

### Vandalism

At many locations, the risk of vandalism needs to be considered. In high-risk areas, built structures need to be—as much as is possible—vandal-resistant. The use of demountable instead of permanent structures is one strategy that may overcome the problem of vandalism.

### CONCLUSION

It should be noted that despite the obvious benefits of using effective shade as a means of protecting against solar UVR, it is unlikely that shade in outdoor environments will ever provide total UVR protection. It is therefore prudent that individuals also use personal forms of protection such as wearing sun protective

clothing, hats, sunscreen and sunglasses. Particular care should be taken during the hours of 10.00 a.m. and 3.00 p.m. when solar UVR levels are at their peak. ☀

For further information about the role of shade in skin cancer prevention, or to obtain copies of *Under cover: Guidelines for shade planning and design*, (at a cost of \$22 per copy including GST, postage and handling) contact the Cancer Prevention Unit, Cancer Council New South Wales, PO Box 572, Kings Cross, New South Wales 1340; telephone: 61 2 9334 1900; fax: 61 2 9326 9328; or email: [gregs@nswcc.org.au](mailto:gregs@nswcc.org.au).

## SUICIDE IN NEW SOUTH WALES: THE NSW SUICIDE DATA REPORT

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The NSW Suicide Prevention Strategy has identified suicide prevention as a high priority for government and the community.<sup>1</sup> Death by suicide is a relatively uncommon event; however, more people in NSW now die from suicide than road injury. Nationally, two per cent of all deaths were attributed to suicide in 1998.<sup>2</sup> This article describes the *Suicide in New South Wales—The NSW Suicide Data Report*,<sup>3</sup> which has been developed and produced by the Centre for Mental Health, and presents improved information on suicide, hospitalisation following attempted suicide, and risk of suicide, both at a state and an area health service level.

### BACKGROUND

The main objective of the report is to provide statistical information about suicide in NSW to assist program planners, policy makers and health care providers to identify risks, trends, magnitude, and other features of suicide-related problems, for the effective planning of population-based and clinical interventions such as suicide prevention programs and other services.

The report has been compiled using mortality data from the Australian Bureau of Statistics (ABS), hospitalisation data from the Inpatient Statistics Collection (ISC), and data from other published sources in Australia and overseas. The latest financial year for which complete mortality data was available at the time of the report was 1996–97.

The report is divided into four chapters:

- all ages (15 to 80+)
- young people (15 to 24 years)

- older people (65+)
- groups at risk.

Each chapter includes a short section on suicide prevention issues, and relevant sub-sections on:

- suicide deaths
- suicide attempts
- suicide means.

The report also provides comprehensive information on suicide death for every area health service by calendar year, age and gender. This information will be updated annually on the Web version of the report, as the ABS mortality data becomes available for subsequent years.

An overview of suicide in NSW has been assembled using prevalence data for:

- suicide attempts
- hospitalisation following attempted suicide
- access to community services by mental health patients
- the time between transfer and discharge to death,

allowing an estimation of the number of suicide-related events for a single year. An example of this overview is presented as Figure 3. The major results of the report are described below.

### SUICIDE DEATHS

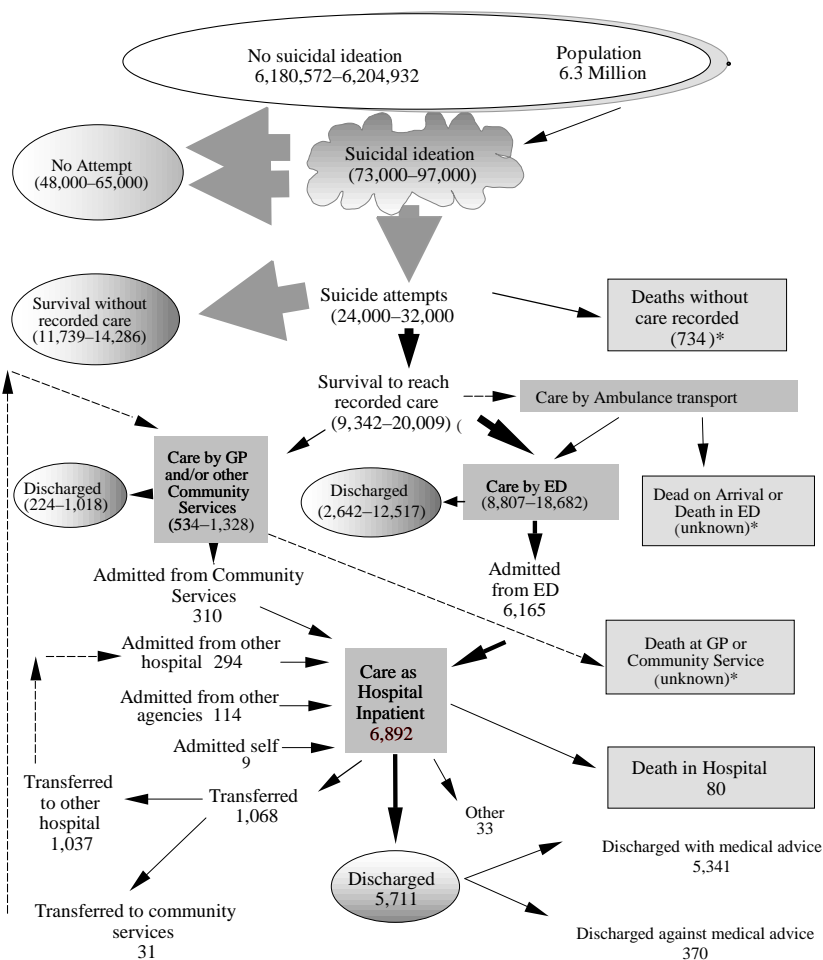
#### All ages

Suicide death rates, between 1973–74 and 1996–97, notwithstanding some fluctuations in the intervening years, have remained relatively stable for both males and females in all age groups (Figure 4).

Males have higher suicide death rates than females across all age groups. For males, the suicide death rate for 1996–

**FIGURE 3**

**ESTIMATED NUMBERS OF SUICIDE-RELATED EVENTS, NSW, 1996-97**



\* All locations of death recorded as 'unknown' are indicated in the non-hospital death total of 734

Note: Suicide and self-inflicted injury were classified according to ICD-9 (E950-E959) external cause codes. NSW population estimates at 31 December, 1996-97 financial year is the most recent year for which complete suicide data are available. \*All locations of death recorded as unknown is indicated in the non-hospital deaths. For explanation on how estimates were derived see: Sayer G, Stewart G, Chipps J. Suicide attempts in NSW: associated mortality and morbidity. NSW Public Health Bulletin 1996;7(6):55-63.

Source: ABS Mortality Data, NSW ISC Data and population estimates (HOIST), Centre for Mental Health, NSW Health Department. Estimates of mental health services were based on survey conducted in the Central Coast Health Service in February, March and April, 1998.

97 was nearly four times higher (20.9 deaths per 100,000) than for females (5.4 deaths per 100,000); however, between 1964-65 and 1996-97 the overall death rates due to suicide in males declined by 12 per cent. The corresponding rate of decline in males aged 65 years and older was 23 per cent; while in younger males aged 15-24 years the rate increased slightly (Figure 5). Males living in rural and outer metropolitan areas have higher death rates due to suicide than those living in metropolitan areas. Between 1971-72 and 1996-97, in rural health areas, death rates due to suicide for males increased by 36 per cent, and

increased in outer metropolitan health areas by 27 per cent. In metropolitan areas death rates due to suicide decreased by 13 per cent. These overall increases in rates are more evident since 1981-82 (Figure 6). Female suicide rates during this period have remained stable in all areas.

**Younger people**

In 1996-97, the death rate due to suicide in young people was 15.2 per 100,000. The rate for young males (23.3 per 100,000) was slightly more than three times that for young females (seven per 100,000). These findings are consistent with Australia-wide suicide data

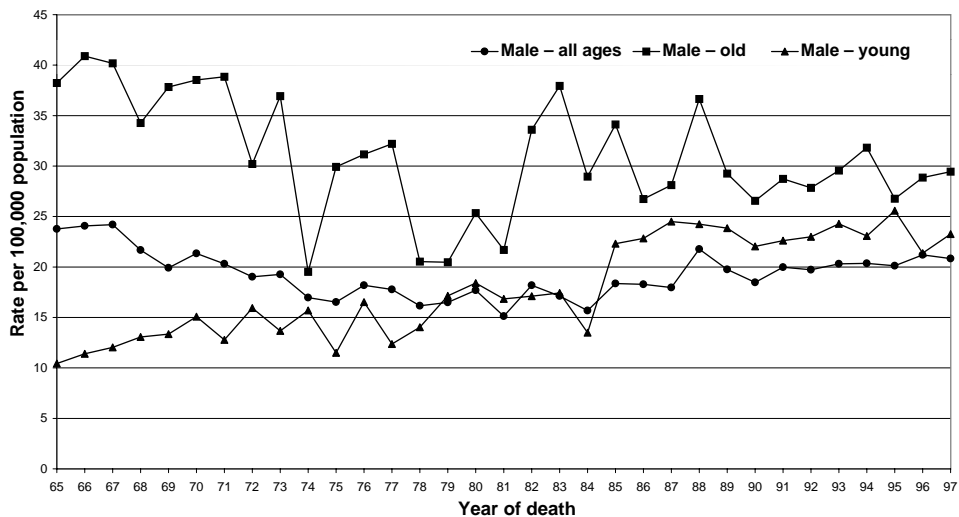
**FIGURE 4**

**DIRECTLY STANDARDISED SUICIDE RATES FOR ALL AGES BY SEX, NSW 1964-65 TO 1996-97**



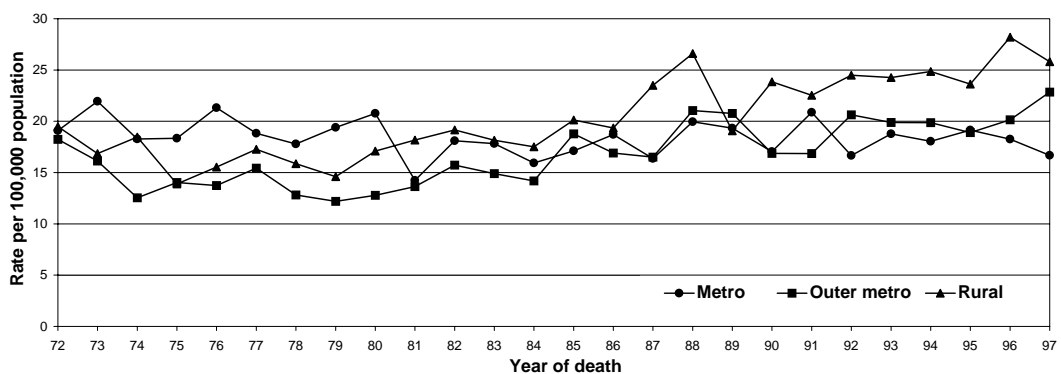
**FIGURE 5**

**DIRECTLY STANDARDISED SUICIDE RATES FOR MALES ALL AGES BY AGE GROUPS, NSW 1964-65 TO 1996-97**



**FIGURE 6**

**DIRECTLY STANDARDISED SUICIDE RATES FOR MALES ALL AGES BY METROPOLITAN, OUTER-METROPOLITAN AND RURAL AREAS, NSW, 1964-65 TO 1996-97**



for males. Suicide in young males in Australia has increased nearly four-fold, from 6.8 per 100,000 in 1960 to 26 per 100,000 in 1994. In young females the rate increased two-fold, from two per 100,000 in 1960 to 4.3 per 100,000 in 1994.<sup>4</sup>

### **Older people**

In 1996–97, the suicide death rate for older males was 29.4 per 100,000. For older females, the corresponding rate was eight per 100,000. Males older than 85 years had the highest suicide rate of any age group in 1996–97. However, because of the small number in this age group, it represented only 1.3 per cent of all male suicide deaths that year.

## **SUICIDE ATTEMPTS**

### **All ages**

In 1996–97, hospitalisation following an attempted suicide (111.4 per 100,000) was 8.6 times more common than the rate of suicide death (12.9 per 100,000) in people of all ages. The ratio of attempted suicide that resulted in hospitalisation to suicide death was 23.5:1 in females and 4.4:1 in males.

### **Young people**

In 1996–97, hospitalisation following a suicide attempt (215.7 per 100,000) was 14 times more common than the rate of suicide death (15.2 per 100,000) in young people. The ratio of attempted suicide that resulted in hospitalisation to suicide death was 40.3:1 in females and 6.6:1 in males.

### **Older People**

Hospitalisation following suicide attempt is less common in older people than in people in other age groups. In 1996–97, hospitalisation following a suicide attempt (40 per 100,000) was 2.6 times more common than rate of suicide death (15.3 per 100,000) in older people. The ratio of attempted suicide that resulted in hospitalisation to suicide death was 6.1:1 in females and 1.3:1 in males.

### **Means of suicide attempts**

In 1996–97, poisoning by medicinal agents was the main cause of hospital admission for suicide attempts (all ages: 78 per cent; male: 67 per cent; female: 86 per cent; young people: 78 per cent; male: 65 per cent; female: 86 per cent; older people: 68 per cent; male: 59 per cent; female: 75 per cent). Of all attempts at suicide, the three that caused the most fatalities were hanging (10 per cent), firearms (seven per cent) and motor vehicle carbon monoxide (MVCO) (22 per cent).

## **MEANS OF SUICIDE**

### **All ages**

Between 1979–80 and 1996–97, among males half of all suicides were by firearms (25 per cent) or hanging (24.2 per cent). Poisoning and MVCO account for another 11 per cent and 18 per cent of all suicides, respectively. Poisoning and hanging have remained the most

frequently used means of suicide in females accounting for 37 per cent and 16 per cent respectively, of all suicides.

### **Young people**

Between 1979–80 and 1996–97, among young males almost three-quarters (71 per cent) of all suicides were by firearms (30 per cent); hanging (27.4 per cent); and MVCO (13.2 per cent). In young females, poisoning remained the most frequently used means of suicide. However, since 1991–92, the rate of suicide by hanging in young females has increased four-fold.

### **Older People**

Between 1979–80 and 1996–97, among older males firearms (28 per cent) and hanging (23 per cent) were the two most common means of suicide. In older females, poisoning remained the most frequently used means of suicide followed by hanging.

## **URBAN AND RURAL DIFFERENCES**

Between 1979–80 and 1996–97:

- metropolitan areas: poisoning and hanging were the most frequent means of suicide. Since 1992–93, suicide by poisoning has decreased slightly and suicide by hanging has increased.
- outer metropolitan areas: firearms were the main means of suicide in the first half of the period. Since 1987–88, hanging and MVCO have become the most frequent means of suicide.
- rural areas: firearms have been and remain the most frequent means of suicide. Since 1989–90, suicides by firearms have declined slightly followed by a corresponding increase in suicide by hanging and MVCO.

## **GROUPS MOST AT RISK**

### **Migrants**

Migrants, most notably from English-speaking countries, countries from Western, Northern and Eastern Europe have higher rates of suicide than the general NSW population.<sup>5</sup> Migrants aged 65 years and older have significantly higher rates of suicide than the overall rate of suicide for all people 65 years and older in NSW.<sup>5</sup>

### **Aboriginal and Torres Strait Islanders**

Suicide death among Aboriginal and Torres Strait Islander people has not been assessed in this report due to poor identification of indigenous status in NSW health data collections. However, findings from the literature show that suicide risk and rate for younger Aboriginal males is much higher than other younger males in the general population.<sup>6</sup>

### **Mental Health Clients**

Mental health clients in NSW have a 10 times higher risk of suicide than that of the general population. The risk of suicide was greatest for patients with depression.<sup>7</sup> About eight per cent of all people who committed suicide in NSW were active mental health clients,<sup>7</sup> and at least 88

per cent of people who died from suicide may have suffered from a diagnosable mental disorder at the time.<sup>8,9</sup>

## CONCLUSION

Up-to-date information on suicide is necessary to ensure that programs and interventions target people most in need, and to improve gaps in suicide information.

- Data on suicide deaths show that older and younger males are at increased risk of suicide. Suicide prevention strategies should aim to increase the awareness of the risk of suicide for these groups among professional and other staff in health and community services.
- Data on suicide attempts shows that suicide prevention-intervention activities should target both male and females as they are equally at risk of suicidal behaviour.
- Data on suicide attempts are limited, except those attempts that result in hospitalisation. A previous attempt at suicide is the single best clinical indicator for increased suicide risk.<sup>10</sup> It is important to improve the surveillance of suicide attempts, to provide accurate indicators of suicidal behaviour for prevention activities.

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Copies of *Suicide in New South Wales—The NSW Suicide Data Report* can be obtained by telephone: (02) 9391 9576; by fax: (02) 9391 9041; or by email: [gansa@doh.health.nsw.gov.au](mailto:gansa@doh.health.nsw.gov.au). The report is also available via the Internet from: [www.health.nsw.gov.au/policy/cmh/publications/suicidedata.html](http://www.health.nsw.gov.au/policy/cmh/publications/suicidedata.html); or via the Intranet from: [internal.health.nsw.gov.au/policy/cmh/publications/suicide/suicidedata.html](http://internal.health.nsw.gov.au/policy/cmh/publications/suicide/suicidedata.html).

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