

Methamphetamine Use in Australia:

What the data tells us about patterns of use & users

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WANADA/NCETA Methamphetamine Forum

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Acknowledgments

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Australian Government Department of Health



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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 and community services to respond appropriately

Family impact and social disruption



What's the current situation?

- * This presentation provides an overview of the current data to inform our understanding of patterns, problems and potential responses.
- * Data will provide only part of the insight and understanding required. Best available data is limited.
- * The community, families and users, and service providers need to complement the available data with first hand knowledge and experience.



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Key Questions and Considerations

What is Methamphetamine?

What is 'Ice'?

What has changed?

What is the concern?

Who is most likely to experience problems?

What are the best evidence-based intervention options?



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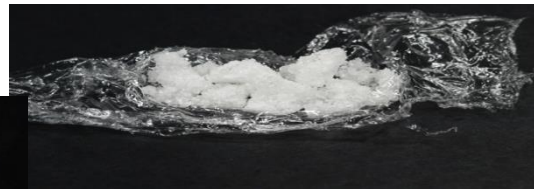
Methamphetamine belongs to the 'stimulant' class of drugs, which also includes amphetamine, ecstasy, and cocaine.

They stimulate the brain and central nervous system; can result in a range of physiological and psychological changes including:

- a) increased alertness/euphoria/energy/enhanced mood
- b) anxiety/panic/agitation/hallucinations...aggression/violence.

3 main forms of methamphetamine:

- powder (speed)
- base
- **crystal (ice)**



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Meth/amphetamine & performance

Stay fit and Slim

Early morning rays of light shine
in her hair as the new dawn
breaks in the haze of health,
energy and youth. A smile of
genuine, unfeigned happiness
shows, fully making you so sure while
you do her hair—so sure and
sure.

The magic power does more than
disperse increased fat in position
and makes the flesh, it tones up the
whole system and makes you feel
better in health in every way. It even
gives you the energy to carry on
working throughout the day.

By using taking amphetamines before
and after meals of looking well looking
you feel in 1940.

*By taking
Amphetamine*

'Amphetroxyn Hydrochloride'
(Methamphetamine Hydrochloride, *Lilly*)

One Pint (475 cc.), No. 1742

ELIXIR AMPHETROXYN HYDROCHLORIDE
(Methamphetamine Hydrochloride, *Lilly*)
2.5 mg. per 4 cc.

Contains Alcohol 3 Percent
Contains in 100 cc. 62.5 mg.
Methamphetamine Hydrochloride 62.5 mg.
Contraindicated in conditions of depression, especially when associated with hypertension, hyperthyroidism, and anxiety in children like drug.
CAUTION—To be dispensed only by or on the prescription of a physician of license, available in pharmacy or hospital.

10019-453381
AZ 13319 *Lilly*
Eli Lilly and Company
INDIANAPOLIS, U.S.A.

100 No. 1742
Tablets AMPHETROXYN HYDROCHLORIDE
(Methamphetamine Hydrochloride, *Lilly*)
2.5 mg.
CAUTION—To be dispensed only by or on the prescription of a physician of license, available in pharmacy or hospital.
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INDIANAPOLIS, U.S.A.

IS OFTEN PREFERABLE TO OTHER FORMS OF AMPHETAMINE—

because—

smaller doses produce longer cerebral stimulation, with a minimum of undesirable excitement and other side-effects.

When patients with depression, narcolepsy, alcoholism, or obesity are selected as suitable cases for stimulant therapy, 'Amphetroxyn Hydrochloride' is a prudent choice of drug.

Detailed information and literature on 'Amphetroxyn Hydrochloride' are personally supplied by your Lilly medical service representative or may be obtained by writing to
Eli Lilly and Company, Indianapolis 6, Indiana, U.S.A.

Lilly
SINCE 1876

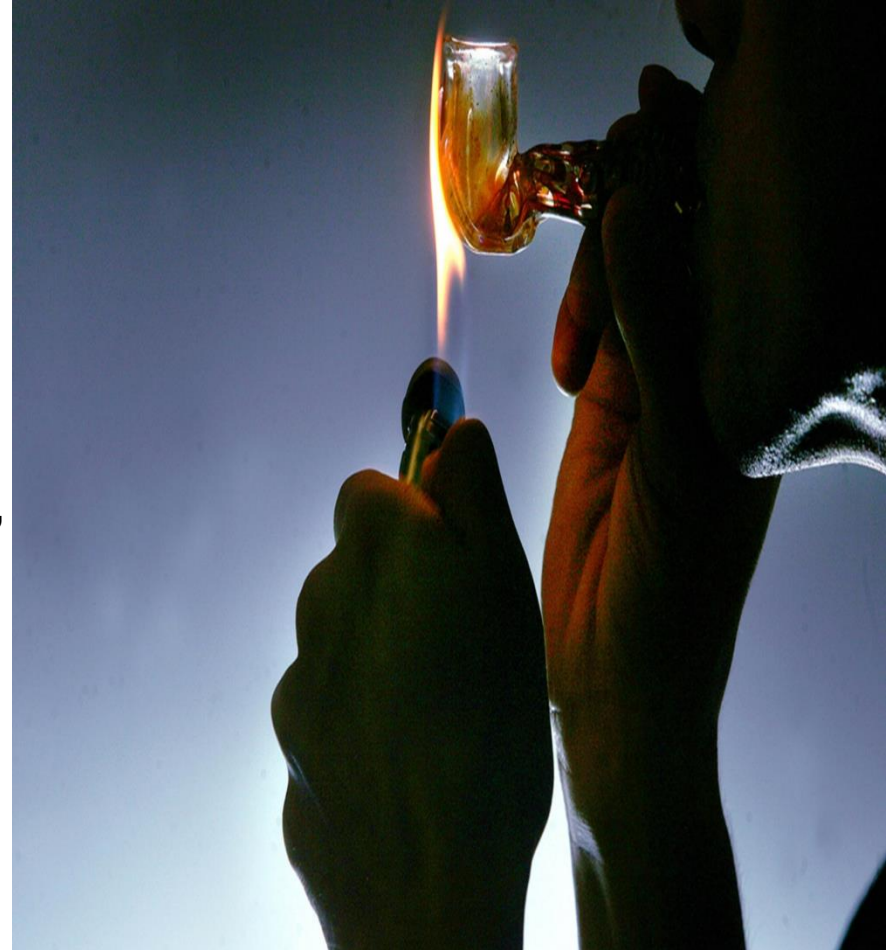
Types of Methamphetamine



Of particular concern is the crystalline form of methamphetamine, known as '**ice**'.

Ice (also known as crystal meth, meth, crystal, shabu, batu, d-meth, glass, or shard):

- most potent form of methamphetamine,
- usually smoked or injected.



Crystalline



- Also known as Crystal Meth/Ice
- Purer form than Salts/Powder
- Highly Addictive
- Highly Corrosive
- Generally Smoked
- High risk of volatile off gassing when produced
- The most talked about form in 2015
- Now the most commonly used form of Meth



What's Changed?

1. Price



2. Purity



3. Form



4. Mode of administration

5. Frequency of Use



Scott et al., 2014

Reported:

- Increase in purity
- Decline in purity-adjusted price per gram
- Extreme purity variation



**THE AUSTRALIAN
METHYLAMPHETAMINE
MARKET**
THE NATIONAL PICTURE



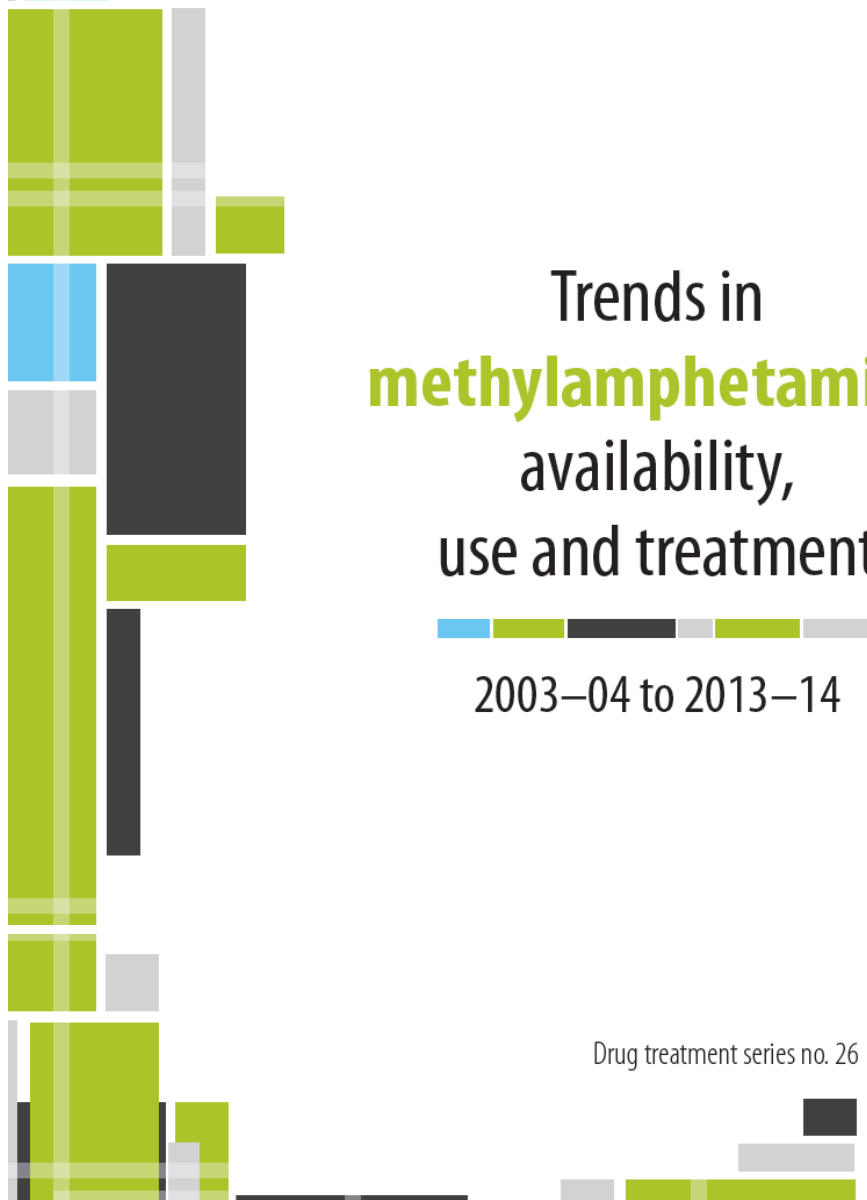


Trends in methylamphetamine availability, use and treatment



2003–04 to 2013–14

Drug treatment series no. 26



Patterns of use and Manifestation of Problems

Multiple sources....*anecdote, media, observation, service providers, law enforcement...*

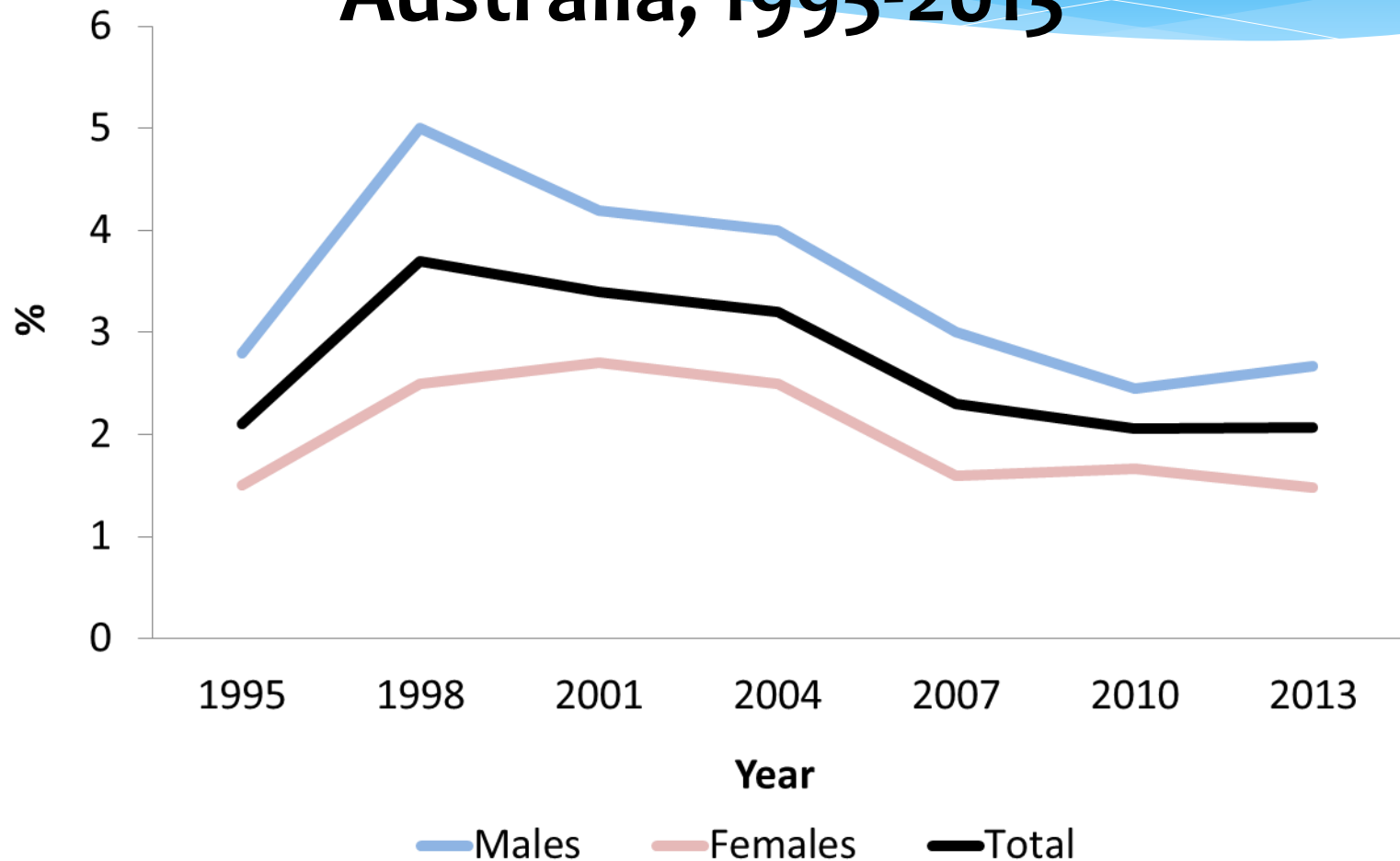
1. National Drug Strategy Household Survey (NDSHS)
2. National Minimum Data Set (AOD Treatment Specialists)
3. Hospital Morbidity Data
4. Other (IDRS, EDRS, ED, specific targeted studies)



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Recent methamphetamine use in Australia, 1995-2013



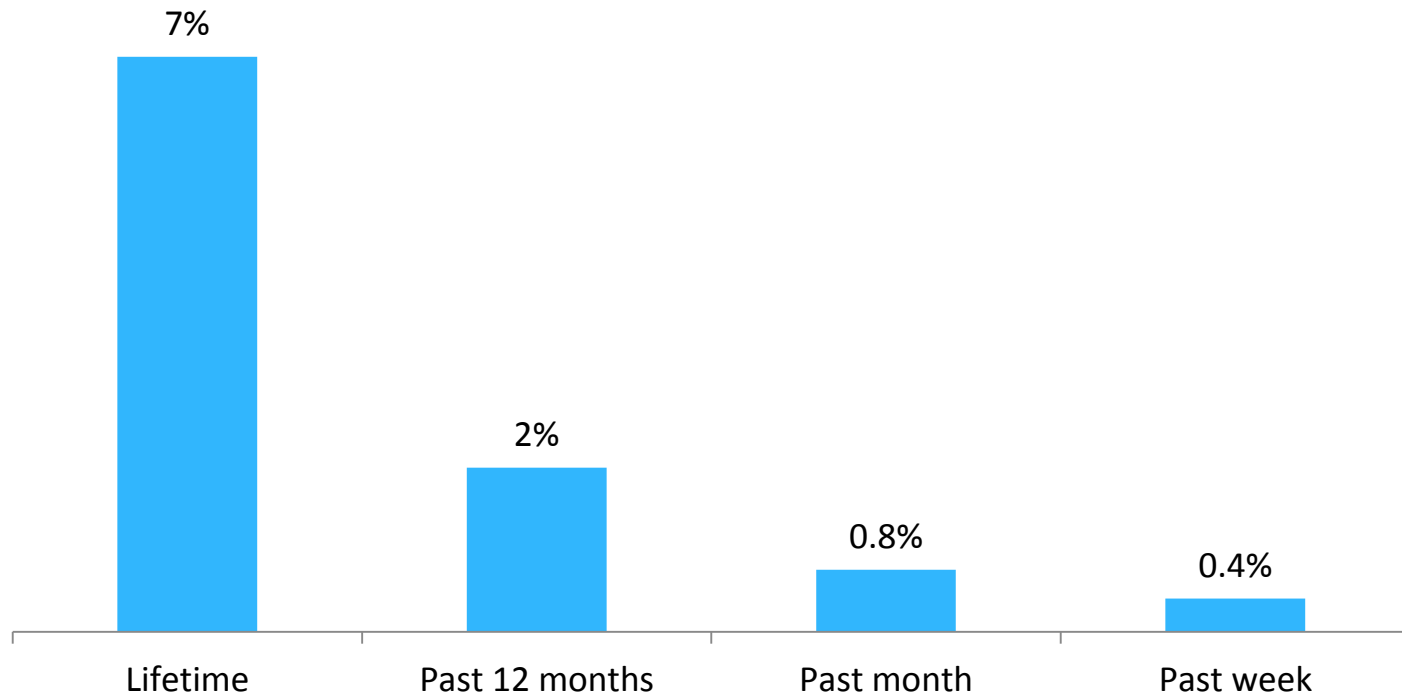
Source: Australian Institute of Health and Welfare (AIHW).
2013 National Drug Strategy Household Survey



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Methamphetamine use in the Australian population, 2013



Frequency of Methamphetamine Use

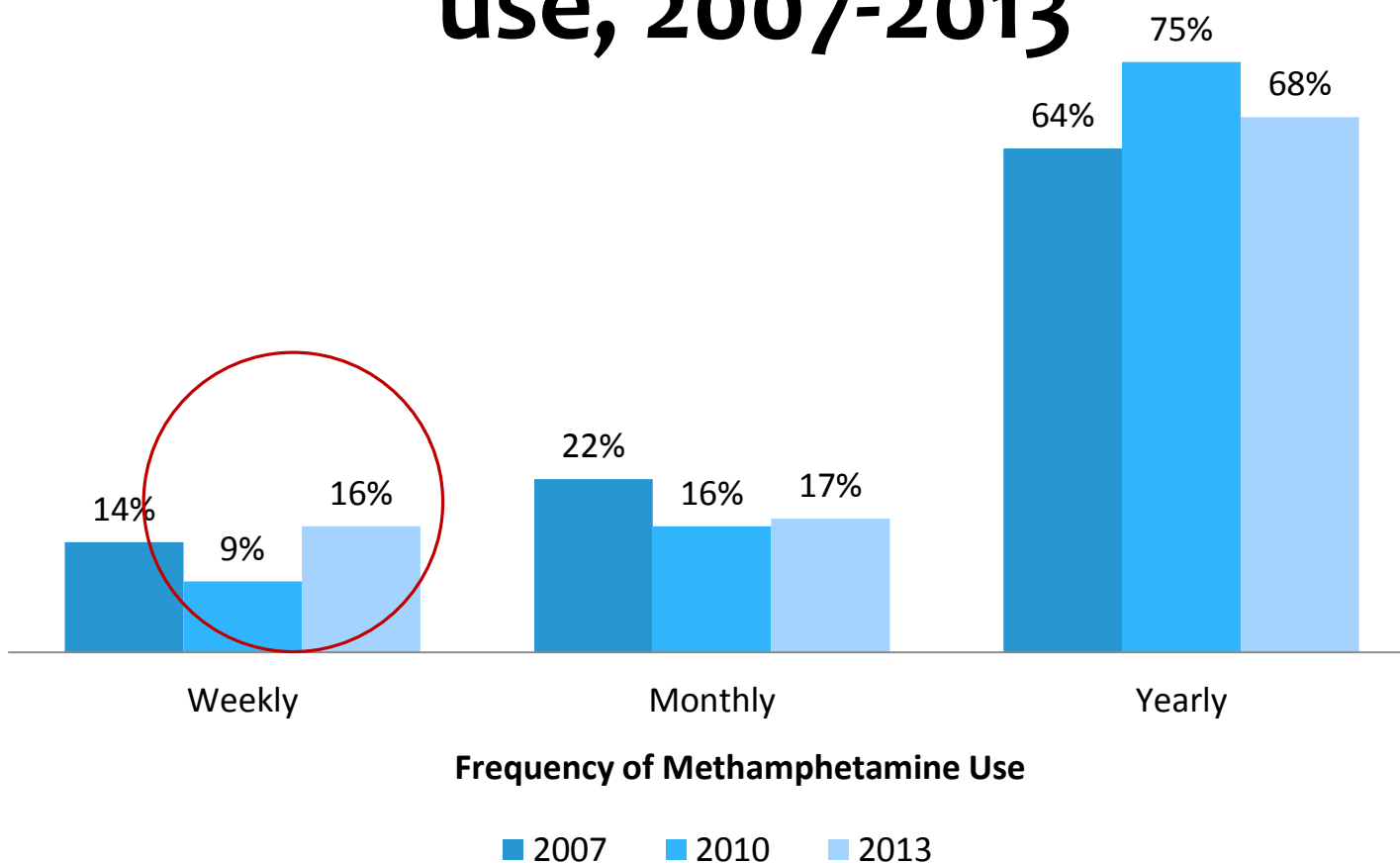
Source: Australian Institute of Health and Welfare (AIHW).
2013 National Drug Strategy Household Survey
(NCETA secondary analysis, 2015).



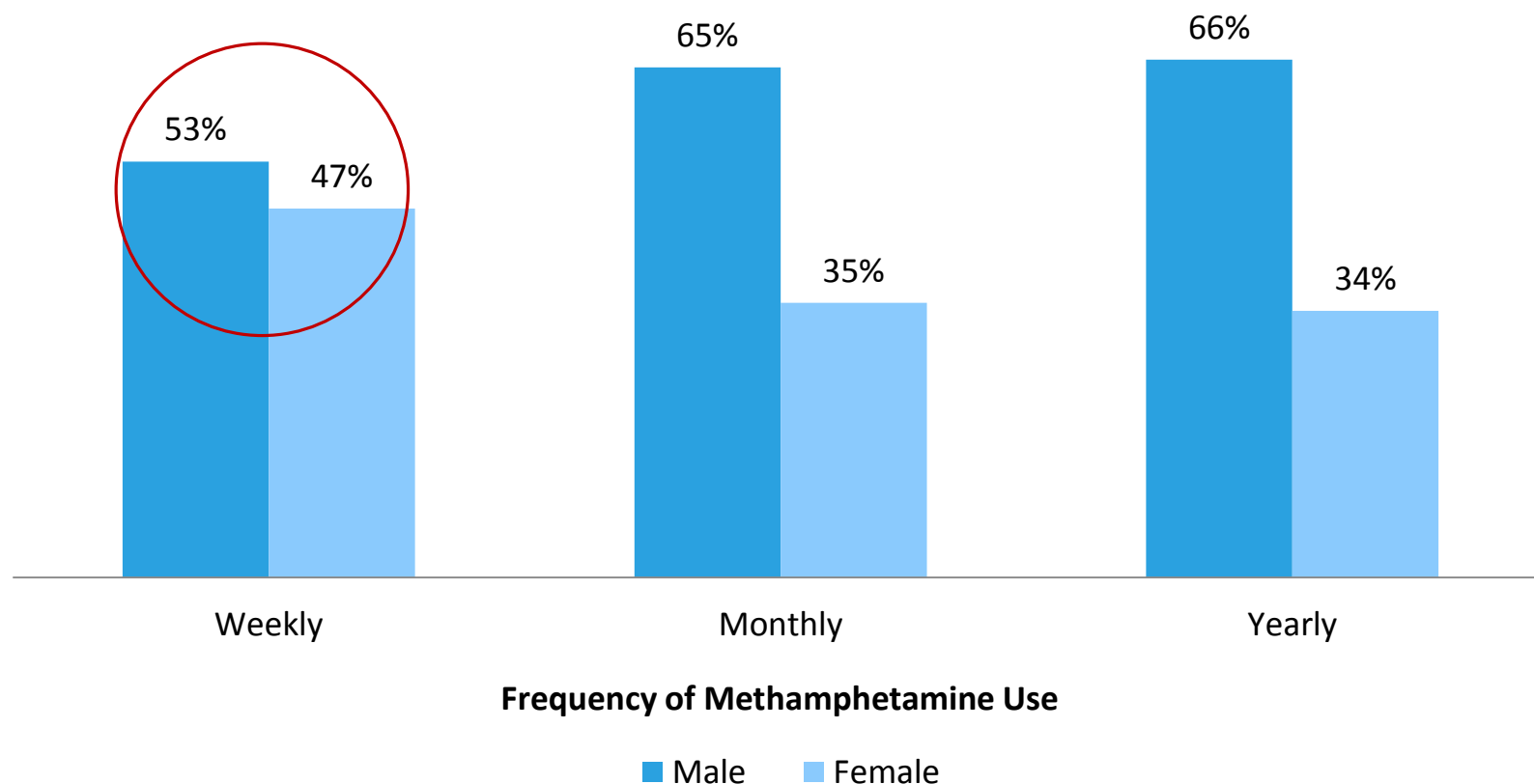
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Frequency of methamphetamine use, 2007-2013



Gender differences in frequency of methamphetamine use, 2013



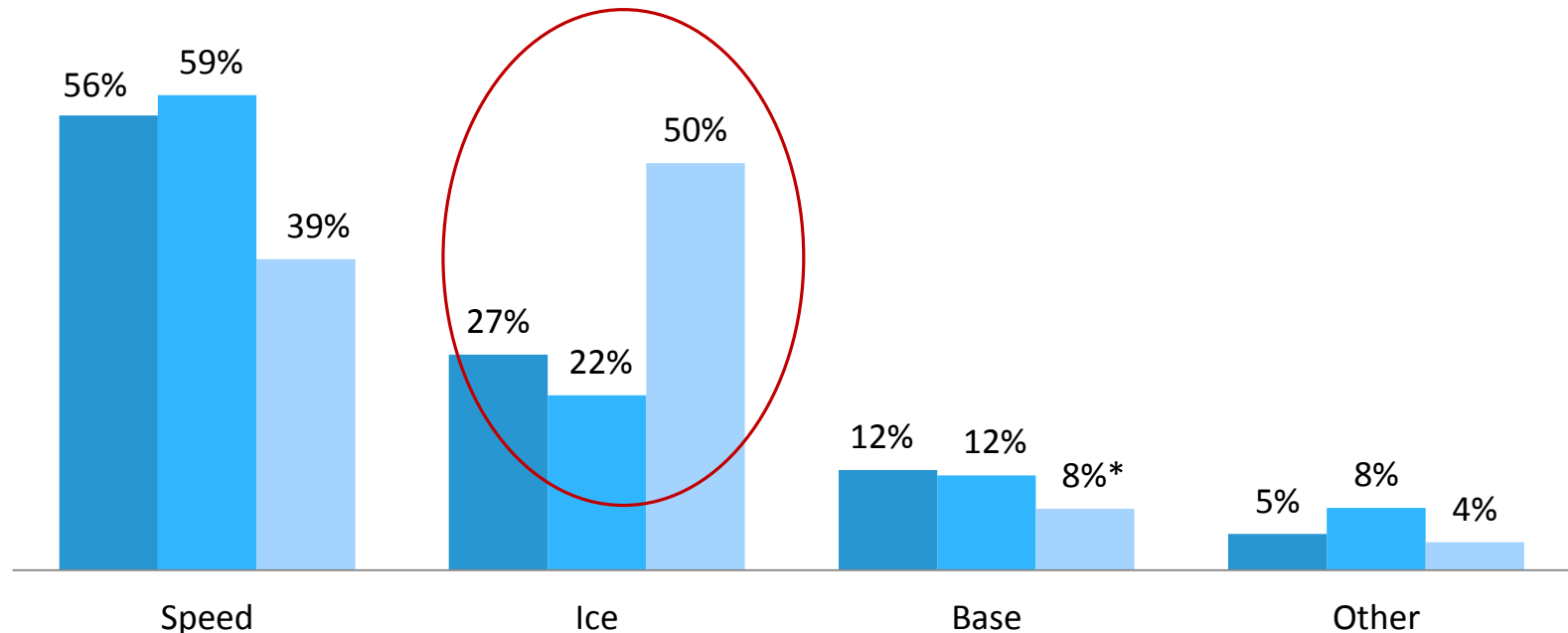
Source: Australian Institute of Health and Welfare (AIHW).
2013 National Drug Strategy Household Survey¹
(NCETA secondary analysis, 2015).



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Main form of meth used in last 12 mnths, 2007-2013



Form of Methamphetamine Used

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

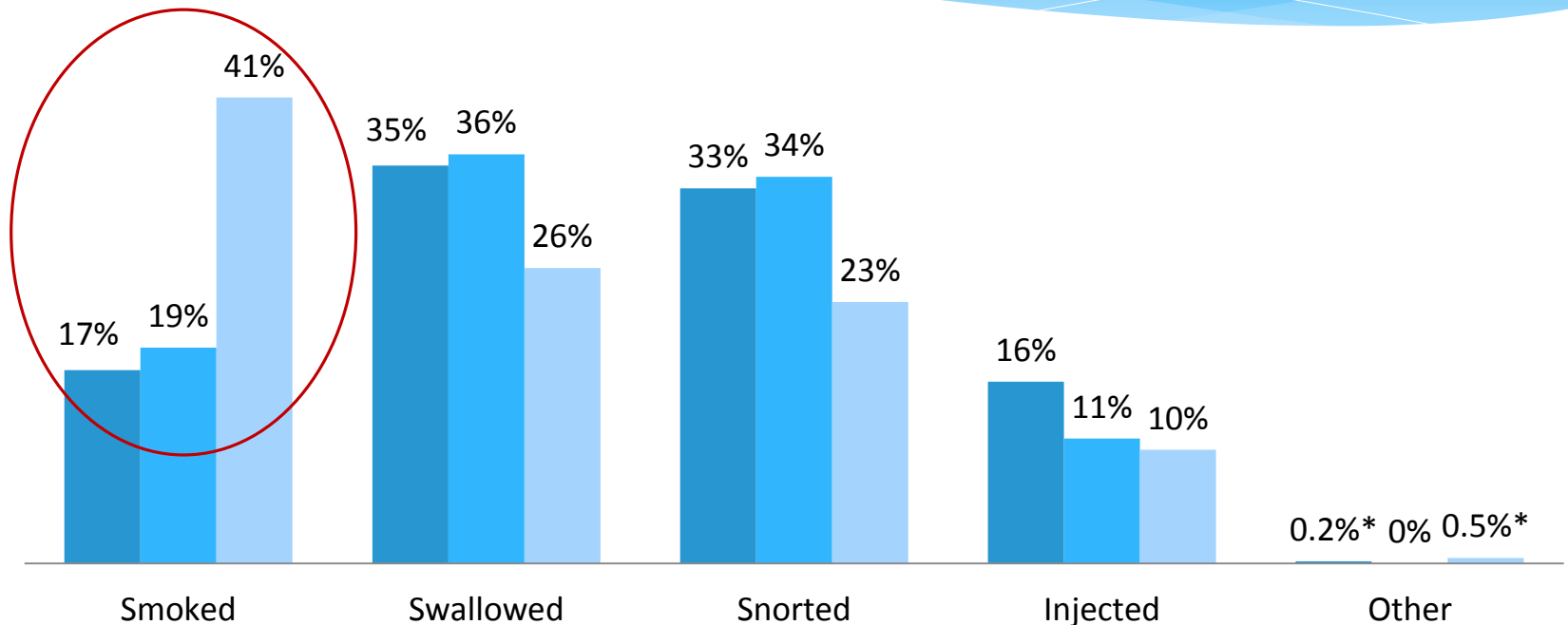
* Estimate may be unreliable due to small sample size



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Main method of meth use, 2007-2013



Mode of Methamphetamine Administration

■ 2007 ■ 2010 ■ 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



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Mean age of methamphetamine users, 2007-20013

	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*	↑

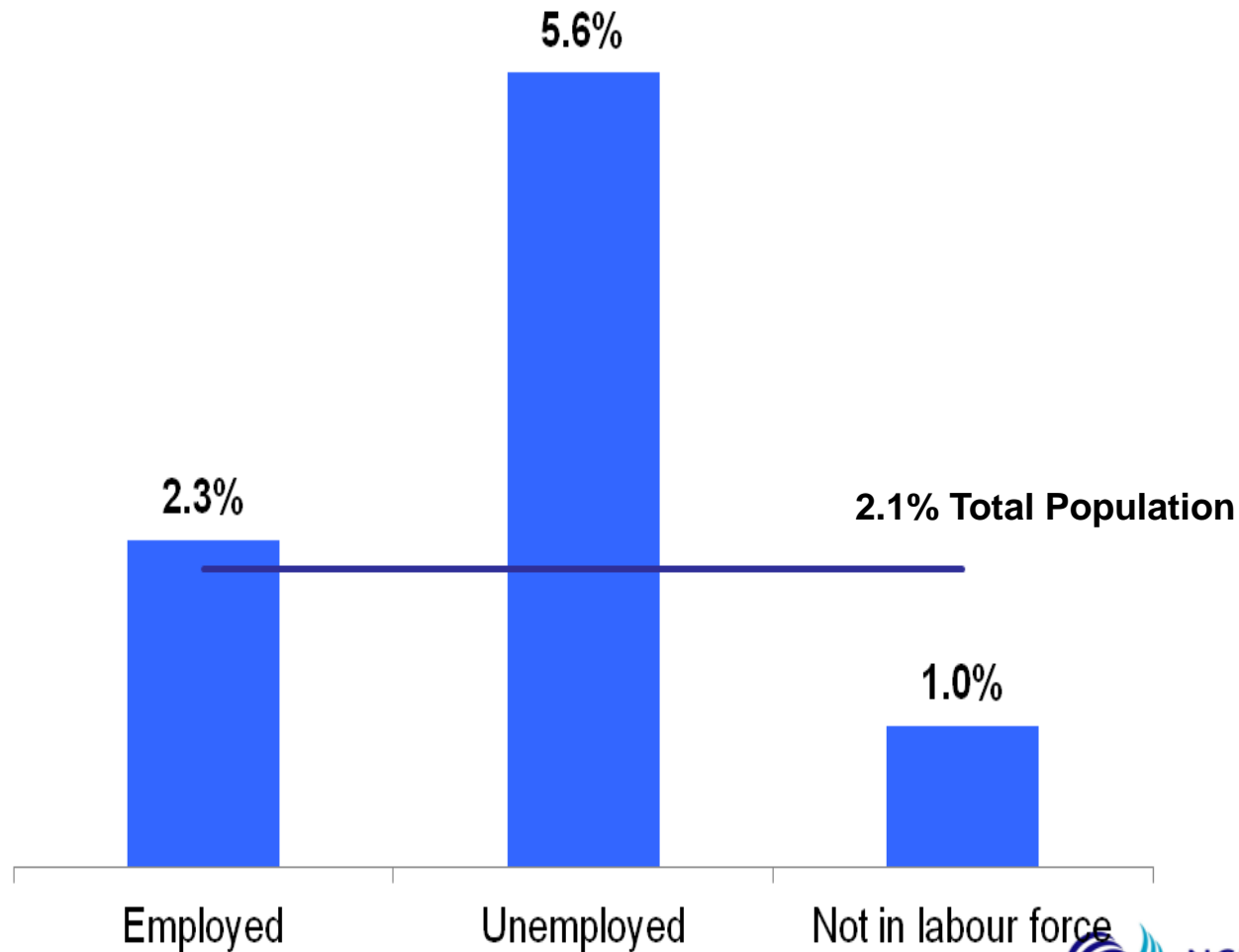
Source: Australian Institute of Health and Welfare (AIHW).
2007, 2010, 2013 National Drug Strategy Household Survey
(NCETA secondary analysis, 2015).



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% methamphetamine users (last 12 months) by employment status

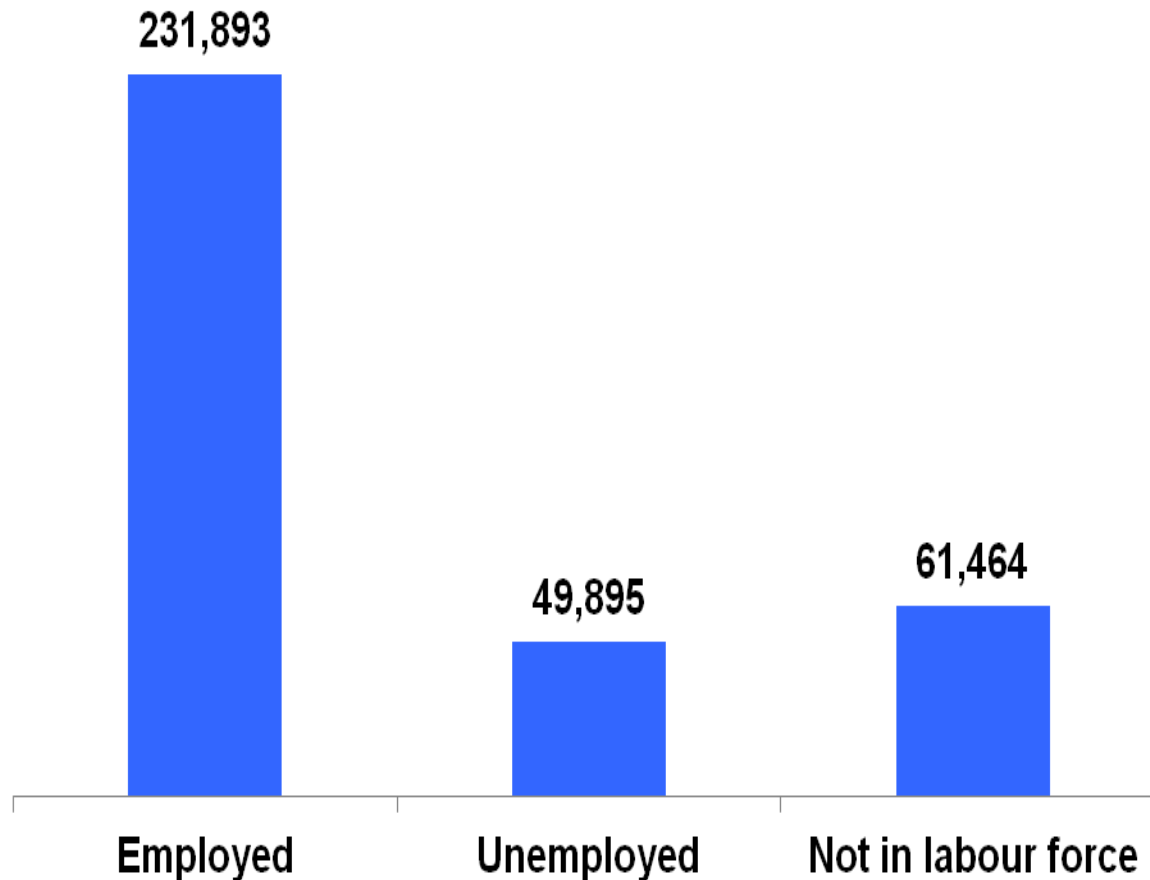


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Data source: 2013 National Drug Strategy Household Survey

Number of methamphetamine users (last 12 months) by employment status

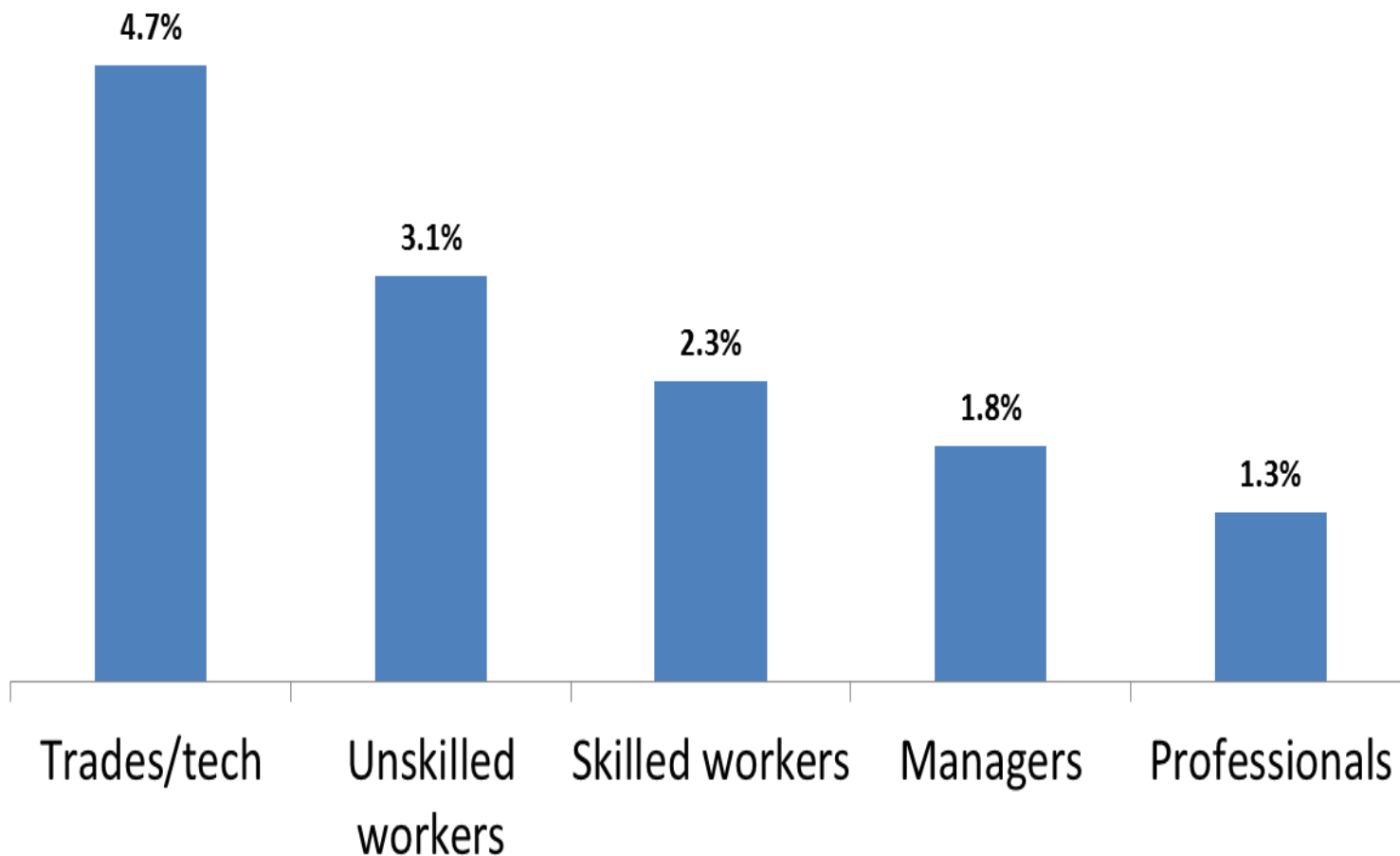


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Data source: 2013 National Drug Strategy Household Survey

Prevalence by occupation



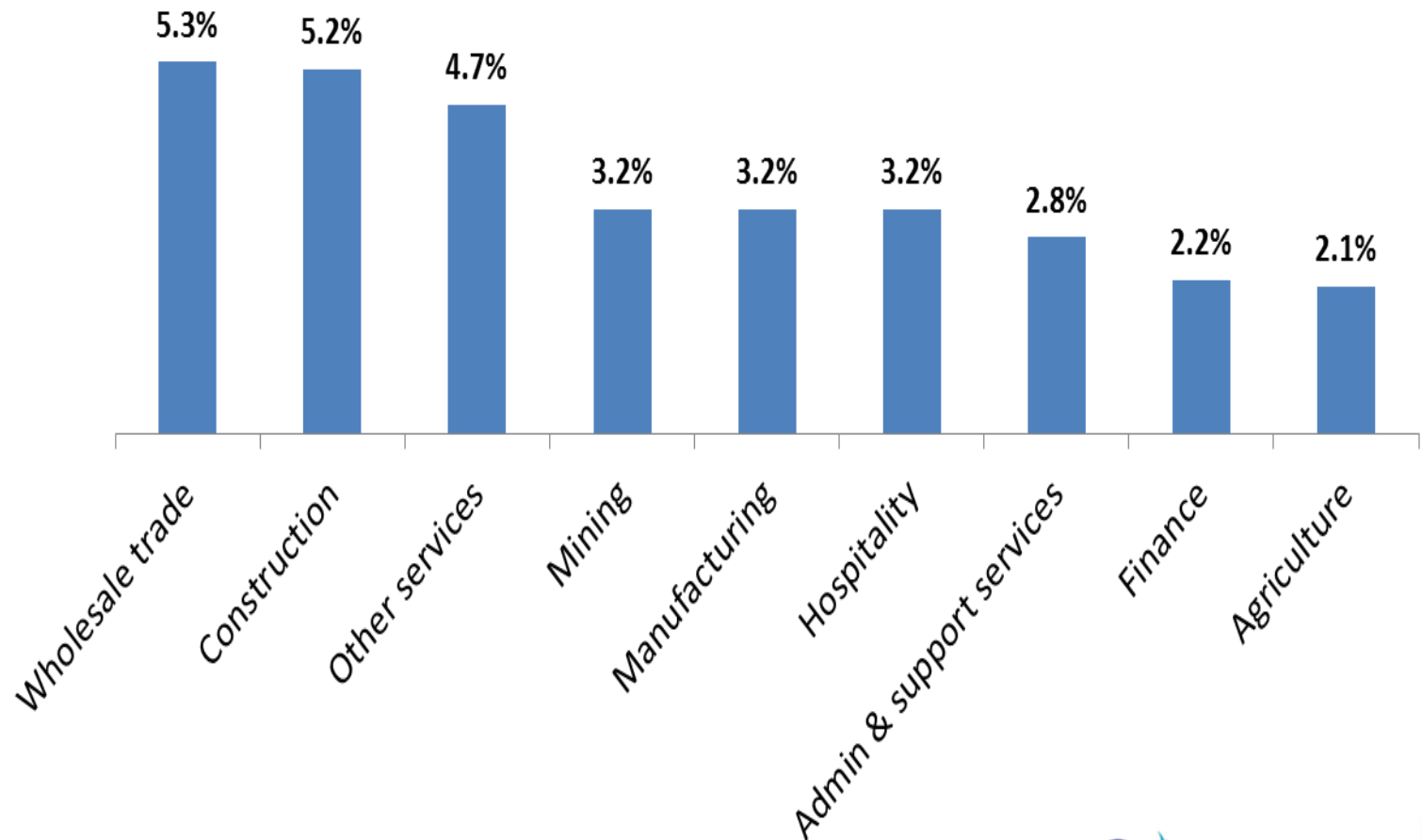
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Data source: 2013 National Drug Strategy Household Survey

Prevalence by industry

Other industries <2.0%



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Data source: 2013 National Drug Strategy Household Survey

Workplace harms

	Meth	Other illicit	Sig diff
Absenteeism due to injury*	16.9%	10.3%	<i>p</i><.01
Absenteeism due to illness*	42.3%	39.5%	ns
Absenteeism due to drug use*	7.3%	1.3%	<i>p</i><.01
Absenteeism due to alcohol use*	12.5%	6.4%	<i>p</i><.01
Usually use at work	9.7%	3.8%	<i>p</i><.01
Worked under influence#	31.6%	6.0%	<i>p</i><.01

* at least 1 day off in past 3 months

at least once in past 12 months



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Data source: 2013 National Drug Strategy Household Survey

High risk workforce groups

- * Workers aged 20-29
- * Males
- * Trades/blue collar
- * Industry
 - * Wholesale
 - * Construction
 - * Mining
 - * Manufacturing
 - * Hospitality



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Frequency of use by form: ice vs all forms of methamphetamine, NDSHS 2013


	Weekly/monthly meth (ice) users %	Yearly meth (ice) users %
Male	60 (62)	66 (62)
Married	24 (20)	35 (31)
Employed	49 (46)	71 (69)
Heterosexual	81 (77)	91 (87)
Live in major cities	73 (76)	72 (74)
Psychologically distressed	41 (46)	28 (18)
Worked under the influence of drugs	60 (62)	24 (22)
Drove under the influence of drugs	63 (62)	34 (48)
Drink at risky levels	70 (78)	68 (59)
Smoke tobacco	72 (83)	59 (57)

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



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Less frequent (yearly) users of methamphetamine, including ice users, tend to be:

- employed,
- heterosexual,
- male,
- low levels of psychological distress.

*Likely to be a
non-treatment
seeking
population*

Frequent (weekly/monthly) methamphetamine users, including ice users, tend to:

- comprise more females,
- be less likely to be married
- fewer heterosexual.

Frequent users are also more likely to be:

- unemployed,
- psychologically distressed,
- engage in various risk taking activities

Stimulants as a proportion of all hospital separation for
illicits substances, increased from:

15% 2009/01

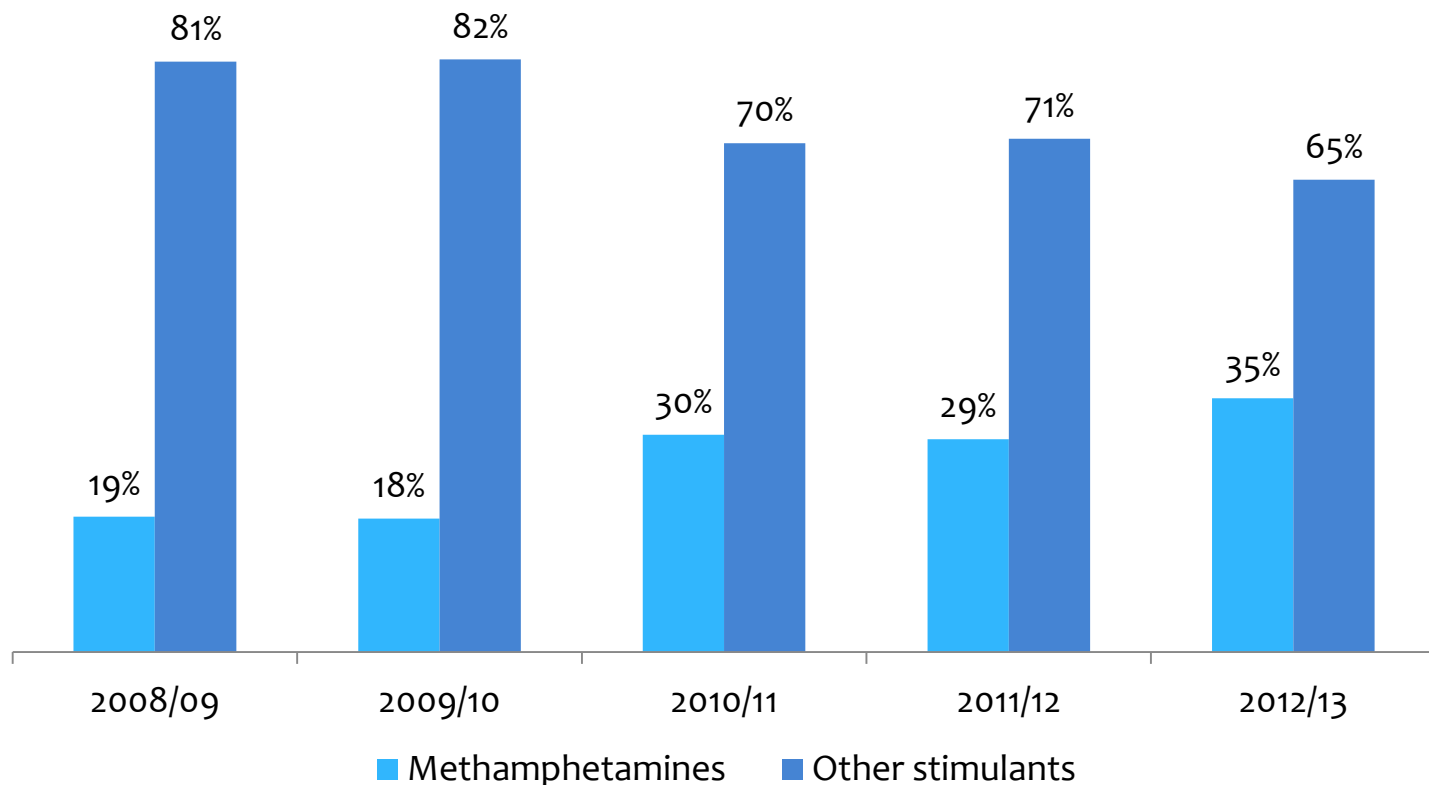
27% 2012/13



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



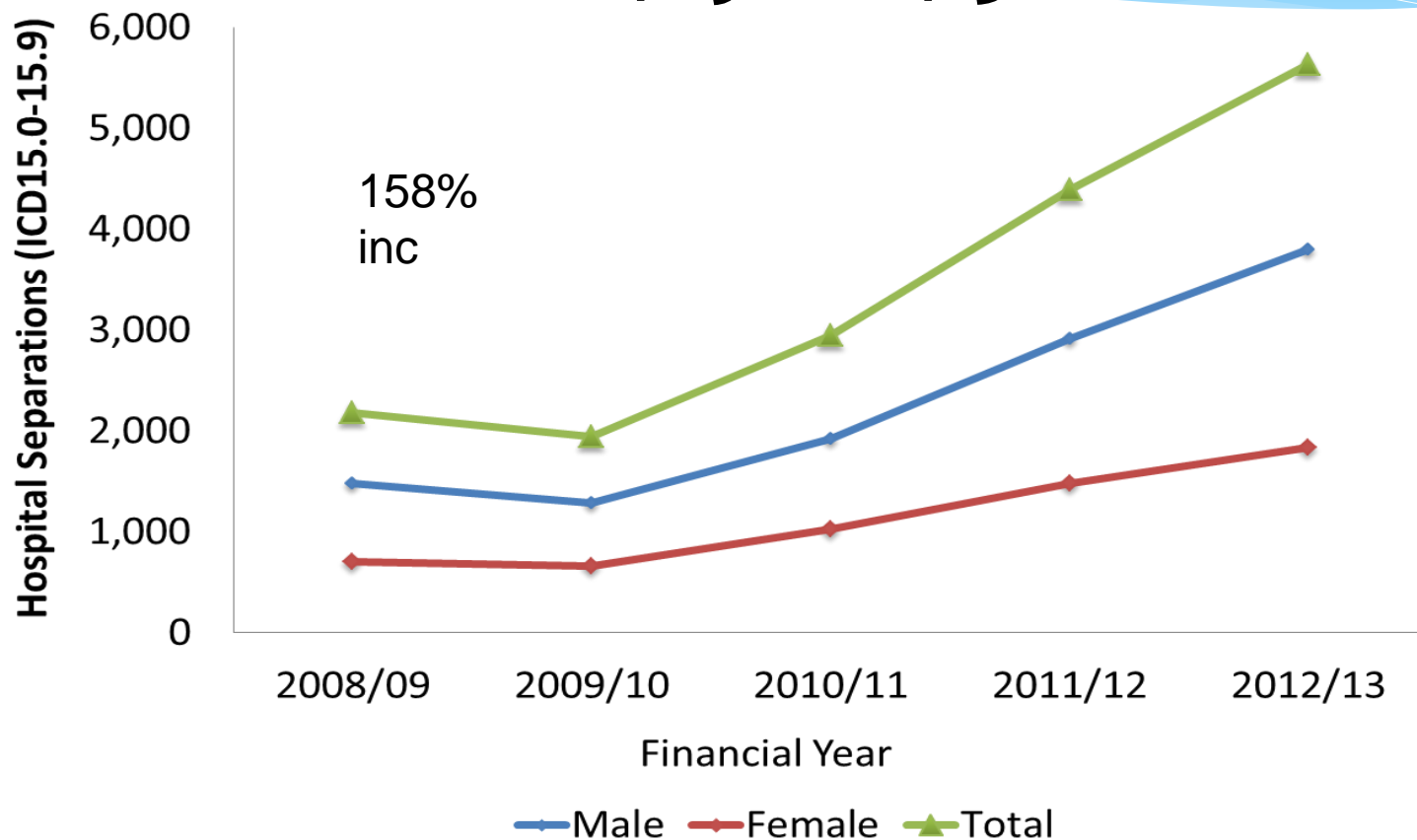
Source: Australian Institute of Health and Welfare (AIHW).
2008-2013 National Hospital Morbidity Database
(NCETA secondary analysis, 2015).



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



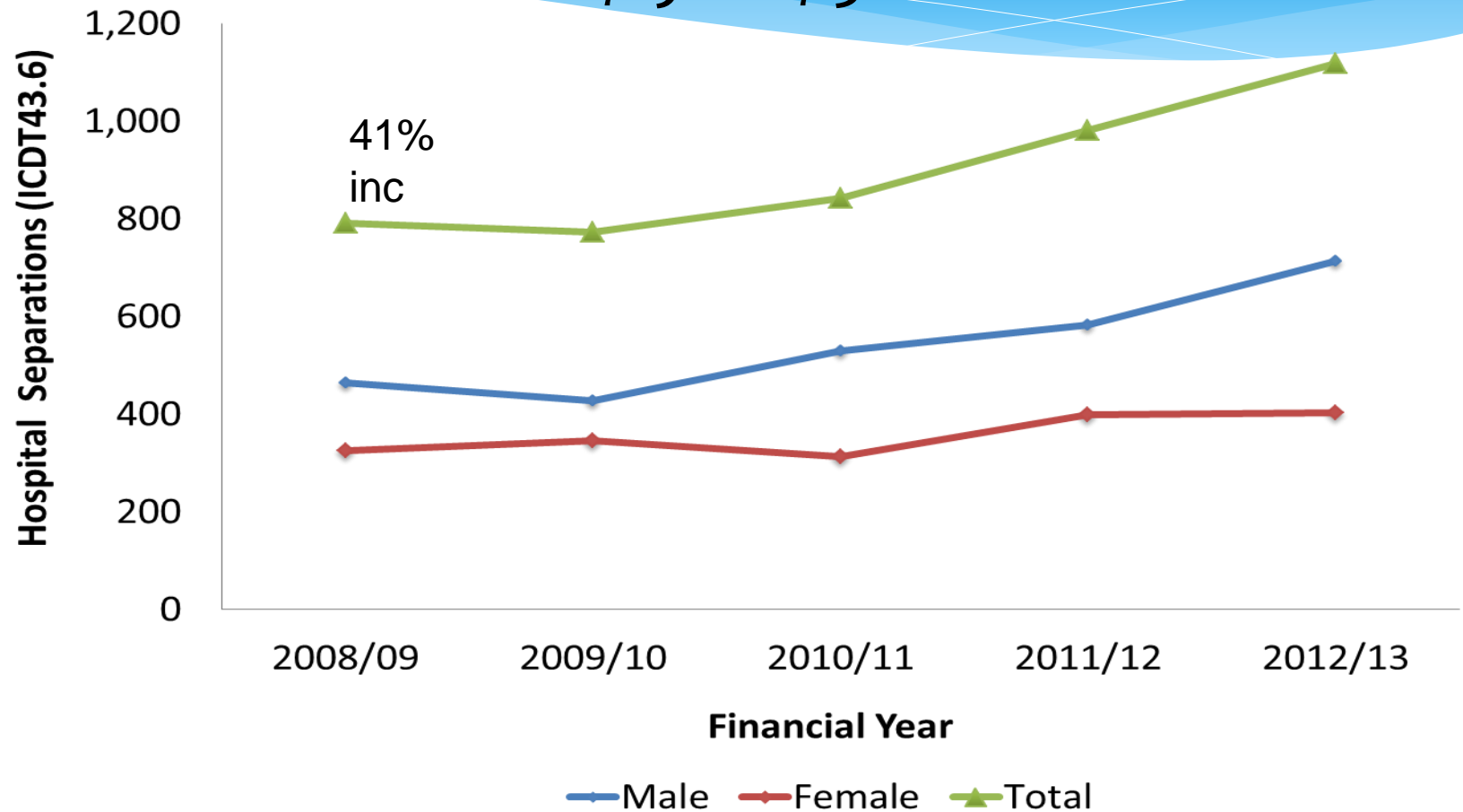
Source: Australian Institute of Health and Welfare (AIHW).
2008-2013 National Hospital Morbidity Database
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Hospital separations: poisonings due to psychostimulants, 2008/09-2012/13



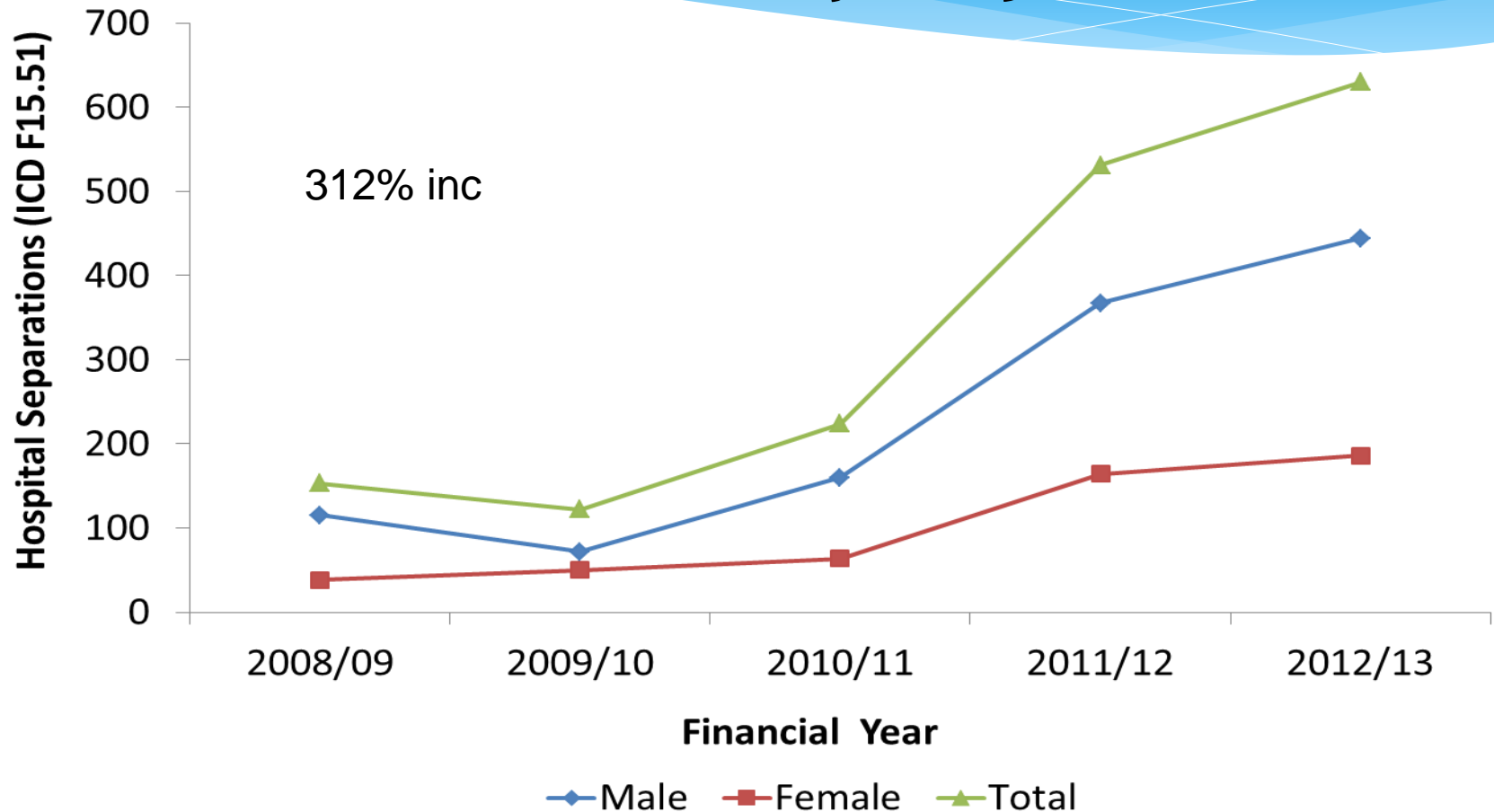
Source: Australian Institute of Health and Welfare (AIHW).
2008-2013 National Hospital Morbidity Database
(NCETA secondary analysis, 2015).



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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).



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AOD Treatment Specialist Services

Report growing episodes of care for methamphetamine

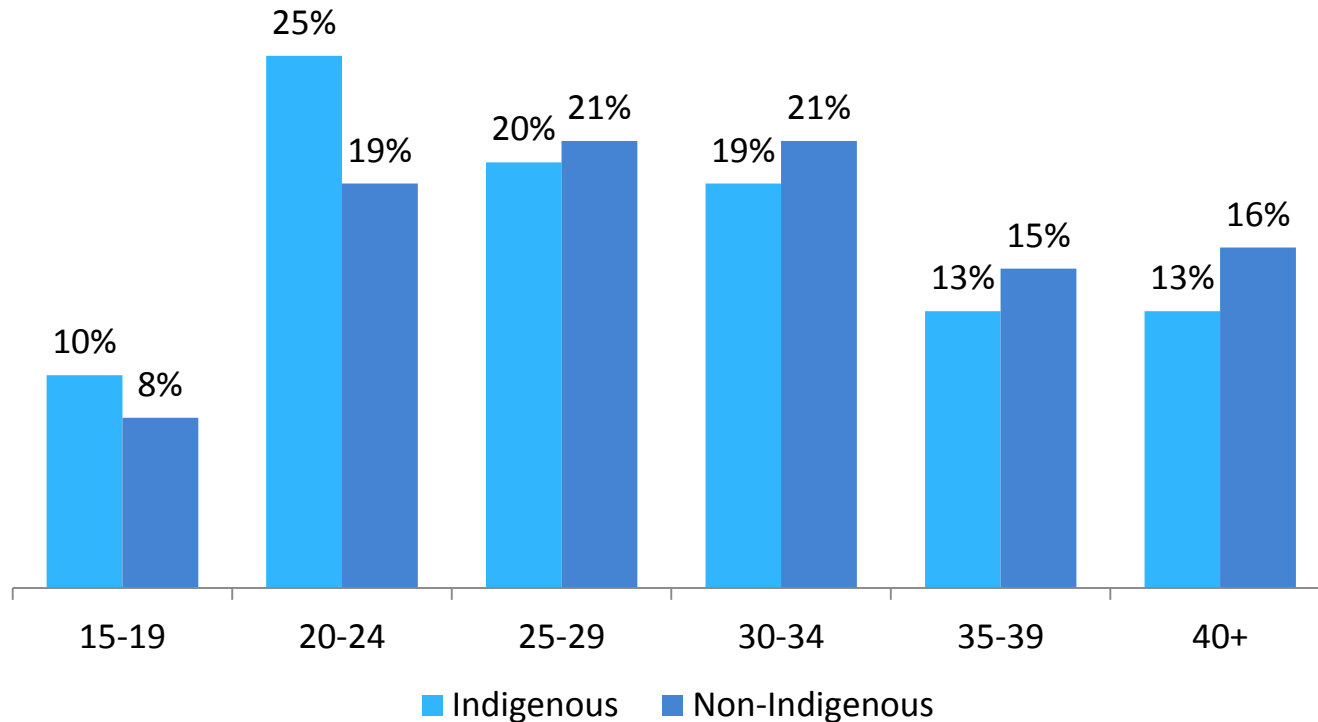
- * In 2009/10, <1% of episodes of AOD specialist treatment were for meth (**n=1,240**)
- * In 2012/13, >3% of episodes of AOD specialist treatment were for meth (**n=4,043**)



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Methamphetamine treatment: Indigenous status by age, 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).

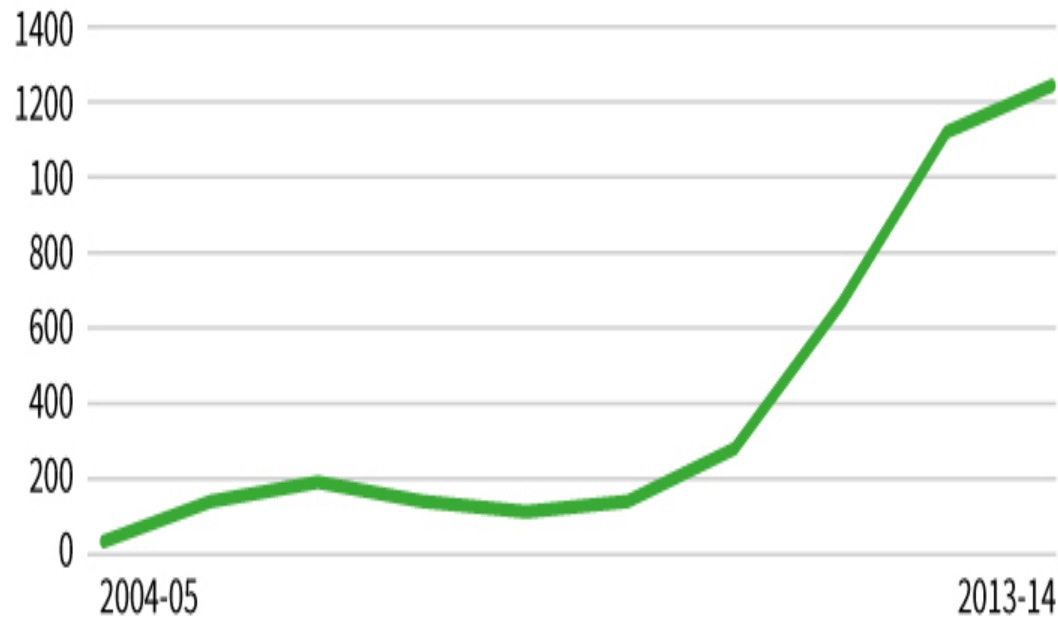


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Crystal methamphetamine-related attendances

Metropolitan Melbourne



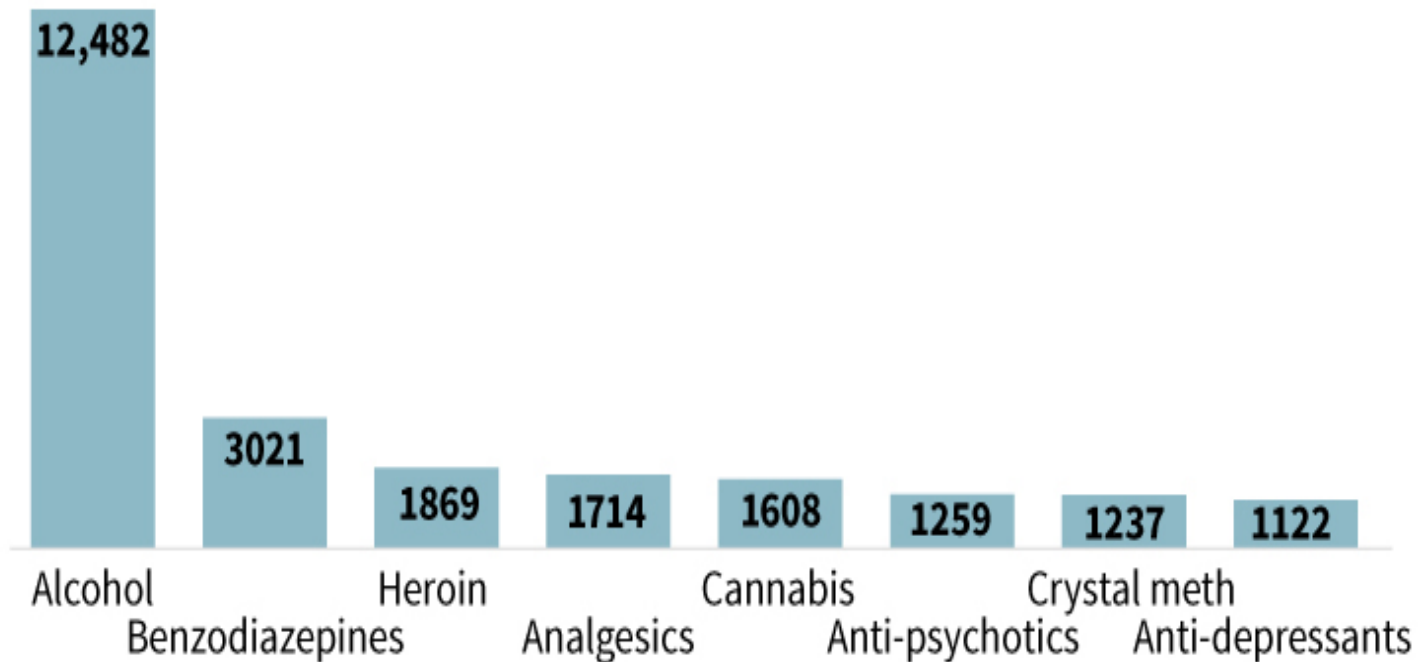
SOURCE: AMBO PROJECT: ALCOHOL AND DRUG RELATED AMBULANCE ATTENDANCES 2013-14



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Alcohol and drug related ambulance cases 2013-14

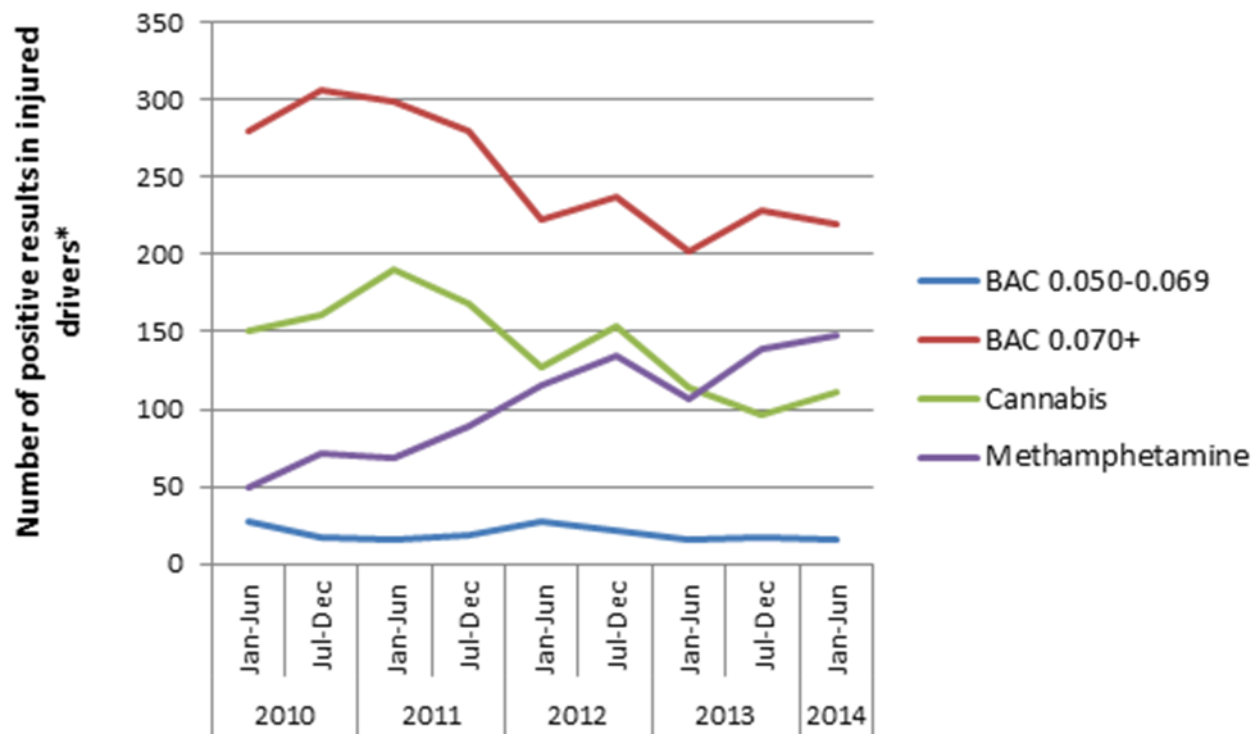


SOURCE: AMBO PROJECT: ALCOHOL AND DRUG RELATED AMBULANCE ATTENDANCES 2013-14



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*Note: Drivers may test positive for more than one substance. *Data provided by RPDAS 15/07/15.*

Other Considerations

- * Important not to see either the causes or the responses to meth/ice issues in isolation
- * Comprehensive/holistic responses needed
- * Consideration given to 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.



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Implications

Clear changes, not in same direction

Problems of severity not prevalence

Greater demand on treatment services

Recognition of impost on services and workers

People with complex needs

Not just a simple drug issue

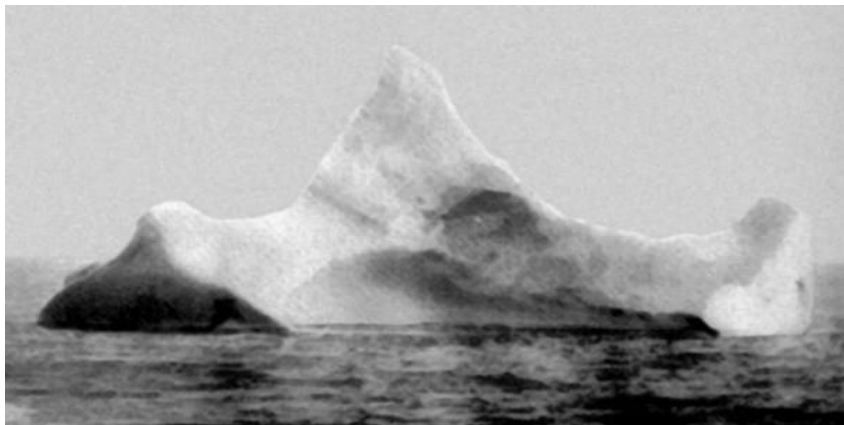
Targeted interventions needed



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Problems experienced by people with complex needs and concerns. Tip of the iceberg only.



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