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# NOTES

SYMBOLS AND OTHER       ABS       Australian Bureau of Statistics         USAGES       HIV       Human Immunodeficiency Virus         ICD       International Classification of Diseases (produced by the World Health Organisation)         ICD-9       International Classification of Diseases Version 9         n.a.       not available         YPLL       years of potential life lost	ABOUT THIS PUBLICATION		rt is the third in the series on suicide deaths in Australia and updates the arrried out in 1982 and 1992.
		HIV ICD ICD-9 n.a.	Human Immunodeficiency Virus International Classification of Diseases (produced by the World Health Organisation) International Classification of Diseases Version 9 not available

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# SUMMARY OF FINDINGS

#### INTRODUCTION

In recent years suicide has emerged as a major public health issue. Although death by suicide is a relatively uncommon event — in 1998, 2% of all deaths were attributed to suicide — the human and economic costs are significant. Apart from the loss of life, there are health care costs associated with attempted suicide, and the circumstances surrounding the death can be particularly difficult for family and friends to deal with.

Suicide can be defined as the deliberate taking of one's life.<sup>1</sup> To be classified as a suicide a death must be recognised as due to other than natural causes. It must also be established by coronial inquiry that death results from a deliberate act of the deceased with the intention of ending his or her own life.

Recent government policy initiatives for suicide prevention began in 1992 when the National Health and Medical Research's Working Group was set up to examine options for suicide prevention in Australia. Subsequently, suicide prevention was identified as a target in *Better Health Outcomes for Australians — National goals, targets and strategies for better bealth outcomes into the next century* (1994). The Commonwealth Government allocated \$31m to The National Youth Suicide Prevention Strategy over four years from July 1995 to June 1999. From May 1999, it allocated a further \$32m over four years to the Fighting Suicide initiative, including funds towards the implementation of the draft National Action Plan on Youth Suicide Prevention.

This publication contains summary statistics on deaths registered in Australia between 1921 and 1998 where the underlying cause of death was determined as suicide. It examines recent and long-term trends, sex differentials, age patterns, method of suicide, marital status, State and Territory variations, urban and rural and international comparisons, premature deaths, and associated or contributory causes. In some instances fluctuations will occur in disaggregations because of small numbers; a more accurate picture may be obtained by averaging the data over a number of years.

During the period 1921 to 1998 Australia's population has increased significantly and the proportion of older people increased in relation to the young. These changes in the population distribution make it necessary to generally examine trends in suicide death rates adjusted for age (for more details see the glossary).

Data for the latest year available show that in 1998 there were 2,683 suicides registered, 40 less than in 1997. Of these, 2,150 were males and 533 females. In 1998 the age-standardised suicide rate was 23.1 for males and 5.6 for females per 100,000 persons. The highest age-specific death rate was for persons in the 25–44 years age group (22.7 deaths per 100,000 persons in this age group). The age-specific death rate in the 15–24 year age group declined from 19 deaths per 100,000 in 1997 to 17 in 1998, and accounted for 24% of all deaths in this age group.

<sup>&</sup>lt;sup>1</sup> Butterworths Concise Australian Legal Dictionary, 1997.

#### **OVERALL TRENDS**

Between 1921 and 1998 suicide rates fluctuated in response to a range of social and economic factors. In 1921 there were 621 registered suicides, and of these 510 were males and 111 were females. The age-standardised suicide rate was 14.0 deaths per 100,000 of the standard population. By 1998 the number of deaths from suicide had increased to 2,683 and the age-standardised death rate was 14.3 per 100,000 of the standard population (see table 1).





Although the age-standardised rates were similar in 1921 and 1998 there were a number of fluctuations during the intervening decades. The suicide rate rose during the depression years to peak at 16.8 per 100,000 of the standard population in 1930. In this period high suicide rates coincided with high levels of unemployment, particularly among males. In contrast, suicide rates declined during World War II, falling below 8 per 100,000 of the population in both 1943 and 1944 — the lowest standardised suicide death rate recorded in Australia (see table 1). The declining suicide rate during World War II was consistent with trends observed in many countries.<sup>1</sup> However, rates for the war years are underestimated because deaths of troops overseas were not included in Australian death and natural increase statistics, but were removed from population counts.<sup>2</sup>

After the war, suicide rates began to rise gradually and peaked in 1963 at 17.5 per 100,000 of the standard population. This rise and the subsequent fall in the suicide rate has been attributed in part to the unrestricted availability of hypnotic and sedative drugs (following changes made to the National Health Act in 1960) and to restricted availability of such drugs (following amendment of the Act in 1967).<sup>3</sup> The suicide death rate declined gradually from 16.9 in 1967 to 11.3 per 100,000 persons in 1984. Following this period the rate trended upwards throughout the late 1980s and 1990s. In 1997 the rate

<sup>&</sup>lt;sup>1</sup> Some countries, particularly those occupied by foreign armies, showed an increase in suicide rates during the war. See P. Noomen 1975 'Suicide in the Netherlands' in N. L. Farberow (ed.) *Suicide in Cultures*, University Park Press, USA, pp. 165–77.

<sup>&</sup>lt;sup>2</sup> ABS, Australian Demographic Trends 1997, Cat. No. 3102.0.

<sup>&</sup>lt;sup>3</sup> R.G. Oliver and B.S. Hetzel, 'Rise and fall of suicide rates in Australia: relation to sedative availability', Medical Journal of Australia, 1972, 2:919–923.

#### **OVERALL TRENDS** continued

peaked at 14.6 per 100,000 persons — the highest standardised suicide death rate recorded in Australia since 1971. The 1998 standardised suicide rate of 14.3 per 100,000 persons reflects a decline of 40 deaths from 1997 (see table 1).

In 1921–1925 suicides accounted for approximately 1% of all deaths, however by 1996–1998 this proportion had increased to 2%. For males in 1921–1925 suicides accounted for 1.7% of all deaths, and for females 0.5%. By 1996–1998 more than 3% of all male deaths were due to suicide, and for females the proportion increased to 1% (see tables 2 and 4).

## SEX DIFFERENTIALS

Throughout the period 1921–1998 the male standardised suicide death rate was considerably higher than the female rate — ranging from a high of nearly 5 to 1 in the period 1921–1925 to a low of 2 to 1 in 1966–1970. In general male suicide rates have been more volatile this century and the variation in the suicide ratio has largely been due to changes in this rate (see table 3).

RATIO OF MALE TO FEMALE SUICIDES



There was a marked rise in male suicide rates during the Depression in contrast to female rates which remained fairly steady, resulting in a male to female ratio of approximately 5 to 1 in the early 1930s. One explanation for this may be the differing impact of unemployment on male and female family roles at that time. High unemployment undermined the conventional male role of primary economic provider for the family, while the traditional roles of mother and housewife became more important.<sup>1</sup> Female rates also remained fairly steady during World War II. Compared to the marked decrease in male rates at that time female suicide rates showed only a slight decline, giving a male to female ratio of approximately 3 to 1 in 1943.

The lowest ratio for the reference period (1.7 males to 1 female) occurred in 1966. This was associated with a marked rise in female suicide rates in the 1960s which may be attributed to the increased availability of hypnotic and sedative drugs until 1968.<sup>2</sup> Differences in the choice of method of suicide between men and women, with the latter more frequently choosing poisons during this period, may explain the latter more

<sup>&</sup>lt;sup>1</sup> R.Hassan and G. Tan, 'Suicide Trends in Australia, 1901–1985: An Analysis of Sex Differentials', *Suicide and Life-threatening Behaviour*, 1989, Vol.19 (4), p. 364, 367.

<sup>&</sup>lt;sup>2</sup> R.G. Oliver and B.S. Hetzel, 'Rise and fall of suicide rates in Australia: relation to sedative availability', *Medical Journal of Australia*, 1972, 2:919–923.

# SUMMARY OF FINDINGS continued

#### SEX DIFFERENTIALS continued

frequently choosing poisons during this period, may explain the comparatively marked rise in suicide rates among women during this time.

#### TRENDS BY AGE GROUP

The pattern of age-specific suicide death rates has changed substantially over the period 1921–1998. In general suicide rates in the older age groups have gradually declined mainly due to a decline in male rates, while rates in the younger age groups have increased. In 1921–1925 suicides peaked in the 65–74 years age group, by 1961–1965 the peak age group was 50–54 years, and by 1996–1998 persons in the 25–29 years age group had the highest age-specific suicide rates (see tables 2 and 3).







#### OLDER AGE GROUPS

The age-specific suicide death rates for persons aged 65 and over declined from 27 per 100,000 persons in 1921–1925 to 15 in the period 1996–1998. Suicide death rates for persons in the age groups 45–54 and 55–64 years also gradually declined, although there were peaks in death rates for these age groups in the 1930s and 1960s, consistent with trends in the overall suicide death rates (see tables 2 and 3).





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#### 25-44 years age group

In contrast to declining suicide death rates in the elderly age groups, there was an overall increase in rates among persons in the 25–44 years age groups. In 1921–1925 the age-specific suicide rate for persons aged 25–44 years was 15 per 100,000 persons and apart from following the overall decline in suicide rates during the war years the trend has been upwards. By 1996–1998 the suicide rate for persons aged 25–44 years age 25–44 years was 20 per 100,000 persons; resulting in this group having the highest age-specific suicide rate among all age groups (see tables 2 and 3).

Within this age group the majority of the increase occurred in male suicide rates. In the period 1921–1925 the age-specific suicide rate for males aged 25–44 years was 24 per 100,000 males, and by 1996–1998 this rate increased to 34 per 100,000 males. In contrast, the age-specific suicide rate for females aged 25–44 years increased only marginally from 7 to 8 per 100,000 females over the same period (see tables 2 and 3).

#### 15–24 years age group

In absolute terms the biggest increase in deaths from suicide over the period 1921–1925 to 1996–1998 has been in the 15–24 years age group (6 per 100,000 persons in 1921–1925 to 17 in 1996–1998) (see tables 2 and 3). The rising trend in suicide death rates among the young, and particularly among males, began in the late 1960s and gathered momentum in the 1980s.<sup>1,2</sup>

As a proportion of all causes of deaths male suicides in the 15–24 years age group have increased from 3.3% to 27% in the period from 1921–1925 to 1996–1998. Female suicides aged 15–24 years also increased substantially as a proportion of all causes of death during the same period from 1.3% to 16% (see tables 2 and 4). The increase in suicides as a proportion of all deaths in this age group partly reflects declining death rates due to other causes such as motor vehicle accidents and malignant neoplasms.



#### SUICIDES AS A PROPORTION OF ALL CAUSES OF DEATH, 15-24 Years

<sup>&</sup>lt;sup>1</sup> L.Ruzicka, C.Y.Choi (1999) 'Youth suicide in Australia', *Journal of the Australian Population Association*, 16:1/2:29–46.

<sup>&</sup>lt;sup>2</sup> C. Pritchard (1992) 'Youth suicide and gender in Australia' and New Zealand compared with countries in the Western World' Australian and New Zealand Journal of Psychiatry, 26:609–617.

MARITAL STATUS

Data in this section of the report are based around census years 1981, 1986, 1991 and 1996. Married people are less likely to die from suicide than those who are never married, widowed or divorced.<sup>1</sup> Over the period 1980–1997 people in registered marriages exhibited lower and more stable rates than people who were not married (whether never married, divorced, or widowed).<sup>2</sup> During this period the average suicide death rate for married people was approximately 9 per 100,000 persons compared with the average rate for all unmarried categories combined of 21 per 100,000 persons (see table 7).

The standardised suicide death rate for never married people rose over the period 1980–1997, from 17 in 1980–1982 to 22 per 100,000 persons in 1995–97. With the rise in age of first marriage and more people living in de facto relationships, the proportion of unmarried people who are in the younger age groups has grown.<sup>3</sup> And as suicide rates have been rising in the younger age groups, this may partly account for the rise in the rate among those never married (see table 7).

Higher suicide rates among unmarried, compared with married, people may also reflect the circumstances of different marital groups. Marriage may improve the physical and mental health, and general well-being, of the incumbents. Marriage may also reduce the incidence of high risk behaviours. At the same time people with adverse physical or mental health may be less likely to enter or sustain marriage because of a complex interaction of factors which in turn increases their isolation.



SUICIDE DEATHS BY MARITAL STATUS

(a) Per 100,000 persons.

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ABS, Marriages and Divorces, 1998, Cat. no. 3310. ABS, Canberra, 1999.

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L.Ruzicka, C.Y.Choi (1999) 'Youth suicide in Australia', Journal of the Australian Population Association, 16:1/2;29-46.

<sup>2</sup> Although de facto married persons, and persons for whom marital status was not stated, are included in the total death rates here, it is likely that the 'Not Married' category contains persons effectively in de facto marriages.

#### MARITAL STATUS continued

Trends among the divorced and widowed groups were not consistent or significant over the period 1980–1997; their rates are sensitive to even small changes in the number of suicides in age groups with fewer numbers of people. The age-standardised suicide rate of divorced persons declined overall during the study period, and were more like those of never married persons than married or widowed persons.

Although overall male rates of suicide for the period 1980–1997 were four times higher than female rates, the relationship between marital status and standardised death rates from suicide were similar for men and women. The average standardised death rates for males who have never married was 28 per 100,000 person; nearly twice as high as those for married males at 15 per 100,000 persons. The rates for widowers and divorced men (both approximately 47 per 100,000 persons) were more than three times higher than those for married men. Similarly, the average standardised death rate for women who have never married at 7 per 100,000 persons was nearly twice as high as the rate for married women (4 per 100,000). The rates for widowed women at 9 per 100,000 persons and divorced women at 16 per 100,000 persons were between two and four times higher than the rate for married women (see table 7).

#### METHOD OF SUICIDE

Analysis in this section is based on data from 1979 to 1998. These years were selected because of their comparability over time; the 9th Revision of the ICD was introduced in 1979 and causes of death have been coded under this revision since then.

The majority of suicides (85%) reported in the period 1979–1998 involved four methods: hanging and strangulation (25%), firearms and explosives (23%), carbon monoxide poisoning (19%), and poisoning by solid and liquid substances (18%). Other methods including jumping from a high place (4%) drowning (3%), cutting and piercing (2%), domestic gas (0.6%) and unspecified (6%) each contributed only a small proportion towards total suicide deaths during the period (see table 8).

The four leading suicide methods changed ranking over the period 1979 to 1998 — reflected in the respective standardised suicide death rates; hanging increased from 1.7 to 6.6 per 100,000 persons, firearms decreased from 3.8 to 1.2 per 100,000 persons, carbon monoxide poisoning increased from 1.3 to 2.9 per 100,000 and poisoning. declined from 3.6 to 1.8 per 100,000 persons (see table 9).

The methods of suicide chosen by men and women differed over the period 1979–1998. The most frequent method used by men was firearms (27%), followed by hanging (26%) carbon monoxide (20%), and poisoning (12%). Because male suicides account for the majority of all suicides, the methods chosen by men have a greater influence on the overall pattern than females. Poisoning was the most common method of suicide for females until 1996, however since 1997 hanging has become the most common method of suicide for females and females. The next most common methods of suicide for females were carbon monoxide poisoning and firearms (see table 7).

#### METHOD OF SUICIDE continued

The use of firearms as a method of suicide by men declined from 7 in 1979 to 2.4 per 100,000 persons in 1998. During the period 1979 to 1998 firearms was the leading cause of suicide death among men until 1989 when hanging became the leading cause. Male deaths due to hanging increased from 2.6 in 1979 to 11.2 per 100,000 persons in 1998, and for deaths due to carbon monoxide poisoning the rate increased from 2.2 in 1979 to 5 per 100,000 person in 1998 (see table 9).

## SUICIDE DEATH RATES BY METHOD, Males



(a) Per 100,000 persons.

For most of the period from 1979 to 1998 the leading cause of female deaths due to suicide was poisoning, however, in 1997 hanging became the leading method. Hanging increased for females from 0.8 in 1979 to 2 per 100,000 persons in 1998, while at the same time poisoning decreased from 3.7 to 1.6 per 100,000 persons.<sup>1</sup> The numbers of female deaths caused by firearms were less than 1 per 100,000 persons throughout the period (see table 9).

In 1998, hanging was the leading method of suicide for both males (nearly 64% of male suicides in that age group) and females (52%) aged 15–24 years. For males, the second leading method of suicide was carbon monoxide poisoning (11%), and for females poisoning by solid or liquid substances (17%). In the 25–44 years age group, the leading methods of suicide were the same as for those aged 15–24 years — hanging was the leading method of suicide (males 50%) and (females 35%) followed by carbon monoxide poisoning for males (25%) and poisoning by solid or liquid substances (31%).

Cantor, C.H., Baume, P.J.M. (1998) 'Changing methods of suicide by young Australians 1974–1994', Archives of Suicide Research 4:41–50.

#### METHOD OF SUICIDE continued

SUICIDE DEATH RATES BY METHOD, Females



(a) Per 100,000 persons.

#### STATE AND TERRITORY VARIATION

Age-standardised suicide rates disaggregated by States and Territories, including the larger States and Territories, tend to fluctuate over time because of the small numbers of suicides registered in each of the jurisdictions. Therefore, care needs to be exercised in comparing annual State and Territory suicide data. Other factors such as the ratio of urban to rural areas may also explain some of the difference between States and Territories given the higher rates of suicide in rural areas (see page 9).

During the 1990s the standardised suicide rates for New South Wales, Victoria, Queensland, South Australia and Western Australia all generally increased. Queensland frequently had higher standardised suicide rates than the other larger States and Territories (see table 10).

In the period 1979–1998 standardised suicide rates for Tasmania, the Northern Territory and the Australia Capital Territory fluctuated widely. Therefore data based on a single year can be unrepresentative of suicide trends over a longer period. However, in spite of the limitations of the data there are some discernible trends, for example, since the late 1980s the Northern Territory's standardised suicide rate has trended upwards to peak in 1998 at 21.3 per 100,000 persons (see table 10).

#### URBAN AND RURAL COMPARISON

Data are available since 1988 disagreggated by capital cities, other urban and rural locations. In 1998 there were 1,589 suicides in capital cities, 511 suicides in other urban and 557 suicides in rural ares. Throughout the period 1988 to 1998 persons living in capital cities had the lowest rates of suicide; ranging from 12.8 to 13.9 per 100,000 persons. In general, persons living in other urban areas had the next lowest rates of suicide ranging from 14.7 to 16.2 per 100,000 persons, and rural areas had the highest suicide rates ranging from 14.6 to 18.5 per 100,000 persons (see table 11).

#### URBAN AND RURAL COMPARISON continued

Suicide rates for males were higher than females in all locations throughout the period 1988 to 1998, and males in rural areas had the highest rates. In 1988 suicide rates for males in rural areas was 25 per 100,000 persons compared to 19 per 100,000 persons in capital cities, and by 1998 rates were 29 and 21 per 100,000 persons respectively. Possible explanations for high rural suicide rates for males include more frequent use of firearms, rapid technological changes and being surrounded by economic uncertainty.<sup>1</sup> As well as much lower rates the pattern differed for females in urban and rural areas (see table 11).

The distribution of suicide deaths between males and females followed the overall pattern of a much higher rate among males for all locations. For males in capital cities the indirect standardised suicide rate in 1998 was 21, in other urban areas the rate was 24 and 29 in rural areas. For females the respective indirect standardised rate for all locations was approximately 5.5 (see table 11).





(a) Estimated by indirect method of standardisation (see glossary).

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<sup>&</sup>lt;sup>1</sup> L.Ruzicka, C.Y.Choi (1999) 'Youth suicide in Australia', *Journal of the Australian Population Association*, 16:1/2:29-46.

#### INTERNATIONAL COMPARISON

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In recent years suicide has emerged as a major health issue in many developed countries. Comparisons between countries are made difficult by a number of factors including no standard legal definition of suicide; related economic issues; and community attitudes towards suicide which may be linked to religious beliefs. These factors are likely to contribute to an underestimation of suicides to a greater or lesser extent in different countries. A World Health Organization study covering 24 countries showed that the procedures for establishing suicide as the cause of death varied widely.<sup>1</sup> Therefore the international comparisons in the following table should be interpreted with some caution. Rates have been averaged over 3 years to minimise the effects of statistical variations that may be present in annual rates.

# STANDARDISED SUICIDE DEATH RATES(a), Selected countries

Country	Reference period	Males F	emales
•••••	• • • • • • • • • •	•••••	• • • •
Greece	1993–95	4.5	1.1
Italy	1991–93	8.9	2.8
Netherlands	1993–95	11.1	5.3
UK and Ireland	1993–95	11.6	3.4
Japan	1992–94	16.6	7.3
Norway	1992–94	17.0	5.8
Germany	1993–95	17.3	5.6
Australia	1992–94	17.7	4.1
Canada	1992–94	18.0	4.7
New Zealand	1991–93	20.6	5.0
Russian Federation	1992–94	61.6	10.2

(a) Average standardised death rate per 100,000 population based on the WHO world standard. Rates are unweighted averages.

Source: World Health Organization Statistics Annual, for the years 1994, 1995 and 1996.

In most instances the ranking between countries varied according to sex. The Russian Federation had the highest standardised suicide rate for both males (61.6 per 100,000) and females (10.2 per 100,000), the next highest rate for males was New Zealand (20.6) followed by Canada (18.0) and Australia (17.7). For females, in contrast, the next highest rates occurred in Japan (7.3), Norway (5.8), and Germany (5.6). The lowest rates for both males and females in the countries included in this study were recorded for Greece and Italy.

<sup>&</sup>lt;sup>1</sup> Brooke, EM. (Ed) (1974) 'Suicide and attempted suicide', World Health Organization, Geneva, *Public Health Papers* No 58: 71–106. Also see 'Suicide statistics: the problem of comparability' *WHO Chonicle*, 29:188–193. 1975.

#### PREMATURE DEATHS DUE TO SUICIDE, 1986-1998

Premature mortality by cause is calculated using 'Years of potential life lost' methodology. In this instance premature mortality is assumed to be any death between the ages of 1-74 years (see Technical Note).

The number of deaths from all causes for people age 1–74 years of age has declined from 58,349 deaths in 1986 to 52,589 deaths in 1998. At the same time the number of deaths from suicide has increased from 1,871 in 1986 to 2,546 in 1998. Resulting in suicides as a percentage of all causes increasing from 3% to 5%.

During this period the number of years of potential life lost from all causes has decreased, while at the same time the years of potential life lost due to suicide has increased. This rise occurred because there has been an increase in both the overall number of suicide deaths, and in the numbers of suicide deaths in the younger age groups. The years of potential life lost from suicide as a percentage of all causes of life lost increased from 7% to 11%.

## YEARS OF POTENTIAL LIFE LOST FROM SUICIDE, As a Proportion of all Causes of Life Lost From Premature Mortality



#### PREMATURE DEATHS, Ages 1-74 Years

	DEATHS.		YPLL		% OF SUICIDE TO ALL CAUSES			
Year	All causes	Suicide	All causes	Suicide	Deaths	YPLL		
		• • • • • •	• • • • • • • • • • • • • • •	•••••	• • • • • • • • • • • • • • •	• • • •		
1986	58 349	1871	995 998	67 462	3.2	6.8		
1987	58 039	2 097	981 632	74 979	3.6	7.6		
1988	58 723	2 051	1 010 768	75 259	3.5	7.4		
1989	58 876	1971	992 138	70 705	3.3	7.1		
1990	56 897	2 033	963 556	74 359	3.6	7.7		
1991	55 873	2 211	937 178	81 371	4.0	8.7		
1992	56 336	2 162	930 112	78 873	3.8	8.5		
1993	55 046	1 954	907 161	70 912	3.5	7.8		
1994	55 815	2 120	902 319	77 802	3.8	8.6		
1995	54 842	2 240	902 907	82 974	4.1	9.2		
1996	54 511	2 254	897 389	83 407	4.1	9.3		
1997	54 250	2 551	899 861	96 491	4.7	10.7		
1998	52 589	2 546	884 774	96 497	4.8	10.9		

#### ASSOCIATED OR CONTRIBUTORY CAUSES OF SUICIDE, 1998

In 1997 the ABS began tabulating all causes and conditions reported on death certificates. This process of recording multiple causes of death statistics was introduced to enhance the underlying cause of death data. It is now possible to identify not only the immediate underlying cause of death but other associated or contributory causes involved that may have indirectly influenced the death.

In 1998, 15% of males and 18% of females who suicided also had an associated or contributory diagnosis of a mental disorder, including 9% of males and 5% of females who were classified in the sub-category of alcohol and drug dependent and non-dependent abuse of drugs. A further 4% of males and 9% of females who suicided were classified as having a depressive disorder, not elsewhere classified (see table 12).

Approximately 4% of males and 5% females who suicided also had a disease of the circulatory system mentioned on their death certificate as an associate or contributory cause. Less than 1% of males who suicided had the human immunodeficiency virus (HIV) mentioned on their death certificate, and no females who suicided had HIV mentioned (see table 12).



ASSOCIATED OR CONTRIBUTORY CAUSES REPORTED, Disease-related Conditions—1998



	NUMBER			CRUD	E RATE(a	)	AGE-STANDARDISED RATE(b)				
Year	Males	Females	Persons	Males	Females	Persons	Males	Females	Persons		
• • • • • • • • •	••••	•••••	• • • • • • • •	• • • • • • • • • •	• • • • • • •	• • • • • • • •	• • • • • • • • • • • • •	• • • • • • • • •	• • • • • • •		
1921	510	111	621	18.4	4.1	11.4	22.6	4.8	14.0		
1922	441	92	533	15.6	3.4	9.6	19.8	3.8	12.0		
1923	492	107	599	17.0	3.8	10.5	21.0	4.3	12.9		
1924	534	119	653	18.0	4.2	11.2	22.2	4.7	13.7		
1925	569	131	700	18.8	4.5	11.8	23.3	5.1	14.4		
1926	583	128	711	18.9	4.3	11.7	22.8	5.1	14.2		
1927	598	142	740	18.9	4.7	12.0	22.7	5.3	14.2		
1928	635	142	777	19.7	4.6	12.3	23.6	5.2	14.6		
1929	644	141	785	19.7	4.5	12.3	22.9	5.0	14.1		
1930	791	152	943	24.0	4.8	14.6	28.1	5.2	16.8		
1931	689	138	827	20.7	4.3	12.7	24.5	4.7	14.7		
1932	598	156	754	17.9	4.8	11.5	20.9	5.2	13.1		
1933	633	157	790	18.8	4.8	11.9	21.4	5.1	13.3		
1934	643	183	826	19.0	5.6	12.4	21.8	5.9	13.9		
1935	612	181	793	17.9	5.5	11.8	20.1	5.8	13.0		
1936	611	178	789	17.8	5.3	11.6	20.1	5.5	12.8		
1937	573	148	721	16.6	4.4	10.5	18.6	4.6	11.6		
1938	574	172	746	16.4	5.0	10.8	18.2	5.3	11.7		
1939	602	179	781	17.1	5.2	11.2	18.9	5.4	12.1		
1940	568	175	743	16.0	5.0	10.6	17.2	5.3	11.2		
1941	463	161	624	12.9	4.6	8.8	14.4	4.6	9.4		
1942	432	162	594	12.0	4.5	8.3	12.8	4.6	8.7		
1943	376	140	516	10.3	3.9	7.1	11.6	4.0	7.7		
1944	362	178	540	9.9	4.9	7.4	11.0	5.0	7.9		
1945	394	173	567	10.6	4.7	7.7	11.8	4.7	8.2		
1946	513	219	732	13.7	5.9	9.8	15.0	6.1	10.4		
1947	546	200	746	14.4	5.3	9.8	15.8	5.4	10.5		
1948	578	159	737	15.0	4.1	9.6	16.4	4.2	10.2		
1949	599	174	773	15.1	4.4	9.8	16.7	4.6	10.5		
1950	567	193	760	13.8	4.8	9.3	15.4	4.9	10.0		
1951	608	197	805	14.3	4.7	9.6	15.6	4.9	10.2		
1952	694	225	919	15.9	5.3	10.6	17.6	5.5	11.5		
1953	698	261	959	15.6	6.0	10.9	17.4	6.2	11.7		
1954	724	245	969	15.9	5.5	10.8	18.0	5.8	11.7		
1955	701	245	946	15.1	5.4	10.3	17.2	5.6	11.2		
1956	751	270	1 021	15.7	5.8	10.8	17.7	6.2	11.8		
1957	844	326	1 170	17.3	6.9	12.1	19.4	7.2	13.2		
1958 1959	910	297	1 207	18.3	6.1	12.3	20.7	6.5	13.4		
1959 1960	827 778	288 314	1 115 1 092	16.3 15.0	5.8 6.2	11.1 10.6	18.4 17.1	6.1 6.6	12.1 11.7		
1961	901	348	1 249	17.0	6.7	11.9	19.0	7.3	13.0		
1962	1 011	458	1 469	18.7	8.6	13.7	21.2	9.3	15.2		
1963	1 143	575	1 718	20.8	10.6	15.8	23.7	11.6	17.5		
1964	1071	549	1 620	19.1	10.0	14.6	21.9	10.8	16.2		
1965	1 075	610	1 685	18.8	10.8	14.9	21.4	11.9	16.5		
1966	1 017	607	1 624	17.4	10.5	14.0	20.0	11.6	15.6		
1967	1 125	653	1 778	18.9	11.1	15.1	21.9	12.2	16.9		
1968	1 022	505	1 527	16.9	8.5	12.7	19.3	9.3	14.1		
1969	1 025	477	1 502	16.6	7.8	12.2	19.2	8.6	13.7		
1970	1 076	475	1 551	17.1	7.6	12.4	19.4	8.3	13.7		
1971	1 150	588	1 738	17.5	9.0	13.3	19.8	9.9	14.7		
1972	1 085	540	1 625	16.2	8.2	12.2	18.4	8.9	13.5		
1973	1 036	492	1 528	15.3	7.3	11.3	17.2	7.9	12.4		
1974	1 073	494	1 567	15.6	7.2	11.0	17.5	7.8	12.5		
1975	1 050	478	1 528	15.1	6.9	11.4	16.9	7.5	12.0		
	- 000		1 020	10.1	0.0		10.0		12.0		

(a) Rates per 100,000 of the mid-year population.

(b) Standardised rates per 100,000 of the standard population (see gloassary for details).

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	NUMBER			CRUD	E RATE(a	)	AGE-ST/	ANDARDISED	RATE(b)
Year	Males	Females	Persons	Males	Females	Persons	Males	Females	Persons
• • • • • • • •	••••	• • • • • •	• • • • • • • • • •	•••••	• • • • • • •	• • • • • • • • • • •	•••••	•••••	••••
1976	1 098	406	1 504	15.6	5.8	10.7	17.3	6.2	11.6
1977	1 128	438	1 566	15.9	6.2	11.0	17.4	6.6	11.9
1978	1 126	469	1 595	15.7	6.5	11.1	17.0	7.0	11.8
1979	1 198	479	1 677	16.5	6.6	11.6	17.6	6.9	12.2
1980	1 199	408	1 607	16.3	5.5	10.9	17.6	5.9	11.6
1981	1 259	413	1 672	16.9	5.5	11.2	18.1	5.8	11.8
1982	1 318	459	1777	17.4	6.0	11.7	18.5	6.3	12.2
1983	1 308	418	1 726	17.0	5.4	11.2	18.0	5.6	11.6
1984	1 309	403	1 712	16.8	5.2	11.0	17.6	5.3	11.3
1985	1 428	399	1 827	18.1	5.0	11.6	18.7	5.1	11.8
1986	1 531	451	1 982	19.1	5.6	12.4	19.8	5.7	12.6
1987	1 773	467	2 240	21.8	5.7	13.8	22.5	5.7	13.9
1988	1 730	467	2 197	21.0	5.6	13.3	21.5	5.6	13.4
1989	1 658	438	2 096	19.8	5.2	12.5	20.1	5.2	12.5
1990	1 735	426	2 161	20.4	5.0	12.7	20.7	4.9	12.7
1991	1 847	513	2 360	21.4	5.9	13.7	21.7	5.9	13.7
1992	1 820	474	2 294	20.9	5.4	13.1	21.1	5.3	13.1
1993	1 687	394	2 081	19.2	4.4	11.8	19.3	4.3	11.7
1994	1 830	428	2 258	20.6	4.8	12.6	20.7	4.7	12.6
1995	1 873	495	2 368	20.8	5.5	13.1	20.9	5.4	13.0
1996	1 931	462	2 393	21.2	5.0	13.1	21.3	4.9	13.0
1997	2 146	577	2 723	23.3	6.2	14.7	23.4	6.1	14.6
1998	2 150	533	2 683	23.1	5.7	14.3	23.1	5.6	14.3
• • • • • • • •	•••••	••••	• • • • • • • • • •	•••••	• • • • • • •		•••••	•••••	• • • • • • •

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(a) Rates per 100,000 of the mid-year population.

(b) Standardised rates per 100,000 of the standard population (see glossary for details).

AGE GROUP (	years)

Period	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+	All ages(a)
MALES														
1921–25	67	142	207	246	267	296	264	252	233	222	158	96	85	2 546
1926-30	59	180	245	283	341	362	386	373	338	284	202	102	93	3 251
1931–35	74	180	242	247	312	288	369	405	336	267	187	136	125	3 175
1936–40	75	175	229	239	256	291	346	310	292	252	170	136	147	2 928
1941–45	64	82	89	118	164	171	214	219	254	213	157	131	144	2 027
1946–50	74	138	175	192	218	264	275	283	312	259	219	166	212	2 803
1951–55	90	193	259	268	288	333	358	290	298	369	291	196	181	3 425
1956–60	81	187	316	408	413	387	475	420	370	325	317	193	205	4 110
1961–65	140	304	377	460	529	592	578	606	478	376	314	212	223	5 201
1966–70	190	376	420	410	501	617	540	534	498	359	312	209	276	5 265
1971–75	297	57	483	420	456	511	608	508	405	327	303	213	251	5 394
1976–80	357	706	660	581	499	490	520	491	396	310	273	221	217	5 749
1981–85	381	941	844	696	562	525	430	442	450	381	332	257	339	6 622
1986–90	625	1 103	1 089	892	794	750	547	489	507	417	348	341	480	8 427
1991–95	589	1 234	1073	1076	954	799	746	552	447	399	364	308	491	9 057
1996–98	352	780	844	752	722	601	471	403	279	244	232	186	340	6 227
1996–98 352 780 844 752 722 601 471 403 279 244 232 186 340 6 227 FEMALES														
FEMALES 1921–25 35 36 65 81 79 55 51 47 48 25 20 12 4 560														
1926-30	49	62	74	65	87	83	83	62	43	43	28	11	13	705
1931–35	47	76	90	79	108	95	95	69	71	28	20	27	10	815
1936-40	32	69	66	83	78	103	107	100	72	57	40	23	19	852
1941–45	27	50	64	85	69	78	100	109	80	69	37	27	18	814
1946–50	26	39	73	74	110	88	95	107	96	94	70	38	32	945
1951-55	20 25	32	78	91	137	121	141	150	120	112	70	55	41	1 173
1956-60	32	52	74	122	150	147	206	175	150	133	120	72	58	1 495
1961-65	61	120	161	199	262	279	299	313	260	207	171	117	84	2 540
1966–70	71	166	202	194	256	290	358	299	247	231	170	114	114	2 717
1971–75	122	177	223	196	225	270	310	294	247	185	126	113	96	2 592
1976-80	98	191	196	185	189	190	236	224	208	165	120	86	103	2 200
1981-85	76	187	215	165	207	153	202	191	182	155	117	102	134	2 092
1986–90	135	182	223	230	214	205	180	158	149	147	140	109	172	2 249
1991–95	117	242	228	238	248	226	202	159	141	118	101	94	181	2 304
1996–98	94	137	164	156	206	161	128	128	83	66	60	66	107	1 572
••••	• • • • • •	• • • • •	• • • • • •	• • • • • •	• • • • •	• • • • • •	PERSC		• • • • • •	• • • • •	• • • • • •	••••	• • • • • •	• • • • • • • • • •
							I LING							
1921–25	102	178	272	327	346	351	315	299	281	247	178	108	89	3 106
1926-30	108	242	319	348	428	445	469	435	381	327	230	113	106	3 956
1931-35	121	256	332	326	420	383	464	474	407	295	207	163	135	3 990
1936-40	107	244	295	322	334	394	453	410	364	309	210	159	166	3 780
1941–45	91	132	153	203	233	249	314	328	334	282	194	158	162	2 841
1946–50	100	177	248	266	328	352	370	390	408	353	289	204	244	3 748
1951–55	115	225	337	359	425	454	499	440	418	481	361	251	222	4 598
1956-60	113	239	390	530	563	534	681	595	520	458	437	265	263	5 605
1961-65	201	424	538	659	791	871	877	919	738	583	485	329	307	7 741
1966–70	261	542	622	604	757	907	898	833	745	590	482	323	390	7 982
1971–75	419	752	706	616	681	781	918	802	652	512	429	326	347	7 986
1976-80	455	897	856	766	688	680	756	715	604	475	394	307	320	7 949
1981-85	457	1 128	1 059	861	769	678	632	633	632	536	449	359	473	8 714
1986-90	760	1 285	1 312	1 122	1 008	955	727	647	656	564	488	450	652	10 676
1991–95	706	1 476	1 301	1 314	1 202	1 025	948	711	588	517	465	402	672	11 361
1996–98	446	917	1 008	908	928	762	599	531	362	310	292	252	448	7 799
•••••	• • • • • •	• • • • •	• • • • • •	• • • • • •	• • • • •	• • • • • •	• • • • •	• • • • • •	• • • • • •	• • • • •	• • • • • •	• • • • • •	• • • • • •	•••••

(a) Includes age not stated.

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AGE GROUP (years)											ALL A	GES(b)			
Period	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+	Crude	Age- standardised
• • • • • • •	• • • • • •	• • • • •		• • • • • •	• • • • •		• • • • •	MALES	• • • • • •			• • • • • •		• • • • • • • • • •	• • • • • • • • •
1921–25	5.3	12.3	18.5	21.2	24.9	32.4	34.3	36.2	38.2	44.6	46.9	50.7	47.8	17.6	21.8
1926–30	4.0	13.2	19.4	24.0	28.8	33.7	42.7	50.5	52.2	51.4	47.5	38.6	44.8	20.3	24.0
1931–35	4.8	12.0	17.6	19.6	26.9	25.0	35.7	47.3	49.6	46.8	40.3	41.2	45.6	18.9	21.7
1936–40	4.7	11.4	15.4	17.5	20.6	25.7	31.0	31.4	36.7	41.4	35.3	37.9	41.9	16.8	18.6
1941–45	4.1	5.3	6.0	8.1	12.2	14.0	19.4	20.5	27.6	29.8	30.7	34.8	35.5	11.1	12.3
1946–50	5.1	8.7	11.2	12.8	14.8	19.8	23.0	26.8	31.4	31.4	36.6	41.9	47.5	14.4	15.9
1951–55	6.1	12.1	14.2	15.2	17.6	21.1	26.0	24.7	29.9	41.1	41.9	42.3	37.9	15.4	17.2
1956–60	4.6	11.5	17.8	21.1	22.6	23.2	30.0	31.3	33.5	36.2	41.8	35.8	38.3	16.5	18.6
1961–65	5.9	15.8	21.4	24.8	26.7	32.1	34.9	39.4	37.8	37.8	41.3	36.0	35.5	18.9	21.5
1966–70	7.0	15.0	20.1	21.8	25.9	30.6	29.3	33.3	34.5	31.5	36.8	36.0	40.1	17.4	20.0
1971–75	9.8	19.8	17.5	18.5	22.6	25.4	29.6	27.8	26.4	24.8	30.3	31.2	34.4	15.9	17.9
1976–80	10.8	22.9	22.0	20.8	21.9	24.6	26.4	24.8	23.0	22.0	23.8	27.7	26.1	16.0	17.4
1981–85	11.6	27.8	26.2	22.3	19.6	22.8	21.7	22.9	23.8	23.9	26.4	26.9	33.7	17.3	18.2
1986–90	17.6	32.5	30.9	26.8	24.6	25.5	23.5	24.7	27.0	23.2	23.9	32.0	37.7	20.4	20.9
1991–95	17.6	34.1	31.1	29.6	27.8	24.3	25.4	23.9	23.2	22.2	22.2	24.7	32.0	20.6	20.7
1996–98	17.7	37.2	38.8	35.2	32.7	29.1	24.0	24.2	21.5	22.5	23.0	22.1	31.3	22.5	22.6
• • • • • • •	• • • • • •	• • • • •	• • • • • •	•••••	••••	• • • • • •	•••••	• • • • •	• • • • • •	••••	• • • • • •	••••	•••••	• • • • • • • • • •	• • • • • • • • •
							F	EMALES	5						
1921–25	2.9	3.1	5.5	7.0	7.7	6.4	7.1	7.4	9.0	5.8	6.7	6.9	2.1	4.0	4.6
1926–30	3.5	4.9	6.2	5.4	7.5	8.1	9.8	8.9	7.1	8.6	7.3	4.4	5.8	4.6	5.2
1931–35	3.1	5.3	7.1	6.6	9.2	8.3	9.6	8.5	10.7	5.0	4.5	8.4	3.3	5.0	5.3
1936–40	2.1	4.6	4.6	6.6	6.6	8.9	9.7	10.5	9.3	9.3	8.0	6.1	4.8	5.0	5.2
1941–45	1.7	3.2	4.3	6.0	5.5	6.7	8.8	10.1	8.7	9.5	6.7	6.5	3.7	4.5	4.6
1946–50	1.8	2.5	4.7	4.9	7.8	7.1	8.3	9.8	9.4	11.0	10.6	8.2	5.6	4.9	5.0
1951–55	1.8	2.2	4.6	5.4	8.6	8.2	11.3	13.2	11.3	11.5	9.0	9.8	6.2	5.4	5.6
1956–60	1.9	3.4	4.6	6.8	8.6	9.1	13.9	14.2	13.6	13.1	13.5	10.8	7.4	6.1	6.5
1961–65	2.7	6.6	9.8	11.7	14.2	15.7	18.4	21.4	21.5	19.6	18.2	15.1	8.7	9.4	10.2
1966–70	2.7	7.0	10.3	11.0	14.2	15.3	20.0	18.8	17.4	19.8	17.2	14.0	9.9	9.1	10.0
1971–75	4.2	6.3	8.5	9.2	11.8	14.4	15.9	16.4	15.7	13.1	11.2	12.6	7.3	7.7	8.4
1976-80	3.1	6.4	6.7	6.9	8.7	10.0	12.8	11.8	11.8	10.8	9.1	8.5	6.8	6.1	6.5
1981–85	2.4	5.7	6.8	5.4	7.5	7.0	10.7	10.4	9.8	9.0	8.1	8.4	7.5	5.4	5.6
1986–90	4.0	5.5	6.4	6.9	6.7	7.3	8.2	8.3	8.2	8.0	8.5	8.2	7.9	5.4	5.4
1991–95	3.7	6.9	6.6	6.6	7.2	6.9	7.1	7.2	7.5	6.5	5.7	6.2	7.1	5.2	5.1
1996–98	5.0	6.8	7.6	7.3	9.3	7.8	6.6	8.0	6.6	6.1	5.7	6.7	6.2	5.6	5.5
•••••	• • • • • •	• • • • •		• • • • • •	• • • • •		P	ERSON	<b></b> .		• • • • • •	• • • • • •		• • • • • • • • • •	• • • • • • • • •
1921-25	4.1	7.7	11.8	14.1	16.5	19.7	21.1	22.5	24.6	26.6	28.1	29.6	24.0	10.9	13.4
1926-30	3.7	9.2	12.9	14.6	18.2	21.2	26.7	30.2	30.4	31.0	28.4	22.1	24.6	12.6	14.8
1931–35 1936–40	4.0	8.7	12.5	13.3	18.0	16.7	22.9	28.4	30.4	26.1	22.7	25.1	23.5	12.0	13.6
1930–40 1941–45	3.4 2.9	8.0 4.3	10.1 5.1	12.3 7.0	13.8 9.0	17.2 10.4	20.4 14.1	21.1 15.3	23.2 18.2	25.2 19.6	21.4 18.2	21.7 19.9	22.3 18.2	11.0 7.8	11.9 8.4
1946-50	3.5	5.7	7.9	8.9	11.4	13.7	15.8	18.2	20.2	21.0	23.0	23.8	24.0	9.6	10.3
1951-55	4.0	7.3	9.6	10.5	13.2	14.9	19.0	19.1	20.3	25.7	24.5	24.5	19.6	10.4	11.3
1956–60 1961–65	3.3	7.6	11.5 15 9	14.2 18.5	15.8 20.7	16.2	22.2 26.7	23.1	23.5	23.9 28.4	26.5 28 5	22.0	19.9 19.2	11.4 14.2	12.5 15.7
1961–65 1966–70	4.4 4.9	11.3 11.1	15.8 15.4	18.5 16.5	20.7	24.0 23.2	26.7 24.7	30.7 26.0	29.9 26.0	28.4 25.6	28.5 26.3	24.1 23.2	19.2 21.2	14.2 13.3	15.7
1971-75	7.1	13.1	13.2	14.0	17.4	20.0	22.9	22.2	21.0	18.7	20.2	20.7	17.0	11.8	13.0
1976-80	7.0	14.8	14.4	14.0	15.5	17.5	19.8	18.4	17.4	16.2	15.9	17.0	13.6	11.1	11.8
1981-85	7.1	16.9	16.6	13.9	13.7	15.1	16.4	16.8	16.9	16.2	16.6	16.6	17.0	11.3	11.7
1986–90 1991–95	10.9	19.2 20.7	18.8 18.0	16.9	15.7 175	16.6 15.7	16.1 16.5	16.7	17.7 15.4	15.5	15.7 12.6	18.7 14 5	18.9 16 5	12.9	13.0
	10.8	20.7	18.9	18.1	17.5	15.7	16.5	15.8	15.4	14.3	13.6	14.5	16.5	12.9	12.8
1996–98	11.5	22.2	23.2	21.2	21.0	18.4	15.4	16.2	14.2	14.3	14.2	13.8	15.8	14.0	14.0

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(a) Rate per 100,000 persons.

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(b) Includes age not stated.



## AGE-SPECIFIC DEATHS: All causes

AGE GROUP (years).....

AGE GROUP (years)														
Period	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+	All ages(a)
• • • • • • •	••••	• • • • •	• • • • • •	••••	••••	••••	• • • • • •	••••	•••••	•••••	• • • • • • •	••••	•••••	• • • • • • • • • • • •
MALES														
1001 05	0.000	0 100	0.040	4 550	5 500	0.405	7.047	0.005	11 100	44.000	10.000	10.000	05 074	450 750
1921–25	2 833	3 436	3 843	4 558	5 562	6 185	7 317	8 985	11 123	14 000	13 929	12 023	25 371	153 756
1926-30	3 115	3 798	3 970	4 316	5 487	6 652	8 005	9 382	11 555	14 662	17 319	16 224	28 706	164 256
1931–35	2 764	3 501	3 485	3 808	4 622	6 200	8 115	9 902	11 928	15 008	18 692	20 500	35 988	167 159
1936–40	2 954	3 715	3 687	3 588	4 665	5 867	8 743	11 646	14 205	16 633	19 969	22 674	46 587	186 388
1941–45	2 266	2 083	2 246	2 827	3 853	5 184	7 840	12 033	15 965	19 853	21 942	24 305	55 346	197 805
1946–50	2 021	2 852	2 650	2 968	3 868	5 434	8 118	11 708	17 513	22 577	25 405	25 382	60 390	210 622
1951–55	2 295	3 105	3 175	3 225	4 067	5 906	8 595	12 595	17 374	24 595	29 340	30 002	64 807	228 601
1956–60	2 415	2 880	2 745	3 530	4 227	5 920	9 369	13 406	18 651	23 880	31 823	34 334	70 733	242 823
1961–65	2 857	3 185	2 555	3 166	4 669	6 891	10 227	15 804	21 214	27 294	32 083	38 026	81 579	267 854
1966–70	3 819	4 384	3 036	3 019	4 599	7 590	11 440	16 666	24 779	31 692	37 540	38 893	93 724	298 878
1971-75	4 622	5 046	3 610	3 281	4 269	6 785	12 250	17 594	24 414	33 667	39 358	41 864	95 025	308 815
1976-80	4 587	5 303	4 005	3 669	4 194	5 961	10 306	16 968	23 681	31 284	40 705	43 331	97 026	302 903
1981-85	3 744	5 211	4 238	3 941	4 219	5 493	8 056	13 901	23 018	30 535	39 081	47 042	109 818	308 584
1986–90	3 695	5 009	4 896	4 520	4 905	6 234	7 794	11 642	19 201	30 619	39 839	47 261	127 915	322 489
1991–95	2 710	4 383	4 304	4 941	5 364	6 395	8 512	11 134	15 935	25 928	39 382	48 041	144 875	328 986
1996–98	1 619	2 593	2 806	3 036	3 340	3 956	5 103	7 051	9 149	13 568	21 104	29 395	96 658	203 031
							FEM	ALES						
							1 [1417	LLO						
1921–25	2 225	3 288	4 000	4 463	4 872	4 545	4 877	5 819	6 768	8 328	8 957	8 552	23 965	117 415
1926–30	2 243	3 408	3 921	4 186	5 008	5 057	5 617	6 127	7 455	9 406	11 518	11 790	28 706	126 544
1931–35	2 072	3 059	3 395	3 621	4 466	4 967	5 938	6 881	7 648	10 055	13 285	15 112	33 468	131 094
1936–40	1 883	2 794	3 338	3 377	3 943	4 712	6 343	7 669	8 791	11 008	14 436	17 436	44 055	146 022
1941-45	1 483	2 227	2 878	3 162	3 579	4 311	6 062	8 332	10 170	12 790	15 956	19 960	55 387	162 875
1946-50	978	1 558	2 034	2 420	3 197	3 953	5 541	8 017	10 549	13 786	17 075	20 597	63 551	167 793
1951–55	835	1 073	1 523	2 060	2 877	3 929	5 411	7 537	10 129	14 649	19 055	23 085	72 104	178 813
1956–60	871	923	1 190	1 835	2 731	3 914	5 755	6 992	9 577	13 962	20 422	25 828	81 518	189 617
1961–65	1 143	1 121	1 183	1 639	2 818	4 065	6 052	8 211	10 029	14 400	20 320	29 017	96 060	209 473
1966–70	1 469	1 387	1 317	1 623	2 706	4 348	6 566	9 366	12 315	15 858	21 857	30 264	115 029	236 845
1971–75	1 629	1 536	1 505	1 719	2 442	3 930	6 781	9 381	12 635	17 241	21 850	29 554	124 858	247 271
1976-80	1 540	1 613	1 470	1 834	2 261	3 324	5 300	8 594	11 935	16 461	22 311	28 000	129 037	242 237
1981-85	1 291	1 601	1 607	1 726	2 343	3 006	4 518	7 214	11 227	16 431	22 238	30 836	142 733	253 996
1986-90	1 376	1 630	1 635	1 868	2 483		4 531	6 421	9 847	15 865	22 238 22 933	30 830 31 824	163 672	273 973
1980-90	1 078	1 445	1 482	1 952	2 483 2 594	3 504 3 600	4 997	6 400	9 847 8 804	13 694	22 933 22 002	31 674 31 674	182 265	287 244
						3 000		0 400	0 004		22 002	51 074	102 205	
1996–98	642	770	924	1 169	1 683	2 219	3 190	4 344	5 351	7 422	11 647	18 589	121 613	182 240
							PERS	SONS						
1921–25	5 058	6 724	7 843	9 021	10 434	10 730	12 194	14 804	17 891	22 328	22 886	20 575	49 336	271 171
1921-25	5 058 5 358	6724 7206	7 843 7 891	9 021 8 502	10 434 10 495	10730 11709	12 194 13 622	14 804 15 509	17 891 19 010	22 328 24 068	22 886 28 837	20 575 28 014	49 336 57 412	271 171 290 800
1920-30						11 709 11 167	13 022 14 053						69 456	
1931–35 1936–40	4 836	6 560 6 500	6 880 7 025	7 429	9 088			16 783	19 576	25 063	31 977 34 405	35 612		298 253 332 410
	4 837	6 509	7 025	6 965	8 608	10 579	15 086	19 315	22 996	27 641	34 405	40 110	90 642	
1941–45	3 749	4 310	5 124	5 989	7 432	9 495	13 902	20 365	26 135	32 643	37 898	44 265	110 733	360 680
1946–50	2 999	4 410	4 684	5 388	7 065	9 387	13 659	19 725	28 062	36 363	42 480	45 979	123 941	378 415
1951–55	3 130	4 178	4 698	5 285	6 944	9 835	14 006	20 132	27 503	39 244	48 395	53 087	136 911	407 414
1956–60	3 286	3 803	3 935	5 365	6 958	9 834	15 124	20 398	28 228	37 842	52 245	60 162	152 251	432 440
1961–65	4 000	4 306	3 738	4 805	7 487	10 956	16 279	24 015	31 243	41 694	52 403	67 043	177 639	477 327
1966–70	5 288	5 771	4 353	4 642	7 305	11 938	18 006	26 032	37 094	47 550	59 397	69 157	208 753	535 723
1971–75	6 251	6 582	5 115	5 000	6 711	10 715	19 031	26 975	37 049	50 908	61 208	71 418	219 883	556 086
1976-80	6 127	6 916	5 475	5 503	6 455	9 285	15 606	25 562	35 616	47 745	63 016	71 331	226 063	545 140
1981-85	5 035	6 812	5 845	5 667	6 562	8 499	12 574	21 115	34 245	46 966	61 319	77 878	252 551	562 580
1986–90	5 071	6 639	6 531	6 388	7 388	9 738	12 325	18 063	29 048	46 484	62 772	79 085	291 587	596 462
1991-95	3 788	5 828	5 786	6 893	7 958	9 995	13 509	17 534	24 739	39 622	61 384	79 715	327 140	616 230
1996–98	2 261	3 363	3 730	4 205	5 023	6 175	8 293	11 395	14 500	20 990	32 751	47 984	218 271	385 271

(a) Includes deaths from 0-14 years. and age not stated.

AGE GROUP (years).....

Year	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+	All ages(a)	
• • • • •	• • • • • •	• • • • • •		• • • • • •	• • • • •		• • • • • •	• • • • •	• • • • • •	• • • • •		• • • • • •		•••••	
MALES															
1979 1980	19798514913613610010311210085644843331 198198066163139134107106938193635636571 199														
1981	72	166	140	134	107	114	90	101	93	69	70	44	59	1 259	
1982	69	189	186	126	108	92	91	78	89	77	75	47	77	1 318	
1983 1984	61 68	187 185	170 146	136 160	112 115	89 101	75 81	90 96	89 94	82 79	69 64	61 46	79 64	1 308 1 309	
1985	111	214	202	143	122	129	93	77	85	74	54	59	60	1 428	
1986	91	199	195	178	139	134	98	89	98	83	62	67	86	1 531	
1987 1988	122 151	215 237	216 211	172 177	171 153	164 169	110 117	120 92	131 84	87 91	65 71	76 69	111 102	1 773 1 730	
1989	133	201	232	188	160	124	117	95	96	72	71	69	92	1 658	
1990	128	251	235	177	171	159	105	93	98	84	79	60	89	1 735	
1991 1992	133 125	243 253	206 226	217 205	227 181	173 150	132 156	119 104	84 80	72 90	68 83	57 71	110 91	1 847 1 820	
1992	125	233	220	205	152	134	150	93	80	90 86	74	61	91 94	1 687	
1994	122	252	205	209	174	180	150	120	91	82	76	65	100	1 830	
1995	98	252	236	239	220	162	154	116	108	69	63	54	96	1 873	
1996 1997	114 122	237 295	236 294	229 246	234 215	179 216	151 153	115 141	93 98	88 81	68 77	68 69	112 131	1 931 2 146	
1998	116	248	314	277	273	206	167	147	88	75	87	49	97	2 150	
••••	••••	••••		• • • • • •	• • • • •	••••	• • • • • •	• • • • •	• • • • • •	• • • • •	• • • • • •	••••	• • • • • •	•••••	
							FEMA	LES							
1979	23	48	47	39	38	38	41	54	43	40	27	25	15	479	
1980	15	41	44	37	44	40	35	33	36	17	21	14	29	408	
1981 1982	15 11	41 31	36 56	35 31	39 43	37 36	42 40	42 53	40 37	22 41	25 25	17 29	21 26	413 459	
1983	12	32	43	37	41	29	33	38	40	36	26	20	29	418	
1984 1985	15 23	42 41	40	42 20	41 43	28 23	48	31 27	33 32	27 29	20	15 21	21 37	403 399	
1985	23 20	41 51	40 45	20 37	43 48	23 36	39 46	37	32 33	29 28	21 23	21	25	399 451	
1980	20 42	38	43 44	37	40 46	30 41	40 36	32	33 37	28 27	23 31	20 24	25 31	467	
1988	26	34	43	54	50	40	36	31	26	38	23	21	44	467	
1989 1990	13 34	33 26	49 42	46 56	35 35	48 40	28 34	32 26	29 24	33 21	36 27	22 22	33 39	438 426	
1991	21	65	56	48	45	51	40	31	40	33	20	22	39	513	
1992	31	46	42	58	45	50	33	29	28	24	24	21	40	474	
1993 1994	19 17	36 40	38 43	40 42	53 55	27 44	43	28 30	19 23	18	20	19 18	33	394	
1994 1995	17 29	40 55	43 49	42 50	55 50	44 54	38 48	30 41	23 31	24 19	14 23	18 14	37 32	428 495	
1996	26	30	49	47	65	45	50	38	21	19	15	23	27	462	
1997	33	60	59	56	64	58	45	51	32	24	25	22	41	577	
1998	35	47	56	53	77	58	33	39	30	23	20	21	39	533	
• • • • •	••••	••••		• • • • • •	••••	•••••	•••••	••••	• • • • • •	••••	•••••	•••••	••••	•••••	

(a) Includes age not stated.

# AGE GROUP (years)..... Year 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+ All ages(a) PERSONS 1979 108 197 183 175 138 141 153 154 128 104 75 68 48 1 677 1980 81 204 183 171 151 146 128 114 129 80 77 50 86 1 607

1981	87	207	176	166	144	151	132	143	133	91	95	61	80	1 672
1982	80	220	242	157	151	128	131	131	126	118	100	76	103	1 777
1983	73	219	213	173	153	118	108	128	129	118	95	81	108	1 726
1984	83	227	186	202	156	129	129	127	127	106	84	61	85	1 712
1985	134	255	242	163	165	152	132	104	117	103	75	80	97	1 827
1986	111	250	240	215	187	170	144	126	131	111	85	87	111	1 982
1987	164	253	260	209	217	205	146	152	168	114	96	100	142	2 240
1988	177	271	254	231	203	209	153	123	110	129	94	90	146	2 197
1989	146	234	281	234	195	172	145	127	125	105	107	91	125	2 096
1990	162	277	277	233	206	199	139	119	122	105	106	82	128	2 161
1991	154	308	262	265	272	224	172	150	124	105	88	79	149	2 360
1992	156	299	268	263	226	200	189	133	108	114	107	92	131	2 294
1993	130	270	238	246	205	161	197	121	103	104	94	80	127	2 081
1994	139	292	248	251	229	224	188	150	114	106	90	83	137	2 258
1995	127	307	285	289	270	216	202	157	139	88	86	68	128	2 368
1996	140	267	285	276	299	224	201	153	114	107	83	91	139	2 393
1997	155	355	353	302	279	274	198	192	130	105	102	91	172	2 723
1998	151	295	370	330	350	264	200	186	118	98	107	70	136	2 683

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(a) Includes age not stated.

# AGE-SPECIFIC DEATH RATES(a): Suicide

AGE GROUP (years).....

Year	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+	All ages	
	MALES														
1979	197912.723.722.623.321.425.529.025.123.722.920.526.119.816.519809.925.322.822.322.025.624.520.425.422.323.221.231.916.3														
1980	1980         9.9         25.3         22.8         22.3         22.0         25.6         24.5         20.4         25.4         22.3         23.2         21.2         31.9         16.3														
1981	10.9	25.3	22.5	21.1	20.8	26.7	23.9	25.5	25.1	23.6	28.0	25.0	31.7	16.9	
1982	10.5	28.0	29.4	20.3	19.7	20.7	23.7	19.9	24.1	25.3	29.7	25.6	40.2	17.4	
1983	9.3	27.3	26.5	21.8	19.2	19.5	19.1	23.4	23.5	25.7	27.4	32.0	39.6	17.0	
1984	10.3	26.9	22.4	25.5	19.1	21.2	20.0	25.3	24.6	23.5	25.7	23.1	30.7	16.8	
1985	16.6	31.2	30.3	22.8	19.5	26.0	22.1	20.5	22.1	21.5	21.3	28.8	27.5	18.1	
1986	13.2	29.2	28.6	28.0	21.7	25.8	22.6	23.6	25.5	23.6	23.3	32.0	36.8	19.1	
1987	17.2	31.9	31.0	26.5	26.9	29.2	24.6	31.2	34.4	24.5	23.3	35.7	45.8	21.8	
1988	21.0	35.2	29.8	26.7	23.9	28.3	25.4	23.4	22.4	25.2	24.3	32.4	40.0	21.0	
1989	18.4	29.7	32.3	27.6	24.7	20.0	24.3	23.4	25.9	19.7	23.1	32.5	34.5	19.8	
1990	17.8	36.5	32.8	25.3	26.1	24.8	20.9	22.1	26.7	22.8	25.2	27.5	32.1	20.4	
1991	19.0	34.4	29.3	30.4	34.2	26.4	25.1	27.4	22.9	19.6	21.2	24.9	38.2	21.4	
1992	18.4	34.9	32.6	28.2	26.8	23.0	27.8	23.3	21.4	24.8	25.5	29.7	30.6	20.9	
1993	16.7	32.0	29.2	28.2	22.2	20.5	25.9	20.4	21.9	24.0	22.4	24.3	30.6	19.2	
1994	18.6	34.5	30.0	28.4	25.0	27.3	24.3	25.3	23.1	23.1	22.9	24.6	32.1	20.6	
1995	15.1	34.8	34.1	32.7	30.9	24.3	24.2	23.4	26.6	19.5	18.8	20.4	29.2	20.8	
1996	17.4	33.4	33.2	31.8	32.2	26.5	23.1	22.2	22.2	24.9	20.2	24.6	32.4	21.2	
1997	18.4	42.3	40.4	34.6	29.2	31.4	23.6	25.3	22.6	22.5	22.9	24.5	36.2	23.3	
1998	17.2	35.9	42.6	39.4	36.6	29.5	25.5	24.9	19.7	20.3	26.0	17.1	25.6	23.1	
	• • • • • •	• • • • • •				• • • • •	• • • • • •					• • • • • •	• • • • • •	•••••	
							FEMA	LES							
1979	3.6	7.9	7.9	6.9	8.6	9.8	11.2	14.2	11.8	13.2	9.8	12.0	4.8	6.6	
1980	2.3	6.6	7.3	6.4	9.5	10.1	9.7	8.7	9.7	5.5	7.4	6.5	9.0	5.5	
1981	2.4	6.4	5.9	5.8	8.0	9.1	11.7	11.1	10.8	6.8	8.7	7.5	6.3	5.5	
1982	1.7	4.7	9.0	5.1	8.2	8.5	11.0	14.2	9.9	12.4	8.6	12.4	7.6	6.0	
1983	1.9	4.8	6.8	6.0	7.3	6.7	8.8	10.3	10.7	10.5	8.9	8.3	8.1	5.4	
1984	2.4	6.3	6.3	6.8	7.1	6.2	12.4	8.6	8.8	7.6	6.9	5.9	5.6	5.2	
1985	3.6	6.2	6.1	3.2	7.1	4.9	9.8	7.5	8.6	8.0	7.2	8.1	9.5	5.0	
1986	3.0	7.8	6.7	5.8	7.7	7.3	11.2	10.3	8.9	7.6	7.6	7.6	6.2	5.6	
1987	6.2	5.8	6.4	5.7	7.4	7.7	8.5	8.7	10.1	7.3	9.8	9.0	7.4	5.7	
1988	3.8	5.2	6.2	8.2	7.9	7.0	8.3	8.2	7.2	10.3	7.0	7.8	10.1	5.6	
1989	1.9	5.0	6.9	6.8	5.4	8.1	6.1	8.2	8.0	8.9	10.5	8.3	7.3	5.2	
1990	5.0	3.9	5.9	8.1	5.3	6.5	7.1	6.5	6.7	5.7	7.7	8.1	8.4	5.0	
1991	3.2	9.4	8.0	6.7	6.8	8.0	8.0	7.5	11.2	8.9	5.7	7.8	8.1	5.9	
1992	4.8	6.5	6.1	8.0	6.6	7.8	6.1	6.8	7.6	6.6	6.8	7.2	8.3	5.4	
1993	3.0	5.1	5.6	5.5	7.7	4.2	7.5	6.5	5.1	5.0	5.6	6.3	6.5	4.4	
1994	2.7	5.6	6.3	5.7	7.9	6.7	6.4	6.6	6.0	6.7	3.9	5.7	7.1	4.8	
1995	4.7	7.8	7.1	6.8	7.0	8.1	7.8	8.6	7.8	5.3	6.5	4.3	5.9	5.5	
1996	4.2	4.4	6.9	6.5	8.9	6.6	7.8	7.6	5.2	5.3	4.2	7.0	4.8	5.0	
1997	5.2	8.9	8.1	7.8	8.6	8.4	7.0	9.5	7.6	6.6	7.1	6.7	7.0	6.2	
1998	5.5	7.1	7.6	7.5	10.3	8.3	5.1	6.8	7.0	6.2	5.7	6.4	6.6	5.7	
• • • • •	• • • • • •	• • • • • •		• • • • • •	• • • • •	• • • • •	••••	• • • • •	• • • • • •	• • • • •	• • • • • •	• • • • • •	• • • • • •	• • • • • • • • • • •	

(a) Rate per 100,000 persons.

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Year	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+	All ages
• • • • •														• • • • • • • • •
							PERS	ONS						
1979	8.2	15.9	15.3	15.3	15.2	17.8	20.4	19.8	17.7	17.8	14.8	18.2	10.1	11.6
1980	6.2	16.1	15.1	14.5	15.9	18.0	17.3	14.7	17.5	13.5	14.8	13.0	17.2	10.9
1981	6.7	16.0	14.3	13.5	14.6	18.1	17.9	18.5	18.0	14.8	17.7	15.2	15.5	11.2
1982	6.2	16.5	19.3	12.8	14.1	14.8	17.5	17.1	17.0	18.5	18.4	18.2	19.3	11.7
1983	5.7	16.2	16.8	14.0	13.4	13.3	14.1	17.0	17.1	17.8	17.5	18.7	19.5	11.2
1984	6.4	16.8	14.4	16.2	13.2	13.9	16.3	17.1	16.8	15.3	15.6	13.5	14.7	11.0
1985	10.3	18.9	18.3	13.0	13.4	15.7	16.1	14.2	15.4	14.5	13.7	17.2	16.1	11.6
1986	8.2	18.7	17.8	16.9	14.8	16.8	17.1	17.1	17.3	15.4	14.9	18.4	17.4	12.4
1987	11.8	19.1	18.9	16.1	17.2	18.7	16.8	20.2	22.5	15.8	16.1	20.8	21.5	13.8
1988	12.6	20.4	18.1	17.4	15.9	17.9	17.1	15.9	14.9	17.6	15.1	18.7	21.2	13.3
1989	10.3	17.5	19.7	17.2	15.1	14.1	15.5	16.0	17.1	14.3	16.5	19.0	17.4	12.5
1990	11.6	20.4	19.5	16.7	15.7	15.8	14.2	14.5	16.8	14.2	16.0	16.8	17.2	12.7
1991	11.3	22.1	18.7	18.6	20.5	17.3	16.7	17.7	17.1	14.2	13.1	15.5	19.4	13.7
1992	11.8	20.9	19.4	18.1	16.7	15.4	17.2	15.3	14.6	15.7	15.8	17.3	16.6	13.1
1993	10.0	18.7	17.4	16.8	14.9	12.4	16.9	13.6	13.6	14.5	13.7	14.4	15.5	11.8
1994	10.9	20.3	18.2	17.1	16.4	17.0	15.5	16.2	14.6	14.9	13.1	14.3	16.5	12.6
1995	10.0	21.5	20.7	19.8	19.0	16.2	16.1	16.1	17.3	12.4	12.5	11.6	14.7	13.1
1996	10.9	19.1	20.1	19.1	20.5	16.5	15.5	15.1	13.8	15.1	12.0	15.1	15.3	13.1
1997	12.0	25.9	24.3	21.2	18.9	19.8	15.4	17.6	15.2	14.5	14.8	14.9	18.2	14.7
1998	11.5	21.7	25.2	23.4	23.4	18.8	15.3	16.0	13.5	13.3	15.7	11.4	13.9	14.3
••••	• • • • • •	• • • • • •	••••		• • • • • •			••••		• • • • •		• • • • • •	• • • • • • •	•••••

AGE GROUP (years).....

(a) Rate per 100,000 persons.

Never

	married	Married	Widowed	Divorced	Unspecified	Total
•••••		•••••	• • • • • • • •		•••••	• • • • • • • • • • •
		AVERAG	GE DEATHS	PER YEAR		
Males						
1980-82	470	587	66	103	33	1 259
1985–87	643	652	87	144	51	1 577
1990–92	817	700	83	187	14	1 801
1995–97	951	696	88	207	42	1 983
Females						
1980-82	97	197	76	54	3	427
1985-87	124	180	73	60	1	439
1990-92	149	178	73	69	3	471
1995–97	189	173	54	87	8	511
Persons						
1980-82	567	784	142	157	36	1 685
1985-87	767	832	161	205	52	2 016
1990-92	966	878	156	255	16	2 272
1995–97	1 140	870	142	294	50	2 495
• • • • • • • • • •					• • • • • • • • • •	
		AVERAGE A	ANNUAL DE	ATH RATES	5(a)	
Males						
1980-82	23.8	14.0	41.3	45.5	n.a.	19.1
1985–87	27.8	16.7	59.4	52.1	n.a.	24.6
1990–92	31.1	14.9	43.1	48.5	n.a.	22.7
1995–97	33.0	14.3	43.1	42.2	n.a.	23.4
Females						
1980-82	6.8	4.6	10.7	19.0	n.a.	6.4
1985–87	8.2	4.5	11.0	17.5	n.a.	6.7
1990-92	7.2	3.7	9.2	14.4	n.a.	5.8
1995–97	8.2	3.5	6.2	14.0	n.a.	5.6
Persons						
1980-82	16.7	9.3	16.3	30.7	n.a.	12.4
1985–87	19.1	9.3	17.4	28.9	n.a.	13.4
1990–92	20.6	9.3	15.9	29.6	n.a.	14.1
1995–97	22.0	8.9	13.1	26.5	n.a.	14.0
• • • • • • • • • •		• • • • • • • •			• • • • • • • • • •	• • • • • • • • • • •

(a) Estimated by indirect method of standardisation. Rate per 100,000 persons.



METHOD OF SUICIDE: Number

		Domestic	Carbon monoxide			Cutting and			Other and unspecified	All
Year	Poisoning	gas	gas(a)	Hanging	Firearms	piercing	Drowning	Jumping	means	methods
• • • • • •	•••••	•••••	•••••	•••••	• • • • • • •	• • • • • • • •	• • • • • • • •	• • • • • • • •	•••••	
					MALES	5				
1979	235	19	148	170	485	23	26	34	58	1 198
1980	217	17	181	157	480	19	23	41	64	1 199
1981	199	18	193	222	455	29	37	37	69	1 259
1982	176	17	192	248	508	28	30	52	67	1 318
1983 1984	179 209	14 20	193 210	244 231	485 478	22 22	38 36	58 46	75 57	1 308 1 309
1985	188	20 14	210	251	507	22	30 42	40	76	1 428
1986	187	17	339	282	508	23	40	61	74	1 531
1987	228	10	364	414	534	28	45	50	100	1 773
1988	211	8	358	424	489	36	36	69	99	1 730
1989	181	4	361	467	421	31	35	67	91	1 658
1990	224	2	385	460	456	32	27	69	80	1 735
1991	242	4	410	479	487	33	34	61	97	1 847
1992	212	5	414	496	464	26	38	64	101	1 820
1993	177	5	348	507	418	29	40	68	95	1 687
1994 1995	219 222	4 5	390 422	532 585	400 366	37 32	39 48	92 80	117 113	1 830 1 873
1996 1997	199 190	4	446	672	369	29 42	31	79 80	102	1 931
1997	190 179	4	521 477	812 1 035	310 218	42 38	43 30	80 71	144 102	2 146 2 150
2000	110	-		1 000	210	00	00		102	2 100
•••••					FEMAL	ES				
1979	253	7	25	55	42	6	37	23	31	479
1980	193	11	23	57	37	8	31	23	27	408
1981	193	4	26	44	42	13	38	22	31	413
1982	216	8	20	62	35	13	42	25	31	459
1983	206	5	29	58	35	9	36	15	25	418
1984	161	4	29	62	46	5	40	25	31	403
1985	146	1	51	74	45	14	24	15	29	399
1986	179	2	60	67	41	6	35	25	36	451
1987	207	3	47	78	38	8	31	28	27	467
1988	187	2	68	91	32	3	29	25	30	467
1989 1990	161	2 1	52 49	88 98	30	10 8	26	39 21	30	438
	162				32		22	31	23	426
1991	193	3	71	108	23	15	22	40	38	513
1992 1993	186	1 2	60 55	93	26	9	34	29	36	474 394
1993 1994	137 156	2	55 57	88 107	17 20	11 8	36 20	21 25	27 34	428
1995	161	2	92	114	23	6	20	28	46	495
1996	179	0	80	120	15	8	16	20	24	462
1997	157	0	108	175	21	11	30	36	39	577
1998	159	1	81	182	17	10	20	26	38	533
• • • • • •	•••••	•••••	• • • • • • • •	•••••	•••••		•••••		• • • • • • • • •	

(a) Includes motor vehicle exhaust gas and other carbon monoxide.

METHOD OF SUICIDE: Number continued

Year	Poisoning	Domestic gas	Carbon monoxide gas(a)	Hanging	Firearms	Cutting and piercing	Drowning		Other and nspecified means	All methods
• • • • • •	• • • • • • • • •	••••	• • • • • • • •	• • • • • • • •	PERSON	IS	•••••	••••	•••••	• • • • • • • • •
1979	488	26	173	225	527	29	63	57	89	1 677
1980	410	28	204	214	517	27	54	62	91	1 607
1981	392	22	219	266	497	42	75	59	100	1 672
1982	392	25	219	310	543	41	72	77	98	1 777
1983	385	19	222	302	520	31	74	73	100	1 726
1984	370	24	239	293	524	27	76	71	88	1 712
1985	334	15	329	326	552	37	66	63	105	1 827
1986	366	19	399	349	549	29	75	86	110	1 982
1987	435	13	411	492	572	36	76	78	127	2 240
1988	398	10	426	515	521	39	65	94	129	2 197
1989	342	6	413	555	451	41	61	106	121	2 096
1990	386	3	434	558	488	40	49	100	103	2 161
1991	435	7	481	587	510	48	56	101	135	2 360
1992	398	6	474	589	490	35	72	93	137	2 294
1993	314	7	403	595	435	40	76	89	122	2 081
1994	375	5	447	639	420	45	59	117	151	2 258
1995	383	7	514	699	389	38	71	108	159	2 368
1996	378	4	526	792	384	37	47	99	126	2 393
1997	347	4	629	987	331	53	73	116	183	2 723
1998	338	2	558	1 217	235	48	50	97	140	2 683
• • • • • •					•••••			• • • • • • • • •	•••••	• • • • • • • • •

(a) Includes motor vehicle exhaust gas and other carbon monoxide.

# METHOD OF SUICIDE: Death rates(a)

Year	Poisoning	Domestic gas	Carbon monoxide gas	Hanging	Firearms	Cutting and piercing	Drowning		Other and nspecified means	All methods
• • • • • •	•••••	•••••	• • • • • • • •	• • • • • • • •	MALES	••••••		• • • • • • • • •	•••••	••••
1070	2.5	0.0	0.0	0.0			0.4	0.5	0.0	477
1979 1980	3.5 3.2	0.3 0.2	2.2 2.6	2.6 2.4	7.0 6.9	0.4 0.3	0.4 0.4	0.5 0.6	0.8 0.9	17.7 17.5
1981 1982	2.8 2.4	0.2 0.2	2.7 2.7	3.2 3.5	6.5 7.1	0.5 0.4	0.6 0.5	0.5 0.7	1.0 0.9	18.0 18.4
1983	2.4	0.2	2.6	3.4	6.6	0.4	0.6	0.8	1.0	18.0
1984	2.8	0.3	2.8	3.1	6.4	0.3	0.5	0.6	0.8	17.5
1985	2.5	0.2	3.6	3.3	6.6	0.3	0.6	0.6	1.0	18.7
1986	2.4	0.2	4.3	3.6	6.6	0.3	0.6	0.8	0.9	19.8
1987	2.9	0.1	4.6	5.2	6.8	0.4	0.6	0.6	1.3	22.5
1988	2.6	0.1	4.4	5.3	6.1	0.5	0.5	0.8	1.2	21.5
1989	2.2	0.0	4.3	5.7	5.1	0.4	0.4	0.8	1.1	20.1
1990	2.6	0.0	4.6	5.5	5.4	0.4	0.3	0.8	1.0	20.7
1991	2.8	0.0	4.8	5.6	5.7	0.4	0.4	0.7	1.1	21.7
1992	2.4	0.1	4.7	5.8	5.4	0.3	0.4	0.7	1.2	21.1
1993 1994	2.0 2.5	0.1 0.0	3.9 4.4	5.8 6.0	4.8 4.5	0.3 0.4	0.5 0.4	0.8 1.0	1.1 1.3	19.3 20.7
1995	2.5	0.0	4.4	6.5	4.5	0.4	0.4	0.9	1.3	20.7
1996	2.1	0.0	4.9	7.4	4.1	0.3	0.3	0.9	1.1	21.3
1990	2.1	0.0	4.9 5.6	7.4 9.0	4.1 3.3	0.3	0.3	0.9	1.1	21.3
1998	1.9	0.0	5.0	11.2	2.4	0.4	0.3	0.8	1.1	23.1
					FEMALE	ËS				
1979	3.7	0.1	0.3	0.8	0.6	0.1	0.5	0.3	0.4	6.9
1980	2.8	0.1	0.3	0.8	0.5	0.1	0.4	0.3	0.4	5.9
1981	2.7	0.1	0.4	0.6	0.6	0.2	0.5	0.3	0.4	5.8
1982	3.0	0.1	0.4	0.8	0.5	0.2	0.6	0.3	0.4	6.3
1983	2.8	0.1	0.4	0.8	0.5	0.1	0.5	0.2	0.3	5.6
1984	2.1	0.1	0.4	0.8	0.6	0.1	0.5	0.3	0.4	5.3
1985	1.9	0.0	0.7	0.9	0.6	0.2	0.3	0.2	0.4	5.1
1986	2.3	0.0	0.8	0.8	0.5	0.1	0.4	0.3	0.5	5.7
1987 1988	2.6 2.3	0.0 0.0	0.6 0.8	0.9 1.1	0.5 0.4	0.1 0.0	0.4 0.3	0.3 0.3	0.3 0.4	5.7 5.6
1989	2.3 1.9	0.0	0.8	1.1	0.4	0.0	0.3	0.5	0.4	5.0
1990	1.9	0.0	0.6	1.1	0.4	0.1	0.3	0.4	0.3	4.9
1991	2.2	0.0	0.8	1.2	0.3	0.2	0.2	0.5	0.4	5.9
1992	2.1	0.0	0.7	1.0	0.3	0.1	0.4	0.3	0.4	5.3
1993	1.5	0.0	0.6	1.0	0.2	0.1	0.4	0.2	0.3	4.3
1994	1.7	0.0	0.6	1.2	0.2	0.1	0.2	0.3	0.4	4.7
1995	1.7	0.0	1.0	1.2	0.3	0.1	0.2	0.3	0.5	5.4
1996	1.9	0.0	0.9	1.3	0.2	0.1	0.2	0.2	0.3	4.9
1997	1.6	0.0	1.1	1.9	0.2	0.1	0.3	0.4	0.4	6.1
1998	1.6	0.0	0.8	2.0	0.2	0.1	0.2	0.3	0.4	5.6

(a) Rate per 100,000 persons.

Year	Poisoning	Domestic gas	Carbon monoxide gas	Hanging	Firearms	Cutting and piercing	Drowning	ו Jumping	Other and unspecified means	All methods
• • • • • •		••••	• • • • • • • •	• • • • • • • •	PERSON	IS	•••••	• • • • • • • •	• • • • • • • • • •	
1979 1980	3.6 3.0	0.2 0.2	1.3 1.5	1.7 1.6	3.8 3.7	0.2 0.2	0.5 0.4	0.4 0.4	0.6 0.6	12.2 11.6
1981 1982 1983 1984	2.8 2.7 2.6 2.5	0.1 0.2 0.1 0.2	1.5 1.5 1.5 1.6	1.9 2.1 2.0 1.9	3.5 3.7 3.5 3.4	0.3 0.3 0.2 0.2	0.6 0.5 0.5 0.5	0.4 0.5 0.5 0.5	0.7 0.7 0.7 0.6	11.8 12.2 11.6 11.3
1984 1985	2.5	0.2	2.2	1.9 2.1	3.4 3.5	0.2	0.5	0.5	0.8	11.3
1986 1987 1988 1989 1990	2.3 2.7 2.4 2.1 2.3	0.1 0.1 0.0 0.0	2.6 2.6 2.5 2.5	2.2 3.0 3.1 3.3 3.3	3.5 3.6 3.2 2.7 2.9	0.2 0.2 0.2 0.2 0.2	0.5 0.5 0.4 0.4 0.3	0.5 0.5 0.6 0.6 0.6	0.7 0.8 0.8 0.7 0.6	12.6 13.9 13.4 12.5 12.7
1991 1992 1993 1994 1995	2.5 2.3 1.8 2.1 2.1	0.0 0.0 0.0 0.0 0.0	2.8 2.7 2.3 2.5 2.8	3.4 3.4 3.6 3.9	3.0 2.8 2.4 2.3 2.1	0.3 0.2 0.2 0.2 0.2	0.3 0.4 0.4 0.3 0.4	0.6 0.5 0.5 0.7 0.6	0.8 0.8 0.7 0.9 0.9	13.7 13.1 11.7 12.6 13.0
1996 1997 1998	2.0 1.8 1.8	0.0 0.0 0.0	2.8 3.3 2.9	4.3 5.4 6.6	2.1 1.8 1.2	0.2 0.3 0.2	0.3 0.4 0.3	0.5 0.6 0.5	0.7 1.0 0.7	13.0 14.6 14.3

(a) Rate per 100,000 persons.



# SUICIDE DEATH RATES(a): State of usual residence

Year	NSW	Vic.	Old	SA	WA	Tas.	NT	ACT	Aust.
• • • • • •	•••••	• • • • •	• • • • • •	• • • • •	• • • • • •		• • • • • •	• • • • •	• • • •
1979	11.1	12.6	14.4	14.3	10.0	14.4	11.0	9.5	12.2
1980	11.0	11.8	13.0	11.6	10.6	11.4	14.4	6.3	11.5
1981	11.3	12.6	15.2	13.1	11.5	16.0	9.7	13.3	12.6
1982	11.4	12.1	13.0	13.3	13.4	14.5	6.0	7.9	12.2
1983	10.3	13.1	11.8	10.5	11.1	16.7	13.0	12.5	11.6
1984	9.6	11.8	13.0	11.1	13.1	12.2	8.5	14.3	11.3
1985	11.9	10.4	13.9	10.1	12.5	16.4	11.7	11.7	11.9
1986	11.3	12.6	15.2	13.1	11.5	16.0	9.7	13.3	12.6
1987	11.7	15.7	16.2	13.5	14.0	15.6	10.8	15.6	14.0
1988	12.9	12.7	15.2	13.1	13.8	16.4	18.8	11.7	13.5
1989	11.9	11.6	14.8	14.2	12.0	13.3	15.9	13.0	12.6
1990	11.6	11.4	14.9	14.8	13.6	15.5	19.5	12.7	12.7
1991	13.0	13.7	14.5	15.8	13.2	14.7	12.1	12.0	13.7
1992	12.3	12.4	14.3	14.4	13.1	20.8	14.5	10.6	13.1
1993	11.7	11.0	11.9	11.2	13.0	17.9	13.6	9.1	11.8
1994	12.8	11.3	14.3	11.3	12.8	15.0	11.6	11.9	12.6
1995	12.4	12.4	15.2	13.4	12.6	14.1	13.6	11.1	13.0
1996	13.0	10.8	16.2	12.3	12.4	13.6	20.2	11.9	13.0
1997	14.6	14.2	15.3	13.0	13.8	10.7	19.6	12.9	14.3
1998	13.3	12.1	16.3	16.1	15.2	12.4	21.3	9.5	14.0

(a) Estimated by indirect method of standardisation. Rate per 100,000 persons.

11

	NUMBE	RS			RATES(b)				
	Capital city	Other urban	Rural	Total(c)	Capital city	Other urban	Rural	Total(c)	
• • • • • • •		• • • • • •	• • • • •	MALES		• • • • • •	• • • • • •	• • • • •	
1988	1 015	346	367	1 730	19.5	24.9	24.6	21.4	
1989	998	308	350	1 658	18.9	21.6	23.0	20.1	
1990	1 037	305	391	1 735	19.3	20.9	25.3	20.7	
1991	1 106	359	378	1 847	20.3	24.0	24.3	21.7	
1992	1 051	355	411	1 820	19.0	23.3	26.1	21.1	
1993	1 016	296	369	1 687	18.2	19.1	23.2	19.3	
1994	1 067	382	367	1 830	18.9	24.2	22.9	20.7	
1995	1 147	341	378	1 873	20.0	21.2	23.4	20.9	
1996	1 106	396	416	1 931	19.0	24.3	25.6	21.1	
1997	1 247	392	494	2 146	21.6	23.7	30.1	23.3	
1998	1 247	409	474	2 150	20.7	24.3	28.6	23.0	
• • • • • • •	• • • • • • •	• • • • • •	• • • • •	FEMALES		• • • • •	•••••	• • • • •	
1988	340	68	58	467	6.3	4.8	4.1	5.7	
1989	301	74	61	438	5.5	5.0	4.2	5.2	
1990	286	67	73	426	5.1	4.5	4.9	5.0	
1991	371	78	63	513	6.5	5.1	4.2	5.9	
1992	324	80	70	474	5.6	5.1	4.6	5.4	
1993	264	65	62	394	4.5	4.1	4.0	4.4	
1994	308	59	58	428	5.2	3.6	3.8	4.7	
1995	346	80	67	495	5.8	4.8	4.3	5.4	
1996	290	95	75	462	4.8	5.6	4.8	4.9	
1997	364	114	99	577	6.2	6.6	6.2	6.1	
1998	342	102	83	533	5.5	5.8	5.2	5.5	
• • • • • • •		• • • • • •	• • • • •	PERSONS		• • • • • •	• • • • • •	• • • • •	
1988	1 355	414	425	2 197	12.8	14.7	14.6	13.5	
1989	1 299	382	411	2 096	12.0	13.2	13.9	12.6	
1990	1 323	372	464	2 161	12.1	12.6	15.4	13.1	
1991	1 477	437	441	2 360	13.3	14.4	14.4	14.6	
1992	1 375	435	481	2 294	12.2	14.0	15.6	13.1	
1993	1 280	361	431	2 081	11.2	11.5	13.8	11.8	
1994	1 375	441	425	2 258	11.9	13.7	13.5	12.6	
1995	1 493	421	445	2 368	12.7	12.9	14.0	13.0	
1996	1 396	491	491	2 393	11.7	14.8	15.3	12.9	
1997	1 611	506	593	2 723	13.8	15.0	18.4	14.6	
1998	1 589	511	557	2 683	12.9	14.9	17.1	14.2	

(a) 'Capital city' is defined as the Statistical Division and 'Other urban' is defined as areas containing a total population of more than 20,000. 'Rural' is defined as the balance of the population. These areas are defined using the 1991 Census population counts.

(b) Estimated by indirect method of standardisation. Rate per 100,000 population.

(c) Total includes 'Overseas and no abode'.



# ASSOCIATED OR CONTRIBUTORY CAUSES REPORTED: disease-related conditions

	Males		Females	5	Persons	
	no.	%	no.	%	no.	%
• • • • • • • • • • • • • • • • • • • •	•••••	• • • • • •	•••••	• • • • • •	• • • • • • • • • •	• • • •
19	97					
Underlying cause of suicide	2 146	100.0	577	100.0	2 723	100.0
Suicide death where a medical condition reported Reported medical condition Human Immunodeficiency	522	24.3	171	29.6	693	25.4
Virus (HIV) infection (042–044)	10	0.5	_	_	10	0.4
Neoplasms (140–239)	35	1.6	8	1.4	43	1.6
Mental disorders (290–319)	349	16.0	115	19.9	464	17.0
Alcohol and drug dependence and						
nondependent abuse of drugs (303–305)	249	12.0	42	7.3	291	10.7
Depressive disorders not elsewhere classified (311)	77	3.6	42	7.3	119	4.4
Diseases of the nervous						
system and sense organs (320–389)	32	1.5	14	2.4	46	1.7
Diseases of the circulatory system (390–459)	87	4.1	29	5.0	116	4.3
Symptoms, signs and ill-defined conditions (780–799)	49	2.3	26	4.5	75	2.8
19	98		•••••	•••••		
Underlying cause of suicide	2 150	100.0	533	100.0	2 683	100.0
Suicide death where a medical condition reported	492	22.9	153	28.7	645	24.0
Reported medical condition						
Human Immunodeficiency						
Virus (HIV) infection (042–044)	8	0.4	_	_	8	0.3
Neoplasms (140–239)	27	1.3	11	2.1	38	1.4
Mental disorders (290–319)	324	15.1	97	18.2	421	15.7
Alcohol and drug dependence and nondependent						
abuse of drugs (303–305)	194	9.0	29	5.4	223	8.3
Depressive disorders not elsewhere classified (311)	89	4.1	48	9.0	137	5.1
Diseases of the nervous system and sense organs						
(320–389)	34	1.6	18	3.4	52	1.9
Diseases of the circulatory system (390–459)	83	3.9	24	4.5	107	4.0
Symptoms, signs and ill-defined conditions (780–799)	51	2.4	22	4.1	73	2.7
•••••••••••••••••••••••••••••••••••••••	•••••	• • • • • •	•••••	• • • • • •		

#### SCOPE AND COVERAGE

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**1** The report presents data on suicides, age-sex specific suicide rates and age-standardised death rates from 1921. While the historical data are presented to provide an overview of suicide trends over time, detailed data are presented for the suicide deaths registered in the most recent 20-year period from 1979 to 1998. In addition, there is an analysis of associated or contributory causes to suicide extracted from the multiple causes of death data file.

**2** Statistical information on suicide deaths is available for Australian colonies before Federation in 1901. However, the annual population estimates by age-group and sex required to calculate age-sex-specific and standardised death rates are available only from 1921.

**3** The deaths classified to 'suicide and self-inflicted injuries' are for the period 1979–1998, these are according to the Ninth Revision of the International Classification of Diseases (ICD-9 codes E950–E959). Deaths prior to 1979 were classified according to the relevant revisions of the ICD classification.

#### 

codes

Remarks

Years of usage Suicide

in Australia

International classification

and revision

1922–1930 165–174 Third revision (1920) Undetermined deaths (203) Fourth revision (1929) 1931–1939 163–171 Undetermined deaths (195) Fifth revision (1938) 1940–1949 163–164 Undetermined deaths included in accidents 1950–1957 E970–979 Sixth revision (1948) Undetermined deaths included in and E963 accidents Seventh revision (1955) 1958–1967 E970–979 Undetermined deaths included in and E963 accidents Eighth revision (1965) 1968–1978 E950–E959 Undetermined death category added (E980-E989) Ninth revision (1975) 1979 to date E950–E959 

**4** The data for the report are derived from medical certificates of death and related information collected and maintained by the Registrars of Marriages, Births and Deaths in the States and Territories. By law the cause of death is certified by a physician, and poisoning or injury deaths, or those occurring in suspicious circumstances are referred to the Coroner. Following investigation the Coroner certifies the probable cause of such deaths. Suicide deaths therefore come under the province of the Coroner.

**5** State and Territory Registrars provide electronic copies of the data on the cause of death, basic characteristics of the deceased, and other relevant statistical information to the Australian Bureau of Statistics. This is then coded for causes of death (and nature of injury) and for aggregation of data for publication.

## DEATH CLASSIFICATION

**6** All deaths relating to poisoning, violence and accidents are classified according to the underlying cause of death. This is defined by the World Health Organisation as the 'circumstance of injury which produced the fatal injury'. Suicides are coded to external cause (E-codes). Therefore for underlying cause tabulations, suicides are coded according to the headings of the Supplementary classification of ICD.

**7** However, commencing from the 1997 calendar year, in addition to the underlying cause coding, the ABS began coding all causes and injuries reported on the death certificate. Thus as well as the underlying cause, all disease related causes, and nature of injury information are available for suicide deaths from 1997.

**8** The injury information has been coded according to the nature of injury codes developed by the World Health Organisation (these are known as N-codes).

**9** The nosological system used for coding suicide deaths is guided by the rules of the International Classification of Diseases (ICD). The ICD is generally revised every 10 years. Although there were a number of changes affecting suicides during the period, they largely affected the suicide mechanism categories, but had little effect on the total suicides. However, the creation of a new category for recording open verdicts may have had some impact (see para 11 below). Such classification changes do not cause substantial problems in assessing long-term trends in total suicides.

#### EXTERNAL CAUSES OF DEATH AND NATURE OF INJURY CODES

**10** The ninth revision of the ICD includes two sets of classifications to code injury and poisoning related deaths. The supplementary classification of the ICD classifies deaths according to external cause (E-codes), consistent with the underlying causes of death concept for tabulating causes of death statistics. The second classification classifies deaths according to the nature of injury (N-codes), which was an additional classification. The ABS began using an automated system to code all causes, and conditions reported on the death certificate, and select the underlying cause from among them. For external causes of death, multiple cause of death coding covers nature of injury and any other disease related condition reported on the death certificate.

DATA QUALITY

**11** The number of deaths coded to suicide and self inflicted injuries are based on the coroner's findings on the manner and the mechanism of death. The accuracy and the quality of the data therefore depends largely on the accuracy of ascertainment of cause of deaths. Coronial investigations and the administrative, and legal powers for conducting Coronial investigations are governed by State and Territory laws. These coronial legislations however have not clearly defined suicide for legal purposes nor is there any operational criteria set out to conduct investigations and recording of suicides.

## DATA QUALITY continued

**12** The definition of suicide normally used by coroners is the 'deliberate taking of one's life.<sup>11</sup> This definition requires that corners give a verdict of a suicide 'beyond any reasonable doubt' that, the death was both self-inflicted and the deceased had the intention to kill him/her self. In the absence of any strong evidence such as a suicide note, some suicides could be given a verdict of a natural cause, accident or could be given an 'open verdict'. In the latter case such deaths are coded to Injury undetermined category'.

**13** Stigma attached to the suicide act and resulting embarrassment and guilt to the family members may also influence the verdict. In many jurisdictions in Australia, it has been observed that due to the above reasons coroners tend to avoid using the term 'suicide' when recording the verdict of a suicide.<sup>2</sup>

**14** By their very nature, the intention of the deceased of some probable suicides is difficult for the coroner to establish accurately. These circumstances are common in equivocal deaths such as an elderly person dying of an overdose of prescribed drugs, or a lone driver dying in a car crash. The intention of the deceased in most drowning deaths causes similar ambiguities. Such problems are compounded by the absence of a uniform criteria for determining suicides as well as conducting detailed investigations. Different coroners seek different types of evidence when investigating evidence relating to the cause of death.

**15** Due to the numerous problems associated with the ascertainment of cause of death of probable suicide deaths, the count of suicides occurring in a year is likely to be an underestimation of the true number of suicides. Although the potential for underestimation is known, its extent is difficult to assess accurately. A recent estimate suggests that the sensitivity of suicide (i.e. percentage of suicides that are certified as suicide) during 1988–1990 averaged about 81% for males and 76.1% for females.<sup>3</sup> The authors also estimated the age-specific sensitivity rates by age group and found that the sensitivity substantially varied by age with males aged 65–74 years (86%) and females aged 35–44 years (79%) showing highest rates.

**16** While there is a potential for underreporting of suicides due to misclassification of possible suicides to other categories (accidents, natural causes and undetermined), almost all deaths classified to suicides are true suicides. This means that false positives' are less common in suicide deaths. This as an important aspect of suicide deaths compared to cause of death reported on other deaths, where the medical certifier based on his or her decision on 'balance of probabilities, and most cases without the aid of any investigations or pathological reports that are normally available for the corners.

<sup>&</sup>lt;sup>1</sup> Butterworths Concise Australian Legal Dictionary, 1997

<sup>&</sup>lt;sup>2</sup> Cantor et al., noted that the term 'suicide' is rarely used by Australian coroners in recording a suicide verdict on death certificates. Instead alternatives such as 'took his own life' is used'.

<sup>&</sup>lt;sup>3</sup> Rocket, IRH and Thomas, BM (1999) 'Reliability and sensitivity of suicide certification in higher-Income countries' Suicide and Life-threatening Behaviour, 29 (2):141–149.

## UNDETERMINED CATEGORY

**17** The 8th revision conference of the ICD recommended that a new category be created in the supplementary classification of injury and poisoning for recording open verdicts. Australia adopted the ICD-7 with the 1968 mortality data and in that year the number of open verdicts registered was 212 deaths which formed 14% (1,527 deaths) of total suicides. Although some deaths coded to this category undoubtedly included deaths that would have previously been classified as suicide. A study reported that among these deaths for the 1988–91 period most would have been classified as accidents in the past.<sup>1</sup>

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# Trends in undetermined deaths (open verdicts)

	Suicide deaths	Undet	ermined d	eaths
Year	no.	no.	rate(a)	% of total(b)
• • • • • • •	•••••	•••••	••••	• • • • • •
1968	1 527	212	1.8	14
1969	1 502	243	2.0	16
1970	1 551	195	1.6	13
1971	1 738	163	1.2	9
1972	1 625	178	1.3	11
1973	1 528	184	1.4	12
1974	1 567	236	1.7	15
1975	1 528	193	1.4	13
1976	1 504	143	1.0	10
1977	1 566	122	0.9	8
1978	1 595	128	0.9	8
1979	1 677	125	1.0	7
1980	1 607	106	0.7	7
1981 1982 1983 1984 1985	1 672 1 777 1 726 1 712 1 827	64 47 52 56 100	0.4 0.3 0.3 0.4 0.6	4 3 3 5
1986 1987 1988 1989 1990	1 982 2 240 2 197 2 096 2 161	95 120 127 128 179	0.6 0.7 0.8 0.8 1.0	5 5 6 8
1991	2 360	183	1.1	8
1992	2 294	190	1.1	8
1993	2 081	96	0.5	5
1994	2 258	95	0.5	4
1995	2 368	127	0.7	5
1996	2 393	139	0.8	6
1997	2 723	126	0.7	5
1998	2 683	129	0.7	5

(a) Crude death rate per 100,000 population.

(b) Percentage of total suicide deaths .

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Australian and New Zealand Journal of Psychiatry, 16:179–184].

<sup>&</sup>lt;sup>1</sup> Burville, P.W., McCall, M.G., Stenhouse, N.S., and Woodings, T.L. (1982) The relationship between suicide, undetermined deaths and accidental deaths in the Australian born and migrants in Australia'

## UNDETERMINED CATEGORY continued

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	<b>18</b> Over time, the number of deaths coded to this category has, however,
	declined, partly because of improved investigations perhaps influenced by known
	suicide risk-factors. The deaths classified to this category are currently so small
	that hat even if all undetermined deaths were misclassified as suicides, the
	current suicide rate would not rise substantially. From 1992, the crude death rate
	for the undetermined category has been below 1.0 per 100,000 population.
INDIGENOUS STATUS	
	<b>19</b> Indigenous death data are currently only available for South Australia,
	Western Australia, Queensland, Northern Territory and the Australian Capital
	Territory For these jurisdictions, identification of Indigenous status of the
	deceased is considered to be reliable enough to publish. In 1998 there were 84
	suicide deaths among Indigenous persons in the above States and Territories. Of
	these 72 were males and 12 were females. The number of suicide deaths are too
	small to disaggregate further.
MARITAL STATUS CATEGORIES	
	<b>20</b> A persons marital status is recorded on the death information form from
	information supplied by next of kin. These death information forms vary from

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information supplied by next of kin. These death information forms vary from State to State. However, only the following marital status categories are recorded: never married, married, widowed and divorced. De facto married or persons separated but not legally divorced, cannot be separately identified. Deaths among de facto and martial status not stated categories have been excluded from the analysis, although the total deaths include such deaths.

# GLOSSARY

Age-specific death rate	Age-specific death rates are the number of deaths registered (or occurred) during the calendar year at a specified age per 100,000 of the estimated resident population of the same age at mid-point of the year (30 June).
Associated or contributory causes of death	Refers to the intervening causes and those conditions which contributed to death, but were not related to the disease or condition causing death (see Multiple causes of death).
Causes of death	Causes of death recorded on death certificates are those, diseases, morbid conditions, or injuries which either resulted in or contributed to death. From the information provided on the death certificates an underlying cause of death is coded according to the rules and guidelines of that particular revision of the International Classification of Diseases.
Crude death rate	The crude death rate is the number of deaths registered during the calendar year per 1,000 estimated resident population at 30 June. For years prior to 1992, the crude death rate was based on the mean estimated resident population for the calendar year.
Death	Death refers to any death which occurs in, or en route to Australia and is registered with a State or Territory Registry of Births, Deaths and Marriages.
Estimated resident population	Estimated resident population (ERP) are estimates of the Australian population obtained by adding to the estimated resident population at the beginning of each period the components of natural increase ( on a usual residence basis) and net overseas migration. For States and Territories, account is also taken of estimated interstate movements involving a change of usual residence.
Geographic area	Capital cities are defined at the Capital City Statistical Division. Other urban are towns containing a population of more than 20,000 persons. Rural is defined as the balance of the population.
Indigenous origin	Persons who identify as being of Aboriginal or Torres Strait Islander origin.
Indigenous death	The death of a person who identified as being of Aboriginal or Torres Strait Islander origin on the death information form.
Marital status	Registered marital status refers to formally registered marriages or divorces for which the partners hold a marriage certificate. Four categories of marital status are identified: never married, married, widowed and divorced at time of death as recorded on death certificate.
Multiple causes of death	All morbid conditions, diseases and injuries entered on the death certificate. These include those involved in the morbid train of events leading to death which were classified as either the underlying cause, the immediate cause, or any intervening cause (see Underlying cause of death). In addition, the death certificate may provide information on conditions which were present at the time of death but were not related to the disease or condition present at death (see Associated or contributory causes of death).
	For deaths where the underlying cause was identified as an external cause (injury or poisoning) multiple causes include circumstances of injury, the nature of injury as well as any other conditions reported on the death certificate.

# **GLOSSARY** continued

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Premature mortality	Premature mortality assumed to be any death at ages 1–74 years inclusive.
Standardised death rate (SDR)	Standardised death rates enable the comparison of death rates between populations with different age structures by relating them to a standard population. The ABS standard population relates to years ending in 1 (e.g. 1991). The current standard population is all persons in the 1991 Australian population. Standardised death rates are expressed per 1,000 or 100,000 persons. There are two methods of calculating standardised death rates:
	The direct method is used when populations under study are large and the age-specific death rates are reliable. It is the overall death rate that would have prevailed in the standard population if it had experienced at each age the death rates of the population under study.
	The indirect method is used when populations under study are small, the age-specific death rates are unreliable or unknown but the total number of deaths is known. It consists of applying a standard set of age-specific rates to the population being studied and comparing the actual number of deaths with the number expected on the assumption that these standard death rates applied. <sup>1</sup>
Suicide	Suicide refers to the deliberate taking of one's life. <sup>2</sup> To be classified as a suicide a death must be recognised as due to other than natural causes and established by a coronial inquiry that death results from a deliberate act of the deceased with the intention of taking his or her own life.
Underlying cause of death	The underlying cause of death is the disease or injury which the doctor (or coroner) reported on the death certificate as being the cause that initiated the train of events leading directly to death, or the circumstances of the accident, or violence which produced the fatal injury.
Years of potential life lost (YPLL)	YPLL measures the extent of premature mortality. By estimating YPLL for deaths of people aged 1–74 years it is possible to assess the significance of specific diseases or trauma as a causes of premature death.

<sup>2</sup> Butterworth Concise Australian Legal Dictionary, 1997. 

 $<sup>^{1}</sup>$   $\,$  A.H. Pollard, F. Yusuf and G.N. Pollard (1974) 'Demographic techniques', A.S.Wilson, Inc.

YPLL measures the extent of premature mortality, which is assumed to be any death at ages 1–75 years inclusive, and aids in assessing the significance of specific diseases or trauma as a cause of premature death.

Estimates of YPLL were calculated for deaths of persons aged 1–75 years based on the assumption that deaths occurring at these ages are untimely. A number of variables are used in these calculations, as described below. YPLL is derived from:

$$YPLL = \sum_{x} (D_x (76 - A_x))$$

where:

 $A_x$  = adjusted age at death. As age at death is only available in completed years the midpoint of the reported age was chosen (e.g. age at death 34 years was adjusted to 34.5).

 $D_x$  = registered number of deaths at age *x* due to a particular cause of death.

YPLL was standardised for age using the following formula:

$$YPLL_s = \sum_x (D_x (76 - A_x) C_x)$$

where the age correction factor  $C_x$  is defined for age *x* as:

$$C_x = N_{xs} \times \frac{1}{N_s} \times \frac{1}{N_x} \times N$$

where:

N = number of persons aged 1–75 years in the study year

 $N_x$  = number of persons aged x years in the study year

 $N_{xs}$  = number of persons aged x years in the standard population

 $N_s$  = number of persons aged 1–75 years in the standard population

The Australian population at 30 June 1991 is the standard population.

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Cat. no. 3310.0	

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