

# Coroners Court

## Monthly Suicide Data Report

September 2024 Update

20 November 2024





**WARNING:** This following report includes information on suicides.

For help or information contact **beyondblue** on 1300 224 636, or **Lifeline** on 13 11 14.

## **Purpose**

This report presents the September 2024 update to Victorian suicide statistics. This report was produced under the Coroners Court of Victoria's initiative to release timely and accessible data on suicide across the state.

## **Victorian Suicide Register**

In Victoria all deaths from suspected non-natural causes including suspected suicides are required to be reported to the Coroners Court of Victoria. The Coroners Court reviews newly reported deaths on a daily basis to identify those that occur in circumstances consistent with suicide and adds these deaths to the Victorian Suicide Register (VSR).

The VSR has been in operation since 2012 and is the most accurate and timely data source for suicide in Victoria. VSR data is regularly shared with the Victorian Department of Health, the Australian Institute of Health and Welfare, Victoria Police, health services, and other bodies engaged in suicide prevention to inform their work.

## **Considerations when interpreting the data**

Victoria's suicide frequency varies quite substantially from month to month. Additionally, there can be substantial variation in the monthly and annual frequency of suicides by sex and age group. This variation, which is not unique to Victoria but is a feature of suicide data around Australia and internationally, usually results from random factors rather than underlying systemic issues or emerging clusters. The data therefore should be interpreted cautiously, with great care taken in drawing conclusions about any apparent increase or decrease that is observed.

## **Changes in reported frequencies over time**

The deaths included in the VSR are regularly reviewed as coroners' investigations progress and more is learned about the circumstances in which they occurred. Deaths may be removed from the VSR if investigation establishes they are likely not to be suicides; likewise, deaths initially missed may be added to the VSR as new evidence consistent with suicide is gathered. This is why some data reported here may be different to what was reported in previous months.

However, data changes are usually minor: VSR analyses have shown that over time, there is consistently less than 5% difference between the number of suicides initially identified as suicides, and the number of deaths ultimately confirmed as suicides.

# Monthly data update

## 1. Year to date frequency by sex

Table 1 shows the frequency of Victorian suicides by deceased sex as at the end of September each year, for the years 2020-2024.

**Table 1:** Year to date (month end September) suicide frequency by sex, Victoria 2020-2024.

Sex	2020	2021	2022	2023	2024
Male	376	370	405	413	435
Female	127	118	151	156	163
<b>Total</b>	<b>503</b>	<b>488</b>	<b>556</b>	<b>569</b>	<b>598</b>

## 2. Monthly frequency

Table 2 shows the monthly frequency and aggregate monthly<sup>1</sup> frequency of Victorian suicides for January 2020 through to September 2024.

**Table 2:** Monthly frequency and aggregate monthly frequency of Victorian suicides, January 2020 to September 2024.

Month	Monthly frequency					Aggregate monthly frequency				
	2020	2021	2022	2023	2024	2020	2021	2022	2023	2024
January	61	57	55	71	79	61	57	55	71	79
February	61	50	54	61	82	122	107	109	132	161
March	64	67	64	57	67	186	174	173	189	228
April	53	49	58	69	58	239	223	231	258	286
May	50	53	56	66	45	289	276	287	324	331
June	52	57	66	47	60	341	333	353	371	391
July	57	55	57	64	64	398	388	410	435	455
August	61	50	73	62	81	459	438	483	497	536
September	44	50	73	72	62	503	488	556	569	598
October	48	74	77	86		551	562	633	655	
November	66	60	65	72		617	622	698	727	
December	51	55	71	70		668	677	769	797	

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1 The aggregate monthly frequency is the sum of frequencies for all months so far in each year. For example, the aggregate monthly frequency in March of a year is the sum of the monthly frequencies in January, February and March for that year.

### 3. Year to date frequency by age group and sex

Table 3 shows the Victorian suicide frequency by deceased sex and age group as at the end of September each year, for the years 2020-2024.

**Table 3:** Year to date (month end September) suicide frequency by sex and age group, Victoria 2020-2024.

Age group by sex	2020	2021	2022	2023	2024
Male					
Under 18	12	8	5	12	3
18 to 24	43	35	35	37	51
25 to 34	64	66	80	80	72
35 to 44	65	68	66	86	85
45 to 54	59	71	90	80	77
55 to 64	63	53	53	62	67
65 and over	70	69	76	56	80
<b>Total</b>	<b>376</b>	<b>370</b>	<b>405</b>	<b>413</b>	<b>435</b>
Female					
Under 18	2	8	2	9	8
18 to 24	9	15	12	14	18
25 to 34	35	27	23	33	30
35 to 44	25	19	26	35	31
45 to 54	13	20	32	28	30
55 to 64	18	16	22	16	20
65 and over	25	13	34	21	26
<b>Total</b>	<b>127</b>	<b>118</b>	<b>151</b>	<b>156</b>	<b>163</b>
All people					
Under 18	14	16	7	21	11
18 to 24	52	50	47	51	69
25 to 34	99	93	103	113	102
35 to 44	90	87	92	121	116
45 to 54	72	91	122	108	107
55 to 64	81	69	75	78	87
65 and over	95	82	110	77	106
<b>Total</b>	<b>503</b>	<b>488</b>	<b>556</b>	<b>569</b>	<b>598</b>

## 4. Year to date frequency by location of fatal incident

Table 4a shows the suicide frequency as at the end of September in Metropolitan Melbourne and Regional Victoria, for the years 2020 to 2024. Table 4b shows the same data but represented as proportions of all suicides rather than as frequencies.

**Table 4a:** Year to date (month end September) suicide frequency by location of fatal incident, Victoria 2020-2024.

Location of fatal incident	2020	2021	2022	2023	2024
Metropolitan	332	309	365	380	398
Regional	170	179	191	189	200
<b>Total</b>	<b>503</b>	<b>488</b>	<b>556</b>	<b>569</b>	<b>598</b>

**Table 4b:** Year to date (month end September) suicide proportion by location of fatal incident, Victoria 2020-2024.

Location of fatal incident	2020	2021	2022	2023	2024
Metropolitan	66%	63%	66%	67%	67%
Regional	34%	37%	34%	33%	33%
<b>Total</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

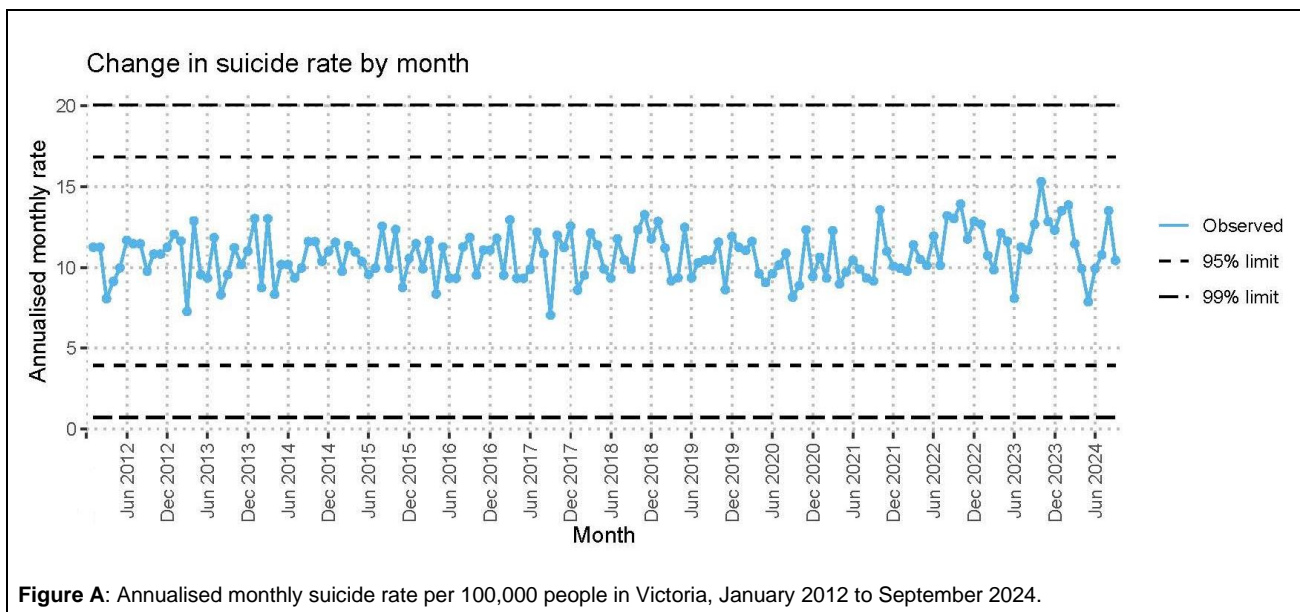
## Addendum: suicide rate analysis

As shown above, the annual number of suicides in Victoria has recently been increasingly steadily, from 668 suicides in 2020 to 797 suicides in 2023. Furthermore, there have been more suicides in the 2024 year to date than the 2023 year to date, suggesting that in 2024 the annual number of suicides in Victoria might reach a new high.

However, while the number of suicides has been rising, so too has the number of people residing in Victoria. According to the Australian Bureau of Statistics, Victoria's population was 6,616,636 people in March 2020, but had grown to 6,959,234 by March 2024.<sup>2</sup> This invites a question about whether the observed increase in the number of Victorian suicides might (in whole or in part) reflect the state's population growth.

To answer this and other questions about what might be behind Victoria's suicide numbers, the Coroners Court entered a research partnership with a team at the Melbourne School of Population and Global Health (The University of Melbourne) headed by Professor Matthew Spittal. The aim of the partnership is to develop new statistical-based tools and methods to describe and interpret what is happening to suicide in Victoria.

Prof Spittal's team produced Figure A as part of their initial exploration of the suicide data. The blue line in Figure A shows the annualised monthly suicide rate in Victoria per 100,000 population for the period from January 2012 to September 2024.



With reference to the scale along the vertical axis, the annualised monthly rate was centred at between 10 and 11 suicides per 100,000 population, although there was quite substantial variation from month to month. Further to this point, the annualised monthly rate was particularly variable in the last 24 months, ranging between approximately 15 suicides per 100,000 people (October 2023) and 8 suicides per 100,000 people (May 2024).

<sup>2</sup> Australian Bureau of Statistics, "3101.0 National, state and territory population", released 19 September 2024.

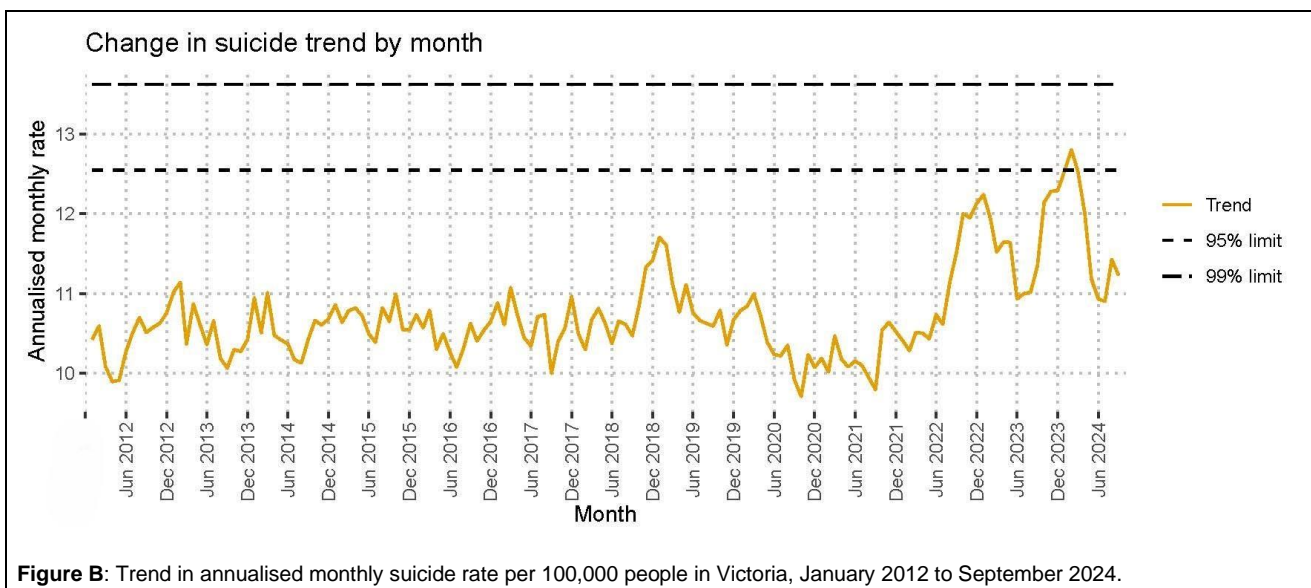
The inner and outer sets of parallel black dotted lines on Figure A, labelled “95% limit” and “99% limit” in the figure’s legend, show how high (or low) Victoria’s annualised monthly suicide rate would need to be, to be significantly higher (or lower) than what we normally expect. (The 95% and 99% lines indicate two levels of statistical confidence; if the annualised monthly suicide rate crossed the 95% line then we could be reasonably confident that the observed rate is outside the range of what would normally be expected, and if it crossed the 99% line then we could be highly confident that the rate is outside the normally expected range.)

Notably, with reference to Figure A, Victoria’s annualised monthly suicide rate did not cross the higher or lower 95% limit line at any time between January 2012 and September 2024. This means that Victoria’s annualised monthly suicide rate was within the normal range during the period examined.

However, some caution is required in interpreting this finding. The annualised monthly suicide rate is best suited to detecting sudden changes: brief periods during which the number of suicides is much higher or lower than usual. Furthermore, it is susceptible to wide variability from month to month, which is why the “95% limit” and “99% limit” levels are set at intervals so far above and below the usual range of the blue line: if intervals are set closer together there may be too many ‘false positive’ alerts.

For this reason, Prof Spittal’s research team conducted further analysis to examine the trend in the annualised monthly rate over time. The trend was calculated through ‘smoothing’: a process whereby the annualised monthly rate for each month was averaged with reference to the months on either side of it, to remove extreme variability and make any underlying patterns (or trends) more noticeable and detectable.

Figure B shows the trend in the annualised monthly suicide rate for the period from January 2012 to September 2024. As with Figure A, the analysis presented in Figure B included “95% limit” and “99% limit” levels for detecting whether the trend in the annualised monthly suicide rate was outside the normally expected range.



With reference to Figure B, the trend in the annualised monthly suicide rate was consistently between 10 and 11 suicides per 100,000 population during the period from 2011 to 2019, with the exception of the period around the end of 2018 and beginning of 2019 when it temporarily rose to nearly 12 suicides per 100,000 population. Then, in the course of 2020 and 2021 the trend appeared to become lower for a time at around 10 suicides per 100,000 population with very little variability.

Most recently, commencing in mid-2022 the trend in the annualised monthly suicide rate rose steadily to around 12 suicides per 100,000 population, and has since fluctuated at between 11 and 12 suicides per 100,000 population. In the first months of 2024 the trend line crossed the “95% limit” level and nearly reached 13 suicides per 100,000 population, indicating we could be reasonably confident that the observed rate at that time was outside the range of what would normally be expected. The trend in the annualised monthly suicide rate then decreased to within the expected range.

## Methodological note

The annualised monthly suicide rate is not a widely used measure, so the following is a brief explanation to assist those who have not encountered it before.

The annualised monthly suicide rate for any particular month is calculated by multiplying that month’s number of suicides by 12 (to scale up the monthly number to represent a year) then dividing this by the population (and then multiplying by 100,000 to express the rate as being per 100,000 population). Doing so enables the monthly rate to be translated into the same scale as annual rates for meaningful comparison.

For example, if there were 62 suicides in one month, in a population of 6,714,487 people, the suicide rate in that month would be  $(62 / 6,714,487) * 100,000 = 0.92$  suicides per 100,000 people per month. This number is very difficult to compare directly to Victoria’s annual suicide rate, which ranges between around 10 and 12 suicides per 100,000 population per year. To resolve this, the annualised monthly rate is calculated as  $0.92 * 12 = 11.1$  suicides per 100,000 people. This does not mean there were 11.1 suicides per 100,000 people in that month; instead it means that if the suicide rate in that month was typical of the overall year then this is what the annual rate would look like based on that month.