Suicide Facts

2005–2006 data

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Contents

Acknowledgements ii
Key Points v
- Suicide deaths in 2005 v
- Hospitalisation for intentional self-harm in 2006 vi

Introduction 1
Technical Notes 2
- PHIOnline 2
- Data 2
- Definitions 4

Suicide Deaths in 2005 7
- Sex 8
- Ethnicity 9
- Life-cycle stages 11
- Deprivation 12
- District Health Boards (2006) 13

Hospitalisation for Intentional Self-harm in 2006 14
- Sex 14
- Ethnicity 14
- Life-cycle stages 15
- Deprivation 15
- District Health Boards (2006) 16

International Comparisons 18
- All ages 18
- Youth (15–24 year olds) 19

References 21
Appendix 1: Further Tables 22
Appendix 2: Further Information 31
General information about suicide prevention 31

List of figures

Figure 1: Suicide death rates, 1985–2005 7

Figure 2: Suicide death rates, by sex, three-year moving averages, 1985–2005 8

Figure 3: Māori and non-Māori suicide death rates, three-year moving averages, 1996–2005 10

Figure 4: Suicide death rates, three-year moving average, by life-cycle stage, 1991–2005 11

Figure 5: Suicide death rates, three-year moving average, by life-cycle stage and sex, 2003–2005 12

Figure 6: Suicide death rates, by District Health Board, 2003–2005 13

Figure 7: Intentional self-harm hospitalisation rates by life-cycle stage, 2004–2006 15

Figure 8: Intentional self-harm hospitalisation rates, by District Health Board, 2006 17

Figure 9: Age-standardised suicide rates for selected OECD countries, males 18

Figure 11: Age-specific suicide rates for selected OECD countries, males, 15–24 years 19

Figure 12: Age-specific suicide rates for selected OECD countries, females, 15–24 years.......... 20

List of tables

Table 1: Suicide death rates, by NZDep2001 quintile, three-year moving averages, 2003–2005.... 12

Table 2: Intentional self-harm hospitalisation rates, by NZDep2001 quintile, 2006 16

Table A1:Number of suicide deaths by sex, life-cycle stage and ethnicity for the most recent three years of data 22

Table A2: Number of self-harm hospitalisations by sex, life-cycle stage and ethnicity for the most recent three years of data 22

Table A3: Suicide deaths, by ethnicity, age and sex, 2005 23

Table A4: Age-standardised suicide rates, by ethnicity and sex, 1996–2005 23

Table A5: Suicide death rates per 100,000 population, by five-year age group and sex, 2005..... 24

Table A6: Age-standardised suicide death rates per 100,000 population, by District Health Board and sex, 2003–2005 25

Table A7: Intentional self-harm hospitalisations, by ethnicity, age and sex, 2006 26

Table A8: Intentional self-harm hospitalisation rates, by five-year age group and sex, 2005 and 2006 27

Table A9: Intentional self-harm hospitalisations and age-standardised rates, by District Health Board and sex, 2004 28

Table A10: Intentional self-harm hospitalisations and age-standardised rates, by District Health Board and sex, 2005 29

Table A11: Intentional self-harm hospitalisations and age-standardised rates, by District Health Board and sex, 2006 30

Key Points

Suicide deaths in 2005

- A total of 502 people died by suicide in 2005, compared with 488 in 2004.
- The three-year moving average rate of suicide for 2003–2005 was 13.2 deaths per 100,000 population. This rate represents a statistically significant decrease of 19.0% from the 1996–1998 peak (16.3 per 100,000), and continues the downward trend of recent years.
- The sub-groups of the New Zealand population with the highest three-year moving suicide mortality rates in 2003–2005 were males, Māori (as opposed to non-Māori), those in the age group of 15–44 years, and those residing in the most deprived areas (quintile 5).

» Please note that Table A1 in Appendix 1 summarises the annual number of suicide deaths for the past three years of available data (2003 to 2005). This table provides a gender breakdown of counts for each ethnicity and life-cycle stage.

Age

- In 2003–2005 the life-cycle stage with the highest three-year moving average suicide rate for males was 25–44 years (28.2 per 100,000 population), while the highest rate for females was in the life-cycle stage of 15–24 years (9.9 per 100,000 population).
- Suicide deaths among Māori are largely confined to those aged under 35 years.

Sex

- Males continue to have a significantly higher suicide rate than females. In 2003–2005 there were 3.1 male suicides to every female suicide, which is unchanged from 2002–2004 and 2001–2003.

Place

- The three-year moving average suicide rate for 2003–2005 increases significantly from the least deprived areas to the most deprived areas (from 9.1 to 15.6 per 100,000 population).
- Wairarapa, Northland and MidCentral District Health Boards had significantly higher suicide rates than the national average for the period 2003–2005.

Ethnicity

- Although 100 Māori died by suicide in 2005, compared with 109 in 2004, the trend over time (three-year moving averages) suggests that rates have continued to increase since 2001–2003. In 2003–2005 the rate was 17.9 per 100,000 population, increasing by 5.3% from 2002–2004 (17.0 per 100,000 population). However, this rate still represents a decrease of 13.9% from the peak in 1996–1998 (20.8 per 100,000 population).
- The average rate of suicide for non-Māori was 12.0 deaths per 100,000 population in 2003–2005. This rate is the same as in 2002–2004, but represents a statistically significant decrease of 21.1% from 1996–1998 (15.2 per 100,000 population).
- In 2003–2005 the average suicide rates for Māori males and females were 28.4 and 8.3 deaths per 100,000 population respectively; for non-Māori males and females, the rates were 18.4 and 5.9 deaths per 100,000 population respectively.
- The disparity between the average suicide rates of Māori and non-Māori males in 2003–2005 is wider than it has been for the previous nine years. In contrast, while the disparity between the average suicide rates of Māori and non-Māori females in 2003–2005 is wider now than it has been in the last six years, it is less marked than in the 1996–1998 period.

Hospitalisation for intentional self-harm in 2006

- There were 5400 hospitalisations for intentional self-harm in 2006, equating to a rate of 151.7 per 100,000 population. This represents a significant increase of 7.5% from the rate in 2005 (141.1 per 100,000 or 4992 hospitalisations).
- While there was an increase in rates between 2005 and 2006, the experience was similar for the various population sub-groups.
- The sub-groups of the New Zealand population with the highest intentional self-harm hospitalisation rates in 2006 were females, Māori (as opposed to non-Māori), those in the life-cycle stage 15–24 years, and those residing in the most deprived areas (quintile five).

» Please note that Table A2 in Appendix 1 summarises the annual number of hospitalisations for the past three years of available data (2004 to 2006). This table provides a gender breakdown of counts for each ethnicity and life-cycle stage.

Age

- The life-cycle stage with the highest self-harm hospitalisation rate for both genders in 2006 was 15–24 years, and this ranking has not changed within the past three years.

Sex

- Females continue to have a significantly higher hospitalisation rate than males. The sex ratio in 2006 was 2.0 female hospitalisations to every male hospitalisation, which is the same as in 2005.

Place

- The annual intentional self-harm hospitalisation rate for 2006 increases significantly from the least deprived areas to the most deprived areas (from 102.8 to 181.7 per 100,000 population).
- MidCentral, Canterbury, Lakes, Waikato and Otago District Health Boards had significantly higher intentional self-harm hospitalisation rates than the national average in 2006.

Ethnicity

- The Māori hospitalisation rate for intentional self-harm was nearly 1.5 times the non-Māori rate.
- The hospitalisation rate for Māori males was over 1.8 times the rate for non-Māori males in 2006 and the rate for Māori females was over 1.3 times the rate for non-Māori females.

Introduction

Suicide is a serious health issue that can be used as an indicator of mental health and wellbeing in the population. Each year approximately 500 New Zealanders die by suicide, more than those who die from motor vehicle accidents. Furthermore, the hospitalisation rate for self-harm is 10 times the mortality rate from suicide. In the period 1997–2001, suicide and self-inflicted injuries were the sixth highest cause of avoidable mortality in those aged 0–75 years, accounting for 5.9% of avoidable deaths (Page et al 2006).

This publication provides the latest suicide and intentional self-harm data available, but does not explain the causes of suicidal behaviour. International and New Zealand research has found that the overwhelming majority of those who die by suicide or make suicide attempts were experiencing mental health problems, which are often accompanied by other sources of life stress and difficulty. For further information on causal models of suicide in New Zealand, see *Suicide Prevention in New Zealand: A contemporary perspective* (Collings and Beautrais 2005).

In June 2006 the *New Zealand Suicide Prevention Strategy 2006–2016* (Associate Minister of Health 2006) was released. *Suicide Facts: 2005–2006 data* and subsequent annual updates will contribute to monitoring and evaluating the progress of the implementation of this strategy.

Technical Notes

PHIOnline

Suicide data are now available through PHIOnline. PHIOnline is a tool for the visualisation of health and related information. It displays an interactive map with linked tables and charts that allow data to be viewed in multiple dimensions, and provides an alternative way of viewing information.[1]

Data

Population denominator

The 2004 suicide and 2005 self-harm hospitalisation rates presented in this report will differ from those in the previous publication of *Suicide Facts* (Ministry of Health 2006c). This is because the projected population data used in the 2006 report underestimated the New Zealand population in 2005. Any comparisons between years should be based upon data within the same publication and not between different publications.

Suicide deaths

All suicide mortality data in this publication were sourced from the New Zealand Health Information Service (NZHIS), except for international comparisons, which were sourced from the World Health Organization (WHO).

Classification of a death as suicide is subject to a coroner's inquiry, and only on completion of an inquest can a death be officially classified as suicide. In some cases the inquest will be heard several years after the death, particularly if there are a number of factors surrounding the death that need to be investigated first. Consequently, a provisional classification may be made for a suicide before a coroner's verdict. The suicide mortality data contained in this report are provisional 2005 data. Some deaths that were registered in 2005 (24) are still subject to coroners' findings, for which neither a final nor a provisional cause of death has been assigned.

The number of provisional deaths for 2005 presented in this report may differ slightly from the number for the same year in future reports, when final 2005 data are presented. NZHIS will release the final data in the publication *Mortality and Demographic Data*.[2]

Caution should be exercised when comparing the age-standardised rates presented in this report with those released by NZHIS because different standard populations are used for age-standardisation. While NZHIS uses Segi's World population, this publication uses the WHO World Standard population.

The suicide data in this report are based on the date the death is registered, which is usually soon after the person has died. However, it may mean that a few deaths (approximately 2%) are registered in later years. It is also worth noting that individuals younger than 5 years are not included in suicide data. They are omitted because self-harm in individuals in this age group is rare, and more likely to be accidental or a product of misclassification.

1 http://www.phionline.moh.govt.nz

2 http://www.nzhis.govt.nz/publications/mortality.html

Hospitalisation for intentional self-harm

The motivation for intentional self-harm varies and, although hospitalisation data cannot adequately measure all those with an intent to die, they do provide a good indication of mental health. In this report, the hospitalisation rate for intentional self-harm is defined as the rate of first admission (inpatient or day patient) for an intentional self-harm event, using the International Statistical Classification of Diseases 10th Revision version 3, Australian Modification system (National Centre for Classification in Health 2002).

It is important to note that hospitalisations for self-harm represent unique 'events' of self-harm, rather than the number of 'people' being hospitalised following a self-harm event. Subsequently, a single person can contribute numerous unique self-harm events. In addition, analyses of intentional self-harm hospitalisations are limited to those aged over 4 years old. This limit has been applied because self-harm in individuals younger than 5 years old is rare, and more likely to be accidental or a product of misclassification.

People who intentionally harm themselves but are not admitted to hospital are not included in these data; for example, those people treated by a general practitioner (GP) or an emergency department but are not admitted to hospital. However, people who visit an emergency department and are recorded as admitted to hospital have been included. The definition of 'admitted' varies among different District Health Boards (DHBs). People who are hospitalised several times for the same intentional self-harm injury event are counted only once. People who are hospitalised for further separate intentional self-harm events are counted once for each event. Cases of intentional self-harm hospitalisation in which the patient dies, and is subsequently discharged as 'dead', are *not* included in the hospitalisation data. However, self-harm hospitalisation events occurring before the event that resulted in their discharge as dead remain included. Hospitalisation data in this report are primarily for 2006.

The same methods used in this report are used in *New Zealand Suicide Trends: Mortality 1921–2003, hospitalisations for intentional self-harm 1978–2004* (Ministry of Health 2006b) and *Suicide Facts: 2004–2005 data* (Ministry of Health 2006c). These rates are not comparable with rates reported in *Suicide Facts* publications before 2006 because 'unfiltered' discharge data were previously presented. Using the unfiltered discharge method can result in an over-count of intentional self-harm events, because it measures any single intentional self-harm event. It is possible that one event may result in multiple admissions to a hospital (or a transfer between hospitals). These re-admissions and transfers were previously counted as separate intentional self-harm events.

Caution should be exercised when comparing the data presented in this report with those released directly from NZHIS because different standard populations are used for age-standardisation. While NZHIS uses Segi's World population, this publication uses the WHO World Standard population.

International Classification of Diseases (ICD) codes

The ICD-10 codes used for both mortality and hospitalisations were X60–X84. The ICD-9 codes used were E950–E959 (National Centre for Classification in Health 2002).

Definitions

Numbers, rates and ratios

The *number* of suicide deaths refers to the actual number of people who have died by suicide.

The *rate* of suicide or hospitalisation refers to the frequency with which these events occur relative to the number of people in a defined population and a defined time period.

Rate ratios indicate how many times suicide or hospitalisation for intentional self-harm are reported in one population group compared with another.

Age-standardised rates or rate ratios

An *age-standardised rate* is a rate that has been adjusted to take account of differences in the age distribution of the population over time or between different groups (for example, different ethnic groups).

An *age-standardised rate ratio* is the ratio of the two rates, taking into account differences in the group size and age structure.

This publication has used the WHO World Standard population, because this is the Public Health Intelligence standard. The WHO World Standard population has an older age structure than Segi's World population and resembles more closely the New Zealand population both now and as it is likely to be in the future (Ministry of Health 2006a).

As individuals under 5 years of age are not included in the analysis of either suicide mortality or intentional self-harm hospitalisations, the standard population for this group has been excluded and the weights recalculated accordingly. By including a weight for a population group that cannot have a value other than zero, the rates produced are likely to be lower. Subsequently, should these rates be compared with those in countries that have not made this adjustment, New Zealand rates may appear higher. For comparisons with other countries, therefore, it is important to use the New Zealand rates presented in the international section (page 17), rather than those described elsewhere in this publication.

Three-year moving average

Three-year moving average age-standardised rates are the average age-standardised rates for rolling three-year periods; that is, 2000–2002, 2001–2003, 2003–2005, etc. The three-year moving averages are plotted on the mid-point year. For example, the 2003–2005 three-year moving average is plotted on the year 2004.

Rates based on individual years tend to exhibit pronounced variation, especially when the event of interest is relatively rare. Using the three-year moving average 'smoothes' this variation so that the underlying trends over time can be more clearly illustrated. Three-year moving averages have been used to present suicide data in this publication because the numbers involved are relatively small. For the hospitalisation data, where numbers are more substantial, annual rates have been used.

Age-specific rates

An *age-specific rate* refers to the frequency with which suicide occurs relative to the number of people in a defined age group. Age-specific rates are presented for life-cycle stages and five-year age groups. The five life-cycle stages are childhood (5–14 years), youth (15–24 years), young adults (25–44 years), middle-aged adults (45–64 years), older adults and the very old (65+ years). The five-year age groups are 5–9, 10–14, 15–19, 20–24, and so on up to 85+ years (Ministry of Health 2006a).

Deprivation

Deprivation has been associated with various health outcomes, and from the social inequalities literature it is evident that those who are most deprived generally experience poorer health (Benzeval et al 2001). Subsequently, suicide mortality and hospitalisation rates for intentional self-harm are presented by deprivation decile according to the New Zealand Deprivation Index 2001 (NZDep2001) (Salmond and Crampton 2002).

District Health Board rates

Age-standardised rates were calculated for each *District Health Board*. Deaths were calculated using a three-year moving average. For hospitalisations for intentional self-harm, sufficient numbers allowed the calculation of rates for single years (2004, 2005 and 2006).

Caution should be exercised when interpreting regional differences in hospitalisation rates for intentional self-harm among DHBs. A cautious approach is necessary because many DHBs differ in their reporting practices and patient management.

Comparison with international data

Caution should be exercised when comparing the New Zealand data presented in this report with those of other countries. Many factors affect the recording and classification of suicide in different countries. These factors include the level of proof required for a verdict, stigma, religion, social class, occupation and confidentiality (Andriessen 2006). Statistical measures, such as confidence intervals, cannot account for these differences and providing them may create a false sense of confidence in these differences. Subsequently, confidence intervals have been excluded from the section on international comparisons. The data used in this publication to make international comparisons are the most recent available from the WHO website.[3]

Statistical significance

In this publication statistical significance was determined using confidence intervals. Confidence intervals are used to illustrate the level of random error present in a point estimate. They were created based on the null assumption of poisson distribution where the inverse of the chi-square distribution allows the calculation of exact limits (Ulm 1990). A two-sided 95% confidence interval was created around the difference of two rates and examined to see whether it covered zero. In tables, the numbers in brackets indicate the confidence intervals. Where results are determined to be statistically significant based on confidence intervals, they are identified as such within the text and, where graphs are used, are highlighted within the graphs. Within this publication the term 'significant' refers to a finding that is *statistically* significant based on the above tests.

3 http://www.who.int/mental_health/prevention/suicide/country_reports/en/

Ethnicity

There are different methods for outputting ethnicity data. This publication uses 'prioritised output', where each respondent is allocated to a single ethnic group using the priority system (Māori › Pacific peoples › Asian › European/Other) (Ministry of Health 2004). The aim of prioritisation is to ensure that where it is necessary to assign people to a single ethnic group, ethnic groups that are small or that are important in terms of policy are not swamped by the European ethnic group (Ministry of Health 2004).

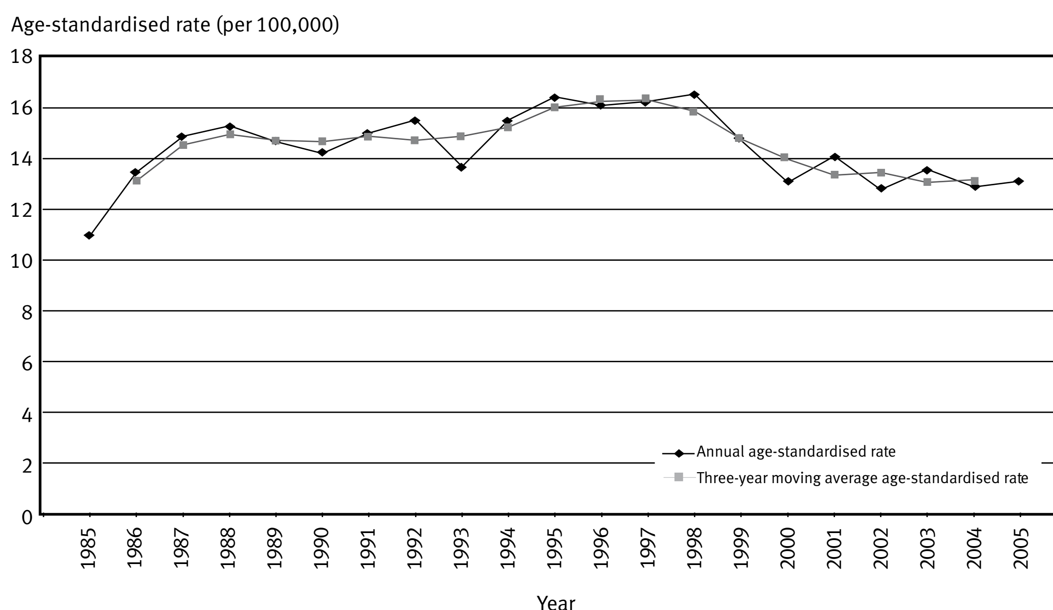
This publication used two ethnic breakdowns for analysing suicides and self-harm hospitalisations. The first ethnic breakdown for the total population is Māori, Pacific peoples, Asian peoples and European/Other. The second divides the population into Māori and non-Māori.

Prior to 1996 Māori and Pacific peoples were undercounted because ethnicity was recorded differently on death registration forms and in the Census. Ethnicity was based on a biological concept (ie, percentage of blood) on death registration forms, and a sociocultural concept (ie, cultural affiliation) in the Census. From September 1995 the death certificate included a question comparable with the self-identified ethnicity question in the 1996 Census, including allowing for multiple ethnic identities. Completion of the ethnic field also became mandatory at this time. New Zealand Census–Mortality Study adjustors can be applied to mortality counts from 1996–1999; these adjust the data to allow for an undercount of Māori and Pacific peoples. From 2000 onwards, comparisons across all the ethnic groups are possible because adjustors are not necessary. For further discussion on inconsistencies in ethnicity collection, refer to *Decades of Disparity: Ethnic mortality trends in New Zealand 1980–1999* (Ajwani et al 2003).

Suicide Deaths in 2005

- A total of 502 people died by suicide in 2005 (see Table A3 in Appendix 1 for a breakdown by ethnicity, age and sex), compared with 488 in 2004.
- The annual age-standardised suicide rate for the total population was 13.1 per 100,000 population in 2005, compared with 12.9 per 100,000 population in 2004 (Figure 1) (see Table A4 in Appendix 1 for further detail).
- The three-year moving average age-standardised rate of suicide for the total population increased to a peak of 16.3 deaths per 100,000 population for the 1995–1997 and 1996–1998 periods and then declined until 2002–2004, when the rate was 13.1 deaths per 100,000 population. This change represents a statistically significant[4] decrease of 20.4%.
- The three-year moving average for 2003–2005 increased by 0.8% from 2002–2004 (from 13.1 to 13.2 per 100,000 population).
- The annual age-standardised rate and three-year moving average age-standardised rate are presented in Figure 1. The three-year moving average age-standardised rate provides a clearer picture of trends over time, smoothing out the variations in the annual age-standardised rate.

Figure 1: Suicide death rates, 1985–2005



Source: New Zealand Health Information Service

Note: Rates are per 100,000 population, age-standardised to the WHO World Standard population over 4 years old.

- The sub-groups of the New Zealand population with the highest three-year moving suicide mortality rates in 2003–2005 were males, Māori (as opposed to non-Māori), those in the life-cycle stage 25–44 years, and those residing in the most deprived areas (quintile five). These trends are described further below.

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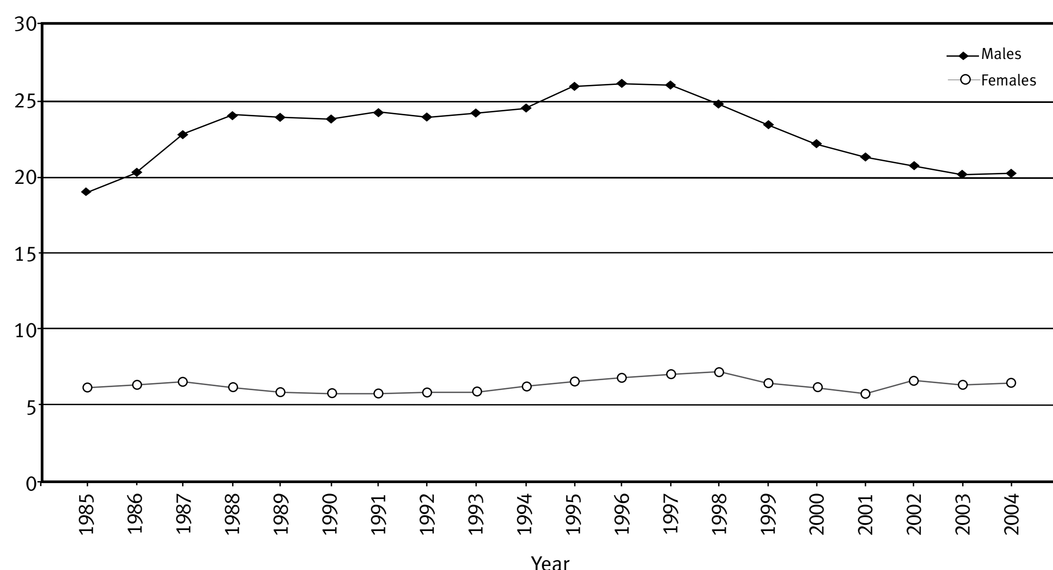
4 The term 'significant' refers to results that are determined to be *statistically* significant according to the tests described in the Technical Notes section of this publication.

Sex

- 375 males died by suicide in 2005 (see Table A3 in Appendix 1 for further detail), compared with 379 in 2004.
- The three-year moving average age-standardised suicide rate for males was 20.3 per 100,000 population in 2003–2005, compared with 20.1 per 100,000 population in 2002–2004. Both these rates represent a statistically significant decrease of 22.0% from 1996–1998 (26.0 per 100,000 population) (Figure 2).
- 127 females died by suicide in 2005, compared with 109 in 2004.
- The three-year moving average age-standardised rate of suicide for females was 6.5 per 100,000 population in 2003–2005, compared with 6.4 per 100,000 population in 2002–2004. This rate has remained relatively steady since 1985.

Figure 2: Suicide death rates, by sex, three-year moving averages, 1985–2005



Source: New Zealand Health Information Service

Note: Rates are per 100,000 population, age-standardised to the WHO World Standard population over 4 years old.

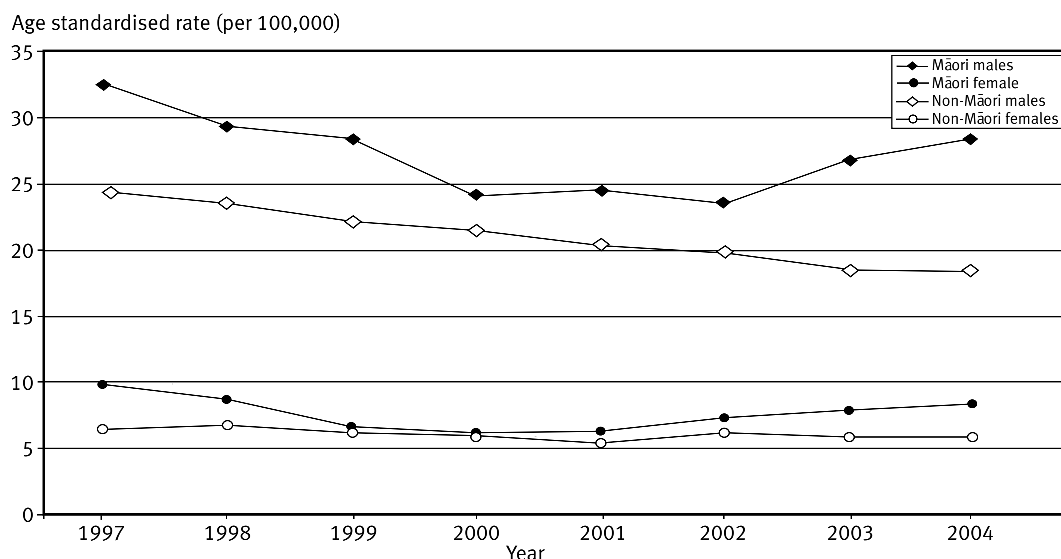
- The all-ages sex ratio for the three-year moving average age-standardised suicide rate for 2003–2005 was 3.1 male suicides to every female suicide. This ratio is unchanged from the previous two periods (2002–2004 and 2001–2003) and represents a statistically significant difference.

Ethnicity

Māori

- 100 Māori died by suicide in 2005, compared with 109 in 2004.
- The three-year moving average age-standardised rate of suicide for Māori was 17.9 deaths per 100,000 population in 2003–2005. The equivalent rate for non-Māori was 12.0 deaths per 100,000 population, which is significantly less than that for Māori.
- The three-year moving average age-standardised Māori rate in 2003–2005 increased by 5.3% from the 2002–2004 rate (17.0 per 100,000 population). However, the 2003–2005 rate represents a 14.0% decrease from the 1996–1998 peak rate (20.8 per 100,000 population). The non-Māori rate was the same as the 2002–2004 rate (12.0 per 100,000 population), but decreased by 21.1% from the 1996–1998 rate (15.2 per 100,000 population).
- The annual percentage of Māori suicides that were male in 2005 was the same as in 2004 (75%). However, the rate in 2005 decreased by 11.3% from the 2004 rate (28.2 per 100,000 population in 2005 compared with 31.8 per 100,000 population in 2004).
- There was a 6.0% increase in the three-year moving average age-standardised rate of suicide for Māori males from 2002–2004 to 2003–2005. This change should be interpreted with caution because, as Figure 3 shows, this rate has fluctuated considerably over the previous nine years (see Tables A1, A3 and A4 in Appendix 1 for further detail on ethnicity).
- The three-year moving average age-standardised rate of suicide for Māori males was 28.4 deaths per 100,000 population in 2003–2005, compared with the rate for non-Māori males of 18.4 per 100,000 population (Figure 3), which was significantly lower. This disparity is the widest it has been in nine years.
- The annual percentage of Māori suicides that were female in 2005 was the same as in 2004 (25%). However, the rate in 2005 represents a decrease of 5.4% from the 2004 rate (8.7 per 100,000 population in 2005 versus 9.2 per 100,000 population in 2004).
- The three-year moving average age-standardised rate of suicide for Māori females was 8.3 deaths per 100,000 population in 2003–2005, compared with the rate for non-Māori females of 5.9 per 100,000 population. This difference is statistically significant.
- The Māori sex ratio for the three-year moving average age-standardised suicide rate was 3.4 male suicides to every female suicide in 2003–2005. This difference is statistically significant.

Figure 3: Māori and non-Māori suicide death rates, three-year moving averages, 1996–2005



Source: New Zealand Health Information Service

Note: Rates are per 100,000 population, age-standardised to the WHO World Standard population over 4 years old.

Pacific peoples

- 21 Pacific people died by suicide in 2005 (18 males and 3 females), compared with 14 deaths in 2004 (12 males and 2 females).

Asian peoples

- 13 Asian people died by suicide in 2005 (6 males and 7 females), compared with 10 deaths in 2004 (6 males and 4 females).

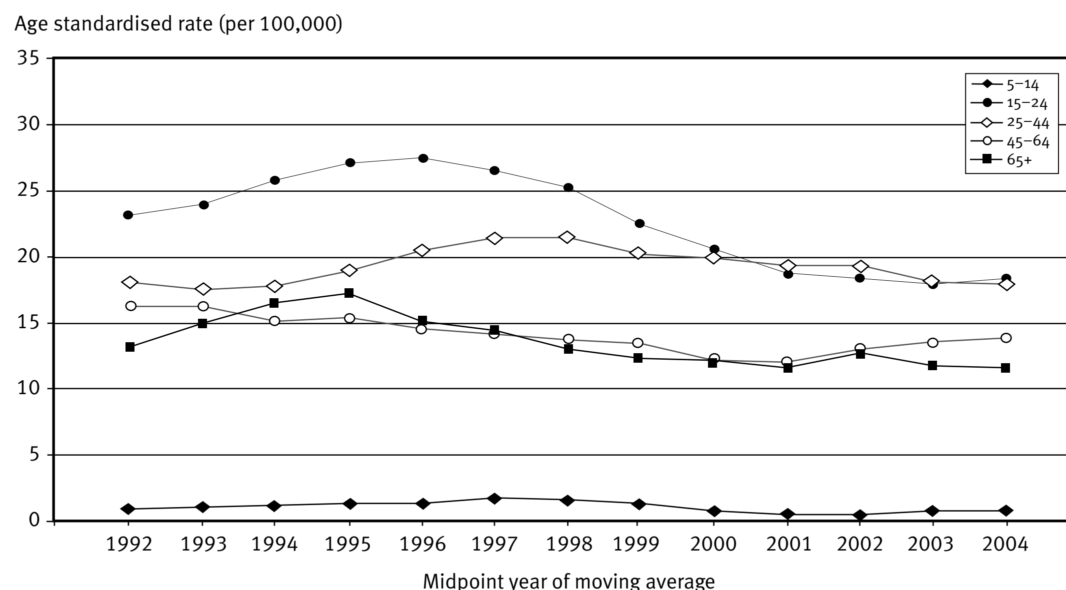
European/Others

- 368 European/Others died by suicide in 2005 (276 males and 92 females), compared with 355 deaths in 2004 (279 males and 76 females).

Life-cycle stages

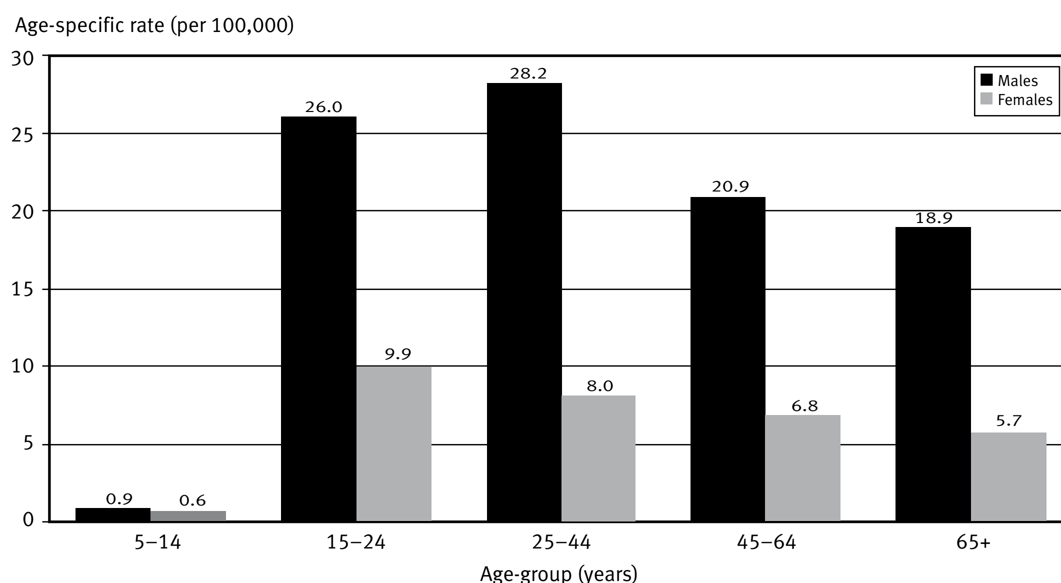
- The suicide rate for those in the life cycle stage of 15–24 years has declined by 33.5% since the peak in 1995–1997, from 27.2 to 18.1 deaths per 100,000 population (Figure 4). Meanwhile, the rate for the life-cycle stage of 45–64 years has increased from the dip of 11.9 per 100,000 population in 2000–2002 to 13.7 in 2003–2005, a level similar to the rate in 1997–1999.
- While the life-cycle stage with the highest three-year moving average suicide rate for males in 2003–2005 was 25–44 years (28.2 per 100,000 population), the highest rate for females was in the stage of 15–24 years (9.9 per 100,000 population) (Figure 5).

Figure 4: Suicide death rates, three-year moving average, by life-cycle stage, 1991–2005



Source: New Zealand Health Information Service

Figure 5: Suicide death rates, three-year moving average, by life-cycle stage and sex, 2003–2005



Source: New Zealand Health Information Service

- Detailed data on five-year age groups are available from Tables A3 and A5 of Appendix 1.
- Among Māori, suicide is largely confined to those aged under 35 years (see Table A3, Appendix 1). Please refer to *New Zealand Suicide Trends: Mortality 1921–2003, hospitalisations for intentional self-harm 1978–2004* for further age group data by ethnicity and sex (Ministry of Health 2006b).

Deprivation

In 2003–2005, the least deprived areas had a three-year moving average age-standardised suicide rate of 9.1 per 100,000 population compared with 15.6 per 100,000 population in the most deprived areas (Table 1). This difference is statistically significant.

Table 1: Suicide death rates, by NZDep2001 quintile, three-year moving averages, 2003–2005

	Age-standardised rate (per 100,000 population)
NZDep01 quintile	**2003–2005**
1 (least deprived)	9.1 (7.9–10.4)
2	10.8 (9.5–12.2)
3	12.9 (11.5–14.5)
4	14.5 (13.0–16.1)
5 (most deprived)	15.6 (14.0–17.4)

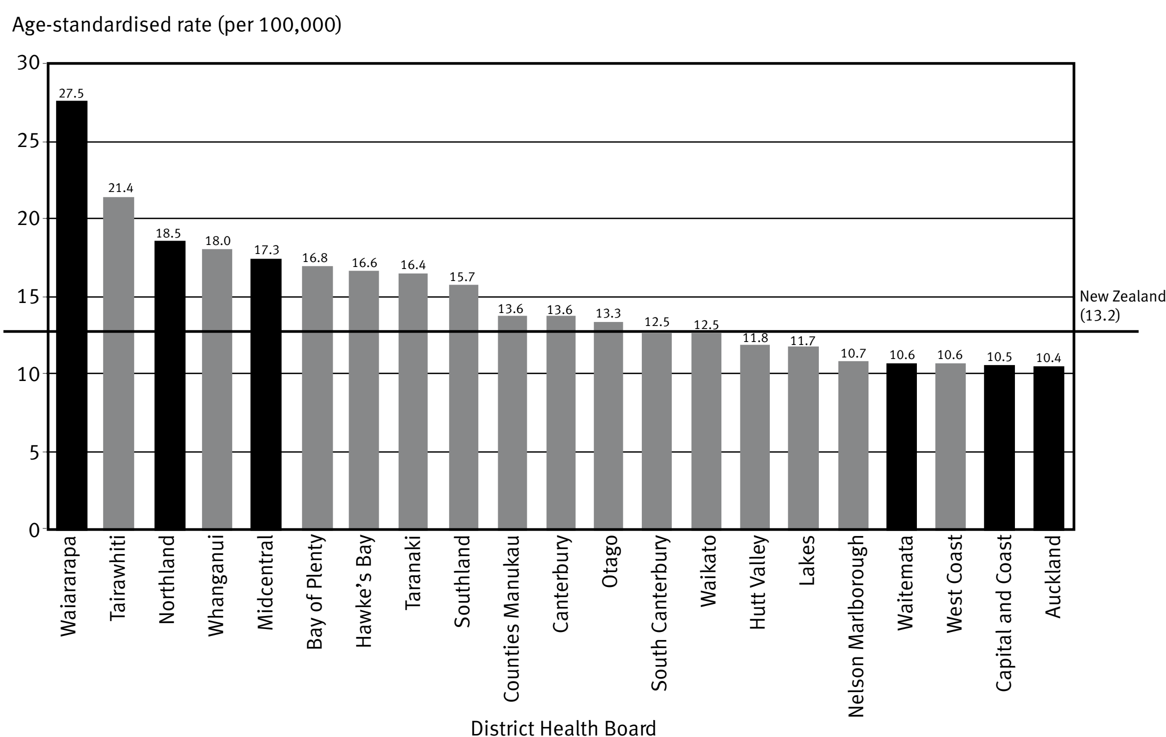
Source: New Zealand Health Information Service

Note: Rates are per 100,000 population, age-standardised to the WHO World Standard population over 4 years old. The numbers in brackets indicate the 95% confidence intervals. A rate in one deprivation quintile is considered to be statistically different from that in another when the confidence intervals do not overlap.

District Health Boards (2003–2005)

- Deaths in 2003–2005 were summed across these three years to provide sufficient numbers to calculate robust rates and protect confidentiality.
- Three DHBs had significantly higher suicide mortality rates than the national average: Wairarapa, Northland and MidCentral (Figure 6).
- The lowest rate of suicide in 2003–2005 was recorded in Auckland DHB (10.4 suicides per 100,000 population) (Figure 6).
- The highest rate of suicide in 2003–2005 was recorded in Wairarapa DHB (27.5 suicides per 100,000 population), followed by Tairawhiti and Northland (Figure 6).
- See Table A6 in Appendix 1 for information on suicide by DHB and sex for the 2003–2005 period.

Figure 6: Suicide death rates, by District Health Board, 2003–2005



Source: New Zealand Health Information Service

Note: Rates are per 100,000 population, age-standardised to the WHO World Standard population over 4 years old. The black bars indicate DHBs with rates significantly higher or lower than the national average.

Hospitalisation for Intentional Self-harm in 2006

- The hospitalisation rate for intentional self-harm in 2006 was 151.7 per 100,000 population (5400 hospitalisations), compared with 141.1 per 100,000 population in 2005 (4992 hospitalisations). This difference was statistically significant and represents a rate increase of 7.5%.
- The sub-groups of the New Zealand population with the highest intentional self-harm hospitalisation rates in 2006 were females, Māori (as opposed to non-Māori), those in the life-cycle stage of 15–24 years, and those residing in the most deprived areas (quintile five).
- See Table A8 in Appendix 1 for further information.

Sex

- Significantly more females are hospitalised for intentional self-harm than males. The female–male age-standardised rate ratio for intentional self-harm in 2006 was 2.0 female hospitalisations to every male hospitalisation, which was the same as in 2005.
- In 2006 the female hospitalisation rate for intentional self-harm was 203.7 per 100,000 population (3691 hospitalisations). This rate represents a statistically significant increase of 8.2% from the 2005 rate (188.3 per 100,000 population).
- In 2006 the male hospitalisation rate for intentional self-harm was 98.2 per 100,000 population (1709 hospitalisations). This rate represents a statistically significant increase of 6.2% from the 2005 rate (92.5 per 100,000 population).

Ethnicity

Māori

- Among Māori in 2006 the total age-standardised hospitalisation rate for intentional self-harm was 209.6 per 100,000 population (1063 hospitalisations). This rate is nearly one and a half times that of non-Māori (141.3 per 100,000 population, 4337 hospitalisations).
- In 2006 the Māori rate increased by 8.8% from the equivalent rate in 2005 (192.7 per 100,000 population) and the non-Māori rate increased significantly by 7.5% from that in 2005 (131.4 per 100,000 population). The increase was evident for both sexes.
- The age-standardised hospitalisation rate for Māori females for intentional self-harm was 258.2 per 100,000 population (695 hospitalisations), compared with 193.8 per 100,000 population (2996 hospitalisations) for non-Māori females.
- The age-standardised hospitalisation rate for Māori males for intentional self-harm was 157.2 per 100,000 population (368 hospitalisations). This rate is 1.8 times that for non-Māori males (87.8 per 100,000 population, 1341 hospitalisations).

Pacific peoples

- The age-standardised hospitalisation rate for Pacific peoples for intentional self-harm in 2006 was 104.0 per 100,000 population (218 hospitalisations). This rate represents an increase of 15.0% compared with the rate in 2005 (90.4 per 100,000 population, 190 hospitalisations).

Asian people

- The age-standardised hospitalisation rate for Asian people for intentional self-harm in 2006 was 53.2 per 100,000 population (194 hospitalisations). This rate represents a 2.2% decrease from the rate in 2005 (54.4 per 100,000 population, 198 hospitalisations).

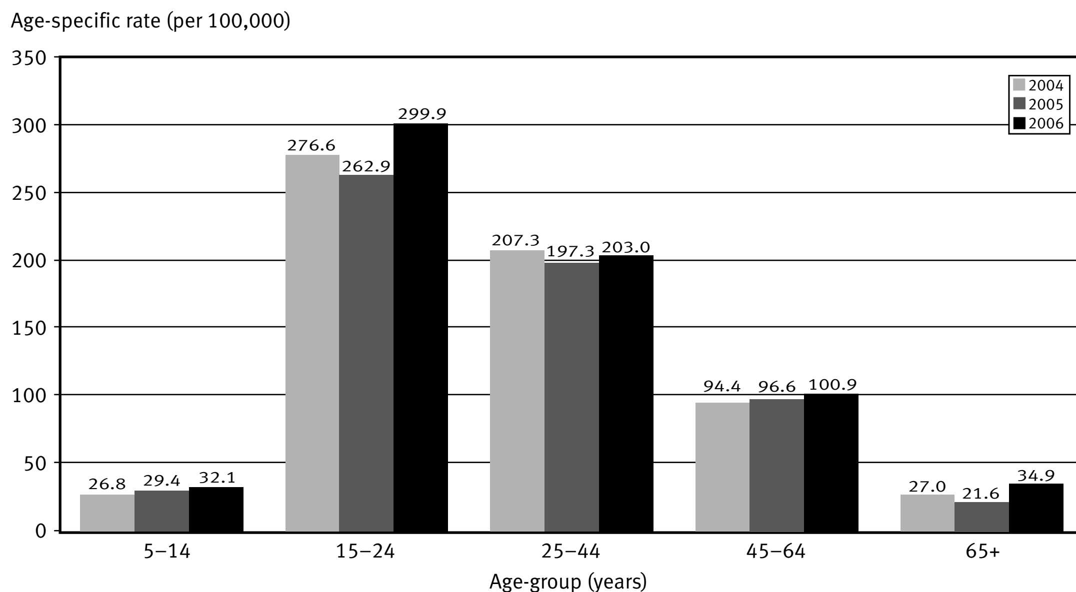
European/Others

- The age-standardised hospitalisation rate for European/Others for intentional self-harm in 2006 was 158.5 per 100,000 population (3925 hospitalisations). This rate represents a statistically significant increase of 9.0% compared with the rate in 2005 (145.4 per 100,000 population, 3622 hospitalisations).

Life-cycle stages

- The life-cycle stage with the highest self-harm hospitalisation rate for both genders in 2006 was 15–24 years, and this ranking has not changed from the past three years. In contrast, the life-cycle stage with the lowest rate in 2006 was childhood (5–14 years), whereas in 2005 adults aged 65+ years had the lowest rate (Figure 7).

Figure 7: Intentional self-harm hospitalisation rates by life-cycle stage, 2004–2006



Source: New Zealand Health Information Service

- Data by five-year age groups are available in Table A8 of Appendix 1.

Deprivation

Intentional self-harm hospitalisation rates increase significantly with increasing deprivation. The rate in the most deprived quintile is 77% higher than the rate in the least deprived quintile (Table 2).

Table 2: Intentional self-harm hospitalisation rates, by NZDep2001 quintile, 2006

NZDep01 quintile	Age-standardised rate (per 100,000 population)
1 (least deprived)	102.8 (95.5–110.6)
2	121.9 (114.0–130.2)
3	143.4 (134.9–152.4)
4	160.7 (151.6–170.2)
5 (most deprived)	181.7 (172.0–191.8)

Source: New Zealand Health Information Service

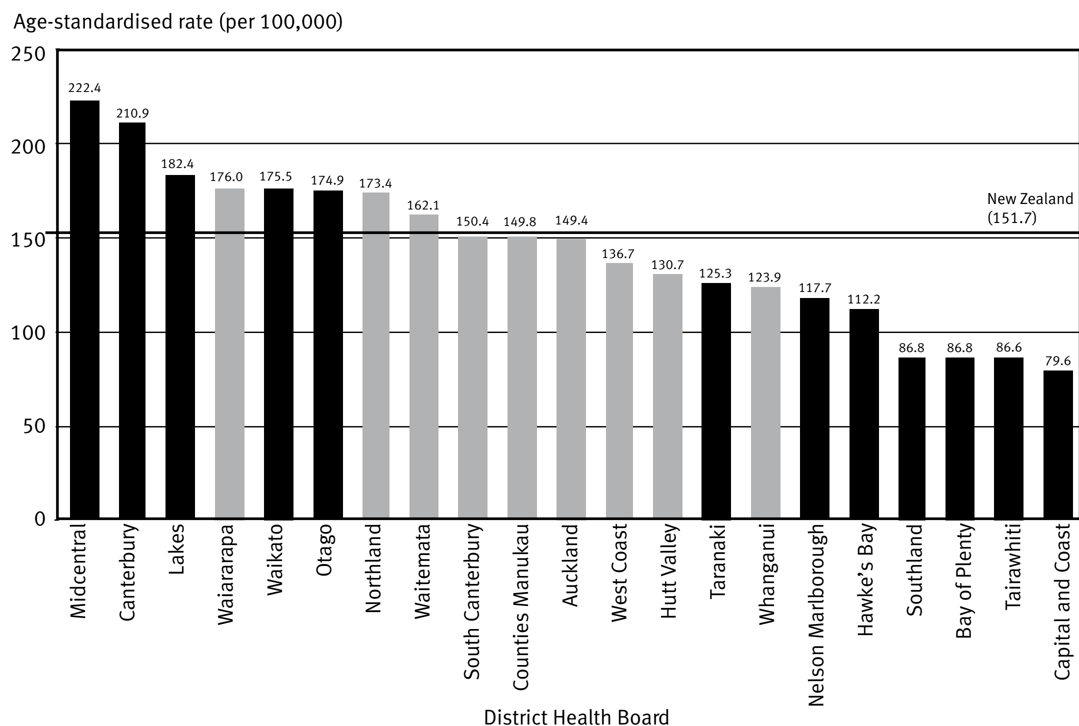
Note: Rates are per 100,000 population, age-standardised to the WHO World Standard population over 4 years old. The numbers in brackets indicate the 95% confidence intervals. A rate in one deprivation quintile is considered to be statistically different from that in another when the confidence intervals do not overlap.

Between 2004 and 2006 the intentional self-harm hospitalisation rate for each of the five deprivation quintiles did not change significantly.

District Health Boards (2006)

- Caution should be exercised when comparing rates among DHBs because some of the regional differences are due to different practices in reporting and patient management.
- In Figure 8, DHBs with a black bar have a significantly higher or lower intentional self-harm hospitalisation rate than the national average.
- The lowest rate of hospitalisation for intentional self-harm was recorded in Capital and Coast DHB (79.6 hospitalisations per 100,000 population) (Figure 8).
- The highest rate of hospitalisation for intentional self-harm was recorded in MidCentral DHB (222.4 hospitalisations per 100,000 population).
- See Tables A9–A11 in Appendix 1 for information on annual intentional self-harm hospitalisations by DHB and sex for 2004, 2005 and 2006.

Figure 8: Intentional self-harm hospitalisation rates, by District Health Board, 2006



Source: New Zealand Health Information Service

Note: Rates are per 100,000 population, age-standardised to the WHO World Standard population over 4 years old. The black bars indicate DHBs with a rate significantly higher or lower than the national average.

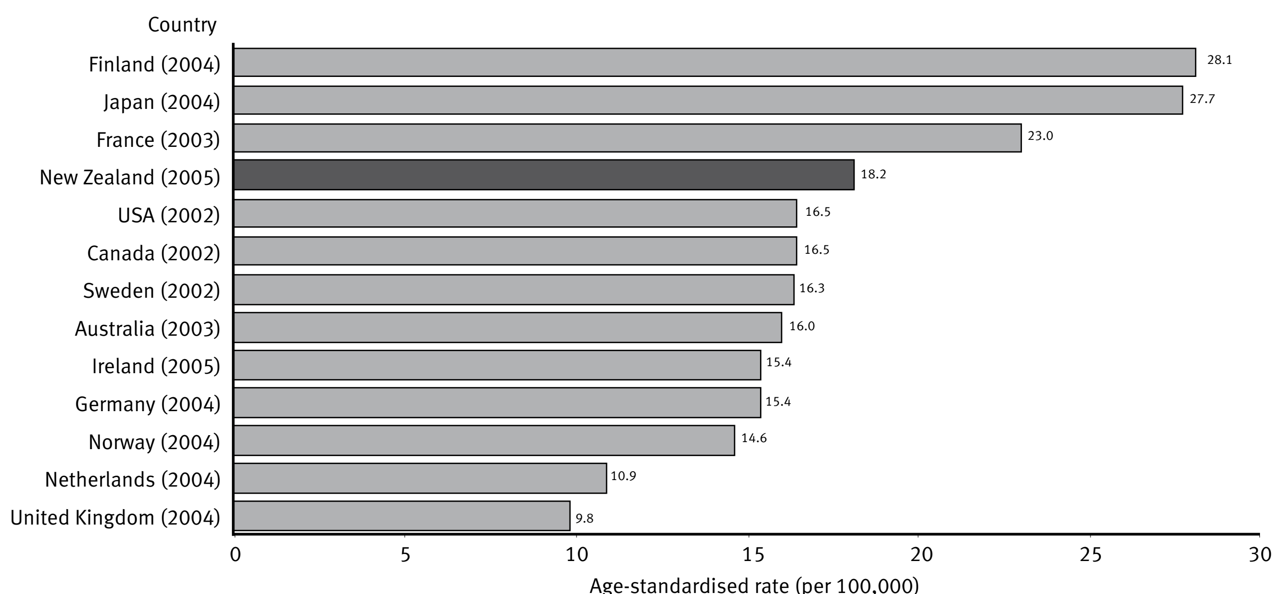
International Comparisons

This section displays New Zealand suicide rates compared with selected countries in the Organisation for Economic Co-operation and Development (OECD).[5] A cautious approach is recommended when comparing international suicide statistics, as many factors affect the recording and classification of suicide in different countries and these factors may result in undercounts. Potentially influential factors include the level of proof required for a verdict, stigma, religion, social class, occupation and confidentiality (Andriessen 2006). Deaths that may be classified as suicide in some countries may be classified as undetermined intent in others.

All ages

When ranked alongside the rates for the other countries in Figure 9 and Figure 10, the New Zealand (2005) suicide rates for males and females are near the top. The male rate is lower than that of Finland (2004), Japan (2004) and France (2003). The New Zealand female rate is broadly similar to the rates in many other countries but it is lower than that in Japan (2004) and higher than that in Australia (2003).

Figure 9: Age-standardised suicide rates for selected OECD countries, males



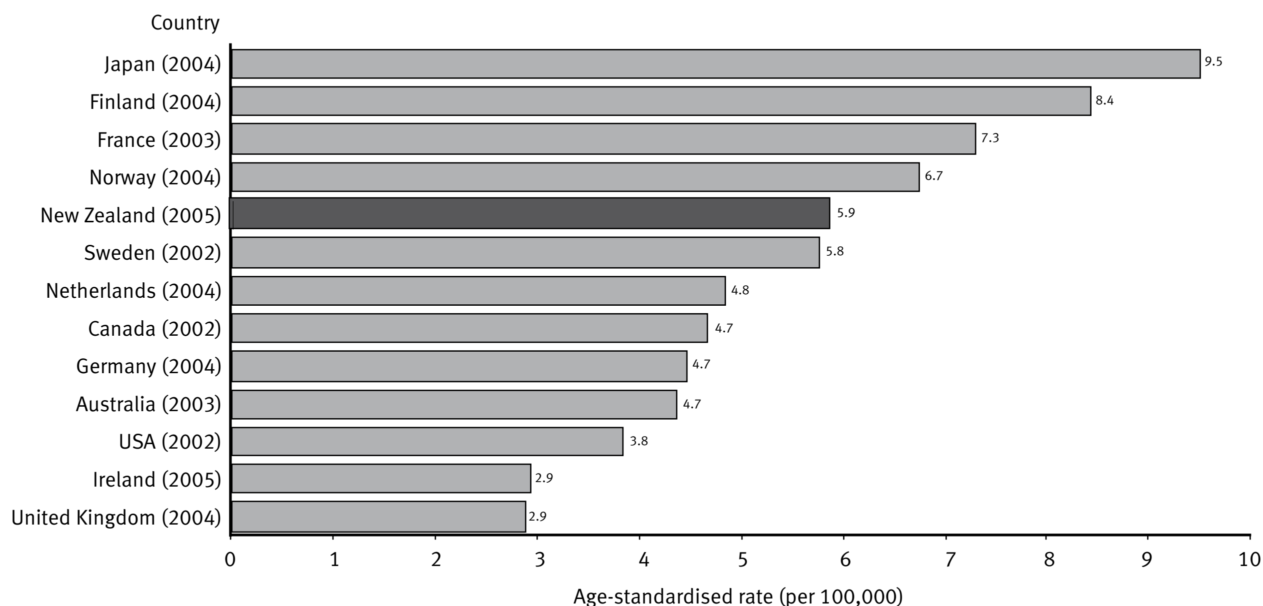
Source: World Health Organization[6]

Note: Rates are age-standardised to the WHO World Standard population. The New Zealand rate here is different to that presented elsewhere in this publication because it has been recalculated in the same manner as the calculations for the other countries, using data available on the WHO website.

5 These countries have been chosen for consistent comparisons with New Zealand over time.

6 http://www.who.int/mental_health/prevention/suicide/country_reports/en/

Figure 10: Age-standardised suicide rates for selected OECD countries, females



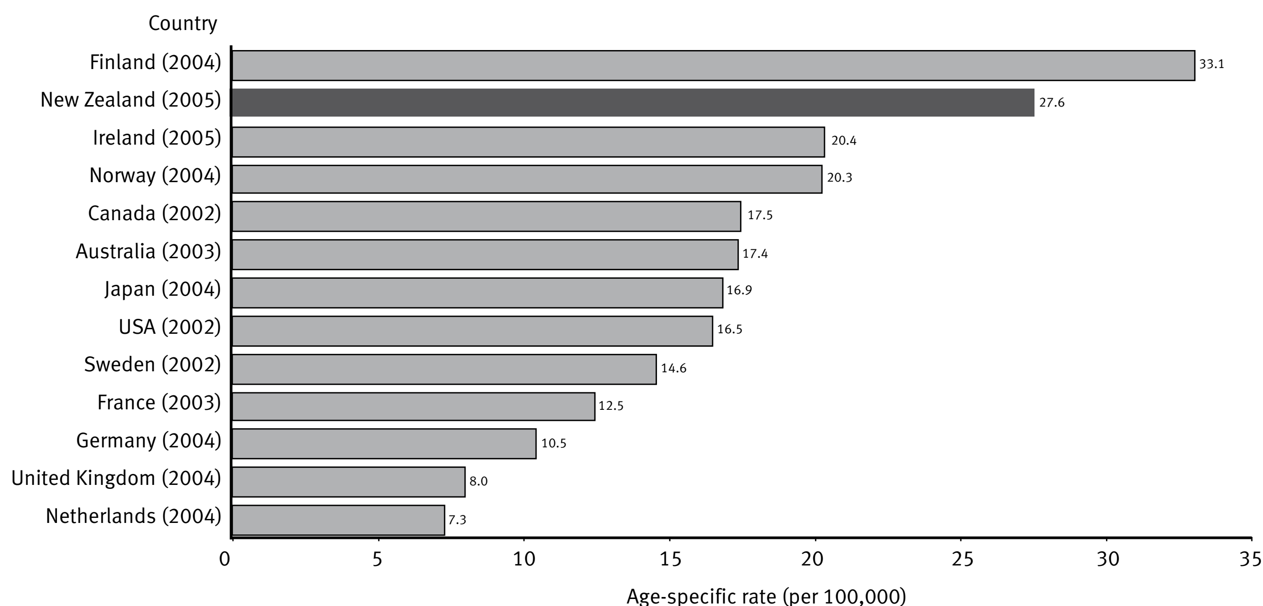
Source: World Health Organization

Note: Rates are age-standardised to the WHO World Standard population. The New Zealand rate here is different to that presented elsewhere in this publication because it has been recalculated in the same manner as the calculations for the other countries, using data available on the WHO website.

Youth (15–24 year olds)

When ranked alongside the other countries in Figure 11, the New Zealand (2005) suicide rate for males aged 15–24 years is higher than that in Ireland (2005), but lower than that in Finland (2004).

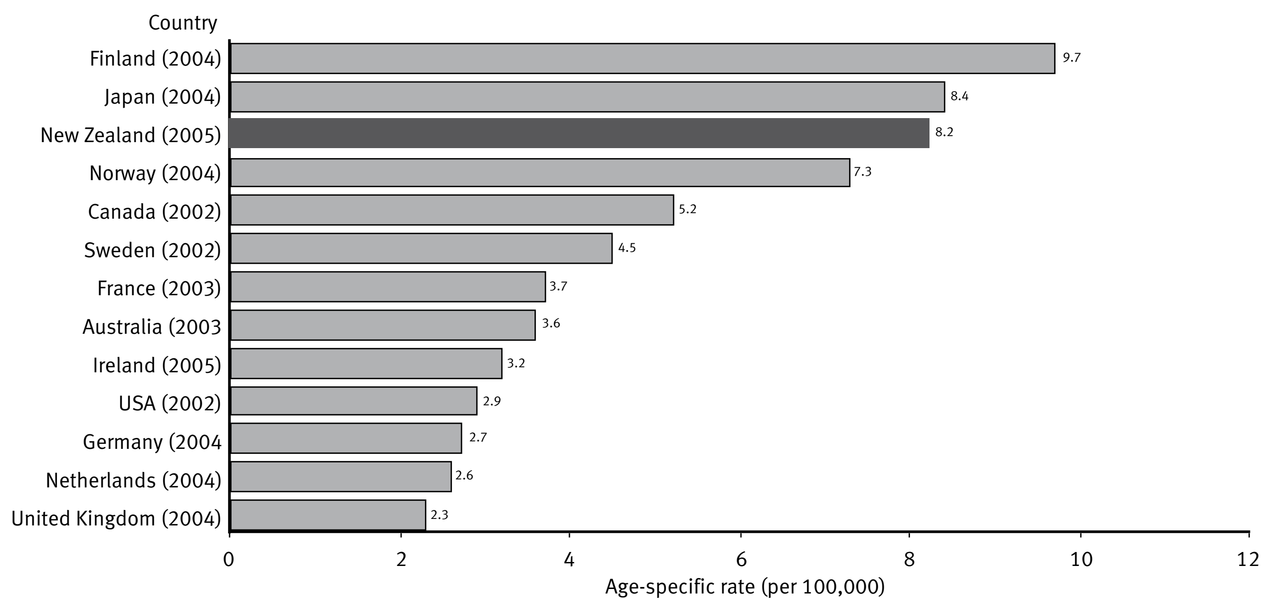
Figure 11: Age-specific suicide rates for selected OECD countries, males, 15–24 years



Source: World Health Organization

When ranked alongside the other countries in Figure 12, the New Zealand (2005) suicide rate for females aged 15–24 years is lower than that in Finland (2004) and Japan (2004), but higher than that in the other selected OECD countries.

Figure 12: Age-specific suicide rates for selected OECD countries, females, 15–24 years



Source: World Health Organization

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Appendix 1: Further Tables

Table A1: Number of suicide deaths by sex, life-cycle stage and ethnicity for the most recent three years of data

		2003		2004		2005	
		M	F	M	F	M	F
Life-cycle (years)	5–14	4	1	4	2	0	2
	15–24	66	31	83	30	84	24
	25–44	160	52	160	39	157	54
	45–64	101	36	88	29	101	31
	65+	45	21	44	9	33	16
Ethnicity	Māori	67	20	82	27	75	25
	Pacific	15	7	12	2	18	3
	Asian	16	12	6	4	6	7
	European/Other	278	102	279	76	276	92
Total number of deaths		376	141	379	109	375	127

Table A2: Number of self-harm hospitalisations by sex, life-cycle stage and ethnicity for the most recent three years of data

		2004		2005		2006	
		M	F	M	F	M	F
Life-cycle (years)	5–14	18	145	38	140	26	167
	15–24	458	1100	423	1067	505	1205
	25–44	770	1647	763	1513	772	1544
	45–64	282	614	320	619	326	678
	65+	55	81	53	56	80	97
Ethnicity	Māori	369	667	351	631	368	695
	Pacific	60	115	84	106	82	136
	Asian	47	143	43	155	48	146
	European/Other	1107	2662	1119	2503	1211	2714
Total number of hospitalisations		1583	3587	1597	3395	1709	3691

Table A3: Suicide deaths, by ethnicity, age and sex, 2005

Ethnicity	Sex	Total	Age group (years)															
			10-	15-	20-	25-	30-	35-	40-	45-	50-	55-	60-	65-	70-	75-	80-	85+
Māori	Total	100	2	15	24	14	21	9	7	2	3	1	0	1	0	1	0	0
	Males	75	0	12	17	9	18	8	5	2	2	0	0	1	0	1	0	0
	Females	25	2	3	7	5	3	1	2	0	1	1	0	0	0	0	0	0
Pacific	Total	21	0	2	7	4	3	0	2	1	1	0	1	0	0	0	0	0
	Males	18	0	2	7	3	3	0	0	1	1	0	1	0	0	0	0	0
	Females	3	0	0	0	1	0	0	2	0	0	0	0	0	0	0	0	0
Asian	Total	13	0	0	2	4	3	1	0	0	1	1	0	0	1	0	0	0
	Males	6	0	0	2	1	2	0	0	0	1	0	0	0	0	0	0	0
	Females	7	0	0	0	3	1	1	0	0	0	1	0	0	1	0	0	0
European/Other	Total	368	0	28	30	33	26	43	41	36	33	38	14	17	5	11	6	7
	Males	276	0	22	22	30	17	34	27	27	26	28	12	12	4	7	2	6
	Females	92	0	6	8	3	9	9	14	9	7	10	2	5	1	4	4	1
Total	Total	502	2	45	63	55	53	53	50	39	38	40	15	18	6	12	6	7
	Males	375	0	36	48	43	40	42	32	30	30	28	13	13	4	8	2	6
	Females	127	2	9	15	12	13	11	18	9	8	12	2	5	2	4	4	1

Source: New Zealand Health Information Service

Note: No suicide deaths were recorded for the age group of 5–9 years in 2005.

Table A4: Age-standardised suicide rates, by ethnicity and sex, 1996–2005

Ethnicity	Sex	Year									
		1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Māori	Total	20.1	20.3	21.9	14.1	15.6	14.6	15.1	15.6	20.0	18.1
	Males	31.0	30.7	35.6	21.8	28.0	22.3	23.3	24.9	31.8	28.2
	Females	10.0	10.3	9.1	6.9	4.1	7.4	7.5	7.0	9.2	8.7
Non-Māori	Total	15.1	15.2	15.2	14.4	12.5	13.7	12.0	12.7	11.4	11.9
	Males	24.6	24.5	24.0	21.8	20.6	21.9	18.6	18.7	18.1	18.3
	Females	6.0	6.3	6.8	7.2	4.7	5.9	5.7	7.0	4.9	5.7
Total	Total	16.1	16.2	16.6	14.7	13.1	14.1	12.8	13.6	12.9	13.1
	Males	26.1	26.0	26.0	22.4	21.9	22.2	19.8	20.2	20.4	20.1
	Females	6.7	7.0	7.5	7.4	4.6	6.4	6.2	7.3	5.7	6.4

Source: New Zealand Health Information Service

Note: Rates per 100,000 population, age-standardised to the WHO World Standard population over 4 years old.

Table A5: Suicide death rates per 100,000 population, by five-year age group and sex, 2005

Age group (years)	Males		Females		Total	
	Number	Rate	Number	Rate	Number	Rate
5–9	0	–	0	–	0	–
10–14	0	–	2	–	2	–
15–19	36	23.0	9	6.0	45	14.7
20–24	48	32.4	15	10.6	63	21.7
25–29	43	34.2	12	9.3	55	21.6
30–34	40	29.1	13	8.7	53	18.4
35–39	42	28.8	11	7.0	53	17.5
40–44	32	20.6	18	10.9	50	15.7
45–49	30	20.8	9	6.0	39	13.3
50–54	30	23.8	8	6.2	38	14.9
55–59	28	24.1	12	10.2	40	17.1
60–64	13	14.6	2	–	15	8.3
65–69	13	18.3	5	6.6	18	12.3
70–74	4	–	2	–	6	5.0
75–79	8	17.1	4	–	12	11.7
80–84	2	–	4	–	6	8.2
85+	6	34.3	1	–	7	12.4
Total	375	20.1	127	6.4	502	13.1

Source: New Zealand Health Information Service

Note: A dash (–) indicates that the rate was suppressed because there were fewer than five deaths in this age group. Age group rates are age-specific per 100,000 population. Total rates are age-standardised per 100,000 population to the WHO World Standard population over 4 years old.

Table A6: Age-standardised suicide death rates per 100,000 population, by District Health Board and sex, 2003–2005

DHB	Males		Females		Total	
	Number	Rate	Number	Rate	Number	Rate
Northland	51	28.1	18	9.8	69	18.5
Waitemata	113	17.2	33	4.6	146	10.6
Auckland	91	15.3	38	6.0	129	10.4
Counties Manukau	99	18.3	55	9.1	154	13.6
Waikato	96	21.1	20	4.3	116	12.5
Lakes District	22	18.3	7	5.4	29	11.7
Bay of Plenty	73	28.7	18	6.0	91	16.8
Tairawhiti	24	41.3	2	–	26	21.4
Hawke's Bay	48	25.2	16	8.5	64	16.6
Taranaki	39	28.5	7	4.9	46	16.4
MidCentral	60	28.0	18	7.4	78	17.3
Whanganui	21	28.4	8	7.5	29	18.0
Capital and Coast	65	17.4	18	4.4	83	10.5
Hutt Valley	34	19.1	8	4.9	42	11.8
Wairarapa	23	47.1	5	8.7	28	27.5
Nelson Marlborough	29	15.2	13	6.4	42	10.7
West Coast	9	19.6	1	–	10	10.6
Canterbury	129	19.3	58	8.3	187	13.6
South Canterbury	15	20.7	3	–	18	12.5
Otago	49	19.0	21	7.8	70	13.3
Southland	36	25.0	9	6.3	45	15.7

Source: New Zealand Health Information Service

Note: The column with the number of suicides is for the total number of suicides for 2003, 2004 and 2005 combined. The rates are for the three-year moving average period 2003–2005 and are age-standardised to the WHO World Standard population over 4 years old.

A dash (–) indicates that the rate was suppressed because there were fewer than five deaths in this District Health Board. Age group rates are age-specific per 100,000 population. Total rates are age-standardised per 100,000 population to the WHO World Standard population over 4 years old.

Table A7: Intentional self-harm hospitalisations, by ethnicity, age and sex, 2006

Ethnicity	Sex	Total	Age group (years)																
			5-	10-	15-	20-	25-	30-	35-	40-	45-	50-	55-	60-	65-	70-	75-	80-	85+
Māori	Total	1063	1	52	240	165	134	130	138	91	47	31	10	14	8	2	0	0	0
	Males	368	0	5	74	66	53	58	43	33	16	8	4	4	4	0	0	0	0
	Females	695	1	47	166	99	81	72	95	58	31	23	6	10	4	2	0	0	0
Pacific	Total	218	0	11	49	55	42	25	9	6	8	7	2	1	1	0	2	0	0
	Males	82	0	1	20	19	16	5	6	4	6	3	1	1	0	0	0	0	0
	Females	136	0	10	29	36	26	20	3	2	2	4	1	0	1	0	2	0	0
Asian	Total	194	0	3	45	52	20	27	13	12	8	2	5	0	1	3	1	1	1
	Males	48	0	0	7	13	4	11	3	4	4	0	2	0	0	0	0	0	0
	Females	146	0	3	38	39	16	16	10	8	4	2	3	0	1	3	1	1	1
European/ Other	Total	3925	1	125	657	447	330	432	444	463	395	246	148	80	44	30	31	25	27
	Males	1211	0	20	158	148	109	125	174	124	95	83	59	40	21	12	17	15	11
	Females	2714	1	105	499	299	221	307	270	339	300	163	89	40	23	18	14	10	16
Total	Total	5400	2	191	991	719	526	614	604	572	458	286	165	95	54	35	34	26	28
	Males	1709	0	26	259	246	182	199	226	165	121	94	66	45	25	12	17	15	11
	Females	3691	2	165	732	473	344	415	378	407	337	192	99	50	29	23	17	11	17

Table A8: Intentional self-harm hospitalisation rates, by five-year age group and sex, 2005 and 2006

Age group (years)	Males				Females				Total			
	Number		Rate		Number		Rate		Number		Rate	
	2005	2006	2005	2006	2005	2006	2005	2006	2005	2006	2005	2006
5–9	0	0	–	–	1	2	–	–	1	2	–	–
10–14	38	26	23.6	16.0	139	165	90.9	106.9	177	191	56.4	60.3
15–19	196	259	129.9	170.3	632	732	430.5	494.2	828	991	278.2	330.1
20–24	227	246	169.5	182.7	435	473	321.8	349.2	662	719	246.0	266.2
25–29	223	182	188.9	157.8	363	344	286.3	278.7	586	526	239.3	220.3
30–34	197	199	148.3	153.9	413	415	277.5	284.6	610	614	216.5	223.2
35–39	192	226	132.3	159.6	335	378	207.6	237.5	527	604	172.0	200.8
40–44	151	165	98.0	105.6	402	407	241.1	239.4	553	572	172.4	175.3
45–49	133	121	93.2	84.1	310	337	206.0	220.8	443	458	151.1	154.5
50–54	101	94	77.9	71.1	166	192	123.7	139.5	267	286	101.2	106.0
55–59	60	66	52.0	55.1	98	99	82.6	80.4	158	165	67.5	67.9
60–64	26	45	29.4	49.7	45	50	48.7	52.7	71	95	39.2	51.2
65–69	12	25	16.6	34.4	18	29	23.5	37.3	30	54	20.1	35.9
70–74	15	12	26.1	21.4	10	23	15.9	37.6	25	35	20.8	29.8
75–79	12	17	25.1	34.7	8	17	14.0	29.8	20	34	19.1	32.0
80–84	8	15	27.3	49.8	11	11	25.0	24.8	19	26	25.9	34.9
85+	6	11	33.2	59.6	9	17	22.6	42.0	15	28	25.9	47.5
Total	1597	1709	92.5	98.2	3395	3691	188.3	203.7	4992	5400	141.1	151.7

Source: New Zealand Health Information Service

Note: A dash (–) indicates that the rate was suppressed because there were fewer than five deaths in this age group. Age group rates are age-specific per 100,000 population. Total rates are per 100,000 population, age-standardised to the WHO World Standard population over 4 years old.

Table A9: Intentional self-harm hospitalisations and age-standardised rates, by District Health Board and sex, 2004

DHB	Males		Females		Total	
	Number	Rate	Number	Rate	Number	Rate
Northland	50	89.3	121	203.0	171	146.8
Waitemata	202	98.5	472	214.8	674	157.6
Auckland	205	105.5	361	179.7	566	143.3
Counties Manukau	164	92.2	347	178.3	511	136.0
Waikato	149	105.8	330	227.2	479	167.3
Lakes District	25	62.0	88	200.8	113	132.9
Bay of Plenty	54	71.7	128	165.2	182	119.1
Tairawhiti	12	63.5	30	151.6	42	107.1
Hawke's Bay	29	47.7	74	109.9	103	79.7
Taranaki	38	91.5	73	160.4	111	126.8
MidCentral	60	89.5	123	169.7	183	130.3
Whanganui	11	48.7	26	97.7	37	73.3
Capital and Coast	52	42.1	98	79.0	150	60.9
Hutt Valley	51	86.4	125	193.4	176	140.4
Wairarapa	20	140.4	42	268.5	62	203.8
Nelson Marlborough	48	84.8	100	178.2	148	131.1
West Coast	10	68.8	29	196.7	39	131.2
Canterbury	261	128.7	695	342.6	956	236.5
South Canterbury	14	77.4	22	130.3	36	103.8
Otago	91	113.7	223	268.3	314	192.7
Southland	23	46.6	66	144.3	89	94.2

Source: New Zealand Health Information Service

Note: Rates are per 100,000 population, age-standardised to the WHO World Standard population over 4 years old.

Table A10: Intentional self-harm hospitalisations and age-standardised rates, by District Health Board and sex, 2005

DHB	Males		Females		Total	
	Number	Rate	Number	Rate	Number	Rate
Northland	51	93.1	133	214.1	184	153.8
Waitemata	188	91.3	404	182.6	592	137.4
Auckland	199	101.6	362	181.8	561	142.3
Counties Manukau	208	113.3	372	190.6	580	152.4
Waikato	163	117.9	368	252.4	531	186.7
Lakes District	32	77.8	86	202.1	118	141.3
Bay of Plenty	58	74.8	91	117.1	149	96.2
Tairawhiti	11	61.3	20	104.0	31	82.4
Hawke's Bay	25	47.8	51	80.8	76	64.7
Taranaki	43	97.4	62	137.4	105	117.4
MidCentral	98	150.8	164	223.0	262	187.8
Whanganui	15	65.8	28	111.0	43	89.0
Capital and Coast	27	21.6	98	75.9	125	49.7
Hutt Valley	33	58.3	84	131.0	117	95.6
Wairarapa	21	150.1	34	215.6	55	181.3
Nelson Marlborough	42	76.0	103	188.7	145	131.4
West Coast	14	90.3	37	252.3	51	171.9
Canterbury	224	111.0	609	292.1	833	202.4
South Canterbury	11	56.3	22	116.8	33	86.4
Otago	95	120.7	197	248.5	292	185.8
Southland	30	62.0	56	121.8	86	91.4

Source: New Zealand Health Information Service

Note: Rates are per 100,000 population, age-standardised to the WHO World Standard population over 4 years old.

Table A11: Intentional self-harm hospitalisations and age-standardised rates, by District Health Board and sex, 2006

DHB	Males		Females		Total	
	Number	Rate	Number	Rate	Number	Rate
Northland	73	132.3	133	214.7	206	173.4
Waitemata	241	116.1	460	207.3	701	162.1
Auckland	207	105.3	389	192.2	596	149.4
Counties Manukau	189	102.6	387	194.4	576	149.8
Waikato	145	102.4	364	246.2	509	175.5
Lakes District	34	87.3	120	272.0	154	182.4
Bay of Plenty	48	65.2	86	107.5	134	86.8
Tairawhiti	9	50.8	24	122.7	33	86.6
Hawkes Bay	41	70.6	96	153.5	137	112.2
Taranaki	45	114.1	62	134.0	107	125.3
MidCentral	95	143.5	212	298.5	307	222.4
Whanganui	21	90.6	41	158.1	62	123.9
Capital and Coast	69	55.1	133	101.5	202	79.6
Hutt	39	65.9	120	194.5	159	130.7
Wairarapa	17	121.2	34	231.7	51	176.0
Nelson Marlborough	36	61.8	86	176.1	122	117.7
West Coast	11	75.3	27	198.5	38	136.7
Canterbury	249	117.8	625	302.9	874	210.9
South Canterbury	21	109.0	38	193.8	59	150.4
Otago	86	113.9	184	235.2	270	174.9
Southland	23	53.5	59	119.1	82	86.8

Source: New Zealand Health Information Service

Note: Rates are per 100,000 population, age-standardised to the WHO World Standard population over 4 years old.

Appendix 2: Further Information

General information about suicide prevention

For general information about suicide and suicide prevention, contact:

Suicide Prevention Information New Zealand (SPINZ)
PO Box 10051
Dominion Road
Auckland 1446
Ph: (09) 300 7035
Fax: (09) 300 7020
Email: info@spinz.org.nz
Website: http://www.spinz.org.nz

To find out more about the New Zealand Suicide Prevention Strategy 2006–2016, see the Ministry of Health's suicide prevention web page (http://www.moh.govt.nz/suicideprevention).

Statistics

For health data, including suicide statistics, contact:

Public Health Intelligence
Ministry of Health
PO Box 5013
Wellington
Ph: (04) 816 2000
Fax: (04) 816 2340
Email: phi@moh.govt.nz
Website: http://www.moh.govt.nz/phi

PHIOnline

Website: http://www.phionline.moh.govt.nz

Or contact:
New Zealand Health Information Service
Ministry of Health
PO Box 5013
Wellington
Ph: (04) 496 2000
Fax: (04) 816 2899
Email: inquiries@nzhis.govt.nz
Website: http://www.nzhis.govt.nz

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For more copies of this publication, or *Suicide Facts* for previous years, see the Ministry of Health website (http://www.moh.govt.nz/suicideprevention), contact SPINZ (see above) or:

Wickliffe Limited
PO Box 932
Dunedin
Ph: (04) 496 2277
Email: moh@wickliffe.co.nz
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