

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

*Released by AIHW on 26 July 2022*

- Annual release of data relating to intentional self-harm hospitalisations for 2020–21.
- Updated monthly snapshot data on ambulance attendances for suicidal and self-harm behaviours from New South Wales and Queensland until September 2021, and Victoria, Tasmania and the Australian Capital Territory until December 2021.
- Commissioned report from the Australian National University’s Centre for Social Research and Methods (CSRSM) with a further analysis on social and economic factors associated with suicide using the Multi-Agency Data Integration (MADIP) linked data asset.
- Evaluation of the National Suicide and Self-harm Monitoring System Final Report from the University of Melbourne.
- Commissioned Primary Health Network (PHN) consultation report.

### Hospitalisations for intentional self-harm

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

Updated data is now available for 2020-21:

- There were more than 29,900 hospitalisations for intentional self-harm in Australia, in 2020–21 (116 hospitalisations per 100,000 population).

The rate of intentional self-harm hospitalisations was higher for females (153 per 100,000 population) than males (79 per 100,000 population).

- Young people continue to have the highest age-specific rates of self-harm, 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 698 per 100,000 and 363 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 (174 per 100,000 for males 15-19 years and 166 per 100,000 for males aged 20-23 years). However, these rates are less than half those of females in the same age groups.
- The data shows a continuation of the long-term trend of increasing hospitalisations for self-harm in younger females:
  - The greatest increase in hospitalisations since 2019-20 was for females aged 0-14 years. The age-specific rate increased from 41 per 100,000 population in 2019-20 to 70 per 100,000 in 2020-21. In 2008-09, the rate was 19 hospitalisations per 100,000 (268% increase since 2008-09).

[View the updated self-harm hospitalisation data](#)

## Ambulance attendances

Data on ambulance attendances helps to provide a more comprehensive picture of suicidal and self-harm behaviours in Australia, as hospital admissions tend to only represent more serious physical injuries or mental health distress needing further hospital treatment. Ambulance attendances for non-fatal self-harm behaviours are coded as being for suicidal ideation, suicide attempt or self-injury.

The National Ambulance Surveillance System (NASS) provides a snapshot of data for one month each quarter from Victoria, Tasmania and the Australian Capital Territory from March 2018 to December 2021, New South Wales from March 2018 to September 2021, and Queensland from March 2020 to September 2021.

- When comparing the same months between 2020 and 2021, the ambulance attendance rates for:
  - Suicidal ideation decreased in New South Wales between September 2020 and September 2021, and Victoria between December 2020 and December 2021
  - Suicidal ideation increased in Tasmania between December 2020 and December 2021
  - Suicide attempts decreased in New South Wales and Queensland between September 2020 and September 2021, and Victoria between September 2020 and September 2021.
- Overall, between 2018 and 2021, ambulance attendance rates for self-injury and suicide attempt have remained highest for young females (0-24 years). Meanwhile, ambulance attendance rates for suicidal ideation were highest among males aged 25-44 years from 2018 to 2020, however from March 2020 have also tended to be highest for young females 0-24 years.
- For females aged 0–24 years, the rate of attendances for self-injury has shown an increasing trend since 2018:
  - The rate was 12.1 per 100,000 in September 2018 to 19.3 per 100,000 in September 2021 (60% increase).

[View the updated ambulance attendance data](#)

## MADIP Modelling – suicide and income/unemployment modelling

New analysis has been conducted by the Australian National University that extends on the [Regression risk models for selected census variables](#) using the Multi-Agency Data Integration Project (MADIP) data set. The MADIP data set links death registration and Census data that allows the analysis of suicide with socioeconomic variables such as income or employment. The updated analysis examined whether changes in income (income uncertainty or variability) and employment status over time were associated with deaths by suicide. The report illustrates how social factors can influence suicide risk, highlighting the importance of addressing socio-economic determinants in suicide prevention.

The analysis showed that from 2012-2016:

- Those in the lowest income group were more likely to die by suicide than those in the highest income group. This holds regardless of income uncertainty (variation in income).

- Those with higher income uncertainty (i.e. higher variation in income) were more likely to die by suicide than those with lower income uncertainty (i.e. more stable income). Those with the highest income uncertainty were 91% more likely to die by suicide than those with the most stable income.
- People who were unemployed were more likely to die by suicide. The likelihood of dying by suicide was 33% higher for the unemployed group compared to those who had no periods of unemployment.
- The likelihood of dying by suicide was higher among those who experienced longer periods of unemployment. Compared to those with no periods of unemployment, the risk of dying by suicide was:
  - 96% higher for those unemployed for five years
  - 103% higher for those unemployed for four years
  - 75% higher for those unemployed for three years
  - 57% higher for those unemployed for two years.

**NOTE:** The modelling carried out includes only a subset of known factors that may influence deaths by suicide, for example, other known associated factors such as mental health status and past history of self-harm are not included in this modelling. Therefore this data should be interpreted with caution and reported in context.

[Read the 'Social and economic factors associated with suicide in Australia: a focus on individual income' report](#)

### **Evaluation of the National Suicide and Self-harm Monitoring System Final Report**

The evaluation of the National Suicide and Self-harm Monitoring System (the System) carried out by the University of Melbourne found that it is the 'most comprehensive public resource of Australian data and information on both suicide and self-harm'. The report notes that collaboration with stakeholders and people with lived experience in the development of the system has been extensive.

The report makes 11 recommendations to improve the System, predominantly around the timeliness and coverage of data, and increased accessibility and usability of the System to inform service planning and localised responses. The recommendations will inform future improvements to the System.

[Read the Evaluation of the National Suicide and Self-harm Monitoring Project and System Final Report](#)

### **Primary Health Network (PHN) consultation report**

This report details findings from consultations with Primary Health Networks (PHNs) on priorities for the development of a State and Territory Information Portal (the Portal).

In particular, PHNs would like access to timely, granular, geocoded data for PHN regions to inform service planning and responses. They would also like data on priority populations who are at greater risk of self-harm and suicide. This report has informed the current development of the Portal and will be used to continually improve the Portal.

[Read the full PHN consultation report](#)