The National Methamphetamine Symposium

Making Research Work in Practice

12 May 2015 | Arts Centre, Melbourne

NCETA

Understanding trends in Methamphetamine use and harm: Implications for harm reduction

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National Centre for Education and Training on Addiction (NCETA), Flinders University

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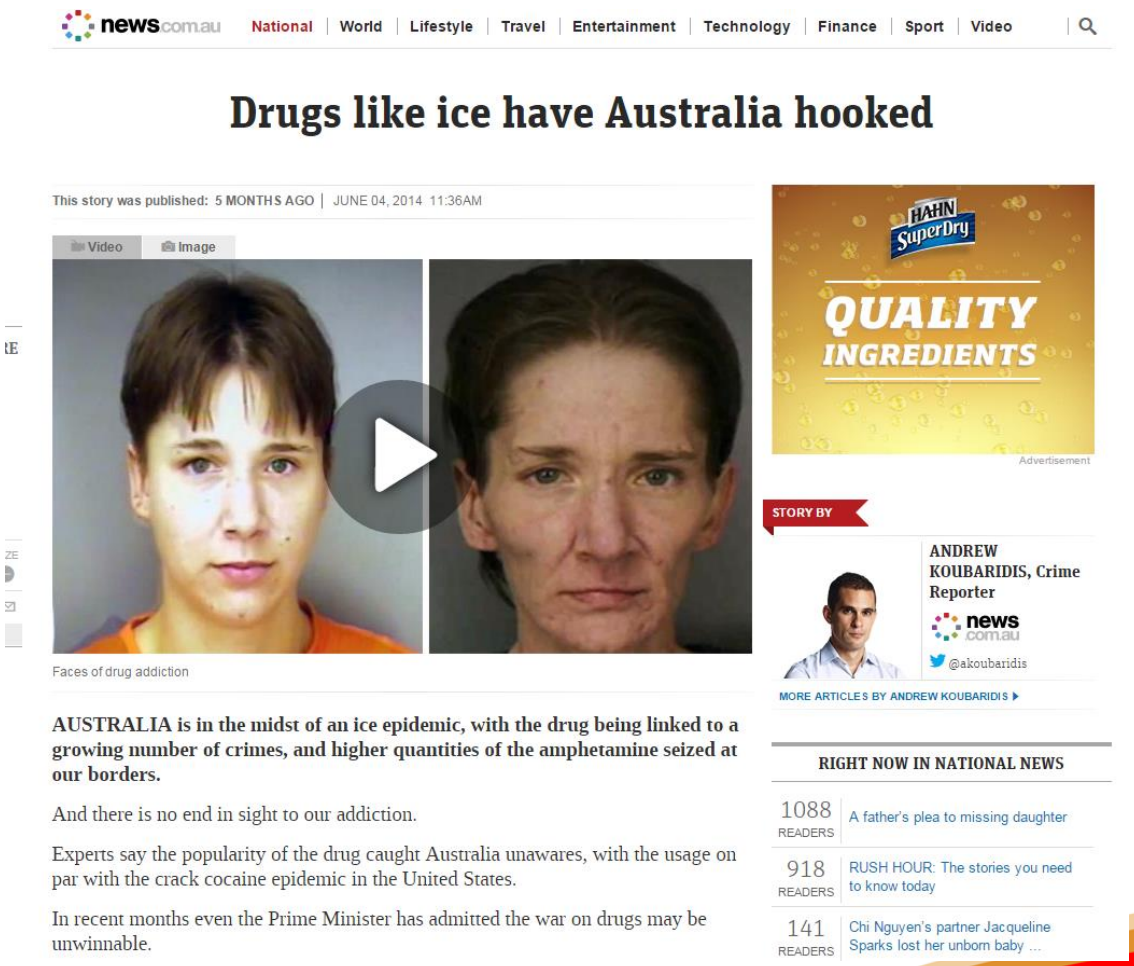
Medical Research. Practical Action.

Understanding trends in Methamphetamine use and harm: Implications for harm reduction

Paul Dietze, Centre for Population Health

Over 250 articles in Herald Sun + Age from Jan 2014



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Drugs like ice have Australia hooked

This story was published: 5 MONTHS AGO | JUNE 04, 2014 11:36AM

Video | Image

Faces of drug addiction

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STORY BY

ANDREW KOUBARIDIS, Crime Reporter
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141 READERS Chi Nguyen's partner Jacqueline Sparks lost her unborn baby ...

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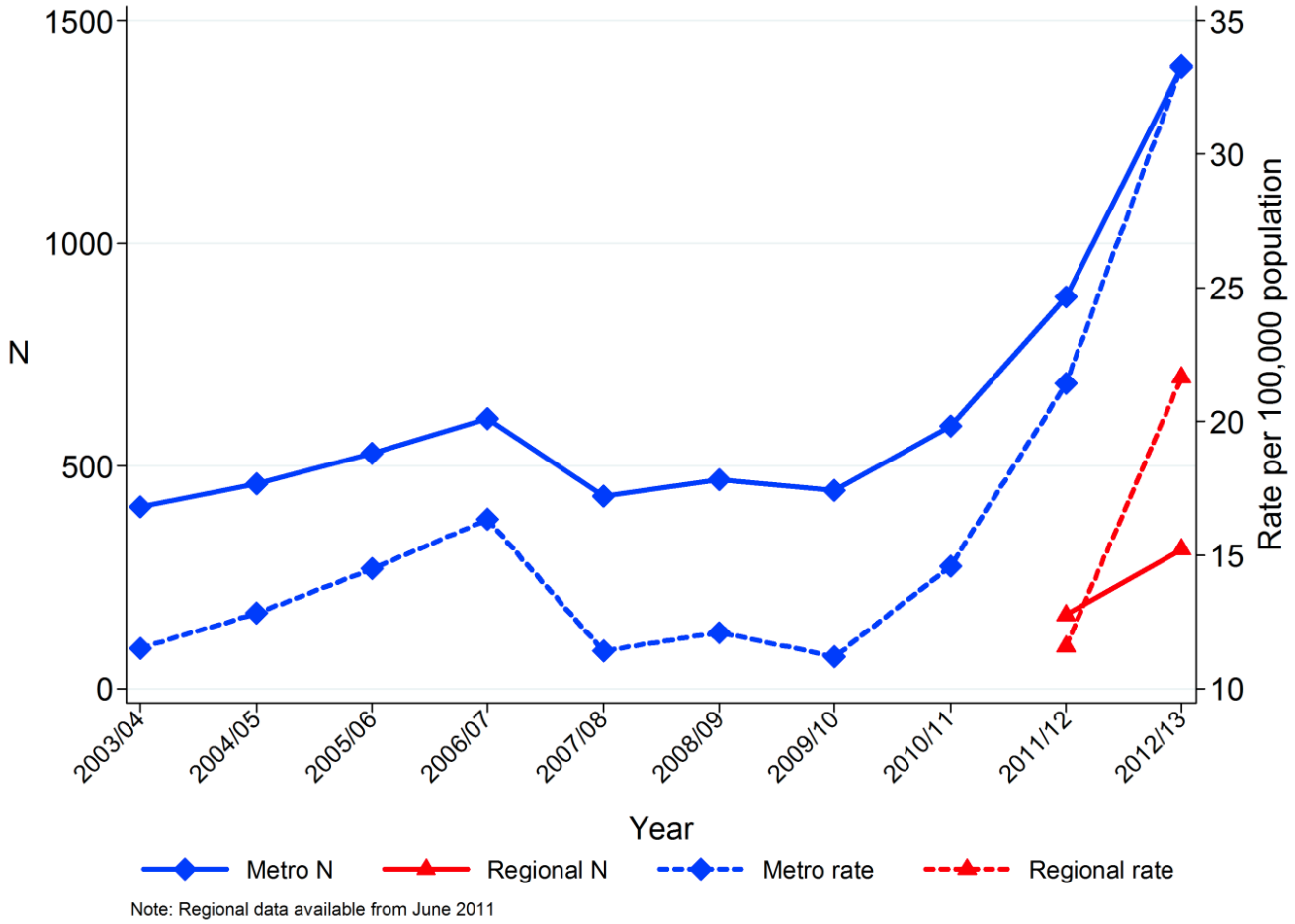
Is ‘ice’ the problem?

- Crystal methamphetamine = methamphetamine = speed powder = methamphetamine = base
- Reports of greater ease in obtaining methamphetamine, increased drug quality/purity (ACC, 2014)
- Increased harms

(Meth)amphetamine-related ambulance attendances



Lloyd et al. (2014).
Ambo Project Report

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However

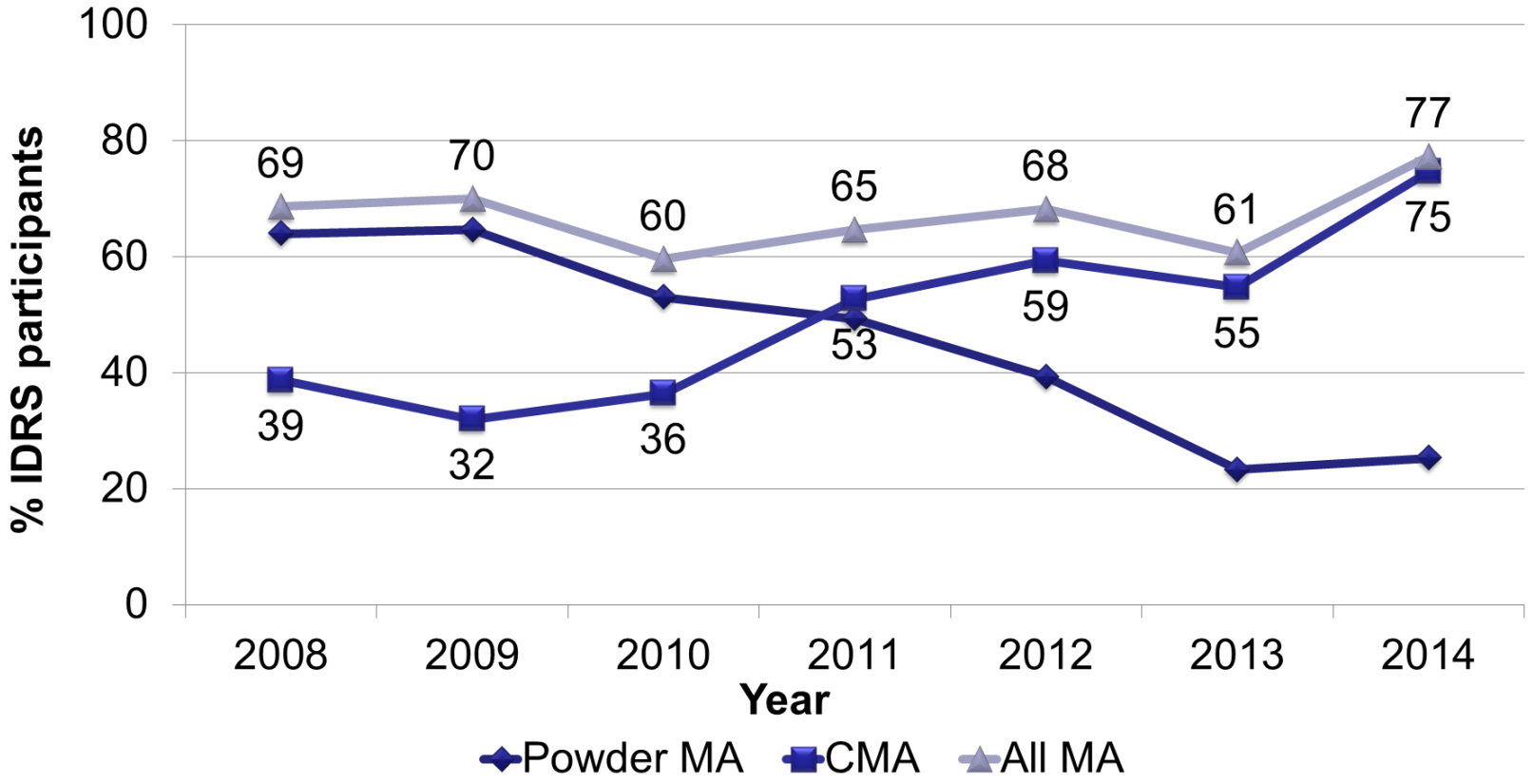
- Has been an actual increase in the prevalence of methamphetamine use?
  - NDSHS findings

  (past-year meth/amphetamine use – 2.1% in 2010 and 2013)

- Why should we care?
  - Practice/policy must be based on sound evidence to appropriately meet the needs of consumers and the wider community

  - Responses to (methamphetamine use and harms) are often ill-informed and possibly counter-productive (eg 'faces of meth', Montana Meth Project)

IDRS: Victorian trends in methamphetamine use



Cogger et al. (2015)

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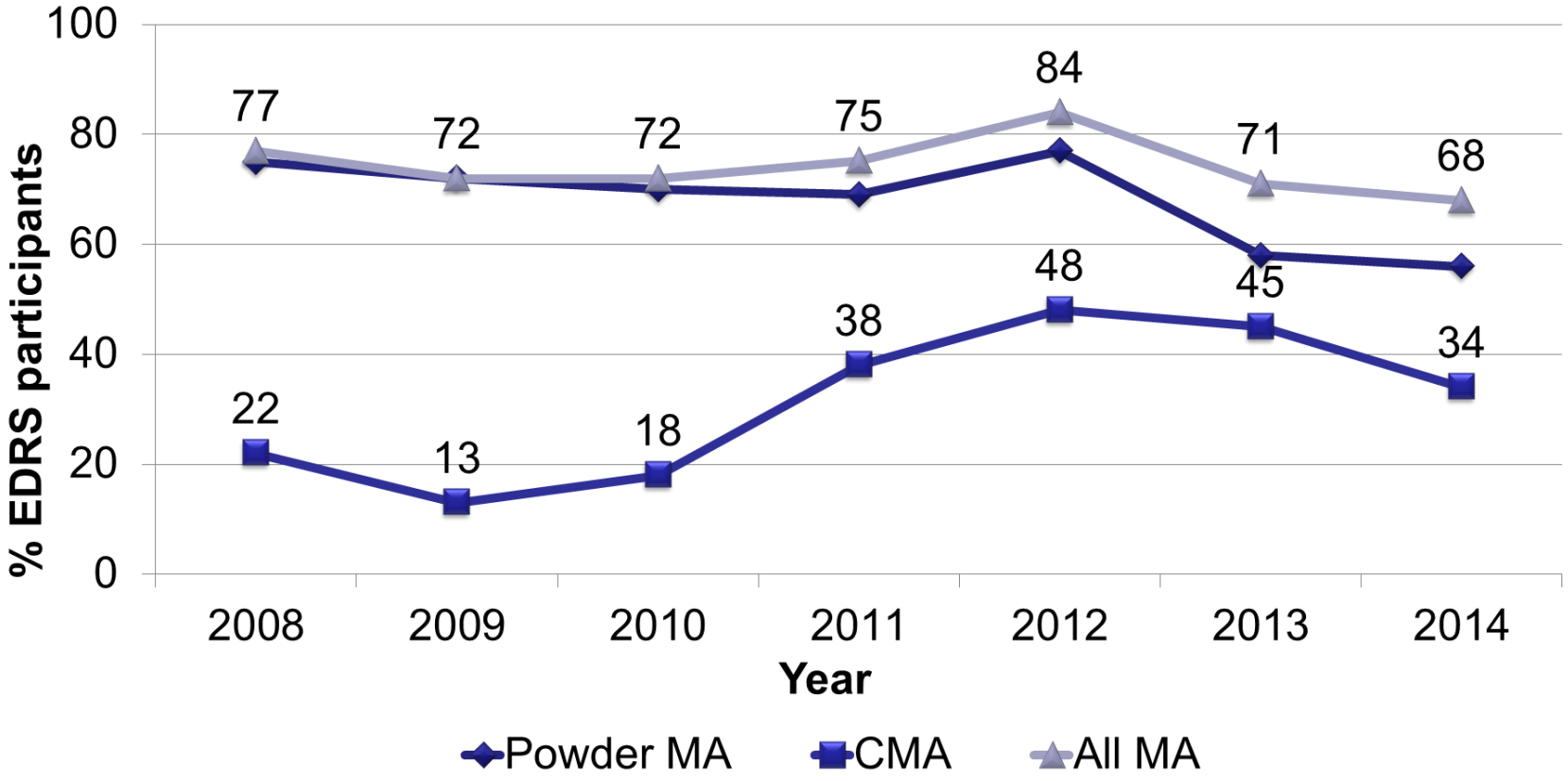
EDRS: Victorian trends in methamphetamine use



Truong et al. (2015)

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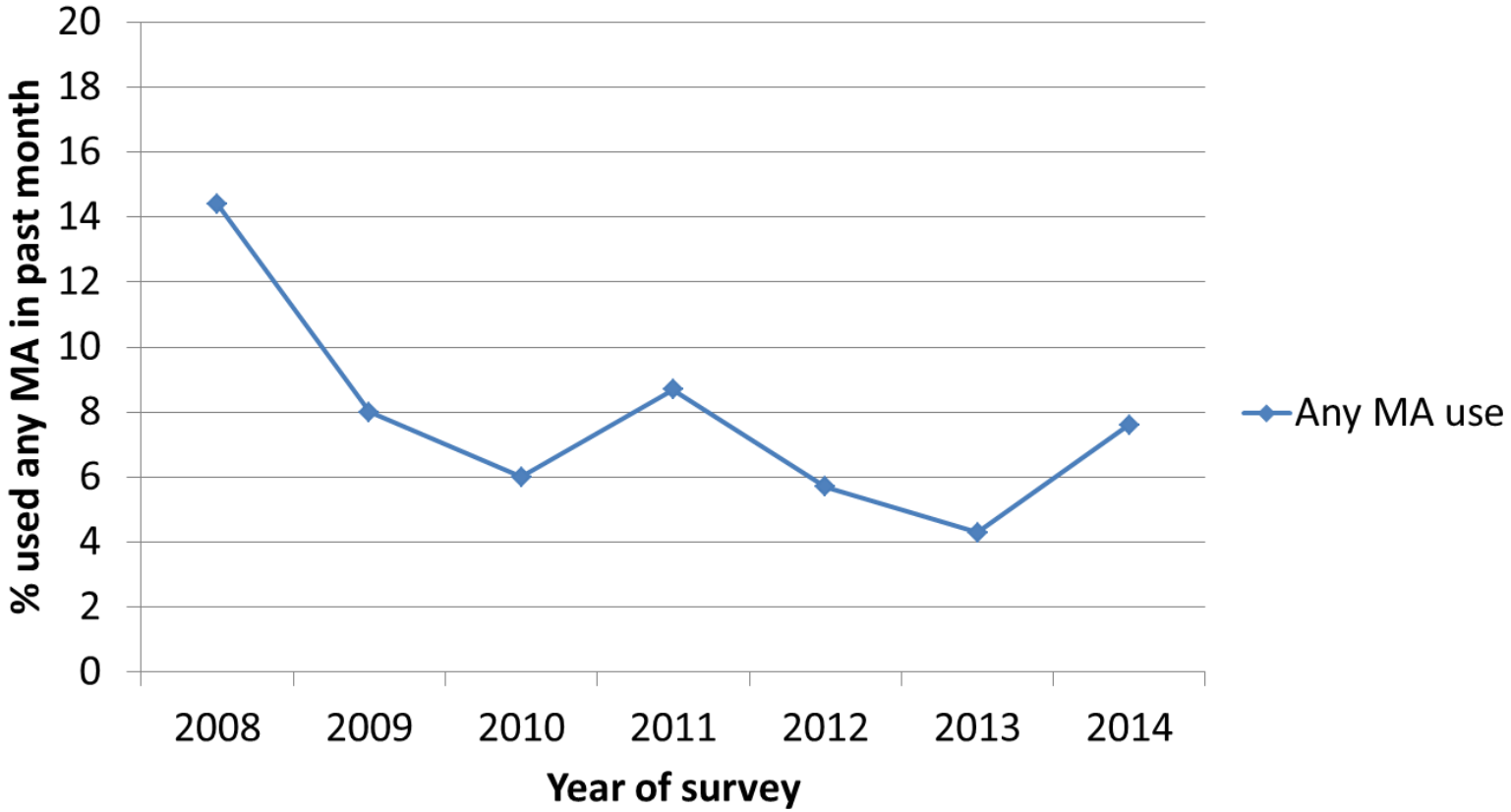
BDO: trends in methamphetamine use



Lim et al. (2015).

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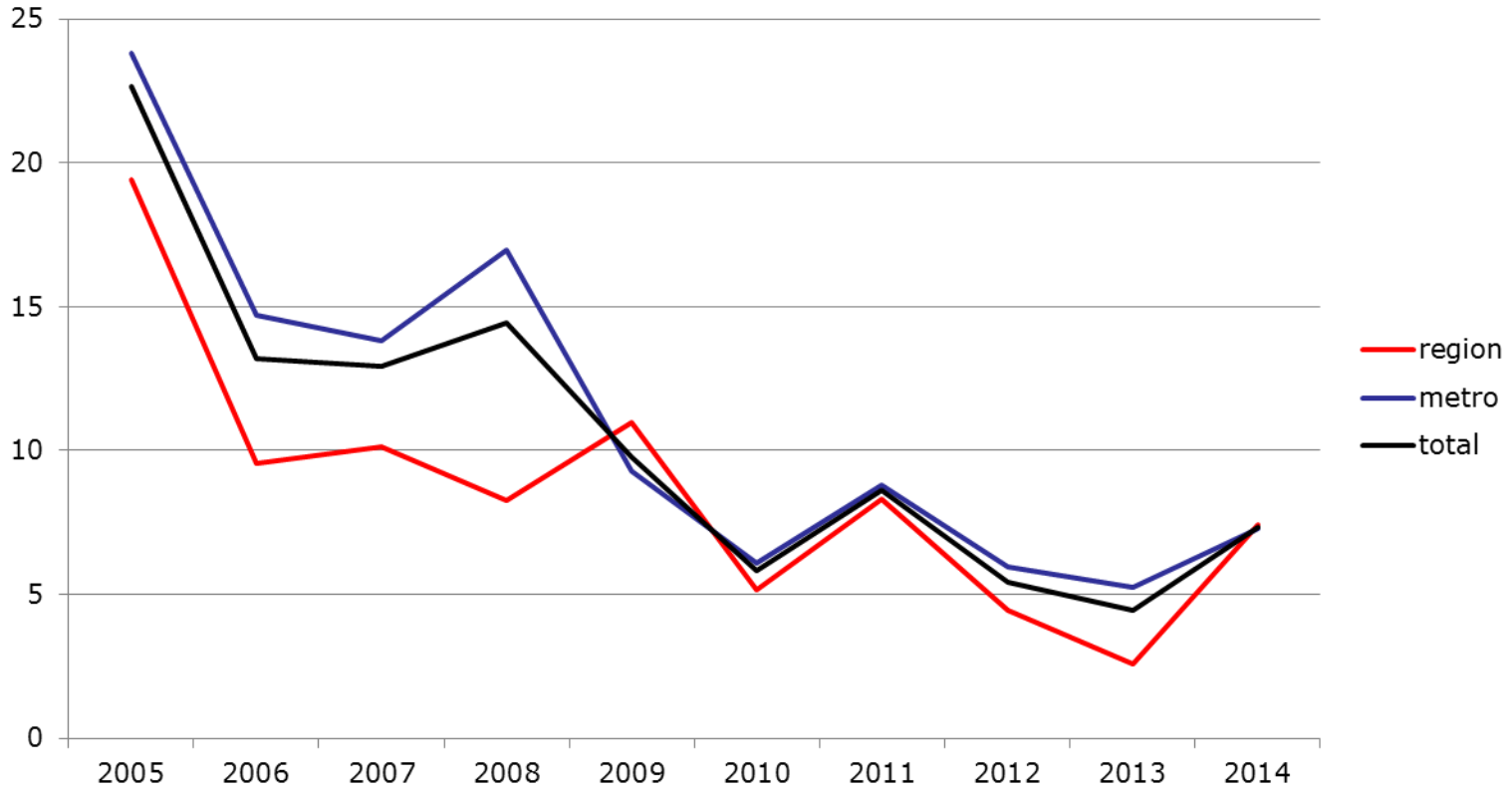
BDO: trends in methamphetamine use



Lim et al, unpublished.

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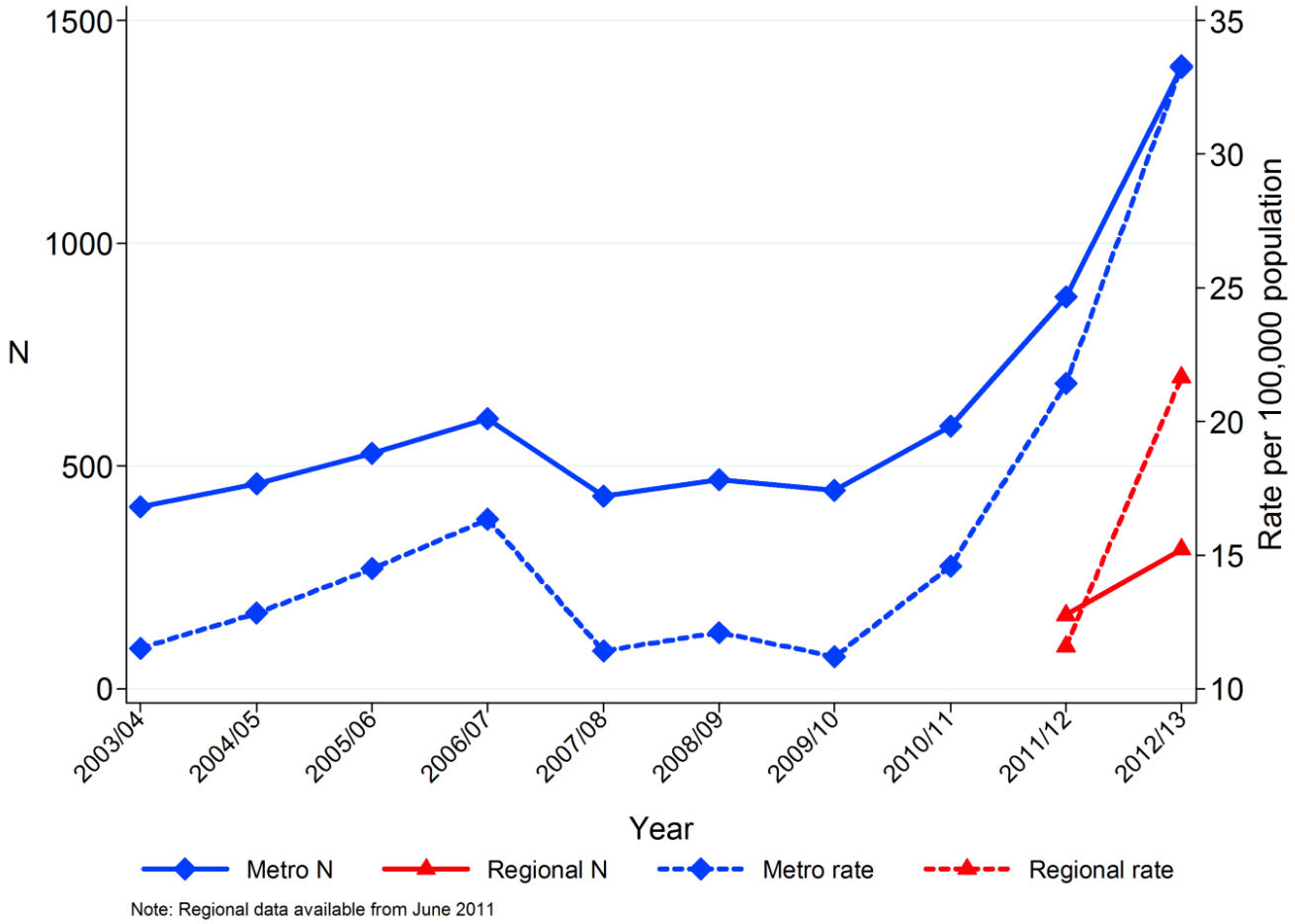

Lloyd et al. (2014).
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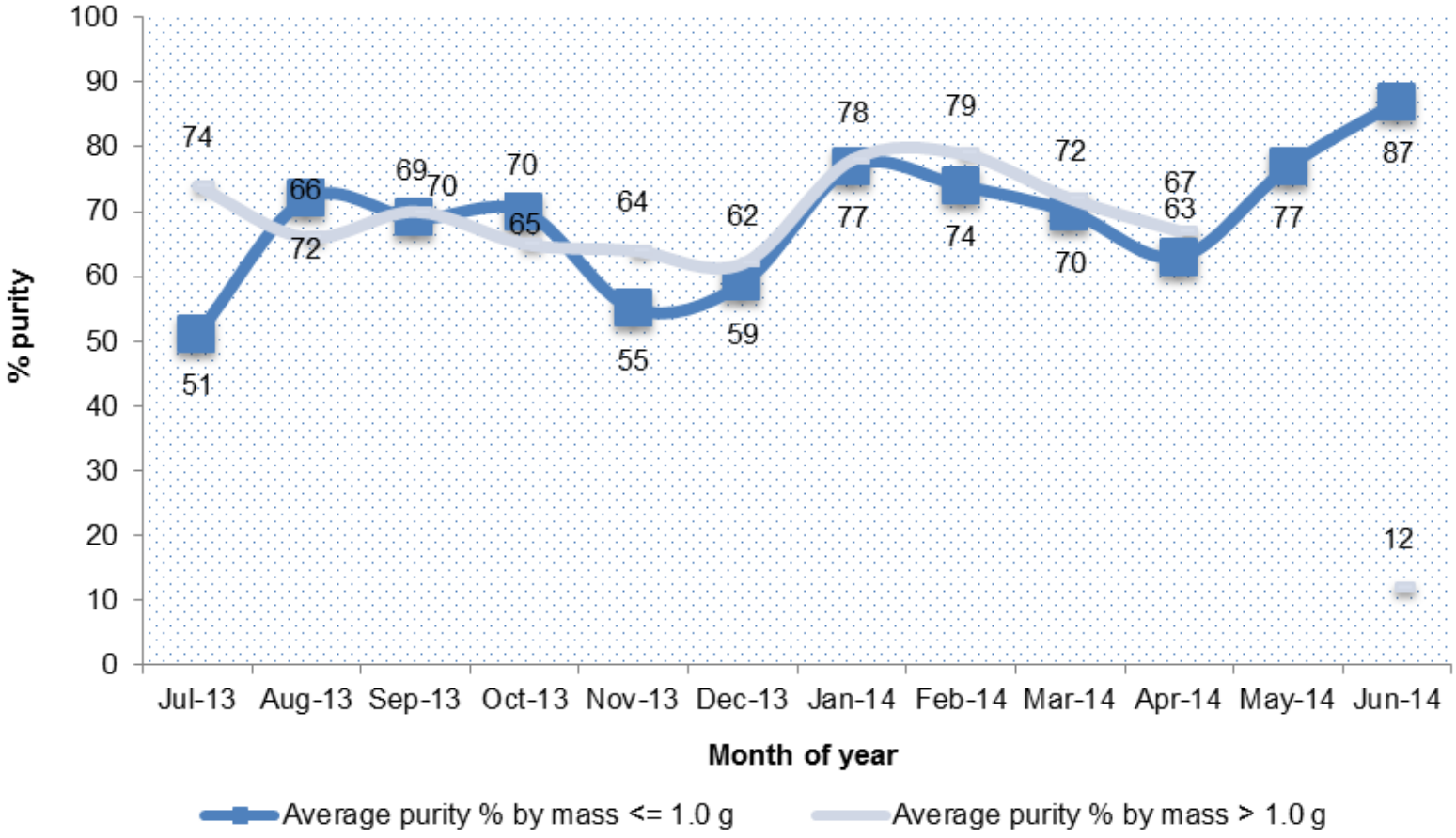
So what is going on?
Average purity of methamphetamine seizures, VIC, 2007/08–2013/14



Source: Victoria Police Forensic Services Department, 2008–2014

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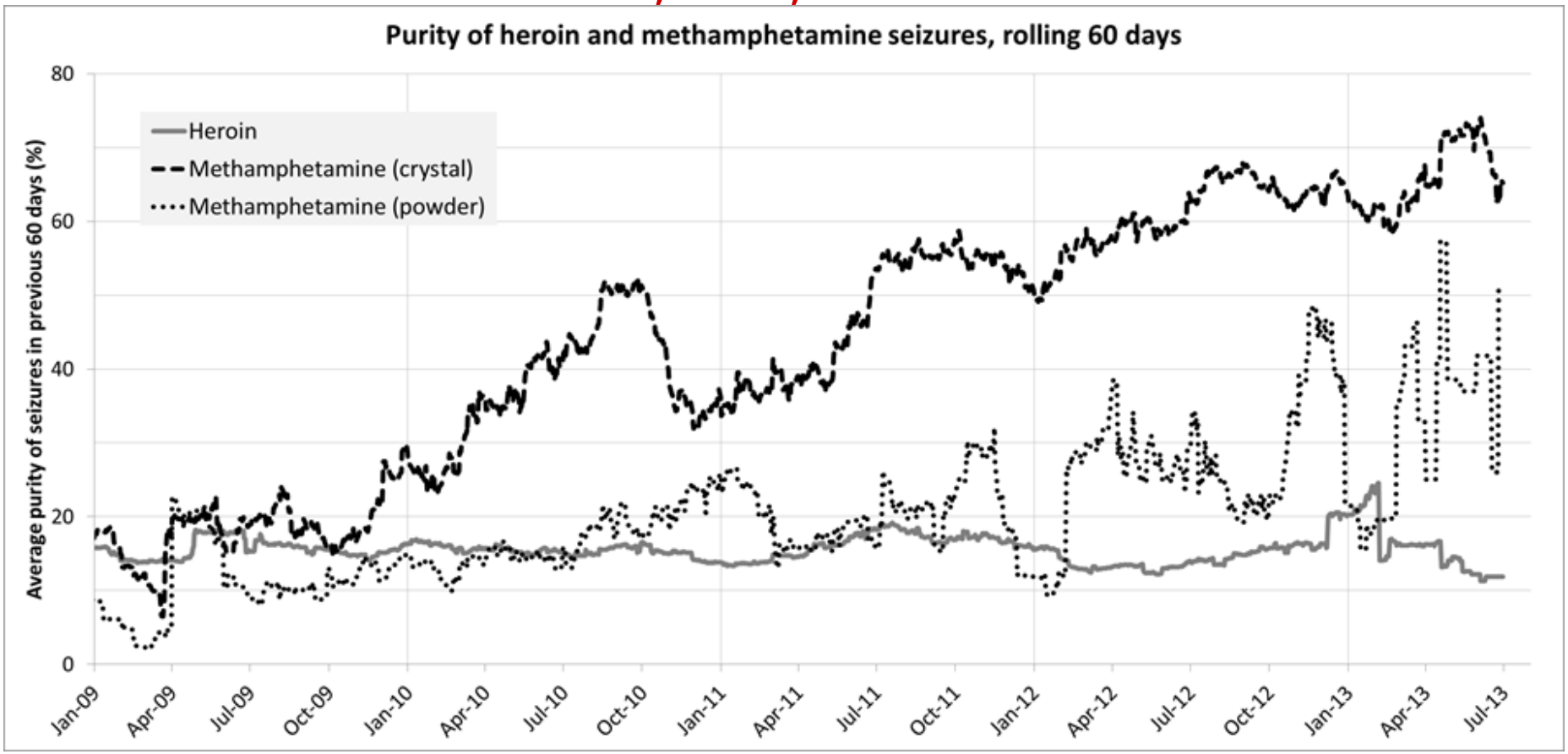
So what is going on?
Average purity of heroin and methamphetamine seizures, VIC, 2009–2013



Scott, N., Caulkins, J. P., Ritter, A. , Quinn, Q., & Dietze, P. (2014).
High-frequency drug purity and price series as tools for explaining drug trends and harms in Victoria, Australia.
Addiction, DOI: 10.1111/add.12740.

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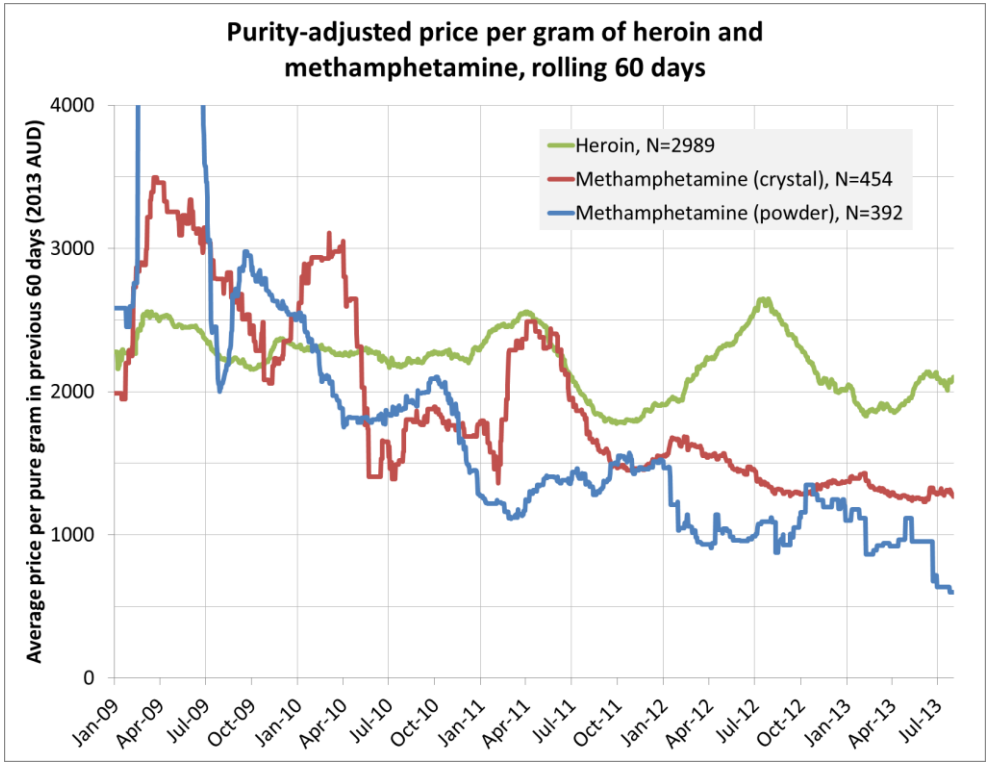
Purity-adjusted price of heroin and methamphetamine, 2009 to mid-2013

- Heroin experienced several mini peaks and troughs.
- Powder meth. declined.
- Crystal meth. declined.
- Both forms of methamphetamine had similar purity-adjusted prices.



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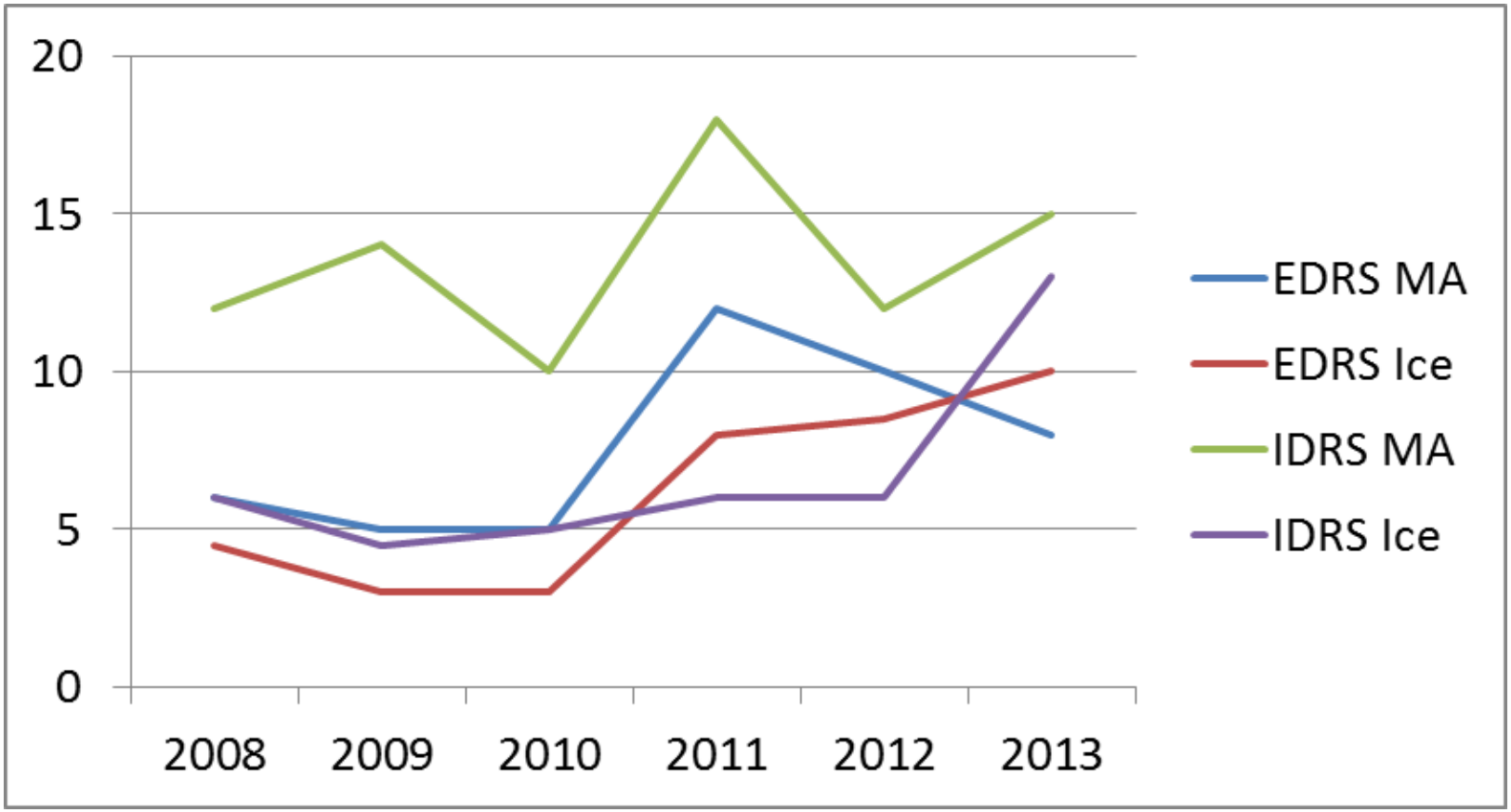
Observations: Preferred drug and drug used most in the last month

Preferred drug	2009	2013
Heroin	73%	64%
Methamphetamine	12%	12%
Cannabis	7%	17%
Other	8%	8%

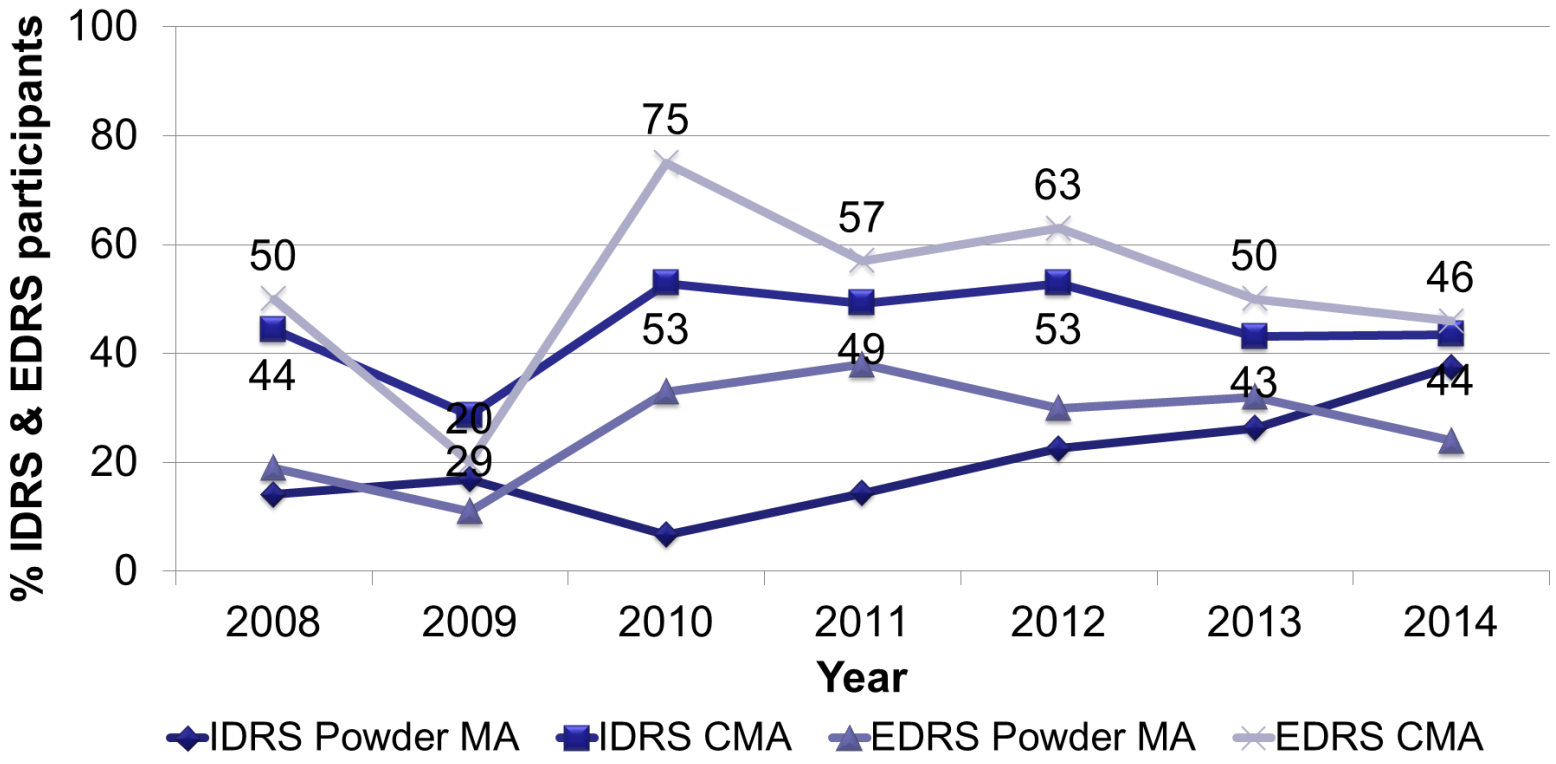
Drug used most	2009	2013
Heroin	60%	30%
Methamphetamine	7%	7%
Cannabis	19%	28%
Other	14%	35%

IDRS/EDRS median days used (past 6 months)



Lim et al. (2015).

Purity Perceptions: "High" purity



Burnet Institute, unpublished

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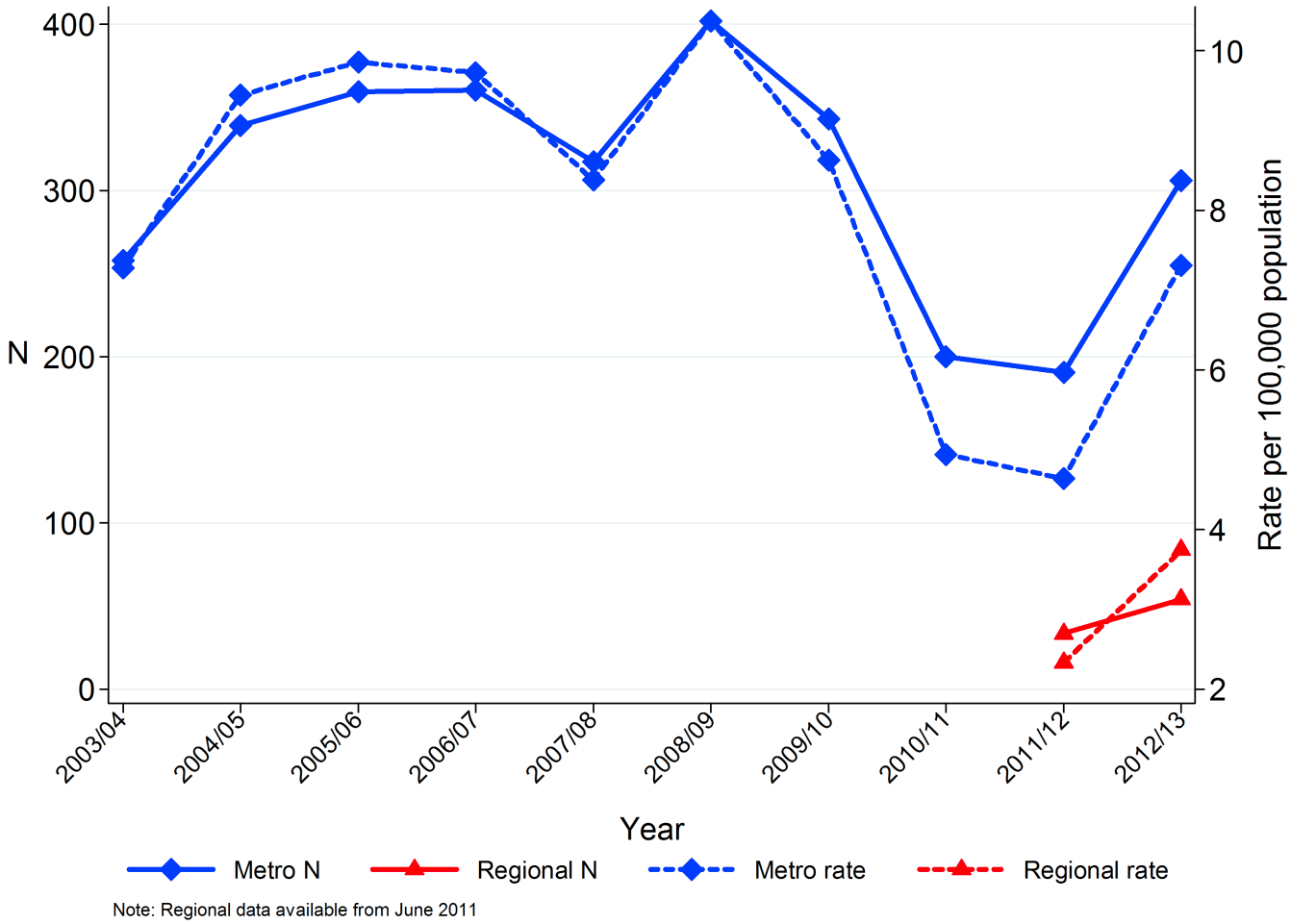
Ecstasy-related ambulance attendances



Lloyd et al. (2014).
Ambo Project Report

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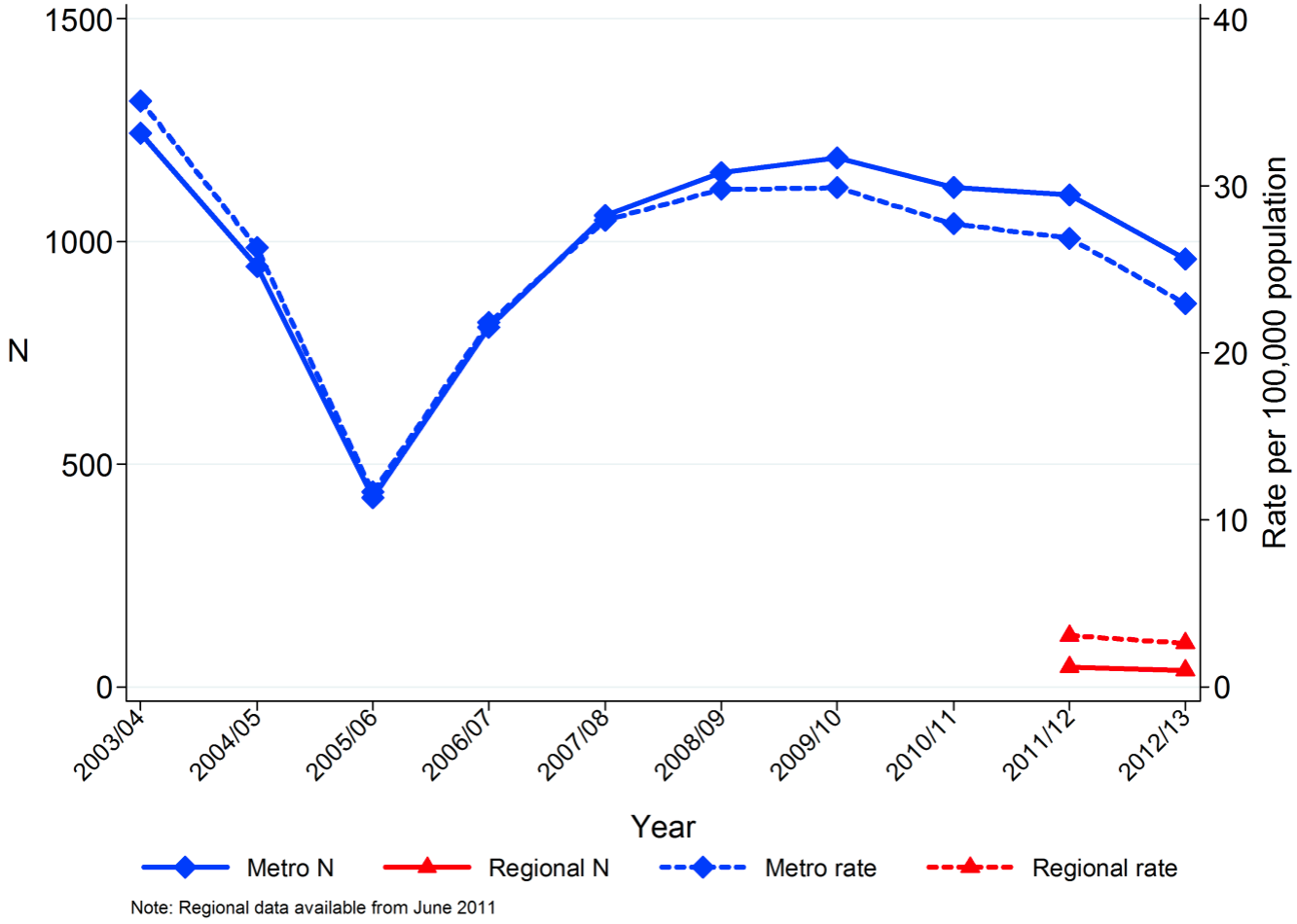
heroin-overdose ambulance attendances



Lloyd et al. (2014).
Ambo Project Report

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Methamphetamine harms (MIX cohort)

ED Utilisation	Drug used	IRR/OR (95% CI)
Any	Heroin	1
	Methamphetamine	1.64 (1.12-2.41)
Frequent	Heroin	1
	Methamphetamine	6.67 (2.64- 16.85)

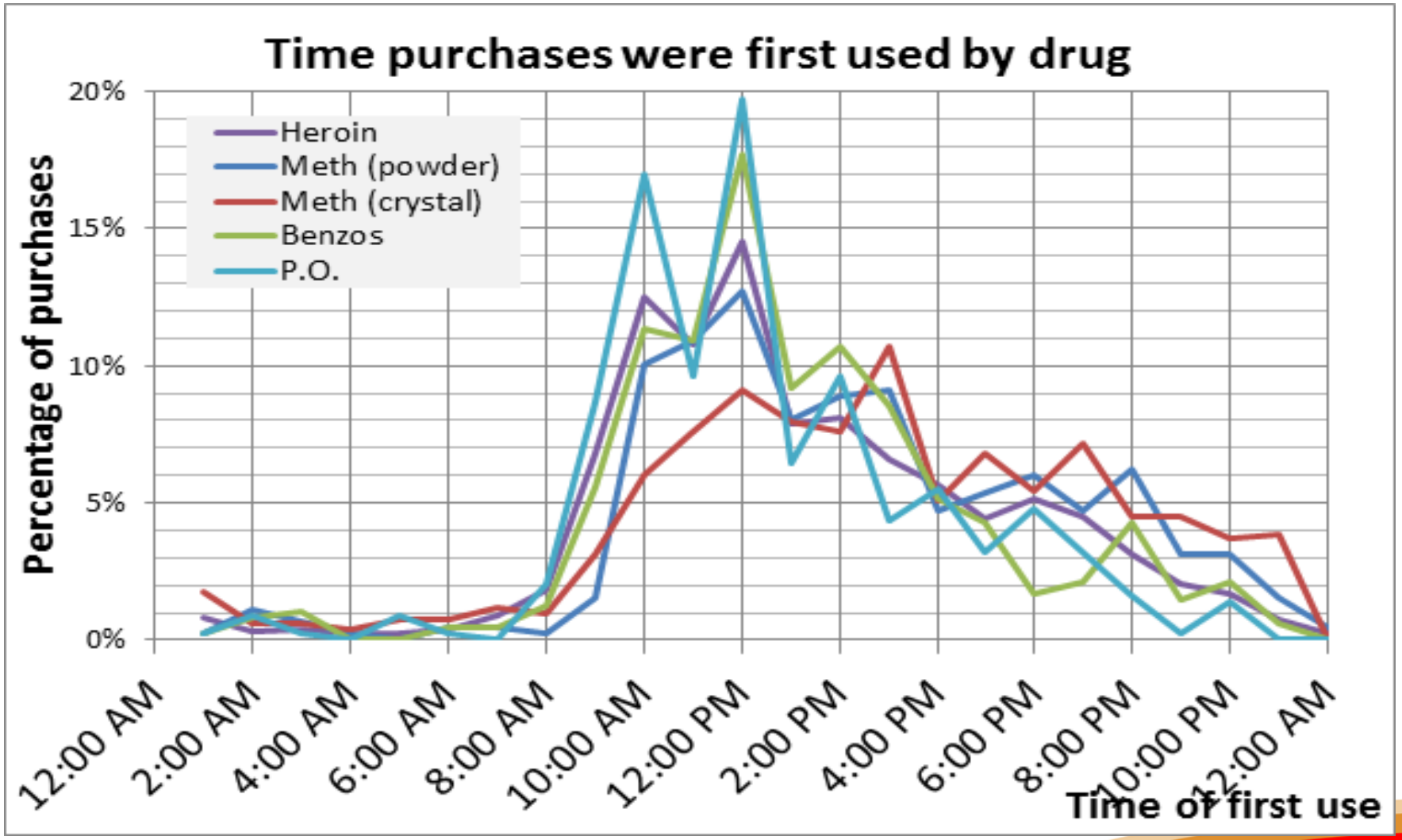
Nambiar, in preparation

NSP coverage in past 2 weeks (MIX)

Coverage	MA use	No MA use
100%+	65	81
<100%	35	19
$X^2=48.46$, $p<0.001$		

OKeefe, in preparation

Time of use (MIX)



Scott et al 2014

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Risk Behaviours for BBVs - IDRS

Behaviour		Odds Ratio (95%CI)	Adjusted Odds Ratio (95%CI)
Syringe re-use	No MA use	1	1
	MA use	1.82 (1.31-2.51)	1.74 (1.17-2.60)
Receptive sharing	No MA use	1	
	MA use	2.72 (1.2-6.17)	N/S
Distributive sharing	No MA use	1	
	MA use	2.72 (1.2-6.17)	N/S

McCormack, in preparation

UnMet

Cohort of 255 regular methamphetamine users recruited in Melbourne in 2010-followed in 2011 (and 2015)

Pattern	Baseline	Follow-up
Regular use	100%	
Stable Use		9%
Decreasing use		70%
Increasing use		21%
ABSTINENT		32%
Dependence	60%	
Remission		45%
Escalation		5%

Quinn, 2012

UnMet: Service avoidance

105 (41%) ‘service avoiders’, who were:

	Odds Ratio (95% CI)
More likely to be employed	2.37 (1.34-4.18)
Less likely to regret decisions	0.47 (0.26-0.86)
Less likely to incur/cause methamphetamine-related injuries	0.34 (0.14-0.78)
Lower frequency of ‘recent’ methamphetamine use	0.31 (0.17-0.55)

- Most use not perceived to be problematic/harmful/severe enough to warrant professional support, e.g.:
  - *“I don’t think it’s a problem…I don’t feel I’m addicted to it and it’s not affecting my life in a bad way”* Elise, 24-year-old female;
  - *“I don’t find I have a problem with [methamphetamine]…I’m not picking at imaginary things on my skin, I don’t have festering sores”* Rob, 34-year-old male

Quinn, 2012

UnMet: Unrecognised need?

Service avoiders

- 50% classified as methamphetamine-dependent;
- 46% using methamphetamine >weekly;
- 50% primarily injected methamphetamine;
- 62% experienced methamphetamine-related financial problems last 6 months;

- There is a need for initiatives targeting this group addressing concepts of ‘problematic’ use and aiming to prevent transition to riskier/more harmful use patterns;
  - Along these lines, need to address constructs of ‘functionality’ that may distort perceptions/awareness of ‘problematic’ use (e.g., employment);

Quinn, 2012

UnMet: Barriers to treatment access

- **Preference for self-treatment** (e.g., due to pride, dignity, accepting responsibility);
  - "I got myself into this pickle…should be up to me to get out of it";
- **Stigma**;
  - "They don't take you in if you're using speed, 'cause they think you'll be violent";
- **Staff turnover, lack of holistic services**;
  - "They always move...you're always repeating yourself like a bloody record";
- **Adverse past experiences**;
  - "…once we've been shat in the face it takes a lot of courage for us to go back and do it again";
- **Lack of methamphetamine-specific services, staff knowledgeable about methamphetamine**;
  - "[Unlike heroin] there's nothing out there that helps with speed";
- **Lack of desire to reduce/cease use** (e.g., use is functional, enjoyable);
- **Adequate support networks already in place**.

Quinn, 2012

UnMet: Remission from dependence

Of participants classified as methamphetamine-dependent at baseline, 33% had remitted from dependence at followup

	Adjusted Odds Ratio (95% CI)
Being younger	0.93 (0.88-1.00)
Maintaining/gaining employment	3.14 (1.21-8.14)
Greater increase in social support	1.08 (1.01-1.16)
Not seeking assistance from family/peers	0.13 (0.03-0.55)

- Accessing services (drug treatment, relevant health/social support services) was not associated with remission from dependence.

Quinn, 2012

Harm Reduction

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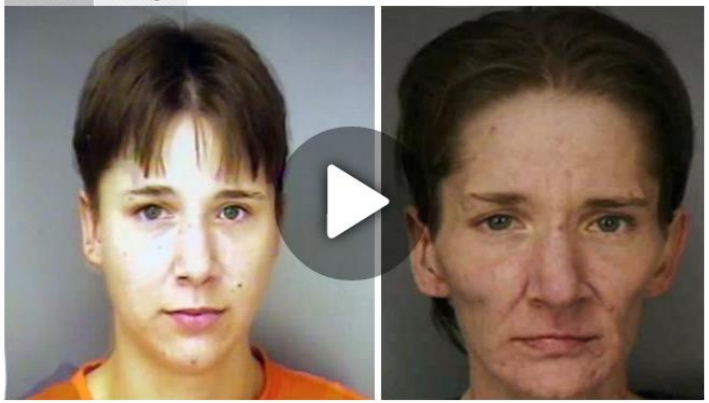

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Harm Reduction

- Needle and syringe programs:
  - Engagement/referral
  - Opening hours
  - Vending machines
  - Regional areas
  - Investment

- Primary Care:
  - GPs
  - Primary health centres for injecting drug use or drug use?

- Consumption facilities/other equipment:
  - Injecting, but what about other equipment?
  - Bans or support?

Harm Reduction

- Safe use education
  - Dose titration?
  - Help and referral
- De-escalation education and training:
  - Front line workers
  - First responders
  - Mental health triage
- Media/Social Marketing Campaigns
  - Targets?
  - Effectiveness?
- Drug Driving
  - Testing & deterrence

Helpful images?

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WEEKEND AUSTRALIAN MAGAZINE 26TH/27TH MAY 1990.

Users say it makes them feel wonderful and helps them cope – while it 'fries' their brains' nerve ends and sends them insane. Will Ice, the drug turning Hawaii into a battleground, take off here?

ICE

THE NEW VICE

BY MIKE SAFE AND MIKE SAGER

THEY MAY HAVE CAUGHT THEIR MAN, but Sydney drug squad detectives were unsure what they had caught him with. The tiny packet of clear to white crystals, like crumbled rock candy, was unlike anything they had seen before.

At first they thought it was the amphetamine known as speed, a stimulant that has existed for many years in various forms.

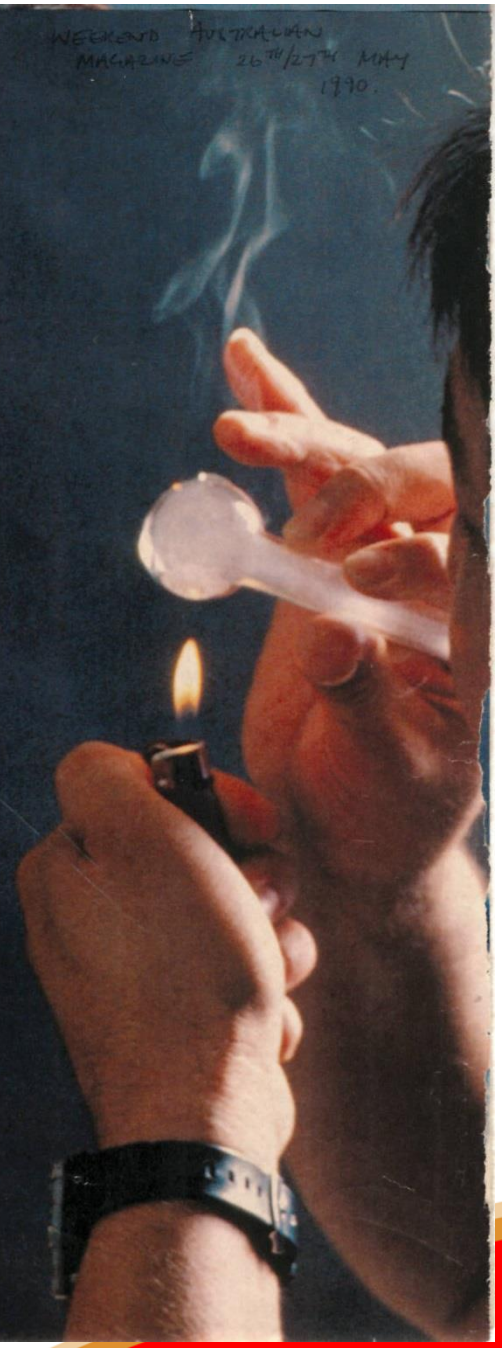
But laboratory tests discovered otherwise. The substance was a smokeable crystal methamphetamine, a more potent variation of speed and capable of delivering a heavy and immediate hit or "rush".

On the streets it is known as Ice.

The drug that has turned Hawaii (population 1,083,000) into a battleground, relating to nearly 80 per cent of its drug crime, has reached Australia. Two years after the first warning signals from the Australian Federal Police monitoring post in Honolulu, Ice appears to be a reality here.

"We're apprehensive," says Detective Sergeant Brent Martin, of the Sydney southern region drug

PHOTOS BY KEN SAKAMOTO



MAIN PHOTO **GEORGE FETTING**

THE ICE STORM

Sleepless binges, manic sexual urges, psychotic episodes … methamphetamine is filling hospitals around the country with its victims. *Mark Whittaker* reports.

Scott remembers when he lost his mind. The first time it happened, the personal trainer from Melbourne was in New York studying drama and literature, doing a bit of bar work, shooting up crystal to go out partying. Towards the end of his year overseas he went on a three-day bender and came home to a friend's apartment where he was staying. The friend rolled over in his bed and he was wearing a huge, fluorescent African mask.

Scott fled to the kitchen, where he saw a movie being projected on to the walls showing policemen about to bust in and arrest him. His friend came out: "What's wrong? What's wrong?" How dare he put that huge, freaky mask on then pretend not to know what was up. Scott ran on to the street and spent the next three days scurrying across Manhattan, cowering from the sirens that he knew were coming to get him. He hadn't slept or eaten in six days when he knocked on another friend's door and was given a sleeping pill. When he woke, he was normal again.

Returning to live in Sydney in 2000, Scott found crystal was just taking off there. He gave it a miss for a while, but its pull was irresistible. It wasn't like he was an addict. He had a job and lots of friends. His body was hard.

Over the next three years he continued bingeing on the drug, often going for five sleepless days and then two to four weeks without touching the stuff. But he got to the point where, half the time he had it, he descended into a psychosis every bit as fierce as his New York episode. "I must have had psychosis maybe 30 or 40 times. I put myself through the same ordeal of imagining people were trying to kill me. Sometimes I'd see people

CORBIS / AFL

filming on my bedroom wall my parents being tortured. Sometimes I would imagine the trucks and the cars in the street had meat mincers inside them and were trying to run me down so they could mince me up alive."

He felt guilty about missing work at his new job. He had deadlines, people to manage. And he was certain they were all bitching about him. So he quit. His circle of friends changed. He went to the theatre less. But he still knew he wasn't an addict; addicts used drugs every day.

The memory of the first time he'd shot up the drug kept pulling him back. It was like the first cigarette of a ▷

Acknowledgements

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- Burnet Staff: all who contributed to this paper, everyone else (plus non-Burnet staff) who assisted with data collection
- Turning Point and other data custodians
- Victoria Police Forensic Sciences Centre
- David Moore

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Predictors/correlates of service utilisation – Discussion (1)

- Service utilisation:
  - GPs most common source of professional support. Possibly indicates greater accessibility, availability, familiarity, utilisation for other health issues vs. other service types;
  - One-on-one drug counsellors most common drug-specialist service type. Possibly indicates:
    - Presence of barriers to high-threshold services (Pennay & Lee, 2010);
    - Preference for low- vs. high-threshold service types; and,
    - The ability of some individuals to address dependent, harmful use patterns without intensive professional support (*important to consider with regard to positive changes to psychosocial factors over follow-up period*).

Quinn, 2012

Predictors/correlates of service utilisation – Discussion (2)

- Factors associated with service access:
  - **Greater perceived need/motivation** to change methamphetamine use patterns, address related harms (e.g., self-treatment, seeking help from family/peers);
    - Suggests a need to develop initiatives for users engaging in harmful use patterns who aren't yet experiencing 'readiness to change', to promote earlier treatment engagement and reduce/prevent harms;
  - **Service utilisation for other issues** (mental health, other drug use);
    - Such contact possibly diminishes certain barriers for some methamphetamine users, means they're more receptive to utilising services for methamphetamine;
    - Suggests a need to facilitate pathways to professional support for those not in contact with the service sector (e.g., non-injectors engaging in harmful use patterns, given injecting associated with service utilisation).

Quinn, 2012