

# Overdose and drug dependency among regular illicit drug users in Australia

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## Introduction

- Increase in reported stimulant overdoses in EDRS surveys<sup>1</sup>
- No increase in reported heroin overdoses in IDRS surveys<sup>2</sup> but an increase in unintentional fatal opioid overdoses<sup>3</sup>
- Unintentional drug overdoses linked to heavy drug use including alcohol use<sup>4,5</sup>
- A key risk factor for a drug overdose is a previous overdose<sup>5</sup>

Is drug dependency linked to risk of overdose?

## Methods

- National data from 2014 EDRS and IDRS
- All 17+ yrs, living in jurisdiction last 12mths

**EDRS (N=800)**  
People who used psychostimulants (PWUP) 6+ times in last six months, recruited via advertising and peer referral.

**IDRS (N=898)**  
People who injected drugs (PWID) 6+ times in last six months, recruited from NSPs, advertising and peer referral.

### Measures of dependency:

- Severity of Dependency Scale\* (5-item SDS)
- Alcohol Use Disorders Identification Test (13-item AUDIT; 3-item AUDIT-C)

\*Cut-off for dependency: ecstasy & cocaine  $\geq 3$ ; methamphetamine  $\geq 4$ ; opioids  $\geq 5$ <sup>6,9</sup>. Chi-square tests were used to determine association.

## Findings

Table 1 Socio-demographic characteristics EDRS and IDRS nationally, 2014

	EDRS (N=800)	IDRS (N=898)
% male	66	69
% under 25 years old	74	3
% unstable housing	5	21
% single	58	56
% completed year 12	81	21
% unemployed	15	83
% in drug treatment	2	47

Note: Numbers may vary due to missing data.

## Drug dependency

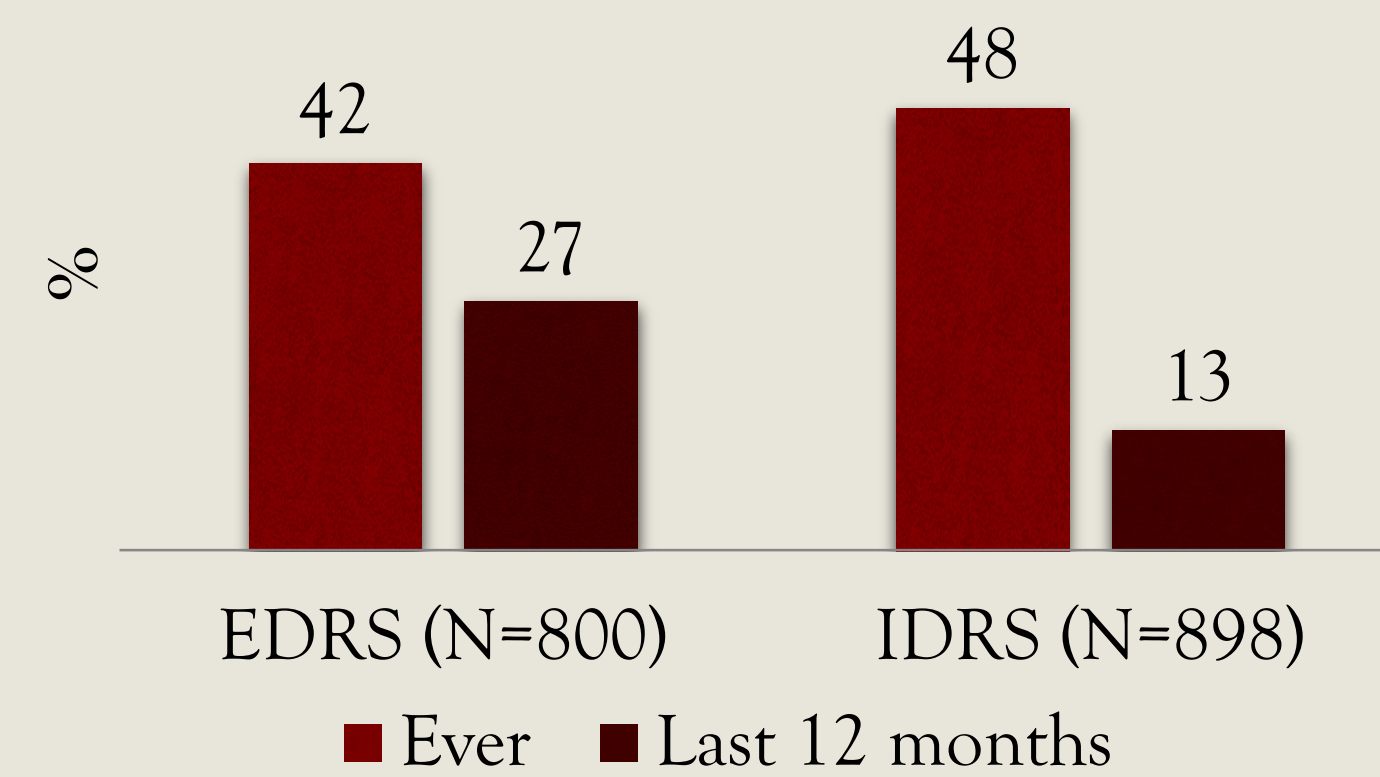
### EDRS

- 82% had risky alcohol use (AUDIT score 8+), with 34% scoring hazardous or higher (16+).
- 25% were at risk of stimulant dependency (SDS score 3+).

### IDRS

- 47% were at risk of alcohol dependency (AUDIT-C score 5+)
- 69% of opioid users at risk of opioid dependency (SDS score 5+)
- 41% of stimulant users at risk of stimulant dependency (SDS score 4+)

Figure 1. Reported experiences of lifetime and recent overdose



## Factors associated with recent overdose among PWUP

Being under 25 years old was significantly associated with a reported recent overdose on any drug ( $p < .05$ ). All other socio-demographic characteristics were not significantly associated.

Figure 2. Recent overdose on any drug by alcohol dependency (AUDIT)

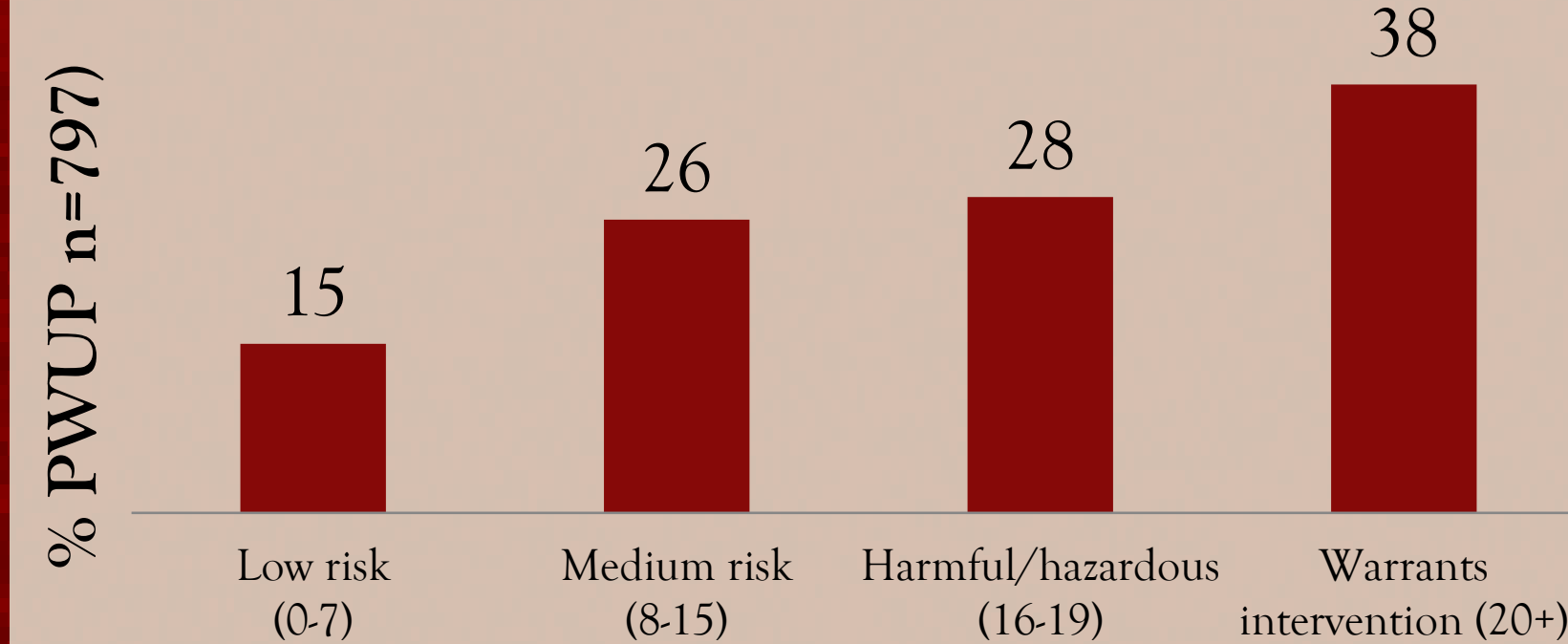
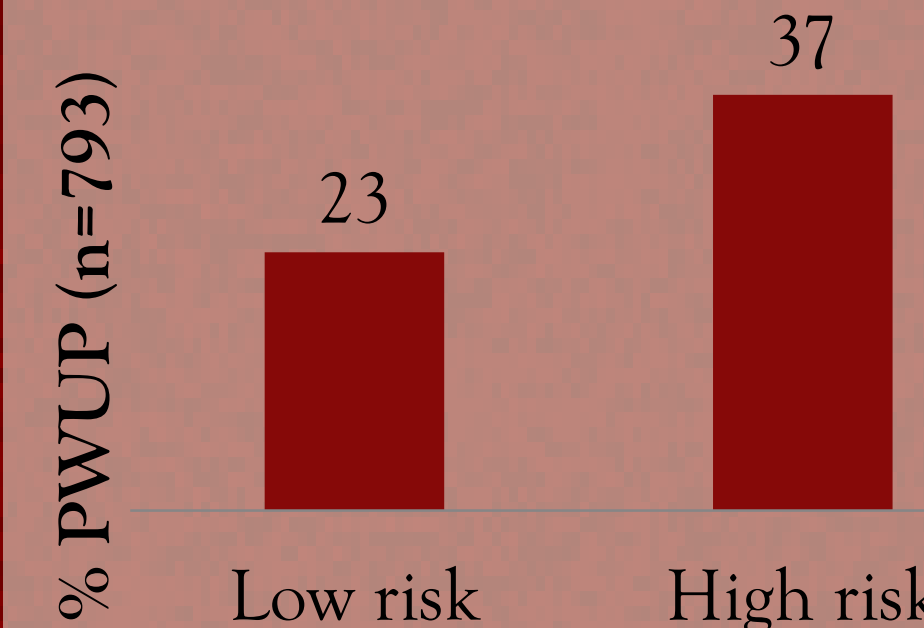


Figure 3. Recent overdose on any drug by stimulant drug dependency (SDS)

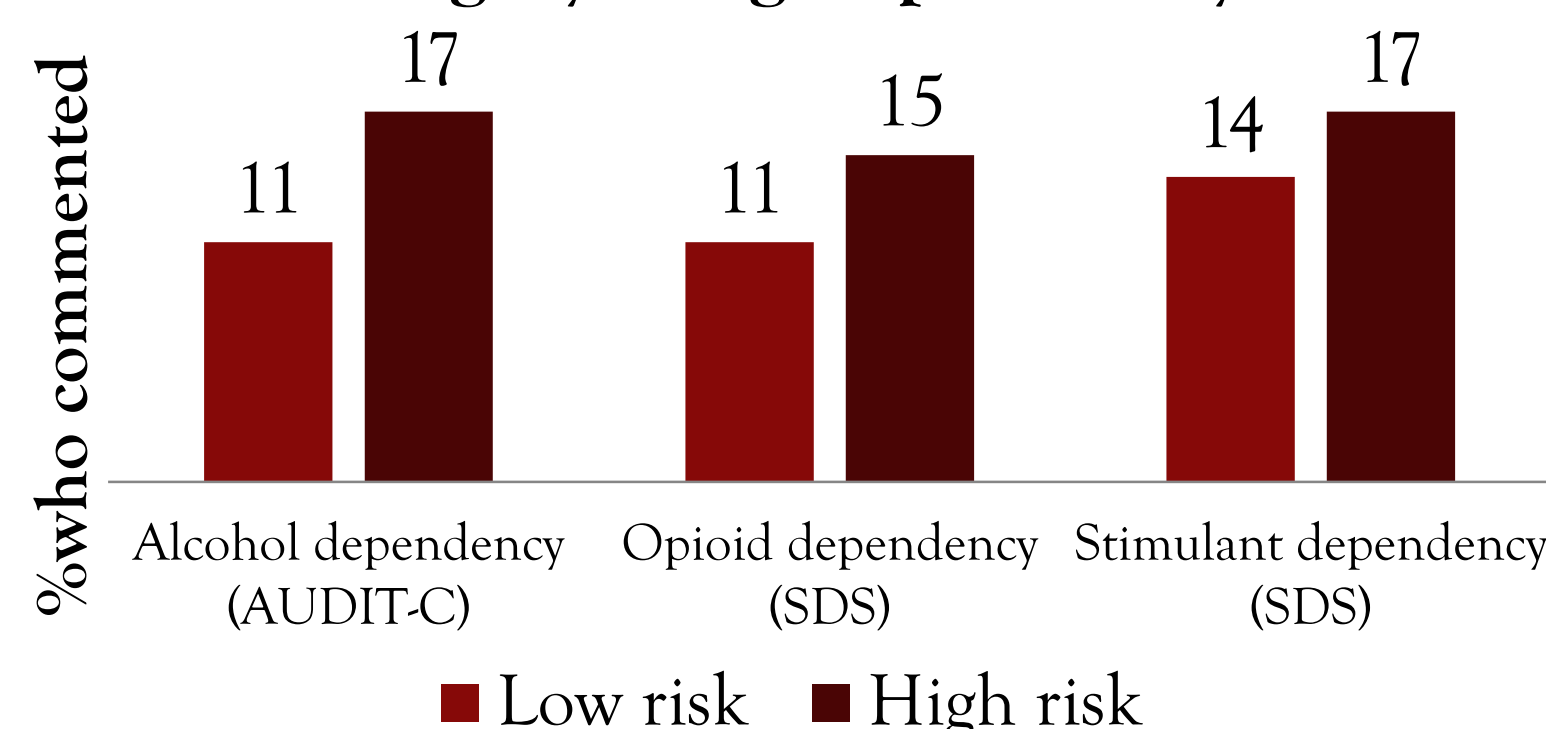


Recent overdose on any drug was significantly associated with increased risk of dependency on both alcohol and stimulant drugs ( $p < .001$ ).

## Factors associated with recent overdose among PWID

Unstable housing was the only socio-demographic characteristic that was significantly associated with recent overdose on any drug ( $p < .05$ ).

Figure 4. Recent overdose on any drug by drug dependency



Recent overdose on any drug was associated with being at risk of dependency on alcohol and opioids ( $p < .05$ ), though not for stimulant drugs.

## Experiences of overdose

### EDRS

- **Lifetime stimulant overdose (n=217)**  
Median times: 2 (range 1-100)  
**Most recent time in last 12mths**  
**Main drug:** ecstasy (57%) & ice/crystal (9%)  
**Main location:** private dwelling (36%), music festival (23%) & nightclub (15%)  
**Main symptom:** vomiting, visual hallucinations, fever, heart racing, extreme anxiety & paranoia

- **Lifetime depressant overdose (n=195)**

- Median times: 2 (range 1-200)  
**Most recent time in last 12mths**  
**Main drug:** alcohol (74%), benzodiazepines (4%) & GHB (4%)  
**Main location:** private dwelling (39%), nightclub (16%), pubs (10%)  
**Main symptom:** vomiting, losing consciousness, collapsing

### IDRS

- **Lifetime heroin overdose (n=355)**  
Median times: 2 (range 1-150)
- **Lifetime overdose on other drug (n=177)**  
Median times: 1 (range 1-72)  
**Most recent time in last 12mths**  
**Main drug:** ice/crystal (25%) & benzodiazepines (21%).

## Conclusions

- PWUP were more likely to report a recent overdose than PWID.
- Those who overdosed, tended to have repeat overdoses
- Main drugs attributed for PWUP were alcohol and ecstasy versus heroin, ice/crystal, benzodiazepines for PWID
- Supports research<sup>1,4</sup> that overdoses are more likely to occur amongst dependent users.
- Harm minimisation target group: heavy drug and alcohol users

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