Australian Government
Australian Institute of Health and Welfare

Alcohol-related injury: hospitalisations and deaths, 2019–20

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About

Many hospitalisations and deaths involve injury where the person injured had consumed alcohol, referred to here as “alcohol-related” injury. This report presents data from 2019–20 on 30,000 hospitalisations and almost 1,950 deaths from alcohol-related injury. For both males and females, falls, intentional self-harm and assault were the leading causes of hospitalisation. Among all hospitalisations for injury, 1 in 4 intentional self-harm and 1 in 5 assault cases involved alcohol.

Cat. no: INJCAT 227

Findings from this report:

- Falls, intentional self-harm and assault were the main causes of hospitalisations for alcohol-related injury
- 20% of all assault hospitalisations involved alcohol among those injured
- Death rates for alcohol-related injuries more than doubled in 10 years
- 4 in 5 deaths and 3 in 5 hospitalisations for alcohol-related injury were for males

Summary

This report discusses intentional self-harm and harmful use of alcohol and other drugs.

For urgent crisis help **call Lifeline on 13 11 14** or if life is in immediate danger, **call 000**.

If you, or someone you know, is experiencing crisis, visit your nearest hospital emergency or seek help from these helplines.
Consuming alcohol can increase the risk of injury. This report presents data on injuries where alcohol was recorded as a contributor to an injury event that resulted in hospitalisation or death. It includes injury cases where alcohol may have been wholly responsible for the injury (for example, alcohol poisoning) or partially responsible (such as a fall or intentional self-harm injury). In 2019–20, alcohol-related injuries resulted in just over 30,000 hospitalisations (118 per 100,000 population) and almost 1,950 (7.7 per 100,000 population) deaths. Alcohol-related injury accounted for 5.7% of all hospitalised injuries and 14% of injury deaths among Australians in 2019–20.

Hospitalisations

In 2019–20:

- falls (40%), intentional self-harm (25%), assault (15%) and transport (7%) were the leading causes of alcohol-related injury hospitalisations
- males were 1.5 times as likely to be hospitalised as females
- the highest rates of alcohol-related injury hospitalisations were for those aged 45–54
- one in 4 hospitalisations for intentional self-harm involved alcohol; and 1 in 5 cases of assault involved alcohol
- over half of alcohol-related injury hospitalisations involved at least one other drug (including pharmaceuticals and tobacco) that was not alcohol
- among intentional self-harm hospitalisations, over 80% involved poisoning due to drug exposure, including alcohol
- poisoning or toxic effect (26%) and fractures (22%) were the most common types of injury hospitalisations
- males were more than 3 times as likely to be hospitalised for an alcohol-related transport injury as females
- alcohol-related assault rates among Indigenous women aged 25–64 were 1.5 times that of Indigenous men of the same age
- very remote areas of Australia had the highest rates of alcohol-related injury hospitalisations, over 8 times the national rate and almost 11 times the rate for people living in major city areas. Among 25–44 year olds, the rate in *Very remote* areas was 17 times that in *Major cities*.

There was a 0.3% average annual increase in alcohol-related hospitalisations between 2010–11 and 2016–17. There was an annual decrease of 5.2% between 2018–19 and 2019–20, when the COVID-19 pandemic began. The month of April 2020 showed the largest decrease when compared to the same month the year before, with 20% fewer alcohol-related injury hospitalisations than the same month the previous year. This included a 30% decrease for assault injuries, a 26% decrease in transport injuries, a 45% decrease in injuries that occurred in non-residential settings and a 6.7% increase in injuries at home. By June 2020, with the easing of COVID-19-related restrictions, alcohol-related injury hospital admissions had returned to pre-pandemic levels.

Deaths

In 2019–20:

- there were almost 1,950 alcohol-related injury deaths
- nearly 80% of deaths were for males
- the top three cause groups for alcohol-related injury deaths were suicide (47%), accidental poisoning (26%) and transport (11%).

The alcohol-related injury death rate more than doubled between 2010–11 and 2018–19, increasing from 4.8 to 10.8 deaths per 100,000 population. Deaths decreased by 10% between 2018–19 and 2019–20, the period affected by COVID-19 lockdowns.

About alcohol-related injury

In 2019–20, alcohol-related injury hospitalisations accounted for 5.7% of all injury hospitalisations and 14% of all injury deaths (AIHW 2022c).

In 2019–20, alcohol-related injuries resulted in:

30,000 hospitalisations in 2019–20
118 per 100,000 population

1,950 deaths in 2019–20
7.7 per 100,000 population

Alcohol use is a major cause of preventable disease, illness and death in Australia (AIHW 2022a). The 2018 Australian Burden of Disease study found that alcohol use is the fifth-ranked preventable risk factor, contributing to 4.5% of the total burden of disease (AIHW 2021).

Excessive alcohol consumption can have both long-term and short-term health impacts. Long-term impacts include damage to organs such as the liver, brain and heart; cancer, mental ill health; and injury (Department of Health and Aged Care 2022, AIHW 2022a).

Short-term impacts include alcohol poisoning, hangovers, decreased coordination and inhibition, and an increase in risky behaviour or interpersonal conflict, which can increase the risk of injury (Better Health 2022; Department of Health and Aged Care 2022, Queensland Government 2023).

The alcohol-related injuries explored in this report may have long-term or short-term impacts on health and wellbeing.

Injuries are harm that is a direct result of an environmental event, circumstance, or condition. Most injury events are preventable (AIHW 2022b).

Injuries may be:

- unintentional – causes include accidental poisoning, choking and suffocation, contact with living things, contact with objects, drowning and submersion, falls, burns and transport accidents
- intentional – caused by assault, homicide, intentional self-harm and suicide
- of undetermined intent.

Further details on each of these causes of injury are included in Injury in Australia.

References

AIHW (Australian Institute of Health and Welfare) (2021) *Australian Burden of Disease Study: Impact and causes of illness and death in Australia 2018*, AIHW, Australian Government, accessed 28 July 2021.

AIHW (2022a) *Alcohol, tobacco & other drugs in Australia*, AIHW, Australian Government, accessed 18 July 2022.

AIHW (2022b) Injury in Australia, AIHW, Australian Government, accessed 18 July 2022.

Better Health (2022) *How alcohol affects your body*, Victorian Government, accessed 21 August 2022.

Department of Health and Aged Care (2022) *What are the effects of alcohol?*, DHAC, Australian Government, accessed 28 July 2022.

Queensland Government (2023) *Effects of alcohol*, accessed 13 February 2023.

Methods

The aim of this report is to count the number of hospitalisations and deaths that were due to alcohol-related injury in Australia from 1 July 2019 to 30 June 2020. In all cases, patients had both an injury condition and an alcohol-related condition (see Box 1) recorded in their hospital record, or an injury-related and an alcohol-related cause of death recorded.

Box 1: What does 'alcohol-related' mean?

Some health conditions can be entirely attributed to, or caused by, alcohol (for example alcoholic liver disease) – these conditions are sometimes referred to as 'alcohol-induced' conditions (Chikritzhs et al. 2002).

Other health conditions are only partially attributed to, or caused by, alcohol (for example a car accident or assault). These are sometimes referred to as 'alcohol-related' conditions, and the level of alcohol contribution may vary due to different factors (for example the quantity of alcohol consumed and frequency of consumption) (Chikritzhs et al. 2002).

Determining the extent to which alcohol caused or contributed to an injury event was a challenge in this project. For this reason, this report examines both alcohol-related and alcohol-induced injuries and uses the term 'alcohol-related' to refer to all cases, regardless of the extent to which alcohol may have contributed to the injury event.

Unlike jurisdictional and hospital data records, the National Hospital Morbidity Database (NHMD) does not contain text fields: diagnosis and external-cause-of-injury information is restricted to International Statistical Classification of Diseases and Related Health Problems Tenth Revision Australian Modification (ICD-10-AM) codes. The data quality therefore depends on the extent to which hospital staff record the involvement of alcohol and the completeness with which those notes are coded by hospital coders.

The deaths data used in this report comes from the National Mortality Database (NMD), which contains information on all deaths certified by a doctor or coroner. The NMD, like the hospitalisations data, contains coded fields, meaning the cause of death and external cause of injury information is restricted to the ICD-10 classification system coding (ABS 2020).

Deaths that are unexpected are certified by a coroner; these deaths are included in the National Coronial Information System (NCIS) database. The NCIS contains both text and coded information on the circumstances surrounding the death. A large proportion of alcohol-related injuries are certified by a coroner. These deaths are included in both the NMD and the NCIS data (NCIS 2020), however because coronial investigations can take some time to conclude, there may be a time lag between a death and the record being included in the data sets.

This report uses NHMD data to investigate the number of alcohol-related injury hospitalisations and both the NMD and NCIS data to examine the number of alcohol-related injury deaths in Australia for 2019–20.

A limitation of this report is that it does not include information on cases that did not result in hospitalisation or death. For each hospitalisation or death there are many more cases that are treated by emergency departments, general practitioners, allied health professionals or outpatient clinics.

Cases where a patient was transferred between hospitals or where a patient's care type changed while in hospital were only counted once.

Deaths that occurred during hospitalisation may be counted in both the hospitalisations and deaths data.

Defining injury

For the purposes of this report, injury is defined by diagnosis codes (in the ICD-10-AM classification system for hospitalisations) and cause-of-death codes (in the ICD-10 classification system for deaths) within the range S00–T75 and T79 as per Box 2 (ACCD 2017; WHO 2019).

Box 2: In-scope injury categories

S00–S09	Injuries to the head
S10–S19	Injuries to the neck
S20–S29	Injuries to the thorax
S30–S39	Injuries to the abdomen, lower back, lumbar spine and pelvis
S40–S49	Injuries to the shoulder and upper arm
S50–S59	Injuries to the elbow and forearm
S60–S69	Injuries to the wrist and hand
S70–S79	Injuries to the hip and thigh
S80–S89	Injuries to the knee and lower leg

S90–S99	Injuries to the ankle and foot
T00–T07	Injuries involving multiple body regions
T08–T14	Injuries to unspecified part of trunk, limb or body region
T15–T19	Effects of foreign body entering through natural orifice
T20–T31	Burns
T33–T35	Frostbite
T36–T50	Poisoning by drugs, medicaments and biological substances
T51–T65	Toxic effects of substances chiefly nonmedicinal as to source (including alcohol)
T66–T75	Other and unspecified effects of external causes
T79–T79	Certain early complications of trauma

Defining alcohol-related conditions

The ICD-10-AM and ICD-10 contain many codes for health conditions and causes of death related to alcohol use. We included only those that were most likely to provide evidence that drinking alcohol contributed to the occurrence of the injury, as per Box 3 (ACCD 2017; WHO 2019).

Box 3: In-scope alcohol-related conditions

F10.0	Acute alcohol intoxication
F10.1	Harmful use of alcohol
F10.2	Alcohol dependence syndrome
R78.0	Finding of alcohol in the blood
T51.0	Toxic effect of alcohol (ethanol)
T51.9	Toxic effect of alcohol (type unspecified) poisoning
X45	Accidental poisoning by and exposure to alcohol
X65	Intentional self-poisoning by and exposure to alcohol
Y15	Poisoning by and exposure to alcohol, undetermined intent
Y90	Evidence of alcohol involvement determined by blood alcohol level (used in hospitalisations data only; not used in deaths data)
Z72.1	Problems related to lifestyle – alcohol use

Some of these codes (T, X and Y codes) overlap with the injury definition above because poisoning by alcohol is defined as an injury in the ICD-10-AM and ICD-10.

Exclusions

We excluded alcohol-related codes used in other studies of alcohol-related harm (for example, AIHW 2022, McKenzie et al. 2010, Nguyen et al. 2018):

a. that are assigned for other non-injury health conditions associated with alcohol (for example - K70 Alcoholic liver disease)
b. that relate to non-beverage types of alcohol (for example - T51.1–51.8 Methanol)
c. that relate to alcohol counselling and surveillance services (for example - Z71.4 Counselling and surveillance for alcohol use disorder)
d. where there is a coding note in the ICD-10-AM instructing that the code should not be used (for example - Y91 Evidence of alcohol involvement determined by blood alcohol level)
e. where the likelihood of alcohol use being a direct contributor to the injury occurring was deemed to be lower (for example - F10.3 Withdrawal state due to use of alcohol).

While an argument could be made for including F10.3 and other similar codes, these were excluded on the basis that it is more difficult to assume that the person was under the influence of alcohol when they were injured compared to the F10.0–F10.2 codes that were included. Including these cases would have yielded an extra 3,230 hospitalisations and 5 deaths.

Inclusion criteria

Box 4: Key definitions

The **principal diagnosis** is established after study to be chiefly responsible for occasioning an episode of admitted patient care (AIHW METEOR).

Additional diagnoses are the one or more conditions or complaints either coexisting with the principal diagnosis or arising during the episode of admitted patient care (AIHW METEOR).

External cause is the circumstance in which an injury, poisoning or other adverse effect has occurred (AIHW METEOR).

Underlying cause of death is the disease or injury that initiated the train of morbid events leading directly to a person's death or the circumstances of the accident or violence which produced the fatal injury (AIHW METeOR).

Multiple causes of death (or **associated causes of death**) are the one or more morbid conditions, diseases and injuries which are listed on the death certificate. They include all the factors in the morbid train of events leading to death: the underlying cause, the immediate cause, any intervening causes, and any conditions that contributed (AIHW METEOR).

Mechanism of injury is the means, environmental event, condition, or circumstances in which the injury sustained resulted in death. Mechanism of injury is similar to the concept of external cause, but usually excludes the concept of intent (NCIS 2020).

Object or substance producing injury means objects, substances and phenomena which produce injury/ies causing death (NCIS 2020).

Hospitalisations

Box 5: Inclusion criteria for hospitalisations

Records were included in the analysis where there was:

Criterion 1 (28,036 cases):

a principal diagnosis of injury (S00-T75; T79) **and**:

an additional in-scope diagnosis relating to alcohol use (F10.0, F10.1, F10.2, R78.0, T51.0, T51.9, Z72.1) **or**

there was an external cause of injury related to alcohol use (X45, X65, Y15, Y90)

OR

Criterion 2 (1,988 cases):

a principal diagnosis of acute alcohol intoxication (F10.0) **and** an additional diagnosis of injury (S00-T75; T79).

See technical notes for further information on the counts contributed by each criterion and ICD-10-AM code (ACCD 2017).

Criterion 2 was included to incorporate cases where there was definite evidence of both alcohol intoxication and injury at the time of hospital admission, where the alcohol intoxication was the chief reason for admission. The principal diagnosis in criterion 2 is restricted to acute alcohol intoxication (F10.0) and does not include the 547 cases where harmful use of alcohol (F10.1) or alcohol withdrawal state (F10.2) was the principal diagnosis. Although an argument could be made for including these cases, these were excluded because of the reduced certainty of alcohol being involved in the occurrence of the injury.

Deaths

Box 6: Inclusion criteria for deaths

Records from the National Morbidity Database (NMD) were included in the analysis where (WHO 2019):

Criterion 1 (143 cases):

there was an alcohol-related underlying cause of death of:

accidental poisoning by and exposure to alcohol (X45) **or**

intentional self-poisoning by and exposure to alcohol (X65) **or**

poisoning by and exposure to alcohol, undetermined intent (Y15)

OR

Criterion 2 (1,721 cases):

there was an injury-related cause of death (S00–T75; T79) **and**

there was an injury-related external cause of death (V01–Y36) **and**

there was an in-scope alcohol-related cause of death (F10.0, F10.1, F10.2, R78.0, Z72.1)

OR

Criterion 3 (491 cases):

there was an in-scope alcohol-related injury cause of death (T51.0, T51.9) **and**

there was an injury-related external cause of death (V01–Y36)

OR

Criterion 4 (280 cases):

there was an injury-related cause of death (S00–T75; T79) **and**

there was an in-scope alcohol-related external cause of death (X45, X65, Y15).

Records from all Australian states and territories in the National Coronial Information System (NCIS) were included in the analysis where (740 cases):

the death occurred from 1 July 2019 to 31 December 2019 **and**

the case status was 'Closed' **and**

the case type was 'Death due to external causes' **and**

the object or substance producing injury was 'Pharmaceutical substances for human use' **and**

the parent drug was 'Alcohol'.

Alcohol and drug contribution level in the NCIS

NCIS data classifies alcohol as either a primary or secondary contributor to a death.

A substance is considered to have a **primary** contribution to a death where:

drug toxicity is noted within the primary mechanism and object field **or**

aspiration of gastric contents is noted in the primary mechanism and object field and drug toxicity was noted in the secondary mechanism and object field.

A substance is considered to have a **secondary** contribution to death where:

another external mechanism (such as a vehicle incident, a fall or drowning) is noted within the primary (and, where required, secondary) mechanism and object field, **and**

pharmaceutical drug toxicity is noted within the secondary or tertiary mechanism and object field.

If pharmaceutical substances contributed to the death, all drugs identified are recorded. For example, where oxycodone toxicity is noted in the cause of death and alcohol is also identified, both substances are recorded in the relevant drug field.

Cases where alcohol is either the primary or secondary contributor to the death were in scope for this report. See the Technical notes for further information the NCIS data.

Limitations

Ability to ascertain involvement of alcohol in the injury event

In preparing this report, subject-matter and ICD-10-AM experts were consulted with the aim to identify cases with ICD codes that provide reasonable confidence that the person was under the effect of alcohol when they were injured. However, there is no one accurate way to do this and the authors acknowledge that the data may include:

- cases where alcohol was consumed after the injury event
- cases where alcohol was consumed, however it did not contribute to the injury event

and may exclude:

- cases where alcohol use contributed to an injury event, but by the time the person presented to hospital, the alcohol consumption was not detectable, divulged or considered relevant by the recorder and therefore was not documented in the patient record.

There are other approaches that quantify the extent to which alcohol contributed to the occurrence of an injury. For example, the alcohol attributable fractions (AAF) method estimates the proportion of injury that would be removed if there were no alcohol consumption. AAFs are used by the World Health Organization in burden-of-disease estimates (Cherpitel et al. 2015, Taylor et al. 2011, Chikritzhs et al. 2002). However, to calculate the AAF, a reference group (of non-drinkers or low-risk drinkers) is required and information on drinking habits is not available within the NHMD (Chikritzhs et al. 2002). Instead, this report uses broadly the same methodology used in other AIHW injury reports (such as Injury in Australia).

Ability to identify injuries sustained relating to someone else's use of alcohol

The available data can only identify cases where the injured person had consumed alcohol. It is not able to identify cases where another person's use of alcohol contributed to the injury of the person who was hospitalised or died. For example, where someone is assaulted by a person under the influence of alcohol.

Evidence of under-recording of the involvement of alcohol in the NHMD

McKenzie et al. (2010) found that counting alcohol involvement in hospitalisations using ICD-10-AM codes alone only identified 38% of cases. In contrast, 94% of cases were identified by using a text search of medical records. McKenzie et al.'s inclusion criteria were broader than this report – they included cases of chronic disease associated with long-term excessive alcohol use.

Lau et al. (2021) also found that ICD-10-AM coding underestimated the proportion of injury events involving alcohol, compared to patient blood alcohol testing – while 15% of patients had a non-zero blood-alcohol concentration, only 4% had an ICD-10-AM code suggesting acute alcohol involvement. Only 37% of patients with a positive blood-alcohol concentration had an alcohol-related ICD code, even though 80% of patients had a blood alcohol concentration of over 0.05 recorded.

Emergency department presentation

This report does not include data from emergency department datasets, as the data quality of national ED data does not currently enable reliable identification of alcohol-related injury presentations.

NCIS time delay

NCIS data is via the NCIS data report service was available for analysis later than the NMD due to the time taken to finalise coronial investigations. At the time of writing, NCIS data for 2020 was not available via the NCIS data report service. Therefore, analysis of the NCIS database from 1 July 2019 to 31 December 2019 (6 months) is included to supplement the information in the NMD but is not representative of the full reporting period (2019–20).

Other limitations of the NHMD and the NMD are explained in the technical notes.

Examples of how the inclusion criteria applies

The three fictional examples below show how the inclusion criteria used in this project apply under different circumstances. The examples are designed to give readers a greater understanding of the diversity of alcohol-related injuries among Australians.

Example 1: Lee's story

Lee works in a sales role with regular business dinners involving alcohol. One Friday night after closing a deal over dinner, Lee celebrated with co-workers at a bar with further drinks. After consuming approximately 7 standard drinks over a period of 3 hours, Lee headed home, thinking, 'I feel okay. I'll be fine to drive'. On the way home Lee lost control of the car and crashed into a tree.

Lee was taken to hospital by ambulance and was admitted with an open wound to the head (S01 - the primary reason for admission) and a fractured forearm (S52). The medical professionals identified acute alcohol intoxication and noted this in the medical record (F10.0).

De-identified data about Lee's hospitalisation would be included in the scope of this report based on the above criteria.

Example 2: Jordan's story

Jordan is a university student in a regional city. Jordan has bouts of depression and since beginning university, Jordan's alcohol consumption has increased, and they sometimes experiment with other drugs.

At a Saturday night party, Jordan drank more alcohol than usual (12 standard drinks) and took benzodiazepines (a depressant drug) with the intent to cause themselves harm. Jordan's friends noticed them fading in and out of consciousness and their body became increasingly cold. An ambulance was called, and they were admitted to hospital and treated primarily for the toxic effect of alcohol (T51 – injury diagnosis). Harmful use of alcohol as an additional diagnosis (F10.1 – alcohol related condition) and intentional self-harm by exposure to benzodiazepines as an external cause code (X61 – *Intentional self-harm by exposure to anti-epileptic, sedative-hypnotic, anti-parkinsonism and psychotropic drugs, not elsewhere classified*) were also recorded in the medical record.

De-identified data about Jordan's hospitalisation would have been included in this report based on the above criteria.

Example 3: Ari's story

Ari, a 30-year-old electrician enjoys a night at the pub with his workmates. One night after work Ari walked to his local pub for dinner, beers and to watch a football game. After watching his team win and consuming about 5 standard drinks, Ari started his short walk home. Walking in the dark, he tripped and hit his head on the footpath, but did not lose consciousness. A passer-by called an ambulance and Ari was taken to the emergency department of his local hospital. After assessing Ari's injuries, he was able to go home with recommendations to rest and seek assistance if his condition worsened.

The medical attention Ari received would not have been captured in this report as he was not admitted to hospital.

References

ABS (2020) *Cause of Death, Australia: Doctor Certified Deaths, Summary Tables*, ABS, Australian Government, accessed 15 July 2022.

ACCD (Australian Consortium for Classification Development) 2019. The international statistical classification of diseases and related health problems, 10th revision, Australian modification (ICD-10-AM), 11th ed. Tabular list of diseases and alphabetic index of diseases. Adelaide: Independent Hospital Pricing Authority (IHPA), Lane Publishing.

AIHW (2022) *Alcohol, tobacco & other drugs in Australia*, AIHW, Australian Government, accessed 18 July 2022.

Cherpitel CJ, Ye Y, Bond J, Borges G, Monteiro M, Chou P and Hao W (2015) Alcohol Attributable Fraction for Injury Morbidity from the Dose-Response Relationship of Acute Alcohol Consumption: Emergency Department Data from 18 Counties, *Addiction*, 10(11):1724–1732, accessed 15 July 2022, https://doi.org/10.1111/add.13031.

Chikritzhs T, Stockwell T, Jonas H, Stevenson C, Cooper-Stanbury M, Donath S, Single E and Catalano P (2002) Towards a standardised methodology for estimating alcohol-caused death, injury and illness in Australia, *Australian and New Zealand Journal of Public Health*, 26(5):443–4450 accessed 15 July 2022, https://onlinelibrary.wiley.com/doi/epdf/10.1111/j.1467-842X.2002.tb00345.x.

Lau G, Gabbe BJ, Mitra B, Dietze PM, Braaf S, Beck B (2021) Comparison of routine blood alcohol tests and ICD-10-AM coding on alcohol involvement for major trauma patients, *Health Information Management Journal*, accessed 9 February 2023, https://doi.org/10.1177/18333583211037l7.

McKenzie K, Harrison JE, McClure RJ (2010) Identification of alcohol involvement in injury-related hospitalisations using routine data compared to medical record review, *Australian and New Zealand Journal of Public Health*, 34(2):146-152, accessed 30 June 2022, https://onlinelibrary.wiley.com/doi/epdf/10.1111/j.1753-6405.2010.00499.x.

NCIS (National Coronial Information System) (2020) *NCIS Data Dictionary*, NCIS, accessed 1 July 2022.

Nguyen TQ, Simpson PM, Braaf SC Cameron PA, Judson J and Gabbe BJ (2019) Level of agreement between medical record and ICD-10-AM coding of mental health, alcohol and drug conditions in trauma patients, *Health information Management Journal*, 48 (3): 127–134, accessed 30 June 2022, https://doi.org/10.1177/1833358318769482.

Taylor BJ, Shield, Rehm JT (2011) Combining best evidence: A novel method to calculate the alcohol-attributable fraction and its variance for injury mortality, *BMC Public Health*, 11(256), accessed 15 July 2022, https://doi.org/10.1186/1471-2458-11-265.

WHO (World Health Organization) 2011 *International Statistical Classification of Diseases and Related Health Problems, 10th Revision*, WHO, accessed 18 July 2022.

Hospitalisations

Variation by age and sex

In 2019–20, there were 30,024 alcohol-related injury hospitalisations, accounting for 5.7% of all injury hospitalisations (AIHW 2022) (Table 1).

Almost 60% of alcohol-related hospitalisations were for males. This is higher than the percentage for all hospitalised injuries cases in 2019–20, where males represented 55% of hospitalisations (Table 1).

Across all age groups the rate of hospitalisations was higher for males than females (Figure 1). Males were 1.5 times as likely as females to be hospitalised for an alcohol-related injury (Table 1; Figure 1).

Table 1: Number and rate of alcohol-related injury hospitalisations, by sex, 2019–20

	Males	Females	Persons
Number of alcohol-related hospitalisations	17,863	12,156	30,024
Rate for alcohol-related hospitalisations	141	95	118
Number of all injury hospitalisations	287,715	239,667	527,423
Rate for all injury hospitalisations	2,273	1,862	2,066

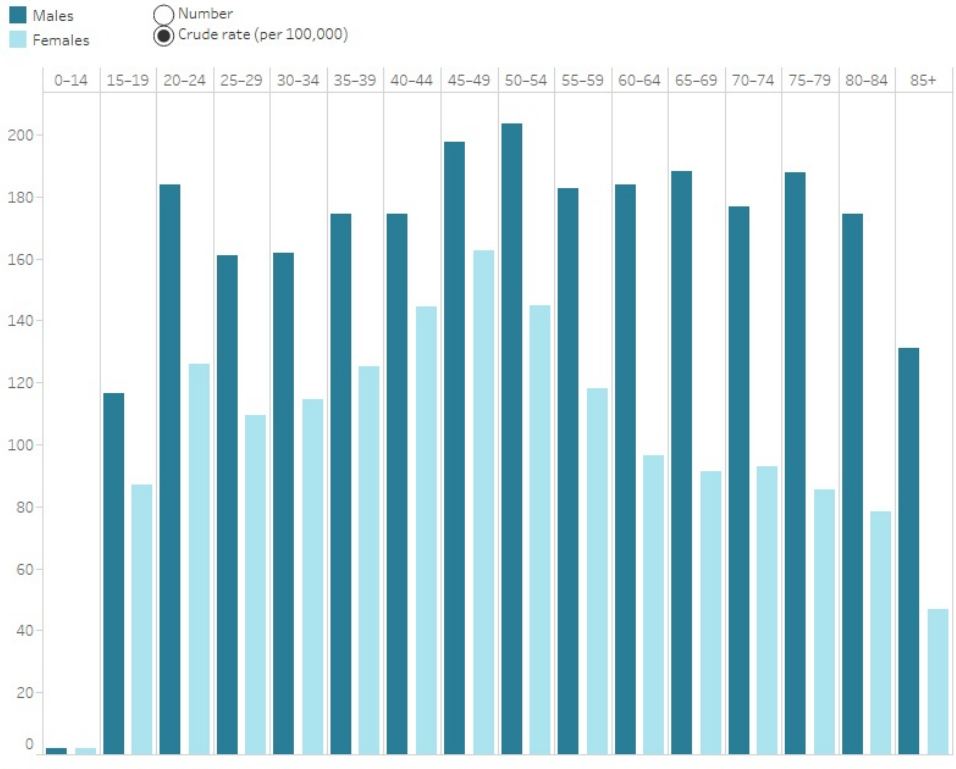
Note: Rates are crude per 100,000 population.
Source: AIHW National Hospital Morbidity Database.

Males aged 45–49 and 20–24 were the five-year age groups with the highest numbers of hospitalisations – just over 1,600 each (Figure 1). For females, the 45–49 age group had the highest number of hospitalisations (almost 1,400).

Among males, those aged 50–54 had the highest rate of alcohol-related injury hospitalisations (204 per 100,000) and among females, those aged 45–49 had the highest rates (163 cases per 100,000 population).

Figure 1: Number and rate of alcohol-related injury hospitalisations, by age group and sex, 2019-20

A bar chart showing that males have higher numbers and rates of alcohol-related injury hospitalisations than females.



Note: Rates are crude per 100,000 population.
Source: AIHW National Hospital Morbidity Database.
http://www.aihw.gov.au

For more detailed data, see Data tables A1–3.

Children

There were 96 hospitalisations for children aged 0–14, with similar numbers of males and females.

For those aged 0–14 years, intentional self-harm (31%, 30 cases) and accidental poisoning (25%, 24 cases) were the most common causes of alcohol-related injury hospitalisations. About half of cases:

- were due to *poisoning or toxic effect* (54 cases)
- involved one or more drug other than alcohol (45 cases)
- occurred in the home (44 cases).

Data for the 0–14 age group is not presented in all sections of this report due to confidentiality issues associated with publication of low case counts.

References

AIHW (2022) Injury in Australia, AIHW, Australian Government, accessed 18 July 2022.

Hospitalisations

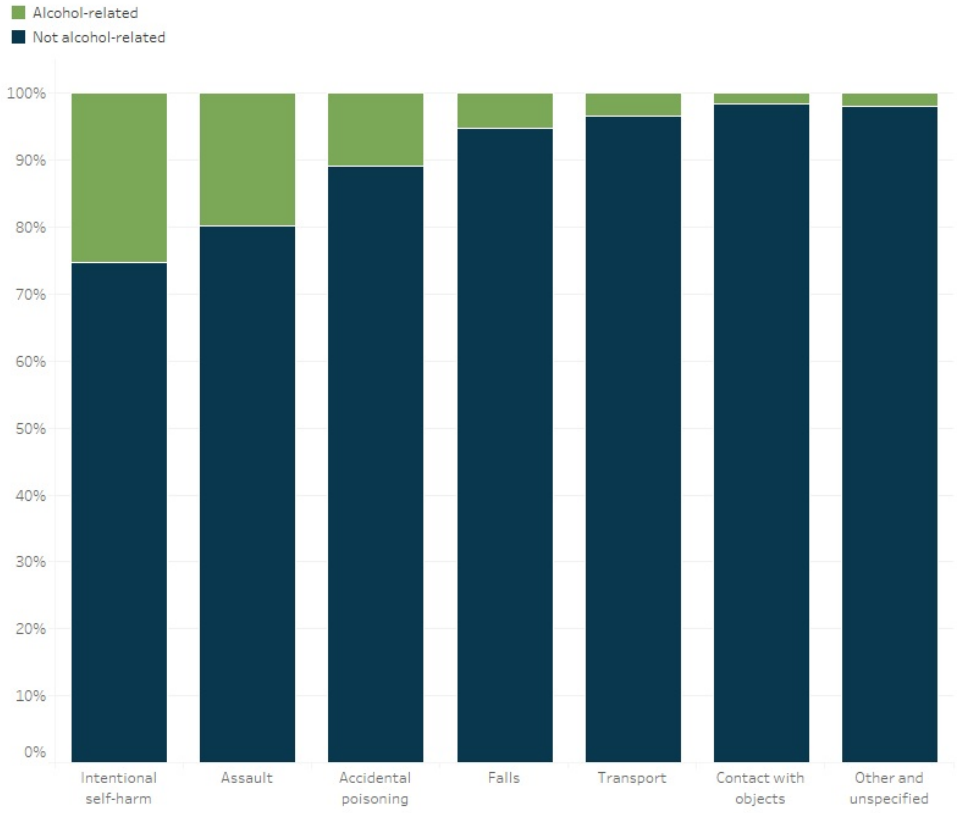
The four most common causes of alcohol-related injury hospitalisations were falls (39%), intentional self-harm (24%), assault (15%) and transport (7.2%) (Figure 2). This is a different pattern to all injury hospitalisations, where intentional self-harm and assault play a smaller role compared to other causes.

One in 4 (25%) injury hospitalisations for intentional self-harm were alcohol-related, and 1 in 5 (20%) injury hospitalisations for assault were alcohol-related.

While 3.5% of all hospitalisations for transport injuries were alcohol-related, this is not necessarily an indication of drink-driving as the hospitalised person may not have been a driver – they could have been a car passenger, a pedestrian or a cyclist, for example.

Figure 2: Percentage of alcohol-related and all injury hospitalisations by selected cause, 2019-20

Stacked bar graph of the percentage of alcohol-related injuries by cause among all injuries showing that 1 in 4 intentional-self harm and 1 in 5 assault injury hospitalisations were alcohol-related.



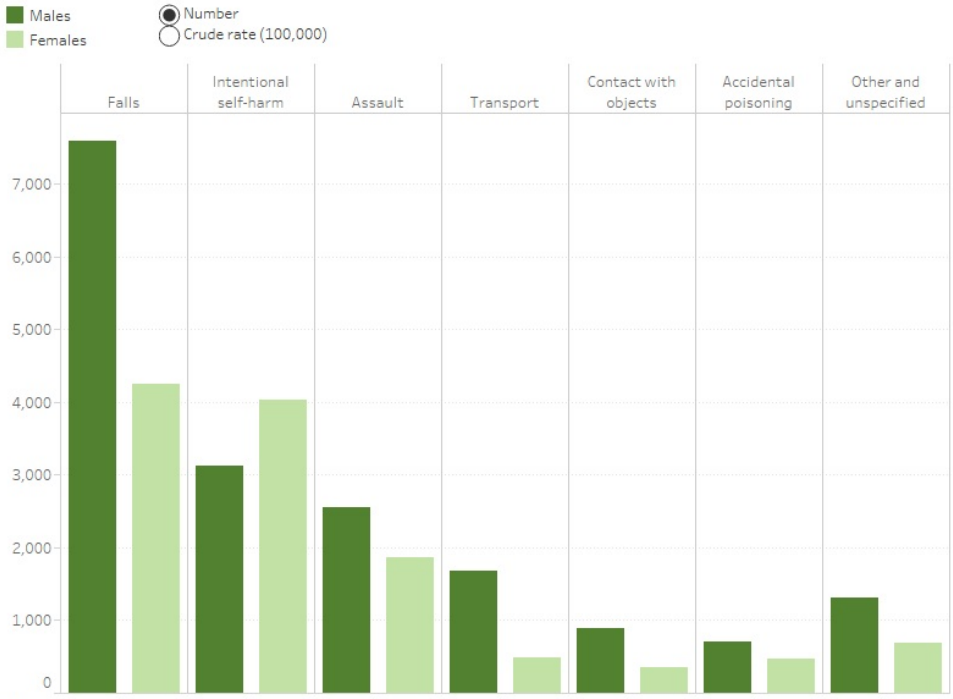
Notes:
1. 'Other and unspecified' includes *Other unintentional causes, Drowning and submersion, Thermal causes, Choking and suffocation, Electricity and air pressure, Forces of nature, Undetermined intent, Contact with living things* and *Overexertion*.
2. 'Not-alcohol related' refers to hospitalised injuries identified in the publication Injury in Australian 2019-20.
Source: AIHW National Hospital Morbidity Database.
http://www.aihw.gov.au

Intentional self-harm was the only cause category where females were more likely (1.3 times as likely) to be hospitalised as males for an alcohol-related injury (Figure 3). The cause categories with the largest difference in rates between males and females were (Figure 3):

- transport crashes (male rate 3.5 times as high)
- thermal causes (male rate 2.8 times as high)
- contact with objects (male rate 2.6 times as high)
- contact with living things (male rate 2.3 times as high).

Figure 3: Number and rate of alcohol-related injury hospitalisations by selected causes and sex, 2019-20

Stacked bar graph showing that among alcohol-related injury hospitalisations, falls, intentional-self-harm and assault were the causes of injury with the highest number and rate. For all causes of injury except intentional self-harm, the crude rate was higher for males than females.



Notes:
1. Rates are crude per 100,000 population.
2. 'Other and unspecified' includes *Other unintentional causes, Drowning and submersion, Thermal causes, Choking and suffocation, Electricity and air pressure, Forces of nature, Undetermined intent, Contact with living things* and *Overexertion*.
Source: AIHW National Hospital Morbidity Database.
http://www.aihw.gov.au

The rate of different causes of alcohol-related injury hospitalisations varies by age group (Figure 4):

- falls hospitalisation rates increased with age
- intentional self-harm rates decreased with age from the 15–24 age group onwards
- transport crashes rates were highest in the 15–24 age group
- assault rates were highest in the 25–44 age group.

These same patterns are found in injury hospitalisations data in general, both with and without the involvement of alcohol (AIHW 2022), showing that age has little bearing on whether an injury hospitalisation is alcohol-related or not. This is also reflected in the relatively small difference between crude and age-standardised rates by cause of injury.

Figure 4: Number and rate of alcohol-related injury hospitalisations by cause, sex and age group, 15 years and over, 2019–20

Stacked column graph showing the top causes of alcohol-related injury hospitalisations were intentional self-harm for those aged 15–44, and falls for those aged over 45.

Notes:
1. Rates are crude per 100,000 population.
2. 'Other and unspecified' includes *Other unintentional causes, Drowning and submersion, Thermal causes, Choking and suffocation, Electricity and air pressure, Forces of nature, Undetermined intent, Contact with living things* and *Overexertion*.
Source: AIHW National Hospital Morbidity Database.
http://www.aihw.gov.au

For more detailed data, see Data tables A4–6.

References

AIHW (2022) Injury in Australia, AIHW, Australian Government, accessed 18 July 2022.

Hospitalisations

Polydrug use, which is use of multiple prescription, over-the-counter or street drugs was observed in the data, with 55% (16,400) of cases recording the presence of other drugs in addition to alcohol (Table 2). Tobacco was the most commonly recorded drug, reported in 36% (11,000) of alcohol-related injury hospitalisations.

Table 2: Number of alcohol-related injury hospitalisations by number of drugs present, Australia, 2019-20

Number and type of drugs	Number	%
Alcohol only	13,598	45.3
Alcohol and tobacco	7,565	25.2
Alcohol, tobacco and 1 other drug	1,722	5.7
Alcohol, tobacco and 2 other drugs	814	2.7
Alcohol, tobacco and 3 or more other drugs	847	2.8
Alcohol and 1 other drug (tobacco not recorded)	2,771	9.2
Alcohol and 2 other drugs (tobacco not recorded)	1,363	4.5
Alcohol and 3 or more other drugs (tobacco not recorded)	1,344	4.5
Total	**30,024**	**100**

Note: Percentage may not total to 100 due to rounding.

Source: AIHW National Hospital Morbidity Database.

Rates at which the use of other drugs were recorded were similar between smokers and non-smokers who had been hospitalised for an alcohol-related injury (Table 3).

Drugs other than alcohol and tobacco

There were around 8,900 (30%) alcohol-related hospitalisations where more than one drug in addition to alcohol was recorded, regardless of tobacco use (Table 3; see below for drug type categories). Among these cases, there were 15,100 records of use of these drugs – an average of 1.7 drugs other than alcohol or tobacco per hospitalisation. Depressants (23%, 3,500) were the most commonly identified drug category but there were over 1,000 cases that recorded use of non-opioid analgesics, antidepressants, amphetamines and other stimulants, anti-psychotics and neuroleptics, cannabinoids, or opioids.

Table 3: Percentage of alcohol-related injury hospitalisations by number of drugs present and smoking status, Australia, 2019–20

Number of drugs	Smokers (%)	Non-smokers (%)
Alcohol and 1 other drug	15.7	14.5
Alcohol and 2 other drugs	7.4	7.1
Alcohol and 3 or more other drugs	7.7	7.0
Alcohol only	69.1	71.3
Total	36.5	63.5

Source: AIHW National Hospital Morbidity Database.

Box 7: Drug type categories

The hospitalisation data from the NHMD contains ICD-10-AM codes that identify types and categories of drugs. These codes have been grouped by type of drug for the following analysis. The types of drugs included in these categories are outlined below (Alcohol and Drug Foundation 2022).

Depressants: includes antiepileptic, sedative, hypnotic and anti-parkinsonism drugs, including benzodiazepines (for example, Xanax, Valium) and gamma hydroxybutyrate (GHB).

Tobacco: consumption methods include smoking of cigarettes, cigars, pipes and waterpipes (for example, hookah) and chewing. Contains nicotine which is its addictive component. (ACCD 2019, AIHW 2022).

Non-opioid analgesics: typically used for pain management. Examples include paracetamol, aspirin and ibuprofen (NEJM Knowledge+ 2019).

Opioids: commonly prescribed for pain management or used as a street drug. Examples include: codeine, fentanyl, heroin, methadone, morphine, oxycodone.

Antidepressants: medications used to treat depression and its symptoms. Examples include: Prozac and citalopram (Healthdirect 2021).

Antipsychotics and neuroleptics: used to treat mental health problems such as schizophrenia, bipolar disorder, severe depression or personality disorder. Examples include: chlorpromazine and fluanxol (CAMH 2022).

Amphetamines and other stimulants: psychostimulants that increase the messages between the body and the brain, commonly prescribed to treat ADHD and Parkinson's disease. Some amphetamines are sold illegally, for example speed or crystal methamphetamine (also known as ice). Excludes cocaine, which has its own category.

Cannabinoids: used for recreational, medicinal and synthetic purposes that can have a psychoactive or anti-psychoactive effect. The most common cannabinoid is marijuana.

Cocaine: a stimulant that is most commonly a street drug.

Other specified and unspecified drugs: all other drugs not included in the above categories. Includes anaesthetics, drugs affecting the cardiovascular, gastrointestinal or hormonal systems, haematological agents, antibiotics, vaccines, water-balance agents and drugs affecting mineral and uric acid metabolism.

The ICD-10-AM coding of drugs is subject to the same limitations as alcohol coding, these are outlined in the methods section.

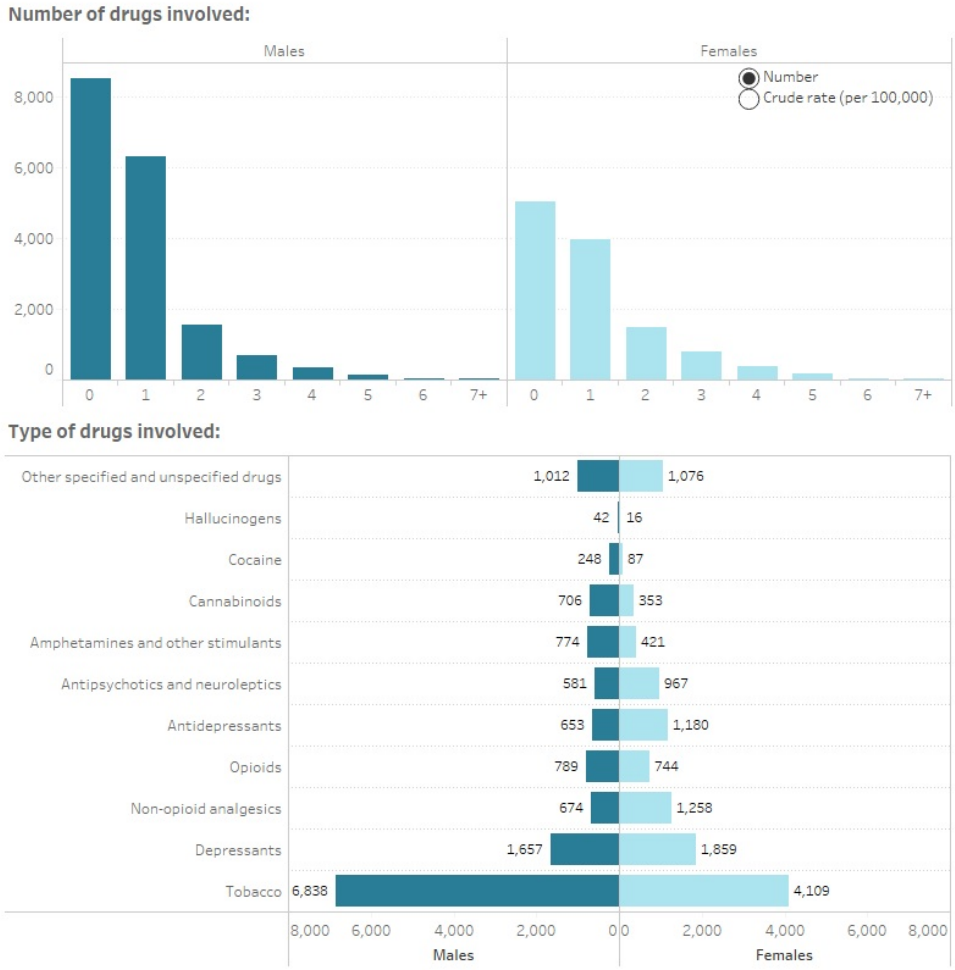
For more information on the codes forming each type of drug see Technical notes.

Figure 5 shows differences between males and females by the type of drug present.

Figure 5: Number and type of drug involved in alcohol-related injury hospitalisations

Stacked bar chart (above) showing that for both males and females alcohol consumption alone and alcohol and one other drug were largest contributors for the number and rate of drugs involved in alcohol-related injury hospitalisations.

The butterfly chart (below) shows that tobacco was the most common drug (other than alcohol) involved, with more cases in males than females. This trend was reversed for non-opioid analgesics and depressant drugs where females had more cases than males.



Note: 'Other specified and unspecified drugs' includes *Hallucinogens, Volatile Solvents* and *Other specified and Unspecified* drug categories.
Source: AIHW National Hospital Morbidity Database.
http://www.aihw.gov.au

For more detailed data, see Data tables A7-8. For more detailed data, see Data tables A7-8.

References

ACCD (Australian Consortium for Classification Development) 2019. The international statistical classification of diseases and related health problems, 10th revision, Australian modification (ICD-10-AM), 11th ed. Tabular list of diseases and alphabetic index of diseases. Adelaide: Independent Hospital Pricing Authority (IHPA), Lane Publishing.

Alcohol and Drug Foundation (ADF) (2022) *Drug facts*, ADF, accessed 11 August 2022.

AIHW (2022) *Alcohol, tobacco & other drugs in Australia*, AIHW, Australian Government, accessed 18 July 2022.

CAMH (The Centre for Addition and Mental Health) (2022) Antipsychotic Medications, CAMH, accessed 11 August 2022.

HealthDirect (2021) *Antidepressant Medicines*, HealthDirect, Australian Government, accessed 11 August 2021.

NEJM Knowledge + (2019) *Non-Opioid Analgesics Role in Pain management*, NEJM Knowledge+, accessed 11 August 2022.

Hospitalisations

The data show that alcohol plays a key role in hospitalisations due to the two intentional causes of injury – intentional self-harm and assault. This section explores intentional self-harm in more detail.

For urgent crisis help **call Lifeline on 13 11 14** or if life is in immediate danger **call 000** If at any point you feel worried about harming yourself while viewing the information on this website—or if you think someone else may be in danger—please stop reading and seek help. Alcohol and other drug use is associated with increased risk of suicide and is a strong predictor of suicidal thoughts and behaviours (Fisher et al. 2020).

There were over 7,100 alcohol-related injury hospitalisations due to intentional self-harm, 24% of all intentional self-harm hospitalisations in 2019–20.

In over 5,900 (83%) of the 7,100 cases, poisoning was the most common mechanism of intentional self-harm, followed by self-harm with a sharp object (840 cases; 12%) (Table 4 and Figure 6).

Of the 5,900 poisoning cases, 97% (5,760) were due to drug exposure, including alcohol, and 2.7% (160) were for exposure to other types of substances such as gases and vapours and pesticides (Table 4).

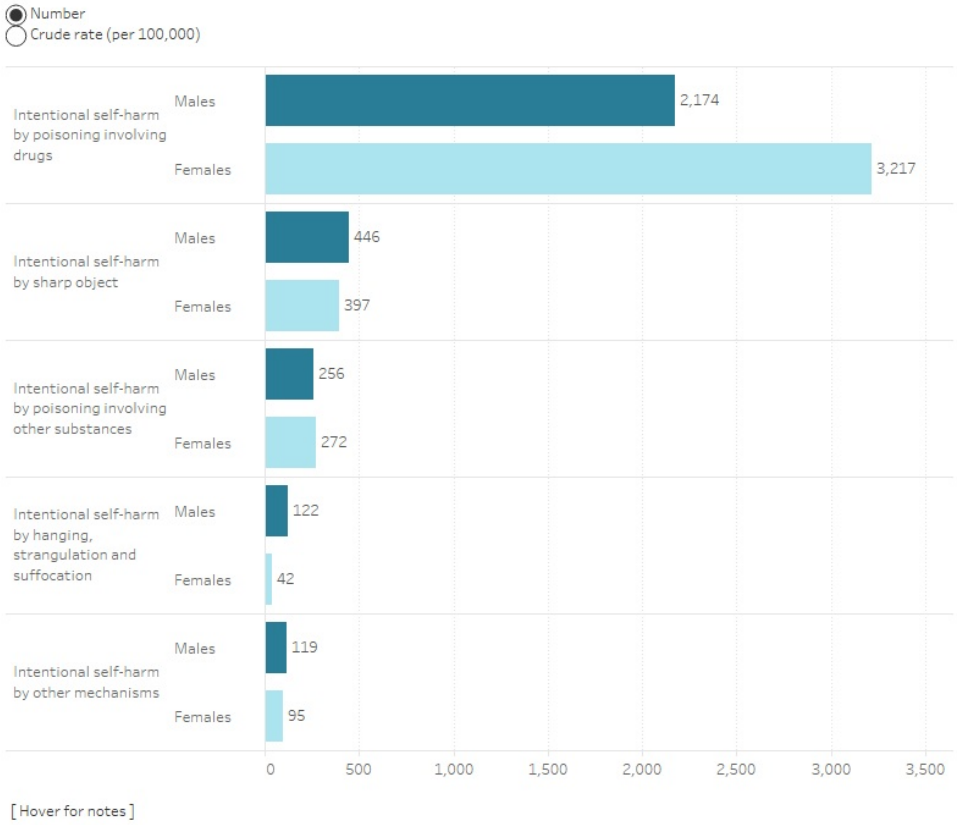
Table 4: Mechanism of injury used in alcohol-related hospitalisations due to intentional self-harm, 2019–20

Mechanism of intentional self-harm	Number	Rate
Poisoning (X60–X69)	5,923	23.3
Drugs (X60–X64)	5,394	21.2
Other substances (X65–69)	529	2.1
Sharp object (X78)	843	3.3
Hanging, strangulation and suffocation (X70)	164	0.6
Other mechanisms (X71–77, X79–84)	214	0.8
Total	**7,144**	**28.0**

Note: Codes in brackets refer to the ICD-10-AM (11th edition) external cause codes (ACCD 2019).
Source: AIHW National Hospital Morbidity Database.

Figure 6: Top mechanism of self-harm used in alcohol-related injury hospitalisations, by sex, 2019–20

Bar graph showing that for intentional self-harm alcohol-related injury hospitalisations, poisoning involving drugs and intentional self-harm by sharp objects were the most common mechanism.



Intentional self-poisoning with drugs

Table 5 shows the types of drugs deemed to have contributed the most to the intentional self-harm injury hospitalisation (the first-listed external cause in the record). In 6.2% (370) of these cases, alcohol was the drug deemed to have been the primary cause of the hospitalisation and may have been the only drug involved. In 94% (5,560) of the cases, alcohol was a secondary contributing cause, with another drug or substance listed as the main external cause. Box 8 below describes how ICD-10-AM drug codes in the medical record were used.

Box 8: External cause codes and additional diagnosis

The presence of other drugs section outlines the drug groupings used in this report based on diagnosis codes listed in the patient's medical record.

This section uses the external cause codes for intentional self-harm (X60–X84). The terminology used in the ICD-10-AM external cause codes is similar to that used for diagnoses. Tables A11–13 in the supplementary data tables presents the relevant intentional self-harm external cause codes and the additional diagnosis codes.

The most common category of drugs used in *intentional self-poisoning was antiepileptic, sedative-hypnotic, anti-parkinsonism and psychotropic drugs* (depressants) (3,300 cases). This drug category includes barbiturates and benzodiazepines (types of sedatives and hypnotics) commonly used to treat sleep disorders or anxiety.

The next most common drug category was *Non-opioid analgesics, anti-pyretics and anti-rheumatics* (1,050 cases), which includes over-the-counter drugs such as paracetamol, ibuprofen and aspirin.

Narcotics and hallucinogens (not elsewhere classified) which includes both prescribed and street forms of drugs such as cannabis, cocaine, codeine, heroin, LSD, methadone and morphine contributed 420 cases to intentional self-harm poisoning (Table 5).

Table 5: Mechanism of intentional self-poisoning used in alcohol-related injury hospitalisations, 2019–20

Mechanism of intentional self-poisoning	Males number	Males rates	Females number	Females rates	Persons number	Persons rate
Anti-epileptic, sedative-hypnotic, anti-parkinsonism and psychotropic drugs, not elsewhere classified (X61)	1,360	10.7	1,926	15.0	3,286	12.9
Non-opioid analgesics, anti-pyretics and anti-rheumatics (X60)	342	2.7	692	5.4	1,035	4.1
Narcotics and psychodysleptics [hallucinogens], not elsewhere classified (X62)	203	1.6	215	1.7	419	1.6
Alcohol (X65)	158	1.2	209	1.6	368	1.4

Other drugs acting on the autonomic nervous system (X63)	51	0.4	92	0.7	143	0.6
Other and unspecified drugs, medicaments and biological substances (X64, X66–X69)	316	2.5	355	2.7	672	2.7
Total	**2,430**	**19**	**3,489**	**27**	**5,923**	**23**

Notes:

1. Rates are age-standardised per 100,000 population.

2. Codes in brackets refer to the ICD-10-AM (11th edition) external cause codes (ACCD 2019).

Source: AIHW National Hospital Morbidity Database.

For more detailed data, see Data tables A11–13.

Hospitalisations

Box 9: How alcohol-related assault hospitalisations are counted

This report includes data on people hospitalised due to assault where there is evidence in the hospital record that the person hospitalised had consumed alcohol. Therefore, it does not include cases where the assault perpetrator had consumed alcohol and the person hospitalised had not.

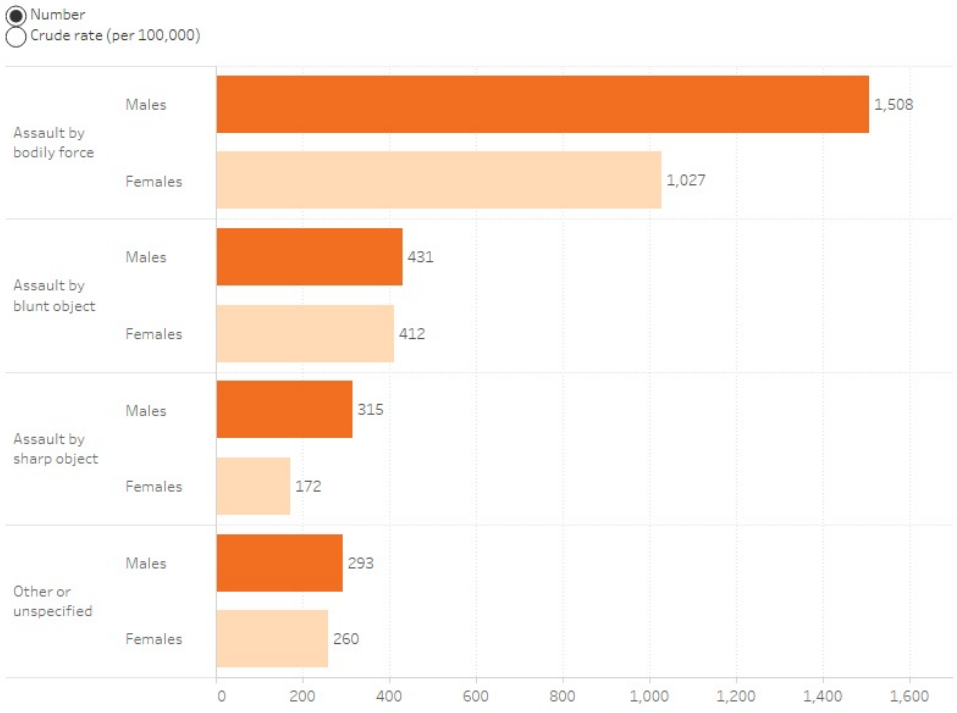
There is limited information in the data source about the relationship of the assault perpetrator to the person who is hospitalised (for example, if they are a spouse or partner, family member, or an unknown person) when that detail is specified in the hospital record. It is not possible to know from the data if the perpetrator had consumed alcohol.

One in 5 (4,400) of the 22,100 hospitalised assault injuries in Australia in 2019–20 was for cases where the person hospitalised had consumed alcohol (Table 6). Males (21 cases per 100,000) had a higher age-standardised rate than females (15 cases per 100,000) (Figure 3).

Over half of alcohol-related assault cases (57%; 2,500 cases) were *Assaults by bodily force* for example being pushed or punched (not including sexual assault). Other causes of assault hospitalisations included *Assault by blunt object* (19%; 840 cases) and *Assault by sharp object* (11%; 485 cases) (Figure 7).

Figure 7: Selected types of assault alcohol-related hospitalisations by sex, 2019–20

Bar graph showing that assaults by bodily force were the largest assault type for both sexes. For all types of assault, the numbers and rates were higher for males than females.



Notes:
1. Rates are crude per 100,000 population.
2. 'Other or unspecified' includes ICD-10-AM codes X85, X89, X91, X95, X97-98, Y01, Y03, Y05, Y07-Y09, Y35.0.
Source: AIHW National Hospital Morbidity Database.
http://www.aihw.gov.au

Assault perpetrators

Among the 4,400 alcohol-related hospitalisations for assault in this report, a perpetrator relationship was specified in 64% (2,800) of cases. Of those 2,800 cases, 61% (1,700) were cases of assault where the perpetrator was a spouse or partner or family member. These cases are broadly defined as family and domestic violence (AIHW 2022). See Family, domestic and sexual violence for more detailed AIHW data. Note, the sex of the perpetrator is not recorded in the source data.

One in 5 (20%) of hospitalisations due to assault in Australia in 2019–20 involved consumption of alcohol by the person who was hospitalised due to an assault. These data do not include whether the perpetrator also consumed alcohol.

Table 6: Number of alcohol-related and all assault injury hospitalisations by perpetrator, Australia, 2019–20

	Alcohol-related assault hospitalisations	All assault hospitalisations	% with alcohol involvement
Family member	1,709	7,639	22
Spouse or domestic partner	1,043	4,822	22
Parent	21	498	4.2
Other family member	645	2,316	28
Acquantance or friend	417	2,246	19
Person(s) unknown	502	3,393	15
Other specified person/authorities	182	1,488	12
Unspecified person	1,584	7,353	22
Total	**4,418**	**22,116**	**20**

Note: 'Total' includes records where the assault perpetrator was missing. Therefore, 'Total' may be greater than the sum of each perpetrator group.

Source: AIHW National Hospital Morbidity Database.

For more detailed data, see Data tables A14–17.

References

AIHW (2022) *Family, domestic and sexual violence*, AIHW, Australian Government, accessed 29 July 2022.

Hospitalisations

In 2019–20, there were almost 2,200 alcohol-related transport injury hospitalisations. People in cars made up almost half (49%) of all alcohol-related transport injury hospitalisations, followed by motorcyclists (17%), pedal cyclists (13%) and pedestrians (10%).

Males accounted for 77% of alcohol-related transport injury hospitalisations. The proportion of alcohol-related hospitalised injuries is higher than for all transport injuries, where males accounted for 67% of hospitalisations. Males were 3.5 times as likely as females to be hospitalised for a transport-related injury (13 per 100,000 compared to 3.8 per 100,000, respectively).

For both sexes, people aged 15–24 had the highest rate of alcohol-related transport injury hospitalisations (16 per 100,000 population).

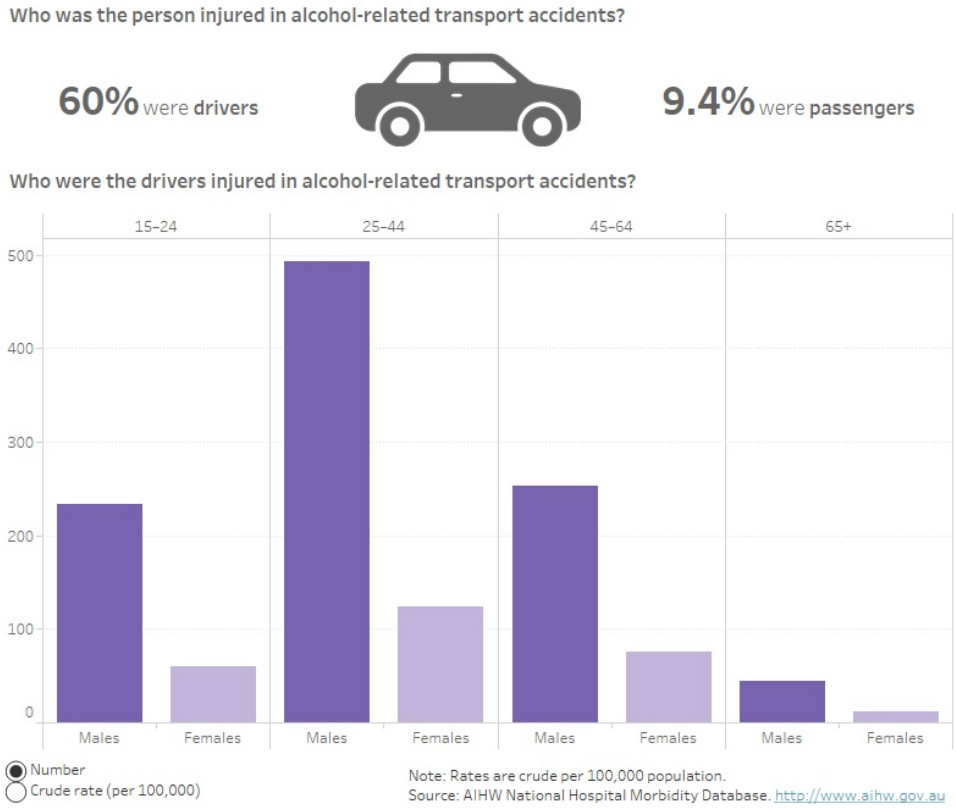
Role of person injured

Some information about the role of the person in a transport accident is included in the data, for example it may be possible to identify if the person was a passenger, driver, pedestrian or cyclist. Of the 2,200 transport cases, driver (1,300 cases, 60%) was the most common role (Figure 8), partly due to the fact that a car must have a driver, but may or may not have passengers. The crude rates for the person injured in transport accidents varied between sexes and age groups:

- the rate was highest in the 15–24 age group when the person injured was the driver or passenger
- males aged 15–24 who were the driver had the highest rate (14 cases per 100,000); they were 3.7 times as likely to be hospitalised as their female counterparts (3.8 cases per 100,000).

Figure 8: Number and rate of drivers hospitalised due to alcohol-related injury, by sex and age group, 15 years and over, 2019–20

Drivers were the most common person injured. The bar graph shows the highest rates of drivers injured from alcohol-related transport accidents were males aged 15–44.



The next most common roles of people hospitalised due to a transport accident were pedestrian (10%, 225 cases) and passenger (9%, 205 cases).

For more detailed data, see Data tables A18–21.

Hospitalisations

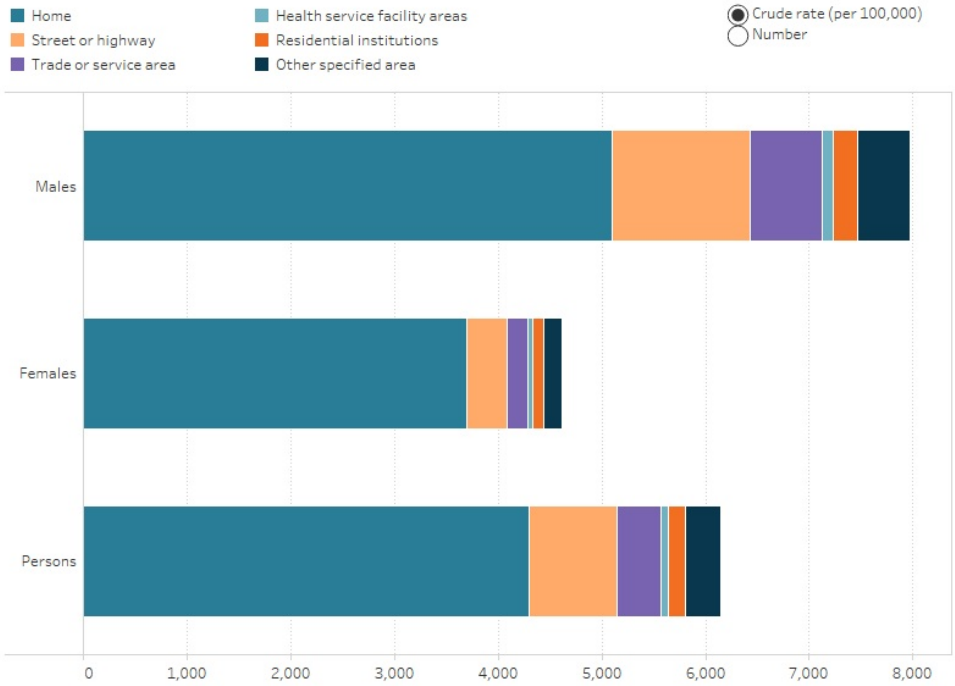
About 60% (18,500) of all alcohol-related injury hospitalisations had a place of occurrence listed. Of these, the home was the most common with 12,200 cases (66%), followed by *Street or highway* (3,100 cases; 17%), then *Trade or service areas* (1,400; 7.5%) (Figure 9).

Rates of hospitalisations for alcohol-related injuries varied between the sexes (Figure 9):

- males were 3 times as likely to be hospitalised due to an injury that occurred in street or highway areas as females (18 cases compared to 5.9 cases per 100,000 population respectively), which is consistent with the higher rate of transport-related injury for males
- males were 2.8 times as likely to be hospitalised at trade or service areas (which include premises that serve alcohol) (8.0 cases compared to 2.9 cases per 100,000 population respectively).

Figure 9: Number and crude rate of alcohol-related injury hospitalisations by place of occurrence and sex, 2019-20

Stacked graph showing that where a specific place of occurrence was noted for the injury, that the most common for alcohol-related injury hospitalisations was the home for both males and females.



Notes:
1. Rates are crude per 100,000 population.
2. 'Other specified area' includes *School*, *Industrial or construction area*, *Sport or athletic area* and *Other specified area*.
3. 'Unspecified or unknown' are exluded, these account for 38% of alcohol-related injury hospitalisations.
Source: AIHW National Hospital Morbidity Database.
http://www.aihw.gov.au

For more detailed data, see Data tables A22-23.

Hospitalisations

In 2019–20 poisoning or toxic effect (7,700 cases), followed by fractures (6,500 cases) and open wounds (4,800 cases) were the most common alcohol-related hospitalised injuries (Table 7).

The rate of alcohol-related hospitalised injuries varied between sexes where (Table 7):

- females were 1.2 times as likely to have a poisoning or toxic effect as males (33 per 100,000 and 27 per 100,000, respectively)
- males were almost twice as likely to sustain a fracture as females (33 per 100,000 and 18 per 100,000, respectively)
- males were 2.7 times as likely to sustain an intracranial injury as females (13 per 100,000 and 4.8 per 100,000, respectively).

Table 7: Number and rate of alcohol-related injury hospitalisations, by injury type and sex, 2019–20

Injury type	Males number	Males rate	Females number	Females rate	Persons number	Persons rate
Poisoning or toxic effect	3,453	27.3	4,201	32.7	7,658	30.0
Fracture	4,222	33.4	2,244	17.5	6,467	25.4
Open Wound	3,034	24.0	1,743	13.6	4,777	18.7
Amputation	1,972	15.6	1,227	9.6	3,199	12.5
Intracranial Injury	1,617	12.8	620	4.8	2,237	9.0
Superficial injury	1,166	9.2	880	6.9	2,046	8.0
Crushing injuries	1,226	9.7	762	5.9	1,988	7.8
Soft-Tissue Injury	498	3.9	213	1.7	711	2.8
Nerve injury	334	2.6	101	0.8	435	1.7
Dislocation	181	1.4	92	0.7	273	1.1
Burn	160	1.3	73	0.6	233	0.9
Total	**17,863**	**141.2**	**12,156**	**94.7**	**30,024**	**117.8**

Note: Rates are age-standardised per 100,000 population.

Source: AIHW National Hospital Morbidity Database.

For more detailed data, see Data tables A24–25.

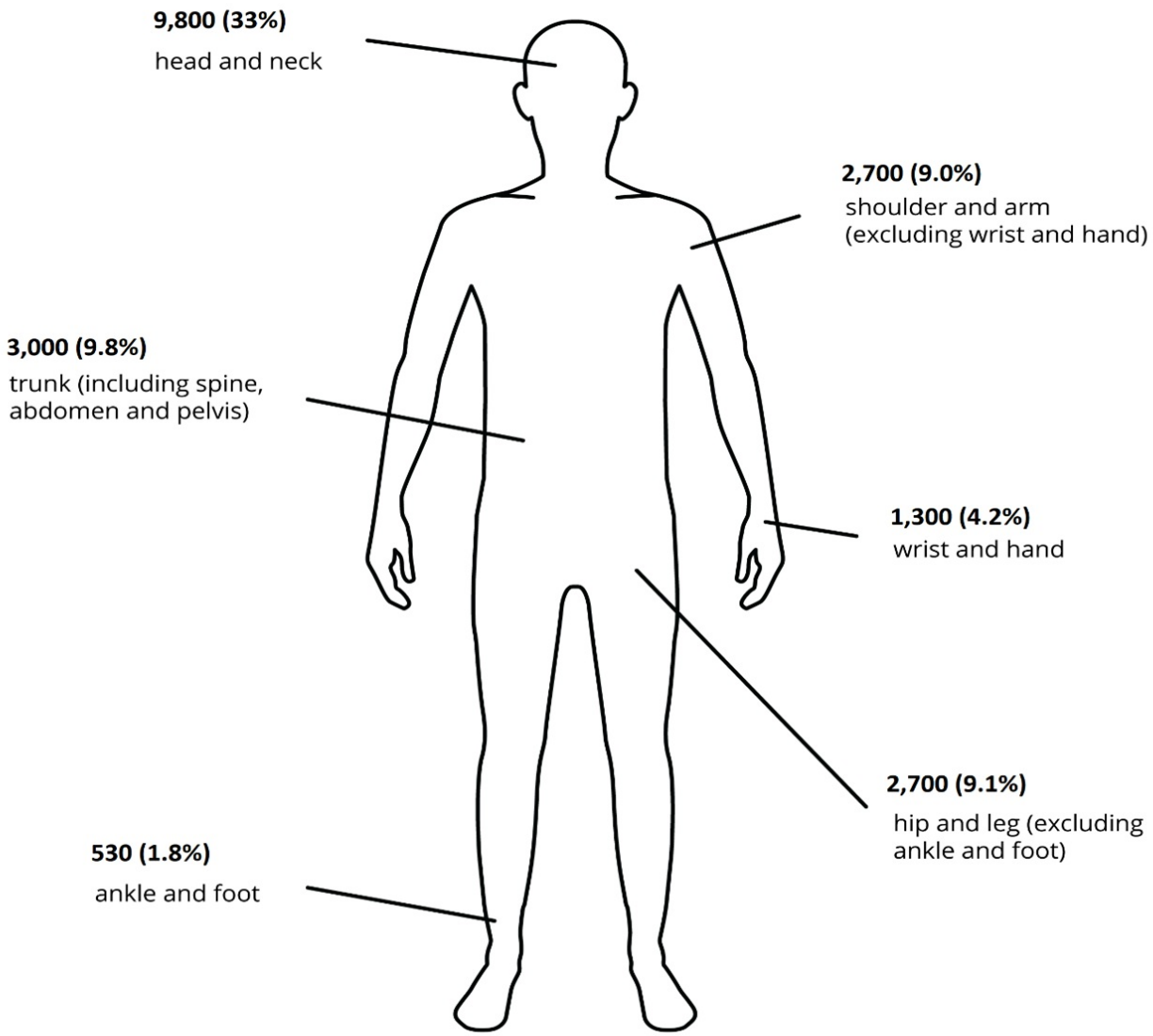
Hospitalisations

The head and neck were the most common body parts injured, with almost 9,800 cases (33%). To some extent this may reflect the inherently serious nature of head and neck injuries. Injuries to the *trunk (thorax, abdomen, lower back, lumbar, spine and pelvis)* (3,000 or 9.8%) and *hip and lower limb* (2,700 or 9.1%), and shoulder and upper limb (2,700 or 9.0%) were the next most common body parts injured (Figure 10).

For all injuries described by body location, males had higher crude rates than females. Some notable differences between the sexes include:

- males were 1.9 times as likely to sustain a head and neck alcohol-related injury hospitalisation as females (51 per 100,000 and 26 per 100,000, respectively)
- males were 2.3 times as likely to sustain an alcohol-related injury hospitalisation for the *trunk (thorax, abdomen, lower back, lumbar, spine and pelvis)* as females (16 per 100,000 and 7.1 per 100,000, respectively).

Figure 10: Alcohol-related injury hospitalisations by principal body part injured, 2019–20



Notes:

1. Percentages may not sum to 100 due to rounding.

2. Body part refers to the principal reason for hospitalisation. Number and percentage of injuries classified as *Other, multiple and incompletely specified body regions* or *Injuries not described in terms of body region (9,969 cases, 33%)* not shown.

Source: AIHW National Hospital Morbidity Database.

For more detailed data, see Data tables A26–27.

Hospitalisations

Four measures that may indicate the severity of an injury hospitalisations are:

- average length of stay
- percentage of cases with time in an intensive care unit (ICU)
- percentage of cases involving continuous ventilator support (CVS) (also called life support)
- urgency of admission.

In 2019–20, alcohol-related injury hospitalisations were more severe than all injury hospitalisations for percentage of cases with time in an ICU or on CVS (Table 8).

Average length of stay

The average length of stay in hospital for an alcohol-related injury was 3.0 days (Table 8). This compares to an overall average length of stay for all injuries of 4.5 days (AIHW 2022). Average length of stay increased with age, with people aged 24 or under spending on average about 2 days in hospital compared to an average of 4.8 days for those aged 65 and over. This pattern occurs for all injuries, where younger people stay fewer days in hospital than older people.

Time in intensive care

In 2019–20, 6.9% of all alcohol-related injury hospitalisations involved time in ICU. This is much higher than for all injuries where 2.4% of hospitalisations involve time in ICU (Table 8) (AIHW 2022). A higher percentage of alcohol-related injury hospitalisations in ICU may be due in part to the high proportion of intentional self-harm cases. Among all injuries, intentional self-harm has the second highest percentage (12%) of cases with time in ICU (AIHW 2022).

Continuous ventilator support

In 2019–20, 5.4% of alcohol-related injury hospitalisations included CVS. These figures are higher than for all injuries (1.4%) (Table 8). This could be attributed in part to the greater proportion of intentional self-harm cases among alcohol-related injury hospitalisations. Among all injuries, intentional self-harm has the second highest percentage (9.5%) of cases with time on CVS (AIHW 2022).

Table 8: Percentage of alcohol-related injury hospitalisations with time in intensive care or on continuous ventilator support, 2019–20

	Alcohol-related injuries	All injuries
Average length of stay (days)	3.0	4.5
Percentage (%) with time in ICU	6.9	2.4
Percentage (%) with time on CVS	5.4	1.4

Source: AIHW National Hospital Morbidity Database.

Urgency of admission

Nearly all (99%) of alcohol-related injury hospitalisations were emergency admissions. Emergency admissions are those where it is deemed that the patient requires admissions within 24 hours, as opposed to non-emergency admissions such as elective (planned) admissions and cases where the urgency category was not stated.

For more detailed data, see Data tables A28–35.

References

AIHW (2022) Injury in Australia, AIHW, Australian Government, accessed 18 July 2022.

Hospitalisations

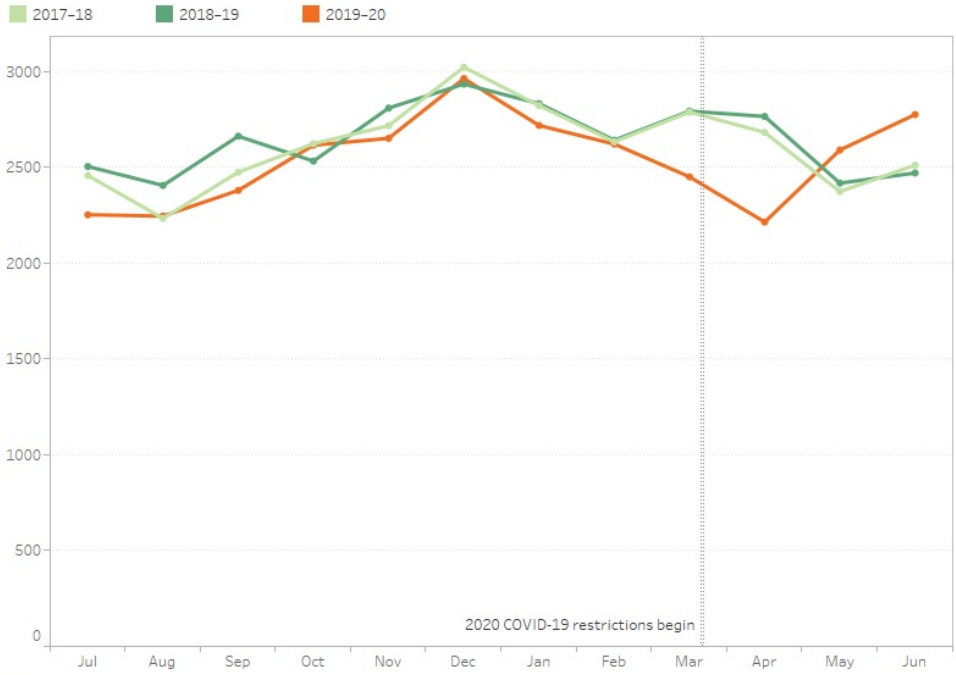
The second half of the 2019–20 reporting period coincided with the beginning of the COVID–19 pandemic in Australia. The social restrictions and behaviour changes associated with the COVID-19 pandemic impacted the number and type of alcohol-related injury hospitalisations. For example, in April 2020 in Victoria all types of emergency department presentations were 32% lower compared to the same month in 2019 (VISU 2020).

National data show that in April 2020 there were 20% fewer alcohol-related injury hospitalisations than the same month in the previous year. However, by May and June 2020, with the easing of COVID-19-related restrictions, hospital admissions for alcohol-related injury hospitalisations had rebounded, exceeding pre-pandemic levels for those months (Figure 11).

Figure 11 also shows that December is the month with the most hospitalisations, coinciding with the end-of-year holiday period.

Figure 11: Number of alcohol-related injury hospitalisations by month of admission, 2017–18 to 2019–20

Line graph showing that over 2019–20 the number of alcohol-related injury hospitalisations was comparable to previous years, however from March to April there is a marked decrease in hospitalisations coinciding with the COVID-19 pandemic.



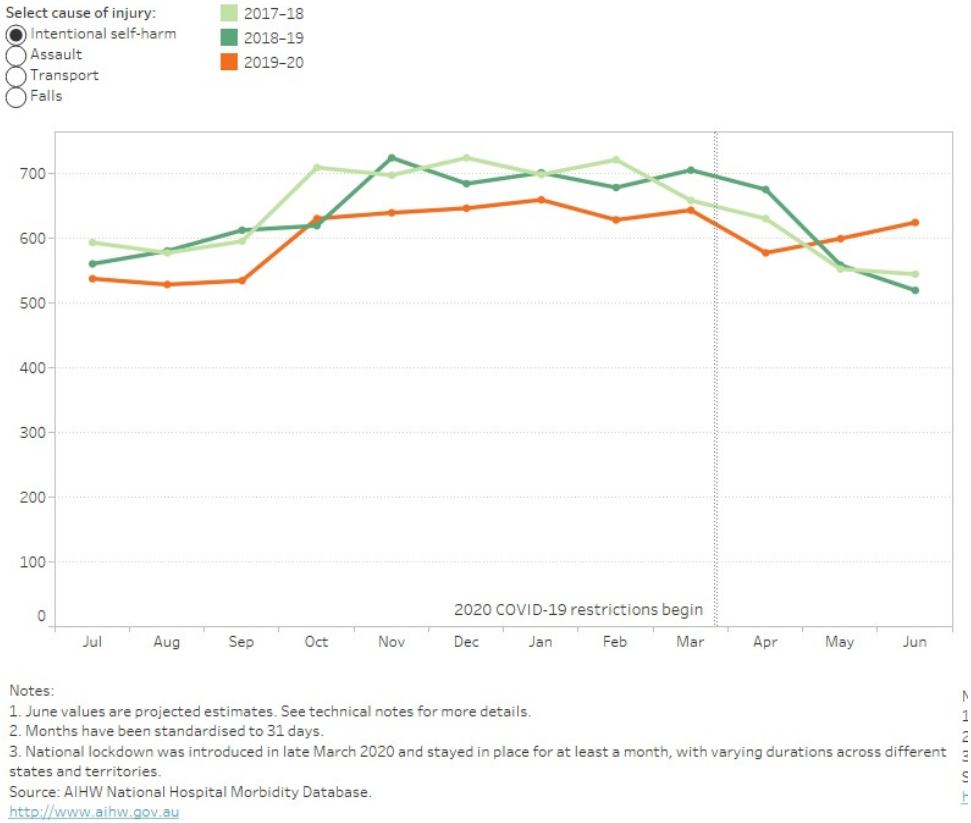
Notes:
1. June values are projected estimates. See technical notes for more details.
2. Months have been standardised to 31 days.
3. National lockdown was introduced in late March 2020 and stayed in place for at least a month, with varying durations across different states and territories.
Source: AIHW National Hospital Morbidity Database.
http://www.aihw.gov.au

There were differences in the cause of alcohol-related injury hospitalisations during this period compared to the same period in previous years (Figure 12). Compared to data from April 2018–19, alcohol-related hospitalisations in April 2019–20 for:

- assault injuries decreased by 30% (from 405 to 285)
- transport injuries decreased by 26% (230 to 170)
- fall injuries decreased by 21% (from 1,060 to 840)
- intentional self-harm injuries decreased by 15% (from 680 to 580).

Figure 12: Number of alcohol-related injury hospitalisations by cause and month of admission, 2017–18 to 2019–20

Line graph showing that all causes of alcohol-related injury hospitalisations observed a decrease in March to April in 2019–20 compared to previous years. Hospitalised alcohol-related assault injuries observed the largest reduction in hospitalisations in 2019–20 compared to other causes.



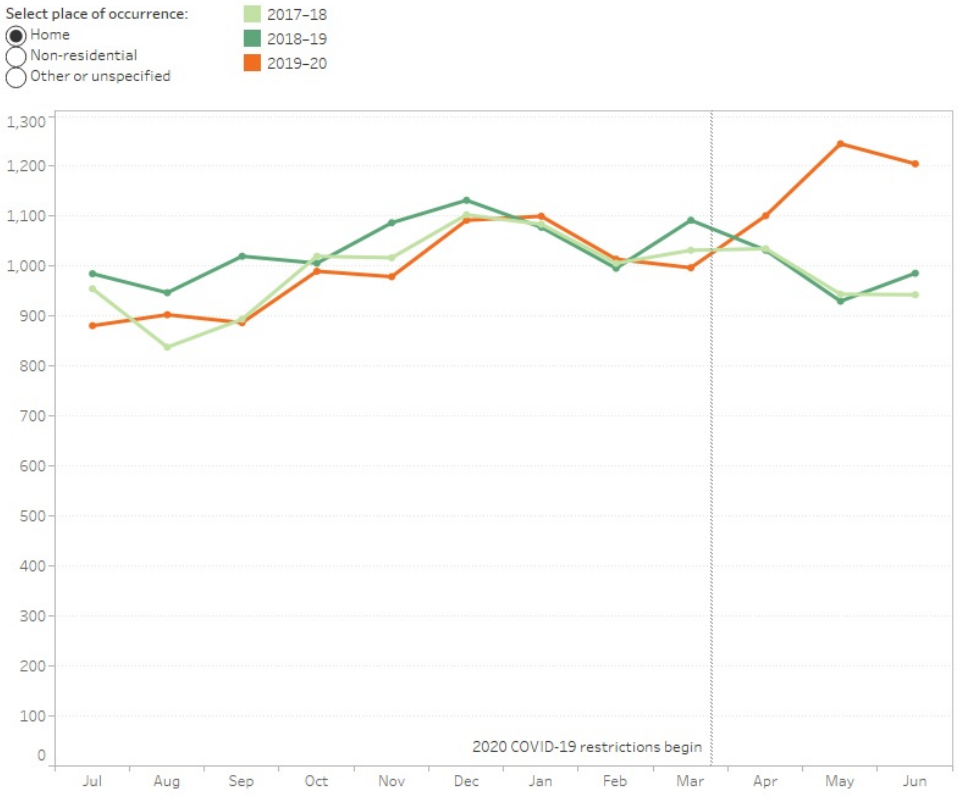
Notes:
1. June values are projected estimates. See technical notes for more details.
2. Months have been standardised to 31 days.
3. National lockdown was introduced in late March 2020 and stayed in place for at least a month, with varying durations across different states and territories.
Source: AIHW National Hospital Morbidity Database.
http://www.aihw.gov.au

There were notable differences in the data for where alcohol-related injury hospitalisations occurred during this time compared to the previous year (Figure 13). Compared to data from April 2018–19, hospitalisations for alcohol-related injuries:

- in non-residential settings (including health service facilities, industrial or construction areas, schools, sports or athletic areas, street or highways, and trade or service areas) decreased by 45% (from 506 to 275)
- at home increased by 6.7% (from 1,030 to 1,100).

Figure 13: Number of alcohol-related injury hospitalisations by place of occurrence and month of admission, 2017–18 to 2019–20

Line graph showing that non-residential areas observed a decrease in number of alcohol-related injury hospitalisations over March to April in 2019–20 compared to previous year. Hospitalisations for alcohol-related injuries that occurred in the home increased over March to April in 2019–20 compared to previous years.



[Hover for notes]

For more detailed data, see Data table A38.

References

VISU (Victorian Injury Surveillance Unit) (2020) *Injuries during the COVID-19 Pandemic Monthly Bulletin - Edition 2*, VISU, accessed 8 December 2021.

Hospitalisations

This section compares hospitalisations data over time and includes the first few months of the COVID-19 pandemic and the central Sydney liquor licencing restrictions that were in force from 2014 to 2021 (Donnelly and Poynton 2019). The effect of the COVID-19 pandemic on the data is considered in more detail in the COVID-19 section of this report.

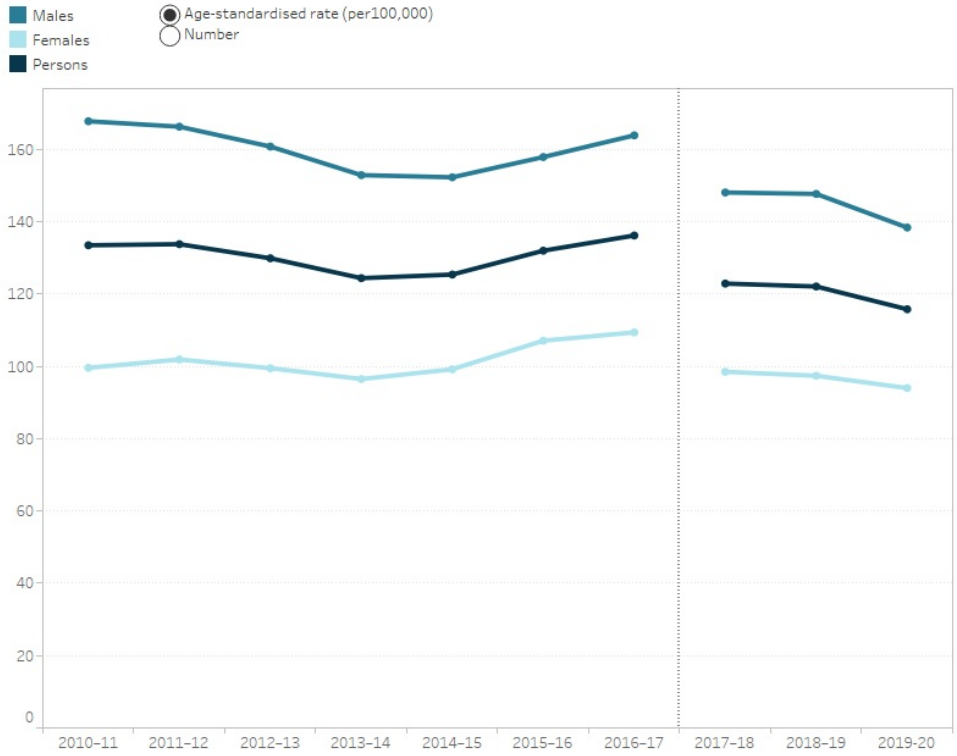
Hospitalisation data are divided into two distinct time periods: 2010–11 to 2016–17 and 2017–18 and 2019–20. Comparisons of hospitalisations data between these two time periods is not recommended due to a change in data collection methods between 2016–17 and 2017–18 (see Technical notes for more details). Comparisons presented here are for within each of the two time periods.

Figure 14 shows:

- a 5.2% decrease in the rate of alcohol-related injury hospitalisations in 2019–20 compared to the previous year (see COVID-19 section)
- a 6.3% and a 3.5% decrease in hospitalisations for males and females, respectively in 2019–20 compared to the previous year
- from 2010–11 to 2016–17, the average annual change in alcohol-related injury hospitalisations remained relatively stable with a 0.3% increase in the age standardised rate.

Figure 14: Age-standardised rate and number of alcohol-related injury hospitalisations, by sex, 2010–11 to 2019–20

Line graph showing that alcohol-related injury hospitalisations for both males and females fluctuated over the years but overall remained steady from 2010–11 to 2016–17 with 0.2% percentage increase in rate. From 2018–19 to 2019–20 the rate decreased by 5.2%.



Note: Break in series between 2016-17 and 2017-18. See technical notes for discussion.
Source: AIHW National Hospital Morbidity Database.
http://www.aihw.gov.au/

For more detailed data, see Data tables A39–41.

References

Donnelly N and Poynton S (2019) The effect of lockout and last drinks laws on non-domestic assaults in Sydney: An update to March 2019 (Bureau Brief No. 142), Sydney: NSW Bureau of Crime Statistics and Research.

Hospitalisations

Aboriginal and Torres Strait Islander people

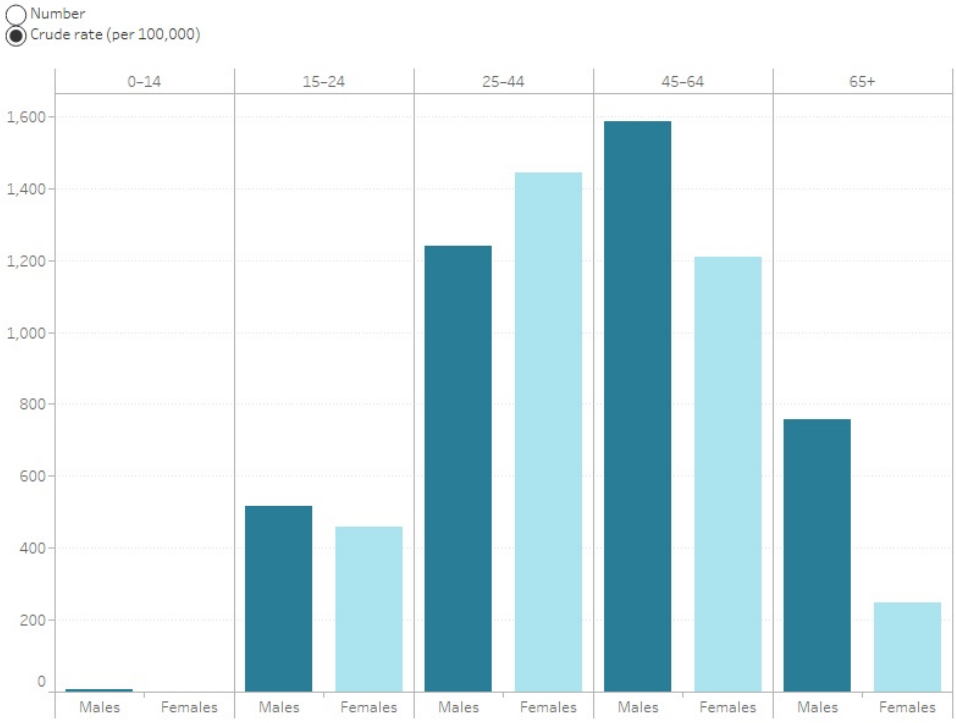
Nearly 6,000 hospitalisations due to alcohol-related injuries in 2019–20 were for Aboriginal and Torres Strait Islander people (Figure 15). There were slightly more hospitalisations for Aboriginal and Torres Strait Islander males than females (51% of were males; 49% were females) and the crude rate per 100,000 was higher for males (714) than females (689).

After adjusting for differences in age, males had an age-standardised rate of 932 cases per 100,000 population and females 837 cases.

The highest crude rate was for males aged 45–64 (1,585 cases per 100,000), followed by females aged 25–44 (1,444 per 100,000). The 25–44-year age group was the only one where the female rate was higher than the male rate (1,238 per 100,000) (Figure 15).

Figure 15: Number and rate of alcohol-related injury hospitalisations, Indigenous Australians, by age group and sex, 2019–20

Column chart showing that the number of hospitalisations for alcohol-related injuries among Indigenous males and females is highest in the 25–44 age group. The crude rate was highest for males aged 45–64 years old.

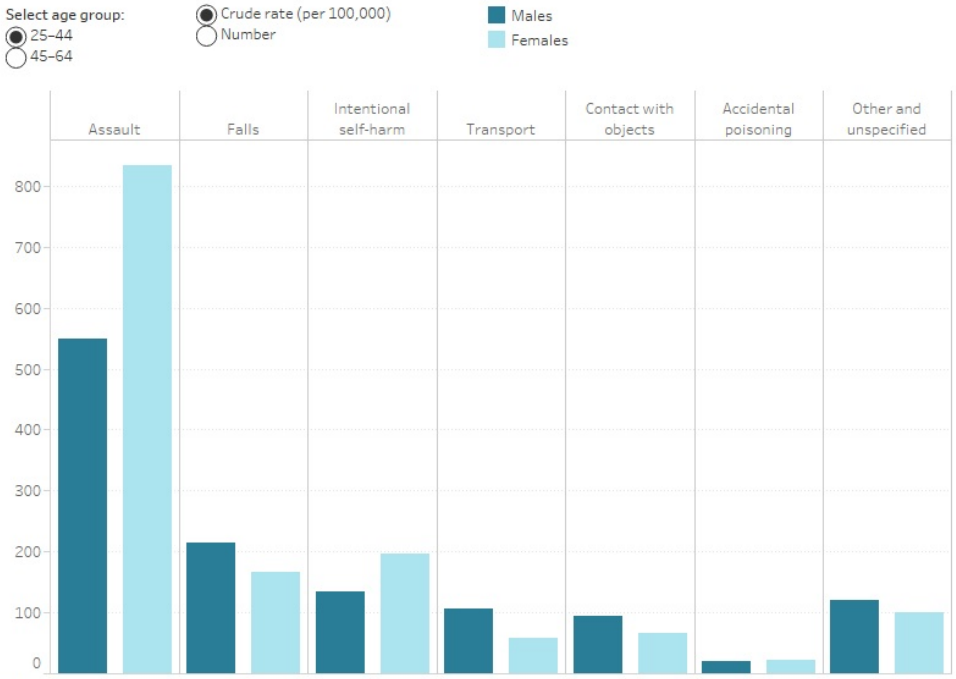


Notes:
1. Rates are crude per 100,000 population.
2. Records where Indigenous status is missing or not stated are excluded.
Source: AIHW National Hospital Morbidity Database.
http://www.aihw.gov.au

Examining the causes of injury for alcohol related hospitalisations for Indigenous Australians, shows that the assaults, falls, intentional self-harm and transport accidents are the leading causes (Figure 16).

Figure 16: Number and rate of alcohol-related injury hospitalisations, Indigenous Australians, by selected age groups, sex and cause, 2019–20

Column chart showing that the number of hospitalisations for alcohol-related injuries among Indigenous Australians is highest for both males and females for assault in the 15–44 year age group and falls in the 45 and over age group.



Notes:
1. Rates are crude per 100,000 population.
2. Records where Indigenous status is missing or not stated are excluded.
3. 'Other and unspecified' includes *Other unintentional causes, Drowning and submersion, Thermal causes, Choking and suffocation, Electricity and air pressure, Forces of nature, Undetermined intent, Contact with living things* and *Overexertion*.
Source: AIHW National Hospital Morbidity Database.
http://www.aihw.gov.au

For more detailed data, see Data tables A45–47.

Indigenous and non-Indigenous Australians

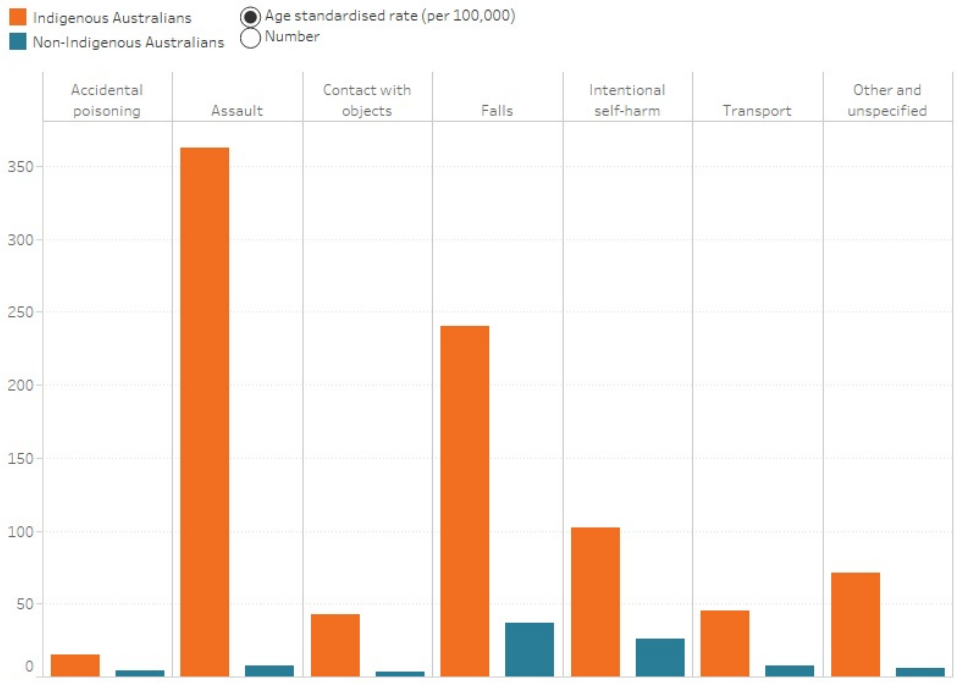
Indigenous Australians were hospitalised due to alcohol-related injuries at a higher rate (age-standardised 879 cases per 100,000) than non-Indigenous Australians (92 cases per 100,000). In 2019–20, the age standardised rates of Indigenous and non-Indigenous alcohol-related injury hospitalisations showed (Table 9):

- the rate for Indigenous Australians was 9.5 times that of non-Indigenous Australians
- for every hospitalisation for non-Indigenous females, there were 12 hospitalisations for Indigenous females
- for every hospitalisation for non-Indigenous males, there were 8.1 hospitalisations for Indigenous males.

Figure 17 shows that assault and falls were the main drivers of the higher rates among Indigenous Australians.

Figure 17: Number and rate of alcohol-related injury hospitalisations, by Indigenous status and cause of injury, 2019-20

Column chart showing Indigenous Australians had higher rates of alcohol-related injury than non-Indigenous Australians where assault followed by falls were the causes of injury with the largest difference between the groups.



Notes:
1. Rates are age standardised per 100,000 population.
2. Records where Indigenous status is missing or not stated are excluded.
3. 'Other and unspecified' includes *Other unintentional causes, Drowning and submersion, Thermal causes, Choking and suffocation, Electricity and air pressure, Forces of nature, Undetermined intent, Contact with living things* and *Overexertion*.

Source: AIHW National Hospital Morbidity Database.
http://www.aihw.gov.au

Table 9: Number and rate of alcohol-related injury hospitalisations, by Indigenous status, 2019–20

	Indigenous Australians	Non-Indigenous Australians
Number	5,990	23,641
Crude rates	702	96
Age-standardised rates	879	92

Source: AIHW National Hospital Morbidity Database.

The ratio of rates comparing Indigenous Australians with non-Indigenous Australians is much higher for alcohol-related hospitalisations (9.5 per 100,000) than for all injury hospitalisations (including those not related to alcohol) (2.1 per 100,000) (Table 10) (AIHW 2022).

Table 10: Age-standardised rate of all injury hospitalisations and alcohol-related injury hospitalisations, by Indigenous status, 2019–20

	Indigenous Australians	Non-Indigenous Australians	Rate ratio
Alcohol-related hospitalised injuries	879	92	9.5
All hospitalised injuries	3,925	1,878	2.1

Notes:

1. This is the age-standardised rate per 100,000 people in the estimated resident population of Australia, by Indigenous status.
2. Rate ratio is the age-standardised rate for Indigenous Australians divided by the age-standardised rate for non-Indigenous Australians.

Source: AIHW National Hospital Morbidity Database.

For more detailed data, see Data tables A48–50.

Remoteness

The remoteness area with the highest rate of alcohol-related injury hospitalisations was *Very remote* areas, with 976 cases per 100,000 population (Figure 18). This is over 8 times the national rate and almost 11 times the rate for *Major cities*. Among 25–44 year olds, the rate in *Very remote* areas is 17 times that in *Major cities*, with the female rate 28 times that of the male rate.

Among those aged 15 and over, males had higher hospitalisation rates across all age groups and remoteness categories, except for:

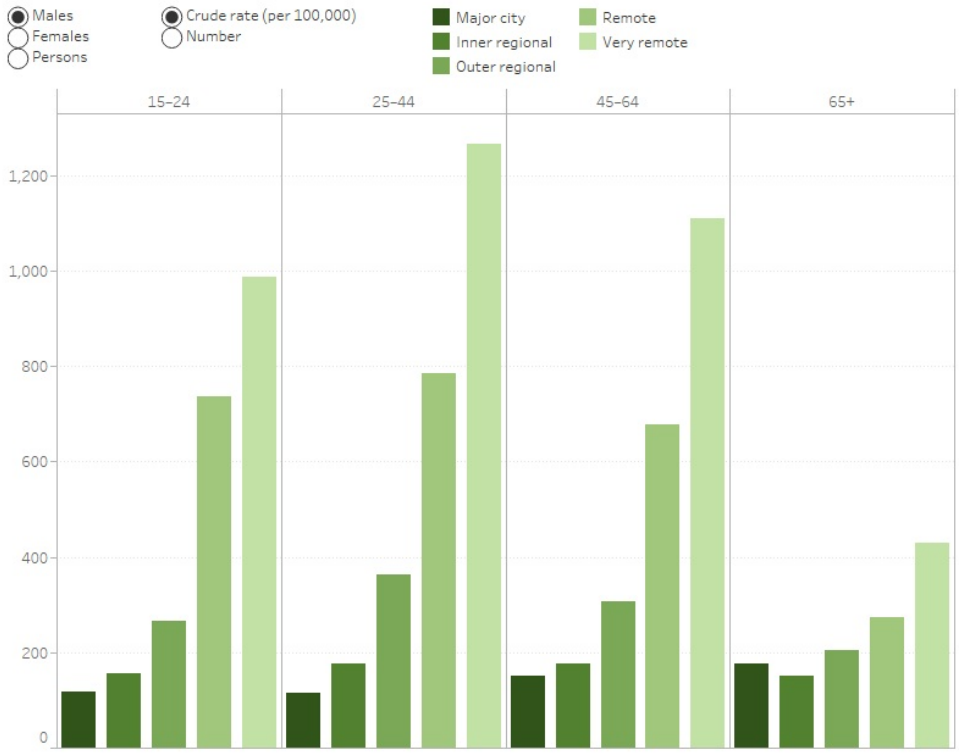
- females aged 25–44 in *Remote* areas, whose rate was 1.2 times that of males
- females aged 25–44 in *Very remote* areas whose rate was 1.7 times that of their male counterparts
- females aged 45–64 in *Very remote* areas, whose rate was 1.4 times that of their male counterparts.

There were 1,331 women in these three categories. Of those, 93% (1,242) were Indigenous and the rates reflect the high rates of assault of Indigenous women in these age groups (see Indigenous Australians section).

Males aged 65 and over living in very remote areas had rates more than 4 times that of their female counterparts.

Figure 18: Number and crude rate of alcohol-related injury hospitalisations, by remoteness area, age group and sex, 15 years and over, 2019–20

Bar chart showing crude rates of alcohol-related injury hospitalisations are highest in remote and very remote areas for both males and females. The highest rate was in females aged 25–44 in very remote areas.



Note: Rates are crude per 100,000 population.
Source: AIHW National Hospital Morbidity Database.
http://www.aihw.gov.au

For more detailed data, see Data tables A51–53.

Socioeconomic position of usual area of residence

The highest number and rates of hospitalisations were observed in areas with the lowest socioeconomic position. For both males and females, those in the lowest socioeconomic position were 2.1 times as likely to be hospitalised for an alcohol-related injury as those in the highest socioeconomic group.

Males aged 45–64 in the lowest socioeconomic areas had the highest rates of alcohol-related injury hospitalisations (279 cases per 100,000). Females had lower rates across most socioeconomic positions and age groups.

For more detailed data, see Data tables A54–56.

References

AIHW (2022) Injury in Australia, AIHW, Australian Government, accessed 18 July 2022.

Deaths

For urgent crisis help **call Lifeline** on 13 11 14

If at any point you feel worried about harming yourself while viewing the information on this website – or if you think someone else may be in danger – please stop reading and seek help.
Deaths data in this report are from two sources: the National Mortality Database (NMD) and the National Coronial Information System (NCIS). Box 10 outlines how each source has been used to present deaths data.

Box 10: Deaths data sources

AIHW National Mortality Database

The AIHW National Mortality Database (NMD) contains information on deaths notified to the registrars of births, deaths and marriages. It includes information on the age, sex, cause of death, Indigenous status and remoteness.

National Coronial Information System data

The National Coronial Information System (NCIS) includes all deaths that are referred to the coroner for investigation. NCIS data is a product of the coronial investigation and includes information such as location of incident, and contribution of alcohol and other drugs that are not included in the NMD. Because of the time it takes for coronial investigations, NCIS data are not available via the data report service as quickly as NMD data. At the time of writing, NCIS data via the data report service were only available for the first half of the reporting period (1 July 2019 to 31 December 2019). Most, but not all injury cases are referred to the coroner. This means there may be some deaths where alcohol was involved but no coronial investigation took place. Only cases where the coronial investigation process was complete were included – ongoing or open cases were not included. For these reasons, the number of deaths reported from the NMD and NCIS differs and it is not appropriate to double the NCIS figure to arrive at an annual estimate.

Deaths

Sex and age

In 2019–20 there were almost 1,950 alcohol-related injury deaths recorded in the AIHW National Mortality Database, 80% of which were for males, with males having an age-standardised rate 3.6 times that of females (15.2 and 4.2 per 100,000, respectively) (Table 11). While this is similar to the pattern for all injuries, where 62% of deaths were for males, the pattern is much more pronounced for alcohol-related injuries.

Table 11: Number and rate of alcohol-related injury deaths, by sex, 2019–20

	Males	Females	Persons
Number of deaths	1,516	430	1,946
Crude rate (per 100,000 population)	12.1	3.4	7.7
Age standardised rate (per 100,000 population)	15.2	4.2	9.7

Source: AIHW National Mortality Database.

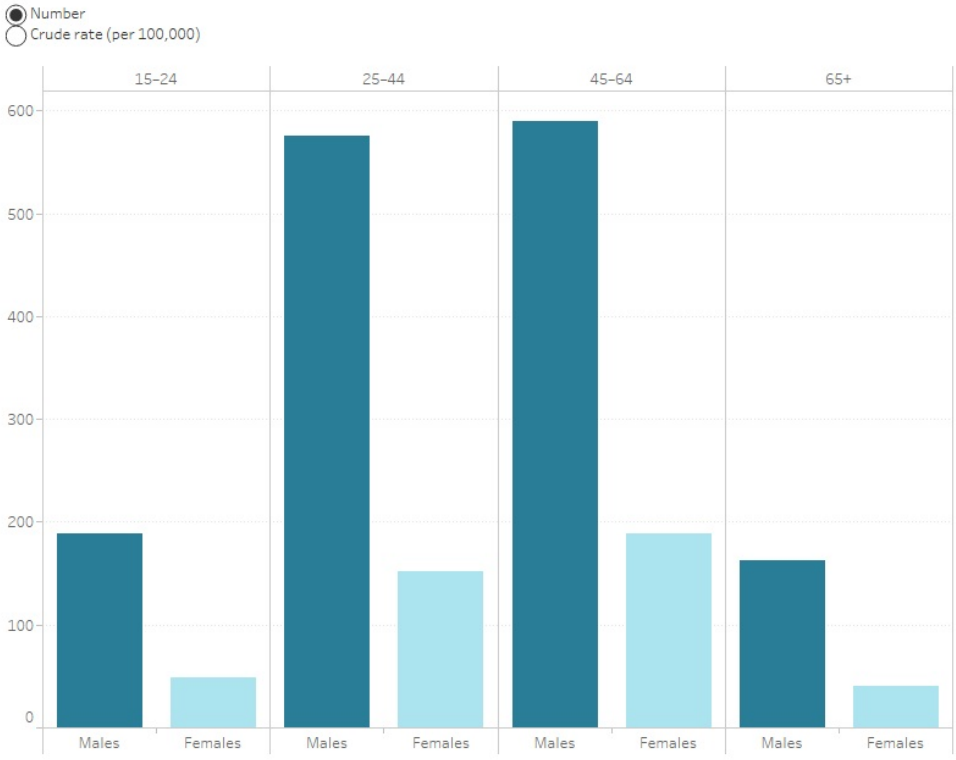
In 2019–20, among those who died due to alcohol-related injuries (Figure 19):

- 77% of deaths occurred among those aged 25–64 years of age
- males aged 45–64 had the highest number and rate of deaths (590 deaths and 19.5 per 100,000).

There was one alcohol-related injury death among the 0–14 year age group (not shown in Figure 19).

Figure 19: Alcohol-related injury deaths, by age group and sex, 2019-20

A bar chart showing that males have higher numbers and rates of alcohol-related injury deaths than females. The highest number and rate for males and females occurs in those aged 25–64 years.



For more detailed data, see Data tables B1–3.

What were the most common causes of alcohol-related injury deaths?

The top three cause groups for alcohol-related injury deaths were suicide (47%), accidental poisoning (26%) and transport (11%) (Figure 20).

For all causes of alcohol-related injury deaths, males had higher rates than females. In 2019–20 (Figure 20):

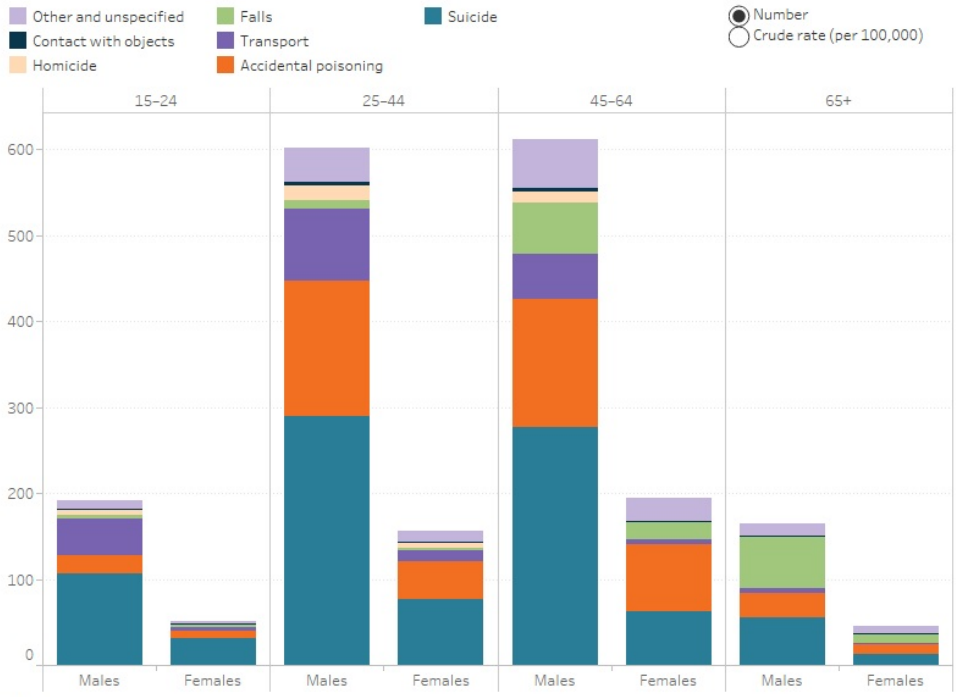
- for suicide, males were 4.1 times as likely to die as females (7.3 per 100,000 compared to 1.8 per 100,000, respectively). This is different to the male-female pattern for alcohol-related hospitalisations, where the female rate is higher than the male rate. This may be due, at least in part, to the use of more lethal and accessible intentional self-harm mechanisms by males, such as hanging.
- for transport injuries, males were 7.5 times as likely to die as females (1.5 per 100,000 compared to 0.2 per 100,000, respectively).

In 2019–20, the most common method of:

- suicide was hanging, strangulation and suffocation (603 deaths or 66% of suicide deaths, 2.4 per 100,000)
- accidental poisoning was alcohol (266 or 53% of accidental poisoning deaths, 1.0 per 100,000).

Figure 20: Number and rate of alcohol-related injury deaths by cause, sex and age group, 2019-20

Stacked column graph showing the top causes of alcohol-related injury deaths were suicide and accidental poisoning for those aged 15–44. For males aged 65 and over, falls was the leading cause of alcohol-related injury death.



Notes:
1. Rates are crude per 100,000 population.
2. 'Other and unspecified' includes *Other unintentional causes, Drowning and submersion, Thermal causes, Choking and suffocation, Electricity and air pressure, Forces of nature, Contact with living things, Undetermined intent* and *Overexertion*.
Source: AIHW National Hospital Mortality Database.
http://www.aihw.gov.au

For more detailed data, see Data tables B4–12.

How have alcohol-related injury deaths changed over time?

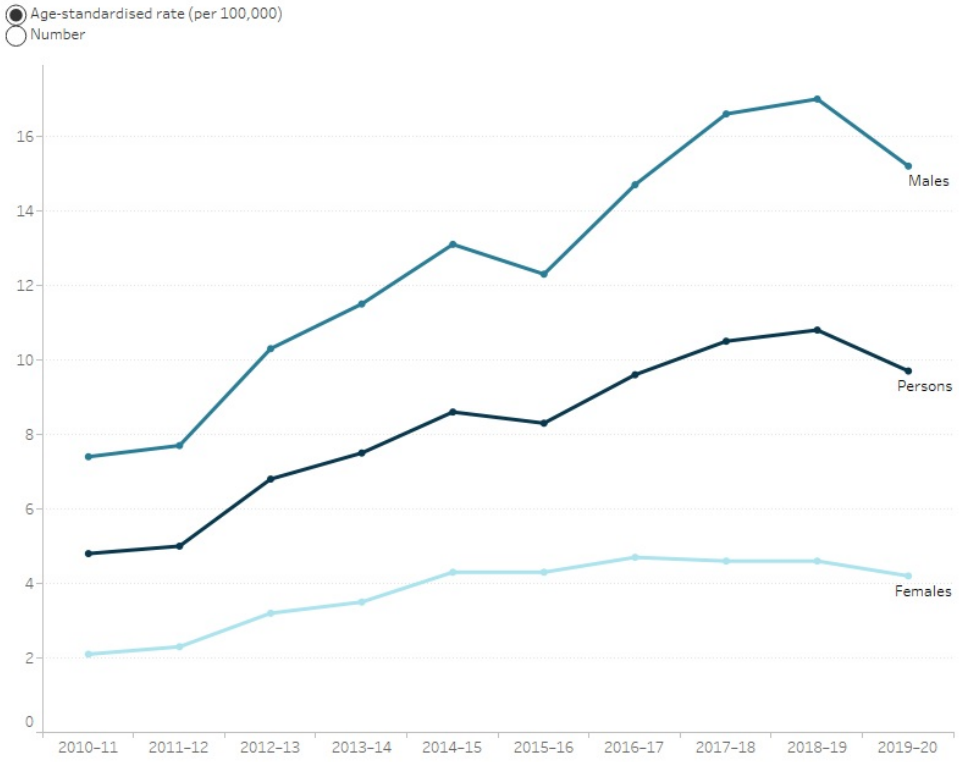
This section compares deaths data over time and includes the first few months of the COVID-19 pandemic and the central Sydney liquor licencing restrictions that were in force from 2014 to 2021 (Donnelly and Poynton 2019). The effects of the COVID-19 pandemic have been considered in more detail in the COVID-19 section of this report.

Figure 21 shows alcohol-related injury deaths:

- increased on average 8.2% per year from 2010–11 to 2019–20
- decreased by 10.2% in 2019–20 compared to the previous year.

Figure 21: Numbers and rate of alcohol-related injury deaths, by sex, 2010-11 to 2019-20

A line graph showing that for both males and females there has been a steady increase in alcohol-related injury deaths – an average of 8.2% per year from 2010–11 to 2019–20 however, from 2018–19 to 2019–20 the rate decreased by 10.2%.



For more detailed data, see Data tables B13–16.

Indigenous Australians

There were 166 alcohol-related injury deaths among Indigenous persons in 2019–20 in the 5 states and territories for which data are available (New South Wales, Queensland, Western Australia, South Australia and the Northern Territory). Indigenous males were 2.6 times as likely to die from an alcohol-related injury as Indigenous females, using age-standardised rates.

The highest number and rate was among Indigenous males aged 25–44 with 58 deaths (61 per 100,000).

Table 12: Number and rate of alcohol-related injury deaths, Indigenous Australians by sex, NSW, Qld, WA, SA and NT, 2019–20

	Males	Females	Persons
Number of deaths	120	46	166
Crude rate (per 100,000 population)	32	12	22
Age standardised rate (per 100,000 population)	46	18	32

Note: Deaths data only includes data for New South Wales, Queensland, Western Australia, South Australia, and the Northern Territory.

Source: AIHW National Mortality Database.

For more detailed data, see Data tables B17–19.

Remoteness

The rate of alcohol-related injury deaths was higher in more remote areas; this is similar to the pattern for all injury deaths. People living in *Very remote* areas had the highest age-standardised rate (33 per 100,000) and were 4.1 times as likely to die from an alcohol-related injury death as those in *Major cities*, who had the lowest rate (7.9 per 100,000) (Table 13).

Table 13: Age-standardised rates of alcohol-related injury deaths by remoteness, 2019–20

	Number	Crude rate (per 100,000)	Age-standardised rate (per 100,000)
Major cities	1,161	6.3	7.9
Inner regional	403	9.0	11.9
Outer regional	261	12.7	17.1
Remote	40	13.8	19.1

Very remote	51	25.6		32.6

Source: AIHW National Mortality Database.

For more detailed data, see Data tables B20–22.

References

Donnelly N and Poynton S (2019) The effect of lockout and last drinks laws on non-domestic assaults in Sydney: An update to March 2019 (Bureau Brief No. 142), Sydney: NSW Bureau of Crime Statistics and Research.

Deaths

There were 740 deaths recorded in the NCIS for the second half of 2019 (from 1 July to 31 December 2019). These were deaths where the coronial case was complete and was not ongoing or open.

Most deaths occur in the home

The most common location of injury incidents that resulted in a coronial death investigation was a *Home or dwelling* (485 cases; 66%), followed by *Transport areas* (16%, 121 cases) such as roads. This is a similar pattern to the alcohol-related hospitalisations data.

Contribution of alcohol to death

Of the 740 cases, alcohol was the primary contributor for 304 (41%) deaths. That is, the deaths were primarily caused by poisoning from a pharmaceutical substance(s), among which alcohol was identified. In the other 436 (59%) cases, alcohol was a secondary contributor to the death, with another cause of death as the primary cause.

Among the 436 cases where alcohol was a secondary contributor, the leading primary causes were *asphyxiation (hanging)* (168 cases, 39%), *vehicle incident* (102 cases, 23%) and *fall-related* (52 cases, 12%).

Role of drugs

For 231 cases (31%), alcohol was the sole drug that contributed to the death. For the other 509 cases (69%) there were other drugs that contributed to death as well as alcohol.

Among the 509 cases where multiple drugs contributed to the death, there were 1,231 instances of drug classes detected – an average of 2.4 drugs per death. *Sedatives and hypnotics* (263 cases, 21%) followed by *analgesics* (253 cases, 21%) and *antidepressants and antipsychotics* (230 cases, 19%) were the leading drug classes identified.

The drug group categories used in the NHMD (used for hospitalisations data) and the NCIS are different. Even so, both show that depressants (including sedatives and hypnotics), analgesics (both non-opioid and non-opioid) and antidepressants are the most common types of other drugs involved in alcohol-related hospitalisations and deaths.

For more detailed data, see Data tables C1–6.

Technical notes

Data

Notes

Acknowledgements

Injury in Australia was prepared by staff in the Injuries and System Surveillance Unit at the AIHW.

The project was funded by the Australian Government Department of Health.

Thanks to the Victorian Department of Justice and Community Safety for providing deaths data from the NCIS database.

Related material

Related topics

- Alcohol