

# Characteristics of Young People at First Alcohol-related Hospital Admissions and Emergency Department Presentations in Australia



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## Introduction

- Alcohol-related harms are most common in early adulthood <sup>1</sup>.
- It is known that earlier alcohol use predicts later harm <sup>2,3</sup>.
- Less is known whether the timing of the experience of alcohol-related harm similarly predicts further harm.
- Examining young people at their first-ever presentation to inpatient and emergency department (ED) services with an alcohol-related problem (their 'first event') can inform intervention strategies to reduce long-term costs to young peoples' health.

## Aims

- Examine the profile of young people at their first alcohol-related hospital separation or ED presentation by age group:
  - **Early adolescent (12-14 years)**
  - **Late adolescent (15-17 years)**
  - **Young adult (18-20 years)**
- Examine correlates of age and sociodemographic and clinical characteristics at this first event.
- Examine rates of subsequent 12-month readmissions.

## Methods

We use data from a subset of 10,300 people aged 12 to 20 years from the existing **Data-Linkage Alcohol Cohort Study** <sup>4</sup>. This cohort consists of New South Wales hospital and ED records between January 1st, 2005 and December 31st, 2014 with an alcohol-related principal or additional diagnosis.

Regression models ( $p < 0.05$ ) were used to determine:

- Whether sociodemographic and clinical characteristics were associated with age group at first event.
- Whether age at first event was associated with rates of subsequent 12-month hospitalisations and ED presentations.

## Results

Compared to **young adults**, people who experienced their first event in **early adolescence** or **late adolescence** were:

- **More** likely to be **female**.
- **More** likely to present to an **ED** (vs being hospitalised).
- **More** likely to present with **behavioural diagnoses** such as intoxication.
- **Less** likely to present with other **physical diagnoses** such as alcoholic liver disease.



Compared to **young adults**, people who experienced their first event in **early adolescence** or **late adolescence** were **11-20% less** likely to be hospitalised in the 12 months after their first alcohol-related event.

Compared to the **general population** of the same age:

- **Early adolescents** had **4.4 times** more ED presentations and **8 times** more hospitalisations.
- **Late adolescents** had **3.3 times** more ED presentations and **5 times** more hospitalisations.
- **Young adults** had **3.4 times** more ED presentations and **4.3 times** more hospitalisations.

## Conclusions & Discussion

Young people who present to an emergency department or are admitted to hospital for the **first time** with an **alcohol-related reason** differ in their sociodemographic and clinical characteristics depending on the **age** at which they experience this event.

- Strategies to reduce alcohol-related harms should consider that **females** are at greater risk of hospital access for alcohol problems in **adolescence** whereas **males** are at greater risk in **young adulthood**.
- **Adolescents** likely had **lower rates** of subsequent 12-month **hospitalisations** compared to **young adults** due to differences in ease of access to alcohol and engagement in heavy episodic drinking.
- Rates of **ED presentations** and **hospitalisations** in the subsequent 12 months were **much more elevated** compared to the **general population**, highlighting the need to address alcohol-related harms in young people to prevent future harm.

## References

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## Acknowledgements

Australian Digital Health Agency; NSW Ministry of Health; Centre for Health Record Linkage

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