

# Trends in intentional versus unintentional poisoning hospitalisations and deaths

Australia, 2007-2020

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## INTRODUCTION

Alcohol and other drug poisoning hospitalisations and deaths are an ongoing public health problem [1-4].

Previous research has typically focused specifically on unintentional poisoning events or reported regardless of intent.

Understanding the differences between intentional and unintentional drug poisoning deaths and hospitalisations is essential for developing effective prevention strategies and improving overall public health.

## AIMS

- 1 Identify trends and patterns in drug poisoning hospitalisations and deaths by intent.
- 2 Compare the profile (sex, age, drug involvement) of unintentional and intentional drug poisoning hospitalisations and deaths in the most recent year.

## METHODS

- We used health administrative data to examine the characteristics of intentional and unintentional drug poisoning hospitalisations and deaths in Australia.
- We used multivariate logistic regression to compare age, sex, and drug involvement for intentional versus unintentional hospitalisations (2019-20) and deaths (2019 and 2020).
- We used Joinpoint regression analysis to examine trends in unintentional and intentional hospitalisations and deaths from 2007 to 2020 1) overall (crude rate per 100,000), and 2) disaggregated by age, sex, and drug type (proportion).

## IMPLICATIONS

The demographic and drug involvement profiles of unintentional and intentional drug poisoning differ, necessitating separate public health approaches. Identifying how trends over time in intentional and unintentional drug poisoning may be impacted by changes in certain demographic segments provides valuable information for public health.

## REFERENCES

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## ALCOHOL AND OTHER DRUG POISONING

2019 - 2020

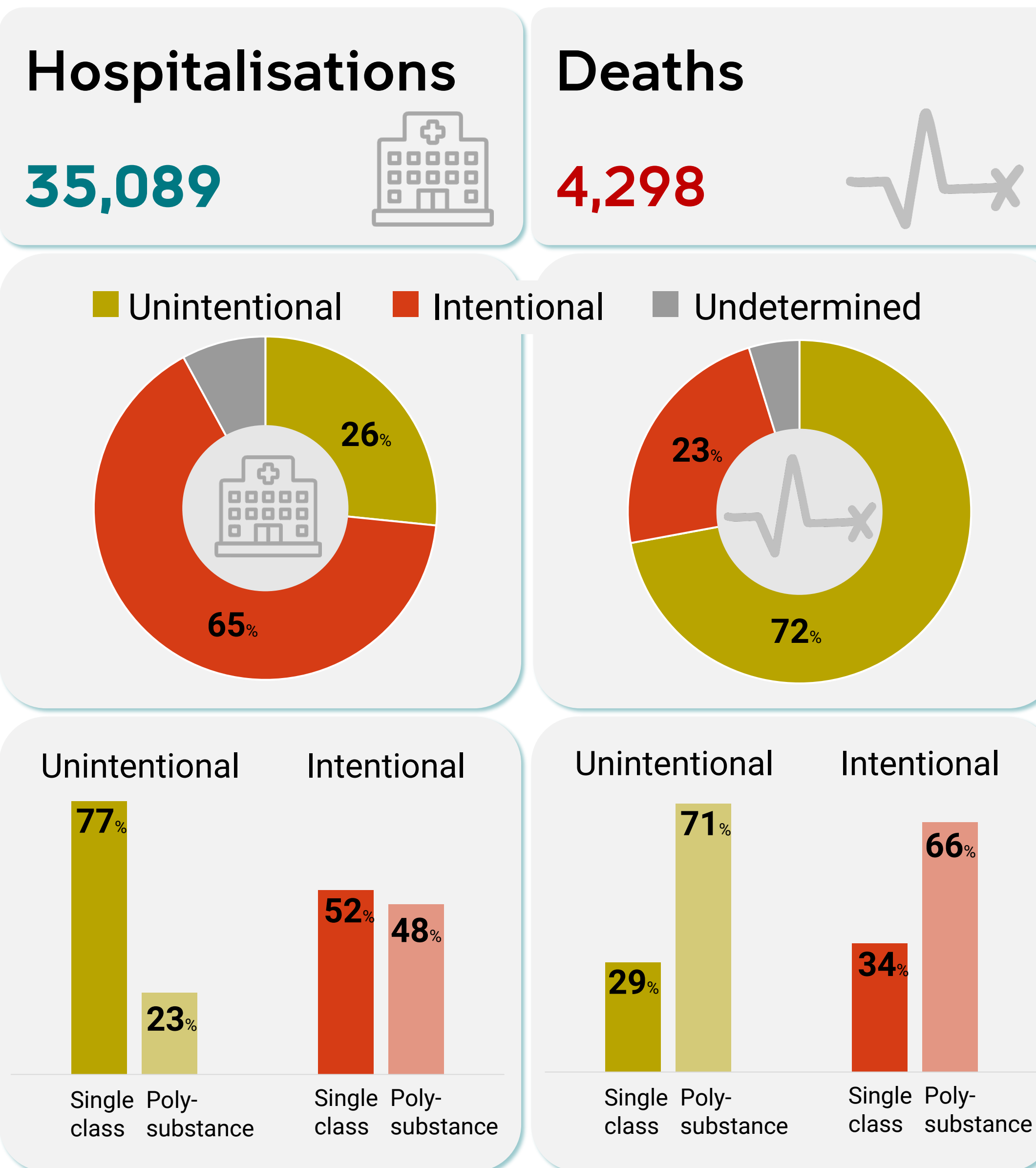
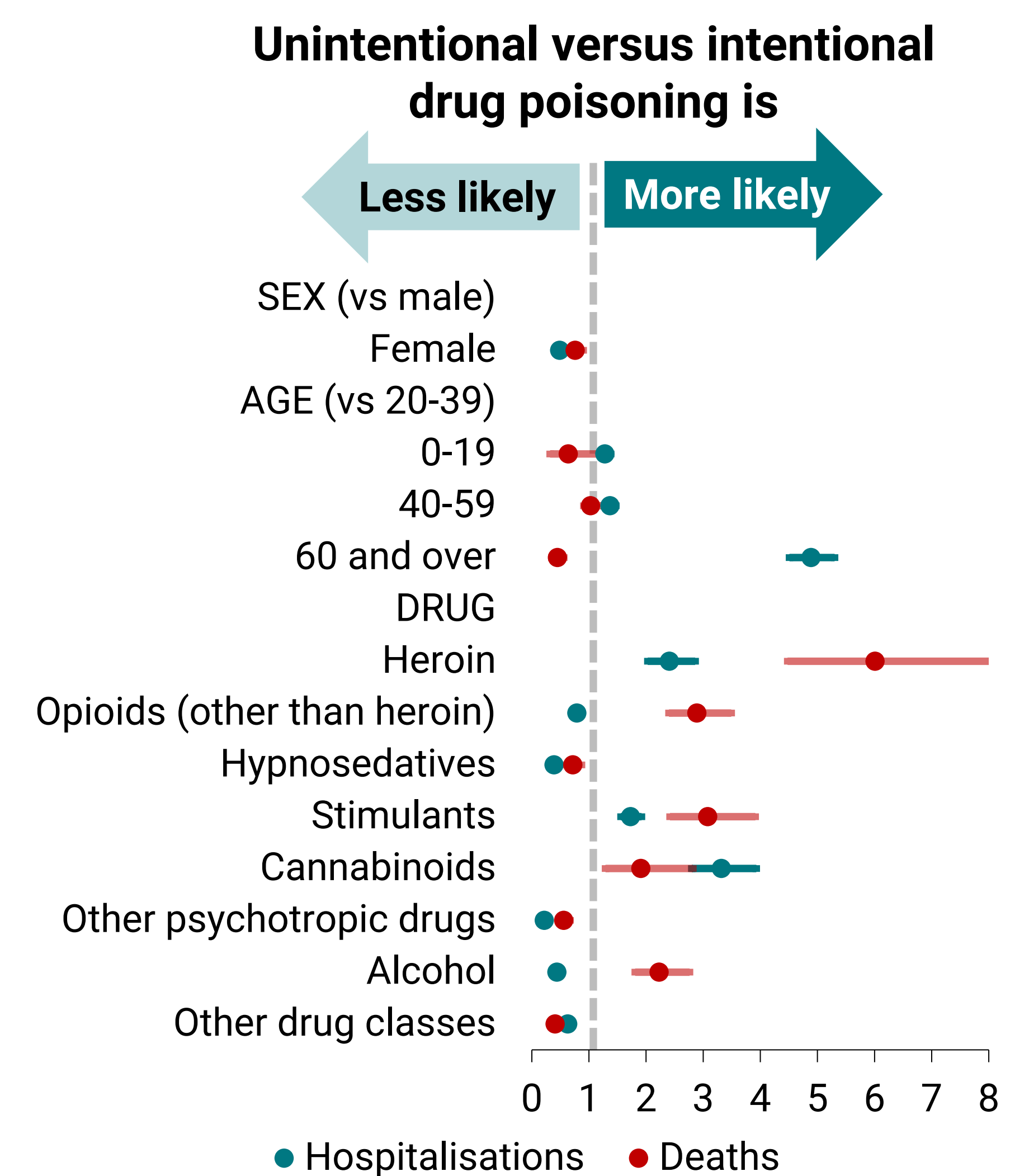
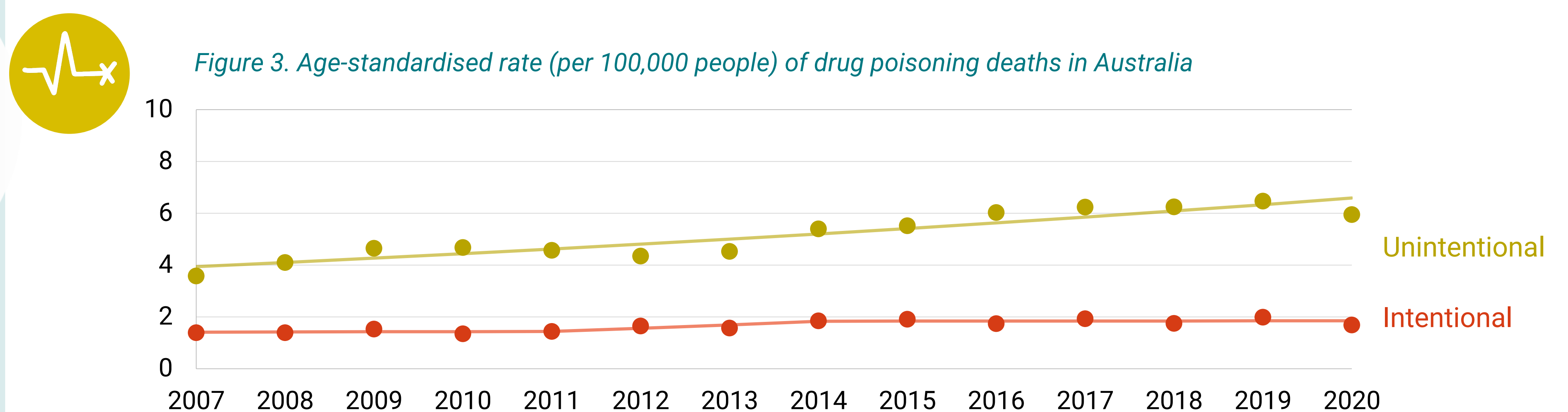
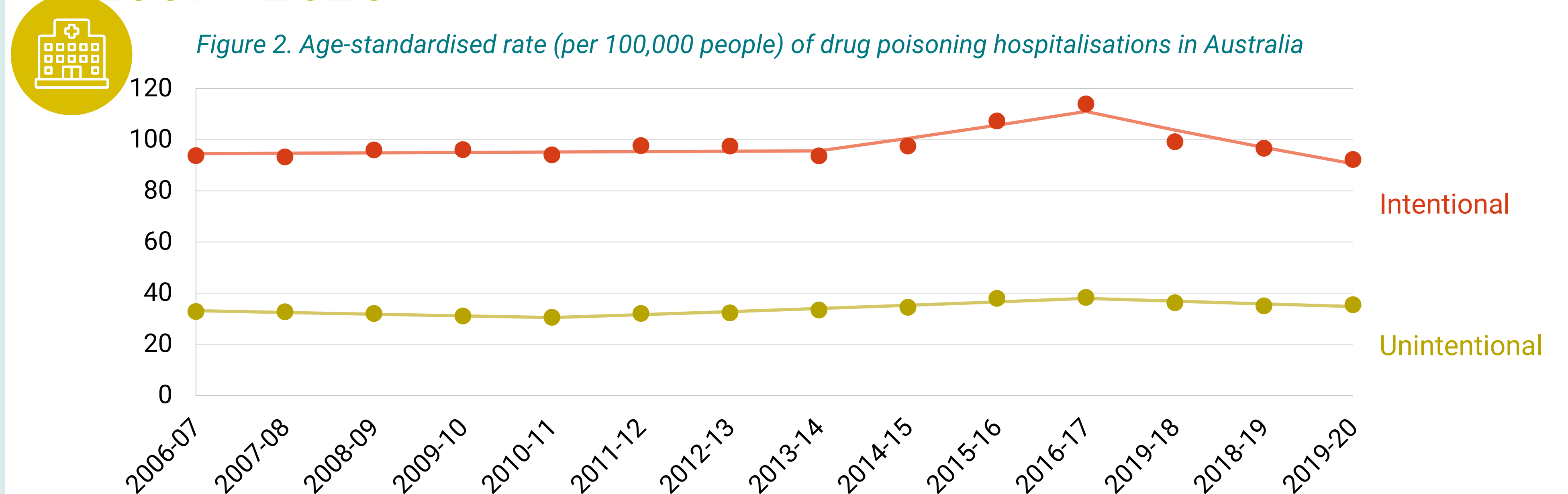


Figure 1. Regression analyses comparing sex, age, and drug involvement for unintentional versus intentional hospitalisations (2019-20) and deaths (2019 and 2020 combined)



2007 - 2020



## UNINTENTIONAL AND INTENTIONAL DRUG POISONING HOSPITALISATIONS AND DEATHS HAVE DIFFERENT PROFILES IN TERMS OF AGE, SEX AND DRUG INVOLVEMENT

**UNINTENTIONAL**

- more likely to involve males and illicit drugs
- more likely to involve heroin, cannabinoids, and stimulants
- unintentional deaths were also more likely to involve opioids (other than heroin) and alcohol

**INTENTIONAL**

- more likely to involve females and pharmaceuticals
- more likely to involve hypnotics and other psychotropics
- have been increasing among children and adolescents (aged 0-19 years; hospitalisations only), and people aged 60 and over

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