

Executive Summary

There were 62,486 [drug-related hospitalisations](#) (excluding alcohol and tobacco) among Australians in 2020-21, equivalent to 0.53% of all hospitalisations in Australia and an average of 171 hospitalisations per day.

The age-standardised rate of drug-related hospitalisations was relatively stable between 1999-00 and 2009-10. It subsequently increased from 199 to 272 hospitalisations per 100,000 people from 2010-11 to 2016-17, before declining to 250 hospitalisations per 100,000 people in 2017-18. This rate has remained relatively stable in 2018-19, 2019-20 and 2020-21 (251, 253 and 255 hospitalisations per 100,000 people, respectively).

The COVID-19 pandemic and associated restrictions on gathering and movement have impacted drug supply and demand, with concern about changes in drug-related harms. The rate of drug-related hospitalisations was higher in Q3 and Q4 of 2020 as compared to Q1 2020 (prior to onset of COVID-19), however these findings should be treated with caution as there are other factors which might contribute to the shifts observed, and more sophisticated analyses and over a longer time period are required.

Sex

In 2020-21, males and females had a similar rate of drug-related hospitalisations ([254 versus 256](#) hospitalisations per 100,000 people, respectively). This represented a recent increase in the rate of drug-related hospitalisations among females (243 hospitalisations per 100,000 people in 2019-20) and decrease in the rate among males (264 hospitalisations per 100,000 people in 2019-20).

Age

In 2020-21, the [highest rates](#) of drug-related hospitalisations continued to be observed

among the 20-29 and the 30-39 age groups. The crude rate of drug-related hospitalisations increased across most age groups from 1999-00 to 2020-21 except for the 20-29 age group, which saw a decline in the rate of hospitalisations in the early 2010s before subsequently rising.

When studying the two most recent years of data, the greatest increase in rate was recorded in the youngest age group (i.e., 10-19; 251 to 302 hospitalisations per 100,000 people in 2019-20 and 2020-21, respectively), largely driven by the significant increase in drug-related hospitalisations among females in this age group.

The aforementioned decrease in the rate of drug-related hospitalisations among males between 2019-20 and 2020-21 was driven by significant decreases in the rates among males aged 30-39, 40-49 and 60-69.

Remoteness Area of Usual Residence

In 2020-21, the majority of drug-related hospitalisations were among people residing in [major city areas](#) (75% of hospitalisations where remoteness was coded), although the age-standardised rate of drug-related hospitalisations was highest in remote and very remote areas of Australia (275 hospitalisations per 100,000 people).

From 2019-20 to 2020-21, there was a significant increase in the rate of drug-related hospitalisations in major city areas (243 versus 250 hospitalisations per 100,000 people, respectively) and a significant decrease in rate in inner and outer regional areas (236 to 223 and 289 to 271 hospitalisations per 100,000 people, respectively).

Principal Diagnosis

Drug-related hospitalisations are typically coded as related to ‘mental and behavioural disorders due to psychoactive substance use’ or ‘poisoning’. In 2020-21, 53% of all drug-related hospitalisations had a [principal diagnosis](#) of mental and behavioural disorder due to substance use, while 47% had a principal diagnosis of drug poisoning.

There are specific diagnoses within these two categories. [Drug-induced psychotic disorder](#) was the leading diagnosis among hospitalisations related to mental and behavioural disorders due to psychoactive substance use (34%), followed closely by dependence syndrome (33%).

In 2020-21, 71% of hospitalisations due to drug poisoning were [intentional](#). While the rate of intentional poisoning hospitalisations has varied over time, the rate of unintentional poisoning hospitalisations has remained relatively stable.

Drug Type

In 2020-21, the largest proportion of drug-related hospitalisations was attributable to [amphetamine-type stimulants](#) (23%, 70 hospitalisations per 100,000 people), followed by antiepileptic, sedative-hypnotic and antiparkinsonism drugs (e.g., benzodiazepines; 16%), non-opioid analgesics (e.g., paracetamol, 13%), cannabinoids (12%) and opioids (11%).

Opioid-related hospitalisations

A [decrease](#) in the rate of opioid-related hospitalisations has been observed since 2016-17, including a further decrease from 2019-20 (29 hospitalisations per 100,000 people) to 2020-21 (26 hospitalisations per 100,000 people).

In 2020-21, natural and semi-synthetic opioids (e.g., oxycodone, morphine) were responsible for over half (53%) of all hospitalisations due to opioid poisoning. The rate of hospitalisations related to natural and semi-synthetic opioids more than doubled from 1999-00 to 2017-18 (3.5

to 9.1 hospitalisations per 100,000 people, respectively) but then declined (6.0 hospitalisations per 100,000 people in 2020-21).

Despite the overall decrease in opioid-related hospitalisations between 2019-20 and 2020-21, the 20-29 age group recorded a significant increase in the rate of opioid-related hospitalisations over this period.

Amphetamine-type stimulant-related hospitalisations

After 10 years of relative stability, the rate of amphetamine-type stimulant-related hospitalisations increased sixfold from 12 hospitalisations per 100,000 people in 2009-10 to a peak of 70 hospitalisation per 100,000 people in 2019-20. A [decline](#) was observed in 2020-21 to 60 hospitalisations per 100,000 people, observed for both males and females and among nearly all age groups.

Cannabinoid-related hospitalisations

From 1999-00 to 2020-21, cannabinoid-related hospitalisations [increased](#) nearly three-fold from 11 to 30 hospitalisations per 100,000 people.

In the last six years, there was an increase in the rate of cannabinoid-related hospitalisations among young females, particularly those aged 20-29 years, from 33 to 64 hospitalisations per 100,000 people in 2014-15 and 2020-21, respectively.

Cocaine-related hospitalisations

The rate of cocaine-related hospitalisations has continued to [increase](#) over time, from 0.82 in 2010-11 to 5.0 hospitalisations per 100,000 people in 2019-20, with a further increase in 2020-21 (7.1 hospitalisations per 100,000 people).

The 20-29 age group recorded the biggest increase in the rate of cocaine-related hospitalisations in this period and in 2020-21 accounted for 55% of all cocaine-related hospitalisations.

Other drug-related hospitalisations

The rate of hospitalisations with a principal diagnosis related to antiepileptic, sedative-hypnotic and antiparkinsonism drugs (e.g., benzodiazepines) declined from a peak of 56 hospitalisations per 100,000 people in 2000-01 to 37 hospitalisations per 100,000 people in 2018-19, then increased in 2019-20 and remained similar in 2020-21 (41 and 40 hospitalisations per 100,000 people, respectively).

The rate of non-opioid analgesic-related hospitalisations, after three years of continuous decline from a peak in 2016-17, increased again between 2019-20 and 2020-21 (27 to 34 hospitalisations per 100,000 people, respectively).

Although, the rate of hallucinogen-related hospitalisations remained lowest of all drug

types, it has been steadily increasing since 2013-14, from 0.86 to 1.9 hospitalisations per 100,000 people in 2020-21.

Jurisdiction

From 2019-20 to 2020-21, the age-standardised rate of drug-related hospitalisations: increased in Victoria; decreased in New South Wales, the Northern Territory, South Australia, and Western Australia; and remained similar in the Australian Capital Territory, Tasmania and Queensland.

Important differences in age-standardised rate of drug-related hospitalisations by sex, age group, remoteness and drug type for each jurisdiction are also reported and available in our publicly-accessible [online interactive visualisation](#).