



Suicide and hospitalised self-harm in Australia



Commonwealth Department of
Health and Aged Care



Malinda Steenkamp, James Harrison

AIHW

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Suicide and hospitalised self-harm in Australia

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Note: Table 2.1 of the printed version of this report contains errors, which have been corrected in this version.

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Summary

Suicide deaths in 1998

Suicide is a prominent public health problem in Australia. Currently, more than 2,500 people die by suicide each year.

A total of 2,683 suicides were registered in 1998. Of these, 80.1% were males. The age-standardised rate for males of all ages was 23.1 per 100,000 population and 5.6 per 100,000 for females of all ages. Rates were highest for males aged 20-39 years and for males aged 80 years and older. Female rates were on average about four times less than the rates for males.

Overall, hanging was the most common method of suicide for both males and females in 1998. For males, motor vehicle exhaust gassing was the second most common method, but suicide by firearm formed only 10.1% of cases. For females, poisoning by solid or liquid substances was the second most common method used to commit suicide and firearms were used in less than 5% of suicide deaths.

The proportion of hanging in males increased from 1997 to 1998 (i.e. up from 35.9% to 47.1%), whereas the proportion for male suicides by firearm decreased from 14.4% in 1997 to 10.1% in 1998.

During 1998, the largest number of suicides was registered in New South Wales (865 cases) and the smallest number in Australian Capital Territory (30 cases). Victoria and Australian Capital Territory had suicide rates significantly lower than the national average, whereas Queensland's rate was significantly higher. However, the differences between jurisdictions are fairly small and in some other years, the rates do not vary significantly from the national average.

The highest rate for males was observed in the Northern Territory (NT) and the lowest in Victoria and Australian Capital Territory (ACT). Except for Victoria, these rates did not differ significantly from the national average rate. For females, the highest suicide rate was observed in Queensland and the lowest in ACT.

The profiles for age-specific suicide rates for males and females were fairly similar to the distribution for the whole of the country, but the profiles for Tasmania, NT and ACT were difficult to interpret because of the effect of small case counts.

In all States and Territories, except Tasmania, hanging had the highest rates of all methods used for suicide. In Tasmania, gassing by motor vehicle exhaust fumes was the most common method. Motor vehicle exhaust gassing was the second most common method for suicide in New South Wales (NSW), Victoria, Queensland, Western Australia, South Australia and ACT, while in Tasmania and NT it was firearms.

Trends in suicide deaths

Suicide is becoming relatively more prominent as a cause of 'external cause' deaths. This is especially true for male suicide deaths and is mainly because deaths from motor vehicle crashes and other 'external causes are declining and because the all-ages suicide rate for males of all ages have tended to increase slightly in recent years. This phenomenon seems to be fairly similar for females, though it is happening on a much lesser scale.

Suicide occurrences and rates rose by about 9% from 1996 to 1997, a large increase but less than the 14% increase in the number of suicide registrations. A further rise in case numbers of about 1% is likely to have occurred from 1997 to 1998.

The rise in suicide rates is largely an increase for males aged 20 to 39 years - rates for this age group have continued to increase since the late 1970s and since the early 1990s the suicide rate for this age group has been the highest for all male age ~~GROUPS~~ Rates for men aged 40 to 59 years have remained fairly stable over time, while the rates for men aged 60 years or more have shown a steady decline.

Youth suicide has received much attention. However, rates for males aged 15-19 years have always been lower than the rates for other groups. Also, although there was a rapid rise in rates at ages 15 to 19 years in the 1980s, the rates for this age group has been fairly stable over recent years.

There seems to be a birth cohort effect for male suicide rates. When comparing rates for various age-groups of men born in particular five-year periods (e.g. 1932-1935, 1936-1940), we see that these birth cohorts all have low rates in childhood whereafter the rates rise. A disturbing phenomenon seems to be that the rise in suicide rates with maturity has been larger and steeper for the younger cohorts. It also appears as if the suicide rates reached by birth cohorts in early adulthood ~~persists for a specific cohort~~ For females, peaks in suicide rates are obvious during the 1960s. These were associated with the wide availability and use of barbiturates, other toxic sedatives and tranquillisers. These peaks were followed by decreases in rates. Recent suicide rates have shown less variation, especially between female age groups.

Hanging has become the dominant means for suicide, especially for males. Moreover, use of this means is accelerating - between 1979 and 1998 the rate of male suicide by hanging has tripled and the increase is most marked at ages 20-39 years. There has also been a strong age-cohort component to this rise.

The rate of suicide by means of a firearm has decreased, roughly in parallel with an increase in motor vehicle exhaust gassing (which became the second most common method for males in 1995).

Up to 1996, poisoning by solid or liquid substances has been the most common method of suicide for females. This suicide rate has continued to decline, showing the tail end of the epidemic of suicide by means of medications that peaked in the 1960s. However, the rate of female suicide by hanging has increased (although much less than for males) and in 1997 and 1998 hanging was a more common method than poisoning by solids or liquids for females.

Age-standardised suicide rates and trends have generally been similar for Australia's States and Territories in the period 1979-1998. The largest divergence from national rates were seen in the jurisdictions with the smallest populations, the ACT (rates tended to be relatively low) and the NT (where rates tended to be relatively high in comparison with the national average.)

All States and Territories, apart from Tasmania, showed a slight increase in age standardised suicide rates for all persons and a larger increase for males during the period 1979 until 1998. Female rates of suicide have remained stable since 1979.

On average for both males and females, the highest suicide rates were seen in the NT, followed by Queensland. The ACT had the lowest rates, while the remainder of the States had rates similar to the national average.

As for Australia overall, the highest rates of suicide in recent years for all jurisdictions occurred in males aged 20-39 years. Queensland and the NT exhibited the highest rates for this age group, whereas Victoria and ACT showed the lowest rates. The rates for females aged 20 to 39 years have shown marked fluctuations, but small numbers complicate interpretation.

Since 1979, there has been an overall increase in the rate of suicide by hanging for both males and females, in all States and Territories. This trend has been particularly marked since 1995, and has been most notable in the NT. The smallest change in rates has occurred in Tasmania.

Nationally there has been a slight trend towards increased rates of suicide by motor vehicle exhaust gassing. All States and Territories display this trend apart from Western Australia, where the rate remained fairly stable between 1979 and 1998.

Most states had similar rates for suicide by firearm to the national average, except for Queensland, the NT and Tasmania which had slightly higher rates. All States and Territories showed a decrease between 1979 and 1998.

For poisoning by solid or liquid substances, Queensland has shown higher rates than the national average, but the rates for this State are decreasing.

Issues in reporting suicide deaths

Suicide deaths may be susceptible to misclassification because the intention of the deceased is not always clear, or because social disapproval might prompt some cases to be recorded as 'accidental' or 'undetermined'. Little empirical information is, however, available on the reliability of data on suicide deaths.

It is often assumed that the number of death registrations in a particular period provides a good estimate of the number of death occurrences. Recent trends in suicide registrations have indicated that this assumption needs to be investigated from time to time. The data for 1997 were a case in point.

In 1997, the number of suicide registrations was inflated by an administrative practice which had the effect of registering some deaths late in 1997. These deaths would have been registered in 1998, if previous practice had prevailed. Thus, the 14% rise in suicide registrations from 1996 to 1997 overestimated the rise in suicide occurrences, which was about 9%. The same event will probably have the opposite effect in 1998, causing registrations to underestimate case numbers. It is difficult to estimate the size of the effect, but the observed 1.5% drop in registrations could certainly be found to correspond to a small rise in cases.

It seems that registrations to the end of a calendar year are likely to include nearly all cases that occurred to the end of the month September for that particular year. Therefore, the occurrence estimate for the previous 12-month period to September should be about 99% complete and it may be worthwhile to report suicide occurrences for the time period between October of one year and September of the next.

Suicide deaths in Indigenous Australians

Particular attention should be paid to suicide deaths among Indigenous people. However, as for many other health issues, data on suicide by Indigenous Australians have special limitations. These mostly relate to the reliability of the Indigenous indicator (which almost certainly results in underestimation of the number of Indigenous deaths), as well as concerns about population estimates for Indigenous Australians.

Identification of Indigenous status is considered to be more reliable for South Australia, Western Australia and the NT. Queensland only started identification of Indigenous status for deaths registered from the beginning of 1996, although the quality of identification has been sufficient to allow publication of Indigenous deaths in 1998.

A total of 109 suicides among Aboriginal and Torres Strait Islanders were registered in 1998.

Age-standardised rates based on data from South Australia, Western Australia and the NT do not show a strong trend in the period for which data are available, but rates have increased somewhat for 1997 and 1998. The number of cases in Queensland has also shown an increase from 1996 to 1998.

These increases in numbers and rates should be treated with caution. There seems to be improvements in identifying Indigenous status among deaths. These may account (at least partly) for the rise in case numbers.

Indigenous suicide is sharply concentrated in the younger age groups for both males and females, but the male to female ratio is 6.7:1.

When compared to non-Indigenous Australians, rates for ATSI people were higher for age groups up to 45-49 years.

Hanging was the most common means of suicide for Indigenous males and females in the period reviewed. For males, the second most common method was firearms, whereas it was poisoning by solid or liquid substances for females.

The data on suicide deaths among Indigenous Australians presented in this report have several limitations, we urge that rates and trends be interpreted with caution and that frequent examination of these be done.

Hospitalised self-harm

Completed suicide is only one outcome of intentionally self-harming behaviours. One other outcome of these behaviours is hospitalisation. It is not accurate to regard hospitalised self-harm as equivalent to 'attempted suicide' for comparison with 'completed suicide'.

Also note that this source provides information on episodes of hospital in-patient care, not incident cases.

Data on hospitalised self-harm indicated that there was a total of 25,120 episodes of hospital care concluded during the financial year 1997/98. This yielded an age-standardised rate of 137.5 per 100,000 population. Of the total number of episodes, 43% were males. The age-standardised rate for males was 116.9 per 100,000, whereas the equivalent rate for females was higher (159.0 per 100,000 population). Moreover, rates for females were significantly higher than rates for males for all age groups from 10 to 14 years to 50 to 54 years, except for the age group 30 to 34 years. Overall, the male to female ratio was 0:74.

Poisoning by solid or liquid substances was by far the most common method used among self-harm hospital separations for both males (70%) and females (85%). Poisoning by tranquillisers accounted for 37% of all male separations and 47% of all female separations due to intentional self-harm by poisoning. Poisoning by aromatic analgesics (the category which includes paracetamol) was the most common means for females aged 10-19 years.

Abbreviations used

ABS	Australian Bureau of Statistics
AIHW	Australian Institute for Health and Welfare
ATSI	Aboriginal and/or Torres Strait Islander
E-code	ICD External cause code
ERP	Estimated Resident Population
ICD	International Classification of Diseases
ICD-9	International Classification of Diseases, 9 th Revision
ICD NOI code	ICD Nature of Injury code
MV	Motor vehicle
n.a.	Not available
nec	Not elsewhere classified
NISU	National Injury Surveillance Unit
RCIS	Research Centre for Injury Studies
..	Not applicable

Please note:

All rates are age-standardised and per 100,000 population, unless otherwise specified.

Rates were adjusted by direct standardisation taking the Australian population in 1991 as the standard.

1 Introduction

Suicide is a prominent public health problem in Australia. Between 1979 and 1998, more than 41,000 Australians have died because of suicide and currently more than 2,500 people die by suicide each year. One particular concern is that rates for males aged 20-39 years continue to increase.

Suicide is becoming more important in relation to other causes of death. This is largely because the numbers of deaths due to other causes are decreasing, while the number of suicides overall remains fairly stable.

Hanging has become the dominant means for suicide and the use of this means is accelerating. Rates of suicide by hanging remain much higher for males than females, but are increasing for both sexes.

This Thematic Report addresses the problem of suicide in Australia and aims to:

- describe occurrences of death due to suicide on the most recent data available;
- show trends in suicide deaths over time;
- profile self-harm in hospital separations;
- describe suicide deaths in Indigenous Australians; and
- highlight problems and issues in regard to current national data sources on suicide deaths and hospitalised self-harm.

The Research Centre for Injury Studies (RCIS) analysed national mortality and morbidity data in order to meet these objectives. While we have referred to other literature where it relates closely to the data we are reporting, we have not undertaken a wider review of the literature for the purposes of this report. At the time of writing, documents surveying three aspects of the literature on suicide in depth had recently been published (Commonwealth Department of Health and Aged Care and Strategy 2000).

The structure of this Thematic Report is as follows:

Section 2 presents data on suicide deaths for 1998, while the next section describes trends in suicide deaths over time. Section 4 deals with issues relating to national suicide deaths data. This is followed by a section on suicide deaths in Indigenous Australians. Section 6 discusses self-harm behaviour in national hospital separations. The References can be found in Section 7. Section 8 (i.e. the Appendices) comprises several tables with various case counts and rates.

2 Suicide deaths; 1998

(See Appendix 8.1, Tables 8.1-8.6)

Suicides in Australia are generally reported in terms of the number of cases registered by Registrars of Births, Deaths and Marriages during each calendar year. This section summarises all suicide deaths registered in Australia during 1998. It shows general age and sex distribution, goes on to discuss other issues of interest, including method of suicide, and presents data for the different States and Territories.

2.1 Age and sex distribution

In 1998 there were 2,683 suicide deaths registered in Australia. This yielded a crude annual suicide rate of 14.3 per 100,000 population and an all-ages standardised rate of 14.3 per 100,000 population. Overall, suicide made up 33.8% of injury deaths and 2% of all deaths in 1998.

Of the total number of suicides, 80.1% were males. These 2,150 suicide cases comprised 38.3% of male injury deaths and accounted for a crude annual rate of 23.1 per 100,000 population. The all-ages standardised rate for males was also 23.1 per 100,000 population.

The 533 female deaths formed 22.9% of all female injury deaths. The crude suicide rate for females in 1998 was 5.7 per 100,000 population, while the all-ages standardised rate was 5.6 per 100,000 population.

Figure 2.1 shows the age-specific rates for males and females for 1998. The highest rates were for males aged 20 to 39 years and for males aged 80 years and older. Male rates in early adulthood were significantly higher than rates for middle aged men. A peak can be seen in the 65 to 69 year male age group (Figure 2.1). This profile was different from the pattern in 1997 and is mainly due to a large increase in suicide deaths registered in South Australia. That is, for South Australia during 1997, there were 2 suicide deaths registered in the 65 to 69 year age group, but in 1998 there were 14 deaths in this age group. Occasional variations of this size may occur by chance.¹ For females, the rates did not vary significantly between adult age groups, even though there were two small peaks in the rates for 35-39 year and 80-84 year olds.

¹ This large increase is not a unique phenomenon: although the mean number of cases between 1979 and 1998 was 6.75, in 1981 there were 10 cases registered in this age category and in 1990 there were 14 cases.

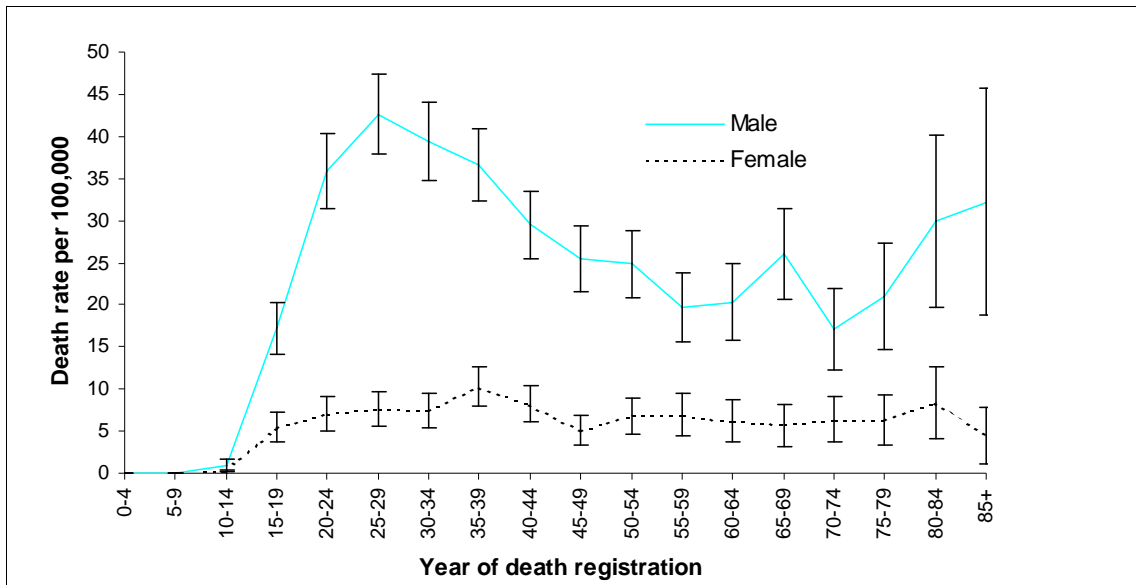


Figure 2.1 : Age-specific rates of suicide registrations for males and females by age group; Australia, 1998

Error bars indicate 95% confidence intervals for rates.

In coding causes of death for the purposes of national statistics, the ABS assumes that children under the age of 10 years are not capable of forming the intent to commit suicide.

Overall, the male to female rate ratio for registered suicide deaths was 4:1. This varied across different age groups, but Figure 2.2 shows that the rate ratio seemed to decrease up to around the early fifties. Thereafter the ratio increases and from about 74 years of age, the rise is quite steep and at 80 to 84 years the rate exceeds the rate for young person between 20 and 34 years.

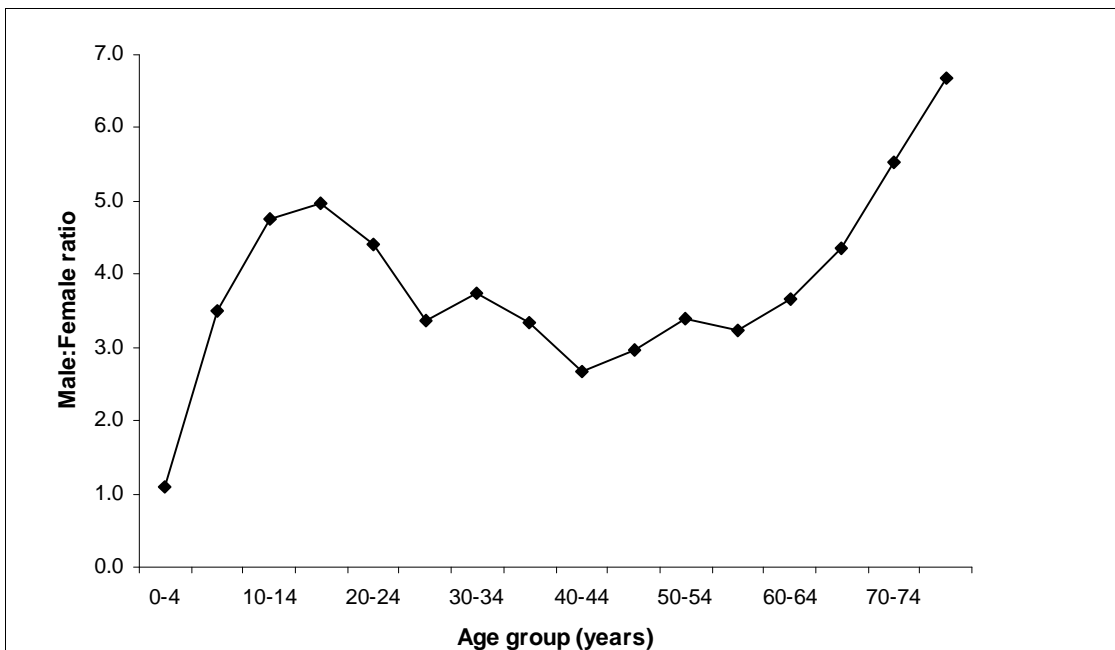


Figure 2.2 : Male to female rate ratio for registered suicide deaths; Australia, 1998

In coding causes of death for the purposes of national statistics, the ABS assumes that children under the age of 10 years are not capable of forming the intent to commit suicide.

Marital status

Table 2.1 shows that for males, close to half of registered male suicides were to unmarried males. For females, the proportion of those who were married and those who were never married were similar.

Table 2.1 : Marital status by sex; Australia 1998

Marital status	Males	Per cent	Crude rates	Females	Per cent	Crude rates
Never married	1007	47%	39.3	193	36%	9.2
Married	734	34%	17.8	191	36%	4.6
Divorced	237	11%	51.5	83	16%	14.5
Widowed	60	3%	34.0	48	9%	6.4
De facto or tribally married ^(a)	60	3%	-	9	2%	-
Unknown/not stated	52	2%	-	9	2%	-
Total	2,150	100%		533	100%	

Sections shaded in blue indicate the most common category or highest rate. Those shaded in grey indicate the second most common.

(a) The categories 'De facto' and 'Tribally married' were combined. The category 'de facto' was only used in NSW and NT. In 1998 there were 59 male and 9 female suicide cases which were classified as 'de facto'. One male was categorised as tribally married.

Crude rates were calculated using estimates of the Australian resident population of males and females aged 15 years and older at 30 June 1998, by marital status (ABS 3310.0 1999 ed). Suicide cases aged less than 15 years were omitted from the numerator (n=7).

In 1998, divorced males had the highest suicide rate, followed by males who were never married (Table 2.1). Widowed men had the lowest crude suicide rate. For females, the rates were much lower than the rates for males and the highest suicide rate was in the divorced group, followed by those who were never married, and those who were widowed. Married women had the lowest suicide rate.

Immigrant status

Of the 2,683 deaths due to suicides, 547 (21%) occurred in persons who were not born in Australia. For males of all ages, 20% of the registered suicide cases were born outside Australia, whereas the proportion females was 25% in 1998.

The crude suicide rate for males not born in Australia (19.0 per 100,000 population) was slightly lower than the rate for Australian-born males (23.5 per 100,000)², whereas the comparable rates for females were very similar, i.e. 6.0 for those born outside Australian and 5.3 for Australian-born females.

The mean number of years residing in Australia was 25.3 years (± 13.7 years) for males committing suicide, with the range from less than one year to 71 years. For female suicides, the average duration of residency was 24.0 years (± 14.9) with a range of a few months to 56 years.

² There were 61 male cases and 18 female cases where immigrant status was unknown.

2.2 Method of suicide

Overall, hanging was the most common method of suicide for both males and females in 1998 (Table 2.2).

Table 2.2 : Method of suicide, by sex, Australia 1998

Method ^(a)	Males counts	Per cent	Females counts	per cent
Hanging	1,012	47.1%	172	32.3%
Motor vehicle (MV) exhaust gassing	451	21.0%	77	14.4%
Firearm	217	10.1%	17	3.2%
Poisoning (solids & liquids)	178	8.3%	158	29.6%
Cutting/piercing	38	1.8%	10	1.9%
Other/unspecified	254	11.8%	99	18.6%
Total	2,150	100%	533	100%

Sections shaded in blue indicates most common method and those shaded in grey the second most common method.

(a) Categories: Hanging: E953.0; Motor vehicle exhaust: E952.0; Firearm: 955.0-.4; Poisoning (solids or liquids): 950; Cutting/Piercing: 956; Other: remainder of E950-E959.

Figure 2.3 shows the suicide rates for various methods for different age groups. Hanging was the leading method of suicide in males aged 10 to 84 years. For males aged between 20 and 65 years, motor vehicle exhaust was the second most common method used to commit suicide, whereas firearms were more prominent as a means of suicide in the older male age groups.

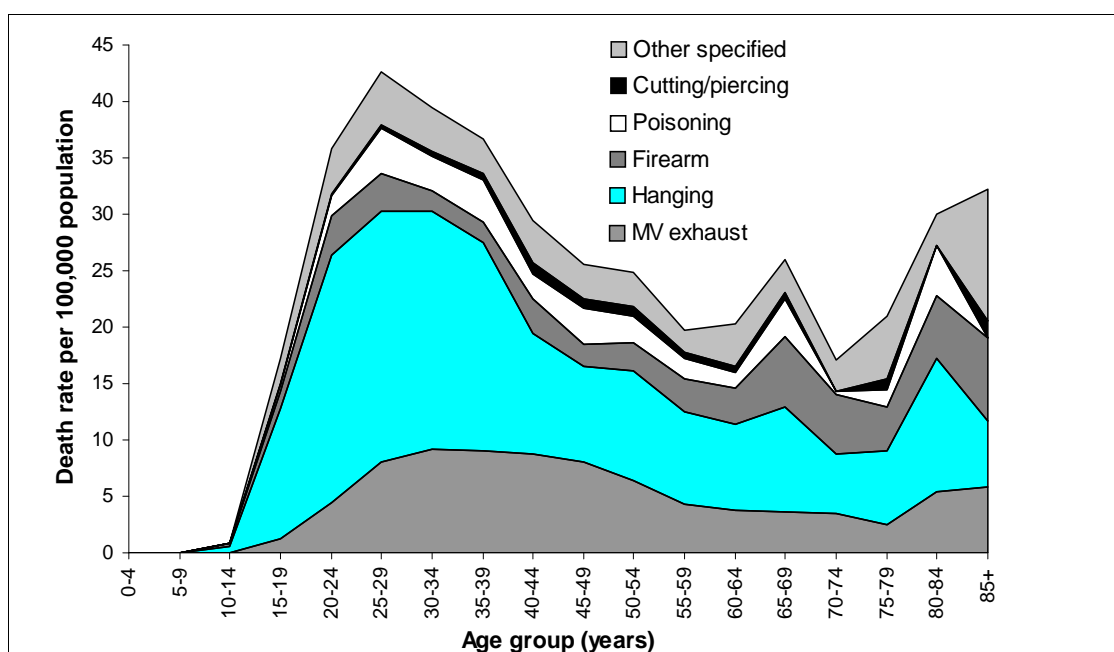
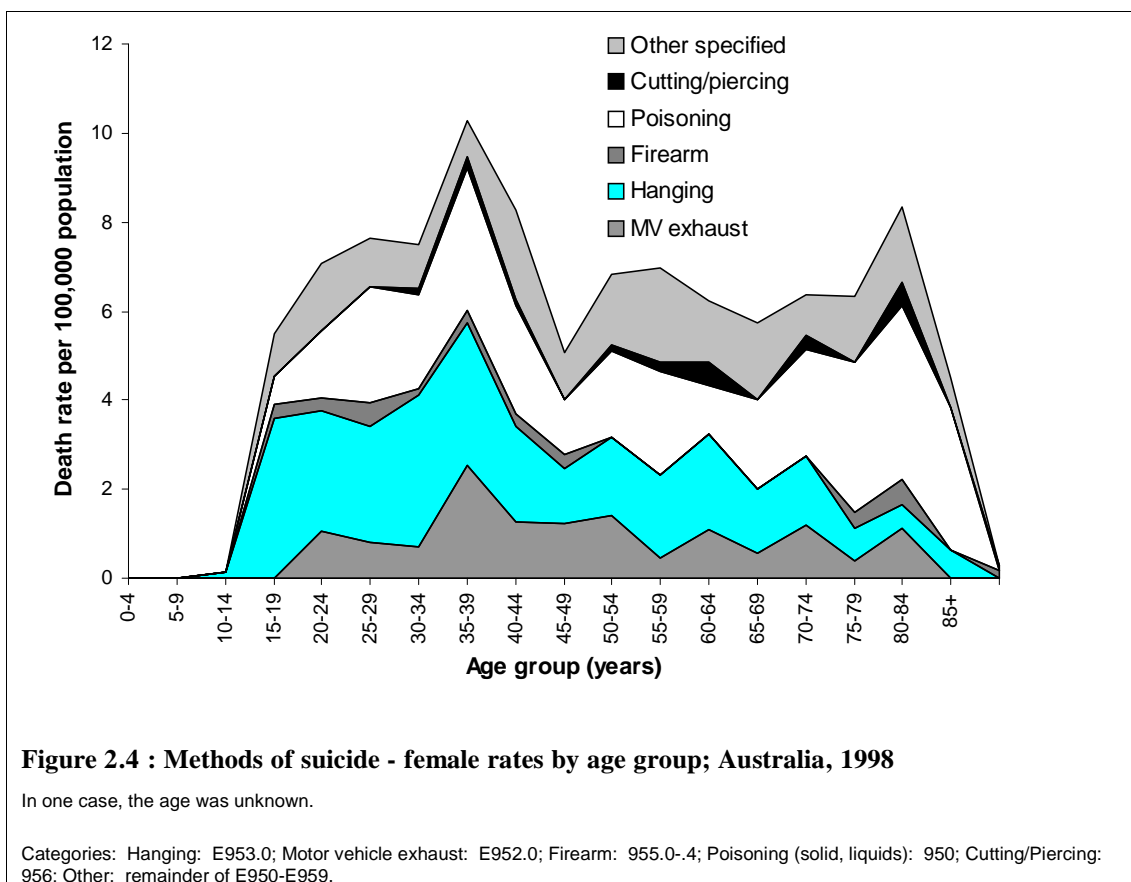


Figure 2.3 : Methods of suicide - male rates by age group; Australia, 1998

Categories: Hanging: E953.0; Motor vehicle exhaust: E952.0; Firearm: 955.0-.4; Poisoning (solid, liquids): 950; Cutting/Piercing: 956; Other: remainder of E950-E959.

Hanging was the most common method of suicide for young females and poisoning by solid and liquid substances was the most common method for middle-aged and older women (Figure 2.4).



Hanging

Over all ages hanging is becoming a very common method of committing suicide. Of male suicides, about two-thirds of young males aged between 10 and 24 years old hanged themselves, whereas the proportion for men aged 25 to 39 years was lower – about half of these males chose hanging as method of suicide. For males between 40 and 84 years, hanging made up at least one-third of the suicide cases. The proportion of suicide deaths by hanging increased between 1997 and 1998: in 1997 hanging formed 35.9% of registered suicide deaths in males, but in 1998 it comprised 47.1%.

Motor vehicle exhaust

Suicide by motor vehicle exhaust gassing was the second most common method for males aged 20 to 65 years, but it did not feature prominently as a cause of suicide for females during 1998.

Firearm

Male suicides by firearms declined from 1997 to 1998. In 1997 firearms comprised 14.4% of suicide deaths and in 1998 the proportion was 10.1%.

For males the most common gun used in suicide was a hunting rifle (Table 2.3). For females, hunting rifles were also the most common type of gun used, but handguns and shotguns made up larger proportions than for males. It is unknown whether this reflects the type of gun owned/available or whether it signifies a different preference for males and females, or even a combination of both.

Table 2.3 : Type of gun used in suicide by sex; Australia, 1998

Type of gun	Males	per cent	Females	Per cent
Hunting rifle	122	55.9%	7	41.2%
Shotgun	42	19.3%	5	29.4%
Handgun	18	8.3%	3	17.6%
Other and unspecified firearm	35	16.5%	2	11.8%
Total	217	100%	17	100%

Sections shaded in blue indicates most common method and those shaded in grey the second most common method.

Poisoning by solid or liquid substances

Poisonings (solid or liquid substances) had different rank orders for males and females (Table 2.2). Yet, when age-specific rates for 1998 are analysed, the profiles for males and females were similar (Figure 2.5).

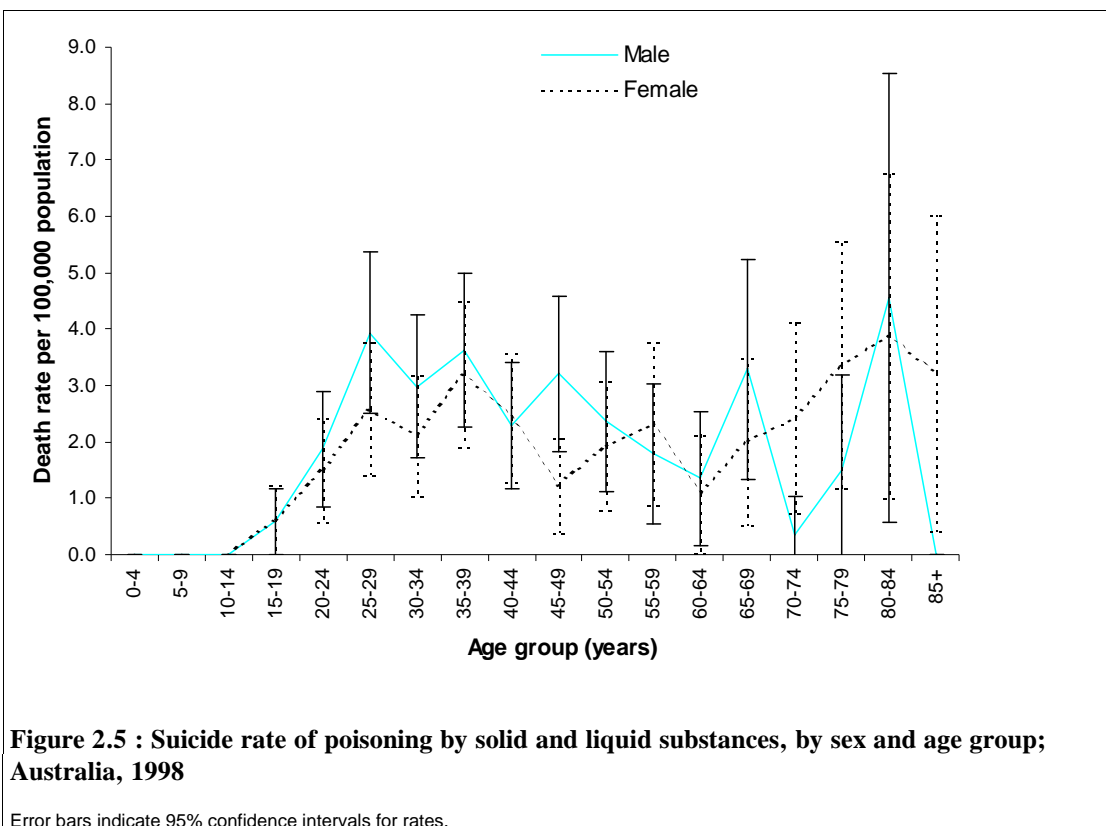


Table 2.4 gives the different types of substances used in poisoning suicides registered in 1998. The categorisation is limited by the codes provided in the ninth revision of the International Classification of Diseases (ICD-9).

Table 2.4 : Type of solid or liquid substances used in poisoning suicides; Australia, 1998

Type of substance according to ICD-9 E-codes	Males	Per cent	Females	Per cent
Other specified drugs and medicinal substances (E950.4)	70	39.3%	69	43.7%
Analgesics, antipyretics, and antirheumatics (E950.0)	37	20.8%	20	12.7%
Tranquillisers and other psychotropic agents (E950.3)	30	16.9%	49	31.0%
Unspecified drug or medicinal substance (E950.5)	16	9.0%	11	7.0%
Agricultural and horticultural chemical and pharmaceutical preparations other than plant food and fertilisers (E950.6)	9	5.1%	1	0.6%
Barbiturates (E950.1)	3	1.7%	4	2.5%
Corrosive and caustic substances (E950.7)	3	1.7%	1	0.6%
Arsenic and its compounds (E950.8)	2	1.1%	0	-
Other sedatives and hypnotics (E950.2)	1	0.6%	0	-
Other and unspecified solid and liquid substances (E950.9)	7	3.9%	3	1.9%
Total	178	100%	158	100%

Sections shaded in blue indicate most common method and those shaded in grey the second most common method.

For both males and females ‘other specified drugs and medicinal substances’ were the most common cause of solid or liquid poisoning. For females the second most common cause of poisoning by solid or liquid substances was tranquilisers and other psychotropic agents, but for males it was analgesics, antipyretics and antirheumatics. Since 1997 multi-cause coding of deaths has been initiated by the Australian Bureau of Statistics (ABS). These data provide ICD nature of injury codes in addition to the ICD External cause code (which was the only code available before 1997). These nature of injury codes were analysed for cases where the three digit E-code was E950 (i.e. cases of intentional self-poisoning by solid or liquid substances). Four groups of substances received particular attention. These were chosen because they were particularly common among cases of hospitalised self-harm (see Section 6.2.3) or deaths.

The analysis of ICD nature of injury (NOI) codes showed that among self-poisoning cases due to solids and liquids, 29.2% of the cases had opiates and related narcotics (ICD NOI-code 965.0) as at least one of the drugs taken (Table 2.5). The proportion for antidepressants (ICD NOI-code 696.0) was 28.3%, and for aromatic analgesics (ICD NOI-code 965.4) was 10.7%.

There were differences in proportions for males and females (Table 2.5). For men, opiates were more commonly present, whereas antidepressants were more often among the drugs present for females.

Table 2.5 : Suicide by poisoning (solids & liquids) - selected drug types that were at least one of the substances mentioned in the multi-cause nature of injury codes; Australia 1998

Sex	Age group (years)	Opiates and other related narcotics (NOI code 965.0)		Aromatic analgesics nec (NOI code 965.4)		Andidepressants (NOI code 969.0)		Benzodiazepine-based tranquillisers (NOI code 969.4)		Total no. of cases	
		Counts	Per cent	Counts	Per cent	Counts	Per cent	Counts	Per cent	Counts	Per cent
Male	10-19	1	1.8%	1	7.1%	0	0.0%	1	2.9%	4	2.2%
	20-29	25	44.6%	4	28.6%	8	20.0%	9	26.5%	42	23.6%
	30-39	19	33.9%	6	42.9%	8	20.0%	11	32.4%	48	27.0%
	40-49	3	5.4%	1	7.1%	12	30.0%	5	14.7%	37	20.8%
	50-59	5	8.9%	1	7.1%	8	20.0%	3	8.8%	22	12.4%
	60-69	2	3.6%	1	7.1%	4	10.0%	3	8.8%	16	9.0%
	70-79	0	0.0%	0	0.0%	0	0.0%	1	2.9%	4	2.2%
	80+	1	1.8%	0	0.0%	0	0.0%	1	2.9%	5	2.8%
	<i>Total males</i>	56	100.0%	14	100.0%	40	100.0%	34	100.0%	178	100.0%
Female	10-19	2	4.8%	0	0.0%	1	1.8%	0	0.0%	4	2.5%
	20-29	10	23.8%	4	18.2%	11	20.0%	5	11.1%	29	18.4%
	30-39	12	28.6%	7	31.8%	14	25.5%	9	20.0%	39	24.7%
	40-49	5	11.9%	4	18.2%	14	25.5%	8	17.8%	25	15.8%
	50-59	7	16.7%	2	9.1%	8	14.5%	7	15.6%	21	13.3%
	60-69	0	0.0%	1	4.5%	2	3.6%	2	4.4%	11	7.0%
	70-79	3	7.1%	2	9.1%	4	7.3%	7	15.6%	17	10.8%
	80+	3	7.1%	2	9.1%	1	1.8%	7	15.6%	12	7.6%
	<i>Total females</i>	42	100.0%	22	100.0%	55	100.0%	45	100.0%	158	100.0%
Total persons	98	29.2%	36	10.7%	95	28.3%	79	23.5%	336	100.0%	

Sections shaded in blue indicate highest case counts and per cent, while those shaded in grey indicate the second highest.

Other methods used

'Other/unspecified' method was often a second most common cause of suicide in females. These cases mostly comprised jumping from heights (26 out of 99 cases), jumping in front of moving vehicles (22 cases), drowning (20 cases), as well as immolation and strangulation/suffocation by means other than hanging (10 cases each).

For males of all ages, jumping from heights made up 71 out of the total 254 cases, followed by jumping in front of moving vehicles (54 cases), drowning (30 cases) and gassing other than motor vehicle exhaust gassing (27 cases). In males aged 85 years or more, 'other specified' methods were the most common method used to commit suicide. These were mostly due to drowning - six out of the eight cases registered.

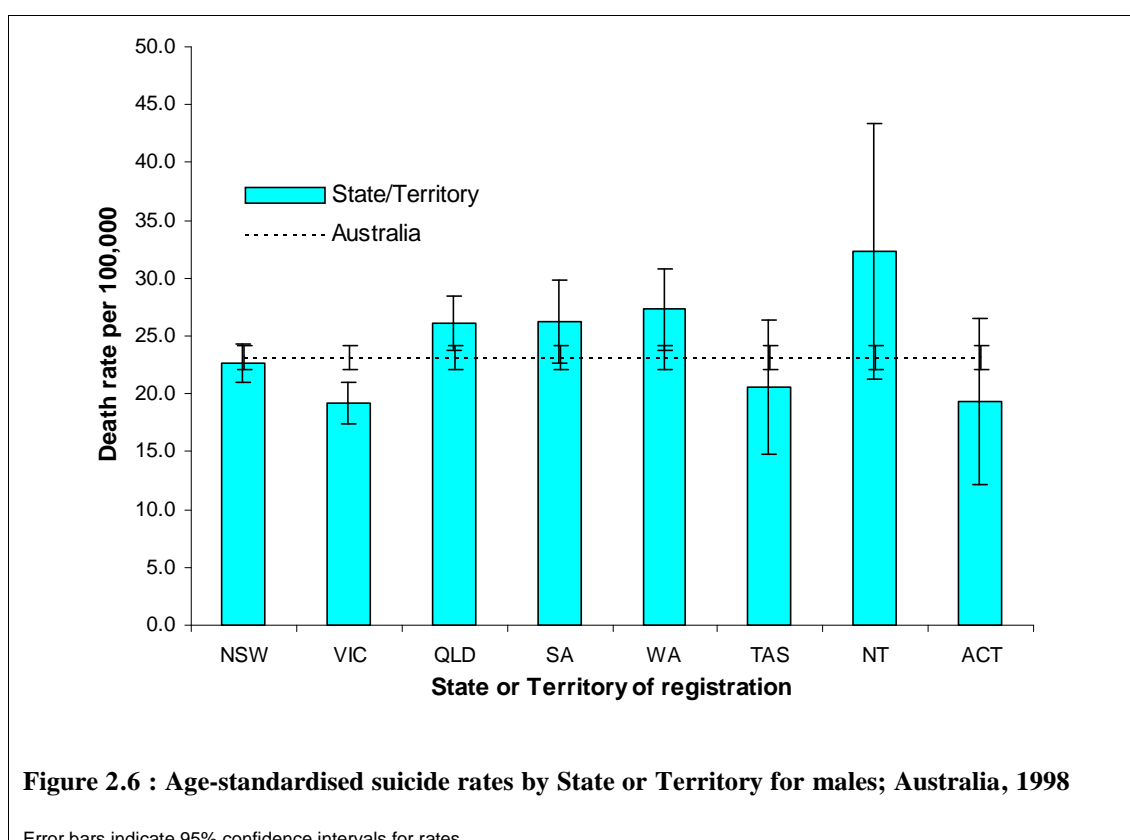
2.3 Data for States and Territories

Age and sex distribution

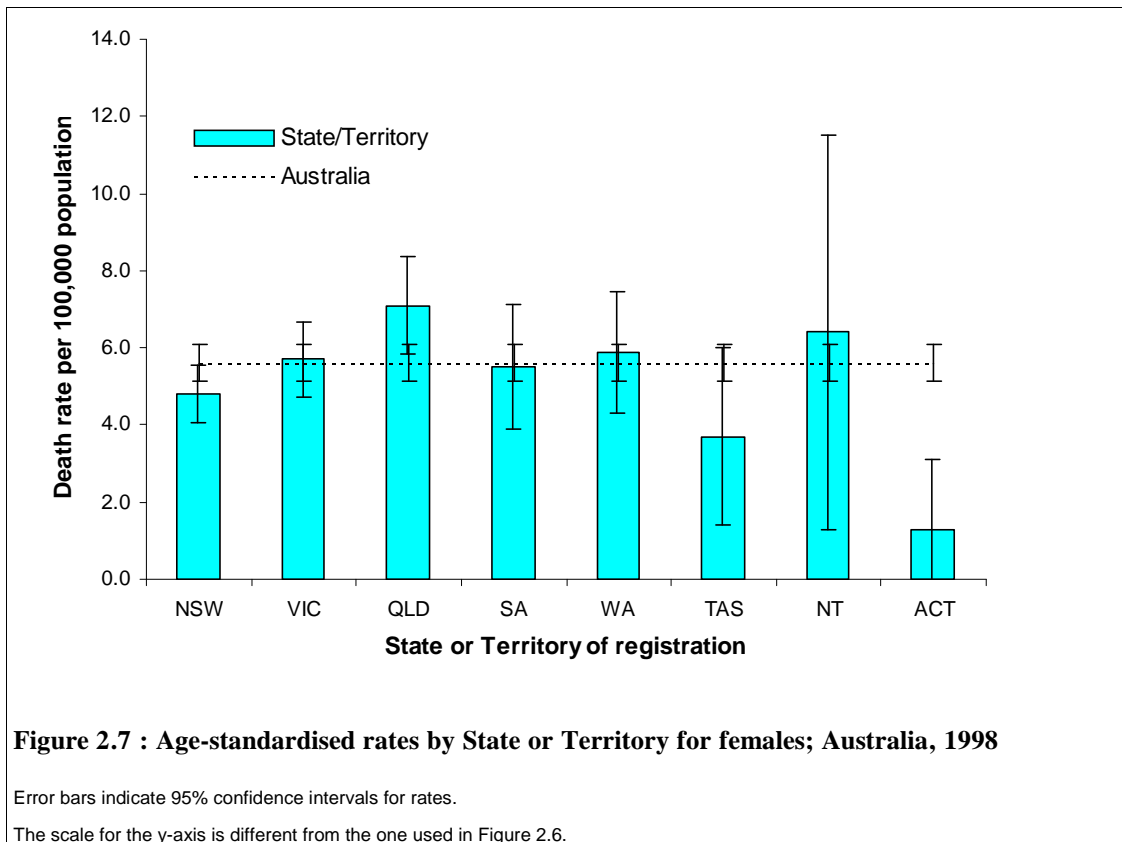
During 1998, the largest number of suicides was registered in NSW (865), followed by Victoria (584). The least number of suicides (30) was registered in the ACT.

Age-standardised rates of suicide varied between States and Territories in 1998. Victoria and ACT (12.4 and 9.9 per 100,000 population, respectively) had suicide rates significantly lower than the national average (14.3 per 100,000), whereas Queensland had a rate that was significantly higher (16.6). Hence the differences between jurisdictions are not very large and do not reach significance (on this criterion) in some other recent years.

Figures 2.6 and 2.7 show the age-standardised rates for males and females for the various States and Territories.



The highest suicide rate among males was seen in Northern Territory at 32.3 per 100,000 population. The lowest rates occurred in Victoria and ACT (19.2 and 19.3 per 100,000 population, respectively). The male suicide rate for Victoria was significantly lower than the national average, but the rate for ACT was not. Northern Territory, Western Australia, South Australia and Queensland had male rates that were higher than the national average, but none of these differed significantly from the national average rate in 1998.



The highest rate of suicide amongst females was seen in Queensland at 7.1 per 100,000 population, followed by Northern Territory and Western Australia at 6.4 and 5.9, respectively. The lowest rate occurred in ACT (1.3 per 100,000 population). This was also the only rate that differed significantly from the national average rate for females. (Please note that the female rates are affected small numbers, e.g. there were only two cases of female suicide in ACT in 1998.)

For NSW, Victoria, Queensland, South Australia and Western Australia, the profiles for age-specific male and female suicide rates were fairly similar to the distribution for the whole of the country, i.e.

- rates were highest for young males aged 20 to 39 years and for older males;
- rates for females were lower than the male rates.

NSW, Western Australia and Victoria showed small peaks in the 65-69 year age group, while South Australia showed a very large peak in this age group (also see Figure 2.1).

The age-specific profiles for Tasmania, NT and ACT were difficult to interpret because of the distortion caused by small numbers.

The overall male to female ratios for the various states seemed to vary between 3:1 (in Victoria) to 5:1 (in NT). In ACT, the male to female ratio was 14:1, but this was constructed from small numbers, i.e. 28 males and 2 females.

Method

Table 2.6 presents the suicide rates for various methods of suicide by State and Territory.

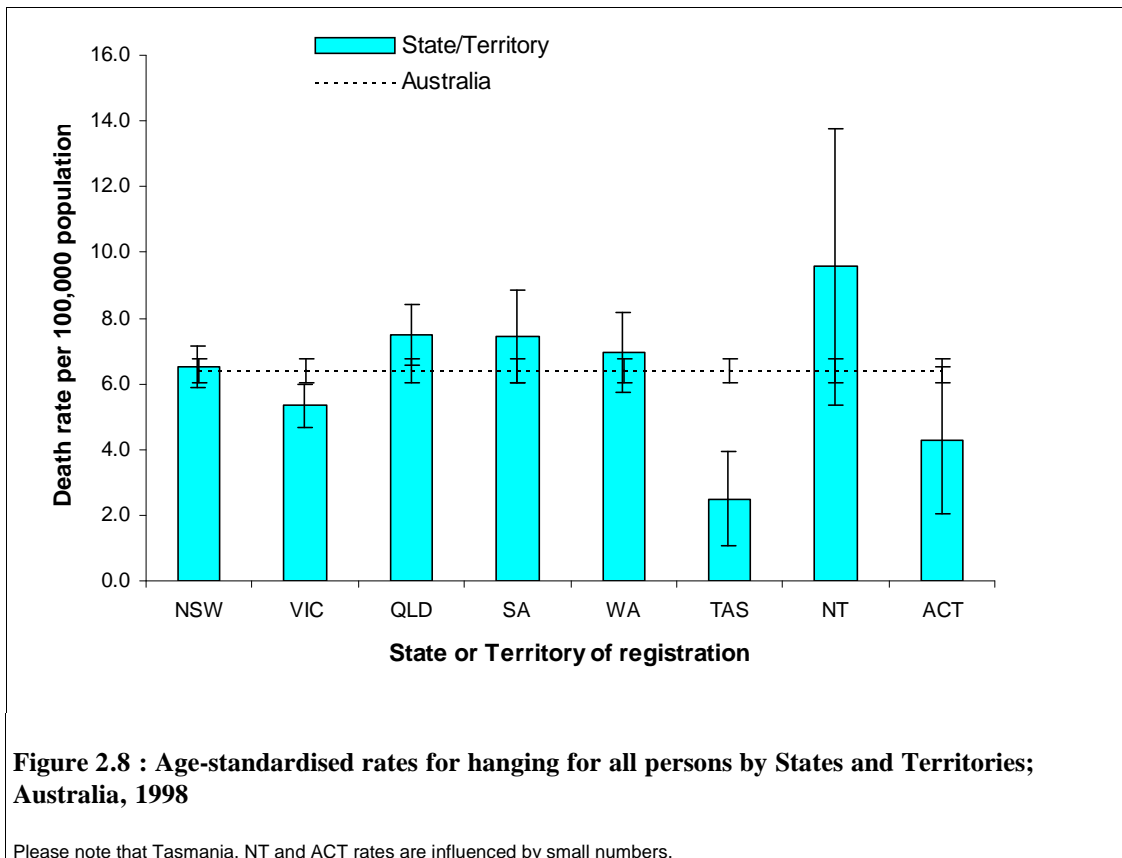
Table 2.6 : Age-standardised suicide rates by method for States and Territories; Persons 1998

METHOD	NSW	VIC	QLD	SA	WA	TAS	NT	ACT
Hanging	6.5	5.3	7.5	7.5	7.0	2.5	9.6	4.3
MV exhaust	2.3	2.6	3.6	4.0	2.9	4.5	2.7	4.0
Firearm	0.9	1.1	1.8	2.0	0.7	2.5	3.2	0.3
Poisoning (solids&liquids)	1.8	1.4	1.9	1.8	1.0	1.5	0.5	0.3
Cutting/piercing	0.9	0.2	0.3	0.3	0.2	0.2	1.4	0.3
Other/unspecified	1.9	1.9	1.7	1.0	3.1	1.0	1.7	0.7

Sections shaded in blue indicate most common method and those shaded in grey the second most common method.

In 1998 in all States and Territories (except Tasmania), hanging had the highest rates of all methods used for suicide. In Tasmania, gassing by motor vehicle exhaust fumes was the most common method, followed by hanging and firearms (Table 2.6). Motor vehicle exhaust gassing had the second highest rates in NSW, Victoria, Queensland and ACT, while firearms was the second most common method in NT. Rates of suicide by firearm ranged from 0.3 per 100,000 population in the ACT to 3.2 per 100,000 in NT, i.e. the rate varied by a factor of 11. In Western Australia Other or unspecified methods were the second most common method.

The highest age-standardised rate for hanging was seen in Northern Territory at 9.6 per 100,000 (Figure 2.8), while the lowest rate was found in Tasmania at 2.5 per 100,000 population. Tasmania had a significantly lower rate of hanging than NSW, Victoria, Queensland, and South Australia (Figure 2.8).



Males of all ages showed a strong preference for hanging as a means of suicide in all states except Tasmania. In this State, there appeared to be a relatively strong preference for motor vehicle exhaust gassing, followed equally by hanging and firearms as a method of suicide.

In most States and Territories, hanging was used particularly among the age group 15 to 39 years but this trend was not seen in Tasmania or the ACT.

The preference for hanging as a means of suicide was also seen among the female population. Marked differences occurred between States and Territories with a much higher age standardised rate in NT. However, this rate was influenced by the small number of suicides registered there.

3 Trends in suicide deaths

(See appendix 8.1, Tables 8.7 - 8.19)

This section deals with trends in suicide deaths over time. We present data on suicide in relation to other causes of death, then look at suicide deaths in more detail. Data are presented by various age and gender groupings and we also describe trends in regard to methods used in committing suicide. The latter part of this section deals with trends for the various States and Territories. Where available, data going back to 1921 have been presented. Otherwise data from 1979 up to 1998 are shown.

3.1 General trends; 1921-1998

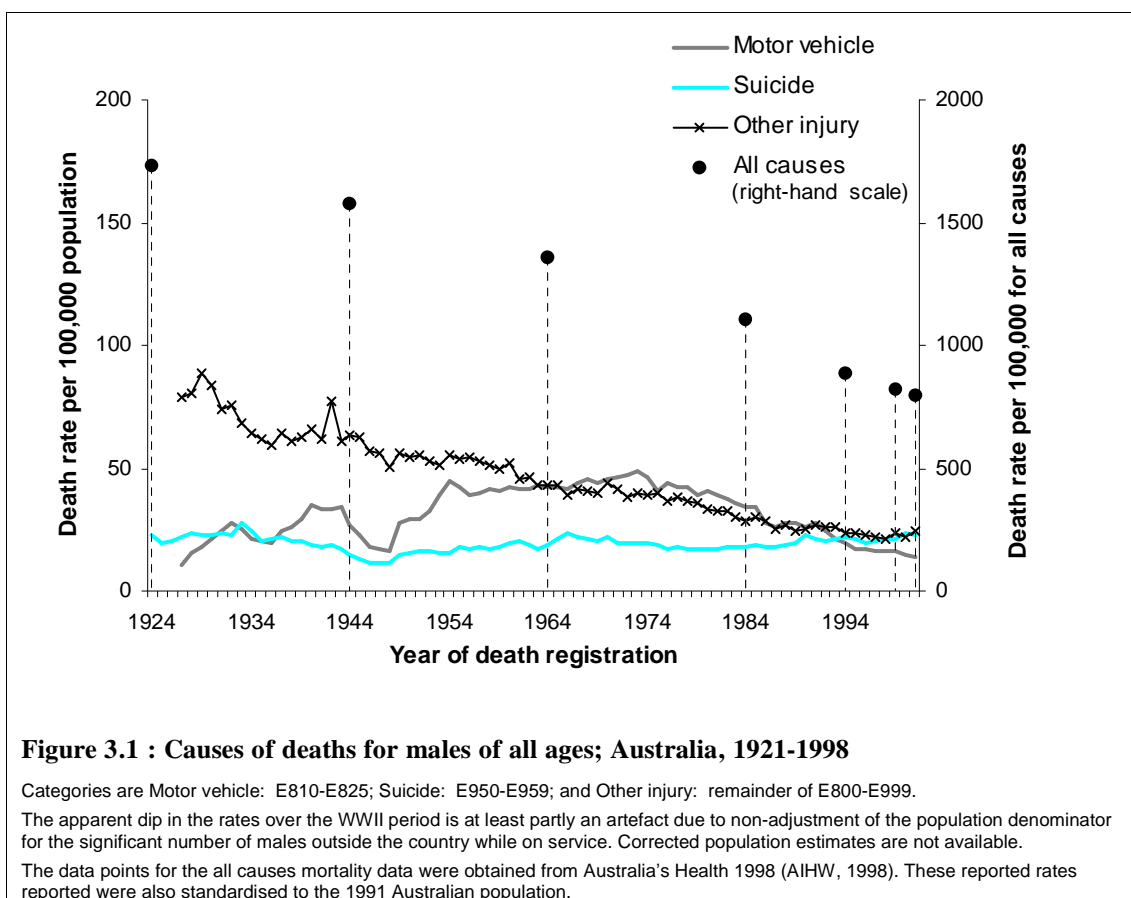
The trends for age-standardised all-ages rates for male deaths due to suicide, motor vehicle crashes, other 'external causes'³ of death, as well as the rates for all causes of mortality can be seen in Figure 3.1.

All-ages rates of male suicide fluctuated during the twentieth Century. No strong long-term trend is obvious, but it does seem as if the all-ages suicide rate has been increasing slightly since the early 1990s (Figure 3.1).

Mortality from all causes has declined considerably, as did mortality due to road crashes (especially since about 1970) and deaths due to all other external causes (i.e. those other than suicide and road crashes). This resulted in suicide becoming relatively more prominent as a cause of death in the latter part of the Century.

This, together with the slight increase in male suicide rates during the last decade, were two factors prompting the recent increase in public health attention directed to suicide and its prevention.

³ 'External causes' are factors that result in injury and poisoning.



Since 1990, suicide has been a more common cause of male death than road crashes (Figure 3.1). In 1997 the male suicide rate also exceeded the rate of mortality due to all external causes other than road crashes.

Female suicide rates are much lower than those for males. Figure 3.2 shows the trends for age-standardised all-ages rates for female deaths due to suicide, motor vehicle crashes, other ‘external causes’⁴ of death, as well as the rates for all causes of mortality between 1921 and 1998.

The trends for females rates are less dramatic, but declines in rates of other injury deaths, as well as mortality due to road crashes can be seen (Figure 3.2). As for males, the all-ages suicide rate for females have remained fairly stable over time. This seems to have the same effect as for males, namely that suicide is also becoming a more prominent cause of death for females, although it is on a smaller scale than for males.

In 1997 and 1998 the female rate for suicides and deaths due to motor vehicle crashes were equal, whereas in previous years, the suicide rate was lower than the rate for motor vehicle crashes. The suicide rate was still lower than the mortality rate due to injuries resulting from causes other than road crashes and suicide (Figure 3.2).

⁴ ‘External causes’ are factors that result in injury and poisoning.

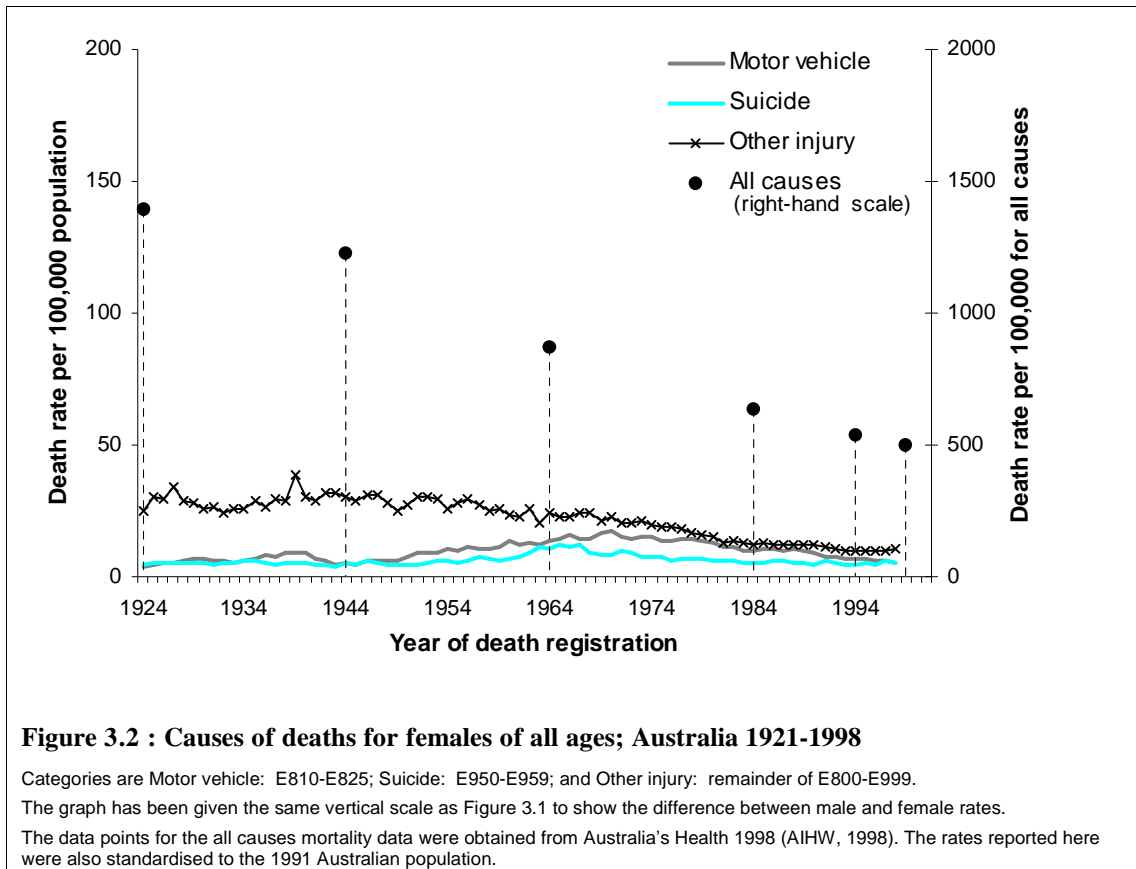
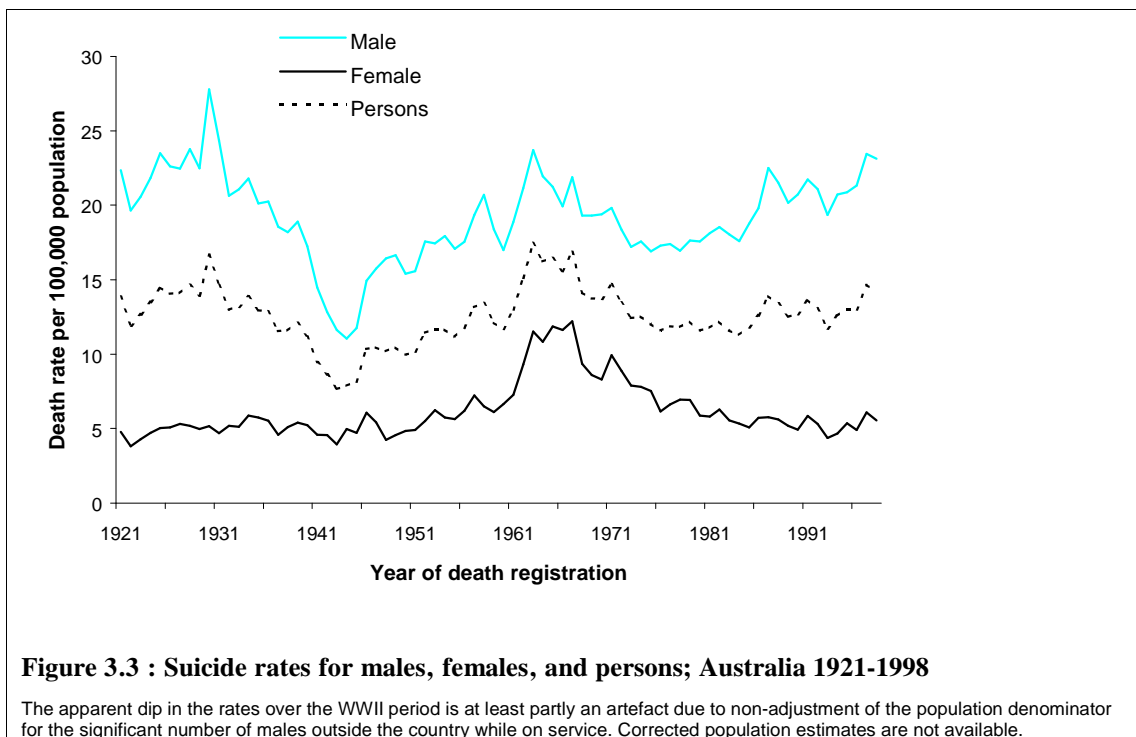


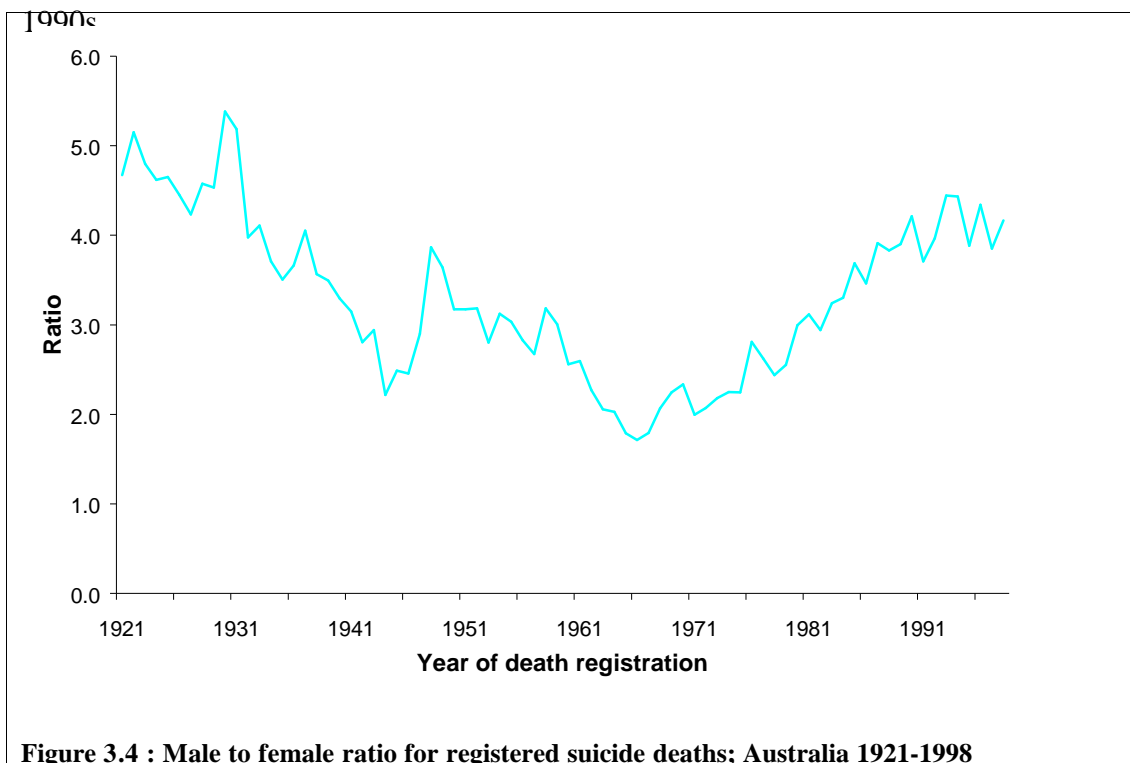
Figure 3.3 combines the male and female suicide rates and is presented on a different scale for its y-axis to show the trends in regard to suicide more clearly.



Although the all-ages suicide rates between 1921 and 1998 remained fairly stable for both males and females, there was a notable increase for both sexes during the 1960s (Figure 3.3). This corresponded with an increase in suicide by poisoning by solid and liquid substances, at a time when barbiturates, as well as other toxic sedatives and tranquillisers were available and widely used (Harrison and Moller 1998). These increases were followed by decreases in the all-ages rates for both sexes, but the all-ages suicide rate for males has tended to rise in recent years (Figure 3.3).

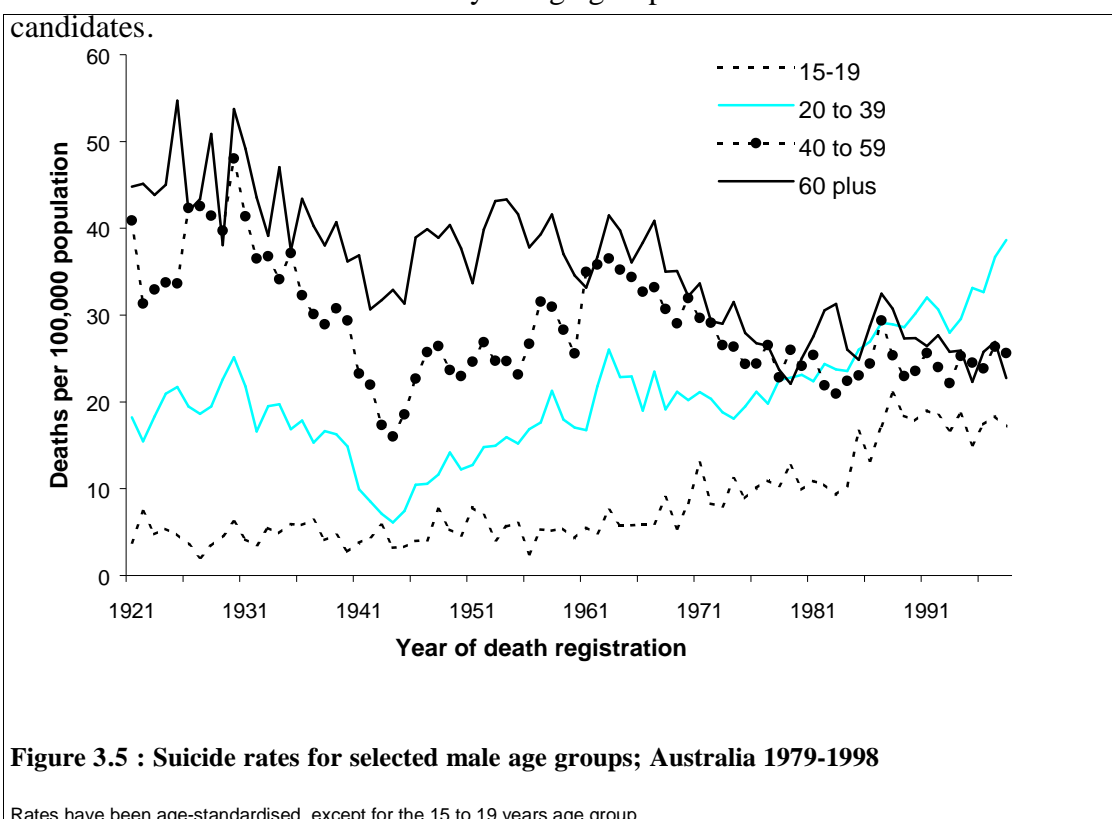
Moreover, there was a marked increase in suicide rates from 1996 to 1997, i.e. the overall rate of suicide for persons of all ages rose 14% from 1996 to 1997. This increase is based on the numbers of suicides registered in each year, but when data on the numbers of suicide occurrences are considered, it is clear that the true rise between 1996 and 1997 was 9% (see Section 3.1.3 for a more detailed discussion). The all-ages suicide rate in 1998 was marginally below that in 1997. The all-ages standardised rates of male suicide registered in 1997 and 1998 were the highest since 1963 and, before that, 1931.

Figure 3.4 shows more clearly the divergence between male and female rates which emerged during the 1980s with male rates rising while female rates did not. The ratio of male to female suicide rates rose from 2:1 in the 1950s to about 4:1 in the



3.2 Age group and sex distribution; 1979-1998

As stated above, the all-ages suicide rates for males have been increasing over recent years. Figure 3.5 shows age-standardised male suicide rates for various age groups. Much attention has been paid to youth suicide. The age ranges 15-24 years or 15-29 years are commonly chosen to represent 'youth'. However, rates of completed suicide show a medium to long-term change in patterns for various age groups. If recent profiles are used as the basis for selecting an age group on which to focus, then 20-29 or 20-34 or even 20-39 year age groups would be more suitable



Rates for males aged 20 to 39 years increased consistently since the late 1970s and continued to rise in 1998. Since the early 1990s the rates for this age group has been the highest for all male age groups.

Rates for younger males (i.e. 15 to 19 years) have been lower than the rates for other age groups. There was a rapid rise in rates at ages 15 to 19 years in the 1980s, but since the early 1990s, the rates for this age group has been fairly stable.

The rates for older males (i.e. those aged 40 to 59 years) in recent years do not show a strong trend, whereas the rates at older ages (i.e. those aged 60 years or more) showed a steady decline over time, especially in the 1970s. The rates for males aged 40 to 59 years and the rates for those older than 60 were very similar over recent years.

Figure 3.5 shows how suicide rates have varied by age-group and period for males in Australia. Another perspective is to consider rates by age-group for men born in a particular period (i.e. birth cohorts). Figure 3.6 shows suicide rates for cohorts of males born in five-year periods centred on the years shown in the legend. The chart shows rates for each of these birth cohorts by age at death.

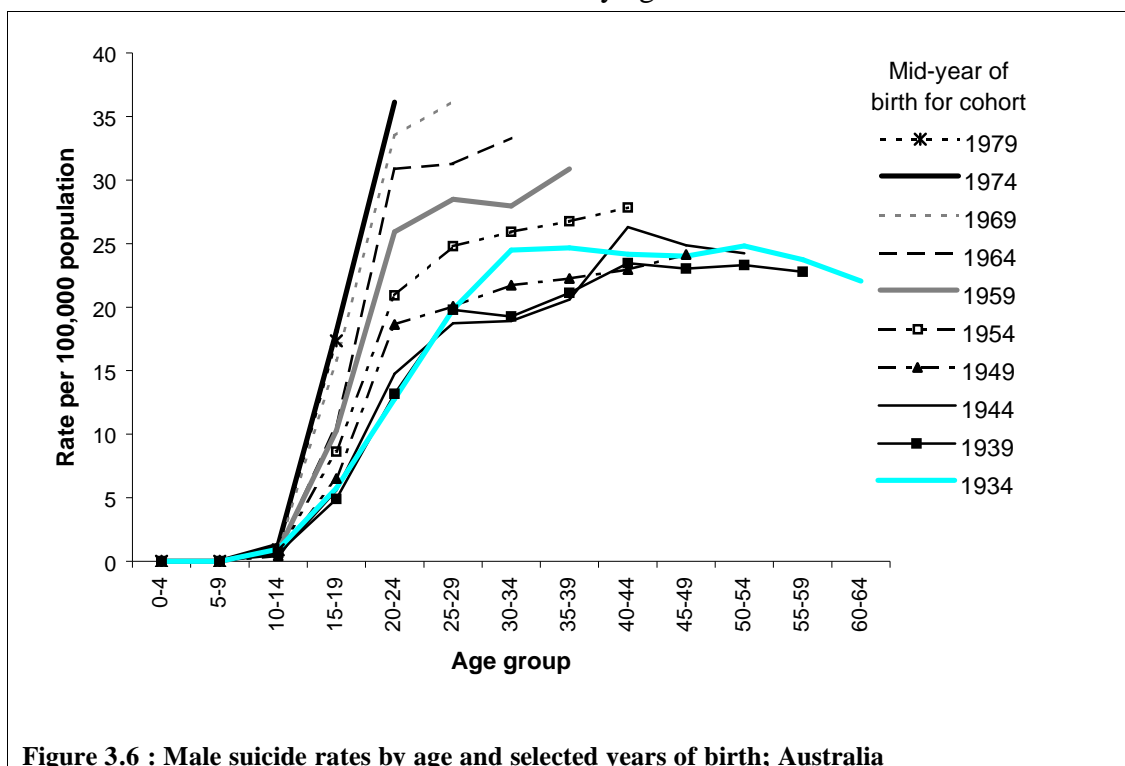
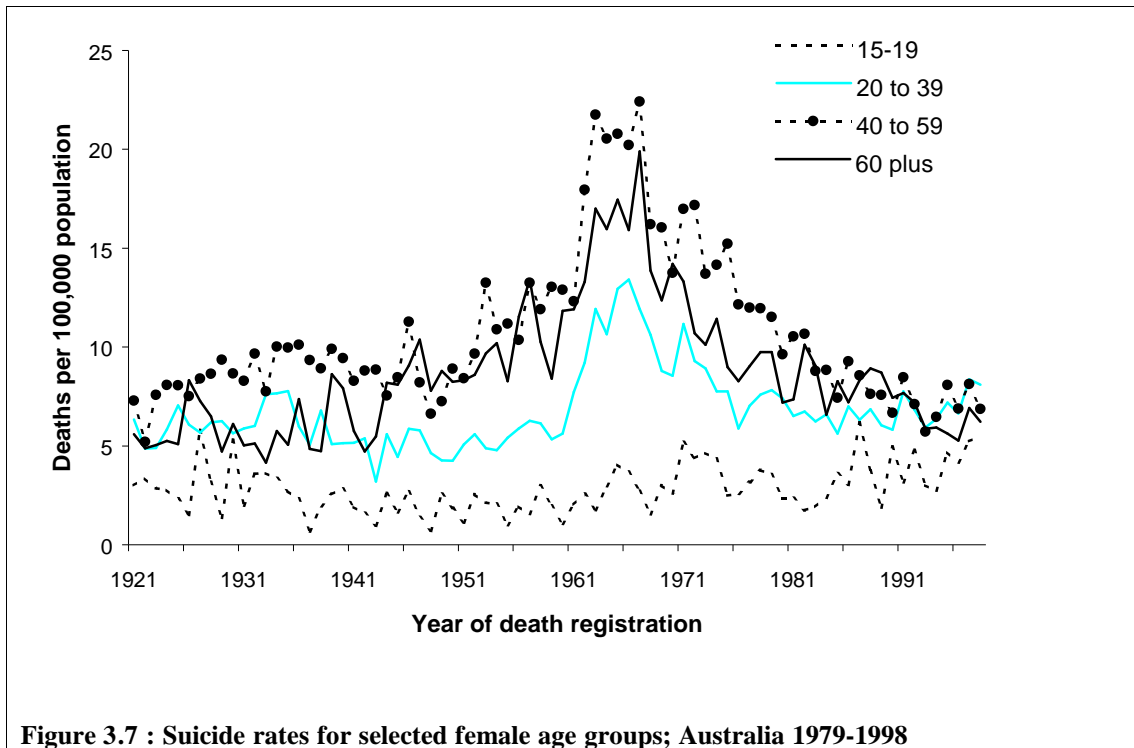


Figure 3.6 : Male suicide rates by age and selected years of birth; Australia

All cohorts share the pattern of having low rates in childhood, rising thereafter. They differ in that this rise has become larger and steeper for younger cohorts shown. The chart also suggests that the suicide rates reached by birth cohorts of males in early adult ages persist as they grow older. It remains to be seen whether this occurs for the younger cohorts for whom rates reached at early adult ages are higher than for previous cohorts.

Suicide data for a number of countries have been studied for birth cohort effects, with variable findings. An early Australian study confirmed Canadian and American findings of rising rates at young ages, but did not find higher age-specific rates for younger cohorts (Goldney and Katsikitis 1983). The more recent data shown in Figure 3.6 suggest that this is now so for males.

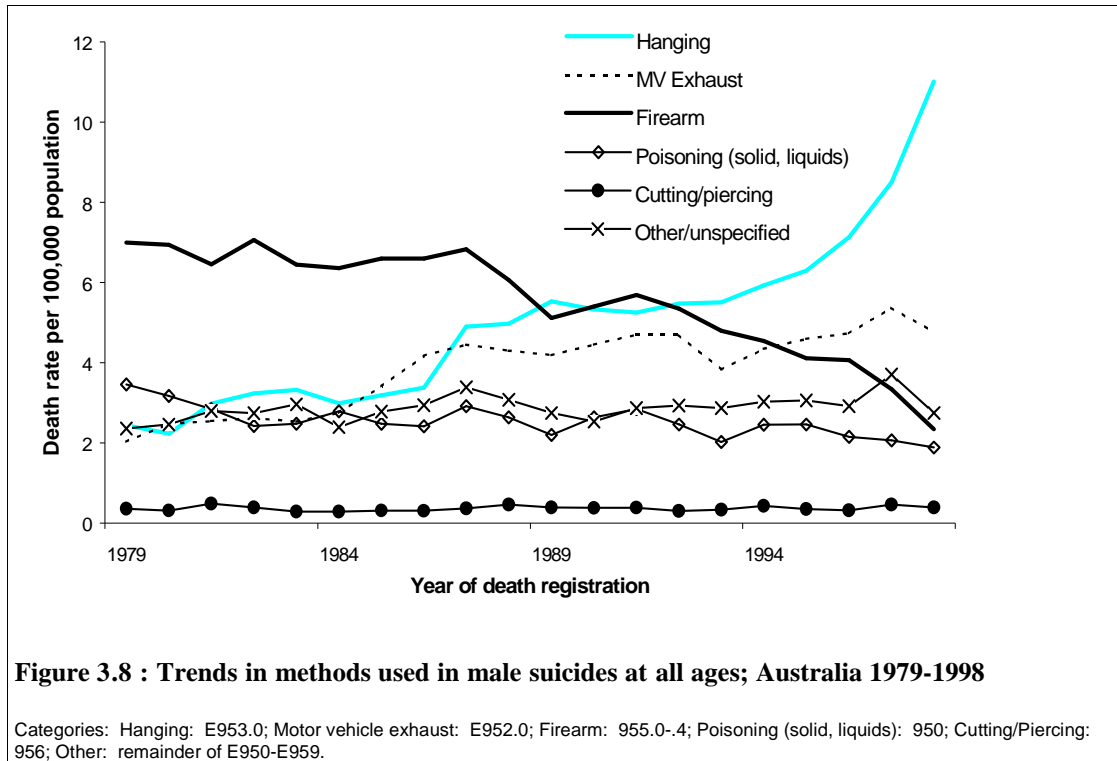
For females, recent suicide rates show less variation with age (Figure 3.7), even though the peaks in the 1960s (associated with the wide availability and use of barbiturates, other toxic sedatives and tranquillisers) are apparent for females aged 20 years or more.



In 1998, the rate for females aged 20 to 39 years were higher than any other age group. Also, the rate for this age group has shown an increase over the last few years (Figure 3.7). Further data points are, however, necessary to determine whether this is a true increase or just a chance fluctuation in this age-specific rate. This is also true for the 15 to 19 year age group.

3.3 Method of suicide; 1979-1998

Trends differ markedly between methods used in committing suicide, as well as between males and females (Figures 3.8 and 3.9).



The largest recent change for males is the rise in suicide by hanging which has been the most common means of suicide by males since 1992. Moreover, the rate of male suicide by hanging more than quadrupled in the period shown (Figure 3.8).

The rate of suicide by means of a firearm decreased, especially after 1988. The annual rate varied from 6.1 to 7.1 per 100,000 males in the decade ending in 1988. The rate in 1998 (2.3 per 100,000) was about one-third the earlier rate.

Suicide by motor vehicle exhaust gas increased roughly in parallel with the decline in firearm cases. Motor vehicle exhaust gassings became the second commonest means of suicide by males in 1995.

The rise in the rate for the composite category for suicide by 'other and unspecified' means was mainly due to increases in falls and jumps (from high structures), threats to breathing (other than hanging) and being struck by moving objects (e.g. vehicles). Rates of suicide by other methods remained fairly stable over time (e.g. electricity, fire/flames, drowning).

The suicide rates for females are much lower than for males and smaller changes have occurred in the methods of suicide used by females in this period (Figure 3.9).

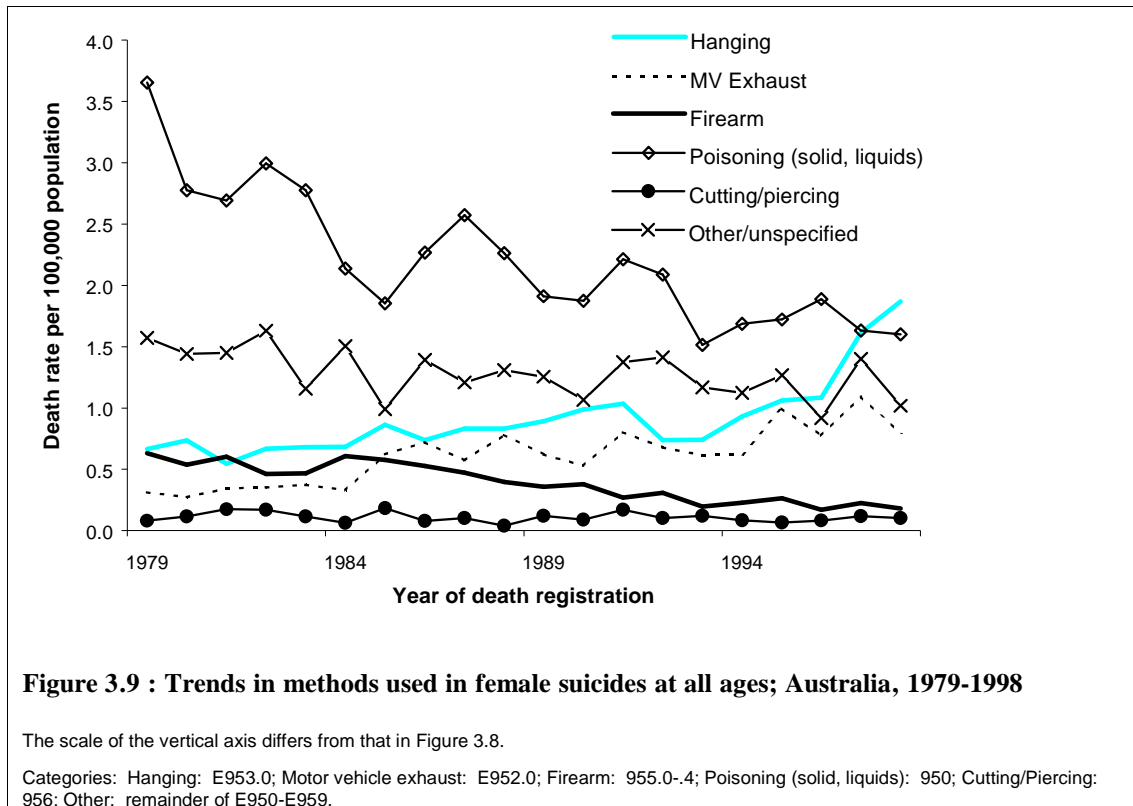


Figure 3.9 shows the tail end of the epidemic of suicide by means of medications that peaked in the 1960s (also see Figure 3.3) - the rate for poisoning by solid or liquid substances in 1979 was 3.7 per 100,000 population, but in 1998 it was 1.6 per 100,000 population.

The rate of suicide by hanging rose for females, though much less than for males. Hanging comprised 10% of all female suicide in 1979, rising to 32% in 1998. Hanging became the second most common means of suicide by women in 1996, and in 1997 and 1998 it was more common than suicide by poisoning.

The rate of female suicide by motor vehicle exhaust fumes has also tended to rise in recent years, while the rate for firearms declined.

3.3.1 Hanging

Suicide by hanging has increased greatly, both in absolute terms and as a proportion of all suicides. While an increase has been noted previously, it warrants further attention because the latest mortality data show that the increase has continued and accelerated. Suicide by hanging [E953.0] rose from 13% of all suicides in 1979 to 47% in 1998.

For each cohort of males born since about 1950, hanging suicide rates have risen faster and faster and further than for earlier cohorts (Figure 3.10). The rate at ages 20 to 29 years was about twice as high for men born in the 1970s as for those born in the 1960s.

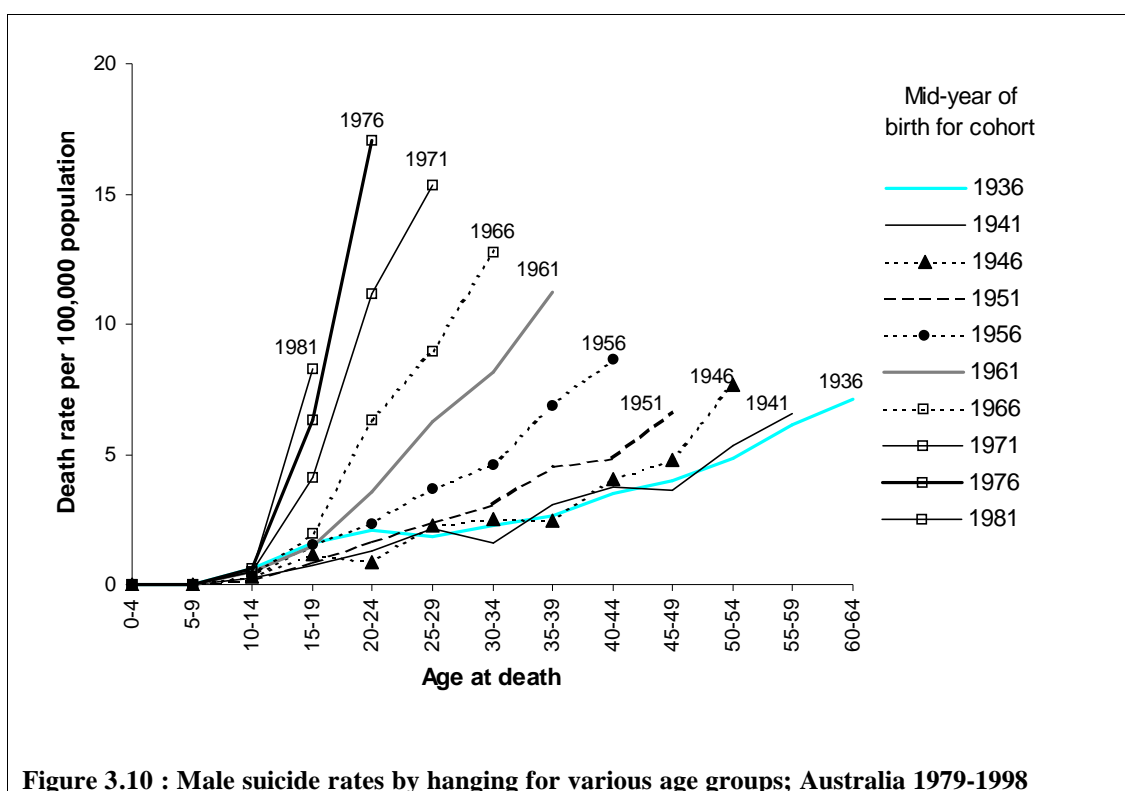


Figure 3.10 : Male suicide rates by hanging for various age groups; Australia 1979-1998

For males, the increase in hanging is most marked at ages 20 to 39 years (Figure 3.11), but it can also be seen for males aged 15 to 19 years, as well as for males aged 40 years or more. Overall rates of suicide by all methods other than hanging are declining for all three male age groups presented in Figure 3.11.

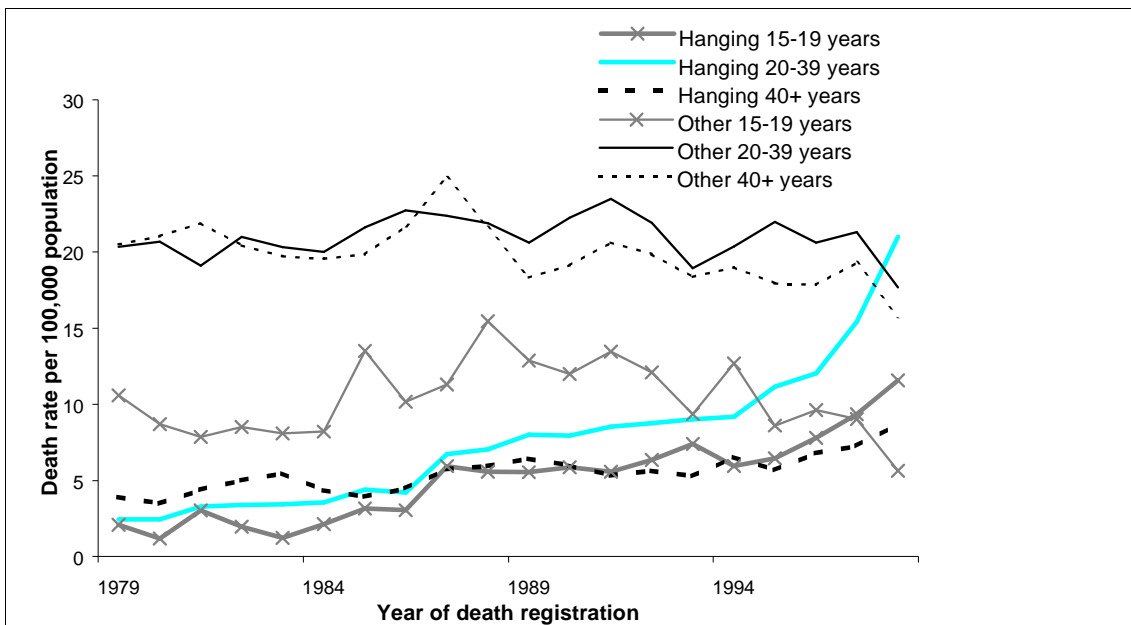


Figure 3.11 : Male suicide by hanging and all other means, by selected age groups; Australia 1979-1998

Categories: Hanging: E953.0; Other: remainder of E950-E959.

Hanging is much more common for males than females, but even for females there are modest increases in hanging suicides for those aged 20 years or more, as well as a steeper increase for young females aged 15 to 19 years. The overall rates for suicide by all methods other than hanging are static for females (Figure 3.12).

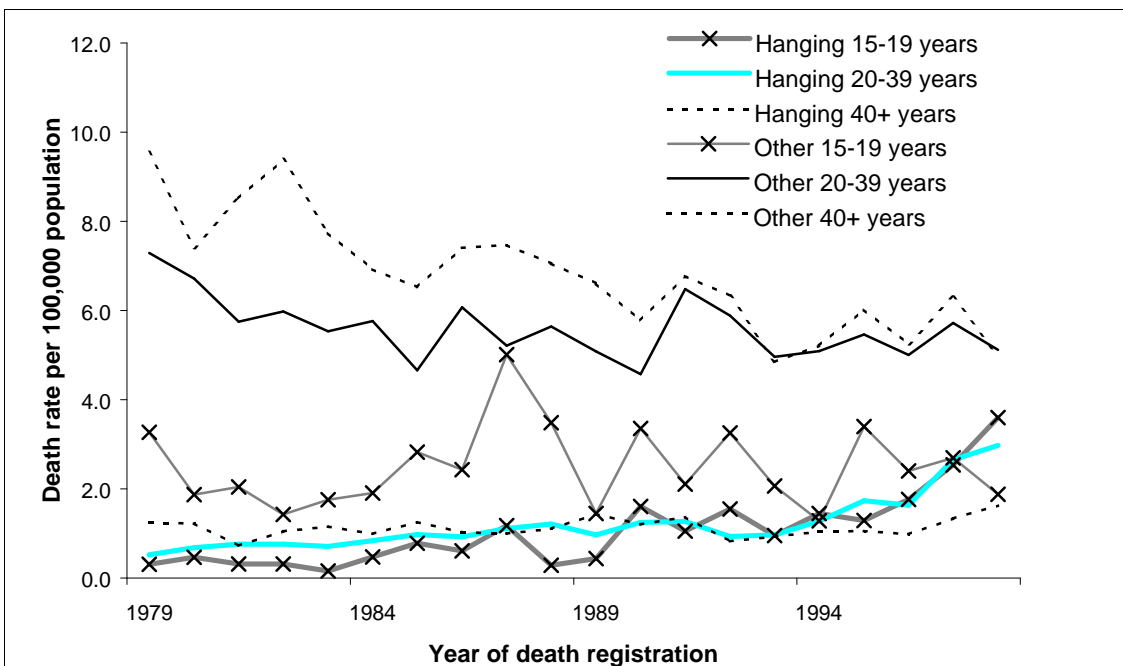


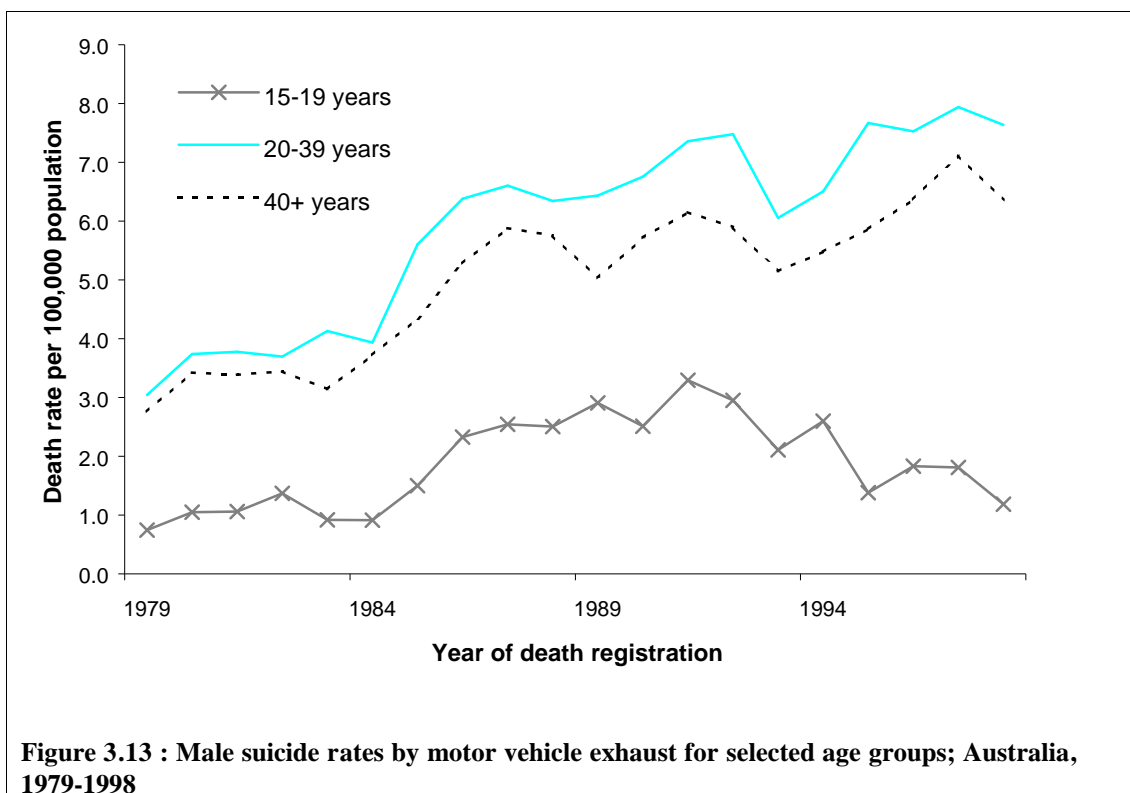
Figure 3.12 : Female suicide by hanging and all other means, by selected age groups; Australia 1979-1998

Categories: Hanging: E953.0; Other: remainder of E950-E959.

The scale of the vertical axis differs from that in Figure 3.8.

3.3.2 Motor vehicle exhaust

The rates of suicides by motor vehicle exhaust gassing have increased for males aged 20 years or more, whereas the rates for young males aged 15 to 19 years seemed to be fairly static over time (Figure 3.13). This may reflect less accessibility of motor vehicles for younger males than older males.



For females there seems to be a modest increase in the suicide rate by motor vehicle exhaust gassing over time (see Figure 3.9). In 1979 there were 23 suicides in females of all ages due to motor vehicle exhaust gassings. The number in 1998 was 77, after a peak of 104 in 1997. Small numbers limit further analysis by age groups for females and no clear patterns could be discerned for female age groups.

3.3.3 Suicide by firearm

Figure 3.14 shows the age-standardised suicide rates for various male age groups for suicide deaths due to firearms.

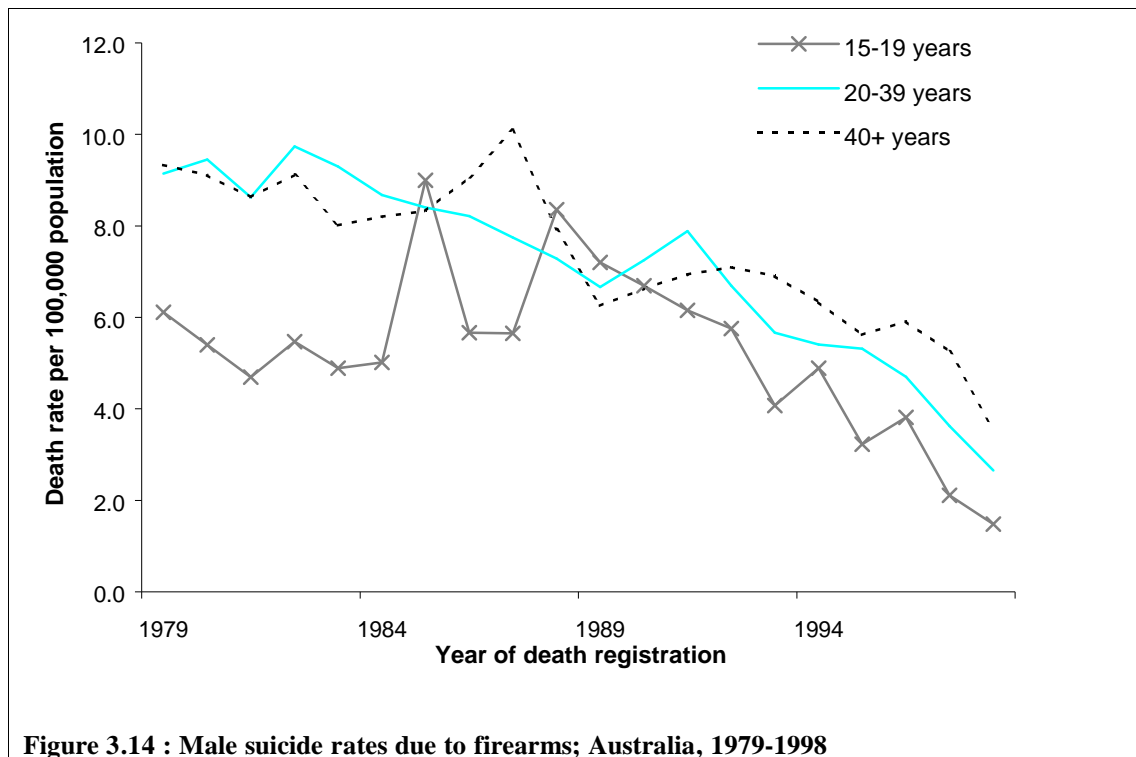


Figure 3.14 : Male suicide rates due to firearms; Australia, 1979-1998

Between 1979 and 1998, the suicide rates for males declined for various age groups (Figure 3.14). The decline was most apparent for men aged 20-39 years (-75%) and young males aged 15-19 years (-72%), but was also seen for older men (-37%).

Suicide rates for females also declined for the various age groups (not shown here). The decline was again most apparent at ages 20-39 years (-82%) and for those aged 15-19 years (-67%), but also declined at ages 40+ years (-44%).

It is problematic to interpret data on the types of guns used in firearm suicide (Figure 3.15). There appears to be a modest increase in the proportion of rifles used, as well as small increases in the proportion of shotguns and handguns used. It is uncertain whether these increases represent true changes or whether they reflect the decrease in cases where the gun type was unknown. When the number of 'unknown' guns are removed from the calculation, it is clear that the proportions of suicide where shotguns, hunting rifles, and military firearms were used, remained stable. Only the proportion of handguns used increased very slightly.

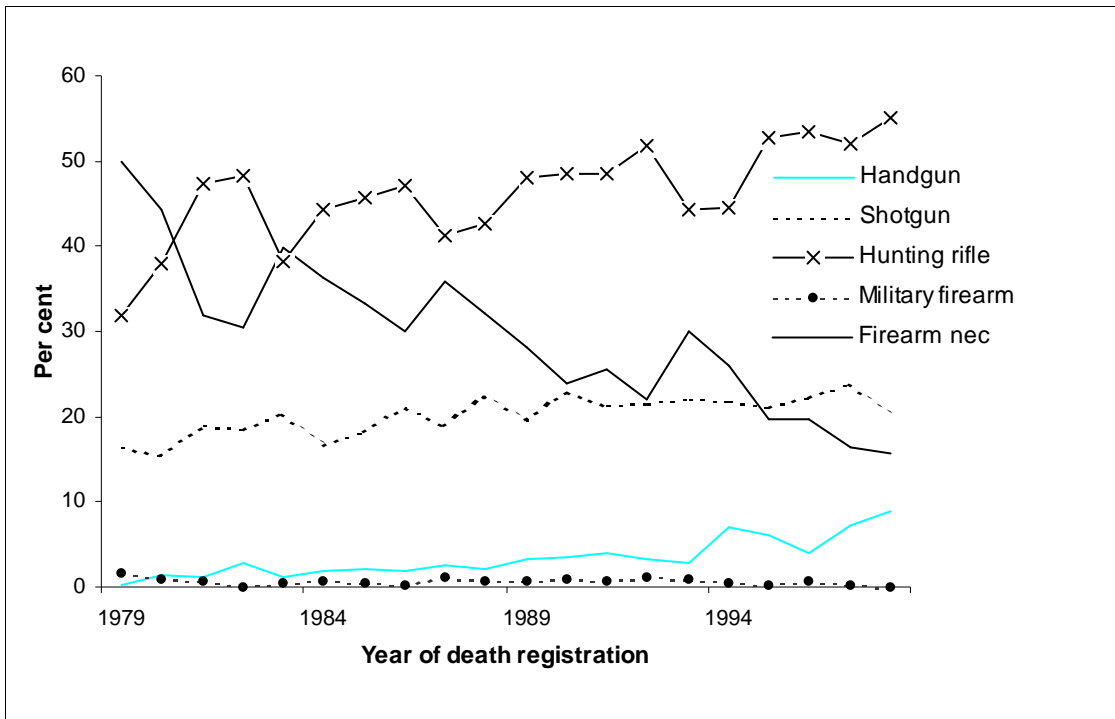


Figure 3.15 : Proportions of guns used in suicide; Australia, 1979-1998

Figure 3.16 shows age-standardised rates of suicide by firearms for males, females and persons from 1964 to 1998. The all-ages rates varied little until the late 1980s, since when they have declined substantially for both males and females. The rate of decline appears to have accelerated in the most recent years shown.

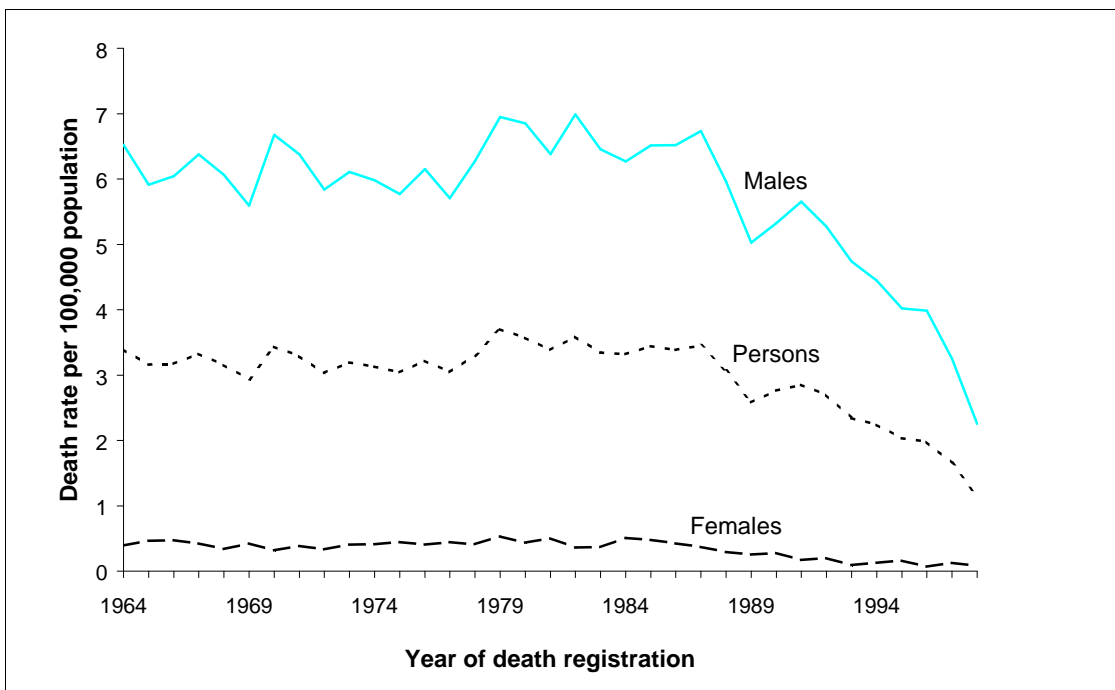


Figure 3.16 : Suicide by firearms* 1964 to 1998, males, females and persons; Australia

* Case inclusion: ICD-7: E976; ICD-8 and 9: E955.

The reasons for the decline in suicide by shooting are not known with any more certainty than the reasons for most other changes in the method-specific suicide rates (e.g. the even larger rise in rates of suicide by hanging). Obvious questions are whether the decline in suicide by firearms is due to measures to control firearms (or related events and publicity), and whether hanging and suicide by means of motor vehicle exhaust have substituted for suicide by firearms. These are complex questions to which only partial and tentative answers are available.

Mouzos (1999) sought to assess the impact of the Nationwide Agreement in Firearms that was introduced early in 1997 after the mass shooting at Port Arthur in 1996. Considering data to the end of 1997, she noted a decline in firearm-related suicides and in the percentage of robberies involving the use of a firearm. Mouzos concluded that “Explanations for these declines are not yet available, and it will be some time before the impact of the uniform legislation can be thoroughly assessed.” As shown by Figure 3.16, the decline in mortality due to suicide by firearms began well before the Port Arthur shootings and the subsequent regulatory response. The decline commenced at about the time of earlier mass shootings (notably Queen Street and Hoddle Street in 1987). The National Committee on Violence was established soon after these events, and recommended additional controls on firearms. However, few of these recommendations were adopted (Mouzos 1999). The rate of decline was rapid in the last two years charted, suggesting the possibility that events following the Port Arthur shootings might have accelerated the pre-existing downward trend. Other factors could have caused the change, and a causal connection has not been established.

If further evidence and analysis leads to a conclusion that these events have reduced suicide by firearms then it will not necessarily be clear how they did so. The events following the Port Arthur shootings were complex, including intense media coverage, community outrage, and a ‘ten point package’ of regulatory responses (Chapman 1998). Much attention was focused on automatic and semi-automatic weapons (e.g. bans and the ‘buy-back’ scheme), while non-automatic weapons are much more common and are the usual types used for suicide. Evaluating firearm controls introduced in Queensland in the early 1990s, Cantor and Slater found reductions in rates of firearm suicide in urban areas (not in rural areas), particularly for young men. They came to a tentative conclusion that “specific firearm control legislation, including a 28-day ‘cooling-off’ period before firearm purchase, may reduce suicide rates”. (Cantor and Slater 1995)

Underlying and preceding the strong downward trend during the 1990s in the all-ages rate of male suicide by shooting in Australia were two marked changes in age-specific patterns of suicide by shooting.

The first was the decline of shooting as a means of suicide for older men. For almost all of the sixty years until the 1980s, shooting was the commonest means of suicide for men in Australia. Rates were generally above 8 per 100,000 per year at ages over 40 years, and higher rates were seen for older men. Rates of suicide by shooting dropped in the late 1980s and 1990s, particularly for middle-aged men. More recently rates have also dropped for older men.

The second change was the rise and fall of shooting as a means of suicide for young men. Rates for men aged in their 20s were generally below 8 per 100,000 per year for several decades until the 1970s. Rates in this age group, and especially at ages 20 to 24 years, then rose sharply until the early 1980s, before declining during the late 1980s and 1990s. In recent years, rates of suicide by shooting at these ages have been lower than before the rise began.

From the perspective of birth cohorts, three distinct phases can be distinguished. Men born from about 1930 to 1950 had fairly constant rates of shooting suicide at ages 20 to 24 years and older (about 6 to 8 per 100,000 population per year). Their rates have declined a little in recent years. Men born from about 1950 to 1970 had higher rates of suicide by shooting in early adulthood (up to 14 per 100,000 population per year at ages 20 to 24 years) which have dropped sharply as these cohorts have grown older. The youngest cohort to have reached their mid-20s did not have this peak in suicide by shooting.

‘Substitution’ refers to the possibility that if one means of suicide is made unavailable or becomes unappealing then another means will be found. The decline in the all-ages rate of suicide by firearms roughly coincided with the rise in suicide by hanging and the smaller rise in suicide by car exhaust poisoning. However, differences in size, timing and relationships to age and period of birth of the changes in rates for these methods suggest the involvement of more than one underlying process, and substitution does not readily explain all of the changes. Thus, for example, while part of the recent rise in suicide by hanging might in some sense be ‘substituting’ for the reduction in suicide by shooting, available data do not exclude the possibility that changes in rates of suicide by these methods are at least partly independent processes.

3.3.4 Suicide by other methods

Poisonings by solid or liquid substances

The time period between 1979 and 1998 represents the tail end of the epidemic of suicide by means of medications, specifically including barbiturates, that occurred in the 1960s. Suicide rates by poisonings due to solid or liquid substances continued to decline for various male and female age groups (Figures 3.17 and 3.18).

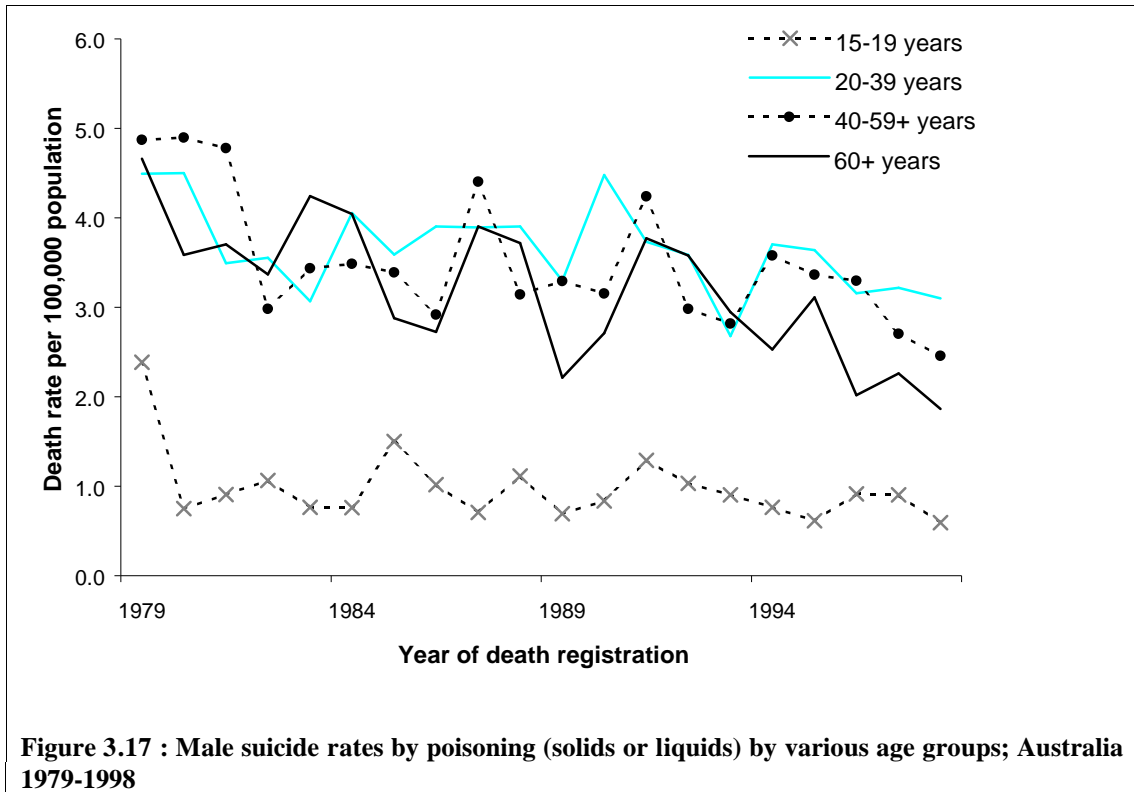


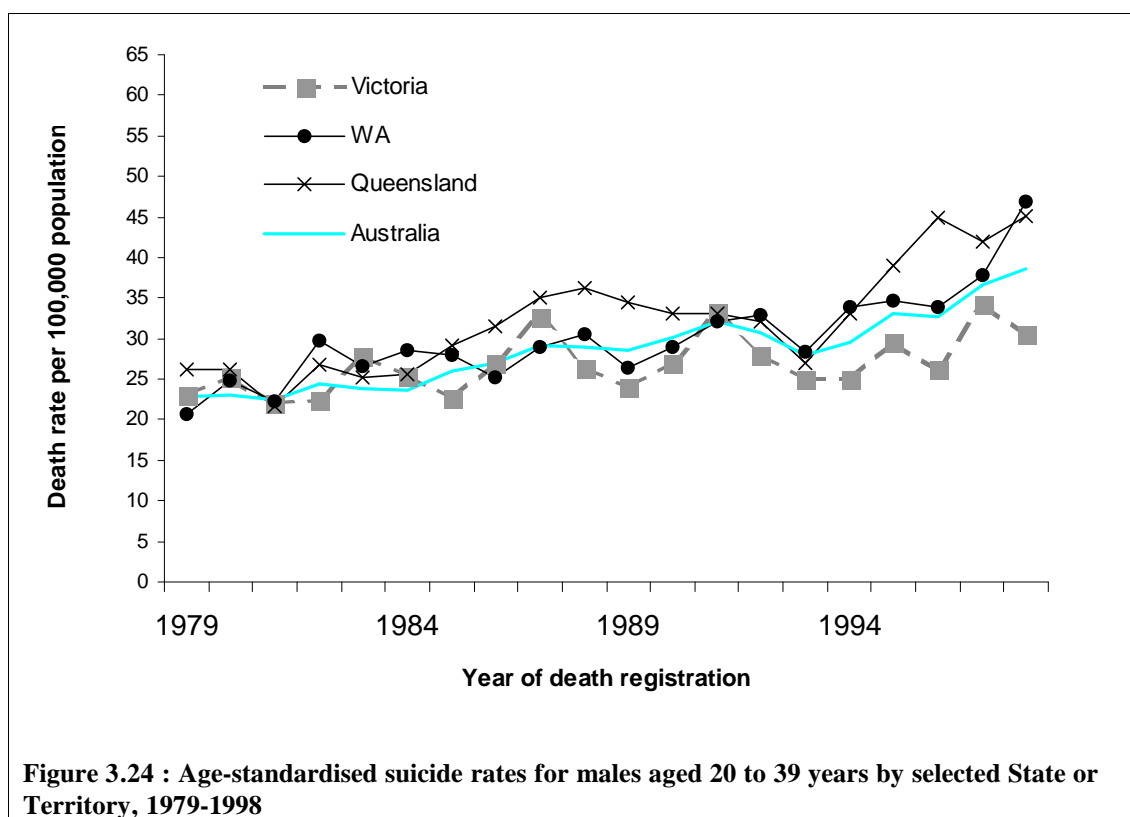
Figure 3.17 : Male suicide rates by poisoning (solids or liquids) by various age groups; Australia 1979-1998

The three previous graphs are cluttered due to the large amount of information displayed. Subsequent graphs incorporate only selected States. Territories are therefore often excluded from some charts because of the distortion by small numbers. (Please refer to Appendices for data on States and Territories.)

For Australia overall the highest suicide rates in recent years occurred in males aged 20-39 years. Comparison of States and Territories reveals that the rates for men aged 20-39 rose in all States and Territories.

The rise was steepest for Queensland and the Northern Territory, followed by Western Australia. These three jurisdictions have exhibited the highest rates of suicide in males aged 20-39 since 1995 (Figure 3.24).

Victoria and ACT showed the least steep rise in rates for males aged 20-39 years. On average, these two jurisdictions exhibited the lowest suicide rates for males between 1979 and 1998. Rates in NSW and South Australia have been similar to the national average rate. Tasmania showed an increase in this rate in the early 1990s, but it has declined since 1994.



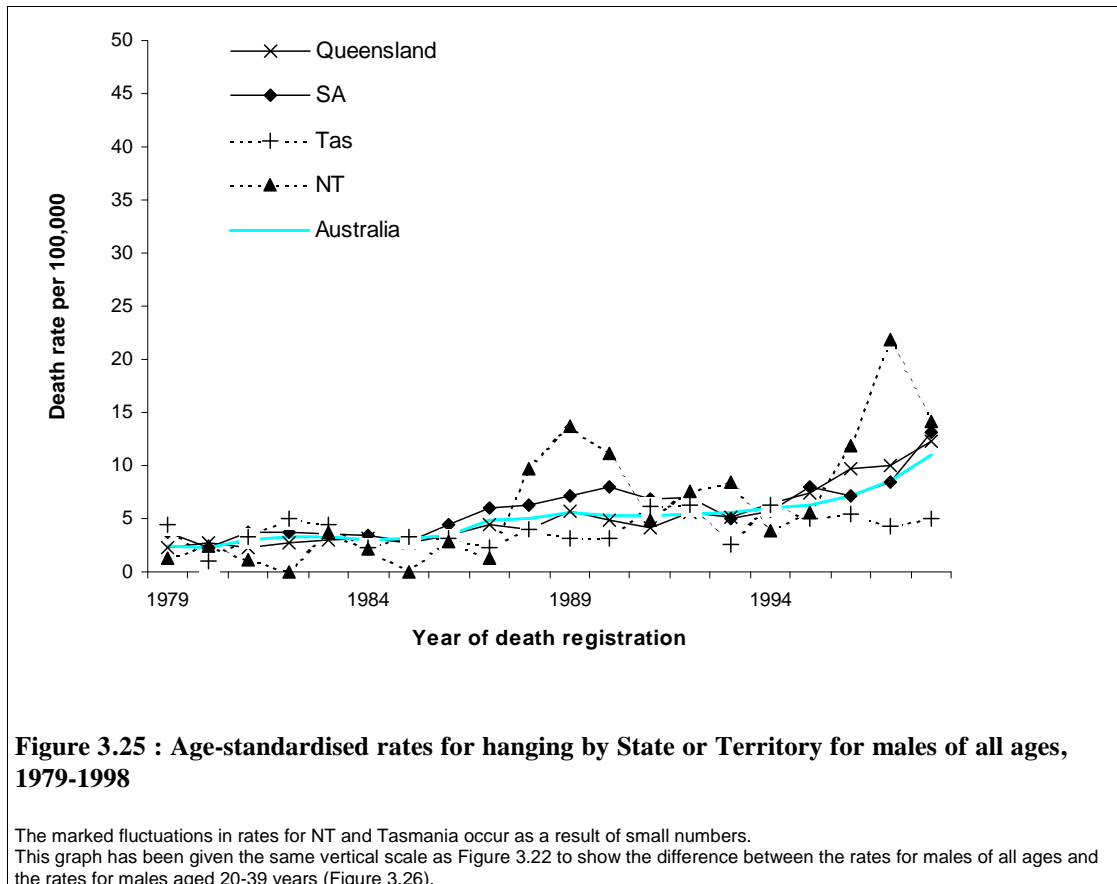
The rates for females aged 20-39 years have shown marked fluctuations. However, small numbers complicate interpretation and the data are not shown here. It does not appear as if the increase among males aged 20 to 39 years applies to females in this age group.

3.4.2 Method

The methods used to commit suicide have been examined for differences between the States and Territories, with a focus upon the most commonly used methods, in particular suicide by hanging, gassing by motor vehicle exhaust, firearms and poisoning by solids or liquids.

Hanging

Since 1979, there has been an overall increase in the rate of suicide by hanging for males in all States and Territories (Figure 3.25). This trend has been particularly marked since 1995, and has been most notable in the Northern Territory, followed by South Australia and Queensland. The smallest change in rates has occurred in Tasmania. The rates for other jurisdictions exhibited profiles very similar to the national average.



Males aged 20 to 39 years in particular demonstrate the marked increase in hanging over time, but, as for suicides of all causes, relatively low rates occurred among Tasmanian men in recent years. The Northern Territory, Western Australia and South Australia exhibit higher rates than the national average for hanging for males in the 20 to 39 year age group (Figure 3.26). The Northern Territory has exhibited the greatest increase in rate of hangings over the 20-year period, but it should be noted that the rate relates to small numbers.

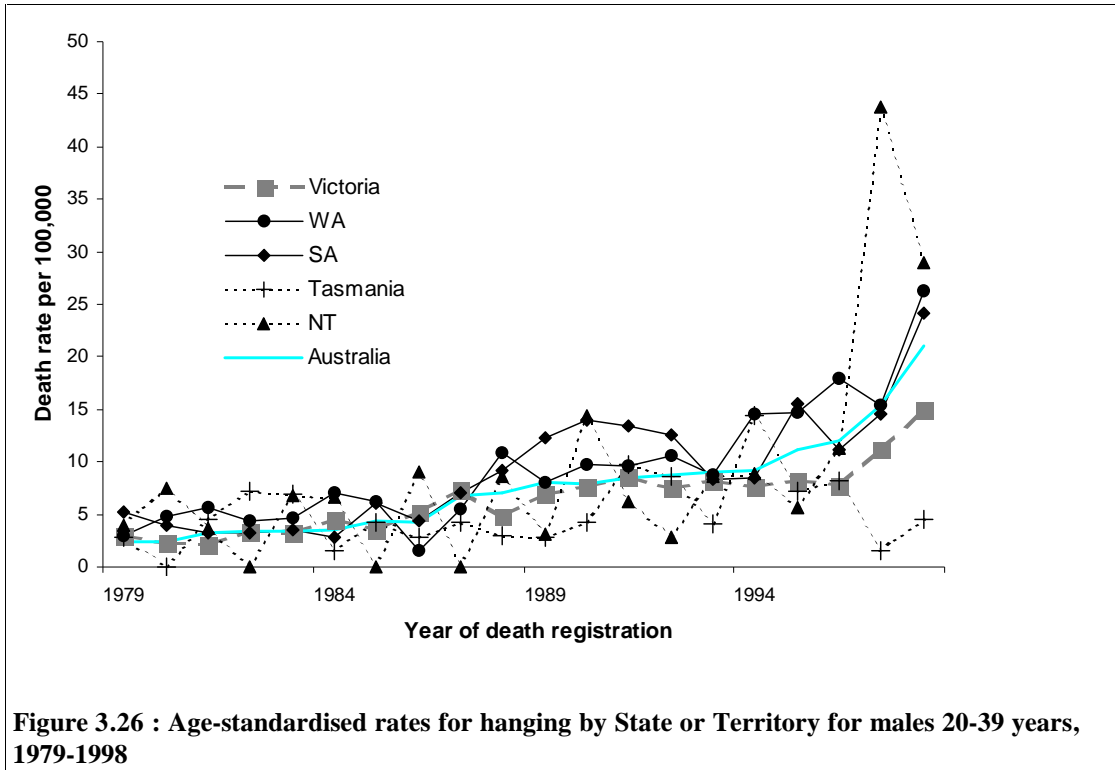


Figure 3.26 : Age-standardised rates for hanging by State or Territory for males 20-39 years, 1979-1998

For females, marked fluctuations because of small numbers in the ACT, Northern Territory and Tasmania complicate interpretation of trends in these jurisdictions. In the remaining States, suicide rates for females due to hanging have increased, especially since 1995 (Figure 3.27).

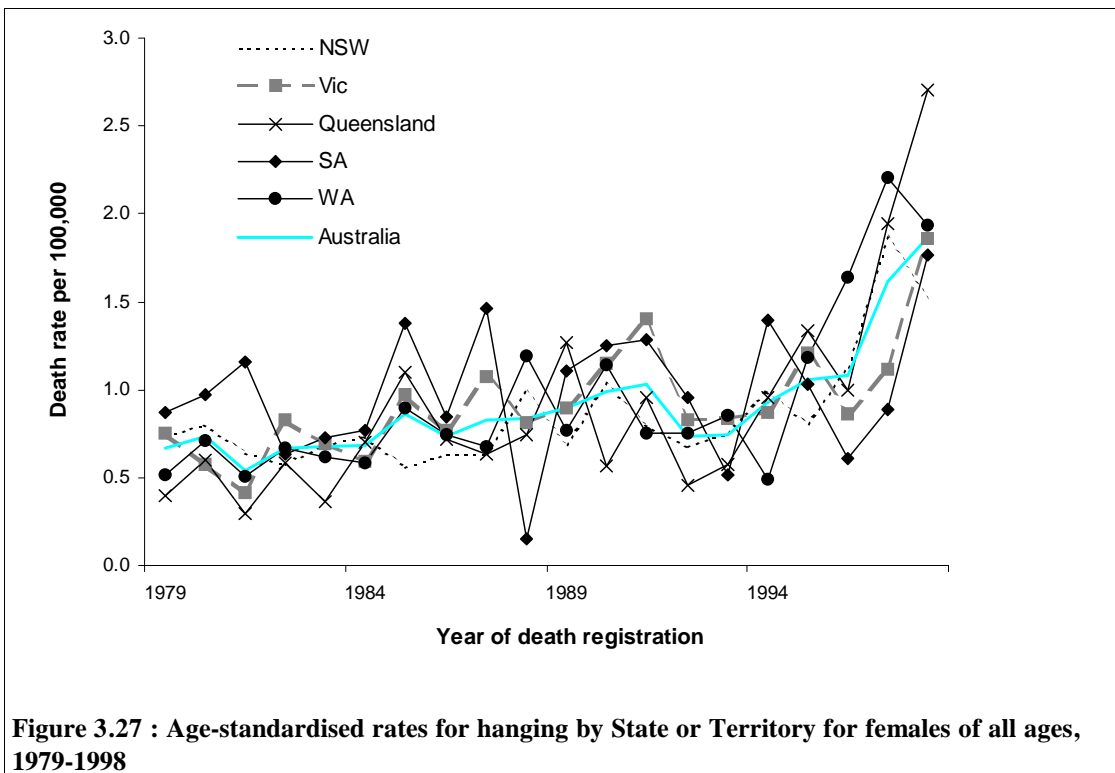


Figure 3.27 : Age-standardised rates for hanging by State or Territory for females of all ages, 1979-1998

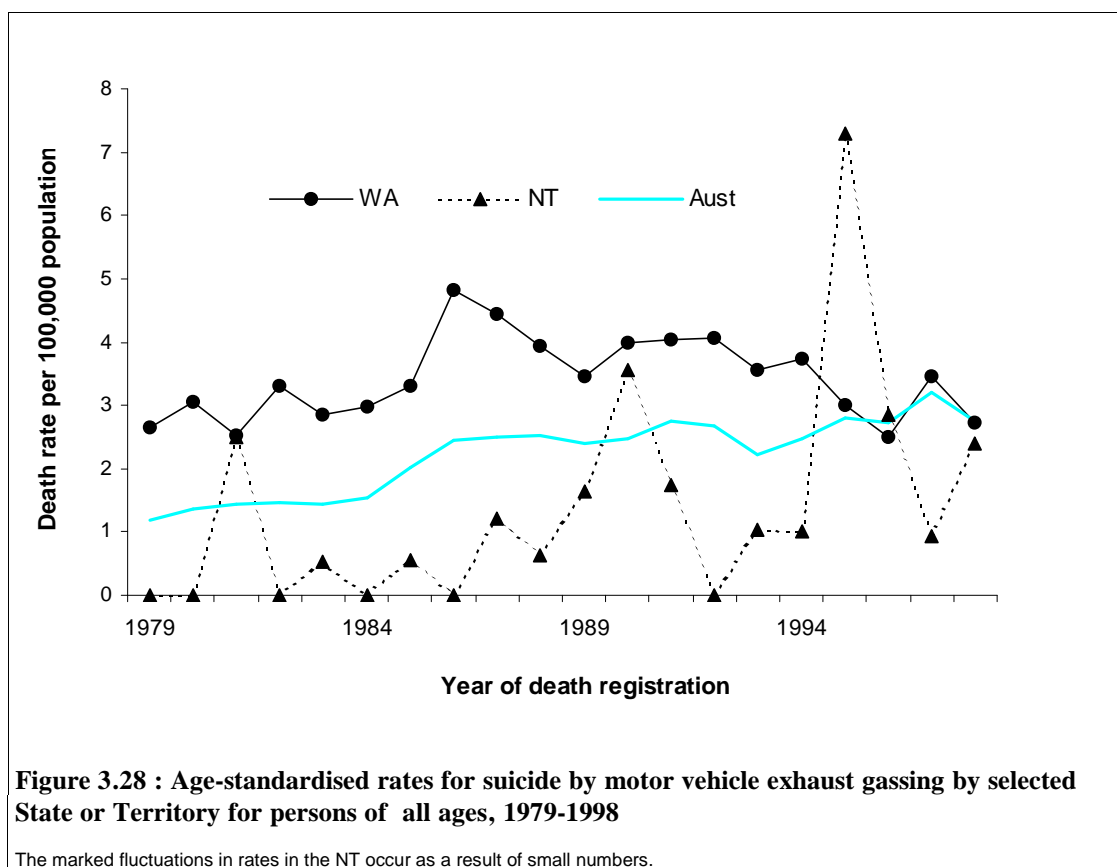
The rate of hanging is not as markedly raised in the 20-39 year old females when compared to other female age groups and are therefore not shown here.

Motor Vehicle Exhaust

Nationally there has been a slight trend towards increased rates of suicide by motor vehicle exhaust gassing. All States and Territories display this trend apart from Western Australia.

Western Australia has displayed the highest rates for suicide by motor vehicle exhaust overall during the period 1979 to 1998, but the rate has remained fairly stable and has not shown the increase seen nationally.

The Northern Territory has had the lowest rates of suicide by this method. Figure 3.28 shows the variation between the Northern Territory, Western Australia and Australia overall. The rates for the remaining States were aligned with the overall Australian rates.



Firearms

For most States and Territories, suicide rates by firearm were similar to the national average. All States and Territories showed decreasing age-standardised rates for suicide by firearms between 1979 and 1998. The Northern Territory, Tasmania and Queensland had consistently higher rates than the remaining States and Territories, but since the mid-1990s these rates have decreased to rates similar to those of the other jurisdictions.

The age-standardised rate for Queensland decreased rather sharply from 1992. Cantor and Slater (1995) came to a cautious conclusion that new firearm control legislation, which came into effect at the start of 1992, may have reduced suicide rates in that State.

A dramatic fall in the rates of suicide by firearms was seen in Tasmania during the period 1994 to 1996 (Figure 3.29).

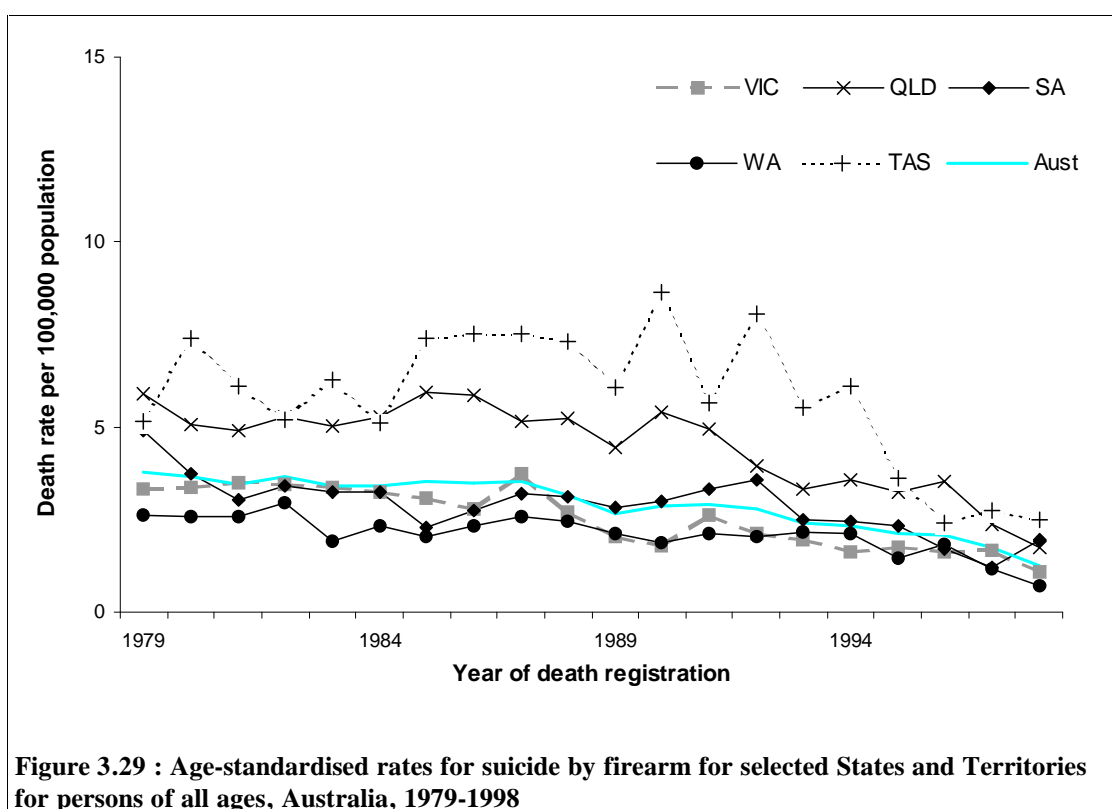


Figure 3.29 : Age-standardised rates for suicide by firearm for selected States and Territories for persons of all ages, Australia, 1979-1998

The rates for the ACT showed year to year fluctuations because of the small numbers involved, whereas the rates for South Australia and Western Australia were slightly lower than the national rates throughout the period, and followed the downwards trend.

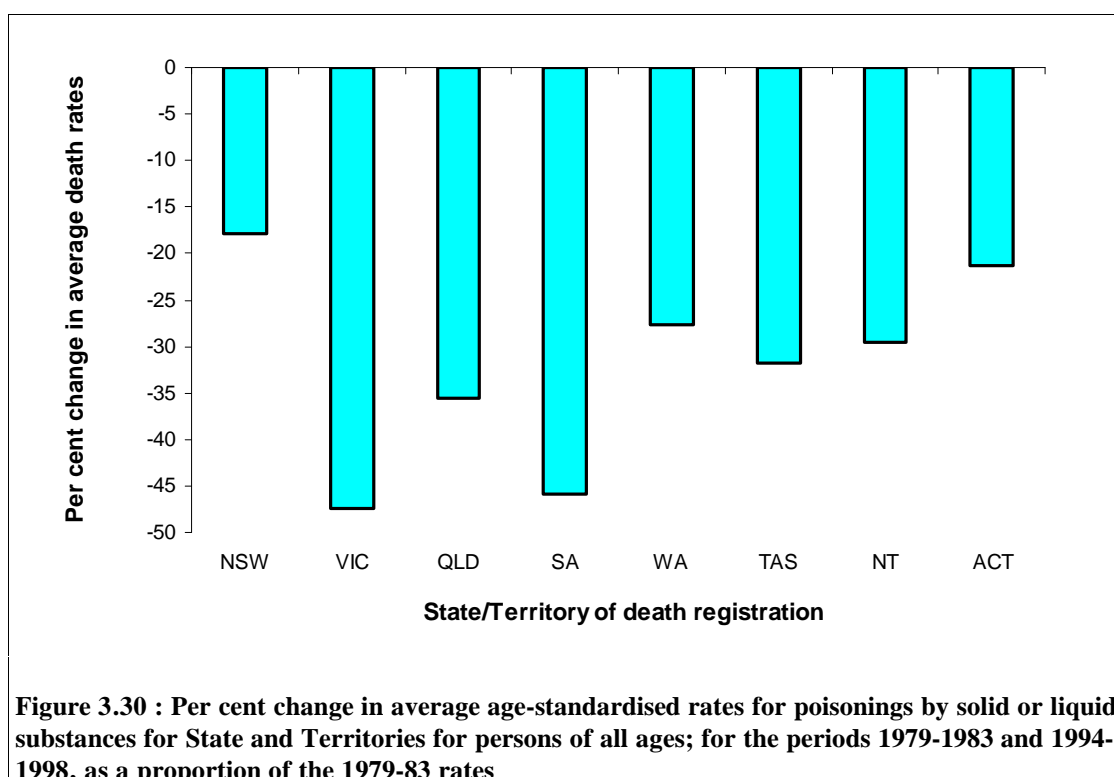
Poisonings by solid or liquid substances

In Australia, suicide rates through poisonings by solid or liquid substances have been decreasing since 1979 for both males and females.

Queensland has shown higher rates than the national average, but the rates for this State are decreasing. The profiles for other jurisdictions are also decreasing and are in close alignment with the national average.

The Northern Territory has generally shown rates lower than the national average, and rates are also decreasing for this jurisdiction.

To highlight the changes in average rates of suicide by poisoning over time for the years 1994-98 compared to 1979-83, the percentage change for each State and Territory is displayed in Figure 3.30. Victoria and South Australia have shown the largest decreases in average rates of suicide due to poisoning.



3.4.3 Variation in State/Territory contributions to national change

As reported in Section 3.1 there was an increase of 9% in the number of suicide occurrences between 1996 and 1997. This large increase mainly occurred in NSW and Victoria. In the following year case numbers did not change much in these two States, but Queensland, South Australia and Western Australia showed notable increases (Table 3.1 and Figure 3.31). The table and the figure present 'years to October' in order to reduce the effect of the non-availability of data on deaths registered after the end of 1998. (See Section 4.2.2)

Table 3.1 : Suicide case numbers by jurisdiction of registration and date of occurrence (12-month periods ending October)

12 months ending October	Jurisdiction in which death was registered								Australia
	NSW	VIC	QLD	SA	WA	TAS	NT	ACT	
1995	777	548	488	195	212	69	22	34	2,345
1996	799	504	536	180	229	57	37	33	2,375
1997	908	594	517	200	233	57	37	40	2,586
1998	914	600	585	238	280	56	37	31	2,741

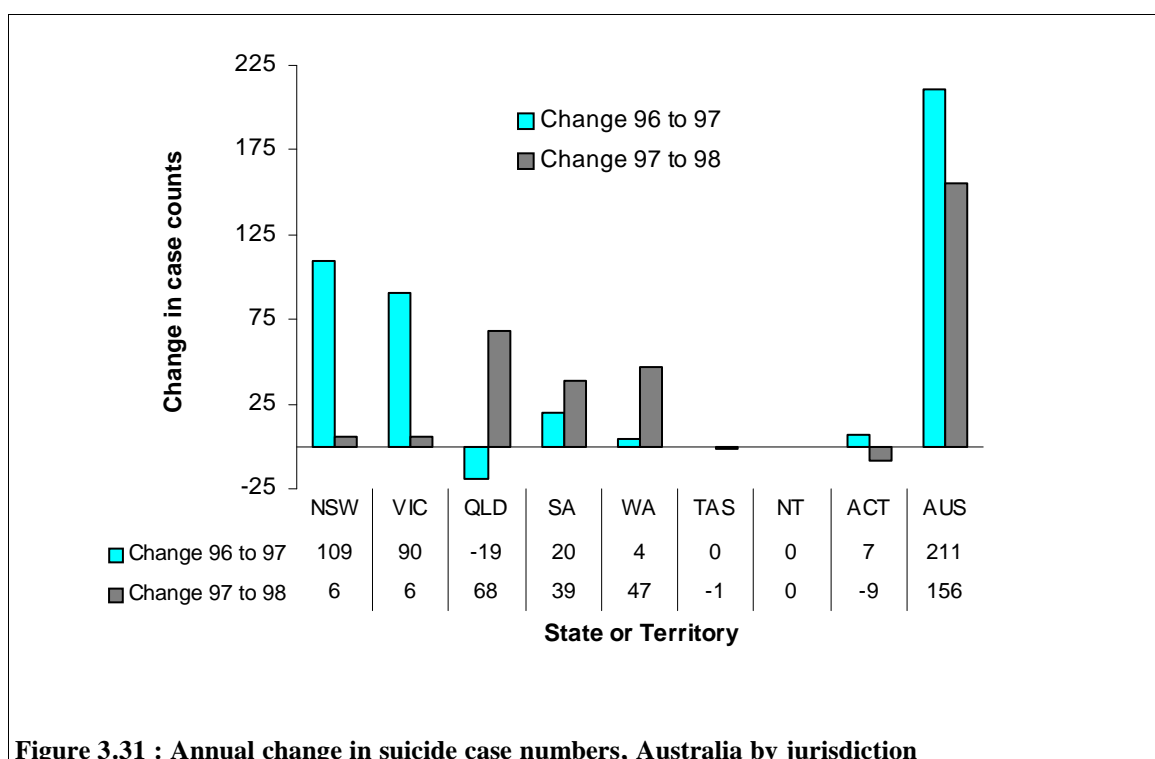


Figure 3.31 : Annual change in suicide case numbers, Australia by jurisdiction

4.2 Considerations in regard to registration of suicide deaths

National mortality data are released annually by the ABS. Each annual file includes all deaths registered in a calendar year. Most deaths are registered during the year in which they occur, but some are not registered until later, mainly early in the following year.

An assumption is often made that the number of registrations in a particular period provides a good estimate of the number of death occurrences. This holds true often enough to be useful, but it works best if the true incidence of a cause of death does not fluctuate greatly over short periods of time and if the time between occurrence and registration of deaths is not long or variable.

For public health purposes, case numbers by date of death (i.e. occurrences) are generally of greater interest than case numbers by date of registration. Also, the greatest interest is usually in the most recent period. Thus, the nature of the mortality data collection is such that the data of greatest interest (i.e. the latest values for occurrence) are the least complete and most uncertain part of the collection. These issues were highlighted with the publication of the 1997 data.

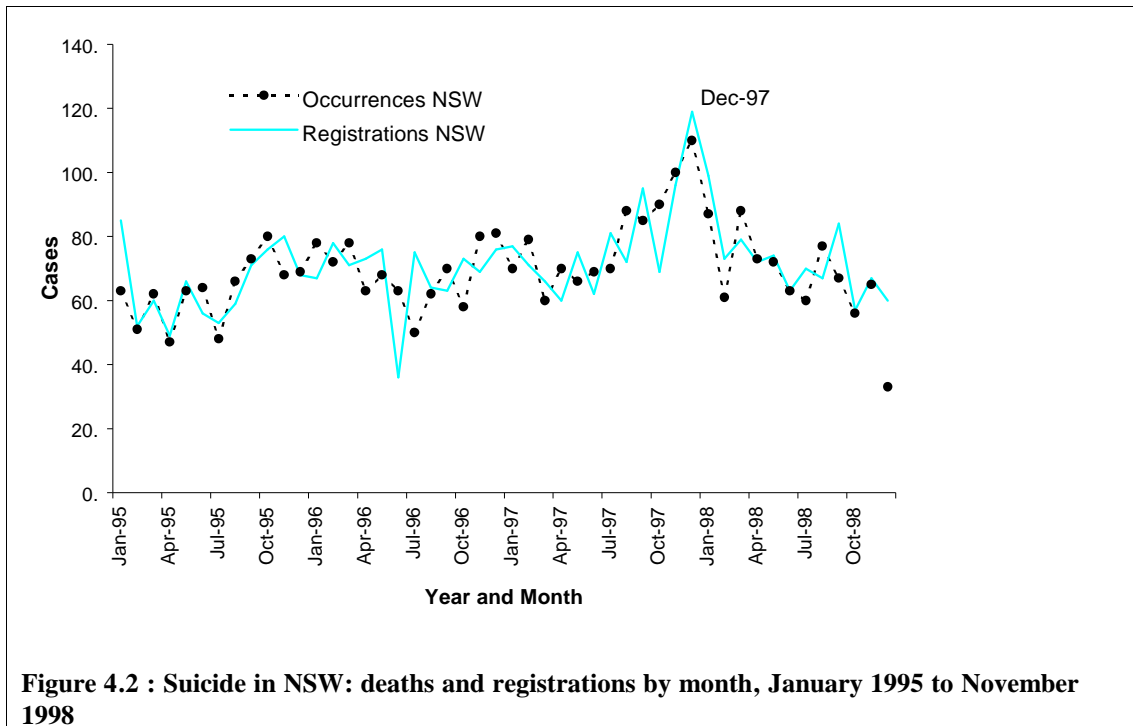
4.2.1 Analysing the increase of suicide cases in 1997

The number of deaths registered as suicide during 1997 was substantially (14%) higher than in the previous year, a point made in by the ABS in the Causes of Death publication (Australian Bureau of Statistics 1999b). Such a large increase, especially in a type of death that is the subject of much attention by policy makers, researchers and the media, warranted scrutiny. When investigating the 1997 death registration data, a consideration was that the ABS had introduced automated coding methods and multiple cause coding for mortality data, beginning with the 1997 registrations. As part of an assessment of data to look for any signs of such an effect, case numbers were examined by month of registration. No sign was seen of a step likely to be due to the changed method, but a large peak in suicide registrations was evident in December 1997.

Further assessment of data and discussion with ABS officers confirmed that a particularly large number of suicide deaths were registered in December 1997. It also showed that the increase in annual suicide registrations and the peak in December 1997 were largely restricted to Victoria and NSW. The registrations in December 1997 did not appear to have an unusual composition (in terms of age, sex, means of suicide, etc). Unusually high numbers of other types of external cause death were also registered in December 1997, and this was restricted to Victoria. Numbers of suicide occurrences were relatively high in the last quarter of 1997, particularly in NSW, Queensland and Victoria.

The unprecedentedly high number of suicides registered in December 1997 can be seen. The 1998 data indicate that this was a transient peak. The number of suicide deaths was also unusually high in the last three months of 1997, these being three of five months on record in which the number exceeded 250.

This overall pattern was not repeated at State level: In NSW (Figure 4.2), the number of deaths registered as suicide increased markedly from 60 to 80 cases per month in the two years to July 1997, to a peak of 110 cases in December 1997. Case numbers for 1998 suggest a return to the previous monthly range. Hanging cases accounted for the peak.



Victoria accounted for most of the peak in registrations seen in December 1997. The numbers of suicide registrations in Victoria in December 1997 and December 1998 were much larger than in other months (Figure 4.3). Unusually small numbers of cases were registered in January 1997 and January 1998. This pattern suggests an administrative cause. There was a less dramatic peak in suicide case numbers in Victoria from September to November 1997. Case numbers averaged a little over 60 per month in this period compared with about 45 per month in the previous two years and 48 per month in the first 10 months of 1998.

Assessment based on year of death shows a more steady increase in suicide case numbers during recent years than does the number of registrations. While suicide registrations increased by 14% from 1996 to 1997, suicide occurrences increased 9%.

Monthly suicide case numbers show seasonal variation, being higher in summer than in winter. A particularly large peak occurred in the summer of 1997/98, which accounts for the rise in rolling annual case counts in the period after mid 1997.

Of the 2,646 suicides that occurred in 1997 and had been registered by the end of 1998, 6.6% were registered in 1998. If the same proportion of 1998 suicide deaths is registered in 1999, then the final number of suicide occurrences in 1998 will be about 1% higher than the number in 1997 (n=2 646).

Case numbers in August and September 1998 were lower than in the corresponding month of 1997, suggesting that the 1998/99 summer peak may not have been as large as that in 1997/98. However, case numbers were higher in mid-1998 than in mid-1997. If the number of cases in the last quarter of 1998 was no higher than the number in the last quarter of 1996, then the final number of suicides in 1998 will be about 1% higher than the number in 1997.

This section illustrates suicide monitoring based on data of occurrence. Essentially complete year-of-occurrence reporting can be based on currently available mortality data if reporting is in terms of years to September. Alternatively, the ABS could enable more timely reporting on the basis of calendar year of occurrence by (for example) releasing data on deaths occurring in a given year and registered in the first quarter of the following year along with the final release of deaths registered during the year.

5 Suicide in Indigenous Australians

This section describes current data on suicide deaths in Aboriginal and Torres Strait Islanders. These data have several limitations which concern identification of suicide cases; identification of Indigenous status; and population data for Indigenous Australians. Due to the significant impact these issues have on the interpretation of data presented here, these concerns are discussed first.

5.1 Data issues

5.1.1 Data source

As for all suicide deaths, data on Indigenous suicide deaths are derived from the routine national mortality data collection held by the ABS. The Indigenous suicide cases reported on here refer to those identified as Indigenous Australians among deaths registered between 1988 and 1998. Limited data on Indigenous status are available before 1988 (see Table 5.1) and 1998 is the most recent data set available at the time of writing.

Little evidence is available on the completeness and reliability of the identification of suicides by Indigenous people. The problem has two parts: identification of suicides, and identification of Indigenous people. These are discussed below.

A further complication relates to the quality of population data for Indigenous Australians. This has a significant implication when suicide rates are calculated and is discussed in Section 5.1.4.

The use of these data for analysis is problematic, but we present these as part of this report, because of the lack of data on suicide in Indigenous Australians and to raise awareness of the complexities in regard to national mortality data.

5.1.2 Identification of suicide cases

This limitation applies to all suicide cases and was discussed in Section 4.1.2. The main conclusion is that there is little evidence about the reliability of identification of suicide. It is unknown whether the reliability of identifying suicide among Indigenous people differs from identification of such cases among non-Indigenous persons. What is known is that there is increased interest in suicide among Indigenous Australians. A recent report on Aboriginal youth suicide bears testimony to this (Tatz 1999).

5.2 Data on Indigenous suicides

5.2.1 Suicide case counts and rates

Between 1988 and 1998 a total of 436 suicides were registered among Indigenous Australians (Table 5.3). This formed 21% of all Indigenous deaths due to injury and poisoning registered for these years. The comparable proportion for non-Indigenous people was also 21%.

As stated in Section 5.1.3, identification of Indigenous status is considered to be more reliable for South Australia, Western Australia and Northern Territory. We do not know how well the data for these jurisdictions represents the profile for all Indigenous Australians, but in the sections below, we present combined data for these three areas as a quasi-national picture.

Table 5.3 : Number of Indigenous suicides registered by State or Territory, Australia 1988-1998

Year	Counts and rates for SA, WA and NT ^(a)						Counts for other States and Territories					Totals for Australia	
	SA	WA	NT	Tot	Crude Rate	Stand. Rate ^(b)	QLD	NSW	VIC	TAS	ACT	Incl QLD	Excl QLD
1988	5	7	5	17	<i>n.a.</i>	<i>n.a.</i>	<i>n.a.</i>	5	4	0	0	..	26
1989	12	8	0	20	<i>n.a.</i>	<i>n.a.</i>	<i>n.a.</i>	6	1	0	0	..	27
1990	8	6	2	16	<i>n.a.</i>	<i>n.a.</i>	<i>n.a.</i>	4	2	0	0	..	22
1991	8	4	1	13	11.1	9.4	<i>n.a.</i>	5	2	1	0	..	21
1992	7	5	7	19	15.8	17.6	<i>n.a.</i>	3	2	0	0	..	24
1993	2	9	2	13	10.6	9.8	<i>n.a.</i>	7	3	1	0	..	24
1994	8	9	5	22	17.6	18.7	<i>n.a.</i>	7	2	0	0	..	31
1995	9	10	2	21	16.5	16.3	<i>n.a.</i>	13	3	1	1	..	39
1996	1	12	8	21	16.1	17.4	16	2	4	0	0	43	27
1997	6	9	11	26	19.6	18.7	38	3 ^(c)	3	0	0	70	32
1998	9	20	10	39	28.9	26.3	44	21	4	0	1	109	65

(a) Crude and standardised rates calculated using case counts and population estimates for Indigenous persons in South Australia, Western Australia and the Northern Territory. Rates are for 100,000 per population.

(b) Stand. Rate, ie Age-standardised rate adjusted by direct standardisation taking the 1991 Australian population as the standard.

(c) The decline in the number of Indigenous suicide deaths for NSW in 1997 is influenced by a decline in the number of all Indigenous deaths registered as such for this year. This decline was the result of a technical issue (ABS & AIHW 1999).

When data for Western Australia, South Australia and the Northern Territory (highlighted in grey in Table 5.1) are reviewed, the annual number of deaths registered as suicides by Indigenous people has ranged from 13 (in 1991 and 1993) to 39 (in 1998).

Crude rates based on these case counts have fluctuated between 10.6 per 100,000 population per year (in 1993) and 28.9 (in 1998). Age-standardised rates for the three combined jurisdictions varied between 9.4 per 100,000 population in 1991 and 26.3 per 100,000 in 1998, but overall the rates did not show a strong trend and the average standardised rate was around 17 per 100,000. The increase from 1997 to

1998 was about 40% for the standardised rates. It is mainly due to a large increase in case numbers in Western Australia.

When looking at non-Indigenous Australians (not presented in Table 5.1), the age-standardised rates for the three combined jurisdictions did not show a notable trend between 1991 and 1998. These rates varied from 11.8 per 100,000 population (in 1994) to 15.7 (in 1998), while the average rate was 13.3 per 100,000 population. There also was only a 14% difference between the rate for 1997 (13.7) and the one for 1998.

In Queensland, data on Indigenous status became available for deaths registered from the beginning of 1996. Age-standardised rates for Indigenous suicide in Queensland based on these case counts were 14.2 per 100,000 population in 1996, 34.2 per 100,000 in 1997 and 40.8 in 1998.

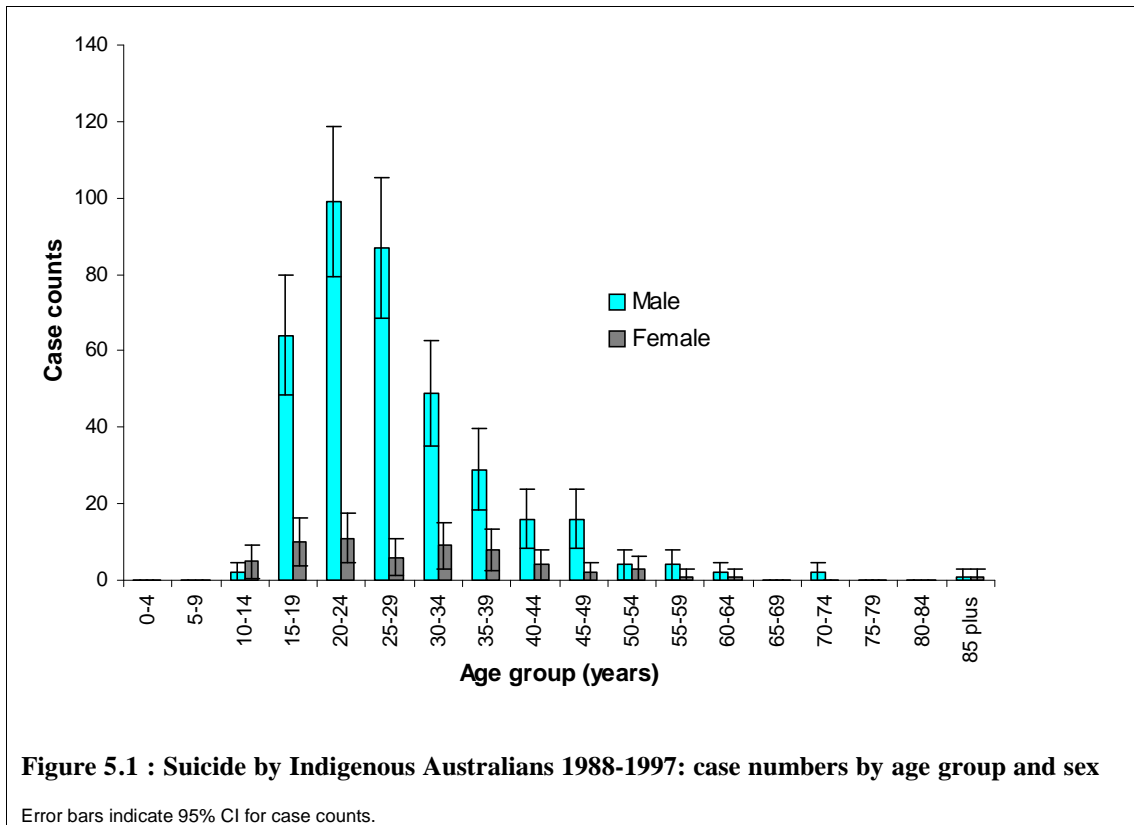
The first of these rates was similar to the age-standardised rate in the same year based on cases in South Australia, Western Australia and the Northern Territory. The Queensland rate for 1997 was more than twice as high as in the previous year. The explanation for the increase in case numbers lies (at least partly) in an administrative change. (As explained in section 5.1.3, 1996 was a transitional year as Indigenous identification in Queensland mortality data commenced.)

It is unclear to what extent rises in suicide numbers and rates among Indigenous Australians reflect true increases. Although there is great variation in ascertainment between jurisdictions, overall for Australia as a whole there is an increase in completeness. This may mean that the increase in suicide deaths can at least partly be explained by better ascertainment of Indigenous status.

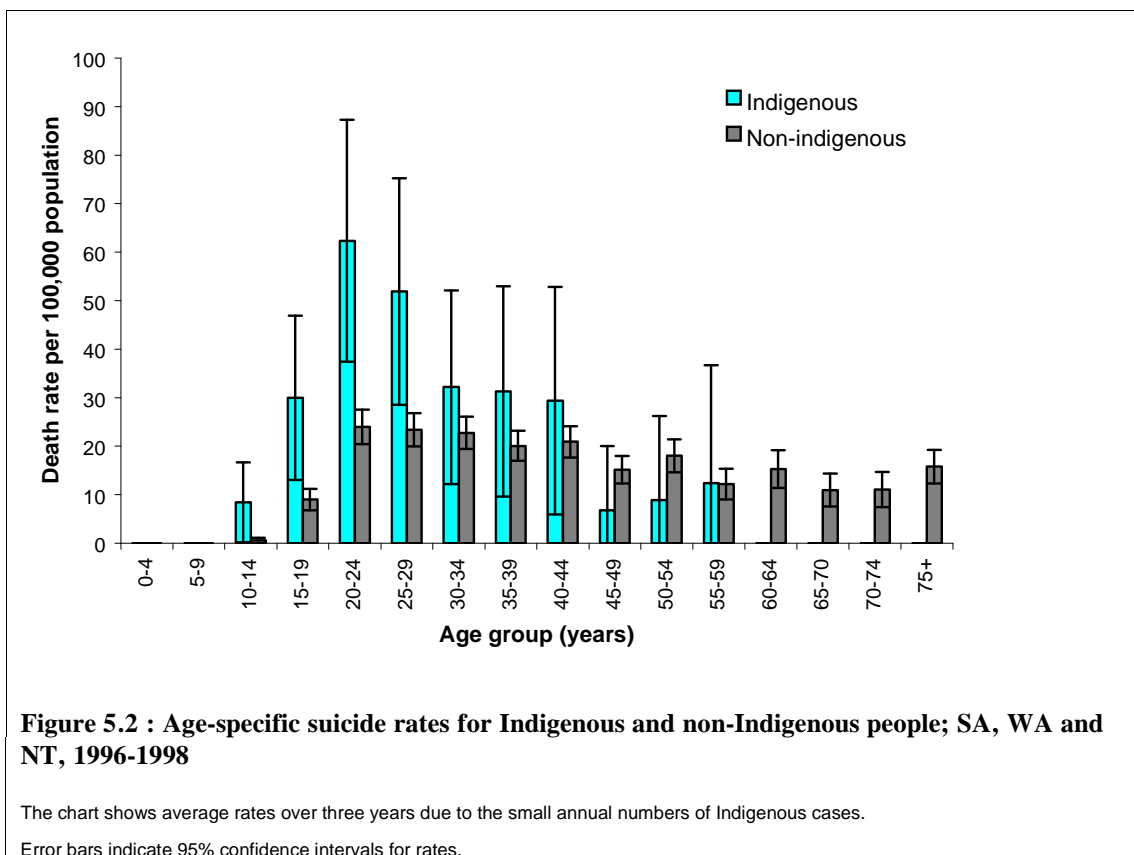
5.2.2 Age and sex distribution

In 1998 (in the whole of Australia) a total of 109 Indigenous deaths were registered as suicide (Table 5.3). Of these, 94 (86%) were male, and of these, 81 (i.e. 86% of 94) were aged between 15 and 39 years of age. Of the 15 females, 12 (80%) were between 15 and 39 years old.

Considering all case that occurred between 1988 and 1998, Indigenous suicide was sharply concentrated in the younger age groups especially for both males (Figure 5.1). Male case counts were significantly higher than those for females, except for those aged 10-14 years and those aged more than 49 years. Between 1988 and 1998, the overall average male to female ratio based on age-standardised rates was 6.7:1 for Indigenous suicides.



Rates were higher for Indigenous persons than non-Indigenous persons at age groups up to 40-44 years, though the difference was significant in terms of 95% confidence intervals only for the age groups 15-19, 20-24 and 25-29 years (Figure 5.2).



5.2.3 Method of suicide

Hanging was the commonest means of suicide for Indigenous males and females between 1988 and 1998 (Table 5.4). Other common means were firearms (for males) and poisoning by solid or liquid substances (for females).

Table 5.4 : Methods used in suicides: percentages for Indigenous and non-Indigenous suicides by sex, Australia, 1988-1998

Method	Indigenous Males		Non-Indigenous Males		Indigenous Females		Non-Indigenous Females	
Hanging	250	67%	5,526	31%	40	67%	944	20%
Firearm	65	17%	3,562	20%	1	2%	221	5%
Poisoning (solids&liquids)	16	4%	1,989	11%	9	15%	1,594	34%
MV exhaust	13	3%	4,079	23%	0	0%	695	15%
Cutting/piercing	10	3%	330	2%	3	5%	91	2%
Other/unspecified	21	6%	2,566	14%	8	13%	1115	24%
Total	375	100%	18,052	100%	61	102%	4,660	100%

Sections shaded in blue indicates most common method and those shaded in grey the second most common method.

Please note that data for Queensland has only been available since 1996.

In comparison with suicides by non-Indigenous people in the same period, the suicides by Indigenous Australians in this period were much more likely to be by hanging (e.g. for males, 67% of Indigenous cases; 31% of non-Indigenous cases) and less likely to be by poisoning, including poisoning by motor vehicle exhaust gas (Table 5.2).

5.3 Deaths in custody

Deaths in custody among Indigenous Australians has been a matter of public concern. This was highlighted by the Royal Commission into Aboriginal Deaths in custody (Royal Commission into Aboriginal Deaths in Custody 1991).

National mortality data held by the ABS do not allow for the identification of deaths in custody within the data sets. The Australian Institute of Criminology has a unique Deaths in Custody Monitoring Program that collects data on deaths which occur in police custody and custody-related police operations, as well as those that happen in prison custody (Dalton 1999).

A recent analysis by Dalton (1999) of these data showed that from 1980 to 30 September 1999, there was a total of 219 Indigenous deaths in custody. Nearly half of these (110) occurred between 1980 and 1989. The other 109 occurred between 1990 and the end of September 1999.

Of the 110 Indigenous deaths in the years 1980-1989, 61% of deaths occurred in police institutional settings and 36% in prison. The rest occurred in juvenile detention. For the second time period, 1990 to 30 September 1999, 18% of deaths occurred in police custody, while 81% took place in prison. Less than 1% occurred during juvenile detention (Dalton 1999). In this latter period there also were 30 Indigenous deaths in custody-related operations. (Data on this category was not available before 1990.)

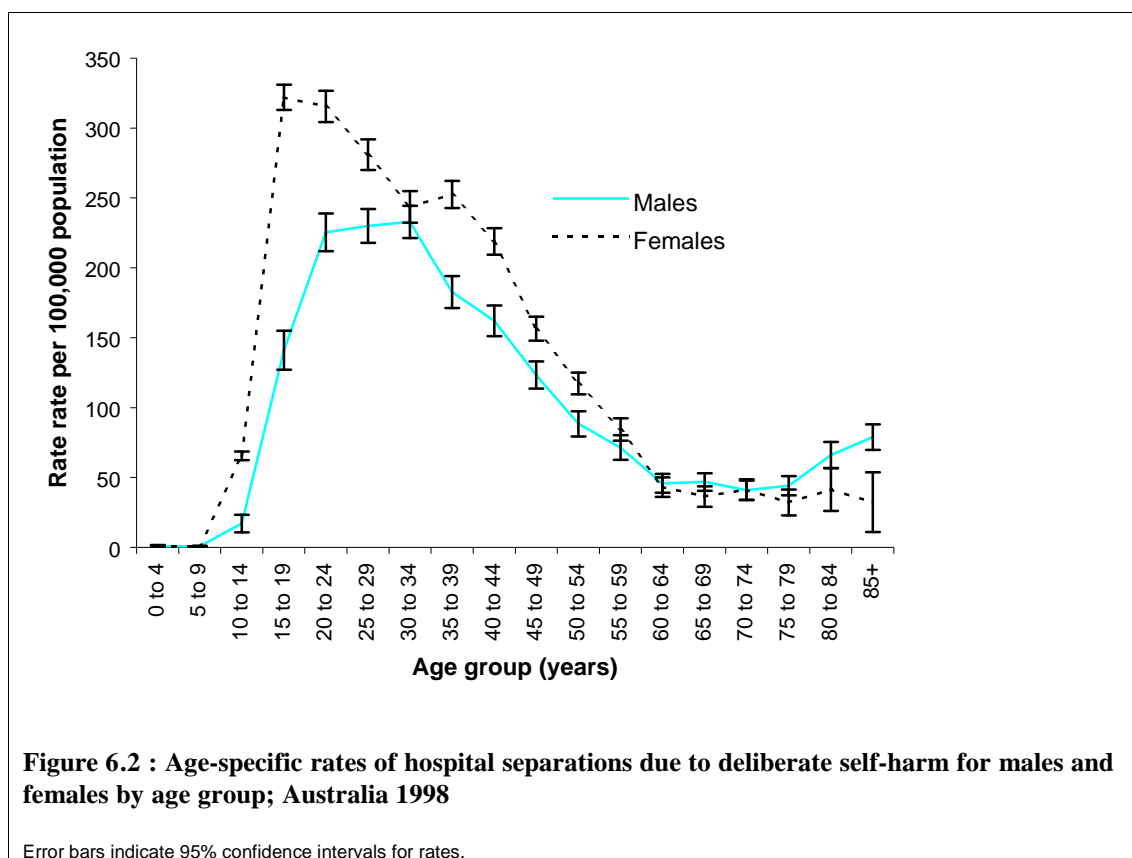
Of the 119 Indigenous deaths that occurred in prisons between 1980 and 1998⁵, 53 (45%) was due to suicide or self-inflicted harm (Dalton 1999). The average number of suicide deaths was just less than 3 deaths per year. For non-Indigenous inmates, suicide comprised 47% of all deaths and the average number of suicides was 17 per year. However, for Indigenous Australians there seems to be a shift in pattern over time. The number and proportion of suicide deaths has been greater for the period since 1990 than in the decade before (Dalton 1999). Also, in each year since 1995, suicide has represented 50% or more of all Indigenous deaths in prison.

Another publication by Dalton (1998) reports on deaths in custody and custody-related police operations. From 1 July 1997 to 30 June 1998, a total of 99 such deaths were reported. Of these, 17 deaths were of Indigenous Australians (Dalton

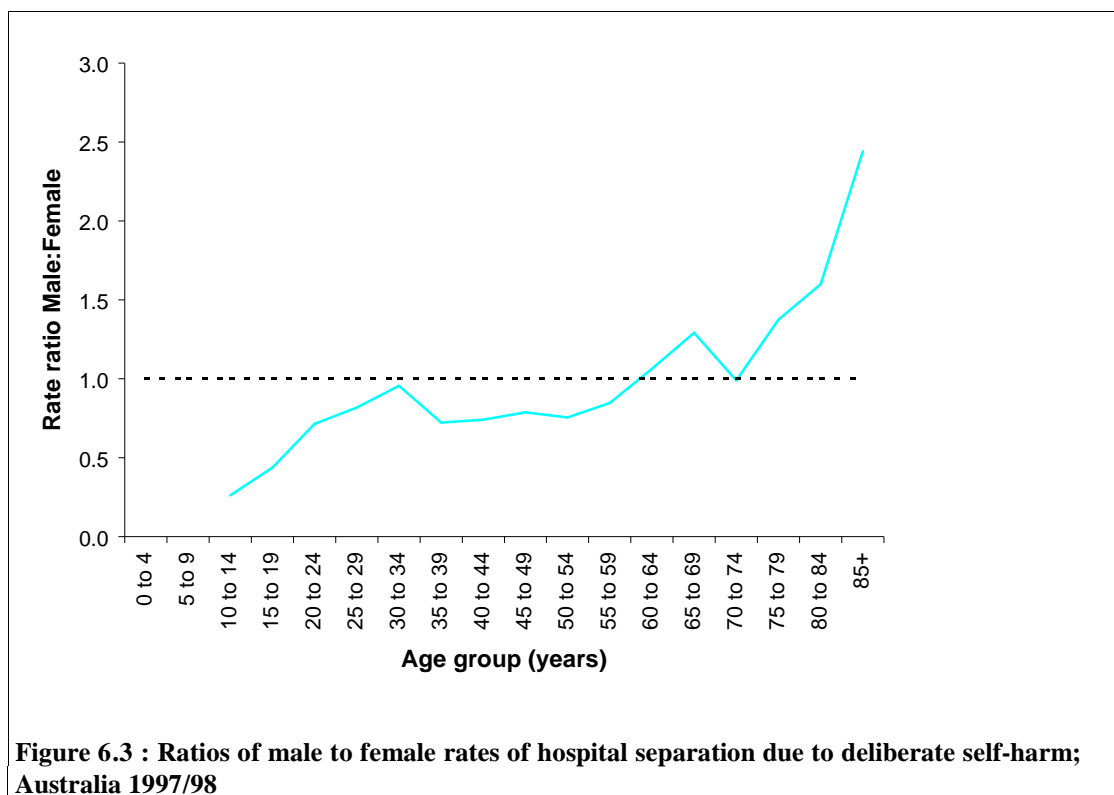
1998). Of the 17 Indigenous deaths, five occurred in police custody and 12 in prison. There were no deaths in juvenile custody. Of the 12 prison deaths, six were due to suicide and hanging was the method of choice in all of them (Dalton 1998).

⁵ In 1988, Indigenous people comprised 15% of the prison population; at June 1998 this figure was 19%. In the years 1980-1989, 12% of prison deaths were of Indigenous Australians. In the decade since, the proportion has risen to 17%. (Dalton 1999)

(Note however, that case numbers for males and females in this age group were similar, the difference in rates reflecting the high proportion of women in the elderly population.)



Overall, the male to female ratio of the rate of hospital separations due to deliberate self-harm was 0.74 (0.75 when based on age-standardised rates). This varied across age groups and the ratio generally increased with age (Figure 6.3). As noted above, male rates were substantially higher than female rates only for the oldest group shown. (Note that rate ratios are not shown for the two youngest groups as the few cases in these groups are of doubtful validity. Even if they were valid, ratios based on such small number are subject to large variation by chance).



6.2.2 Methods used among episodes of hospitalised self-harm in 1997/98

Poisoning by solid or liquid substances was by far the most common means used among self-harm hospital separations in Australia in 1997/98 (Table 6.1). This category accounted for 70% of male separations due to self-harm, and 85% of female separations.

Table 6.1 : Self-harm hospital separations by method used and sex, Australia 1997/98

Method ^(a)	Males		Females	
	Case counts	Per cent	Case counts	Per cent
Hanging	410	4%	131	1%
Motor vehicle exhaust	330	3%	86	1%
Firearm	77	1%	9	0%
Poison, solids/liquids	7,520	70%	12,236	85%
Cutting/piercing	1,574	15%	1,463	10%
Other/unspecified	798	7%	485	3%
Total ^(b)	10,709	100%	14,410	100%

Sections shaded in blue indicates most common method and those shaded in grey the second most common method.

(a) Categories: Hanging: E953.0; Motor vehicle exhaust: E952.0, Firearm: 955.0-.4; Poisoning (solid, liquids): 950; Cutting/Piercing: 956; Other: remainder of E950-E959.

(b) Sex was not recorded for one separation.

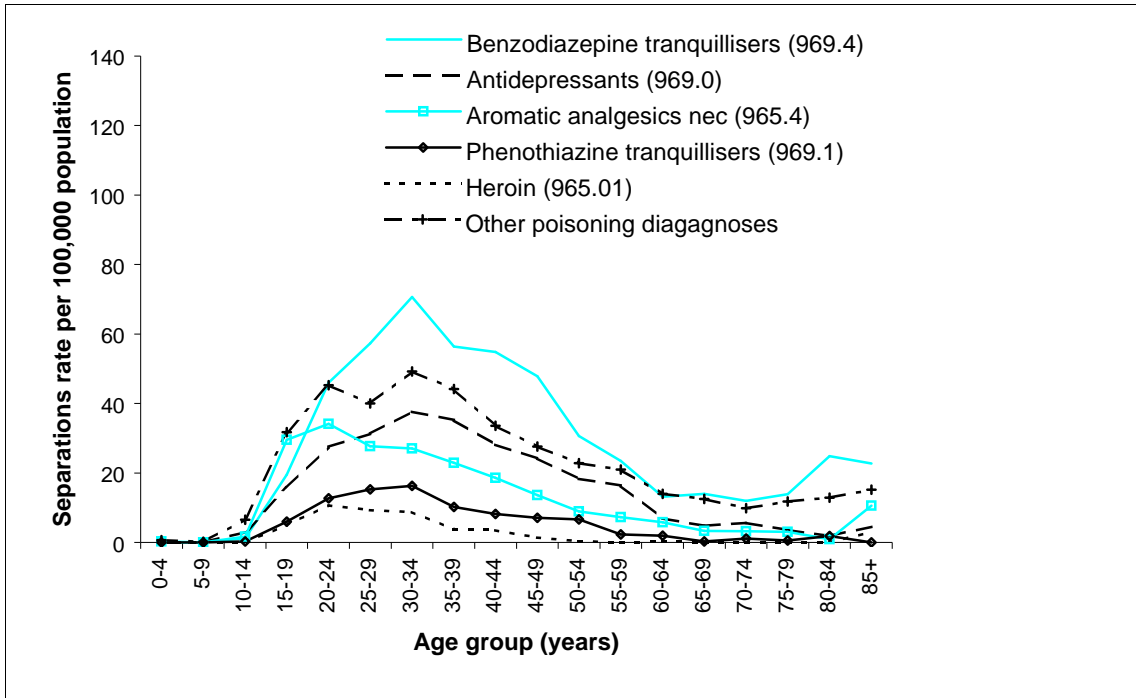


Figure 6.7 : Age-specific rates of type of poisoning for male self-harm poisoning separations; Australia 1997/98

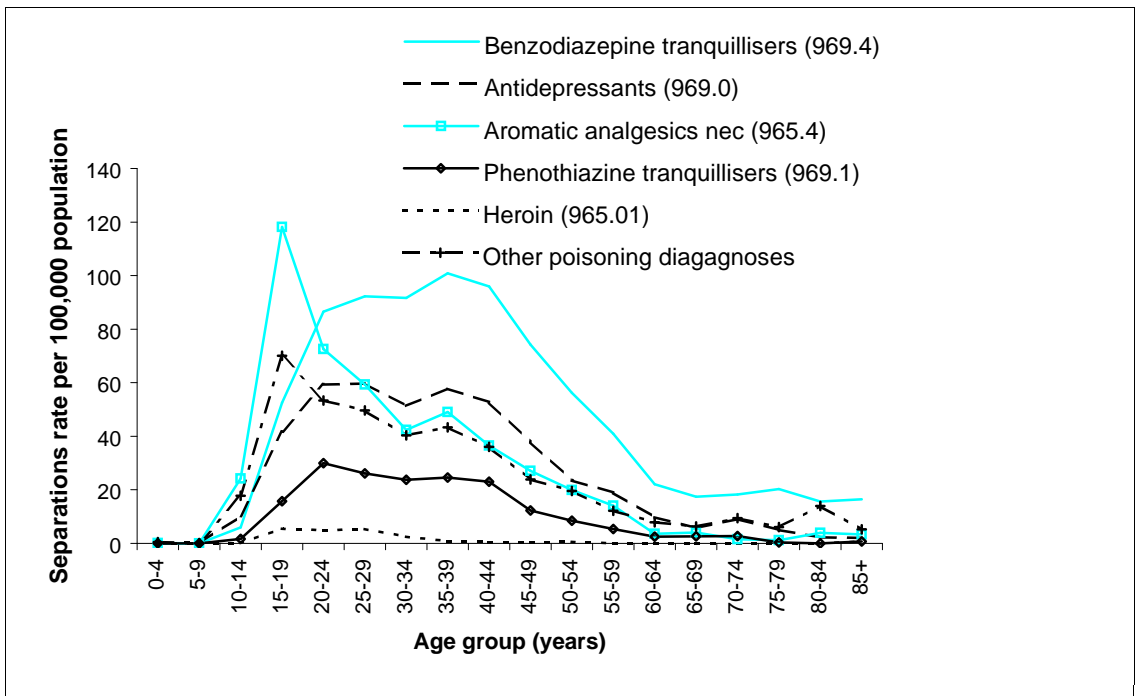


Figure 6.8 : Age-specific rates of type of poisoning for female self-harm poisoning separations; Australia 1997/98

Table 6.4 : Mode of separation for hospitalised self-harm; Australia 1997/98

Mode of separation	Case counts	Per cent
Discharge/transfer to (an)other acute hospital	2,427	9.7%
Discharge/transfer to a nursing home	61	0.2%
Discharge/transfer to (an)other psychiatric hospital	928	3.7%
Discharge/transfer to other health care accommodation	270	1.1%
Statistical discharge - type change	611	2.4%
Left against medical advice/discharge at own risk	1,149	4.6%
Statistical discharge from leave	87	0.3%
Died	281	1.1%
Other (includes discharge to usual residence)	19,282	76.8%
Total ^(a)	25,096	100%

Sections shaded in blue indicates most common method and those shaded in grey the second most common method.

(a) Missing data for 24 separations.

Just over 1% of the episodes ended with death of the patient (Table 6.4). These 281 deaths were 10% of the 2,801 deaths that occurred in Australia in 1997/98 and were coded as due to suicide [Unpublished analysis of national mortality data (NISU, 2000)].

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8 Appendices

Appendix 8.1 : Data tables for suicide deaths

Table 8.1 : Counts, age-specific rates and male to female rate ratio of suicide registrations by five-year age groups for males, females, and persons; Australia, 1998

Age group (years)	Males		Females		Persons		M:F Rate Ratio
	Case counts	Rates	Case counts	Rates	Case counts	Rates	
0-4 ^(a)	..	..	..	..	..	..	..
5-9 ^(a)	..	..	..	..	..	..	..
10-14	6	1.2	1	1.1	7	0.5	1.1
15-19	116	18.4	35	5.2	151	11.5	3.5
20-24	248	42.3	47	8.9	295	21.7	4.8
25-29	314	40.4	56	8.1	370	25.2	5.0
30-34	277	34.6	53	7.8	330	23.4	4.4
35-39	273	29.1	77	8.6	350	23.4	3.4
40-44	206	31.4	58	8.4	264	18.8	3.7
45-49	167	23.5	33	7.0	200	15.3	3.4
50-54	147	25.3	39	9.5	186	16.0	2.7
55-59	88	22.6	30	7.6	118	13.5	3.0
60-64	75	22.5	23	6.6	98	13.3	3.4
65-69	87	22.9	20	7.1	107	15.7	3.2
70-74	49	24.6	21	6.7	70	11.4	3.7
75-79	42	35.8	17	8.2	59	12.6	4.4
80-84	33	34.0	15	6.2	48	16.5	5.5
85 plus	22	39.8	7	6.0	29	12.9	6.7
All ages	2,150	23.1	533^(b)	5.7	2,683^(b)	14.3	4.0

(a) For purposes of national statistics, the ABS assumes that children under the age of 10 years are not capable of forming the intent to commit suicide.

(b) Age was not reported for one case.

Table 8.2 : Methods of suicide - case counts and age-specific rates by five-year age group for males; Australia, 1998

Age group (years)	Hanging (E953.0)		Motor vehicle exhaust (E952.0)		Firearm (E955.0-4)		Poisoning (E950)		Cutting/ Piercing (E956)		Other/ unspecified (Remainder of E950-E959)	
	Case counts	Rates	Case counts	Rates	Case counts	Rates	Case counts	Rates	Case counts	Rates	Case counts	Rates
10-14	4	0.6	0	..	2	0.3	0	..	0	..	0	..
15-19	78	11.6	8	1.2	10	1.5	4	0.6	1	0.1	15	2.2
20-24	151	21.8	31	4.5	24	3.5	13	1.9	1	0.1	28	4.0
25-29	164	22.2	59	8.0	25	3.4	29	3.9	3	0.4	34	4.6
30-34	149	21.2	64	9.1	13	1.8	21	3.0	3	0.4	27	3.8
35-39	138	18.5	67	9.0	14	1.9	27	3.6	5	0.7	22	3.0
40-44	75	10.7	61	8.7	21	3.0	16	2.3	6	0.9	27	3.9
45-49	55	8.4	53	8.1	13	2.0	21	3.2	5	0.8	20	3.1
50-54	57	9.6	38	6.4	15	2.5	14	2.4	5	0.8	18	3.0
55-59	37	8.3	19	4.3	13	2.9	8	1.8	2	0.4	9	2.0
60-65	28	7.6	14	3.8	12	3.3	5	1.4	2	0.5	14	3.8
65-69	31	9.3	12	3.6	21	6.3	11	3.3	2	0.6	10	3.0
70-74	15	5.2	10	3.5	15	5.2	1	0.3	0	..	8	2.8
75-79	13	6.5	5	2.5	8	4.0	3	1.5	2	1.0	11	5.5
80-84	13	11.8	6	5.5	6	5.5	5	4.5	0	..	3	2.7
85+	4	5.9	4	5.9	5	7.3	0	..	1	1.5	8	11.7
Total^(a)	1,012	10.9	451	4.8	217	2.3	178	1.9	38	0.4	254	2.7

(a) Total rates are age-standardised rates, while the others in this table are age-specific.

Table 8.3 : Methods of suicide - case counts and age-specific rates by five-year age group for females; Australia, 1998

Age group (years)	Hanging (E953.0)		Motor vehicle exhaust (E952.0)		Firearm (E955.0-4)		Poisoning (E950)		Cutting/ Piercing (E956)		Other/ unspecified (Remainder of E950-E959)	
	Case counts	Rates	Case counts	Rates	Case counts	Rates	Case counts	Rates	Case counts	Rates	Case counts	Rates
10-14	1	0.2	0	..	0	..	0	..	0	..	0	..
15-19	23	3.6	0	..	2	0.3	4	0.6	0	..	6	0.9
20-24	18	2.7	7	1.1	2	0.3	10	1.5	0	..	10	1.5
25-29	19	2.6	6	0.8	4	0.5	19	2.6	0	..	8	1.1
30-34	24	3.4	5	0.7	1	0.1	15	2.1	1	0.1	7	1.0
35-39	24	3.2	19	2.5	2	0.3	24	3.2	2	0.3	6	0.8
40-44	15	2.1	9	1.3	2	0.3	17	2.4	1	0.1	14	2.0
45-49	8	1.2	8	1.2	2	0.3	8	1.2	0	..	7	1.1
50-54	10	1.8	8	1.4	0	..	11	1.9	1	0.2	9	1.6
55-59	8	1.9	2	0.5	0	..	10	2.3	1	0.2	9	2.1
60-65	8	2.2	4	1.1	0	..	4	1.1	2	0.5	5	1.4
65-69	5	1.4	2	0.6	0	..	7	2.0	0	..	6	1.7
70-74	5	1.5	4	1.2	0	..	8	2.4	1	0.3	3	0.9
75-79	2	0.7	1	0.4	1	0.4	9	3.4	0	..	4	1.5
80-84	1	0.6	2	1.1	1	0.6	7	3.9	1	0.6	3	1.7
85+	1	0.6	0	..	0	..	5	3.2	0	..	1	0.6
Total^(a)	172	1.8	77	0.8	17	0.2	158	1.7	10	0.1	99^(b)	1.0

(a) Total rates are age-standardised rates, while the others in this table are age-specific.

(b) Age was not reported for one case.

Table 8.4 : Methods of suicide - case counts and age-specific rates by five-year age group for persons; Australia, 1998

Age group (years)	Hanging (E953.0)		Motor vehicle exhaust (E952.0)		Firearm (E955.0-4)		Poisoning (E950)		Cutting/ Piercing (E956)		Other/ unspecified (Remainder of E950-E959)	
	Case counts	Rates	Case counts	Rates	Case counts	Rates	Case counts	Rates	Case counts	Rates	Case counts	Rates
10-14	5	0.4	0	..	2	0.2	0	..	0	..	0	..
15-19	101	7.7	8	0.6	12	0.9	8	0.6	1	0.1	21	1.6
20-24	169	12.5	38	2.8	26	1.9	23	1.7	1	0.1	38	2.8
25-29	183	12.4	65	4.4	29	2.0	48	3.3	3	0.2	42	2.9
30-34	173	12.3	69	4.9	14	1.0	36	2.6	4	0.3	34	2.4
35-39	162	10.8	86	5.8	16	1.1	51	3.4	7	0.5	28	1.9
40-44	90	6.4	70	5.0	23	1.6	33	2.4	7	0.5	41	2.9
45-49	63	4.8	61	4.7	15	1.1	29	2.2	5	0.4	27	2.1
50-54	67	5.8	46	4.0	15	1.3	25	2.2	6	0.5	27	2.3
55-59	45	5.1	21	2.4	13	1.5	18	2.1	3	0.3	18	2.1
60-65	36	4.9	18	2.4	12	1.6	9	1.2	4	0.5	19	2.6
65-69	36	5.3	14	2.0	21	3.1	18	2.6	2	0.3	16	2.3
70-74	20	3.2	14	2.3	15	2.4	9	1.5	1	0.2	11	1.8
75-79	15	3.2	6	1.3	9	1.9	12	2.6	2	0.4	15	3.2
80-84	14	4.8	8	2.8	7	2.4	12	4.1	1	0.3	6	2.1
85+	5	2.2	4	1.8	5	2.2	5	2.2	1	0.4	9	4.0
Total ^(a)	1,184	6.4	528	2.8	234	1.2	336	1.8	48	0.3	353^(b)	1.9

(a) Total rates are age-standardised rates, while the others in this table are age-specific.

(b) Age was not reported for one case.

Table 8.5 : Suicide death registrations - counts and age-specific rates for males, females and persons by five-year age groups for States and Territories; Australia, 1998

Age group (years)	NEW SOUTH WALES						VICTORIA					
	Males		Females		Persons		Males		Females		Persons	
	Case Counts	Rates	Case Counts	Rates	Case Counts	Rates	Case Counts	Rates	Case Counts	Rates	Case Counts	Rates
0-4	0	..	0	..	0	..	0	..	0	..	0	..
5-9	0	..	0	..	0	..	0	..	0	..	0	..
10-14	3	1.3	0	0	3	0.7	2	1.2	0	0	2	0.6
15-19	33	14.8	6	2.8	39	9.0	31	18.9	9	5.8	40	12.5
20-24	92	40.7	12	5.5	104	23.3	43	24.8	16	9.6	59	17.3
25-29	85	34.7	19	7.7	104	21.2	74	39.9	12	6.4	86	23.1
30-34	86	36.2	14	5.9	100	21.0	55	31.2	20	11.1	75	21.0
35-39	104	41.0	19	7.5	123	24.3	47	25.7	21	11.3	68	18.4
40-44	69	29.3	19	8.1	88	18.7	34	19.8	12	6.9	46	13.3
45-49	51	23.3	11	5.1	62	14.2	38	23.9	5	3.1	43	13.4
50-54	42	21.0	13	6.8	55	14.0	38	26.5	6	4.2	44	15.4
55-59	31	20.4	12	8.1	43	14.4	25	22.6	6	5.5	31	14.1
60-64	24	18.7	9	7.0	33	12.8	14	15.1	6	6.3	20	10.6
65-69	29	24.7	7	5.7	36	14.9	18	21.1	5	5.5	23	13.1
70-74	19	18.9	6	5.1	25	11.4	12	16.4	6	7.0	18	11.3
75-79	16	22.4	4	4.2	20	12.0	9	17.8	8	11.5	17	14.2
80-84	15	38.6	2	3.1	17	16.5	6	21.5	2	4.3	8	10.8
85+	10	43.4	3	5.5	13	16.7	2	11.0	2	4.8	4	6.7
Total ^(a)	709	22.7	156	4.8	865	13.6	448	19.2	136	5.7	584	12.4

(a) Total rates are age-standardised rates, while the others in this table are age-specific.

Table 8.5 : Suicide death registrations - counts and age-specific rates for males, females and persons by five-year age groups for States and Territories; Australia, 1998 (continued)

Age group (years)	QUEENSLAND						SOUTH AUSTRALIA					
	Males		Females		Persons		Males		Females		Persons	
	Case Counts	Rates	Case Counts	Rates	Case Counts	Rates	Case Counts	Rates	Case Counts	Rates	Case Counts	Rates
0-4	0	..	0	..	0	..	0	..	0	..	0	..
5-9	0	..	0	..	0	..	0	..	0	..	0	..
10-14	0	..	0	..	0	..	1	1.9	0	..	1	1.0
15-19	27	20.8	14	11.4	41	16.2	7	13.8	1	2.1	8	8.1
20-24	46	35.4	7	5.6	53	20.7	25	48.3	3	6.1	28	27.7
25-29	60	43.7	13	9.5	73	26.7	34	61.6	5	9.3	39	35.9
30-34	66	51.7	9	7.0	75	29.3	28	51.5	4	7.4	32	29.6
35-39	68	50.0	24	17.5	92	33.6	15	25.8	5	8.5	20	17.1
40-44	41	32.1	14	10.9	55	21.5	24	43.6	5	9.0	29	26.2
45-49	45	36.6	10	8.4	55	22.7	14	26.8	1	1.9	15	14.2
50-54	28	25.2	6	5.7	34	15.7	16	34.0	7	14.8	23	24.4
55-59	14	16.9	8	10.2	22	13.7	8	22.3	2	5.6	10	13.9
60-64	18	27.1	3	4.7	21	16.1	4	13.0	3	9.4	7	11.2
65-69	15	25.7	4	6.7	19	16.1	14	47.9	0	..	14	23.3
70-74	10	20.1	3	5.4	13	12.4	2	7.5	3	9.7	5	8.7
75-79	4	11.3	2	4.4	6	7.5	4	21.2	2	7.8	6	13.5
80-84	2	10.3	7	23.2	9	18.1	2	19.0	2	11.6	4	14.4
85+	6	49.4	0	..	6	15.9	1	15.5	1	6.6	2	9.2
Total ^(a)	450	26.2	124	7.1	574	16.6	199	27.3	45 ^(b)	5.5	244	16.4

(a) Total rates are age-standardised rates, while the others in this table are age-specific.

(b) Age was not reported for one case.

Table 8.5 : Suicide death registrations - counts and age-specific rates for males, females and persons by five-year age groups for States and Territories; Australia, 1998 (continued)

Age group (years)	WESTERN AUSTRALIA						TASMANIA					
	Males		Females		Persons		Males		Females		Persons	
	Case Counts	Rates	Case Counts	Rates	Case Counts	Rates	Case Counts	Rates	Case Counts	Rates	Case Counts	Rates
0-4	0	..	0	..	0	..	0	..	0	..	0	..
5-9	0	..	0	..	0	..	0	..	0	..	0	..
10-14	0	..	1	1.5	1	0.7	0	..	0	..	0	..
15-19	12	17.5	3	4.6	15	11.2	2	11.4	0	..	2	5.8
20-24	32	45.0	7	10.4	39	28.2	1	6.5	0	..	1	3.3
25-29	45	60.5	7	9.8	52	35.7	6	37.4	0	..	6	18.4
30-34	31	44.0	4	5.8	35	25.0	5	31.8	1	6.0	6	18.6
35-39	28	37.4	6	8.1	34	22.9	8	44.1	1	5.3	9	24.3
40-44	22	30.9	7	9.9	29	20.4	6	34.1	1	5.6	7	19.7
45-49	12	18.0	4	6.2	16	12.2	0	..	2	12.1	2	6.1
50-54	12	20.7	4	7.5	16	14.3	7	46.8	2	13.7	9	30.5
55-59	5	11.7	1	2.5	6	7.2	4	34.2	0	..	4	17.3
60-64	12	35.4	2	6.0	14	20.8	2	20.5	0	..	2	10.1
65-69	7	23.7	3	10.0	10	16.8	2	22.3	1	10.5	3	16.2
70-74	3	12.4	3	11.1	6	11.7	1	13.0	0	0.0	1	6.1
75-79	7	42.4	0	..	7	18.4	2	37.4	1	13.5	3	23.5
80-84	4	44.7	1	6.8	5	21.2	2	64.3	1	19.4	3	36.2
85+	3	50.0	1	7.5	4	20.7	0	..	0	..	0	..
Total ^(a)	235	26.1	54	5.9	289	16	48	20.5	10	3.7	58	11.9

(a) Total rates are age-standardised rates, while the others in this table are age-specific.

Table 8.5 : Suicide death registrations - counts and age-specific rates for males, females and persons by five-year age groups for States and Territories; Australia, 1998 (continued)

Age group (years)	NORTHERN TERRITORY						AUSTRALIAN CAPITAL TERRITORY					
	Males		Females		Persons		Males		Females		Persons	
	Case Counts	Rates	Case Counts	Rates	Case Counts	Rates	Case Counts	Rates	Case Counts	Rates	Case Counts	Rates
0-4	0	..	0	..	0	..	0	..	0	..	0	..
5-9	0	..	0	..	0	..	0	..	0	..	0	..
10-14	0	..	0	..	0	..	0	..	0	..	0	..
15-19	4	53.6	2	29.4	6	42.1	0	..	0	..	0	..
20-24	4	44.3	2	25.2	6	35.4	5	35.1	0	..	5	18.2
25-29	7	67.6	0	..	7	35.2	3	22.9	0	..	3	11.4
30-34	4	43.3	0	..	4	22.6	2	16.8	1	8.2	3	12.4
35-39	2	22.5	1	12.6	3	17.9	1	8.1	0	..	1	4.0
40-44	6	79.7	0	..	6	41.3	4	34.3	0	..	4	16.7
45-49	2	29.4	0	..	2	15.9	5	43.1	0	..	5	21.0
50-54	2	35.2	1	22.5	3	29.6	2	19.5	0	..	2	9.9
55-59	1	26.2	0	..	1	15.5	0	..	1	15.4	1	7.5
60-64	0	..	0	..	0	..	1	20.7	0	..	1	10.4
65-69	0	..	0	..	0	..	2	52.8	0	..	2	25.8
70-74	1	108.1	0	..	1	57.8	1	33.2	0	..	1	15.1
75-79	0	..	0	..	0	..	0	..	0	..	0	..
80-84	0	..	0	..	0	..	2	197.8	0	..	2	72.4
85+	0	..	0	..	0	..	0	..	0	..	0	..
Total ^(a)	33	32.3	6	6.4	39	20.1	28	19.3	2	1.3	30	9.9

(a) Total rates are age-standardised rates, while the others in this table are age-specific.

Table 8.6 : Methods used in suicide deaths - counts and age-standardised rates for males, females and persons by State or Territory; Australia, 1998

Sex	Method	NSW		VIC		QLD		SA		WA		TAS		NT		ACT	
		Case counts	Rates	Case counts	Rates	Case counts	Rates	Case counts	Rates	Case counts	Rates	Case counts	Rates	Case counts	Rates	Case counts	Rates
Males	Hanging	356	11.6	204	8.8	209	12.3	94	13.1	108	11.8	12	5.0	16	14.2	13	7.9
	MV exhaust	126	3.9	99	4.2	100	5.8	52	7.0	43	4.7	17	7.0	4	3.7	10	8.2
	Firearm	59	1.9	48	2.0	53	3.1	27	3.7	12	1.4	11	4.8	6	6.0	1	0.6
	Poisoning (solids&liquids)	67	2.0	31	1.3	37	2.1	11	1.5	22	2.5	5	2.3	4	0.9	1	0.5
	Cutting/piercing	11	0.3	7	0.3	11	0.6	3	0.4	3	0.3	0	0.0	2	1.8	1	0.6
	Other/unspecified	90	2.9	59	2.5	40	2.4	12	1.6	47	5.4	3	1.4	1	3.2	2	1.5
	All methods	709	22.7	448	19.2	450	26.2	199	27.3	235	26.1	48	20.5	33	32.3	28	19.3
Females	Hanging	48	1.5	43	1.9	46	2.7	13	1.8	17	1.9	0	..	4	4.4	1	0.7
	MV exhaust	18	0.5	18	0.7	22	1.2	6	0.8	7	0.7	4	1.6	1	1.0	1	0.6
	Firearm	2	0.1	4	0.2	7	0.4	2	0.3	1	0.1	1	0.4	0	0.0	0	0.0
	Poisoning (solids&liquids)	52	1.6	37	1.5	31	1.8	17	1.9	19	2.0	2	0.7	0	0.0	0	0.0
	Cutting/piercing	3	1.5	2	0.1	1	0.1	2	0.3	0	0.0	1	0.3	1	1.1	0	0.0
	Other/unspecified	33	1.0	32	1.4	17	0.9	5	0.5	10	1.1	2	0.8	0	0.0	0	0.0
	All methods	156	4.8	136	5.7	124	7.1	45	5.5	54	5.9	10	3.7	6	6.4	2	1.3
Persons	Hanging	404	6.5	247	5.3	255	7.5	107	7.5	125	7.0	12	2.5	20	9.6	14	4.3
	MV exhaust	144	2.3	117	2.6	122	3.6	58	3.9	50	2.9	21	4.5	5	2.7	11	4.0
	Firearm	61	0.9	52	1.1	60	1.8	29	2.0	13	0.7	12	2.5	6	3.2	1	0.3
	Poisoning (solids&liquids)	119	1.8	68	1.4	68	1.9	28	1.8	41	1.0	7	1.5	4	0.5	1	0.3
	Cutting/piercing	14	0.9	9	0.2	12	0.3	5	0.3	3	0.2	1	0.2	3	1.4	1	0.3
	Other/unspecified	123	1.9	91	1.9	57	1.7	17	1.0	57	3.1	5	1.0	1	1.7	2	0.7
	All methods	865	13.6	584	12.4	574	16.6	244	16.4	289	16.0	58	11.9	39	20.1	30	9.9

Table 8.7 : Suicide case counts, age-standardised rates and male to female rate ratio of suicide registrations for males, females and persons; Australia selected years 1921-1998

Year of death registration	Males		Females		Persons		M:F Rate Ratio
	Case counts	Rates	Case counts	Rates	Case counts	Rates	
1921	505	22.4	111	4.8	616	13.9	4.7
1931	687	24.4	138	4.7	825	14.6	5.2
1941	463	14.5	161	4.6	624	9.4	3.1
1951	608	15.6	197	4.9	805	10.2	3.2
1961	898	18.9	347	7.3	1245	13.0	2.6
1971	1150	19.8	588	9.9	1738	14.7	2.0
1981	1258	18.1	413	5.8	1671	11.8	3.1
1990	1735	20.7	426	4.9	2161	12.7	4.2
1991	1847	21.7	513	5.9	2360	13.7	3.7
1992	1820	21.1	473	5.3	2293	13.1	4.0
1993	1687	19.3	394	4.4	2081	11.7	4.4
1994	1829	20.7	428	4.7	2257	12.6	4.4
1995	1871	20.9	495	5.4	2366	13.0	3.9
1996	1931	21.3	462	4.9	2393	13.0	4.3
1997	2146	23.5	577	6.1	2723	14.6	3.9
1998	2150	23.1	533	5.6	2683	14.3	4.2

Table 8.8 : Suicide case counts for males by five-year age group in years; Australia, selected years 1921-1998

Year of death registration	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80-84	85+
1921	0	0	1	9	28	42	41	47	66	58	51	59	46	35	9	8	4	1
1931	0	0	2	13	32	53	64	71	58	68	88	83	57	42	30	22	0	4
1941	0	0	0	12	26	23	28	37	52	47	45	53	54	29	24	20	9	4
1951	0	0	3	22	38	41	37	55	63	75	52	52	66	52	25	17	7	3
1961	0	0	1	23	46	54	68	83	106	110	115	96	63	61	42	22	4	4
1971	0	0	8	75	107	98	89	100	102	127	127	85	73	59	45	30	16	9
1981	0	0	4	72	166	140	131	105	114	90	101	93	69	70	44	27	22	10
1990	0	0	6	128	251	235	177	171	159	105	93	98	84	79	60	39	29	21
1991	0	0	6	133	243	206	217	227	173	132	119	84	72	68	57	52	42	16
1992	0	0	5	125	253	226	205	181	150	156	104	80	90	83	71	47	25	19
1993	0	0	4	111	234	200	206	152	134	154	93	84	86	74	61	38	34	22
1994	0	0	3	122	252	205	209	174	180	150	120	91	82	76	65	45	33	22
1995	0	0	5	98	252	236	238	220	162	154	116	108	69	63	54	39	34	23
1996	0	0	7	114	237	236	229	234	179	151	115	93	88	68	68	52	42	18
1997	0	0	8	122	295	294	246	215	216	153	141	98	81	77	69	68	37	26
1998	0	0	6	116	248	314	277	273	206	167	147	88	75	87	49	42	33	22

Table 8.9 : Suicide counts for females by five-year age group in years; Australia, selected years 1921-1998

Year of death registration	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80-84	85+
1921	0	0	0	7	4	16	20	15	10	11	8	9	4	2	4	0	1	0
1931	0	0	0	6	11	21	15	11	13	18	11	15	7	3	6	1	0	0
1941	0	0	1	6	13	15	16	13	15	19	20	17	13	6	5	2	0	0
1951	0	0	0	3	14	11	13	27	17	25	13	26	15	15	11	5	2	0
1961	0	0	0	8	15	24	33	35	34	33	36	41	34	31	15	3	3	2
1971	0	0	3	29	38	51	57	46	60	76	63	44	47	29	28	9	6	2
1981	0	0	1	15	41	36	35	39	37	42	42	40	22	25	17	13	6	2
1990	0	0	0	34	26	42	56	35	40	34	26	24	21	27	22	17	14	8
1991	0	0	2	21	65	56	48	45	51	40	31	40	33	20	22	18	13	8
1992	0	0	2	31	46	42	58	45	50	33	29	28	24	24	21	23	8	9
1993	0	0	1	19	36	38	40	53	27	43	28	19	18	20	19	16	14	3
1994	0	0	3	17	40	43	42	55	44	38	30	23	24	14	18	16	12	9
1995	0	0	0	29	55	49	50	50	54	48	41	31	19	23	14	13	15	4
1996	0	0	7	26	30	49	47	65	45	50	38	21	19	15	23	14	8	5
1997	0	0	7	33	60	59	56	64	58	45	51	32	24	25	22	21	11	9
1998	0	0	1	35	47	56	53	77	58	33	39	30	23	20	21	17	15	7

Table 8.10 : Suicide case counts for persons by five-year age group in years; Australia, selected years 1921-1998

Year of death registration	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80-84	85+
1921	0	0	1	16	32	58	61	62	76	69	59	68	50	37	13	8	5	1
1931	0	0	2	19	43	74	79	82	71	86	99	98	64	45	36	23	0	4
1941	0	0	1	18	39	38	44	50	67	66	65	70	67	35	29	22	9	4
1951	0	0	3	25	52	52	50	82	80	100	65	78	81	67	36	22	9	3
1961	0	0	1	31	61	78	101	118	140	143	151	137	97	92	57	25	7	6
1971	0	0	11	104	145	149	146	146	162	203	190	129	120	88	73	39	22	11
1981	0	0	5	87	207	176	166	144	151	132	143	133	91	95	61	40	28	12
1990	0	0	6	162	277	277	233	206	199	139	119	122	105	106	82	56	43	29
1991	0	0	8	154	308	262	265	272	224	172	150	124	105	88	79	70	55	24
1992	0	0	7	156	299	268	263	226	200	189	133	108	114	107	92	70	33	28
1993	0	0	5	130	270	238	246	205	161	197	121	103	104	94	80	54	48	25
1994	0	0	6	139	292	248	251	229	224	188	150	114	106	90	83	61	45	31
1995	0	0	5	127	307	285	288	270	216	202	157	139	88	86	68	52	49	27
1996	0	0	14	140	267	285	276	299	224	201	153	114	107	83	91	66	50	23
1997	0	0	15	155	355	353	302	279	274	198	192	130	105	102	91	89	48	35
1998	0	0	7	151	295	370	330	350	264	200	186	118	98	107	70	59	48	29

Table 8.11 : Age-specific suicide rates for males by five-year age group in years; Australia, selected years 1921-1998

Year of death registration	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80-84	85+
1921	0	0	0.4	3.8	12.7	18.7	18.1	23.6	38.7	39.6	37.8	50.3	50.5	61.1	26.8	40.4	42.1	21.3
1931	0	0	0.6	4.2	11.0	19.9	26.3	30.3	25.4	34.7	54.7	63.9	50.4	46.2	48.5	71.9	..	75.5
1941	0	0	..	3.7	8.5	7.5	9.8	14.2	22.1	21.3	21.3	30.5	40.3	29.5	32.1	41.8	39.0	53.3
1951	0	0	1.0	7.8	11.5	11.4	11.4	16.9	21.2	29.0	23.2	26.3	37.0	39.8	28.5	33.1	24.7	22.9
1961	0	0	0.2	5.5	12.8	15.8	17.6	21.1	30.8	32.8	39.4	40.4	33.2	40.9	35.9	31.9	12.0	25.3
1971	0	0	1.2	13.0	18.4	19.7	20.9	25.7	24.5	31.2	37.4	27.7	29.3	31.1	35.4	38.5	36.5	42.7
1981	0	0	0.6	10.9	25.2	22.5	21.1	20.8	26.7	23.9	25.5	25.1	23.6	28.0	25.0	25.4	42.3	36.0
1990	0	0	0.9	17.8	36.5	32.8	25.3	26.1	24.8	20.9	22.1	26.7	22.8	25.2	27.5	25.2	35.9	50.5
1991	0	0	0.9	19.0	34.4	29.3	30.4	34.2	26.4	25.1	27.4	22.9	19.6	21.2	24.9	32.7	49.8	36.2
1992	0	0	0.8	18.4	34.9	32.6	28.2	26.8	23.0	27.8	23.3	21.4	24.8	25.5	29.7	29.0	28.3	40.1
1993	0	0	0.6	16.7	32.0	29.2	28.2	22.2	20.5	25.9	20.4	21.9	24.0	22.4	24.3	23.3	36.5	43.7
1994	0	0	0.5	18.6	34.5	30.0	28.4	25.0	27.3	24.3	25.3	23.1	23.1	22.9	24.6	27.6	33.5	41.3
1995	0	0	0.8	15.1	34.8	34.1	32.6	30.9	24.3	24.2	23.4	26.6	19.5	18.8	20.0	23.0	33.1	40.5
1996	0	0	1.0	17.4	33.4	33.2	31.8	32.2	26.5	23.1	22.2	22.2	24.9	20.2	24.6	29.0	39.7	29.9
1997	0	0	1.2	18.4	42.3	40.4	34.6	29.2	31.4	23.6	25.3	22.6	22.5	22.9	24.5	35.8	34.1	40.6
1998	0	0	0.9	17.2	35.9	42.6	39.4	36.6	29.5	25.5	24.9	19.7	20.3	26.0	17.1	20.9	30.0	32.2

Table 8.12 : Age-specific suicide rates for females by five-year age group in years; Australia, selected years 1921-1998

Year of death registration	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80-84	85+
1921	0	0	..	3.0	1.7	6.7	9.0	7.8	6.2	8.0	6.7	9.0	5.1	4.0	12.5	..	9.7	..
1931	0	0	..	2.0	4.0	8.6	6.3	4.6	5.9	9.7	7.2	11.8	6.4	3.5	10.1	3.3	..	..
1941	0	0	0.3	1.9	4.3	4.9	5.9	5.4	6.5	8.3	9.6	9.9	9.5	5.7	6.1	3.8	..	..
1951	0	0	..	1.1	4.5	3.3	4.1	8.6	6.2	10.6	5.8	12.3	8.0	10.4	10.5	7.6	5.2	..
1961	0	0	..	2.0	4.5	7.7	9.4	9.4	10.2	10.2	13.2	18.1	16.3	16.7	10.2	3.1	5.6	7.2
1971	0	0	0.5	5.2	6.8	11.0	14.3	12.6	15.5	19.5	18.6	14.2	17.6	13.8	16.3	7.2	7.7	4.4
1981	0	0	0.2	2.4	6.4	5.9	5.8	8.0	9.1	11.7	11.1	10.8	6.8	8.7	7.5	8.4	5.9	2.7
1990	0	0	..	5.0	3.9	5.9	8.1	5.3	6.5	7.1	6.5	6.7	5.7	7.7	8.1	7.7	10.0	7.6
1991	0	0	0.3	3.2	9.4	8.0	6.7	6.8	8.0	8.0	7.5	11.2	8.9	5.7	7.8	8.0	8.9	7.3
1992	0	0	0.3	4.8	6.5	6.1	8.0	6.6	7.8	6.1	6.8	7.6	6.6	6.8	7.2	10.0	5.3	7.8
1993	0	0	0.2	3.0	5.1	5.6	5.5	7.7	4.2	7.5	6.5	5.1	5.0	5.6	6.3	7.0	8.8	2.5
1994	0	0	0.5	2.7	5.6	6.3	5.7	7.9	6.7	6.4	6.6	6.0	6.7	3.9	5.7	7.0	7.2	7.1
1995	0	0	..	4.7	7.8	7.1	6.8	7.0	8.1	7.8	8.6	7.8	5.3	6.5	4.3	5.6	8.7	3.0
1996	0	0	1.1	4.2	4.4	6.9	6.5	8.9	6.6	7.8	7.6	5.2	5.3	4.2	7.0	5.7	4.5	3.5
1997	0	0	1.1	5.2	8.9	8.1	7.8	8.6	8.4	7.0	9.5	7.6	6.6	7.1	6.7	8.2	6.1	6.0
1998	0	0	0.2	5.5	7.1	7.6	7.5	10.3	8.3	5.1	6.8	7.0	6.2	5.7	6.4	6.3	8.3	4.5

Table 8.13 : Age-specific suicide rates for persons by five-year age group in years; Australia, selected years 1921-1998

Year of death registration	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80-84	85+
1921	0	0	0.2	3.4	7.1	12.6	13.6	15.9	22.9	24.3	23.1	31.2	29.4	34.5	19.8	19.8	25.3	9.8
1931	0	0	0.3	3.1	7.6	14.5	16.4	17.3	15.8	22.6	31.5	38.2	28.8	25.6	29.6	37.6	..	32.5
1941	0	0	0.2	2.8	6.4	6.2	7.9	10.0	14.3	14.7	15.5	20.3	24.8	17.2	18.5	22.0	17.8	22.2
1951	0	0	0.5	4.6	8.1	7.5	7.8	12.8	14.0	20.2	14.5	19.1	22.2	24.4	18.7	18.8	13.5	9.2
1961	0	0	0.1	3.8	8.8	11.9	13.7	15.4	20.6	21.7	26.8	29.5	24.3	27.5	21.6	15.2	8.1	13.7
1971	0	0	0.9	9.2	12.7	15.5	17.7	19.3	20.2	25.4	28.0	20.9	23.2	22.1	24.4	19.2	18.0	16.4
1981	0	0	0.4	6.7	15.9	14.3	13.5	14.6	18.1	17.9	18.5	18.0	14.8	17.7	15.2	15.3	18.2	11.7
1990	0	0	0.5	11.6	20.4	19.5	16.7	15.7	15.8	14.2	14.5	16.8	14.2	16.0	16.8	14.9	19.5	19.7
1991	0	0	0.6	11.3	22.1	18.7	18.6	20.5	17.3	16.7	17.7	17.1	14.2	13.1	15.5	18.2	23.9	15.6
1992	0	0	0.6	11.8	20.9	19.4	18.1	16.7	15.4	17.2	15.3	14.6	15.7	15.8	17.3	17.9	13.8	17.2
1993	0	0	0.4	10.0	18.7	17.4	16.8	14.9	12.4	16.9	13.6	13.6	14.5	13.7	14.4	13.7	19.1	14.5
1994	0	0	0.5	10.9	20.3	18.2	17.1	16.4	17.0	15.5	16.2	14.6	14.9	13.1	14.3	15.6	16.9	17.1
1995	0	0	0.4	10.0	21.5	20.7	19.7	19.0	16.2	16.1	16.1	17.3	12.4	12.5	11.5	12.9	17.8	14.1
1996	0	0	1.1	10.9	19.1	20.1	19.1	20.5	16.5	15.5	15.1	13.8	15.1	12.0	15.1	15.6	17.7	11.4
1997	0	0	1.1	12.0	25.9	24.3	21.2	18.9	19.8	15.4	17.6	15.2	14.5	14.8	14.9	20.0	16.7	16.4
1998	0	0	0.5	11.5	21.7	25.2	23.4	23.4	18.8	15.3	16.0	13.5	13.3	15.7	11.4	12.6	16.5	12.9

Table 8.14 : Suicide case counts and age-standardised rates for various methods of male suicides; Australia, 1979-1998

Year of death registration	Hanging (E953.0)		MV Exhaust (E952.0)		Firearms (E955.0-4)		Poisoning (solid, liquids) (E950)		Cutting/piercing (E956)		Other/unspecified (Remainder of E950-959)	
	Case counts	Rates	Case counts	Rates	Case counts	Rates	Case counts	Rates	Case counts	Rates	Case counts	Rates
1979	161	2.4	137	2.0	481	7.0	234	3.5	23	0.4	160	2.4
1980	149	2.2	169	2.5	479	6.9	217	3.2	19	0.3	165	2.5
1981	210	3.0	183	2.5	453	6.4	199	2.8	29	0.5	184	2.8
1982	232	3.2	187	2.6	506	7.1	176	2.4	28	0.4	187	2.7
1983	236	3.3	187	2.5	477	6.4	179	2.5	22	0.3	206	3.0
1984	221	3.0	203	2.8	477	6.4	208	2.8	22	0.3	177	2.4
1985	242	3.2	262	3.4	505	6.6	187	2.5	23	0.3	208	2.8
1986	266	3.4	328	4.2	507	6.6	187	2.4	23	0.3	220	2.9
1987	388	4.9	356	4.5	533	6.8	228	2.9	28	0.4	252	3.4
1988	399	5.0	349	4.3	489	6.1	211	2.6	36	0.5	246	3.1
1989	455	5.5	347	4.2	420	5.1	181	2.2	31	0.4	224	2.7
1990	444	5.3	376	4.5	454	5.4	224	2.6	32	0.4	205	2.5
1991	447	5.2	405	4.7	482	5.7	242	2.8	33	0.4	238	2.9
1992	469	5.5	410	4.7	462	5.3	212	2.5	26	0.3	250	2.9
1993	478	5.5	339	3.8	414	4.8	177	2.0	29	0.3	250	2.9
1994	519	5.9	388	4.3	400	4.5	219	2.5	37	0.4	266	3.0
1995	562	6.3	418	4.6	365	4.1	222	2.5	32	0.4	272	3.1
1996	644	7.1	432	4.7	367	4.1	199	2.2	29	0.3	260	2.9
1997	770	8.5	500	5.4	309	3.3	190	2.1	42	0.5	335	3.7
1998	1,012	10.9	451	4.8	217	2.3	178	1.9	38	0.4	254	2.7

Table 8.15 : Suicide case counts and age-standardised rates for various methods of female suicides; Australia, 1979-1998

Year of death registration	Hanging (E953.0)		MV Exhaust (E952.0)		Firearms (E955.0-4)		Poisoning (solid, liquids) (E950)		Cutting/piercing (E956)		Other/unspecified (Remainder of E950-959)	
	Case counts	Rates	Case counts	Rates	Case counts	Rates	Case counts	Rates	Case counts	Rates	Case counts	Rates
	1979	46	0.7	23	0.3	42	0.6	253	3.7	6	0.1	109
1980	50	0.7	18	0.3	37	0.5	193	2.8	8	0.1	102	1.4
1981	38	0.5	23	0.3	42	0.6	193	2.7	13	0.2	104	1.5
1982	50	0.7	25	0.4	35	0.5	216	3.0	13	0.2	120	1.6
1983	51	0.7	28	0.4	35	0.5	206	2.8	9	0.1	89	1.2
1984	52	0.7	24	0.3	46	0.6	161	2.1	5	0.1	115	1.5
1985	69	0.9	47	0.6	45	0.6	146	1.9	14	0.2	78	1.0
1986	58	0.7	56	0.7	41	0.5	179	2.3	6	0.1	111	1.4
1987	68	0.8	46	0.6	38	0.5	207	2.6	8	0.1	100	1.2
1988	69	0.8	64	0.8	32	0.4	187	2.3	3	..	112	1.3
1989	76	0.9	52	0.6	30	0.4	161	1.9	10	0.1	108	1.3
1990	86	1.0	45	0.5	32	0.4	162	1.9	8	0.1	93	1.1
1991	90	1.0	69	0.8	23	0.3	193	2.2	15	0.2	123	1.4
1992	65	0.7	59	0.7	27	0.3	186	2.1	9	0.1	128	1.4
1993	66	0.7	55	0.6	17	0.2	137	1.5	11	0.1	108	1.2
1994	84	0.9	56	0.6	20	0.2	156	1.7	8	0.1	104	1.1
1995	95	1.1	91	1.0	23	0.3	161	1.7	6	0.1	119	1.3
1996	99	1.1	73	0.8	15	0.2	179	1.9	8	0.1	88	0.9
1997	148	1.6	104	1.1	21	0.2	157	1.6	11	0.1	136	1.4
1998	172	1.8	77	0.8	17	0.2	158	1.7	10	0.1	99	1.0

Table 8.16 : Suicide case counts and age-standardised rates for various methods of suicides for persons; Australia, 1979-1998

Year of death registration	Hanging (E953.0)		MV Exhaust (E952.0)		Firearms (E955.0-4)		Poisoning (solid, liquids) (E950)		Cutting/ piercing (E956)		Other/ unspecified (Remainder of E950-959)	
	Case counts	Rates	Case counts	Rates	Case counts	Rates	Case counts	Rates	Case counts	Rates	Case counts	Rates
	1979	207	1.5	160	1.2	523	3.8	487	3.5	29	0.2	269
1980	199	1.5	187	1.4	516	3.7	410	3.0	27	0.2	267	1.9
1981	248	1.7	206	1.5	495	3.5	392	2.8	42	0.3	288	2.1
1982	282	1.9	212	1.5	541	3.7	392	2.7	41	0.3	307	2.1
1983	287	1.9	215	1.4	512	3.4	385	2.6	31	0.2	295	2.0
1984	273	1.8	227	1.5	523	3.4	369	2.4	27	0.2	292	1.9
1985	311	2.0	309	2.0	550	3.5	333	2.2	37	0.2	286	1.8
1986	324	2.0	384	2.5	548	3.5	366	2.3	29	0.2	331	2.1
1987	456	2.8	402	2.5	571	3.5	435	2.7	36	0.2	352	2.2
1988	468	2.8	413	2.5	521	3.2	398	2.4	39	0.2	358	2.2
1989	531	3.2	399	2.4	450	2.7	342	2.1	41	0.2	332	2.0
1990	530	3.1	421	2.5	486	2.9	386	2.3	40	0.2	298	1.8
1991	537	3.1	474	2.7	505	2.9	435	2.5	48	0.3	361	2.1
1992	534	3.1	469	2.7	489	2.8	398	2.3	35	0.2	378	2.2
1993	544	3.1	394	2.2	431	2.4	314	1.8	40	0.2	358	2.0
1994	603	3.4	444	2.5	420	2.3	375	2.1	45	0.2	370	2.1
1995	657	3.7	509	2.8	388	2.1	383	2.1	38	0.2	391	2.1
1996	743	4.1	505	2.7	382	2.1	378	2.0	37	0.2	348	1.9
1997	918	5.0	604	3.2	330	1.7	347	1.8	53	0.3	471	2.5
1998	1,184	6.4	528	2.8	234	1.2	336	1.8	48	0.2	353	1.9

Table 8.17 : Suicide case counts and age-standardised rates for males, by State or Territory; Australia, 1979-1998

Year of death registration	NSW		VIC		QLD		SA		WA		TAS		NT		ACT	
	Case counts	Rates	Case counts	Rates	Case counts	Rates	Case counts	Rates	Case counts	Rates	Case counts	Rates	Case counts	Rates	Case counts	Rates
1979	396	16.5	313	17.4	211	20.7	132	21.1	83	14.2	38	19.7	10	12.2	15	13.1
1980	411	16.9	320	17.6	209	20.2	99	16.5	101	17.2	37	18.5	11	18.2	11	14.0
1981	412	16.8	317	17.0	221	20.5	118	19.2	109	18.0	53	27.7	13	22.9	16	18.7
1982	434	17.4	325	17.3	230	20.5	131	21.0	132	20.2	43	20.8	8	13.6	15	12.7
1983	401	16.0	375	19.6	226	19.4	105	16.1	110	16.8	53	26.8	16	23.6	21	21.1
1984	383	14.9	346	17.7	246	20.7	125	18.9	139	20.6	39	18.8	9	12.0	22	19.5
1985	503	19.0	336	17.1	263	21.2	106	15.5	134	19.9	52	24.5	14	18.0	20	18.7
1986	477	17.8	371	18.7	309	24.4	143	20.9	134	19.3	60	27.9	13	24.8	24	18.7
1987	532	19.5	500	24.4	338	26.2	142	21.0	162	22.2	58	27.7	15	18.8	26	21.8
1988	561	20.1	413	20.2	333	25.1	149	21.3	169	22.3	60	27.6	23	25.6	21	13.7
1989	552	19.4	374	17.8	334	24.4	149	21.0	158	20.5	43	19.7	21	37.4	26	21.1
1990	538	18.8	398	18.5	340	24.1	174	24.4	167	21.0	63	28.3	30	33.3	25	20.2
1991	595	20.5	474	21.7	342	23.8	169	23.5	168	20.8	52	23.2	18	19.7	29	22.2
1992	590	20.1	445	20.2	326	22.0	166	22.7	171	20.8	75	33.1	19	22.3	27	21.3
1993	577	19.4	394	17.8	304	20.0	134	18.3	174	20.9	67	29.4	15	15.3	19	12.0
1994	629	21.1	399	17.9	368	23.4	140	19.1	189	22.2	63	27.7	17	16.8	25	16.0
1995	602	19.8	436	19.4	395	24.3	162	22.5	176	20.3	52	22.8	21	28.1	30	21.9
1996	661	21.6	382	16.9	456	27.6	154	20.6	171	19.4	52	23.0	28	28.3	27	17.5
1997	724	23.4	529	23.1	432	25.9	161	21.9	206	23.1	38	16.5	32	30.5	23	15.2
1998	709	22.7	448	19.2	450	26.2	199	27.3	235	26.1	48	20.5	33	32.3	28	19.3

Table 8.18 : Suicide case counts and age-standardised rates for females by State or Territory; Australia, 1979-1998

Year of death registration	NSW		VIC		QLD		SA		WA		TAS		NT		ACT	
	Case counts	Rates	Case counts	Rates	Case counts	Rates	Case counts	Rates	Case counts	Rates	Case counts	Rates	Case counts	Rates	Case counts	Rates
1979	146	5.8	147	7.8	83	8.4	47	7.4	35	6.2	16	7.9	1	1.3	4	3.5
1980	135	5.5	118	6.2	71	6.7	46	7.4	24	4.4	10	5.2	3	5.9	1	0.7
1981	134	5.3	108	5.7	82	7.6	43	6.7	28	4.8	10	4.8	3	4.4	5	3.8
1982	151	5.8	136	7.0	69	6.1	45	6.9	37	6.3	16	7.5	0	0.0	5	4.1
1983	137	5.1	140	7.0	56	4.8	34	4.9	32	5.0	15	7.4	0	0.0	4	3.5
1984	126	4.7	120	6.0	70	6.1	26	3.8	37	5.5	13	5.9	2	2.4	9	7.6
1985	140	5.1	83	4.0	80	6.5	32	4.5	40	6.0	15	6.8	1	1.2	8	8.6
1986	137	4.9	142	6.9	79	6.3	39	5.4	30	4.3	12	5.8	1	1.2	11	8.9
1987	116	4.1	150	7.0	91	7.1	46	6.3	42	5.8	9	4.1	2	3.1	11	8.4
1988	162	5.5	118	5.4	85	6.4	38	5.3	39	5.2	13	5.7	3	3.3	9	6.5
1989	135	4.6	118	5.4	82	5.9	52	7.2	25	3.3	18	7.8	2	3.4	6	4.5
1990	142	4.7	102	4.5	79	5.5	41	5.5	44	5.6	8	3.5	3	3.0	7	5.8
1991	173	5.8	136	6.0	80	5.4	57	7.7	43	5.3	14	6.0	3	2.8	7	4.7
1992	145	4.7	112	4.9	98	6.5	48	6.5	43	5.2	20	8.2	3	3.6	5	3.8
1993	138	4.4	94	4.1	62	4.0	34	4.5	42	5.0	15	6.2	6	6.5	3	1.9
1994	152	4.8	111	4.7	90	5.6	30	4.1	28	3.4	7	3.0	1	6.4	9	5.5
1995	172	5.5	127	5.5	101	6.1	39	5.2	37	4.3	14	5.9	2	8.7	3	2.0
1996	160	5.0	111	4.7	87	5.2	31	4.1	47	5.3	11	4.2	7	7.8	8	4.9
1997	219	6.8	140	5.8	103	6.0	34	4.4	49	5.5	11	4.5	5	5.2	16	10.2
1998	156	4.8	136	5.7	124	7.1	45	5.5	54	5.9	10	3.7	6	6.4	2	1.3

Table 8.19 : Suicide case counts and age-standardised rates for persons by State or Territory; Australia, 1979-1998

Year of death registration	NSW		VIC		QLD		SA		WA		TAS		NT		ACT	
	Case counts	Rates	Case counts	Rates	Case counts	Rates	Case counts	Rates	Case counts	Rates	Case counts	Rates	Case counts	Rates	Case counts	Rates
1979	541	11.0	460	12.5	294	14.5	179	14.1	118	10.2	54	13.9	11	7.3	19	8.3
1980	546	11.1	437	11.7	280	13.3	145	11.6	125	10.8	47	11.8	14	12.8	12	7.1
1981	545	10.8	425	11.2	303	13.9	161	12.7	137	11.4	63	15.8	16	14.6	21	10.9
1982	583	11.4	461	11.9	299	13.1	176	13.5	169	13.2	59	14.3	8	7.8	20	8.4
1983	537	10.3	515	13.1	282	12.0	139	10.3	142	10.9	68	16.3	16	13.2	25	11.9
1984	509	9.6	465	11.6	316	13.3	151	11.2	176	13.1	52	12.1	11	7.8	31	13.5
1985	643	11.9	419	10.3	343	13.8	138	10.1	174	12.8	67	15.5	15	10.4	28	12.6
1986	614	11.2	513	12.5	388	15.3	182	13.0	164	11.6	72	16.6	14	12.2	35	13.8
1987	647	11.5	650	15.4	429	16.5	188	13.3	204	14.0	67	15.5	17	11.6	37	14.9
1988	723	12.7	531	12.5	418	15.6	187	13.1	208	13.8	73	16.1	26	15.4	30	10.1
1989	687	11.9	492	11.4	416	15.0	201	14.0	183	11.9	61	13.6	23	21.2	32	12.3
1990	680	11.6	500	11.3	419	14.6	215	14.9	211	13.3	71	15.7	33	19.3	32	12.6
1991	768	13.0	610	13.7	422	14.4	226	15.5	211	13.0	66	14.4	21	11.9	36	12.9
1992	735	12.2	557	12.4	424	14.1	214	14.6	214	13.1	95	20.4	22	13.6	32	11.8
1993	715	11.8	488	10.8	366	11.8	168	11.3	216	13.0	82	17.7	21	11.2	22	6.9
1994	780	12.8	510	11.2	458	14.4	170	11.5	217	12.8	70	15.0	18	12.5	34	10.7
1995	774	12.5	562	12.3	496	15.1	201	13.7	213	12.3	66	14.2	23	19.1	33	11.3
1996	821	13.1	493	10.6	543	16.3	185	12.2	218	12.3	63	13.2	35	18.9	35	11.2
1997	943	15.0	669	14.3	535	15.8	195	13.0	255	14.2	49	10.3	37	18.7	39	12.6
1998	865	13.6	584	12.4	574	16.6	244	16.4	289	16.0	58	11.9	39	20.1	30	9.9

Appendix 8.2 : Data tables for hospitalised self-harm

Table 8.20 : Counts, age-specific rates and male to female ratio of hospitalised self-harm by five-year age groups for males, females and persons; Australia 1997/98

Age group (years)	Males		Females		Persons		M:F ratio
	Case counts	Rates	Case counts	Rates	Case counts	Rates	
0 to 4	6	0.9	6	1.0	12	0.9	0.9
5 to 9	5	0.7	2	0.3	7	0.5	2.4
10 to 14	115	17.1	419	65.4	534	40.7	0.3
15 to 19	941	141.0	2,040	321.9	2,981	229.1	0.4
20 to 24	1,559	225.4	2,110	315.5	3,669	269.7	0.7
25 to 29	1,684	229.9	2,050	281.0	3,734	255.4	0.8
30 to 34	1,646	232.9	1,731	243.6	3,377	238.3	1.0
35 to 39	1,354	182.7	1,881	252.6	3,235	217.7	0.7
40 to 44	1,123	162.0	1,526	218.8	2,649	190.5	0.7
45 to 49	804	123.3	1,009	156.5	1,813	139.8	0.8
50 to 54	508	88.4	649	117.3	1,157	102.6	0.8
55 to 59	314	71.4	359	84.4	673	77.8	0.8
60 to 64	167	45.8	158	43.1	325	44.4	1.1
65 to 69	157	46.8	127	36.3	284	41.4	1.3
70 to 74	116	40.9	136	41.3	252	41.2	1.0
75 to 79	86	44.1	84	32.1	170	37.2	1.4
80 to 84	72	66.1	74	41.4	146	50.7	1.6
85+	52	78.9	49	32.3	101	46.4	2.4
All ages ^(a)	10,709	116.9	14,410	159.0	25,120 ^(b)	137.5	0.7

(a) The all-age rates are age-standardised.

(b) Includes case where age or sex were not state

Table 8.21 : Case counts and rates for various methods of hospitalised self-harm for males; Australia 1997/98

Age-group (Years)	Hanging (E953.0)		MV exhaust gas (E952.0)		Firearms (E955.0-4)		Poisoning, tranquillisers & other psychotropics (E950.3)		Poisoning, analgesics etc (E950.0)		Other poisoning by solids & liquids (Remainder of E950)		Cutting/piercing (E956)		Other means (Remainder of E950-959)	
	Case counts	Rates	Case counts	Rates	Case counts	Rates	Case counts	Rates	Case counts	Rates	Case counts	Rates	Case counts	Rates	Case counts	Rates
	0-4 ^(a)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5-9 ^(a)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10-14	14	2.1	0	..	1	0.1	36	5.4	11	1.6	34	5.1	6	0.9	13	1.9
15-19	48	7.2	12	1.8	4	0.6	235	35.2	229	34.3	176	26.4	149	22.3	88	13.2
20-24	80	11.6	30	4.3	16	2.3	481	69.5	296	42.8	254	36.7	267	38.6	135	19.5
25-29	80	10.9	56	7.6	9	1.2	571	78.0	249	34.0	242	33.0	344	47.0	133	18.2
30-34	61	8.6	49	6.9	14	2.0	651	92.1	225	31.8	300	42.4	238	33.7	108	15.3
35-39	40	5.4	50	6.7	5	0.7	574	77.4	171	23.1	273	36.8	160	21.6	81	10.9
40-44	27	3.9	41	5.9	4	0.6	465	67.1	140	20.2	196	28.3	145	20.9	105	15.1
45-49	14	2.1	39	6.0	6	0.9	368	56.4	95	14.6	158	24.2	87	13.3	37	5.7
50-54	19	3.3	15	2.6	2	0.3	228	39.7	44	7.7	128	22.3	44	7.7	28	4.9
55-59	10	2.3	20	4.6	3	0.7	130	29.6	31	7.1	78	17.7	28	6.4	14	3.2
60-64	1	0.3	9	2.5	3	0.8	69	18.9	19	5.2	42	11.5	16	4.4	8	2.2
65-69	6	1.8	3	0.9	4	1.2	49	14.6	14	4.2	41	12.2	24	7.2	16	4.8
70-74	2	0.7	3	1.1	1	0.4	40	14.1	16	5.6	24	8.5	21	7.4	9	3.2
75-79	0	..	2	1.0	2	1.0	26	13.3	10	5.1	17	8.7	18	9.2	11	5.6
80-84	4	3.7	1	0.9	2	1.8	23	21.1	2	1.8	17	15.6	18	16.5	5	4.6
85+	3	4.5	0	..	1	1.5	16	24.3	12	18.2	7	10.6	9	13.6	4	6.1
All ages	410	4.5	330	3.5	77	0.9	3,965	42.8	1,565	17.3	1,990	21.6	1,574	17.4	798	8.8

(a) In 1997/98, 12 hospitalised self-harm cases were registered for the 0-4 year age group and another 7 for the 5-9 year age group (Table 8.20). Cases and rates for these age groups are not shown in this table.

(b) The all-ages rates are age standardised.

Table 8.22 : Case counts and rates for various methods of hospitalised self-harm for females; Australia 1997/98

Age-group (Years)	Hanging (E953.0)		MV exhaust gas (E952.0)		Firearms (E955.0-.4)		Poisoning, tranquillisers & other psychotropics (E950.3)		Poisoning, analgesics etc (E950.0)		Other poisoning by solids & liquids (Remainder of E950)		Cutting/piercing (E956)		Other means (Remainder of E950-959)	
	Case counts	Rates	Case counts	Rates	Case counts	Rates	Case counts	Rates	Case counts	Rates	Case counts	Rates	Case counts	Rates	Case counts	Rates
0-4 ^(a)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5-9 ^(a)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10-14	9	1.4	0	..	1	0.2	106	16.6	162	25.3	93	14.5	39	6.1	9	1.4
15-19	26	4.1	4	0.6	0	..	549	86.6	745	117.6	429	67.7	233	36.8	54	8.5
20-24	19	2.8	13	1.9	1	0.1	885	132.3	487	72.8	329	49.2	281	42.0	95	14.2
25-29	25	3.4	14	1.9	4	0.5	977	133.9	400	54.8	336	46.1	239	32.8	55	7.5
30-34	16	2.3	10	1.4	1	0.1	878	123.6	287	40.4	285	40.1	189	26.6	65	9.1
35-39	13	1.7	17	2.3	0	..	1,006	135.1	322	43.2	288	38.7	176	23.6	59	7.9
40-44	8	1.1	10	1.4	1	0.1	850	121.9	229	32.8	251	36.0	132	18.9	45	6.5
45-49	4	0.6	6	0.9	1	0.2	581	90.1	156	24.2	163	25.3	64	9.9	34	5.3
50-54	5	0.9	4	0.7	0	..	373	67.4	100	18.1	98	17.7	50	9.0	19	3.4
55-59	3	0.7	5	1.2	0	..	206	48.4	44	10.3	59	13.9	12	2.8	30	7.0
60-64	1	0.3	2	0.5	0	..	96	26.2	17	4.6	29	7.9	12	3.3	1	0.3
65-69	0	..	0	..	0	..	75	21.4	17	4.9	23	6.6	12	3.4	0	..
70-74	1	0.3	0	..	0	..	78	23.7	10	3.0	29	8.8	12	3.6	6	1.8
75-79	0	..	1	0.4	0	..	56	21.4	9	3.4	13	5.0	4	1.5	1	0.4
80-84	1	0.6	0	..	0	..	31	17.3	7	3.9	27	15.1	3	1.7	5	2.8
85+	0	..	0	..	0	..	26	17.1	5	3.3	8	5.3	5	3.3	5	3.3
All ages	131	1.5	86	0.9	9	0.1	6,774	73.5	2,998	33.9	2,464	27.3	1,463	16.4	485	5.3

(a) In 1997/98, 12 hospitalised self-harm cases were registered for the 0-4 year age group and another 7 for the 5-9 year age group (Table 8.20). Cases and rates for these age groups are not shown in this table.

(b) The all-ages rates are age standardised.

Table 8.23 : Case counts and rates for various methods of hospitalised self-harm for persons; Australia 1997/98

Age-group (Years)	Hanging (E953.0)		MV exhaust gas (E952.0)		Firearms (E955.0-.4)		Poisoning, tranquillisers & other psychotropics (E950.3)		Poisoning, analgesics etc (E950.0)		Other poisoning by solids & liquids (Remainder of E950)		Cutting/piercing (E956)		Other means (Remainder of E950-959)	
	Case counts	Rates	Case counts	Rates	Case counts	Rates	Case counts	Rates	Case counts	Rates	Case counts	Rates	Case counts	Rates	Case counts	Rates
0-4 ^(a)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5-9 ^(a)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10-14	23	1.8	0	..	2	0.2	142	10.8	173	13.2	127	9.7	45	3.4	22	1.7
15-19	74	5.7	16	1.2	4	0.3	784	60.3	974	74.9	605	46.5	382	29.4	142	10.9
20-24	99	7.3	43	3.2	17	1.2	1,366	100.4	783	57.6	583	42.9	548	40.3	230	16.9
25-29	105	7.2	70	4.8	13	0.9	1,548	105.9	649	44.4	578	39.5	583	39.9	188	12.9
30-34	77	5.4	59	4.2	15	1.1	1,529	107.9	512	36.1	585	41.3	427	30.1	173	12.2
35-39	53	3.6	67	4.5	5	0.3	1,580	106.3	493	33.2	561	37.8	336	22.6	140	9.4
40-44	35	2.5	51	3.7	5	0.4	1,315	94.6	369	26.5	447	32.1	277	19.9	150	10.8
45-49	18	1.4	45	3.5	7	0.5	949	73.2	251	19.4	321	24.8	151	11.6	71	5.5
50-54	24	2.1	19	1.7	2	0.2	601	53.3	144	12.8	226	20.0	94	8.3	47	4.2
55-59	13	1.5	25	2.9	3	0.3	336	38.8	75	8.7	137	15.8	40	4.6	44	5.1
60-64	2	0.3	11	1.5	3	0.4	165	22.6	36	4.9	71	9.7	28	3.8	9	1.2
65-69	6	0.9	3	0.4	4	0.6	124	18.1	31	4.5	64	9.3	36	5.3	16	2.3
70-74	3	0.5	3	0.5	1	0.2	118	19.3	26	4.2	53	8.7	33	5.4	15	2.4
75-79	0	..	3	0.7	2	0.4	82	18.0	19	4.2	30	6.6	22	4.8	12	2.6
80-84	5	1.7	1	0.3	2	0.7	54	18.8	9	3.1	44	15.3	21	7.3	10	3.5
85+	3	1.4	0	..	1	0.5	42	19.3	17	7.8	15	6.9	14	6.4	9	4.1
All ages	541	3.0	416	2.2	86	0.5	10,739	58.1	4,563	33.9	4,454	24.3	3,037	16.8	1,283	7.1

(a) In 1997/98, 12 hospitalised self-harm cases were registered for the 0-4 year age group and another 7 for the 5-9 year age group (Table 8.20). Cases and rates for these age groups are not shown in this table.

(b) The all-ages rates are age standardised.

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INJURY RESEARCH & STATISTICS

This is a statistical report on suicide and hospitalised self-harm in Australia. It provides the latest data available, including data on age and sex distribution and methods used, and presents trends for suicide deaths.

The report also includes information on suicide among Indigenous Australians and describes the shortcomings of the data and the implications for interpreting the information.

It will be relevant to those interested in data on suicide or those working in the field, including community practitioners, health planners and administrators, academic researchers and the public.