



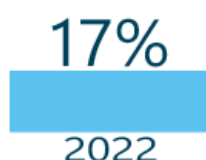
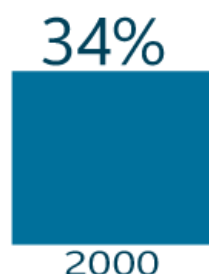
# Prevalence and correlates of public injecting among a group of people who inject drugs in Australia

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National 2022  IDRS



The percentage of the national IDRS sample reporting most recently injecting in a public location has decreased from 34% in 2000 to 17% in 2022.



Our findings show that public injecting is significantly correlated with unstable housing and the number of different drugs injected.



Public injecting was reported more frequently in Melbourne, Hobart and Perth.

## Introduction



The physical environment in which people inject drugs can significantly contribute to high-risk behaviours and adverse health outcomes among people who inject drugs (1, 2). Injecting in public spaces such as streets, parks, and public toilets is associated with risk outcomes for people who inject drugs such as police intervention, robbery, and assault, which can lead to rushed injections in these spaces and unsafe or less hygienic injection practices compared to private injecting (3). As such, public injecting has been associated with a higher risk of drug and health related harms such as experiencing overdose (4, 5) and contracting blood borne viruses (6).

Public injecting is often a measure used to index public amenity around street-based drug markets (7). Public injecting can lead to inappropriately discarded injecting equipment and other public amenity impacts in areas around street-based drug markets that can lead to negative perceptions about the amenity of areas (8).

In this bulletin, we aimed to examine the extent of public injecting in the IDRS sample over time and whether there were any differences observed between Sydney and Melbourne, where supervised injecting facilities have been implemented compared to the remaining capital cities. We also examined key correlates associated with recent public injecting.

## Methods

Data were collected as part of the Illicit Drug Reporting System (IDRS). Annual interviews were conducted with people aged 18 or older residing in capital city areas of Australia who injected illicit drugs on a monthly or more frequent basis.

The data for analysis were drawn from the national IDRS sample from 2000-2022, consisting of 20,850 interviews (n=~100 per city per year, ~150 in Melbourne and Sydney). These interviews were conducted predominately via face-to-face surveys as well as telephone surveys in some instances after the onset of the COVID-19 pandemic. Please refer to the [IDRS Background and Methods](#) (9) document for further details.

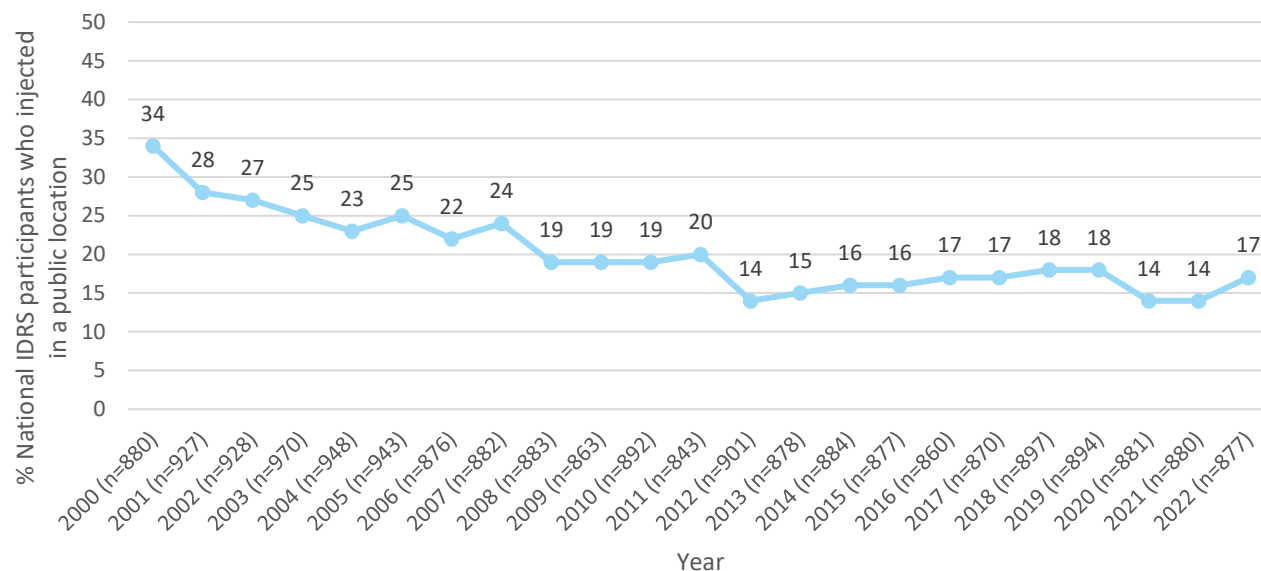
Public injecting was measured by asking participants 'where were you when you injected last?'. Responses were coded into 'public location' (street/park or beach, car, public toilet, stairwell) or 'private location' (private home, shooting room, medically supervised injecting centre, or prison). Trends in the percentage of participants reporting their most recent injection to have taken place in a public location were examined over time (2000-2022) in the national sample. Rates of public injecting in the Sydney and Melbourne samples, areas with supervised injecting facilities, were then examined separately for the years in which supervised injecting facilities were open in the two cities (the supervised injecting facilities opened in Sydney in 2001 and Melbourne in 2018), as well as the two years prior in Melbourne. Further disaggregation into the area where the Melbourne MSIR is located (Richmond) versus other recruitment sites was also undertaken. Public injecting and its correlates were examined in the 2022 IDRS sample (n=696). Potential demographic, drug use, and health and wellbeing correlates of public injecting drawn from existing literature were examined in a multivariable logistic regression model with the significance level set at  $p<0.05$ .

For information regarding the characteristics of the national IDRS sample in 2022, please refer to the [National 2022 IDRS report](#).

## Results

### Public Injecting Trends

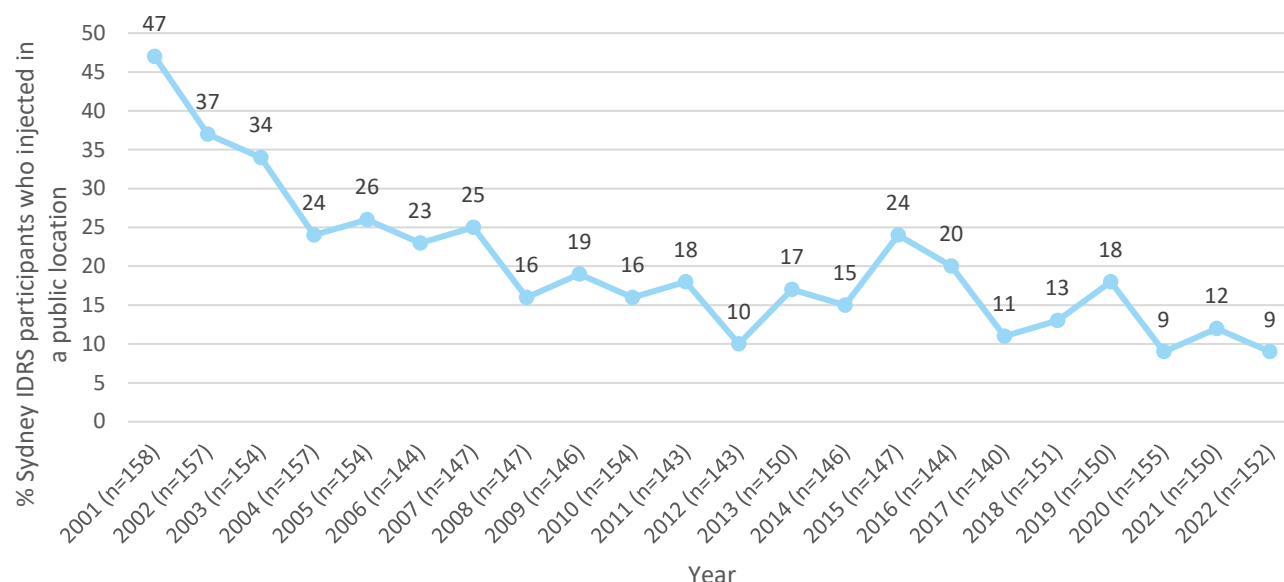
Figure 1. Public location of last injection among the National IDRS sample, 2000-2022



Note. Y axis is reduced to 50% to improve visibility of trends.

Figure 1 shows the percentage of the national IDRS sample that reported their most recent injection to have taken place in a public location more than halved between 2000 (34%) and 2022 (17%).

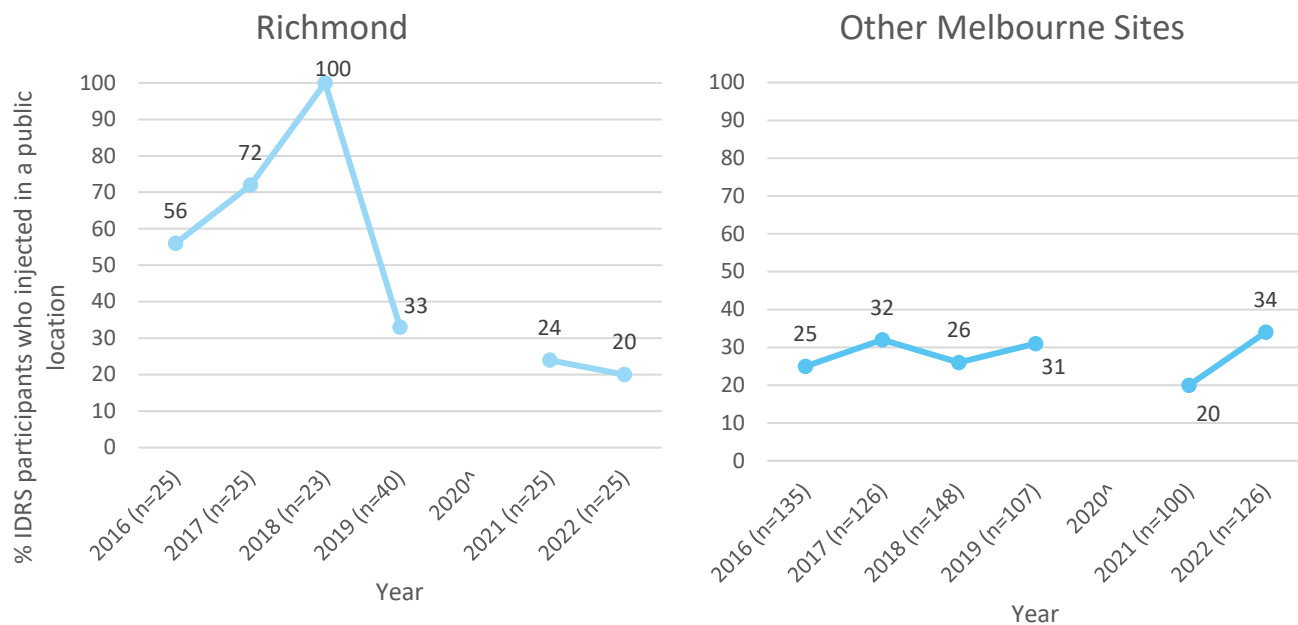
Figure 2. Public location of last injection among the Sydney IDRS sample, 2001-2022



Note. Y axis is reduced to 50% to improve visibility of trends.

Figure 2 shows that the percentage of the Sydney IDRS sample reporting their most recent injection took place in a public location was generally higher compared to other cities until 2004, but lower in recent years, and the magnitude of the decline over the period 2001 (47%) to 2022 (9%) was greater than observed nationally.

**Figure 3. Public location of last injection among the Melbourne IDRS sample, 2016-2022**



Note: Other Melbourne sites include St Kilda, Footscray, Frankston, CBD, Dandenong, and Collingwood. Supervised injecting facility opened in North Richmond in 2018. ^ Site data not collected in 2020 due to COVID-19 restrictions.

Figure 3 shows that the per cent of the Melbourne IDRS sample reporting their most recent injection to have taken place in a public location was generally higher compared to other cities. Public injecting was particularly high in Richmond in 2016-2018, however sharp and immediate declines were observed once the supervised injecting facility was opened (although note that small numbers of people are interviewed in different sites and so these findings should be treated with caution). In contrast, public injecting at other Melbourne sites (i.e., where there is no supervised injecting facility) remained relatively stable.

## Correlates of Public Injecting

Table 1 shows the relationships between public injecting and demographic variables, adjusted for all variables included in the model. Compared to Sydney, public injecting among the 2022 sample was significantly higher in Melbourne, Hobart, and Perth, with the per cent being highest in Melbourne. Public injecting was also significantly associated with unstable housing.

**Table 1. Demographic Correlates of Public Injecting**

	N=696 (%)	Site of last injection		Adjusted OR (95% CI) ^	P value ^
		Public n= 108 (16%)	Private n= 588 (84%)		
Age					
Median (years; IQR)	46 (13)	44 (14)	46 (13)	1.00 (0.97-1.03)	0.86
Gender					
Male	461 (66%)	78 (72%)	383 (65%)	1 (ref)	
Non-male	235 (34%)	30 (28%)	205 (35%)	0.74 (0.44-1.25)	0.26
Capital City					
Sydney	125 (18%)	11 (10%)	114 (19%)	1 (ref)	
Canberra	79 (11%)	10 (9%)	69 (12%)	1.70 (0.62-4.64)	0.30
Melbourne	124 (18%)	36 (33%)	88 (15%)	5.42 (2.40-12.24)	0.00*
Hobart	68 (10%)	12 (11%)	56 (10%)	2.96 (1.03-8.49)	0.04*
Adelaide	84 (12%)	7 (6%)	77 (13%)	1.21 (0.41-3.62)	0.73
Perth	77 (11%)	17 (13%)	60 (10%)	3.70 (1.45-9.45)	0.01*
Darwin	54 (8%)	-	51 (9%)	1.04 (0.24-4.51)	0.96
Brisbane & Gold Coast	85 (12%)	12 (11%)	73 (12%)	1.84 (0.71-4.82)	0.21
Housing status					
Stable housing	580 (83%)	68 (63%)	512 (87%)	1 (ref)	
Unstable housing#	116 (17%)	40 (37%)	76 (13%)	3.89 (2.29-6.58)	0.00*
Employment status					
Unemployed	607 (87%)	90 (83%)	517 (89%)	1 (ref)	
Employed	89 (13%)	18 (17%)	71 (12%)	1.49 (0.75-2.97)	0.26
Weekly Income					
Median (\$AUD; IQR)	397 (190)	383 (182)	400 (190)	1.00 (1.00-1.00)	0.05

Note. ^ Regressions adjusted for indigenous status, injecting frequency, number of drugs injected, current OAT, initiation age, overdose, drug most injected, mental health, incarceration history, HCV status and all variables reported above. # Unstable housing is defined as currently living in a boarding house or hostel, shelter or refuge, couch surfing, or rough sleeping and squatting. - No data labels provided with small cell size (i.e., n≤5 but not 0). \*p<0.05

Table 2 shows the relationships between public injecting and drug use characteristics, adjusted for all variables included in the model. There was a positive association between reports of public injecting and the number of different drugs injected such that for each additional drug injected there was an increase in the odds of reporting public injecting.

**Table 2. Drug Use Characteristics and Public Injecting**

	N=696 (%)	Site of last injection		Adjusted OR (95% CI) ^	P value^
		Public n= 108 (16%)	Private n= 588 (84%)		
Injecting frequency					
Weekly or less	144 (21%)	15 (14%)	129 (22%)	1 (ref)	
More than weekly, not daily	247 (35%)	32 (30%)	215 (37%)	0.98 (0.48-1.99)	0.96
Once a day	124 (18%)	17 (16%)	107 (18%)	1.08 (0.48-2.43)	0.85
2 to 3 times a day	127 (18%)	30 (28%)	97 (16%)	1.92 (0.88-4.18)	0.10
More than 3 times a day	54 (8%)	14 (13%)	40 (7%)	1.43 (0.53-3.85)	0.48
Number of different drugs injected					
Median (IQR)	2 (2)	2 (2)	2 (2)	1.24 (1.05-1.46)	0.01*
Current Opioid Agonist Treatment (OAT)					
Not in OAT	444 (64%)	71 (66%)	373 (63%)	1 (ref)	
Currently in OAT	252 (36%)	37 (34%)	215 (37%)	0.86 (0.50-1.47)	0.58
Age of initiation of injecting drug use					
Median (years; IQR)	18 (8)	18 (8)	18 (9)	1.00 (0.96-1.04)	0.97
Any drug overdose in the past 12 months					
No overdose	579 (83%)	91 (84%)	488 (83%)	1 (ref)	
Overdose	117 (17%)	17 (16%)	100 (17%)	0.64 (0.33-1.24)	0.19
Drug injected most in the past month					
Heroin	263 (38%)	52 (48%)	211 (36%)	1 (ref)	
Methamphetamine	365 (52%)	43 (40%)	322 (55%)	0.65 (0.37-1.16)	0.14
Other	68 (10%)	13 (12%)	55 (9%)	0.82 (0.34-1.95)	0.65

<sup>^</sup> Regressions adjusted for indigenous status, age, gender, state, housing status, employment status, income, mental health, incarceration history, HCV status, and all variables reported above. \* $p < 0.05$ .

Table 3 shows that there were no significant relationships between public injecting and health and wellbeing variables when adjusted for all variables in the model.

**Table 3. Health and Wellbeing Correlates of Public Injecting**

	N=696 (%)	Site of last injection		Adjusted OR (95% CI) ^	P value^
		Public n= 108 (16%)	Private n= 588 (84%)		
Have you experienced any mental health problems in the last 6 months?					
No mental health problems in the last 6 months	366 (53%)	55 (51%)	311 (53%)	1 (ref)	
Experienced mental health problems in the last 6 months	330 (47%)	53 (49%)	277 (47%)	1.10 (0.68-1.79)	0.70
Incarceration history					
Ever been in prison: No	263 (38%)	39 (36%)	224 (38%)	1 (ref)	
Ever been in prison: Yes	433 (62%)	69 (64%)	364 (62%)	1.00 (0.59-1.72)	0.99
Hepatitis C (HCV) status					
Never had HCV	267 (38%)	42 (39%)	306 (52%)	1 (ref)	
Cleared the virus	378 (54%)	56 (52%)	323 (55%)	0.71 (0.41-1.23)	0.22
Current infection	51 (7%)	10 (9%)	41 (7%)	0.91 (0.37-2.23)	0.83

^ Regressions adjusted for indigenous status, age, gender, state, housing status, employment status, income, injecting frequency, number of drugs injected, current OAT, initiation age, overdose, drug most injected, mental health, incarceration history, HCV status and all variables reported above.

## Discussion



The per cent of self-reported public injecting among the national IDRS sample has decreased over time, with 17% of participants reporting last injecting in a public location in 2022. Public injecting was found to be highest in Melbourne but there were few other significant correlates of public injecting across the range of demographic, drug use and health variables considered. Reports of public injecting in Richmond declined sharply following the opening of the supervised injecting facility, but small numbers mean these findings should be treated with caution. The only exceptions were reported living circumstances whereby people reporting living in unstable accommodation were more likely to report public injecting. There was also a positive association between reports of public injecting and the number of different drugs injected such that for each additional drug injected there was an increase in the odds of reporting public injecting. This finding highlights the nexus between social circumstances and drug use behaviours and potential exposure to harms related to public injecting amongst people who inject drugs.

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