

# Impact of scheduling restrictions on non-prescribed alprazolam use among people who frequently inject drugs

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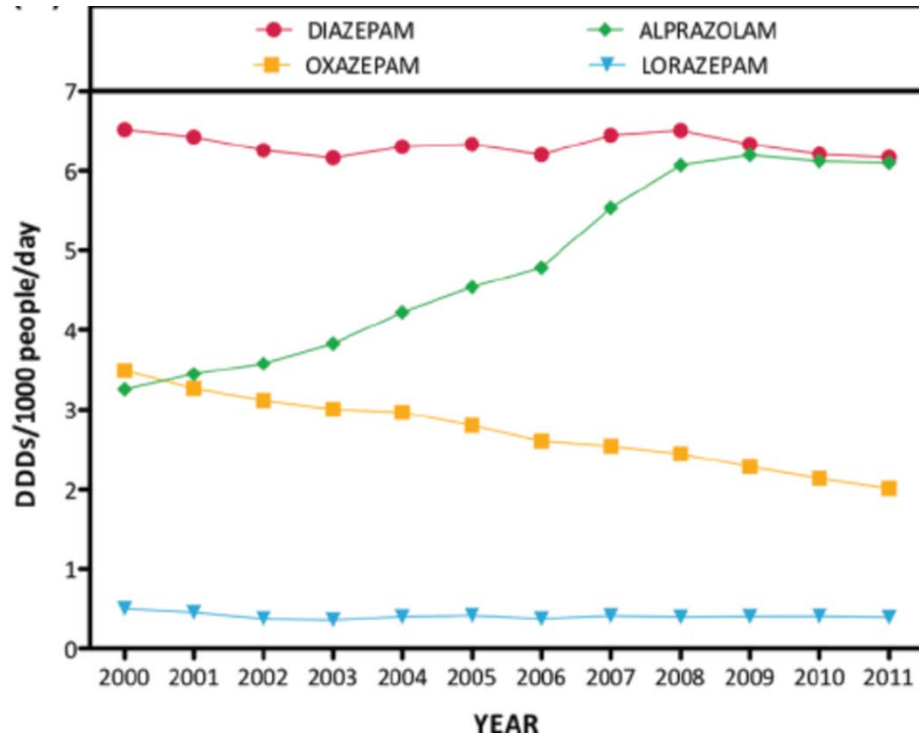
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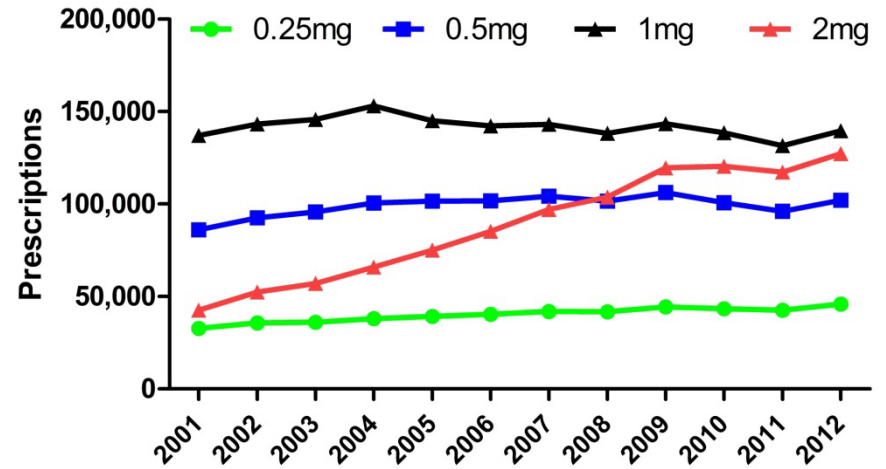
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# Alprazolam use in Australia

## All Anxiolytic Prescriptions

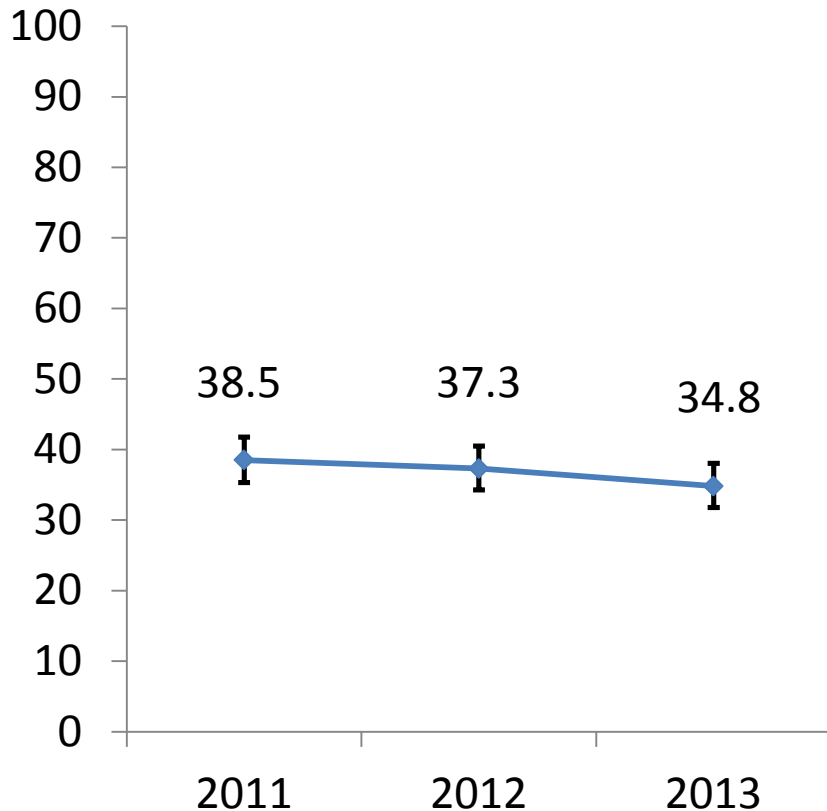


## Subsidised Alprazolam Prescriptions

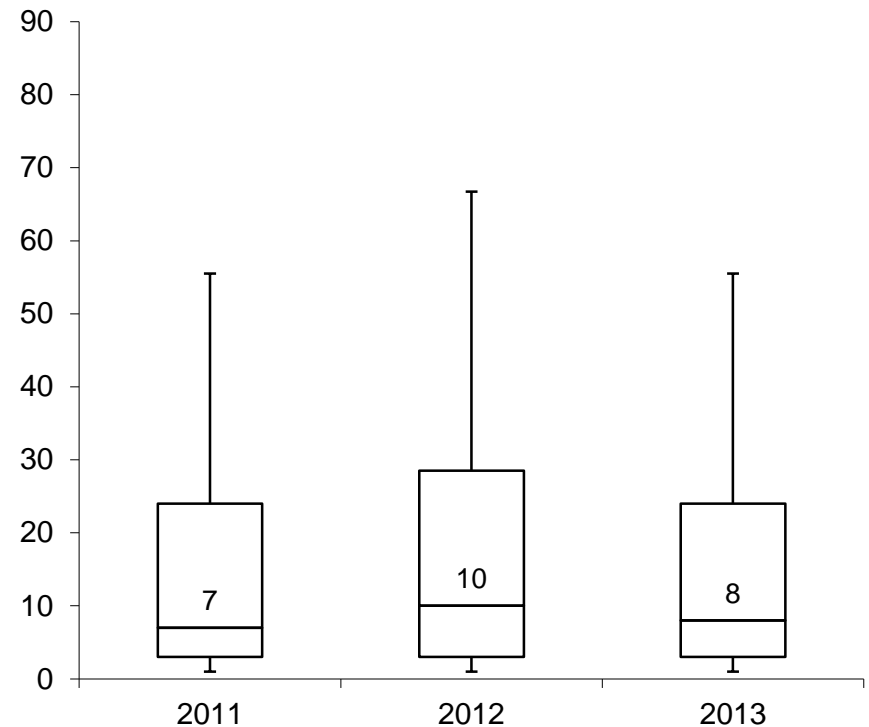


# 'Illicit' alprazolam use in IDRS samples

## % using in last 180 days



## Days used out of last 180





ELSEVIER

Contents lists available at ScienceDirect

## Drug and Alcohol Dependence

journal homepage: [www.elsevier.com/locate/drugalcdep](http://www.elsevier.com/locate/drugalcdep)

# Why is this an issue?

Escalation of sudden/unnatural deaths involving alprazolam in NSW

1997: 3 → 2012: 86

2010-12 → >44 deaths p.a.

accidental OD,

~80% PWID, 90% opioid+alpraz

Chronic BZD impairs cognition

(meta analysed:  $d = -0.74$ )

Cognitive impairment NON-

REVERSED following abstinence

(meta analysed:  $d = -0.48$ )

Circumstances and toxicology of sudden or unnatural deaths involving alprazolam

Shane Darke<sup>a,\*</sup>, Michelle Torok<sup>a</sup>, Johan Duflou<sup>b,c,d,e</sup>



Pergamon

Archives of Clinical Neuropsychology  
19 (2004) 437–454

Archives  
of  
CLINICAL  
NEUROPSYCHOLOGY

Persistence of cognitive effects after withdrawal from long-term benzodiazepine use: a meta-analysis

Melinda J. Barker, Kenneth M. Greenwood, Martin Jackson, Simon F. Crowe\*

BZD use (any) associated with increased risk of dementia

<91 LT DDD OR 1.09

91-180 LT DDD **OR 1.32\***

>180DDD **OR 1.84\***

(controlling for confounders)

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Page 1 of 10

RESEARCH

## Benzodiazepine use and risk of Alzheimer's disease: case-control study

OPEN ACCESS

Sophie Billioti de Gage *PhD student*<sup>1</sup>, Yola Moride *professor*<sup>2,3</sup>, Thierry Ducruet *researcher*<sup>2</sup>, Tobias Kurth *director of research*<sup>4,5</sup>, H el ene Verdoux *professor*<sup>1,6</sup>, Marie Tournier *associate professor*<sup>1,6</sup>, Antoine Pariente *associate professor*<sup>1</sup>, Bernard B egaud *professor*<sup>1</sup>

# Increased adverse correlates with alprazolam use

IDRS 2011-13	No BZD use (n=488)		BZD use (not alpraz) (n=315)	Alpraz use ( $\pm$ other BZD) (n=641)	
	%	AOR		%	%
Male	70	1.12	66	65	0.86
Unst. Accom	20	0.90	22	29	1.20
Daily IDU	40	1.10	39	46	1.34
OST	38	0.71*	49	59	1.42*
Anx dx	14	0.56*	26	33	1.16
$\Psi$ distress	21	0.62**	35	49	1.41*
Arrested	29	1.19	27	45	1.61**
Any crime	29	0.97	33	49	1.37*

Incrementally greater adverse events associated with alprazolam use

- Poorer MH function (SF-12 MHS -2SD) despite controlling for anxiety dx
- Greater crime involvement despite controlling for IDU frequency, unemployment

**Relationship between days alprazolam use and days crime sig even after controlling for frequency of other BZD use**

Controlling for: age, sex, education, unemployment, accommodation, frequency of injection, drug types injected, OST, health service utilisation, physical function, sharing, anxiety dx

# What's changed?

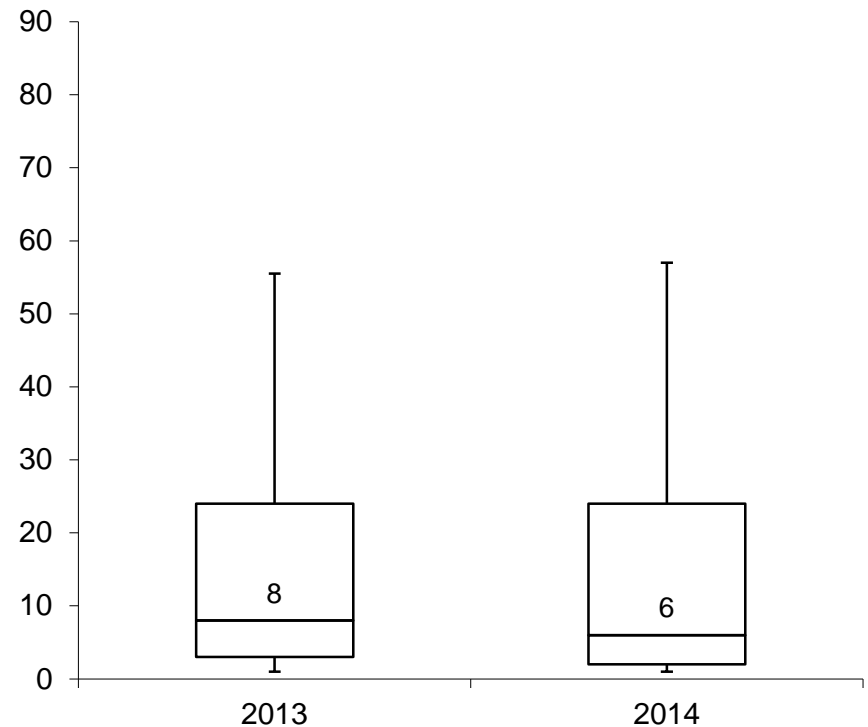
- Feb 1, 2014: National up-schedule from Schedule 4 (prescription only) to Schedule 8 (controlled drug)
  - Pfizer withdraws alprazolam as of December 2013
- Practically, what does this mean?
  - Generally:
    - If declared drug dependent person → immediate authority required
    - Otherwise → ~8 week 'grace period' THEN authority required

# Did alprazolam use change in 2014?

## Alprazolam Use 2013 vs 14

	2013 N=887	2014 N=898	p
Any licit	9.5% (n=84)	7.2% (n=65)	0.105
Days licit	158 (1-180)	74 (1-180)	0.065
<b>Any illicit</b>	<b>34.8%</b> <b>(n=309)</b>	<b>26.9%</b> <b>(n=242)</b>	<b>&lt;0.001*</b>
Days illicit	8 (1-180)	6 (1-180)	0.134
<b>Any IV</b>	<b>5.1%</b> <b>(n=45)</b>	<b>3.0%</b> <b>(n=27)</b>	<b>0.036*</b>
Days IV	4 (1-180)	4 (1-100)	0.870

## Frequency of illicit use 2013 vs 14



p=0.134

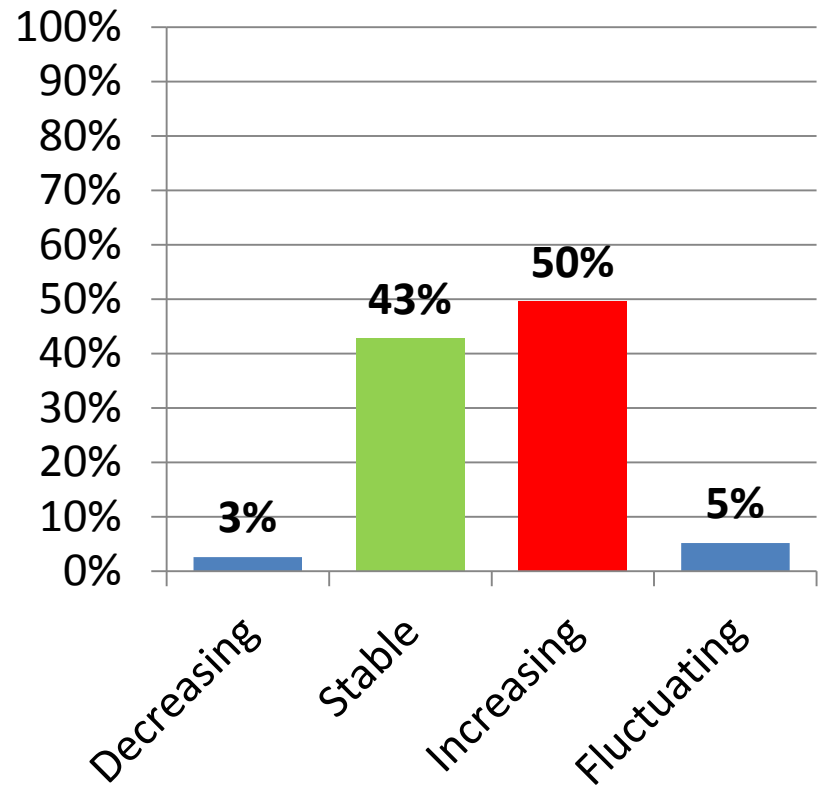
Source: 2014 National IDRS PWID interviews

# Did prices change in 2014?

## Prices paid for alprazolam

	2013	2014	M-W p
0.25mg	-	-	
0.5mg	\$3 (3-5) n=3	\$3 (1-5) n=3	0.637
1.0mg	\$5 (2-10) n=7	\$5 (2-15) n=7	0.554
2.0mg	\$5 (1-20) n=114	\$7 (2-40) n=101	0.008**

## Price change since Feb n=117

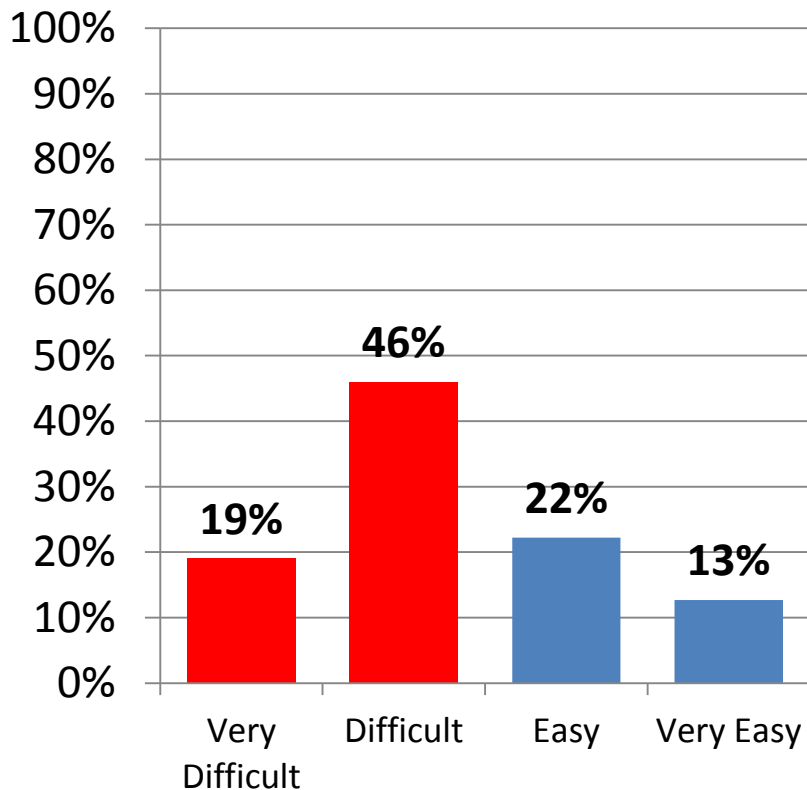


Source: 2014 National IDRS PWID interviews

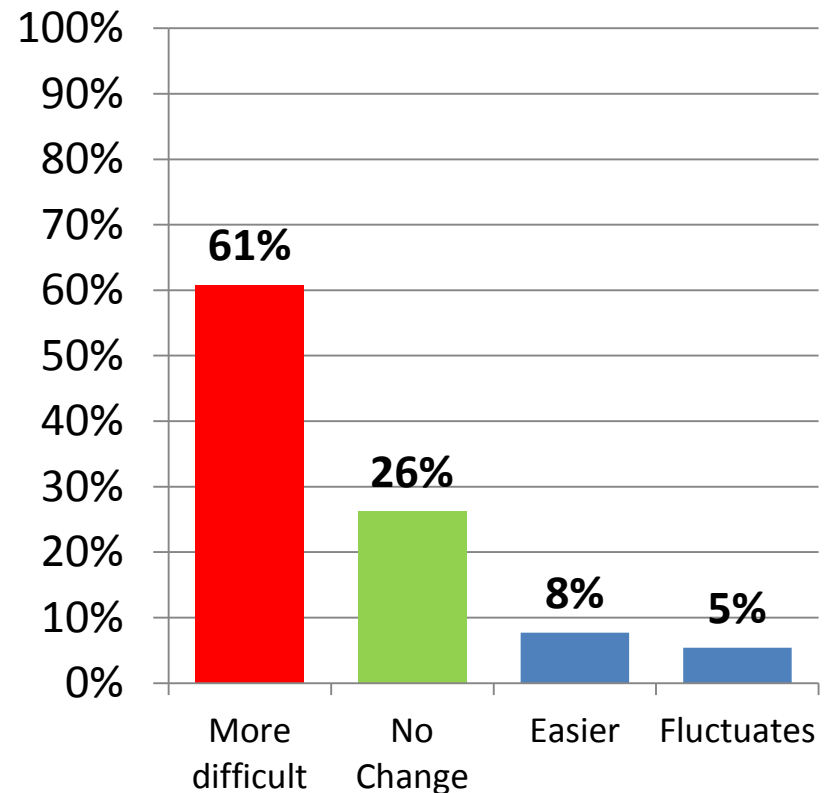


# Did availability change in 2014?

**Ease of access post-policy change  
(n=126)**



**Change in access post policy change (n=130)**



# Attributions: what caused you to change your alprazolam use?

	<b>N=194</b>
<b>Still using it post the policy change</b>	<b>67% (n=130)</b>
Harder to access	16% (n=31)
Price increase	2% (n=4)
Prescriber shifted me to other medications	2% (n=4)
Not interested in it	7% (n=14)
Experienced adverse events from the drug	3% (n=6)
Friends have experienced adverse events	2% (n=4)

# So, what's the upshot of all this?

- Rescheduling has produced some reduction in extramedical use
  - Use↓, price↑, availability↓
- However, 2/3 of those using pre-regulatory change continued to use
- What else might have an impact on use?
  - Peer-led interventions? (health behaviour change models)