Australian Institute of Health and Welfare (AIHW) National Suicide and Self-harm Monitoring System data release

Released by AIHW on Thursday, 28 September 2023

- Australian Youth Self-Harm Atlas
- Annual update to intentional self-harm hospitalisations for 2021-22
- Updates to ambulance attendances for suicidal and self-harm behaviours

Australian Youth Self-Harm Atlas

The Australian Youth Self-Harm Atlas Study investigated self-harm, suicidal thoughts and behaviours, as well as risk and protective factors, among young people aged 12-17 years in regions throughout Australia. This study was conducted by the Queensland Institute of Medical Research (QIMR) Berghofer, in partnership with leading lived experience organisation, Roses in the Ocean. Aspects of the quantitative findings of the study have now been incorporated into the National Suicide and Self-harm Monitoring System with this update.

The study combined data from the nationally representative Young Minds Matter (YMM) survey, 2016 Census and 2019 Australian Bureau of Statistics Estimated Resident Population data. Information about self-harm, suicidal thoughts and behaviours and related risk and protective factors from the YMM survey were used to generate estimates for young people in local areas throughout Australia based on socio-demographic characteristics.

More detail on the generation of these estimates is available here. Importantly, the estimates are generated from modelling and may be different to the number of actual cases of youth self-harm and suicidal thoughts and behaviours in communities.

The National Suicide and Self-harm Monitoring System presents the following self-harm, suicidal thoughts and behaviours, and related risk and protective factor outcomes from the Australian Youth Self-Harm Atlas study for a 12-month period (2019):

- **Self-harm (regardless of intent):** self-injurious behaviour irrespective of intent or motivation, including behaviours with either suicidal or non-suicidal intent, or where intent is ambiguous. This is inclusive of non-suicidal self-harm and suicide attempt behaviour.
- **Non-suicidal self-harm:** self-injurious behaviour for which there is evidence that the person did not intend to kill themselves.
- **Suicidal ideation/plans:** thoughts of engaging in or planning suicide-related behaviour; without engaging in suicidal behaviour.
- **Suicide attempt:** non-fatal, self-directed, potentially self-injurious behaviours with an intent to die.
- **Suicidality:** suicidal thoughts or behaviours, including thoughts, plans and attempts.

These outcomes are presented in interactive maps of Primary Health Network, Statistical Area 3 (SA3) and Statistical Area 4 (SA4) areas.

Presenting local level data is useful to target and tailor support and interventions to individual communities. However, it is important to use caution when reporting about suicide and self-harm statistics in a local community so as not to add to distress or stigma. When reporting on trends in a local community, include the strengths and needs of those communities, and seek input from the local suicide prevention sector.

There is large variation across Australia for each of the above suicidal and self-harm related outcomes for young people. Areas in the Northern Territory had the highest prevalence of self-harm (regardless of intent).

There is a possible trend towards increasing prevalence of suicidal thoughts, behaviours and self-harm outcomes with increasing remoteness. However, estimates were unable to be generated for some more remote areas due to limited data from the YMM survey. The relationship between suicidal thoughts and behaviours, self-harm prevalence and remoteness were not able to be fully assessed.

Risk and protective factors

A second set of maps present the association between the prevalence of self-harm (regardless of intent) with the prevalence of the following risk and protective factors for SA3 areas*:

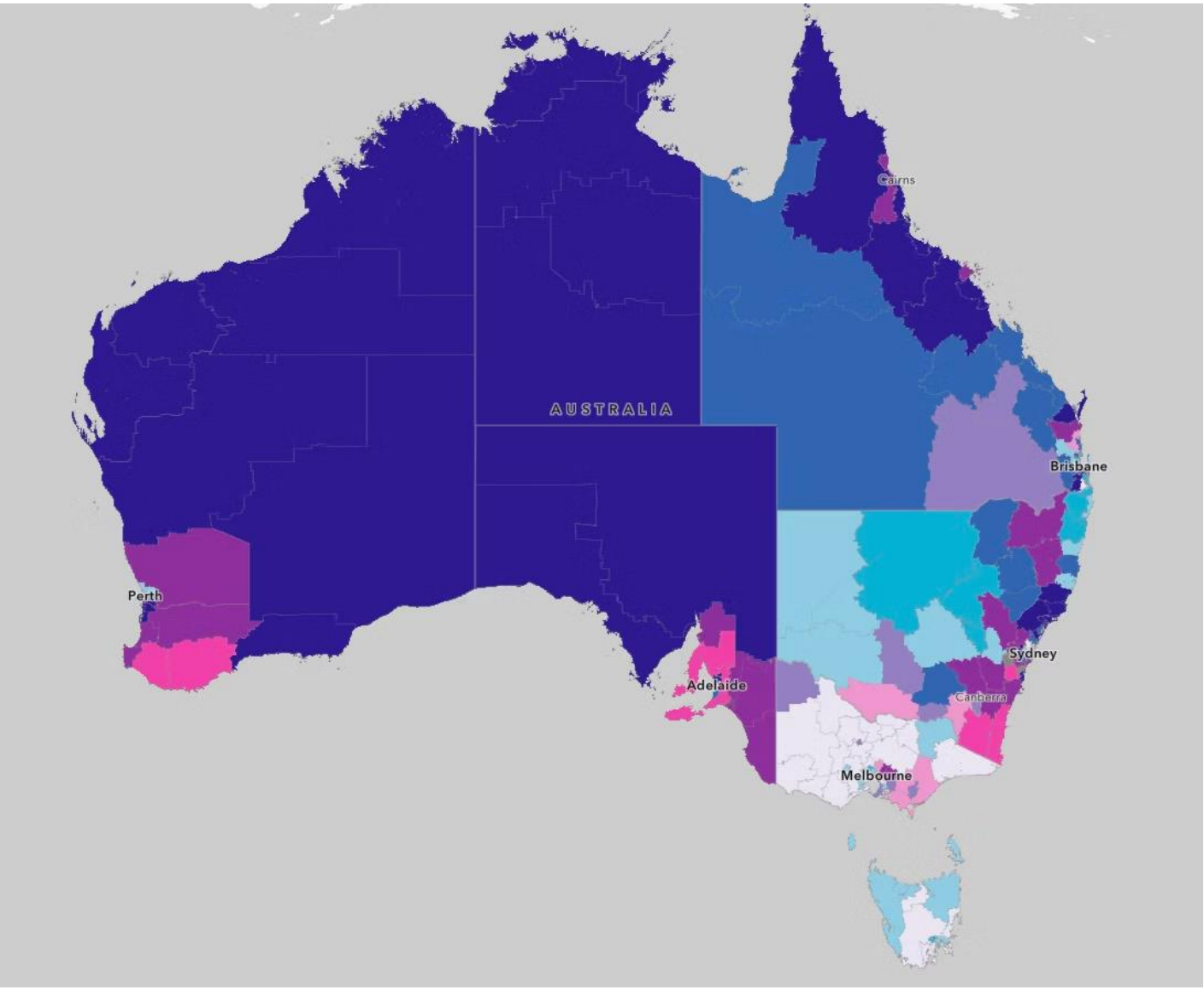
- **Major depression and anxiety disorders among 12–17-year-olds:** Young people, aged 12-17 years, who experience anxiety or depression over a 12-month period.
- **Socio-economic status:** The socio-economic characteristics of areas are categorised using the Index of Relative Socio-economic Advantage and Disadvantage (IRSAD). Higher IRSAD scores indicate relatively low financial disadvantage and high financial advantage.
- **Percentage of 12-17-year-olds that are male:** The proportion of 12-17-year-olds that are male.

The maps show that there is geographic variation between youth self-harm prevalence and the prevalence of these risk or protective factors across Australia. For example, areas could have:

- Both high prevalence of youth self-harm and high prevalence of particular risk or protective factors
- High prevalence of youth self-harm but low prevalence of particular risk or protective factors
- Low prevalence of youth self-harm but high prevalence of particular risk or protective factors
- Both low prevalence of self-harm and particular risk or protective factors.

These are shown in different colours on the maps. Note that a co-occurrence of youth self-harm and risk or protective factors does not imply the risk or protective factor may be causing self-harm.

**The prevalence of risk and protective factors for SA4 and PHN areas can be downloaded in Excel spreadsheet format.*



Map taken from
https://maps.arcgis.aihw.gov.au/portal/apps/experiencebuilder/experience/?id=5ca94102e4054451aa247e3125f96ccd&page=Associations-with-Risk-and-Protective-Factors

Key findings:

Major depression and anxiety disorders

- Particularly across remote areas of Western Australia, Northern Territory, South Australia and Far North Queensland, higher youth self-harm prevalence was associated with higher prevalence of major depression and anxiety disorders among people aged 12-17 years.

- Predominantly in Victoria and Tasmania, there are outer regional and remote areas where lower self-harm prevalence is associated with lower depression and anxiety prevalence.

Socio-economic Advantage and Disadvantage

- Broadly, lower socio-economic advantage was associated with higher youth self-harm prevalence.
- However, mostly (but not exclusively) within major capital cities, there were areas in which higher socio-economic advantage was associated with higher youth self-harm.
- There are other areas, predominantly across western, central and far north-eastern New South Wales, western Victoria, and Tasmania, where lower socio-economic advantage was associated with lower youth self-harm.

Males aged 12-17 years

- Most areas in which youth self-harm prevalence is lower and the proportion of 12-17-year-olds that are male is higher are concentrated across Tasmania, Victoria and New South Wales.

There are also areas, largely across remote Western Australia, South Australia, Far North Queensland, and close to the east coast, where higher youth self-harm is associated with lower proportion of males aged 12-17 years.

View the Australian Youth Self-Harm Atlas

Intentional self-harm hospitalisations

Intentional self-harm data are sourced from the National Hospital Morbidity Database (NHMD), which provides information on patients admitted to hospital after self-harm with or without the intention of dying. Self-harm and suicide can be considered distinct and separate acts although some people who self-harm are at an increased risk of suicide.1 Therefore, monitoring intentional self-harm is key to suicide prevention.

Updated data now available for 2021-22, with updates to the Intentional self-harm hospitalisations data by states and territories, age groups, Aboriginal and Torres Strait Islander people and geography pages of the National Suicide and Self-Harm Monitoring System. Key statistics and trends are described below.

National, state, gender and age groups

- There were almost 26,900 hospitalisations for intentional self-harm in Australia in 2021–22 (105 hospitalisations per 100,000 population).
- The highest rate of hospitalisation for intentional self-harm was reported in the Northern Territory (238 hospitalisations per 100,000), which is more than double the national rate.
- The majority of hospitalisations were for females (67% or over 18,000 hospitalisations) which has been a consistent finding since 2008-09.
- The rate of intentional self-harm hospitalisations was higher for females (139 per 100,000 population) than males (69 per 100,000 population).

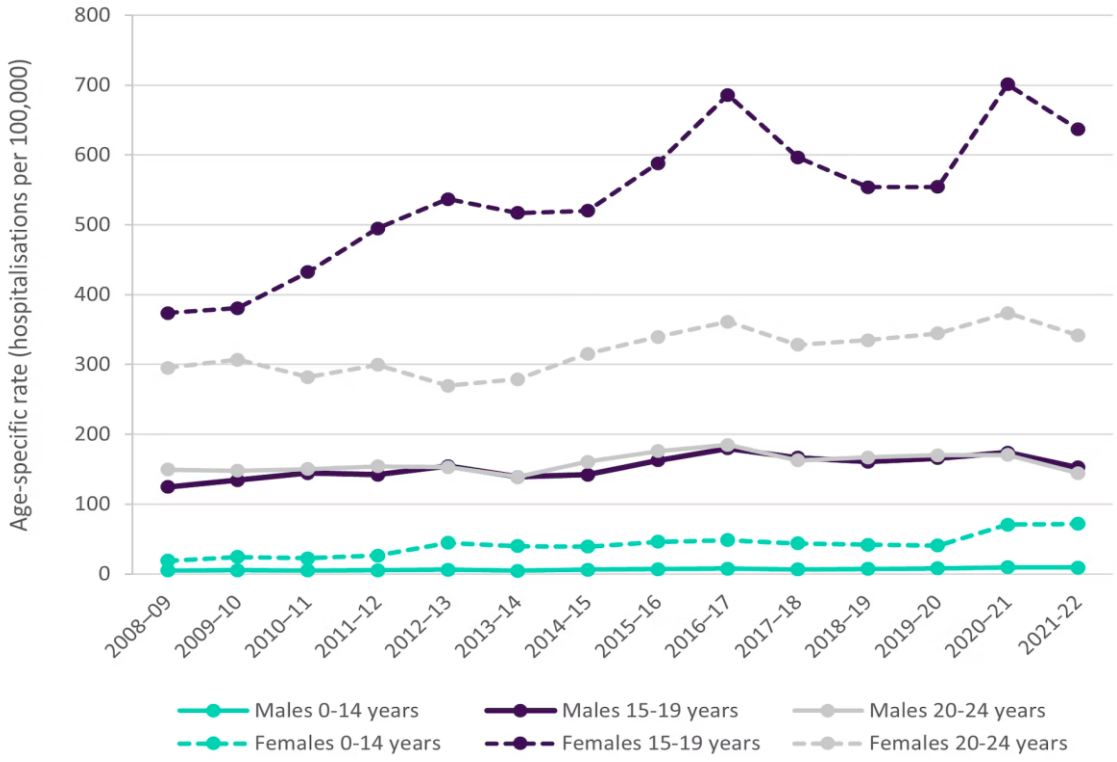
- Young people continue to have the highest age-specific rates of self-harm hospitalisations, with young females aged 15-19 years and 20-24 years having the highest rates overall:
- The rate for females aged 15-19 years was 637 per 100,000, and 342 per 100,000 for females aged 20-24 years.
- Males aged 15-19 years and 20-24 years had the highest age-specific rates of all male age groups. However, the rate for males aged 15-19 years (153 per 100,000) was less than a quarter than for females of the same age group, and the rate for males 20-24 years (144 per 100,000) less than half that for females in the same age group.

View the updated self-harm hospitalisations data

Young people

- The age-specific hospitalisation rates for young people under 25 years are shown on the graph below.
- The rate for females aged 0–14 years increased from 41 hospitalisations per 100,000 population in 2019–20 to 72 per 100,000 in 2021–22 (76% increase).
- During 2008-09 to 2021-22, there was an overall increase in the hospitalisation rates for intentional self-harm for both males and females aged 15–19 years (see graph below). For males, the rate increased from 124 hospitalisations per 100,000 in 2008-09 to 374 per 100,000 in 2021-22 (22.6% increase). For females, the rate increased from 152 per 100,000 in 2008-09 to 637 per 100,000 in 2021-22 (70.5% increase).

View the updated self-harm hospitalisation data for young people



Aboriginal and Torres Strait Islander peoples

- In 2021–22, the rate of intentional self-harm hospitalisations for Aboriginal and Torres Strait Islander people (326 hospitalisations per 100,000 population) was over three times that of non-Indigenous Australians (96 per 100,000 population).
    - The highest rate of intentional self-harm hospitalisations for Aboriginal and Torres Strait Islander people was in the 15-19-years age group (710 hospitalisations per 100,000 population), almost double that of non-Indigenous Australians (366 hospitalisations per 100,000 population)
    - The rates were highest among Aboriginal and Torres Strait Islander females aged 15-19 years (1,127 hospitalisations per 100,000 population) and 20-24 years (756 hospitalisations per 100,000).

View the updated self-harm hospitalisations data for Aboriginal and Torres Strait Islander people

Remoteness areas

- While the majority (two-thirds) of self-harm hospitalisations were residents of Major Cities, the rate of hospitalisations tends to increase with increasing level of remoteness.
    - Residents of Very Remote areas recorded a rate of 193 hospitalisations per 100,000, nearly twice that of residents of Major Cities (97 hospitalisations per 100,000).
    - Between 2012-13 and 2021-22 overall rates increased in Very Remote areas by 12.2% (from 172 to 193 hospitalisations per 100,000 population) and Remote areas by 9.6% (from 146 to 160 per 100,000 population)
    - Between 2012-13 and 2021-22 overall rates fell in Inner Regional areas by 17.6% (from 125 to 103 per 100,000), and Major Cities by 12.6% (from 111 to 97 per 100,000).
    - The highest increase in rates occurred in young people aged 15-18 years in Outer Regional, Remote and Very remote areas.

View the updated self-harm hospitalisations data by remoteness areas

Socioeconomic areas

- From 2012–13 to 2021–22 the highest proportion of intentional self-harm hospitalisations was for people living in the lowest socioeconomic (most disadvantaged) areas. This proportion has remained relatively stable over the period, averaging around 23%.
- In 2021-22, the rate for hospitalisations for intentional self-harm in the most disadvantaged areas (122 per 100,000) was 1.5 times the rate for the least disadvantaged areas (82 per 100,000 population.

View the updated self-harm hospitalisations data by socioeconomic areas

Ambulance attendances for suicidal and self-harm behaviours

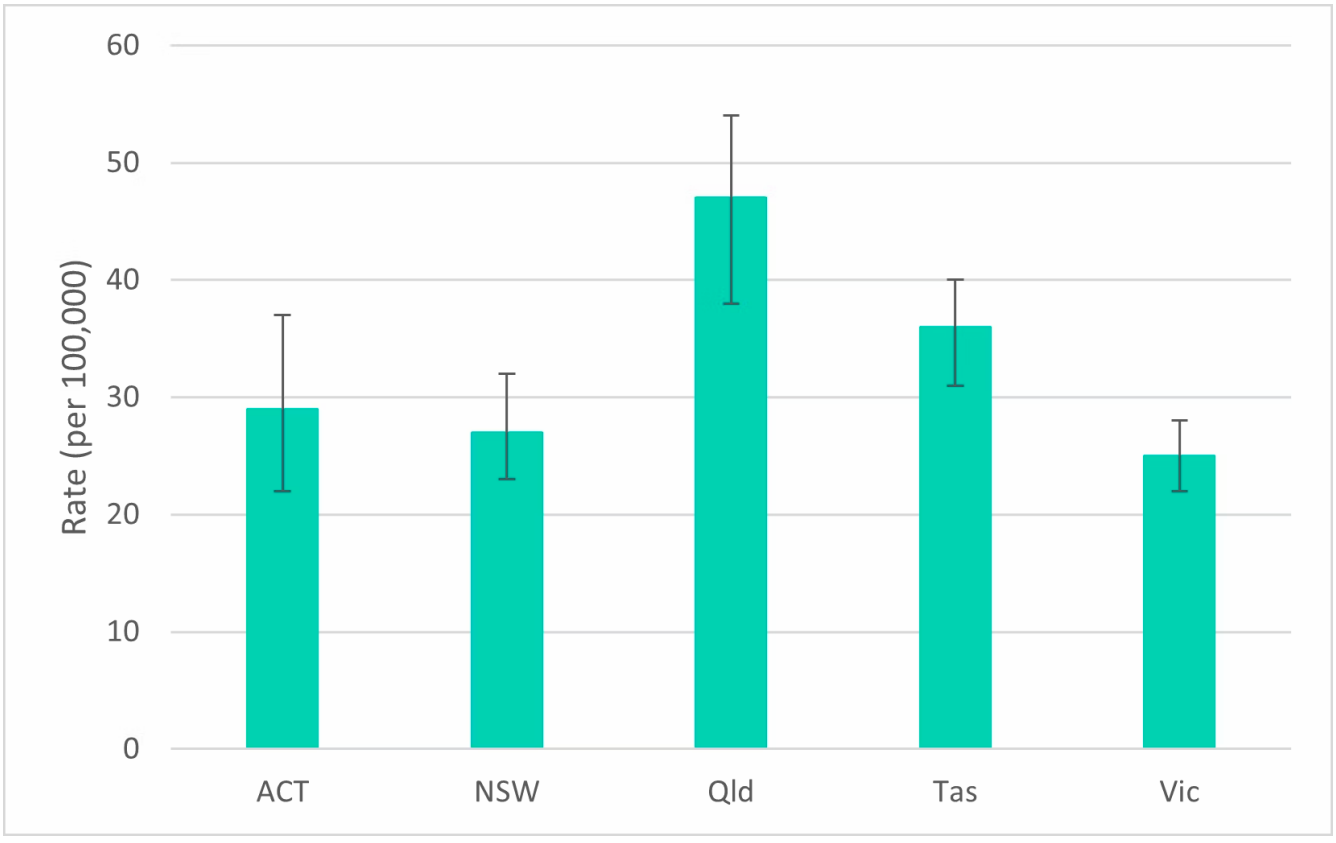
Data on ambulance attendances helps to increase understanding of suicide and self-harm behaviours in Australia. However, these data do not show the full extent of suicide and self-harm as ambulances are not always called to self-harm or suicide-related incidents.

Ambulance attendances for non-fatal self-harm behaviours are coded as being for suicidal ideation (suicidal thoughts), suicide attempts or self-injury (without suicidal intent).

The National Suicide and Self-harm Monitoring System has been updated to include National Ambulance Surveillance System data to December 2022 for the Tasmania (Tas), Queensland (Qld) and Victoria (Vic), and to September 2022 for Australian Capital Territory (ACT) and New South Wales (NSW).

In 2021, ambulances attended around 90,100 incidents that involved suicidal thoughts or behaviours across NSW, Vic, Qld, Tas and the ACT.

In 2022, average monthly ambulance attendances per 100,000 population for suicide ideation or attempts combined are represented below with bars to indicate the range in ambulance attendances over the same period.



Data for NSW and ACT are available up to September 2022

Generally, for the available states and territories across both 2021 and 2022, average monthly rates of ambulance attendances per 100,000 population is highest for suicidal ideation (thoughts), followed by suicide attempts, and lowest for self-injury.

Gender differences

While more males die by suicide compared to females in Australia, females have higher rates of self-harm or suicide attempts. Over time, general trends for the rate of ambulance attendances for:

- Self-injury tended to be higher for females compared to males, across NSW, Vic, Qld and the ACT.
- Suicidal thinking was similar for females and males across NSW, Vic, Qld, Tas and ACT.
- Suicide attempts were higher in females than males in NSW, Vic and Qld.

Age and gender differences

Ambulance attendances for suicide and self-harm behaviours also vary with age. When looking at combined data for ambulance attendances in NSW, Vic, ACT and Tas from June 2018 to June 2022, attendance rates for:

- Female self-injury, suicidal thoughts and suicide attempts generally decreased with age.
- Male suicide attempts were highest for the 25–44 years age group.
- Self-injury, suicidal thinking and suicide attempts were higher in females compared to males for the under 24 years age group.
- Suicidal thoughts were generally higher in males compared to females for the 25–44 years age group.
- Female self-injury in people under 25 years increased between March 2018 and August 2021, then declined overall from November 2021 to September 2022.
- Female suicide attempts increased in people under 25 years between March 2018 and March 2021, before steadily declining until September 2022.
- Male suicidal thoughts decreased from January 2021 onwards for all age groups, especially people under 65 years.
- Self-injury among people aged 45 years and older were similar across males and females.

View the updated ambulance attendances data

Notes

1. Communicating about self-harm - mindframe.org.au

For support and advice on safely communicating about these findings please refer to the *Mindframe* guidelines.