



Prevalence and determinants of non-prescribed ['street'] benzodiazepine use and related harms among a national sample of people who inject drugs

Dr. Andrew McAuley

@arjmcauley

'Jellies' have ruined thousands of lives

John Arlidge talks to a former addict in Glasgow

John Arlidge | Wednesday 13 September 1995 00:02 |



Stuff

Diazepam Is Killing Scotland's Drug-Using Poor

Thanks to the majority of late-20th-century American fiction, many of us have the mistaken belief that Valium is the preserve of the clinically bored, middle-aged housewife, when really the drug is killing Scotland's poorest men.

By William Nicol

Mar 19 2013, 7:00pm Share Tweet

GPs 'TURNING MILLIONS INTO PRESCRIPTION DRUG ADDICTS'

The Scotsman

February 4, 2004

by Geoff Meade, European Editor,
PA News in Brussels



Sign in

NEWS

Street valium blamed for 'unprecedented' spike in drugs deaths



NEWS

24th September 1998

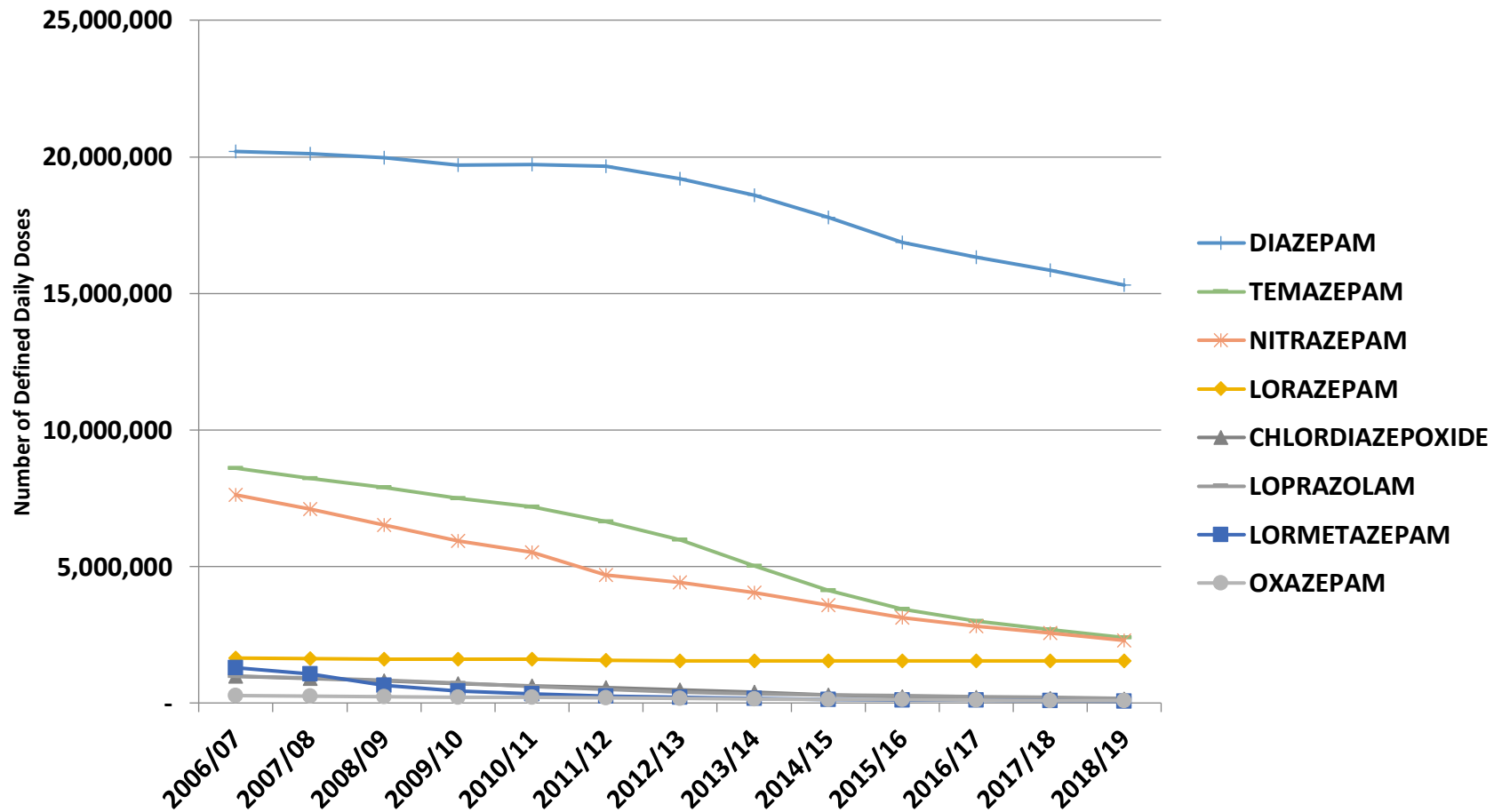
The Herald

Return of the banned killer jellies



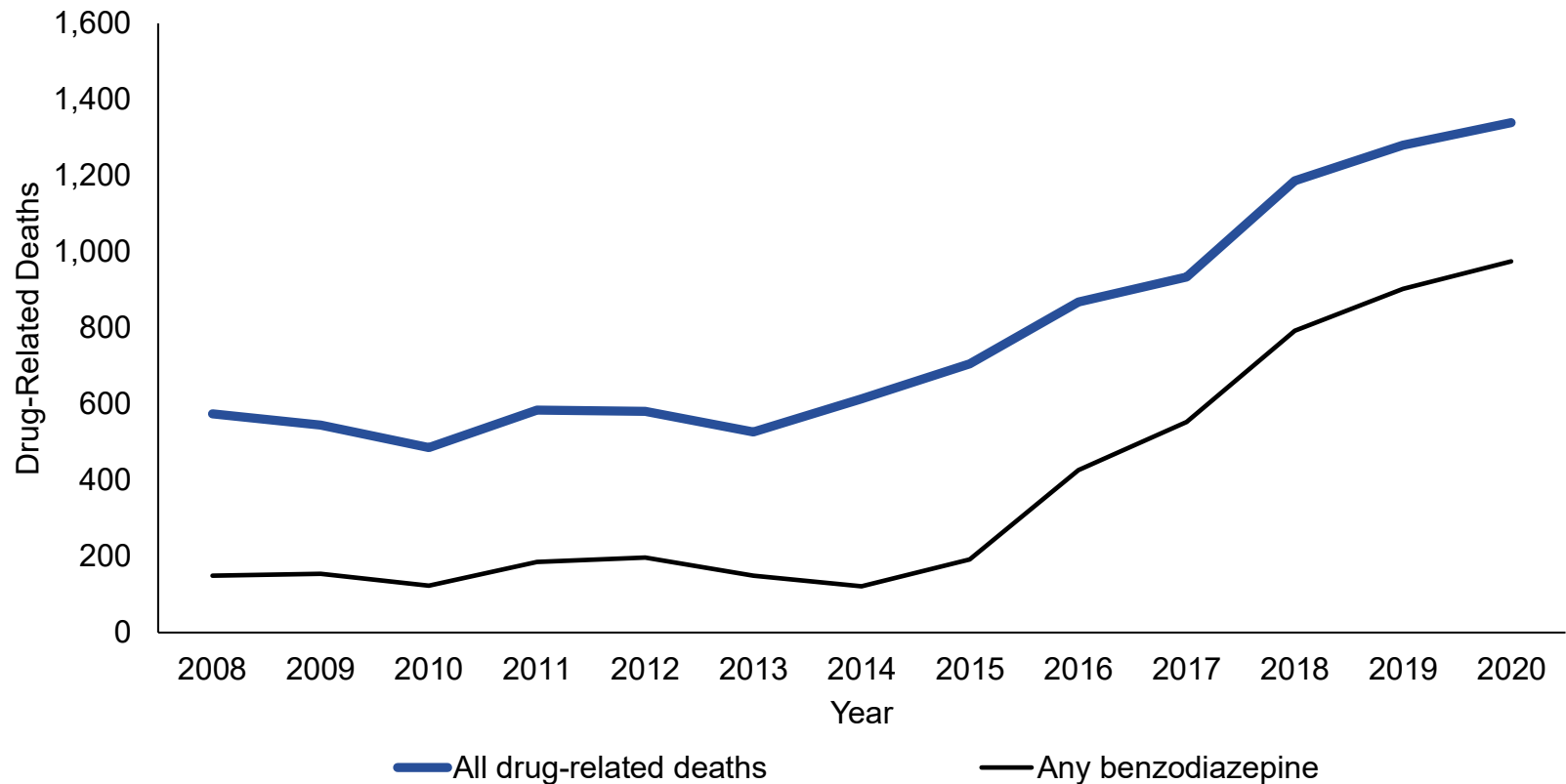
TEMAZEPAM, formerly the most widely abused prescription drug in Scotland, is making a comeback despite Government moves to ban it, drug experts were warned yesterday.

Trends in prescribing of Benzodiazepines in Scotland, 2006-2019



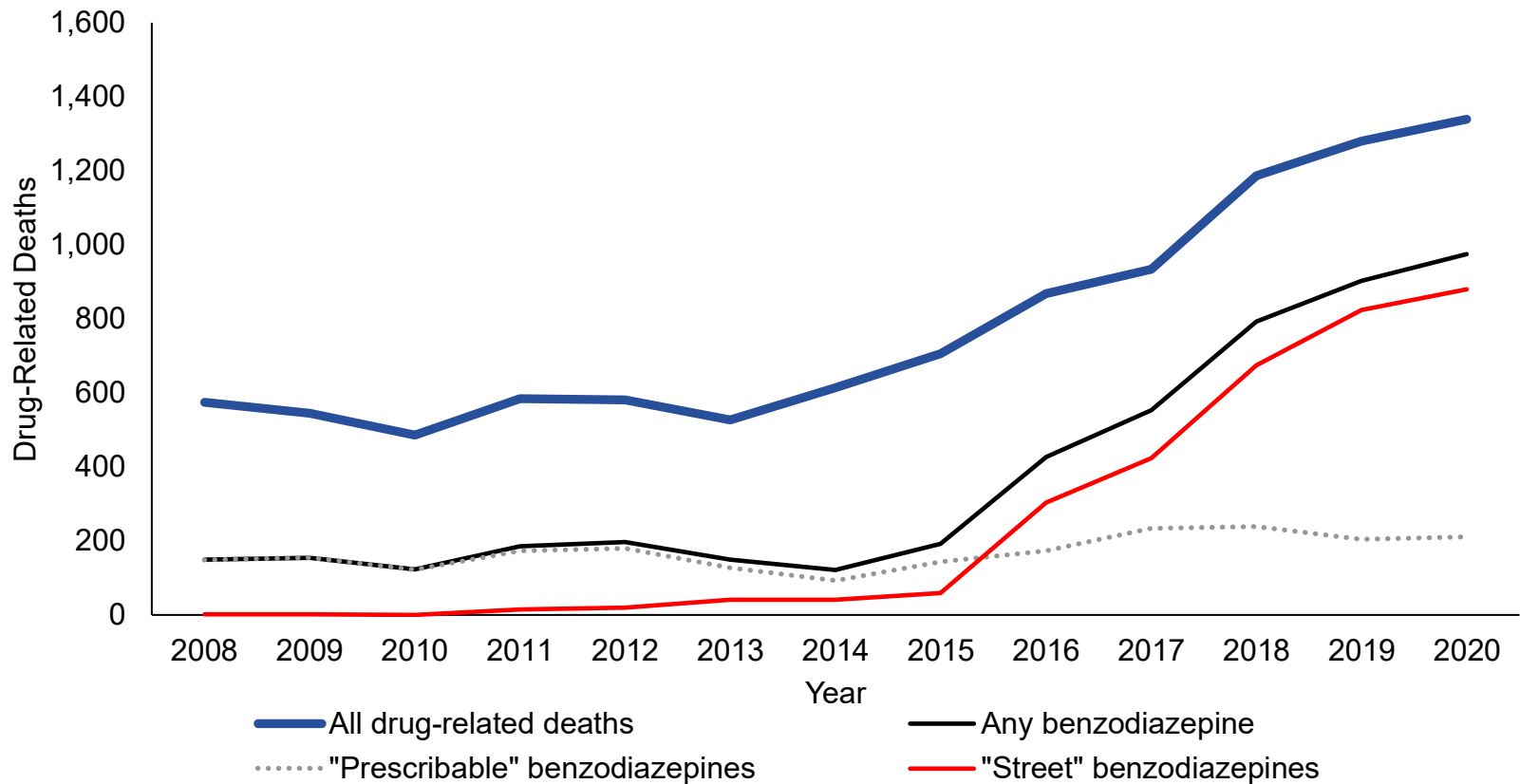
Source: Public Health Scotland

Benzodiazepine-related deaths, Scotland, 2008-2020



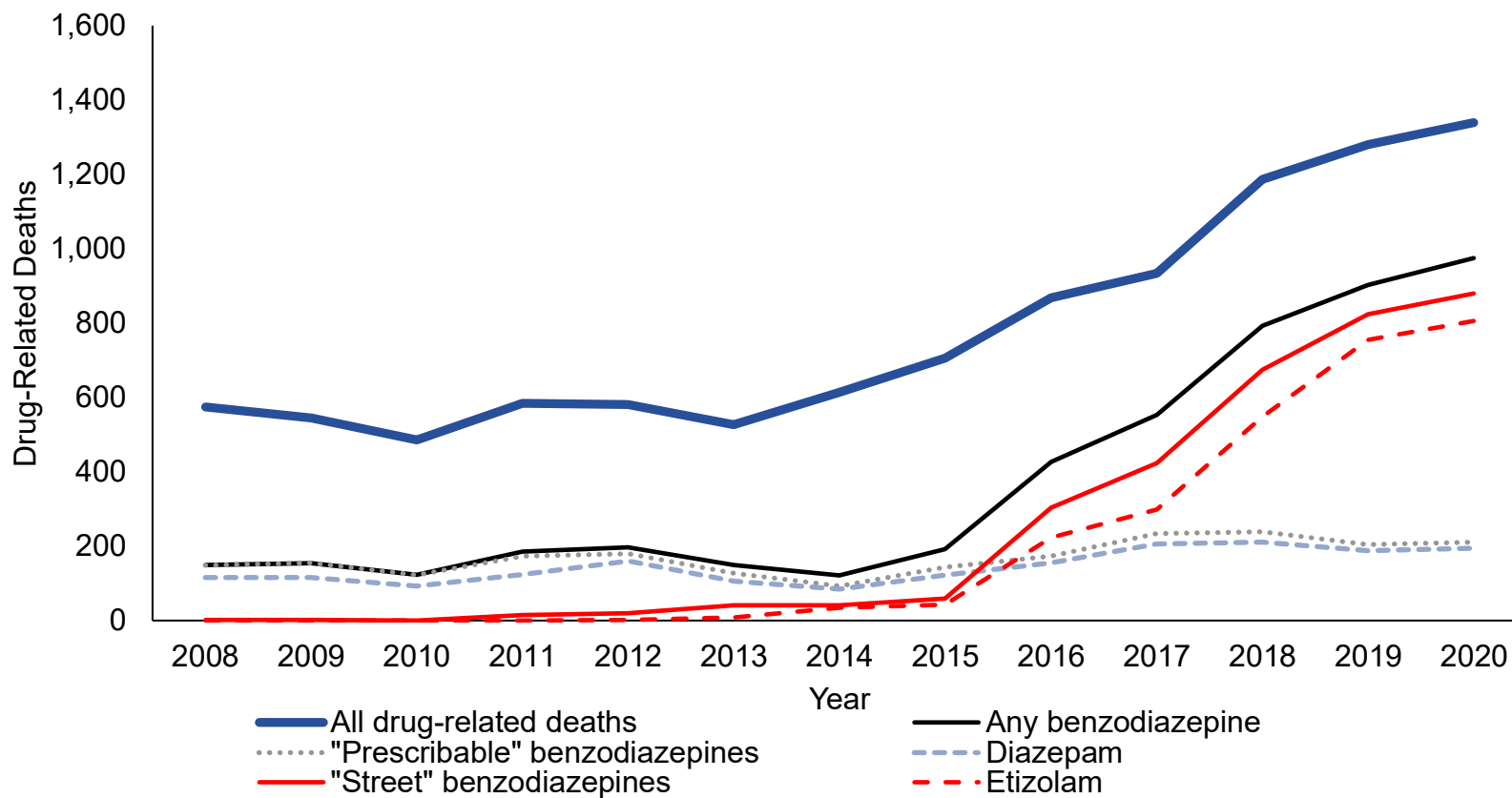
Source: National Records of Scotland (NRS)

Benzodiazepine-related deaths, Scotland, 2008-2020



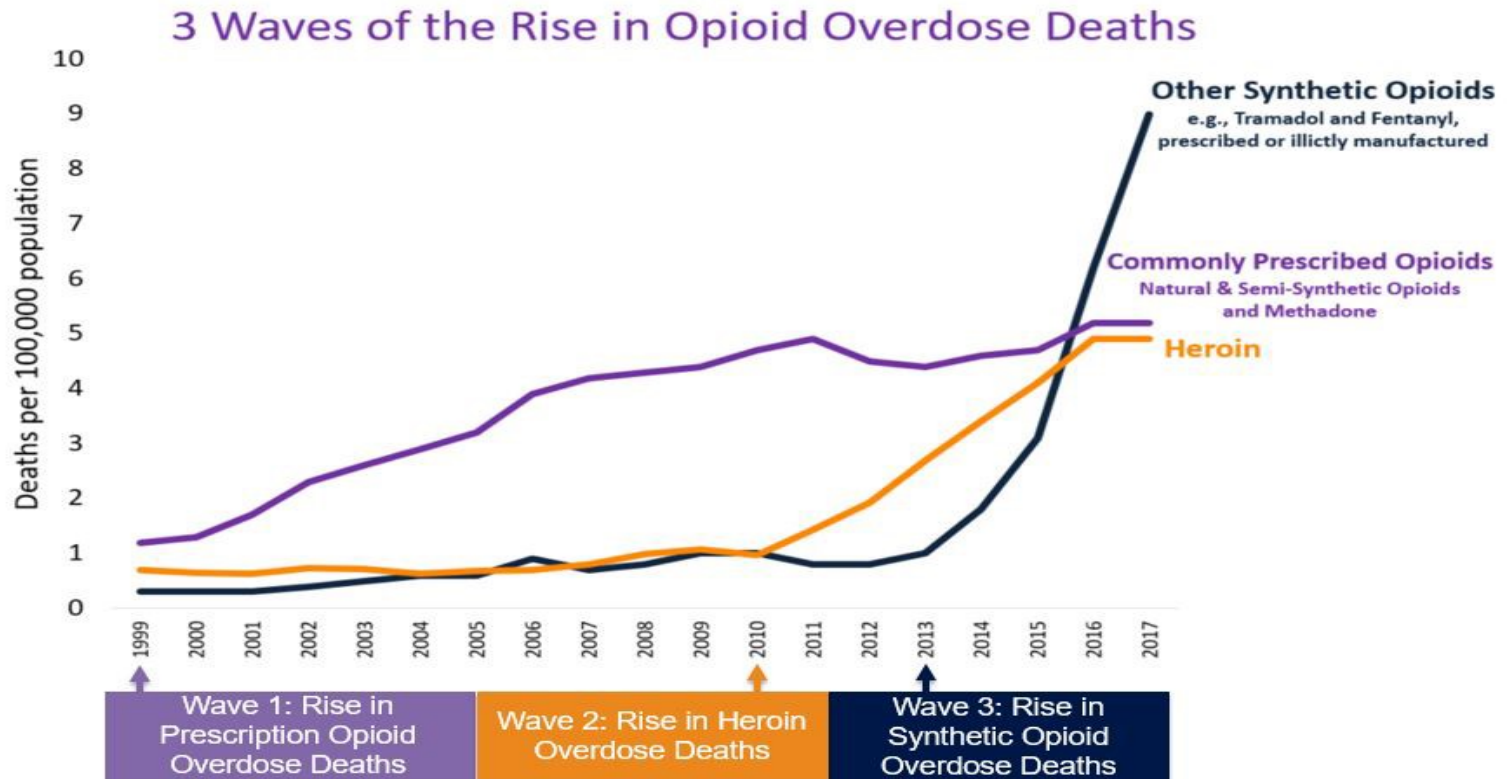
Source: National Records of Scotland (NRS)

Benzodiazepine-related deaths by substance, Scotland, 2008-2020




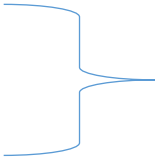

Source: National Records of Scotland (NRS)

Opioid-related deaths by substance, USA, 1999-2017



SOURCE: National Vital Statistics System Mortality File.

Why 'street benzo's matter...

- Increases polydrug toxicity  *Increased risk of overdose*
- When compared traditional Benzo's...
 - *Often* stronger
 - Different half-life *Increased risk of overdose*
- False advertising  *"Consumption roulette"*

Consumption roulette



“The ACMD is concerned with Police Scotland’s report that a number of benzodiazepines are being sold as ‘street valium’. When analysed, tablets with the appearance of diazepam tablets were found to contain diclazepam, diazepam, a mixture of etizolam and the synthetic opiate U-47,700 or U-47,700 on its own.”

ACMD letter to Home Office recommending control of Etizolam and other designer benzodiazepines, 2 Dec 2016

Aim

- *To determine the prevalence and determinants of non-prescribed ['street'] benzodiazepine use and related harms among a national sample of people who inject drugs.*

Methods – Needle Exchange Surveillance Initiative (NESI)

- **National bio-behavioural survey** consisting of dried blood spot testing to test for BBVs and an interviewer administered questionnaire
- Main aim is to measure and monitor the **prevalence of blood-borne viruses and injecting risk behaviours** among people who inject drugs (PWID) in Scotland
- **Powerful research tool:**
 - ~15% of Scotland's injecting population sampled every two years since 2008

Participant characteristics of PWID who reported street benzo use, Scotland 2019-20

	Total sample (%)	Reported street benzo use (%)
Total	2436	1259 (52)
Mean age (SD)	41.0 (7.8)	40.0 (7.3)
Gender		
Male	1747 (72)	914 (53)
Female	678 (28)	341 (50)
Excess alcohol	369 (15)	205 (56)
Frequent incarceration (>5 times)	742 (31)	432 (58)
Homeless in last 6 months	586 (24)	311 (54)
Injected drugs in last 6 months	1660 (68)	981 (59)
Injected in public in last 6 months	292 (12)	205 (70)
Methadone Px in last 6 months	1941 (80)	1057 (55)
Ever prescribed benzodiazepines	305 (13)	202 (66)
Non-fatal OD in last 12 months	385 (16)	283 (74)

Factors associated non-prescribed ('street') benzo use among PWID in Scotland, 2019-20*

	street benzo use, n (%)	Overall sample (n = 2424, 1259 reported street benzo use in past 6 months)			
		OR (95% CI)	p	aOR (95% CI)	p
Age					
Age (Per Year Increase)		0.97 (0.96, 0.98)	0.00	0.97 (0.96, 0.98)	0.00
Sex					
Male	914 (52.6)	1.00		1.00	
Female	341 (50.4)	0.92 (0.77, 1.1)	0.34	0.94 (0.77, 1.14)	0.53
Healthboard					
RoS	541 (49.9)	1.00		1.00	
GGC	528 (51.7)	1.08 (0.91, 1.28)	0.40	1.04 (0.87, 1.25)	0.67
TAYSIDE	190 (59.7)	1.49 (1.16, 1.92)	0.00	1.50 (1.15, 1.97)	0.00
Incarceration history					
5 times or less	824 (49.2)	1.00		1.00	
More than 5 times	432 (58.3)	1.44 (1.21, 1.72)	0.00	1.32 (1.09, 1.60)	0.01
Injected drugs in the last six months					
No	278 (36.2)	1.00		1.00	
Yes	776 (56.8)	2.32 (1.93, 2.78)	0.00	2.22 (1.83, 2.69)	0.00
Yes in a public place	205 (70.4)	4.19 (3.13, 5.69)	0.00	3.65 (2.68, 4.97)	0.00
Methadone prescription in the last six months					
No	199 (40.9)	1.00		1.00	
Yes	1057 (54.6)	1.74 (1.42, 2.12)	0.00	1.89 (1.52, 2.34)	0.00
Ever prescribed benzodiazepines					
No	1053 (49.8)	1.00		1.00	
Yes	202 (66.4)	2.00 (1.55, 2.57)	0.00	1.89 (1.45, 2.48)	0.00

* Provisional data. Odds ratios generated by binary logistic regression, adjusted for age, sex and region in addition to listed covariates.

Factors associated non-fatal overdose (NFOD) among PWID in Scotland, 2019-20*

	NFOD, n (%)*	Overall sample (n = 2391, 385 reported NFOD in the past 12 months)			
		OR (95% CI)	p	aOR (95% CI)	p
Age					
Age (Per Year Increase)		0.99 (0.97, 1.00)	0.05	1.01 (0.97, 1.03)	0.14
Sex					
Male	286 (16.7)	1.00		1.00	
Female	98 (14.7)	0.86 (0.67, 1.11)	0.24	1.01 (0.76, 1.33)	0.95
Healthboard					
RoS	146 (13.6)	1.00		1.00	
GGC	184 (18.3)	1.42 (1.12, 1.80)	0.00	1.20 (0.93, 1.56)	0.17
TAYSIDE	55 (17.6)	1.35 (0.96, 1.90)	0.08	1.32 (0.92, 1.90)	0.14
Incarceration history					
5 times or less	220 (13.3)	1.00		1.00	
More than 5 times	165 (22.5)	1.90 (1.52, 2.38)	0.00	1.33 (1.03, 1.71)	0.03
Excessive alcohol consumption					
No	294 (14.6)			1.00	
Yes	89 (24.5)	1.90 (1.45, 2.48)	0.00	1.50 (1.11, 2.02)	0.01
Homelessness in the last six months					
No	217 (11.9)	1.00		1.00	
Yes	167 (29.5)	3.08 (2.45, 3.87)	0.00	2.21 (1.70, 2.87)	0.00
Street benzo use in the last six months					
No	102 (8.9)	1.00		1.00	
Yes	283 (22.8)	3.04 (2.39, 3.88)	0.00	2.48 (1.91, 3.22)	0.00
Injected drugs in the last six months					
No	44 (5.8)	1.00		1.00	
Yes	223 (16.5)	3.21 (2.30, 4.50)	0.00	2.82 (1.98, 4.01)	0.00
Yes in a public place	118 (41.7)	11.61 (7.89, 17.06)	0.00	6.58 (4.31, 10.02)	0.00

* Provisional data. Odds ratios generated by binary logistic regression, adjusted for age, sex and region in addition to listed covariates.

Summary

- High demand for benzodiazepines among PWUD in Scotland, alongside other drugs
- Shift from diversion of prescribed benzos to street based illicit benzos has increased the risk environment
- High prevalence of street benzo use among PWUD in Scotland especially among OD risk populations
- Street benzo use associated with an increased risk of non-fatal overdose

Recommendations

- Short term (supply, harm reduction)
 - Prescribing
 - Community drug checking facilities
 - Drug consumption rooms
- Long term (demand)
 - Address wider socioeconomic inequalities fuelling the epidemic



Thank you

andy.mcauley@phs.scot

@arjmcauley