Suicide Facts: Deaths and intentional self-harm hospitalisations 2007

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Preface

Each year approximately 500 New Zealanders die by suicide: a number that is higher than the national road toll. Data suggests that suicide is the sixth-highest cause of avoidable deaths in those aged less than 75 years, accounting for approximately 6 percent of avoidable deaths (Page et al 2006).

There are more than 2500 admissions to hospital every year for intentional self-harm, excluding patients who were discharged from an emergency department and stayed less than 48 hours and patients who were re-admitted within two days of a previous admission for an intentional self-harm episode. More details of these exclusions are given on page 23.

Note that because of changes in methodology it is not advisable to compare the hospitalisation data in this publication to Suicide Facts documents published before 2008. However, comparing the data within this publication and last year's publication (*Suicide Facts: Deaths and intentional self-harm hospitalisations 2006*) is appropriate. More details on this are included in the 'Technical Notes' section.

It is important to recognise that motivation for intentional self-harm varies, and therefore hospitalisation data is not a measure of attempts to take one's life by suicide. While this publication provides the latest suicide and intentional self-harm data for 2007, it does not attempt to explain the causes of suicidal behaviour. However, suicide is a serious health and social issue and as such is an indicator of social wellbeing (Associate Minister of Health 2006, p 3).

Suicide prevention in New Zealand is guided by the *New Zealand Suicide Prevention Strategy 2006–2016* (Associate Minister of Health 2006), the *New Zealand Suicide Prevention Action Plan 2008–2012: The summary for action* (Ministry of Health 2008b) and the *New Zealand Suicide Prevention Action Plan 2008–2012: The evidence for action* (Ministry of Health 2008a). Suicide Facts: Deaths and intentional self-harm hospitalisations 2007 and subsequent annual data updates contribute to monitoring and evaluating the progress of the implementation of the strategy and the action plan.

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Key Points

Suicide

Overview

- A total of 483 people died by suicide in New Zealand in 2007.
- This equates to 11.0 deaths per 100,000 population (age-standardised).
- The 2007 suicide rate was 27.3 percent below the peak rate in 1998, continuing the downward trend.

Sex

- There were 370 male suicide deaths (17.4 deaths per 100,000 male population, age-standardised) in 2007: 27.1 percent below the highest rate in 1995.
- There were 113 female suicide deaths (4.9 deaths per 100,000 female population, age-standardised) in 2007: the lowest rate since 2000.
- The ratio of male suicide deaths to female was 3.6:1 in 2007.

Age

- There were 33.9 male suicide deaths per 100,000 population in the 30–34 years age group in 2007.
- There were 10.3 female suicide deaths per 100,000 population in the 40–44 years age group in 2007.
- The male suicide rate for those aged 25–29 years has halved since 1997.
- The peak age group for female suicide rates has changed from 15–19 years to 40–44 years since 1997.

Youth (15–24 years)

- In 2007 there were 22.9 male youth suicide deaths per 100,000 population (almost half the rate in 1995), and 7.6 female youth suicide deaths per 100,000 population.
- The youth suicide rate has declined by 46.6 percent since the peak in 1995.
- The male youth suicide rate was almost three times the female youth rate.

Ethnicity

- There were 16.1 Māori suicide deaths per 100,000 population (age-standardised) in 2007.
- The majority (86.6 percent) of Māori suicides occurred in people under 45 years.
- There were 9.9 non-Māori deaths per 100,000 population (age-standardised) in 2007, which is approximately 60 percent of the Māori rate.
- Māori suicide death rates show no overall trend over time, but the current rate is 19.1 percent lower than the peak rate in 1998.
- There were 25 deaths from Pacific peoples and 14 Asians deaths in 2007.

Deprivation

- There were 13.3 deaths per 100,000 population (age-standardised) in the most deprived areas in 2007.
- There were 7.7 deaths per 100,000 population (age-standardised) in the least deprived areas in 2007.
- This is a significant difference in rates between the least deprived areas and the most deprived areas.

District Health Boards

- For 2003–2007 Wairarapa had the highest age-standardised suicide rate (20.3 deaths per 100,000 population).
- For 2003–2007 Hutt Valley had the lowest age-standardised suicide rate (8.6 deaths per 100,000 population).

Intentional self-harm hospitalisations[1]

Overview

- There were 2679 intentional self-harm hospitalisations in New Zealand in 2007.
- This equates to 63.9 hospitalisations per 100,000 population (age-standardised rate).
- Between 1996 and 2007 there was a significant decrease (25.5 percent) in rates of intentional self-harm hospitalisations.

Sex

- There were 45.5 male hospitalisations per 100,000 male population in 2007 (age-standardised rate): a significant reduction of 31.9 percent since 1996.
- There were 82.2 female hospitalisations per 100,000 female population in 2007 (age-standardised rate), a significant reduction of 21.6 percent since 1996.

Age

- Males were most commonly hospitalised in the age range 35–39 years in 2007.
- Females were most commonly hospitalised in the age range 15–19 years in 2007.
- Since 1997 male hospitalisation rates have dropped in the 15–34 years age range.
- Since 1997 female hospitalisation rates have dropped in the 15–34 years range and increased in the 45–54 years age range.

Youth (15–24 years)

- Hospitalisation rates in males aged 15–24 years have shown a significant downward trend since 1996 (down 52.4 percent).
- Hospitalisation rates in females aged 15–24 years have shown a significant downward trend since 1996 (down 32.4 percent).

Ethnicity

- There were 75.3 Māori intentional self-harm hospitalisations per 100,000 Māori population in 2007 (age-standardised).
- There were 61.6 non-Māori hospitalisations per 100,000 non-Māori population in 2007 (age-standardised).
- Rates for Māori hospitalisations (age-standardised) have remained relatively stable since 1996.
- Rates for non-Māori hospitalisations (age-standardised) have dropped markedly since 1996 (by 29.8 percent).

Deprivation

- In 2007 males from quintile 5 (most deprived) areas were almost three times more likely to be hospitalised than those in quintile 1 (least deprived) areas.
- In 2007 females from quintile 5 (most deprived) areas were almost twice as likely to be hospitalised as those in quintile 1 (least deprived) areas.

District Health Boards

- Wairarapa had the highest age-standardised rate of intentional self-harm hospitalisation in 2007 (193.3 per 100,000 population).

  Auckland had the lowest age-standardised rate in 2007 (29.9 per 100,000 population).
- Wairarapa had the highest female-to-male rate ratio (3.6) in 2007.
- Auckland and Hawkes Bay had the lowest female-to-male rate ratio (1.2) in 2007.

1 For a description of the data in this section, please refer to page 23.

Suicide Deaths in 2007

Overview

A total of 483 people died by suicide in 2007. Table 1 below shows the number of suicides and age-standardised rates for the period 1985–2007.

Table 1: Suicide deaths and age-standardised rates, 1985–2007

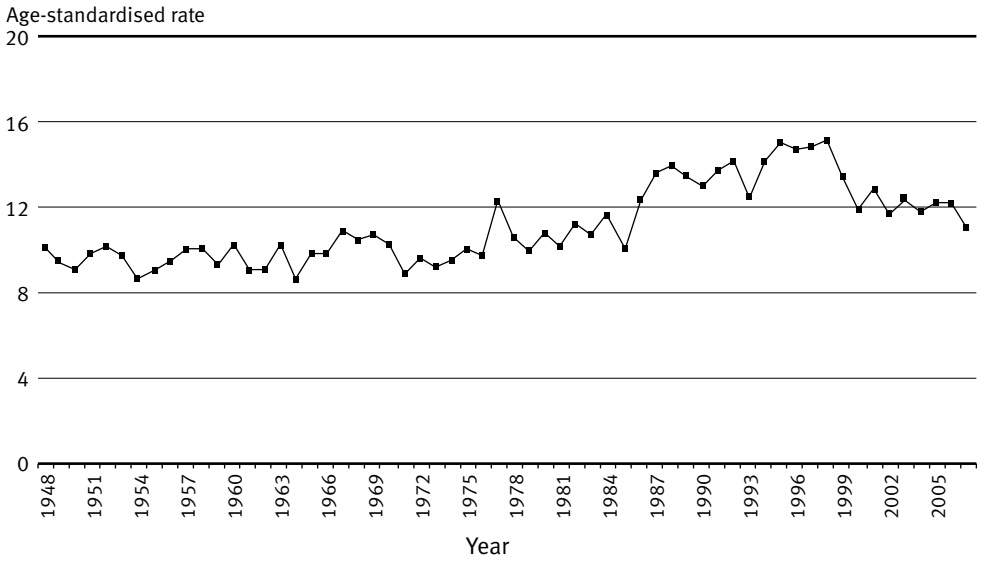
Year	Total	
	Number	Rate
1985	338	10.0
1986	414	12.3
1987	463	13.6
1988	484	13.9
1989	465	13.4
1990	455	13.0
1991	474	13.7
1992	493	14.1
1993	443	12.5
1994	512	14.1
1995	543	15.0
1996	540	14.7
1997	561	14.8
1998	577	15.1
1999	516	13.4
2000	458	11.9
2001	507	12.9
2002	466	11.6
2003	517	12.4
2004	488	11.7
2005	511	12.2
2006	526	12.3
2007	483	11.0

Source: New Zealand Mortality Collection

Note: The rate shown is the age-standardised rate per 100,000 population, standardised to the World Health Organization (WHO) standard world population.

The long-term annual age-standardised rates for New Zealand are presented in Figure 1. In 1998 the age-standardised rate of suicide for the total population was at its highest since 1948, at 15.1 deaths per 100,000 population, and the rate has been generally declining since then. The 2007 figure of 11.0 deaths per 100,000 population represents a statistically significant decrease of 27.3 percent since the peak rate of 15.1 in 1998, continuing the downward trend. However, as Figure 1 illustrates, the rates are extremely volatile from year to year. While there is evidence that suicide rates have continued to decline since 1998, it is highly likely that there will always be year-on-year variations. (See the 'Definitions' section of this publication for information on confidence intervals and statistical significance.)

Figure 1: Suicide age-standardised death rates, 1948–2007



Source: New Zealand Mortality Collection

Notes: 1. The rate shown (ASR) is the age-standardised rate per 100,000 population, standardised to the WHO standard world population.

2. The numbers of suicides for all years since 1948, from which the rates for this graph were calculated, are shown in Appendix 1, Table A6.

The sub-groups of the New Zealand population with the highest suicide mortality rates in 2007 were males, Māori (as opposed to non-Māori), younger male adults (age group 20–39 years) and those residing in the most deprived areas (quintile 5). The male youth rate (aged 15–24) has begun to decline. Further data for these groups are presented in later sections of this publication.

Sex

Male and female suicide deaths and age-standardised rates per 100,000 population since 1985 are set out in Table 2.

Table 2: Suicide deaths and age-standardised rates, by sex, 1985–2007

Year	Males		Females		Sex rate ratio (M:F)
	Number	Rate	Number	Rate	
1985	255	15.5	83	4.9	3.2
1986	301	18.3	113	6.6	2.8
1987	363	21.7	100	5.8	3.7
1988	381	22.4	103	5.7	4.0
1989	372	21.8	93	5.3	4.1
1990	363	21.1	92	5.1	4.1
1991	380	22.3	94	5.4	4.2
1992	397	23.1	96	5.5	4.2
1993	349	19.9	94	5.2	3.8
1994	409	23.1	103	5.5	4.2
1995	427	23.9	116	6.3	3.8
1996	428	23.8	112	6.1	3.9
1997	440	23.7	121	6.3	3.7
1998	445	23.7	132	6.8	3.5
1999	385	20.4	131	6.8	3.0
2000	375	20.0	83	4.2	4.7
2001	388	20.3	119	5.9	3.4
2002	353	18.0	113	5.6	3.2
2003	376	18.4	141	6.6	2.8
2004	379	18.6	109	5.2	3.5
2005	380	18.6	131	6.0	3.1
2006	388	18.6	138	6.3	3.0
2007	370	17.4	113	4.9	3.6

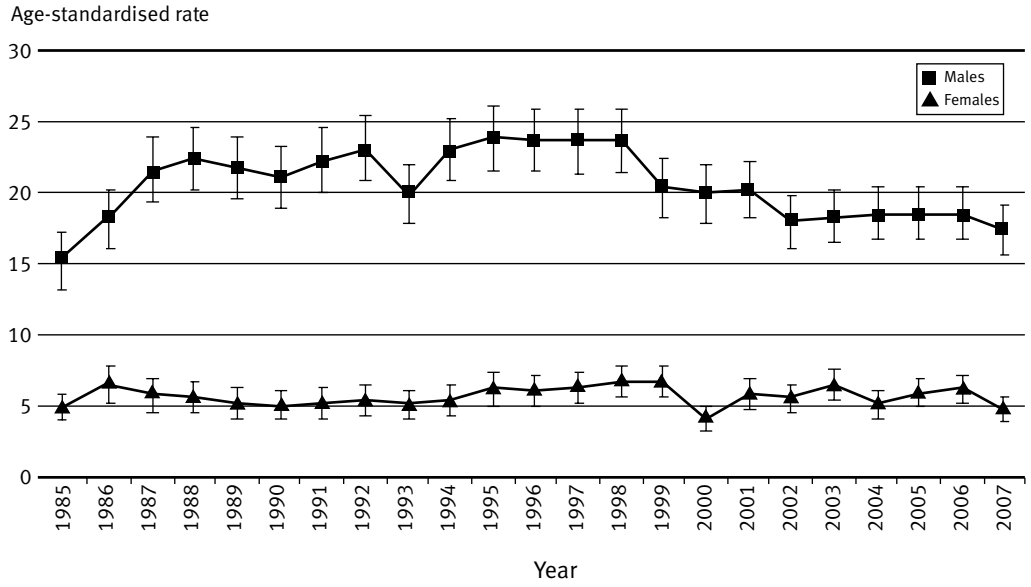
Source: New Zealand Mortality Collection

Note: The rate shown is the age-standardised rate per 100,000 population, standardised to the WHO standard world population.

A total of 370 males died by suicide in 2007. This represents an age-standardised suicide rate of 17.4 per 100,000 population: a statistically significant decrease of 27.1 percent from the male peak in 1995 (23.9 suicide deaths per 100,000 population). This is illustrated in Figure 2, with the upper confidence interval bands for the years 2002–2007 falling below the lower confidence interval bands for 1994–1998. However, these recent rates are not significantly different from the rate in 1985.

There were fewer female suicide deaths in 2007 than there were in 2006 (113 as opposed to 138). The age-standardised female suicide rate in 2007 was 4.9 per 100,000 population. In spite of this reduction, the female suicide rate has remained relatively steady, averaging 5.8 per 100,000 population since 1985. This is shown clearly in Figure 2.

Figure 2: Suicide age-standardised death rates, by sex, 1985–2007

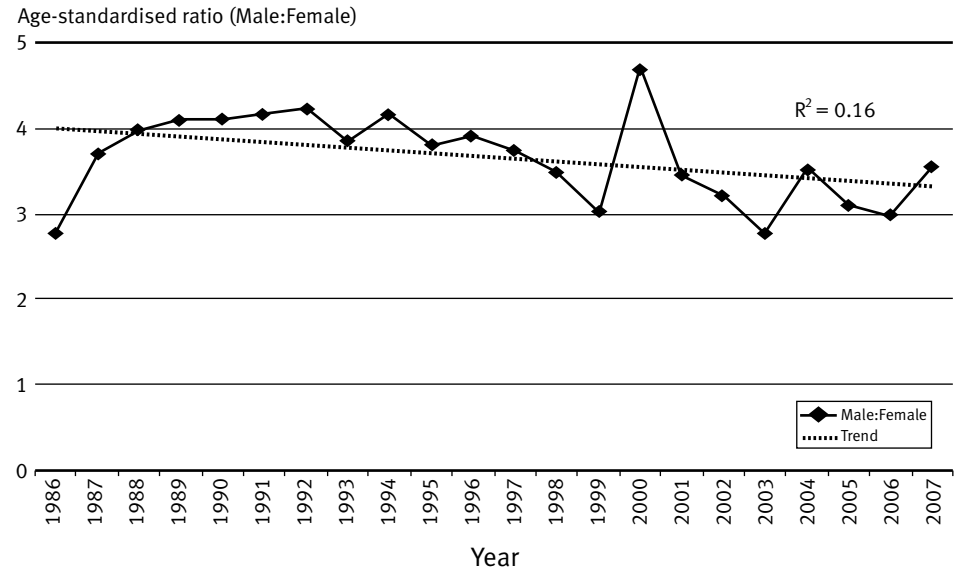


Source: New Zealand Mortality Collection

Note: The rate shown (ASR) is the age-standardised rate per 100,000 population, standardised to the WHO standard world population.

The rate of male suicides is significantly higher than the rate of female suicides, by a ratio of 3.6:1. While the ratio of male suicides compared to female suicides is declining (largely due to the male rate declining), as shown in Figure 3 the R^2 value of 0.16 is quite low.

Figure 3: Sex rate ratio (M:F), 1986–2007



Source: New Zealand Mortality Collection

Notes:

1. R^2 is a measure of how well the data fit the trend line. An R^2 value of 0.16 indicates that 16 percent of the variation in the sex rate ratio of suicide deaths over time is explained by the downward trend over time. See the 'Definitions' section of this publication for further information.
2. The rate shown (ASR) is the age-standardised rate per 100,000 population, standardised to the WHO standard world population.

Age

Suicide death numbers and age-specific rates for five-year age groups are shown in Table 3. The highest total rate for 2007 occurred in the 35–39 years age group (19.4 suicides per 100,000 population). For males the highest suicide rates occurred in older age groups than in 2006: in the 30–34 years age group (33.9 deaths per 100,000 male population) and the 35–39 years age group (30.7 deaths per 100,000 male population). For females the highest rate in 2007 was in the 40–44 age group (10.3 deaths per 100,000 female population).

These figures represent a change in the five-year age groups with the highest suicide rates compared to the previous year. In 2006 the highest male suicide rates were in the 15–19 years age group, which had 30.7 deaths per 100,000 population, and the 20–24 years age group, with 31.5 deaths per 100,000 population. For females, the highest rate in 2006 was in the 25–29 age group (13.4 per 100,000 female population).

Table 3: Suicide deaths and age-specific rates, by five-year age group and sex, 2007

Age group	Males		Females		Total	
	Number	Rate	Number	Rate	Number	Rate
5–9	0	–	0	–	0	–
10–14	1	–	1	–	2	–
15–19	30	18.4	12	7.7	42	13.1
20–24	41	27.8	11	7.5	52	17.7
25–29	33	25.3	6	4.4	39	14.6
30–34	45	33.9	7	4.8	52	18.7
35–39	46	30.7	15	9.1	61	19.4
40–44	35	22.7	17	10.3	52	16.3
45–49	38	24.9	8	5.0	46	14.7
50–54	29	21.8	11	8.0	40	14.8
55–59	19	15.8	11	8.9	30	12.3
60–64	12	12.3	7	7.0	19	9.6
65–69	10	12.6	0	–	10	6.1
70–74	9	15.4	0	–	9	7.3
75–79	10	20.8	0	–	10	9.6
80–84	9	28.6	3	–	12	15.8
85+	3	–	4	–	7	11.5
	370	**17.4**	**113**	**4.9**	**483**	**11.0**

Source: New Zealand Mortality Collection

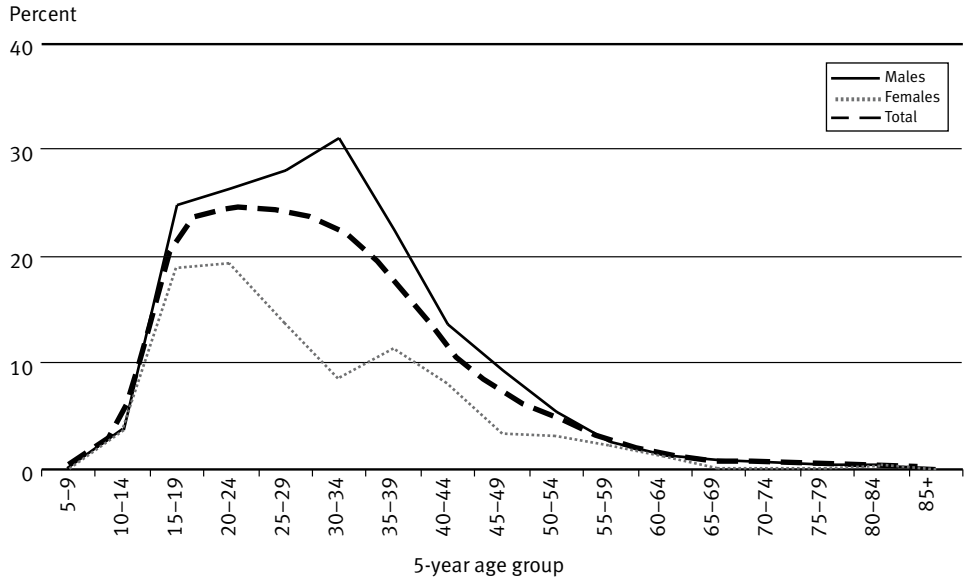
Note: A dash (–) indicates that a rate is suppressed because there were five or fewer deaths in this category.

Note that in both the youngest and oldest age groups, rates have been suppressed because the low number of suicides means that the rates are volatile and difficult to interpret.

Deaths from suicide in 2007 made up almost one-quarter of all deaths in both the 20–24 years age group and the 25–29 years age group. In the five-year age groups from 40–44 to 60–64, cancer became a more common cause of death (increasing from nearly one-third in the 40–44 group to more than half in the 60–64 group). In the oldest age groups (80 years and over) diseases of the circulatory system predominated.

As shown in Figure 4a, suicide accounted for almost one-third of male deaths in the 30–34 years age group and approximately a quarter of male youth (15–19) deaths. Almost half of all deaths among male youths in 2007 were from transport accidents.

Figure 4a: Suicide as a percentage of all deaths, 2007



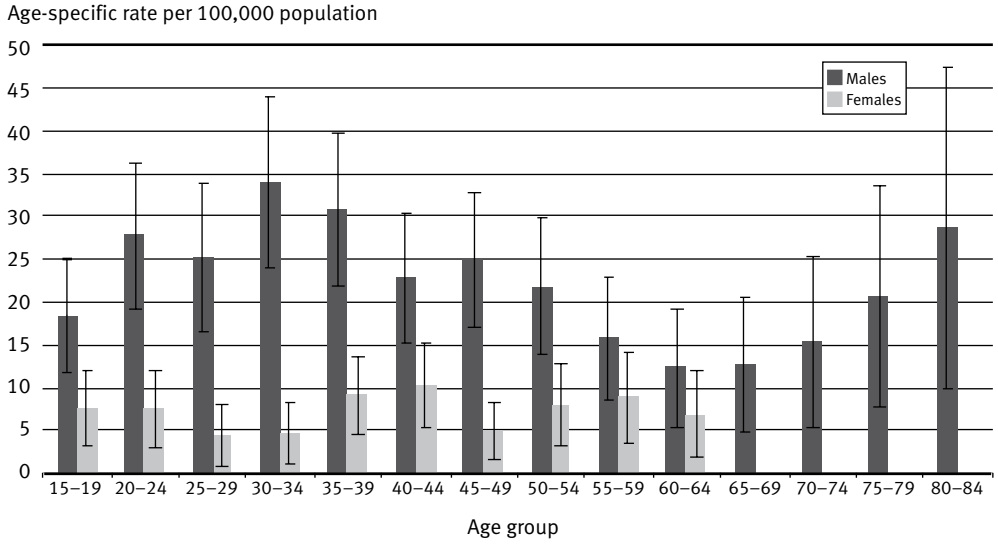
Source: New Zealand Mortality Collection (unpublished)

Among female youth, suicide accounted for almost 20 percent of deaths in 2007, and cancer about 15 percent. Transport accidents comprised 38 percent of female youth deaths. As Figure 4a shows, the percentage of female suicide deaths drops away markedly from age 20 years through to 34 years, perhaps indicating a link with a woman's child-bearing years. By contrast, the male percentage increases through these age groups.

In 2007, male suicide age-specific rates outnumbered female rates by 7:1 in the 30–34 years age group (compared to 3.6:1 for the total population). In the 40–44 years age group the ratio was only 2.2:1. However, this may illustrate no more than between-age-group volatility, rather than any age-related feature of sex difference.

The difference between male and female age-specific suicide rates was significant in the five year age groups from 20–24 to 35–39 and from 45–49 to 50–54 age groups, as shown in Figure 4b. The very large confidence intervals in the older male age groups indicate that these figures are volatile, mainly because of the small numbers involved.

Figure 4b: Suicide age-specific death rates, by five-year age group, 2007



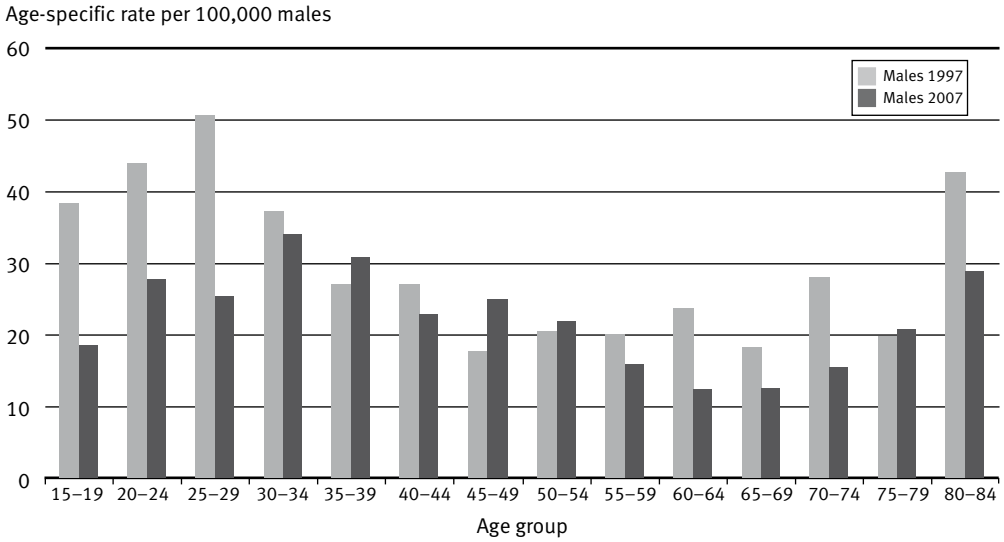
Source: New Zealand Mortality Collection

Note: Rates for younger and older age groups have been suppressed because of small numbers of deaths in these categories.

Figures 5a and 5b show a snapshot age-group comparison between 1997 and 2007 male and female suicide rates. While this comparison gives an idea of changes over a decade, the year on-year volatility in the rates means caution is recommended in interpreting these figures.

Figure 5a shows the drop (by more than 40 percent) in suicide rates for males under 30 over the past decade. In particular, the suicide rate for males aged 25–29 has halved since 1997: this decrease is statistically significant. Although there have been similar drops for males in some of the older age groups, it is not realistic to draw conclusions for these groups because the number of actual suicide deaths was small, and the calculated rates thus too volatile for measuring trends.

Figure 5a: Age-specific suicide death rates, males, 1997 and 2007



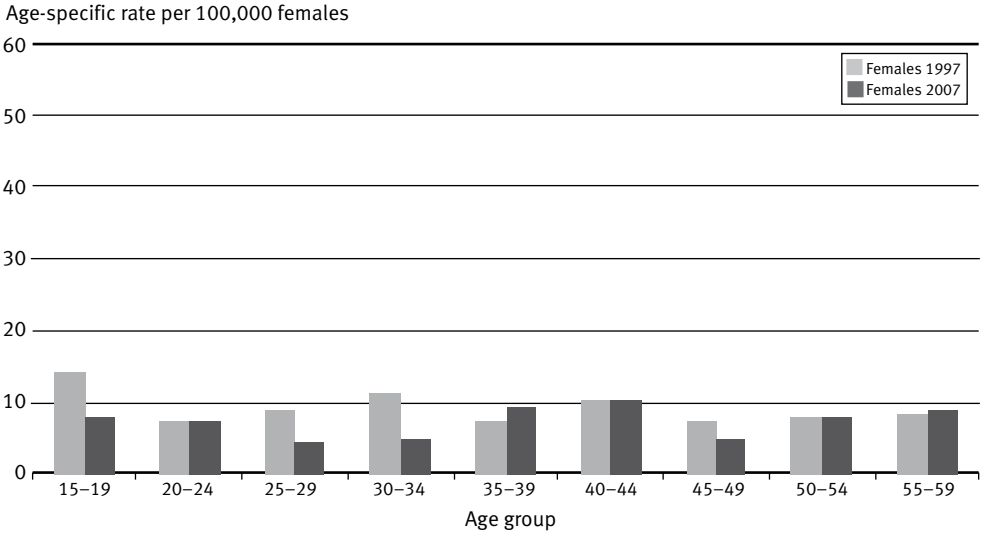
Source: New Zealand Mortality Collection

Notes:

1. Rates for younger and older age groups have been suppressed because of small numbers of deaths in these categories.
2. This graph refers to the data in Table 3 and Appendix 1, Table A4.

Figure 5b suggests that, among females, there has been a marked decrease in suicide rates for those aged under 35. However, the small numbers of female suicides mean that these differences are not statistically significant. Among females in the broad 35–59 years age group, there was no significant change in 2007 compared with 1997.

Figure 5b: Age-specific suicide death rates, females, 1997 and 2007, aged 15–19 years



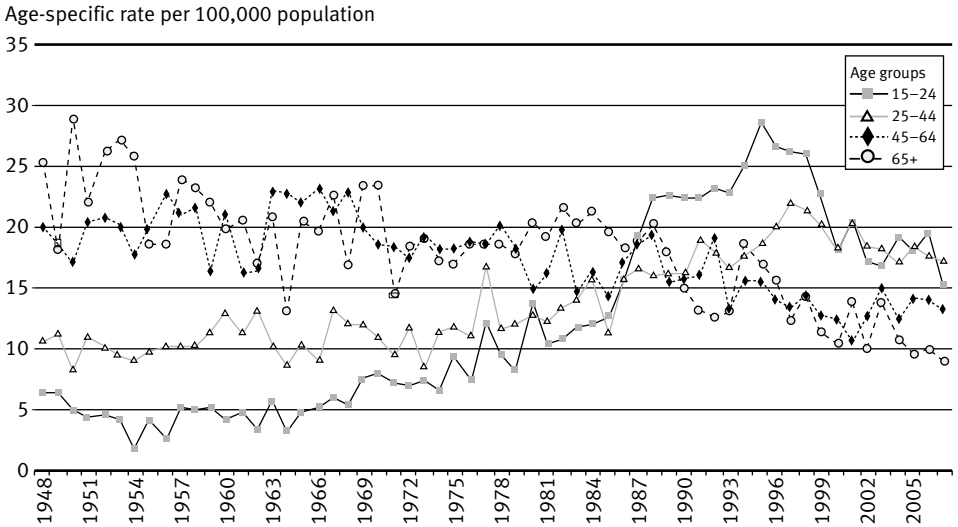
Source: New Zealand Mortality Collection

Note: This graph refers to the data in Table 3 and Appendix 1, Table A4.

Figure 5c illustrates clearly the volatility of New Zealand's suicide rates since 1948. In part, this reflects small suicide numbers in each age group category. This graph shows broad life-cycle age groups to simplify the chart. Although its variability makes it difficult to draw conclusions, some general comments can be made.

Firstly, the differences between age groups appear less marked in 2007 compared to 1948. Secondly, a clear change in age group patterns occurred in the mid- to late 1980s. In the two older age groups (the over 65 years and 45–64 years age groups), suicide rates tended to decrease over time, while in the two youngest age groups (the 15–24 years and 25–44 years age groups) suicide rates increased until the early 1990s. However, the rates in these two groups have begun to drop significantly since then.

Figure 5c: Age-specific suicide rates for life-cycle age groups, 1948–2007



Source: New Zealand Mortality Collection

Note: This graph refers to the data in Appendix 1, Table A6.

Youth

The suicide rate for youth (the 15–24 years age group) has declined by 46.6 percent since 1995, when it was highest. The 2007 rate was 15.3 per 100,000 youth population. The youth rate increased from 12.6 per 100,000 youth population in 1985 to a peak of 28.7 per 100,000 youth population in 1995 (a trend with an R^2 value of 0.81), before beginning to fall (in a trend between 1996 and 2007 with an R^2 value of 0.71). There has clearly been a marked change in youth suicide rates that is not due to chance.

Table 4: Age-specific youth suicide rates, by sex, 1985–2007

Year	Males		Females		Total	
	Number	Rate	Number	Rate	Number	Rate
1985	60	19.6	15	5.1	75	12.6
1986	68	22.9	23	8.0	91	15.6
1987	93	31.2	20	6.9	113	19.3
1988	106	35.7	25	8.7	131	22.4
1989	111	37.9	20	7.0	131	22.6
1990	111	38.0	19	6.7	130	22.5
1991	109	38.7	16	5.8	125	22.4
1992	112	39.9	17	6.2	129	23.3
1993	110	39.4	16	5.9	126	22.9
1994	111	39.9	26	9.7	137	25.1
1995	122	44.1	34	12.8	156	28.7
1996	105	39.1	38	14.3	143	26.7
1997	113	41.1	29	10.8	142	26.2
1998	105	38.5	35	13.3	140	26.1
1999	83	30.6	37	14.2	120	22.6
2000	81	29.9	15	5.8	96	18.1
2001	87	32.2	23	8.7	110	20.6
2002	65	23.2	30	11.0	95	17.2
2003	66	22.5	31	11.0	97	16.9
2004	83	27.7	30	10.5	113	19.3
2005	84	27.6	24	8.2	108	18.1
2006	95	31.1	24	8.0	119	19.7
2007	71	22.9	23	7.6	94	15.3

Source: New Zealand Mortality Collection

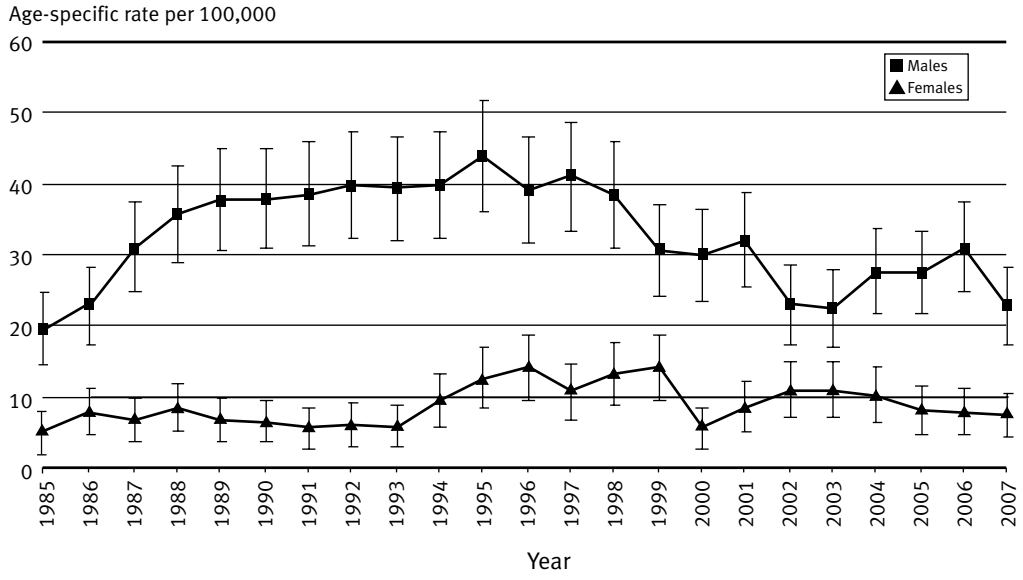
The male youth (15–24 years) age-specific suicide rate in 2007 was 22.9 per 100,000 male youth population: nearly three times the female rate of 7.6 per 100,000 female youth population. This ratio is lower than the all-age ratio of 3.6:1. Figure 6 shows the youth suicide rates for males and females over time. Suicide deaths accounted for 25.7 percent of all male youth deaths over this period, compared with 19.0 percent for females.[2]

By again testing the two sets of data (before and after the peak rate) separately, there is evidence of an upward trend for male youth suicide rates from 1985 to 1995 (with an R^2 value of 0.79) and some evidence of a downward trend from 1996 to 2007 (with an R^2 value of 0.60). The male youth rate has declined by 48.1 percent since the peak.

2 These percentages have been calculated from the New Zealand mortality data, not yet published.

There were no statistically significant trends in female youth suicide rates between 1985 and 2007. Although there was some variation over the period, rates have essentially remained steady.

Figure 6: Age-specific youth suicide death rates, by sex, 1985–2007



Source: New Zealand Mortality Collection

Ethnicity[3]

Table 5 shows suicide deaths by ethnicity, age and sex for 2007. Note that the small numbers of suicide deaths for Pacific and Asian peoples mean that suicide rates for these groups tend to be highly variable and may be misleading, and so have not been calculated for this publication.

Māori

Ninety-seven Māori died by suicide in 2007. The age-standardised rate of suicide for Māori was 16.1 deaths per 100,000 Māori population in 2007 (see Figure 7a), with no significant linear trend since 1996, the R^2 value being 0.01. The ratio of Māori suicide rates to non-Māori rates was 1.6:1.

Pacific peoples

There were 25 deaths by suicide among the Pacific peoples ethnic group in 2007 (20 males and 5 females). It is difficult to draw conclusions about changes over time for this group because the number of suicides is small and there is considerable variation over time.

Asian peoples

There were 14 suicides among the Asian peoples ethnic group in 2007 (eight males and six females). Again, it is difficult to draw conclusions about changes over time: not only was the number of suicides in the group small, but the population of Asian peoples has increased markedly since 1996. However, it may be worth noting that over the period 1996–2007 the ratio of male-to-female suicides for Asian peoples was 1.4:1, compared to the national average over the same period of 3.7:1, which may indicate a much higher proportion of female suicides among Asian peoples in New Zealand.

Table 5: Suicide deaths by ethnicity, age and sex, 2007

			Age group (years)															
Ethnicity	Sex	Total	10–14	15–19	20–24	25–29	30–34	35–39	40–44	45-49	50–54	55-59	60–64	65–69	70–74	75-79	80–84	85+
Māori	Total	97	1	15	18	10	19	11	10	6	3	1	2	1	0	0	0	0
	Males	74	0	12	11	8	15	9	7	6	3	1	1	1	0	0	0	0
	Females	23	1	3	7	2	4	2	3	0	0	0	1	0	0	0	0	0
Pacific	Total	25	0	5	7	3	3	3	0	1	3	0	0	0	0	0	0	0
	Males	20	0	3	7	3	3	2	0	0	2	0	0	0	0	0	0	0
	Females	5	0	2	0	0	0	1	0	1	1	0	0	0	0	0	0	0
Asian	Total	14	0	1	1	2	0	1	0	0	3	2	1	0	0	1	1	1
	Males	8	0	0	1	2	0	0	0	0	2	2	0	0	0	1	0	0
	Females	6	0	1	0	0	0	1	0	0	1	0	1	0	0	0	1	1
Other	Total	347	1	21	26	24	30	46	42	39	31	27	16	9	9	9	11	6
	Males	268	1	15	22	20	27	35	28	32	22	16	11	9	9	9	9	3
	Females	79	0	6	4	4	3	11	14	7	9	11	5	0	0	0	2	3
Total	Total	483	2	42	52	39	52	61	52	46	40	30	19	10	9	10	12	7
	Males	370	1	30	41	33	45	46	35	38	29	19	12	10	9	10	9	3
	Females	113	1	12	11	6	7	15	17	8	11	11	7	0	0	0	3	4

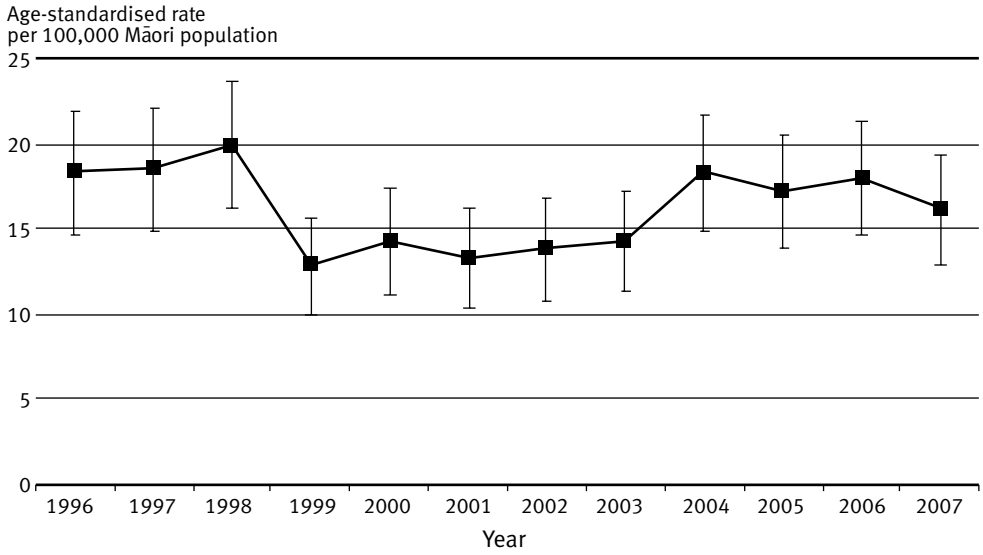
Source: New Zealand Mortality Collection

3 Note that ethnicity data can only be compared back to 1996 because of changes in the way ethnicity was recorded after that year.

Māori and non-Māori comparisons

In 2007 the age-standardised suicide death rate for Māori (16.1 deaths per 100,000 Māori population) was significantly higher than that for non-Māori (9.9 deaths per 100,000 non-Māori population). Figure 7b indicates that non-Māori suicide death rates are trending downwards over time, with a high R^2 value of 0.83. Māori rates (Figure 7a) showed no obvious trend in the same period, although the small numbers of Māori suicide deaths mean it is harder to ascertain trends.

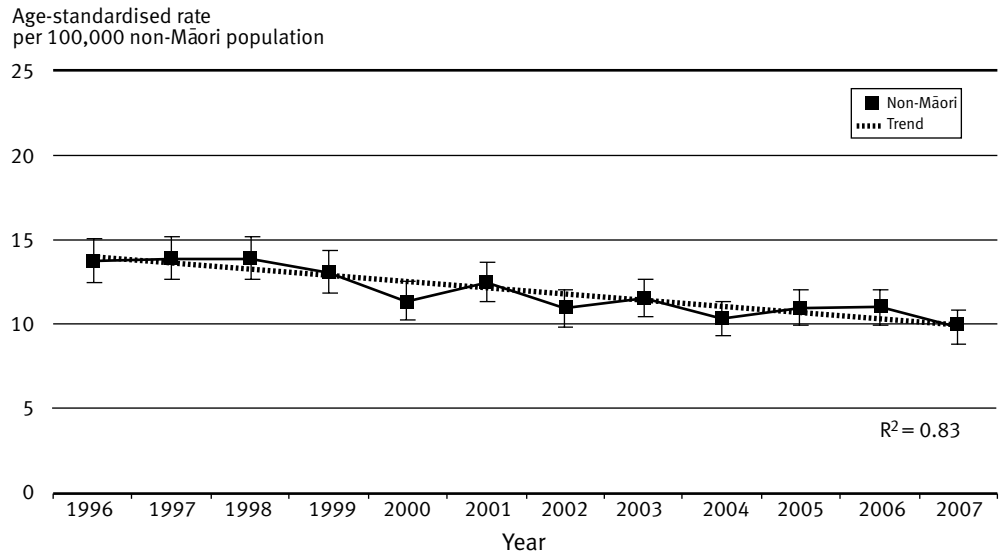
Figure 7a: Māori suicide rates, 1996–2007



Source: New Zealand Mortality Collection

Note: The rate shown (ASR) is the age-standardised rate per 100,000 Māori population, standardised to the WHO standard world population.

Figure 7b: Non-Māori suicide rates, 1996–2007



Source: New Zealand Mortality Collection

Notes:

1. R^2 is a measure of the how well the data fit the trend line. An R^2 value of 0.83 indicates that 83 percent of the variation in non-Māori suicide deaths over time is explained by the downward trend over time. See the 'Definitions' section of this publication for further information.
2. The rate shown (ASR) is the age-standardised rate per 100,000 non-Māori population, standardised to the WHO standard world population.

A summary of suicide death numbers and age-standardised rates for Māori and non-Māori, by sex, is shown in Table 6a.

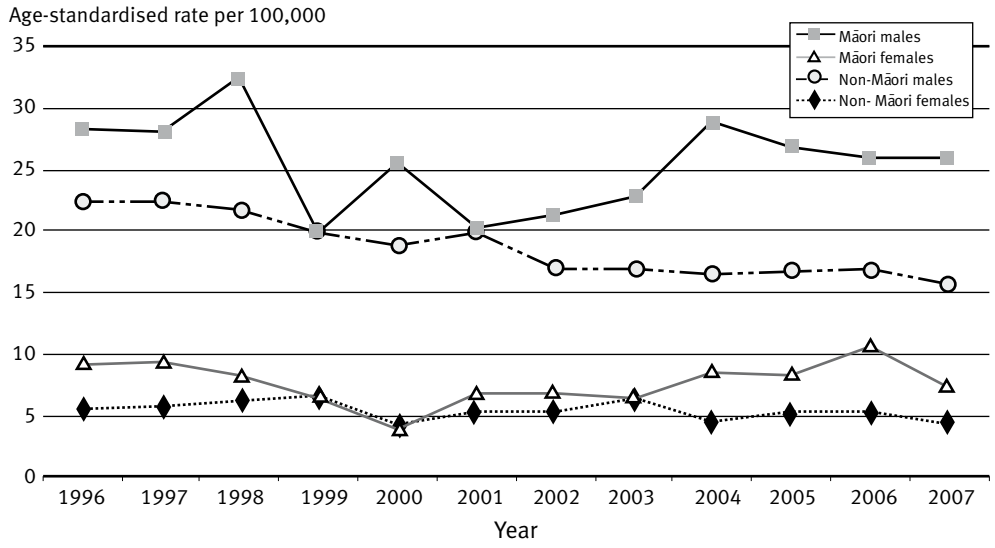
Table 6a: Suicide deaths and age-standardised rates for Māori and non-Māori, by sex, 1996–2007

	Number of deaths						Age-standardised rate					
	Māori			Non-Māori			Māori			Non-Māori		
Year	Males	Females	Total	Males	Females	Total	Males	Females	Total	Males	Females	Total
1996	71	24	95	357	88	445	28.3	9.2	18.3	22.5	5.5	13.7
1997	77	26	103	363	95	458	28.0	9.4	18.5	22.4	5.8	13.9
1998	87	25	112	358	107	465	32.5	8.3	20.0	21.8	6.2	13.9
1999	58	20	78	327	111	438	19.9	6.3	12.9	19.9	6.6	13.1
2000	69	11	80	306	72	378	25.5	3.8	14.2	18.8	4.2	11.4
2001	57	22	79	331	97	428	20.3	6.7	13.3	20.0	5.4	12.5
2002	59	21	80	294	92	386	21.2	6.8	13.8	17.0	5.2	10.9
2003	67	20	87	309	121	430	22.7	6.4	14.3	17.0	6.4	11.6
2004	82	27	109	297	82	379	29.0	8.4	18.3	16.5	4.5	10.4
2005	78	26	104	302	105	407	26.9	8.3	17.2	16.8	5.4	11.0
2006	75	33	108	313	105	418	25.9	10.7	18.0	17.0	5.3	11.0
2007	74	23	97	296	90	386	25.9	7.3	16.1	15.7	4.3	9.9

Source: New Zealand Mortality Collection

Note: The rate shown is the age-standardised rate per 100,000 population, standardised to the WHO standard world population.

Figure 8a: Māori and non-Māori suicide death rates, by sex, 1996–2007



Source: New Zealand Mortality Collection

Note: The rate shown (ASR) is the age-standardised rate per 100,000 population, standardised to the WHO standard world population.

The age-standardised rate of suicide for Māori males was 25.9 deaths per 100,000 population in 2007, compared with the rate for non-Māori males of 15.7 per 100,000 population: this is a significant difference. The age-standardised rate of suicide for Māori females was 7.3 deaths per 100,000 population in 2007: higher than the rate for non-Māori females (4.3 per 100,000 population) but not significantly different.

Figure 8a suggests that the declining rate of male suicides is largely accounted for by non Māori; the Māori male rate is volatile, although still lower than the peak rate of 32.1 per 100,000 Māori male population in 1998.

There is no significant difference over time between Māori and non-Māori female rates, although Māori rates are usually higher.

As discussed in the previous section, youth suicide rates have been at high levels since the mid-1990s. Rates for Māori and non-Māori youth, by sex, are shown in Table 6b and Figure 8b.

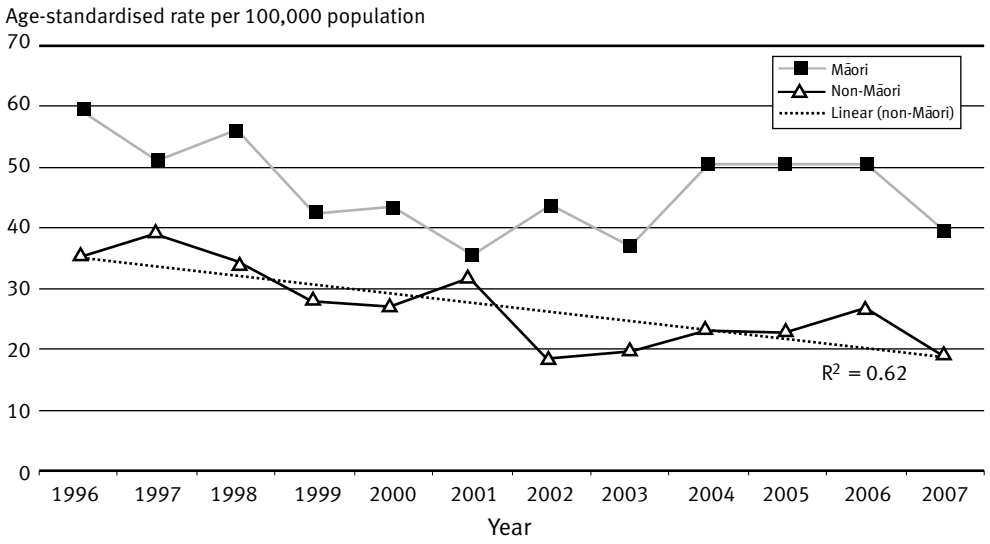
Table 6b: Youth suicides and age-standardised rates for Māori and non-Māori, by sex, 1996–2007

	Māori						Non-Māori					
	Males		Females		Total		Males		Females		Total	
Year	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
1996	29	59.6	9	17.8	38	38.4	76	34.6	29	13.4	105	24.1
1997	27	51.1	9	16.9	36	33.9	86	38.7	20	9.3	106	24.3
1998	30	56.1	13	24.4	43	40.3	75	34.2	22	10.5	97	22.6
1999	23	42.4	10	18.7	33	30.6	60	27.7	27	13.1	87	20.5
2000	24	43.5	4	7.4	28	25.7	57	26.4	11	5.4	68	16.2
2001	20	35.6	9	16.4	29	26.1	67	31.3	14	6.7	81	19.1
2002	23	43.7	10	18.8	33	31.2	42	18.4	20	9.1	62	13.9
2003	20	37.1	11	20.2	31	28.6	46	19.3	20	8.8	66	14.2
2004	28	50.5	13	23.3	41	36.9	55	22.5	17	7.3	72	15.1
2005	29	50.5	10	17.4	39	34.0	55	22.2	14	6.0	69	14.3
2006	29	50.6	8	13.5	37	31.8	66	26.6	16	6.6	82	16.8
2007	23	39.5	10	16.8	33	28.1	48	19.0	13	5.3	61	12.3

Source: New Zealand Mortality Collection

Māori youth suicide rates are higher than those for non-Māori youth. Because of the much smaller numbers for female youth, it is not possible to draw conclusions on female youth suicide rates by ethnicity. The male rates are shown in Figure 8b. While there is some indication of a reduction over time in the non-Māori male youth suicide rate (the R^2 value is 0.62), the Māori male rate is more variable, and does not show the same statistical evidence for a decreasing trend.

Figure 8b: Male youth suicide rates, by ethnicity, 1996–2007



Source: New Zealand Mortality Collection

Note: R^2 is a measure of how well the data fit the trend line. An R^2 value of 0.62 indicates that 62 percent of the variation in non-Māori suicide deaths over time is explained by the downward trend over time. See the 'Definitions' section of this publication for further information.

Table 5 earlier in this section also shows that the age distribution of suicides for Māori differs from that of non-Māori. In 2007, 86.6 percent of Māori suicides occurred in people under 45 years of age. The ratio of suicide rates for Māori aged under 45 years to non-Māori was 1.7:1. For males under age 45, the ratio of Māori to non-Māori was 1.6:1. Although female suicide numbers are small, when the relative size of the populations are taken into account the ratio of Māori female suicides to non-Māori in this age group is about 2:1.

The breakdown by ethnicity and sex for this age-group since 1996 is shown in Table 6c. Disparities between Māori and non-Māori have been more pronounced since 2003.

Table 6c: Suicides and age-standardised rates for Māori and non-Māori aged under 45 years, by sex, 1996–2007

	Māori						Non-Māori					
	Males		Females		Total		Males		Females		Total	
Year	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
1996	65	29.5	21	9.3	86	19.3	230	22.7	56	5.5	286	14.1
1997	70	29.6	25	10.5	95	20.0	248	23.6	62	6.0	310	14.8
1998	75	31.1	23	9.5	98	20.2	232	22.2	70	6.7	302	14.5
1999	57	23.2	20	8.1	77	15.6	209	20.2	75	7.3	284	13.7
2000	60	23.9	9	3.6	69	13.8	194	18.9	45	4.4	239	11.6
2001	50	19.6	22	8.6	72	14.1	226	22.0	54	5.2	280	13.6
2002	53	21.5	20	8.0	73	14.7	177	16.9	58	5.5	235	11.2
2003	63	25.2	19	7.5	82	16.3	167	15.7	65	6.1	232	10.9
2004	73	28.8	25	9.8	98	19.2	174	16.3	46	4.3	220	10.3
2005	71	27.6	24	9.3	95	18.4	172	16.2	59	5.6	231	10.9
2006	65	26.3	30	11.8	95	19.0	180	16.6	59	5.4	239	11.0
2007	62	24.8	22	8.6	84	16.6	169	15.6	47	4.3	216	9.9

Source: New Zealand Mortality Collection

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 (White et al 2008, Benzeval et al 2001). See the 'Definitions' section of this document for more information on NZDep2001. Consequently, suicide mortality and hospitalisation rates for intentional self-harm are presented in this publication by deprivation quintile according to the New Zealand Deprivation Index 2001 (NZDep2001) (Salmond and Crampton 2002).

In 2007 the least deprived areas had an age-standardised suicide rate of 7.7 per 100,000 population, compared with 13.3 per 100,000 population in the most deprived areas (Table 7).

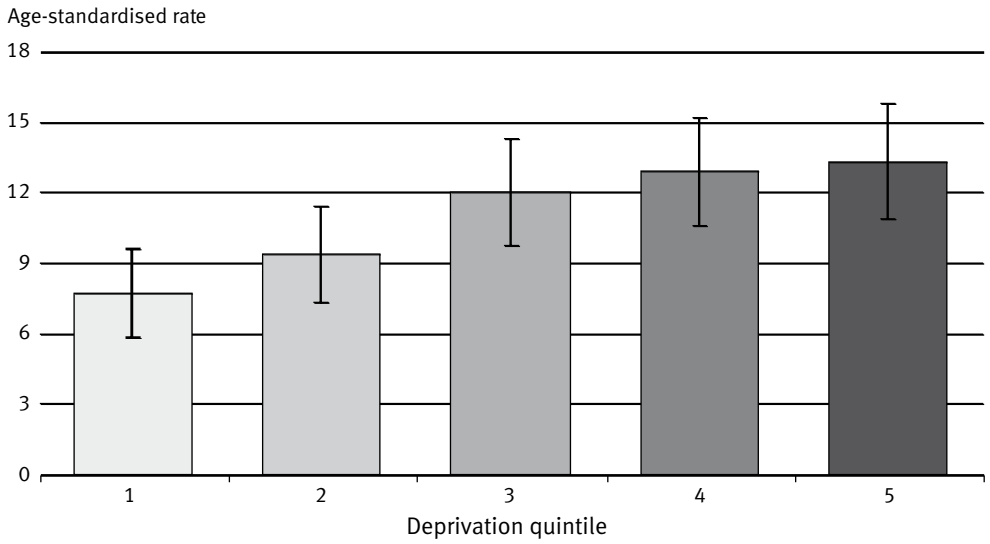
Table 7: Suicide numbers and age-standardised rates, by NZDep2001 quintile and sex, 2007

Deprivation quintile		Number of deaths	ASR
1 (least deprived)	Total	63	7.7
	Males	47	12.0
	Females	16	3.5
2	Total	80	9.4
	Males	57	13.6
	Females	23	5.3
3	Total	108	12.0
	Males	82	18.5
	Females	26	5.8
4	Total	120	12.9
	Males	98	21.7
	Females	22	4.5
5 (most deprived)	Total	111	13.3
	Males	85	21.2
	Females	26	6.0

Source: New Zealand Mortality Collection

Note: ASR (age-standardised rate) is the age-standardised rate per 100,000 population, standardised to the WHO standard world population.

Figure 9: Suicide death rates, by NZDep2001 quintile, 2007



Source: New Zealand Mortality Collection

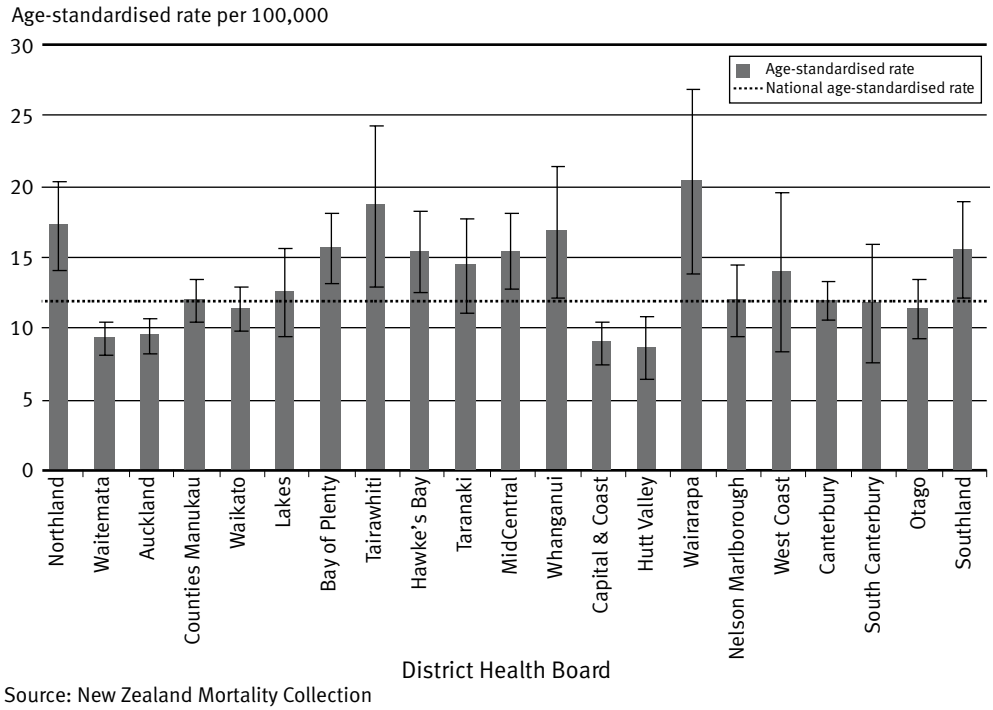
Note: The age-standardised rate (ASR) is the age-standardised rate per 100,000 population, standardised to the WHO standard world population.

It is clear from Figure 9 that there is a significantly higher suicide rate among the most deprived quintiles (quintile 3 to quintile 5) in the New Zealand population when compared to quintile 1 (least deprived).

District Health Boards

In this section, data for District Health Boards (DHBs) have been aggregated over five years (2003–2007) because the small number of suicides annually in most areas makes analysis using rates uncertain. The New Zealand age-standardised rate for this five-year period has been calculated based on the New Zealand estimated resident populations as at 30 June 2005 and standardised to the WHO standard world population. The national figure is 11.9 suicides per 100,000 population over the five years, as shown by the horizontal line in Figure 10. Confidence intervals are also provided to aid interpretation.

Figure 10: Suicide death rates, by DHB, 2003–2007



Source: New Zealand Mortality Collection

Notes:

1. ASR is the age-standardised rate per 100,000 population, standardised to WHO standard world population.
2. This graph is based on information in Appendix 1, Table A5.

Eight DHB areas (Northland, Bay of Plenty, Tairawhiti, Hawke's Bay, MidCentral, Whanganui, Wairarapa and Southland) had significantly higher average suicide rates than the total New Zealand rate for the five years 2003–2007 (which was 11.9 deaths per 100,000 population per year).

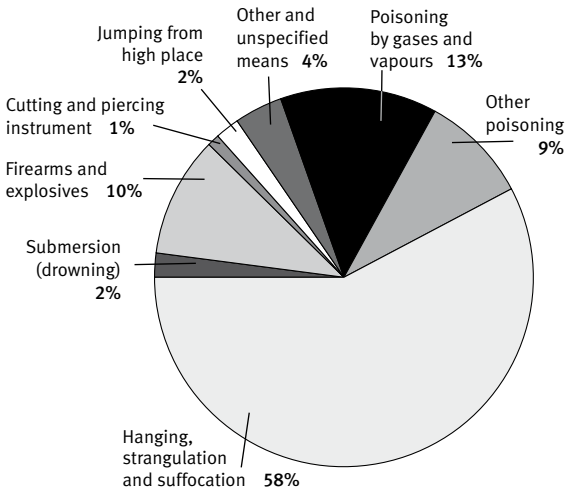
Waitemata, Auckland, Capital and Coast, and Hutt Valley DHB areas had significantly lower average suicide death rates than the country as a whole over the period 2003–2007.

Methods

In 2007 the most common suicide method was hanging, strangulation and suffocation, as coded by the International Classification of Diseases and Related Health Problems, 10th Revision, Australian Modification (ICD-10-AM). Figure 11 shows that this method was used in more than half (58.0 percent) of all suicide deaths. Poisoning by gases or vapours was the method used in 13.5 percent of suicides, firearms and explosives were used in 9.7 percent of cases, and other poisonings made up 9.3 percent.

Over 60 percent of males and 46.9 percent of females used hanging, strangulation and suffocation to take their lives. The next most common methods used by males were poisoning by gases or vapours (13.0 percent), and firearms and explosives (11.6 percent). For females, the second most common method was poisoning (15.0 percent by gases and vapours and 23.0 percent by other means).

Figure 11: Methods used for suicide deaths, 2007



Source: New Zealand Mortality Collection

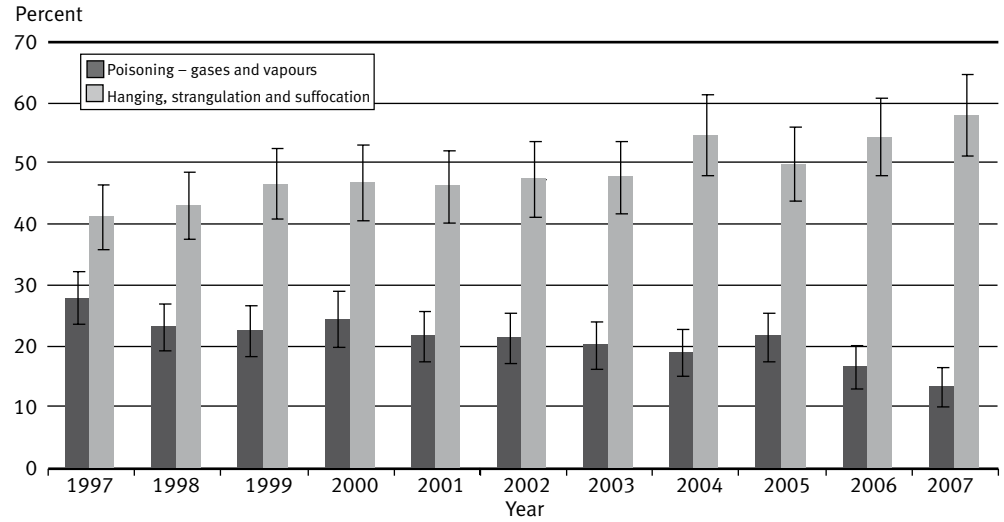
Since 1997 there has been a significant increase in the proportion of suicide deaths by hanging, strangulation and suffocation (from 41.4 percent in 1997 to 58.0 percent in 2007). Over the same period suicides from poisoning by gases and vapours have significantly decreased, from 28.0 percent of suicide deaths in 1997 to 13.5 percent in 2007. Table 8 shows the suicide methods used over the period, and Figure 12 illustrates the change over time in the use of hanging, strangulation and suffocation, and poisoning by gases and vapours.

Table 8: Methods used for suicide deaths, 1997–2007

	Poisoning – solids and liquids		Poisoning – gases and vapours		Hanging, strangulation and suffocation		Submersion (drowning)		Firearms and explosives		Other means		Total	
Year	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
1997	58	10.3	157	28.0	232	41.4	17	3.0	56	10.0	41	7.3	561	100.0
1998	64	11.1	133	23.1	249	43.2	10	1.7	72	12.5	49	8.5	577	100.0
1999	52	10.1	116	22.5	241	46.7	16	3.1	47	9.1	44	8.5	516	100.0
2000	37	8.1	112	24.5	215	46.9	15	3.3	36	7.9	43	9.4	458	100.0
2001	54	10.7	110	21.7	234	46.2	7	1.4	51	10.1	51	10.1	507	100.0
2002	47	10.1	99	21.2	221	47.4	12	2.6	49	10.5	38	8.2	466	100.0
2003	58	11.2	104	20.1	247	47.8	14	2.7	41	7.9	53	10.3	517	100.0
2004	47	9.6	93	19.1	267	54.7	12	2.5	38	7.8	31	6.4	488	100.0
2005	50	9.8	110	21.5	255	49.9	13	2.5	44	8.6	39	7.6	511	100.0
2006	49	9.4	87	16.6	285	54.4	9	1.7	48	9.2	46	8.8	524	100.0
2007	45	9.3	65	13.5	280	58.0	11	2.3	47	9.7	35	7.2	483	100.0

Source: New Zealand Mortality Collection

Figure 12: Suicide, by most common methods, 1997–2007



Source: New Zealand Mortality Collection

International Comparisons

This section compares New Zealand suicide rates with those in selected countries in the Organisation for Economic Co-operation and Development (OECD). These countries have been selected for comparison because they are considered to have reliable data collections, or they are countries most often used for comparison with New Zealand health statistics.

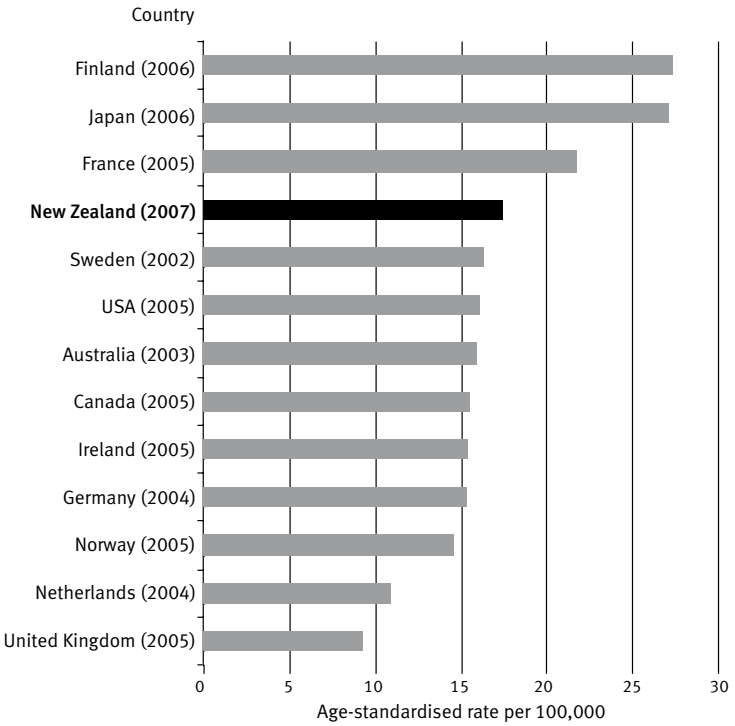
A cautious approach is recommended when comparing international suicide statistics, because many factors affect the recording and classification of suicide in different countries, and may result in undercounts. Potential factors include the level of proof required for a verdict; stigma associated with suicide within a particular society; the religion, social class or occupation of the victim; and confidentiality (Andriessen 2006). As a result, deaths that may be classified as suicide in some countries may be classified as accidental or of undetermined cause in others.

The international figures cited here are the latest available from WHO (http://www.who.int/mental_health/prevention/suicide/country_reports/en/), and compare different years. In some cases this information relates to data for as early as 2002 or 2003.

All ages

When ranked alongside the rates for other selected OECD countries (Figures 13 and 14) the New Zealand 2007 suicide rates for males and females are towards the middle of the group. The New Zealand male rate is similar to that of a cluster group of countries with similar rates, but is lower than those of Finland (2006), Japan (2006) and France (2005). The New Zealand female rate is broadly similar to the rates in many other countries, but is lower than those of Japan (2006), Finland (2006), France (2005), Norway (2005) and Sweden (2002). Note that these selected OECD countries all have higher male than female suicide rates, like New Zealand.

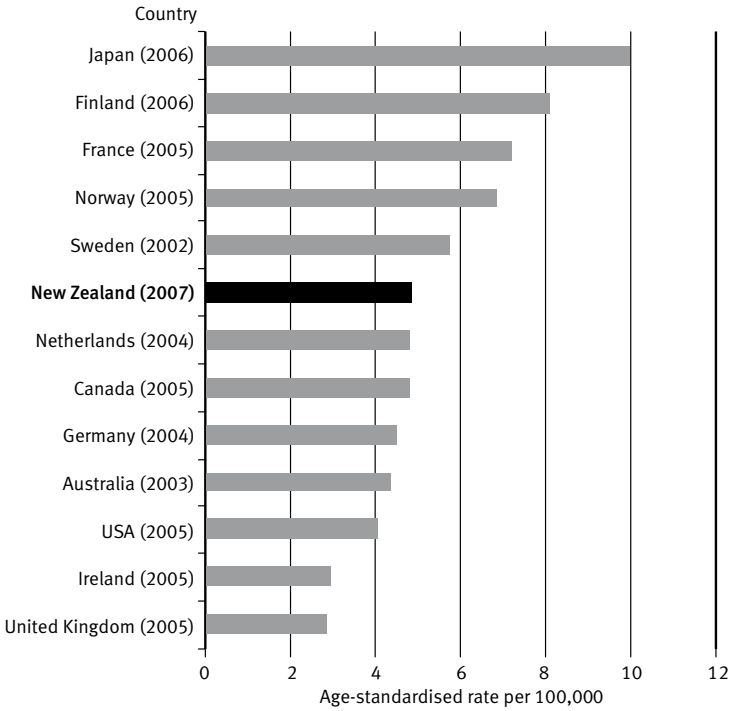
Figure 13: Age-standardised suicide rates for selected OECD countries, males



Source: WHO: http://www.who.int/mental_health/prevention/suicide/country_reports/en/ (accessed 17 August 2009).

Note: Rates are age-standardised to the WHO standard world population.

Figure 14: Age-standardised suicide rates for selected OECD countries, females



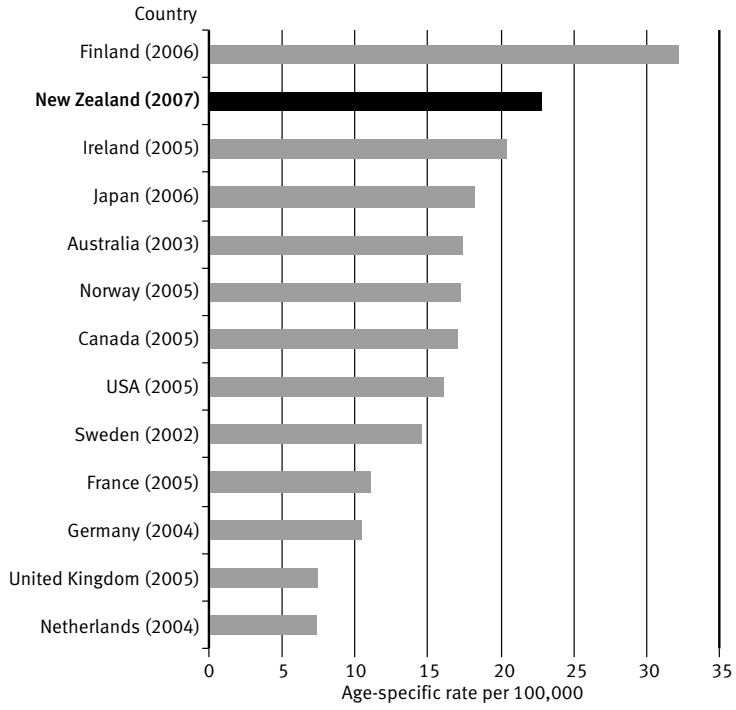
Source: WHO: http://www.who.int/mental_health/prevention/suicide/country_reports/en/ (accessed 17 August 2009).

Note: Rates are age-standardised to the WHO standard world population.

Youth (15–24-year-olds)

When ranked alongside other OECD countries, the New Zealand suicide rate for males aged 15–24 years in 2007 was higher than that in any other selected country except Finland (2006), as Figure 15 shows.

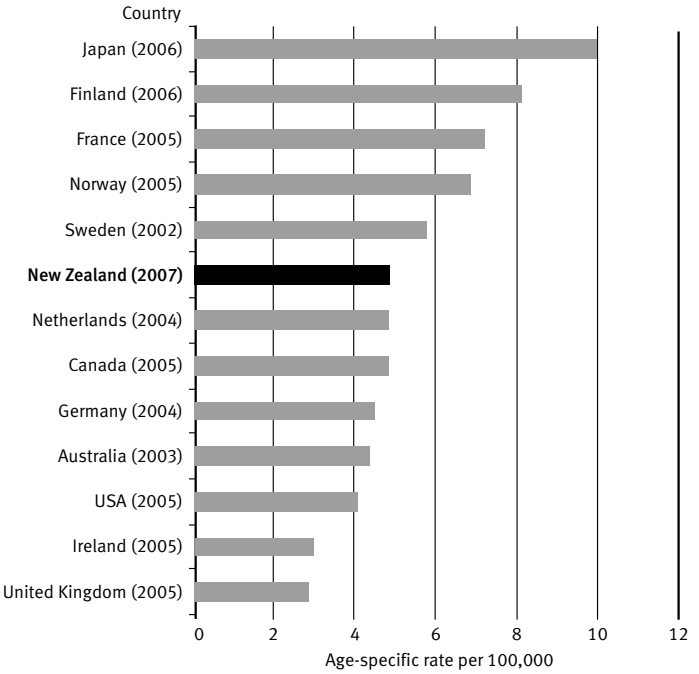
Figure 15: Age-specific suicide rates for selected OECD countries, males, 15–24 years



Source: WHO: http://www.who.int/mental_health/prevention/suicide/country_reports/en/ (accessed 17 August 2009).

As shown in Figure 16, when ranked alongside other OECD countries, the New Zealand female youth suicide rate in 2007 was lower than that in Japan (2006), Finland (2006), France (2005), Norway (2004) and Sweden (2002). It is similar to that of the Netherlands (2004) and Canada (2005).

Figure 16: Age-specific suicide rates for selected OECD countries, females, 15–24 years



Source: WHO: http://www.who.int/mental_health/prevention/suicide/country_reports/en/ (accessed 17 August 09).

Intentional Self-harm Hospitalisations in 2007

The data

This section presents data on hospital admissions involving intentional self-harm, focusing on 2007. Data has also been extracted from 1996 onwards for comparison of trends. Please note that the data used in this publication has been filtered in a different way to those in Ministry of Health publications prior to Suicide Facts: Deaths and intentional self-harm hospitalisations 2006, and therefore direct comparisons cannot be drawn between them. However, 2006 and 2007 filtering methods were the same, and hence comparisons across these two years are possible.

When considering all the information in this section of the publication, it is extremely important to note that a large subset of the data has been removed. This is because DHBs had different admission practices, which resulted in differences in the reporting of data that prevent meaningful comparison. The data in Table 9 below show admissions that have been excluded from the main 1996–2007 data presented in this document. The excluded data represent patients who were discharged from an emergency department with a length of stay of less than two days.

It is evident in Table 9 that these events have been reported very differently within single DHBs since 1996. By removing the data that is not consistent, the remaining data can be used to make meaningful comparisons across years and DHBs.

Table 9: Numbers of short-stay emergency department hospitalisations involving intentional self-harm, 1996–2007 (excluded from this publication)

		Year of discharge											
	District Health Board of domicile	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
North Island	Northland					8	18	35	37	43	56	71	66
	Waitemata		9	6	104	204	305	441	370	316	298	360	407
	Auckland	151	126	91	62	241	376	385	373	432	410	475	453
	Counties Manukau	119	94	133	173	248	308	365	369	373	445	430	461
	Waikato	8	9	20	23	56	128	165	184	199	224	242	71
	Lakes		2	1	2	4	13	35	39	56	57	52	53
	Bay of Plenty	1			1	12	1		13	12	5	22	69
	Tairawhiti				3	2							
	Taranaki	3	3	2	1	4	4	11	22	7	1		
	Hawke's Bay		2			1						43	67
	MidCentral									19	113	131	180
	Whanganui				2	1	3	20	12	13	11	16	18
	Capital & Coast	6	5	4	4		2	1	1	3	2	7	1
	Wairarapa	4	2										
South Island	Nelson Marlborough	6	10	3	2	5	2						
	West Coast	14	10	6	8	9	14	20	14	8	23	3	4
	Canterbury	13	115	243	308	337	418	448	500	405	436	503	424
	South Canterbury		1							1			
	Otago	3	10	15	12	64	83	82	104	151	135	121	132
	Southland	2	4	9	3	8	1		1	1	1	18	18
	South Island 'Other'				4	7	11	4	8	14	12	4	2
	Total New Zealand	**330**	**402**	**533**	**712**	**1211**	**1687**	**2012**	**2047**	**2053**	**2229**	**2498**	**2426**

Source: New Zealand National Minimum Dataset

Notes:

1. Short stay = 0 or 1 is a stay of one day or less; see the 'Technical Notes' section for more detail.
2. There were no events for Hutt Valley DHB.

Further, the data presented here also exclude any readmissions for an intentional self-harm incident within two days of a previous admission for intentional self-harm (see Table 9a). It is not unusual for patients to be transferred between hospitals after an intentional self-harm event, and in many cases such transfers were being counted as an additional admission. These admissions usually occurred within two days of the previous discharge, and artificially inflated the numbers of recorded admissions. Therefore, for the sake of consistency, and to give a more accurate picture of changes within the population, all readmissions involving intentional self-harm within two days of a previous admission for intentional self-harm have been removed from the dataset.

Table 9a: Numbers of hospitalisations involving intentional self-harm within two days of a previous intentional self-harm hospitalisation, 1996–2007 (excluded from this publication)

		Year of discharge											
	District Health Board of domicile	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
North Island	Northland	8	3	11	11	17	15	11	16	20	15	8	13
	Waitemata	16	16	14	20	42	36	28	44	58	34	44	44
	Auckland	6	17	37	31	28	20	35	32	27	19	16	16
	Counties Manukau	2	7	12	23	22	19	16	9	11	9	10	15
	Waikato	21	9	22	31	44	76	58	34	42	52	28	30
	Lakes	5	11	7	4	12	14	16	10	6	3	6	11
	Bay of Plenty	3	7	8	18	31	15	9	14	23	20	11	21
	Tairawhiti	1	4	6	1	1	8	5	4	3	5	2	6
	Taranaki	12	4	9	18	24	18	10	14	17	20	24	19
	Hawke's Bay	3	9	5	1	9	9	3	5	2	1	7	1
	MidCentral	8	11	21	21	23	10	21	19	21	11	15	11
	Whanganui	2	3	5	6	2	2	2	1	0	1	0	4
	Capital & Coast	27	18	14	13	20	16	5	14	14	7	8	8
	Hutt Valley	5	8	15	32	15	23	40	32	12	7	10	16
	Wairarapa	5	4	4	2	4	4	6	7	2	0	2	1
South Island	Nelson Marlborough	2	8	3	0	2	2	2	5	5	5	8	7
	West Coast	6	5	3	8	13	12	12	19	10	16	9	10
	Canterbury	10	9	25	79	70	94	57	82	81	56	50	29
	South Canterbury	1	3	1	4	11	11	10	12	6	3	6	3
	Otago	9	16	6	2	7	8	10	6	11	8	8	12
	Southland	2	5	2	4	11	12	9	7	4	7	7	10
	Other	1	2	3	3	2	0	2	2	0	2	1	1
	Total New Zealand	**155**	**179**	**233**	**332**	**410**	**424**	**367**	**388**	**375**	**301**	**280**	**288**

Source: New Zealand National Minimum Dataset

By removing inconsistent data, any trends found within the data are more likely to be due to changes in population behaviour, rather than changes in administrative procedures within or across DHBs. The dataset used for this section of the report therefore largely concentrates on admissions for stays of two days or more, because anyone who has had a short stay (and was discharged from the emergency department) has been removed from the analysis.

The Ministry of Health is addressing such inconsistencies, and in 2009 put a system in place to enable all DHBs to manage and report emergency department cases in a consistent manner.

The hospitalisations for intentional self-harm data in this publication do not therefore present the total numbers of people receiving hospital treatment for intentional self-harm. Even once consistency issues between DHBs are addressed, the total extent of intentional self-harm will still be difficult to capture, because many people who intentionally self-harm do not seek hospital treatment. Te Rau Hinengaro: The New Zealand Mental Health Survey estimated that in the 12 months prior to the survey (conducted in late 2003/early 2004), 0.4 percent of the population (400 per 100,000 population) had reported an attempted suicide (Oakley Brown et al 2006, p 99). (Note that the description 'attempted suicide' may differ from 'intentional self-harm'.)

In summary, the data used within this section of the report has been filtered to allow the best possible chance to present real trends relating to changes in intentional self-harm behaviour within the New Zealand population and to allow regional comparison. It is not intended to be a total count of people who have received hospital treatment for an intentional self-harm event.

Overview

Taking into account that a subset of the data has been removed (as explained above), the total number of hospitalisations involving intentional self-harm showed a steady decrease between 1996 and 2007.

Table 10 shows a decline from 3030 hospitalisations in 1996 to 2679 hospitalisations in 2007.

When expressed as an age-standardised rate per 100,000 population this represents a significant downward trend, from 85.8 per 100,000 population in 1996 to 63.9 per 100,000 population in 2007. This equates to a drop of 25.5 percent (see Figure 17).

Table 10: Numbers and rates of hospitalisations involving intentional self-harm, 1996–2007

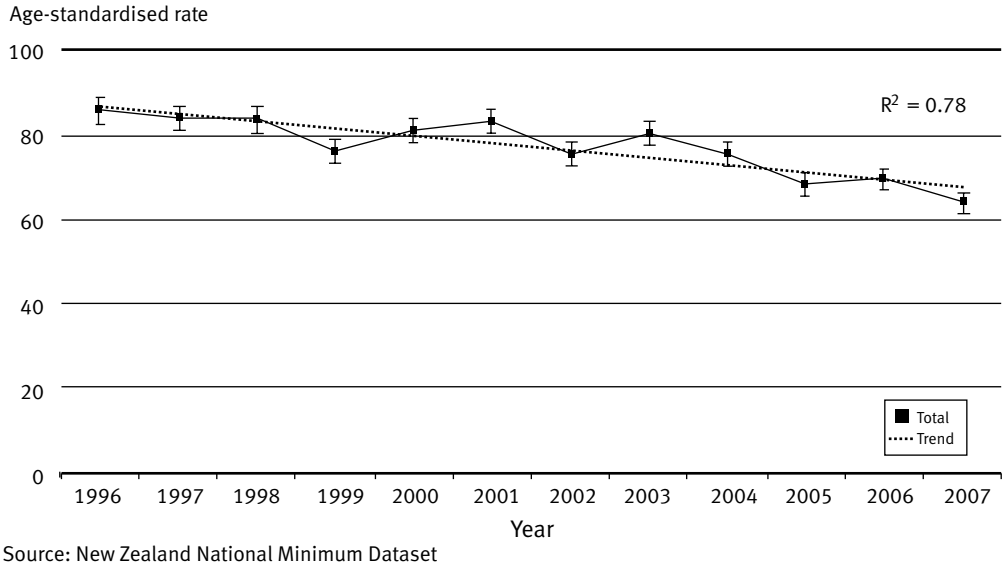
Year	Total	
	Number	Rate
1996	3030	85.8
1997	3074	83.8
1998	3103	83.6
1999	2836	76.3
2000	3017	81.0
2001	3136	83.3
2002	2902	75.3
2003	3142	80.3
2004	3000	75.5
2005	2742	68.4
2006	2868	69.7
2007	2679	63.9

Source: New Zealand National Minimum Dataset

Note: The rate shown is the age-standardised rate per 100,000 population, standardised to the WHO standard world population.

This significant difference may in part be due to a real change in behaviour within the population, but it is also very likely to be due to changes in medical practice and medical administration over the last decade. For example, the move towards community-based mental health care will almost certainly be reducing the numbers of people who may previously have been admitted to inpatient mental health services following an intentional self-harm event.

Figure 17: Hospitalisation rates involving intentional self-harm, 1996–2007



Source: New Zealand National Minimum Dataset

Notes:

1. The rate shown (ASR) is the age-standardised rate per 100,000 population, standardised to the WHO standard world population.
2. R^2 is a measure of how well the data fit the trend line. An R^2 value of 0.78 indicates that 78 percent of the variation in hospitalisations over time is explained by the downward trend over time. See the 'Definitions' section of this publication for further information.

Sex

It is well documented that females are more likely to be hospitalised for intentional self-harm than males (Berry and Harrison 2006). In 2007 1741 hospitalisations were recorded for females, compared to 938 for males. Expressed as an age-standardised rate, this represents 82.2 hospitalisations per 100,000 females and 45.5 hospitalisations per 100,000 males (see Figure 18).

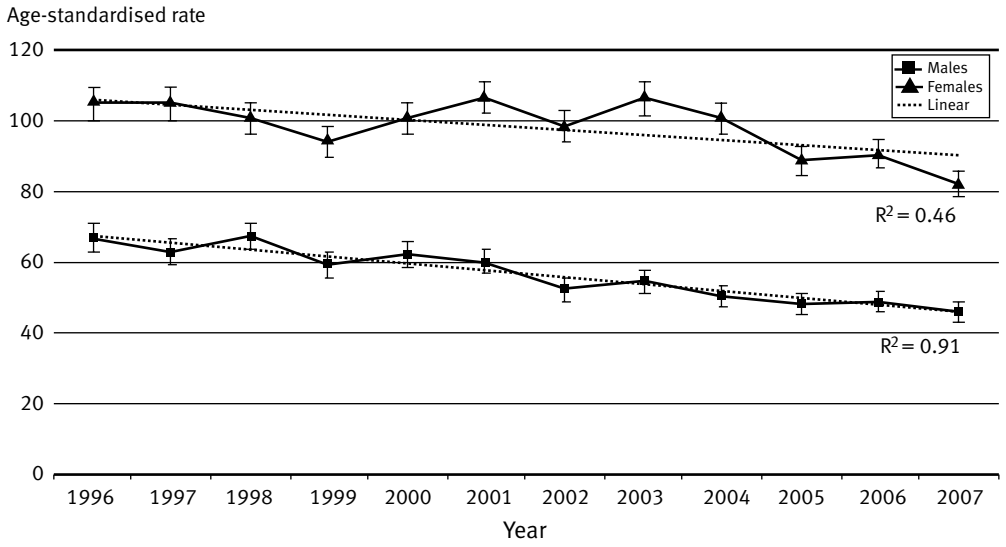
Table 11: Male and female hospitalisations involving intentional self-harm: numbers, rates and female-to-male ratio, 1996–2007

	Male		Female		Rate
Year	Number	Rate	Number	Rate	ratio (F:M)
1996	1173	66.8	1857	104.9	1.6
1997	1156	63.1	1918	104.9	1.7
1998	1229	66.9	1874	100.3	1.5
1999	1087	59.1	1749	93.7	1.6
2000	1148	62.0	1869	100.3	1.6
2001	1114	60.1	2022	106.3	1.8
2002	994	52.2	1908	98.2	1.9
2003	1049	54.4	2093	106.1	2.0
2004	982	50.1	2018	100.8	2.0
2005	953	48.1	1789	88.7	1.8
2006	990	48.8	1878	90.3	1.8
2007	938	45.5	1741	82.2	1.8

Source: New Zealand National Minimum Dataset

Note: The rate shown is the age-standardised rate per 100,000 population, standardised to the WHO standard world population.

Figure 18: Male and female hospitalisation rates involving intentional self-harm, 1996–2007



Source: New Zealand National Minimum Dataset

Notes:

1. The rate shown (ASR) is the age-standardised rate per 100,000 population, standardised to the WHO standard world population.
2. R^2 is a measure of how well the data fit the trend line. An R^2 value of 0.91 indicates that 91 percent of the variation in hospitalisations over time is explained by the downward trend over time. See the 'Definitions' section of this publication for further information.

There has been a decrease of 21.6 percent in the rate of female hospitalisations for intentional self-harm between 1996 and 2007. Fitting a linear trend line yields an R^2 value of 0.46, indicating that just under half the variation over time can be attributed to a downward trend. Since 1996 the male rate of intentional self-harm hospitalisations has reduced from 66.8 to 45.5 per 100,000 male population: a decrease of nearly 31.9 percent. The high R^2 value of 0.91 (see Figure 18) confirms that this reduction is significant.

As well as numbers and rates, Table 11 shows the female-to-male ratio for intentional self-harm hospitalisations.

In summary, the numbers and rates of both males and females being hospitalised for intentional self-harm events have fallen since 1996, and male hospitalisation rates have fallen particularly sharply.

Age

In 2007 the age group with the highest number of hospitalisations for intentional self-harm and the highest age-specific rate was that of 15–19 year-olds (see Table 12).

Table 12: Numbers and rates of male and female hospitalisations involving intentional self-harm, by five-year age group, 2007

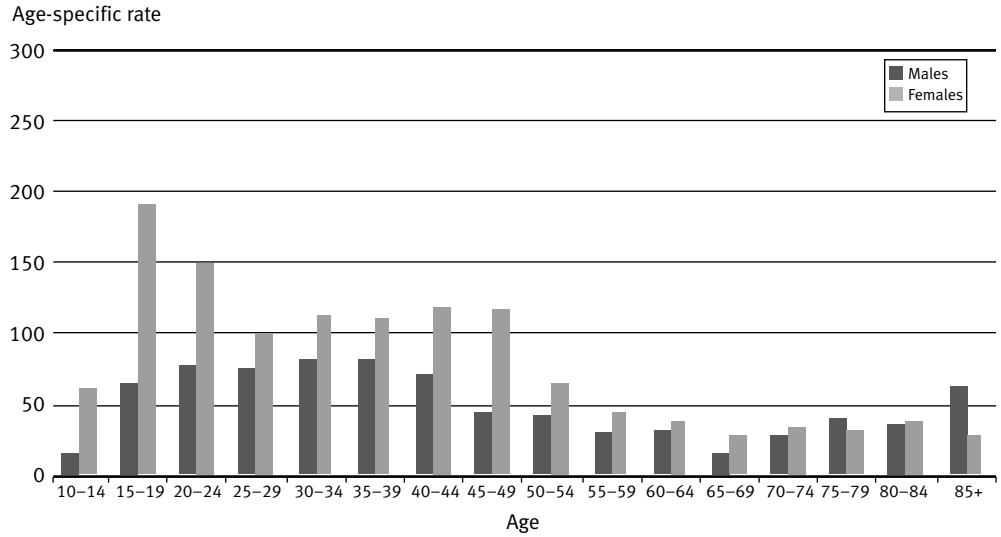
Age-group (years)	Males		Females		Total	
	Number	Rate	Number	Rate	Number	Rate
5–9	0	–	0	–	0	–
10–14	22	14.0	89	59.7	111	36.3
15–19	105	64.4	299	190.7	404	126.3
20–24	114	77.3	220	150.4	334	113.7
25–29	98	75.1	136	99.8	234	87.7
30–34	108	81.4	162	111.4	270	97.1
35–39	123	82.1	183	111.2	306	97.3
40–44	108	70.2	195	118.2	303	95.0
45–49	67	44.0	187	116.6	254	81.2
50–54	57	42.9	88	64.1	145	53.6
55–59	36	29.9	53	43.1	89	36.6
60–64	30	30.8	38	37.8	68	34.3
65–69	12	15.1	23	27.5	35	21.5
70–74	16	27.4	22	34.3	38	31.0
75–79	19	39.5	18	32.0	37	35.5
80–84	11	35.0	17	38.3	28	36.9
85+	12	61.8	11	26.5	23	37.8
	938	**45.5**	**1741**	**82.2**	**2679**	**63.9**

Source: New Zealand National Minimum Dataset

Note: A dash (–) indicates that the rate has been suppressed because there were five or fewer hospitalisations in this category.

For females, the 15–19 years age group had the greatest number and highest rate of intentional self-harm hospitalisations. For males, although the highest rate occurred between the ages of 35 and 39, there was very little difference between age groups within the 15–44 years age range. After the age of 55 the differences between male and female rates were much less marked. This relationship can be seen clearly in Figure 19.

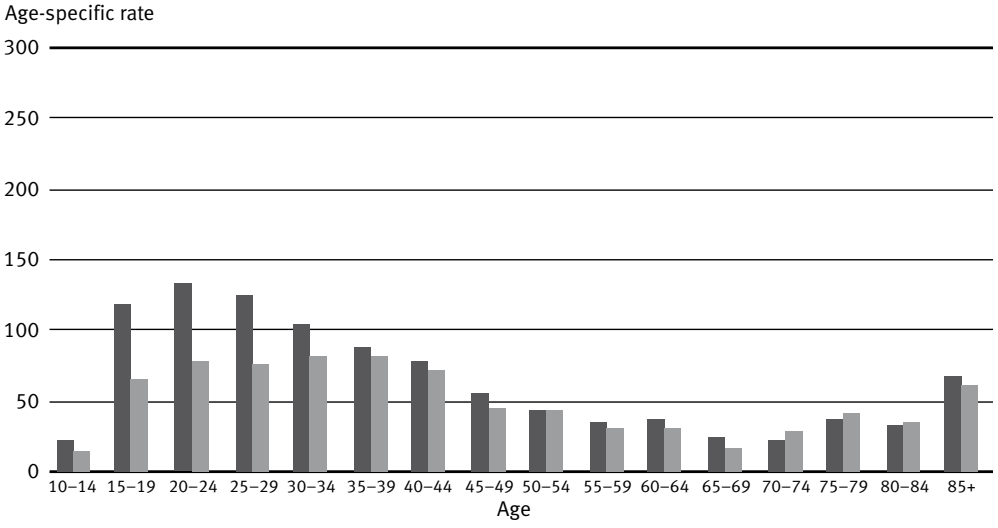
Figure 19: Hospitalisation rates involving intentional self-harm, by age group and sex, 2007



Source: New Zealand National Minimum Dataset

Comparing age-specific rates between 1997 and 2007, males and female rates both showed decreases in the younger age groups (10–14 years through to 30–34 years). There was little change among the other age groups, except possibly for an increase of rates among females in the 45–49 years age group (see Figures 20 and 21).

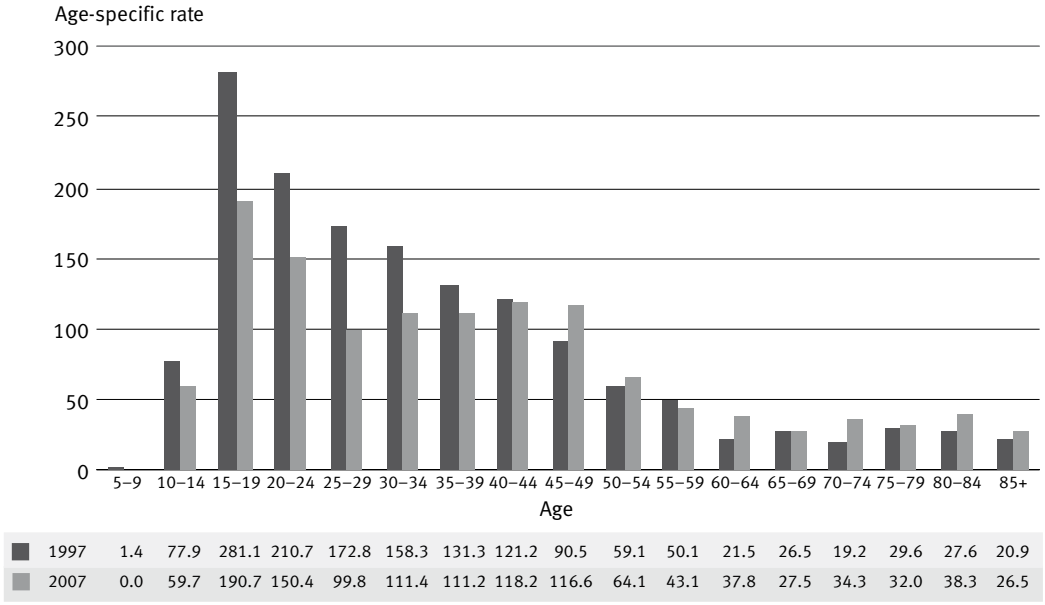
Figure 20: Male hospitalisation rates involving intentional self-harm, by age group, 1997 and 2007



	10–14	15–19	20–24	25–29	30–34	35–39	40–44	45–49	50–54	55–59	60–64	65–69	70–74	75–79	80–84	85+
1997	22.1	119.1	132.5	124.9	104.3	88.4	76.5	54.4	43.1	34.1	36.7	24.4	22.3	36.6	33.2	66.1
2007	14.0	64.4	77.3	75.1	81.4	82.1	70.2	44.0	42.9	29.9	30.8	15.1	27.4	39.5	35.0	61.8

Source: New Zealand National Minimum Dataset

Figure 21: Female hospitalisation rates involving intentional self-harm, by age group, 1997 and 2007



Source: New Zealand National Minimum Dataset

Youth

Over the last 12 years both the numbers and the age-specific rates of hospitalisations involving intentional self-harm for youths aged 15–24 have steadily reduced (see Table 13). Between 1996 and 2007 the intentional self-harm hospitalisation rates for youths decreased by 40.1 percent.

Table 13: Males and females aged 15–24: hospitalisations involving intentional self-harm, numbers and age-specific rates per 100,000 population, 1996–2007

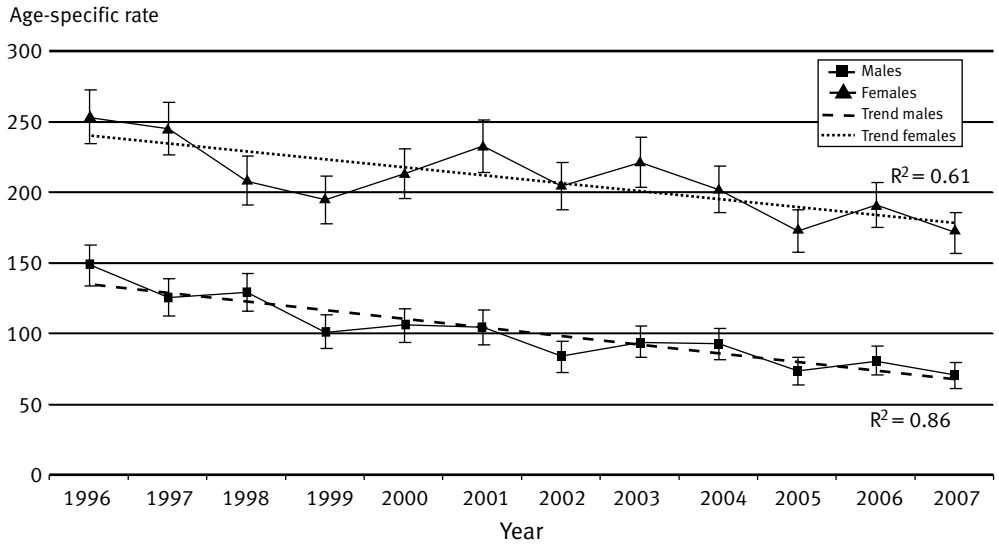
Year	Males		Females		Total	
	Number	Rate	Number	Rate	Number	Rate
1996	398	148.3	675	253.4	1073	200.7
1997	346	125.7	657	245.3	1003	184.7
1998	352	129.1	549	208.2	901	168.0
1999	274	101.2	506	194.5	780	146.9
2000	287	105.9	551	213.0	838	158.2
2001	282	104.4	615	232.6	897	167.8
2002	235	83.7	556	204.5	791	143.1
2003	276	94.2	622	221.2	898	156.4
2004	278	92.7	580	202.1	858	146.2
2005	224	73.5	503	172.8	727	122.0
2006	247	80.9	573	191.1	820	135.5
2007	219	70.5	519	171.2	738	120.3

Source: New Zealand National Minimum Dataset

Figure 22 shows that there has been a significant reduction in the intentional self-harm hospitalisation rates of 15–24 year-olds for both males and females. For male youth, the rates have declined by 52.4 percent, and female youth rates are down by 32.4 percent.

Trend lines plotted from the data show that although rates among females have shown a relatively large amount of variation since 1996, the variation among males has been lower. The R^2 value of the male trend line is 0.86, which signifies a strong trend.

Figure 22: Males and females aged 15–24: hospitalisations involving intentional self-harm, age-specific rates per 100,000 population, 1996–2007



Source: New Zealand National Minimum Dataset

Notes: R^2 is a measure of how well the data fit the trend line. For example, an R^2 value of 0.86 indicates that 86 percent of the variation in hospitalisations over time is explained by the downward trend over time. See the 'Definitions' section of this publication for further information.

Ethnicity[4]

Māori

In 2007 there were 463 intentional self-harm hospitalisations involving Māori (17.3 percent of the total) (see Table 14). The most common age group for Māori males to be hospitalised was 20–24 years. Māori females were most commonly hospitalised between the ages of 15 and 19. Females accounted for 58.1 percent of Māori hospitalisations involving intentional self-harm, compared to the total national figure of 65.0 percent.

Pacific peoples

Seventy-five intentional self-harm hospitalisations in 2007 involved Pacific peoples (2.8 percent of the total). Numbers are too small to draw conclusions from this data. It should be noted, however, that Pacific females accounted for 52 percent of Pacific hospitalisations involving intentional self-harm, a noticeably smaller proportion than in other ethnic groups.

Asian peoples

In 2007 there were 109 intentional self-harm hospitalisations involving Asian peoples (4.1 percent of the total). Numbers are too small to draw conclusions from this data. Women accounted for 69.7 percent of all Asian intentional self-harm hospitalisations, higher than the rate for other ethnic groups.

4 Note that ethnicity data can only be compared back to 1996 because of changes in the way ethnicity was recorded after that year.

Other groups

There were 2032 intentional self-harm hospitalisations involving ethnic groups classified as 'Other' in 2007 (75.1 percent of the total). The most common age for males to be hospitalised was between 35 and 39, while females were more commonly hospitalised between the ages of 15 and 19. Females accounted for 66.8 percent of intentional self-harm hospitalisations in this group.

Table 14: Hospitalisations involving intentional self-harm, by ethnicity, age group and sex, 2007

Ethnicity	Sex	Total	Age group (years)																	
			0–4	5–9	10–14	15–19	20–24	25–29	30–34	35–39	40–44	45–49	50–54	55–59	60–64	65–69	70–74	75–79	80–84	85+
Māori	Total	463	0	0	26	90	73	52	63	58	42	28	16	5	5	1	1	1	2	0
	Males	194	0	0	8	30	34	25	31	26	18	10	6	1	2	0	0	1	2	0
	Females	269	0	0	18	60	39	27	32	32	24	18	10	4	3	1	1	0	0	0
Pacific	Total	75	0	0	4	14	14	12	8	6	7	2	2	0	1	1	2	2	0	0
	Males	36	0	0	0	5	9	4	3	4	6	1	1	0	1	0	1	1	0	0
	Females	39	0	0	4	9	5	8	5	2	1	1	1	0	0	1	1	1	0	0
Asian	Total	109	0	0	8	19	18	13	11	10	6	8	4	2	2	2	1	1	1	3
	Males	33	0	0	3	5	4	3	3	3	1	3	2	1	0	1	0	0	1	3
	Females	76	0	0	5	14	14	10	8	7	5	5	2	1	2	1	1	1	0	0
Other	Total	2032	0	0	73	281	229	157	188	232	248	216	123	82	60	31	34	33	25	20
	Males	675	0	0	11	65	67	66	71	90	83	53	48	34	27	11	15	17	8	9
	Females	1357	0	0	62	216	162	91	117	142	165	163	75	48	33	20	19	16	17	11
Total	Total	2679	0	0	111	404	334	234	270	306	303	254	145	89	68	35	38	37	28	23
	Males	938	0	0	22	105	114	98	108	123	108	67	57	36	30	12	16	19	11	12
	Females	1741	0	0	89	299	220	136	162	183	195	187	88	53	38	23	22	18	17	11

Source: New Zealand National Minimum Dataset

Māori and non-Māori comparison

Rates have been calculated using groupings of Māori and non-Māori populations, mostly because appropriate population data for the Asian and Pacific people is not available for 2007.

Table 15: Numbers and rates of intentional self-harm hospitalisations for Māori and non-Māori, by sex, 1996–2007

Year	Number						Rate					
	Māori self-harm hospitisations			Non-Māori self-harm hospitisations			Māori self-harm hospitisations			Non-Māori self-harm hospitisations		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
1996	147	249	396	1026	1608	2634	56.3	89.8	73.5	67.8	108.0	87.7
1997	178	262	440	978	1656	2634	64.1	87.9	76.2	62.3	107.9	84.8
1998	217	268	485	1012	1606	2618	76.7	91.9	84.6	64.4	102.2	83.2
1999	194	260	454	893	1489	2382	67.4	85.1	76.3	56.9	95.0	75.8
2000	191	293	484	957	1576	2533	66.7	96.2	81.6	60.6	101.0	80.5
2001	211	302	513	903	1720	2623	71.7	96.7	84.2	57.0	108.1	82.6
2002	152	268	420	842	1640	2482	53.0	88.0	70.9	51.0	99.8	75.4
2003	193	305	498	856	1788	2644	66.1	97.2	82.0	51.3	107.0	79.1
2004	177	259	436	805	1759	2564	60.5	82.0	71.3	47.7	104.4	76.0
2005	187	276	463	766	1513	2279	64.0	85.6	74.9	45.0	89.2	67.0
2006	174	299	473	816	1579	2395	60.2	93.6	77.3	46.2	90.0	68.2
2007	194	269	463	744	1472	2216	68.0	83.0	75.3	41.3	82.0	61.6

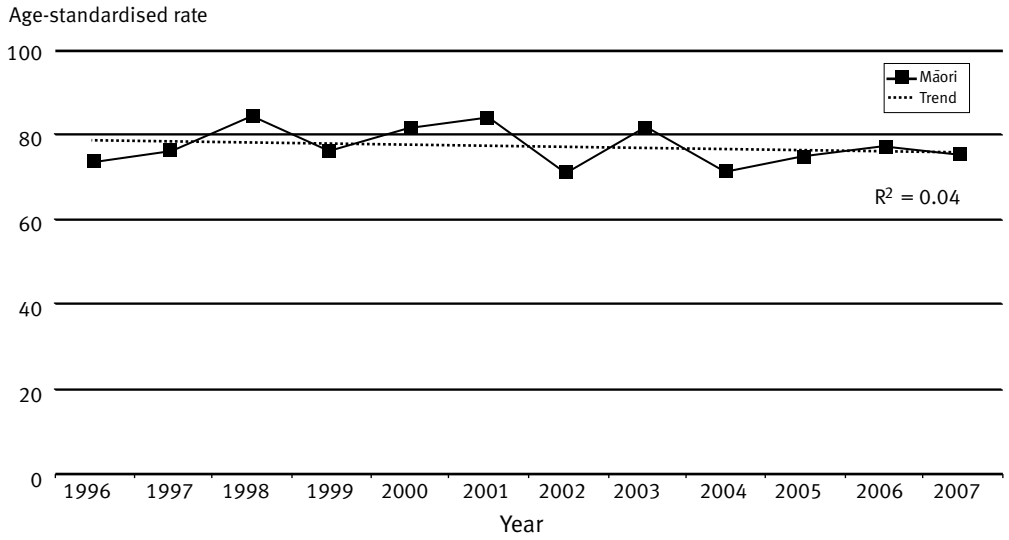
Source: New Zealand National Minimum Dataset

Note: The rate shown is the age-standardised rate per 100,000 population, standardised to the WHO standard world population.

There were 75.3 Māori intentional self-harm hospitalisations per 100,000 Māori population in 2007, compared to 61.6 per 100,000 non-Māori population.

As can be seen in Figure 23, since 1996 the rates of intentional self-harm hospitalisations show no downward trend for Māori. The inclusion of a trend line shows that the rates have generally remained stable over the last 12 years: any variation is probably the result of relatively small numbers within the population. In comparison, intentional self-harm hospitalisation rates for non-Māori have dropped markedly since 1996, by 29.8 percent (Figure 24).

Figure 23: Age-standardised intentional self-harm hospitalisation rates for Māori, 1996–2007

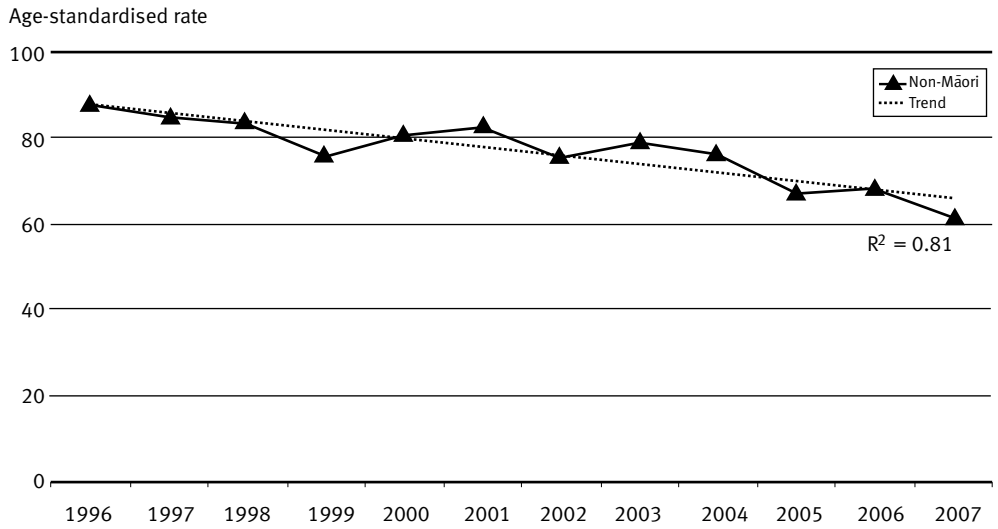


Source: New Zealand National Minimum Dataset

Note:

1. The rate shown (ASR) is the age-standardised rate per 100,000 population, standardised to the WHO standard world population.
2. R^2 is a measure of how well the data fit the trend line. An R^2 value of 0.04 indicates that only 4 percent of the variation in hospitalisations over time is explained by the downward trend over time. See the 'Definitions' section of this publication for further information.

Figure 24: Age-standardised intentional self-harm hospitalisation rates for non-Māori, 1996–2007



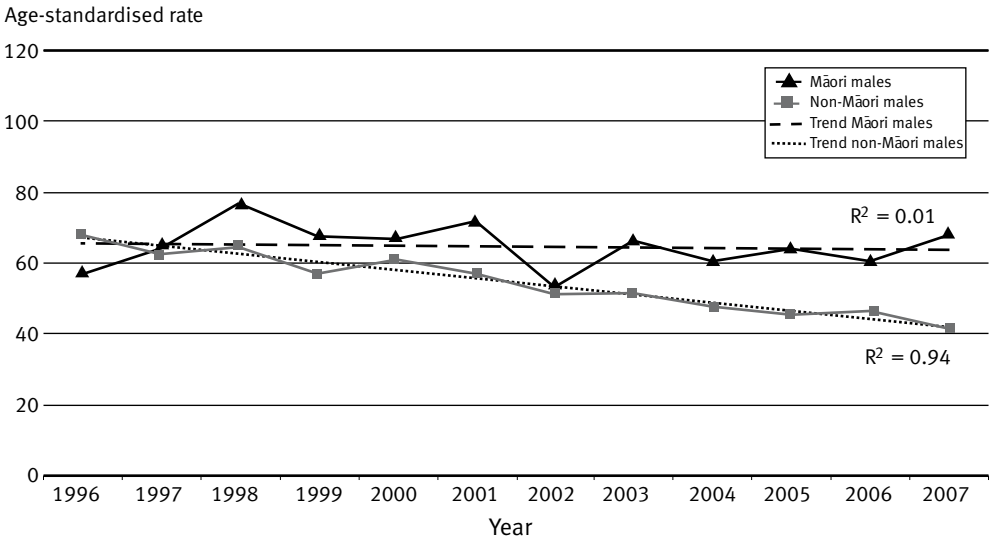
Source: New Zealand National Minimum Dataset

Notes:

1. The rate shown (ASR) is the age-standardised rate per 100,000 population, standardised to the WHO standard world population.
2. R^2 is a measure of how well the data fit the trend line. An R^2 value of 0.81 indicates that 81 percent of the variation in hospitalisations over time is explained by the downward trend over time. See the 'Definitions' section of this publication for further information.

In breaking down the Māori and non-Māori groups by sex, it is possible to see that rates for neither Māori males nor Māori females have shown any real change since 1996 (Figures 25 and 26). Rates for non-Māori females showed a slight downward trend, with about half the variation in rates explained by change over time. Rates for non-Māori males showed a very strong downward trend (R^2 =0.94).

Figure 25: Intentional self-harm hospitalisation rates for Māori and non-Māori males, 1996–2007

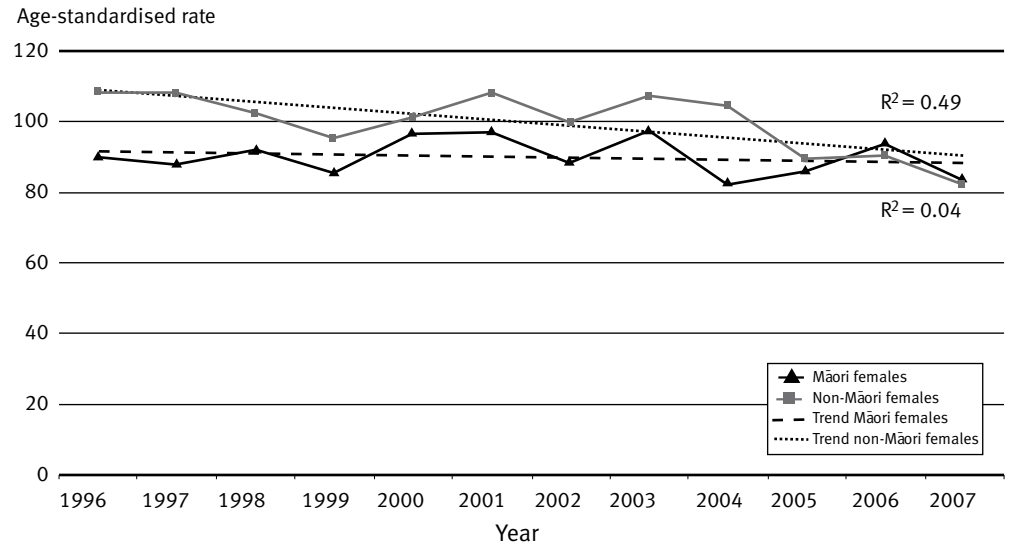


Source: New Zealand National Minimum Dataset

Notes:

1. The rate shown (ASR) is the age-standardised rate per 100,000 population, standardised to the WHO standard world population.
2. R^2 is a measure of how well the data fit the trend line. An R^2 value of 0.94 indicates that 94 percent of the variation in hospitalisations over time is explained by the downward trend over time. See the 'Definitions' section of this publication for further information.

Figure 26: Intentional self-harm hospitalisation rates for Māori and non-Māori females, 1996–2007



Source: New Zealand National Minimum Dataset

Notes:

1. The rate shown (ASR) is the age-standardised rate per 100,000 population, standardised to the WHO standard world population.
2. R^2 is a measure of how well the data fit the trend line. An R^2 value of 0.49 indicates that 49 percent of the variation in hospitalisations over time is explained by the downward trend over time. See the 'Definitions' section of this publication for further information.

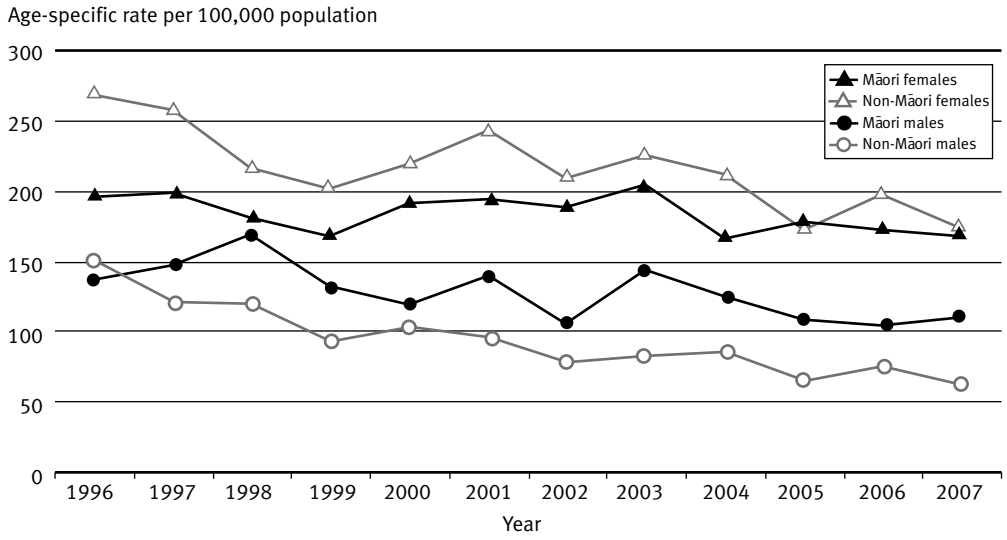
In 2007, there was little difference between intentional self-harm hospitalisation rates for Māori and non-Māori youth (Table 15a). In this category, Māori males tend to have higher rates of hospitalisation than non-Māori males, with the reverse generally true for females. However, over time these differences are not significant. The pattern is shown in Figure 26a. (To reduce complexity, error bars are not shown; if they were, the width of the confidence intervals would mean that they would overlap across categories.)

Table 15a: Numbers and rates of intentional self-harm hospitalisations for Māori and non-Māori youth, by sex, 1996–2007

Year	Māori						Non-Māori					
	Males		Females		Total		Males		Females		Total	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
1996	66	135.7	98	194.4	164	165.6	332	151.1	577	267.2	909	208.6
1997	77	145.8	105	197.3	182	171.6	269	121.0	552	257.2	821	187.9
1998	90	168.4	96	180.3	186	174.4	262	119.5	453	215.3	715	166.4
1999	71	131.0	89	166.4	160	148.6	203	93.7	417	201.7	620	146.4
2000	65	117.9	103	191.0	168	154.0	222	102.8	448	218.8	670	159.2
2001	78	138.8	106	193.5	184	165.8	204	95.3	509	242.8	713	168.3
2002	55	104.4	100	188.1	155	146.5	180	78.9	456	208.4	636	142.3
2003	77	142.7	111	204.2	188	173.6	199	83.3	511	225.2	710	152.4
2004	69	124.3	92	165.1	161	144.8	209	85.5	488	211.0	697	146.5
2005	62	107.9	102	177.6	164	142.8	162	65.5	401	171.6	563	117.1
2006	59	102.9	101	170.8	160	137.4	188	75.7	472	196.1	660	135.0
2007	64	110.0	99	166.8	163	138.7	155	61.4	420	172.3	575	115.9

Source: New Zealand National Minimum Dataset

Figure 26a: Intentional self-harm hospitalisation rates for youth by ethnicity and sex, 1996–2007



Source: New Zealand National Minimum Dataset

Deprivation

As discussed in the corresponding section of the 'Suicides' part of this publication, 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 (White et al 2008, Benzeval et al 2001).

Analysis of intentional self-harm hospitalisations by deprivation quintile shows that in 2007 there was a significant difference between rates for the least deprived quintile (quintile 1) and the most deprived (quintile 5) (see Table 16). Males and females living in the most deprived areas had significantly higher rates of intentional self-harm hospitalisation than those living in the least deprived areas.

Table 16: Numbers and age-standardised rates of intentional self-harm hospitalisation, by NZDep2001 quintile, 2007

Deprivation quintile		Number	Rate
1 least deprived	Total	316	41.8
	Males	100	26.2
	Females	216	57.9
2	Total	371	46.3
	Males	140	35.2
	Females	231	58.0
3	Total	491	57.9
	Males	153	35.7
	Females	338	80.3
4	Total	763	87.6
	Males	253	58.8
	Females	510	115.9
5 most deprived	Total	724	87.0
	Males	288	72.1
	Females	436	101.8

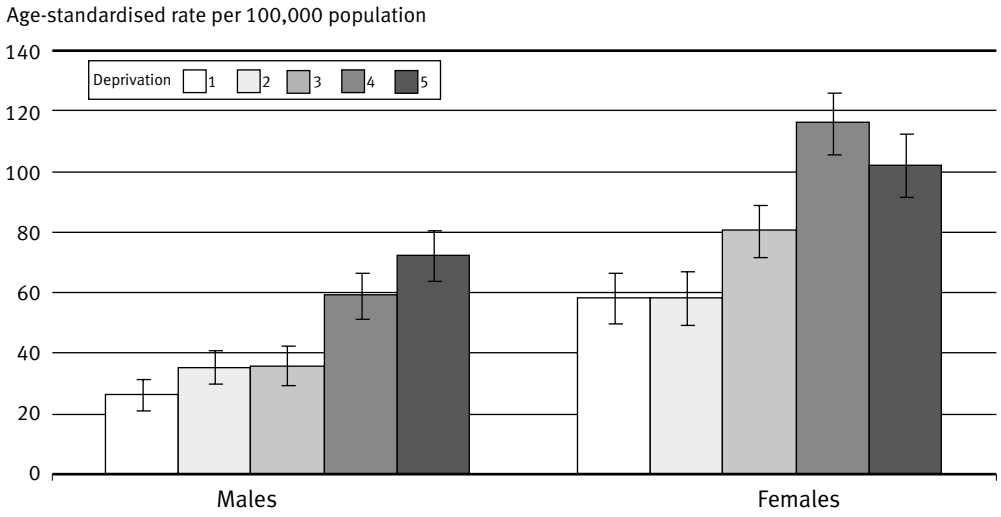
Source: New Zealand National Minimum Dataset

Note: ASR (age-standardised rate) is the age-standardised rate per 100,000 population, standardised to the WHO standard world population.

Figure 27 shows the rates and confidence intervals relating to each quintile. For males there was a significant difference between rates in the least and most deprived quintiles. The rate in the most deprived quintile was almost three times higher than the rate in the least deprived quintile. There was also significant difference when quintiles 2 and 3 were compared with quintile 5. However, there was no significant difference between quintiles 2 and 3.

For females there was no significant difference between rates in the two most deprived quintiles, but these two were significantly different from rates for the rest of the population. In 2007 the female rate was highest in quintile 4, in which it was twice as high as the rate in the two least deprived quintiles.

Figure 27: Age-standardised intentional self-harm hospitalisation rates, by deprivation quintile and sex, 2007



Source: New Zealand National Minimum Dataset

Note: The rate shown is the age-standardised rate per 100,000 population, standardised to the WHO standard world population.

District Health Boards

Hospitalisation data have been filtered in such a way as to allow as much consistency as possible over time and between DHBs (see pp 34–35). It is important to exercise caution when comparing rates among DHBs because filtering cannot completely eliminate differences caused by different DHBs' methods of managing patients and keeping records.

Table 17 shows that the DHB with the highest age-standardised rate of intentional self-harm hospitalisations in 2007 was Wairarapa, followed by Nelson-Marlborough, and that Auckland had the lowest rates. The DHBs with the lowest female-to-male rate ratio were Auckland and Hawke's Bay, with 1.2 females hospitalised for every male. Wairarapa DHB had the highest rate ratio in this respect, with 3.6 females hospitalised for every male.

Table 17: Numbers and rates of intentional self-harm hospitalisations, by DHB of domicile and sex, 2007

	DHB	Males		Females		Total		F:M
		Number	Rate	Number	Rate	Number	Rate	rate ratio
North Island	Northland	40	58.8	59	89.1	99	73.7	1.5
	Waitemata	106	43.0	181	70.0	287	56.5	1.6
	Auckland	63	27.6	73	32.8	136	29.9	1.2
	Counties Manukau	68	31.0	124	55.2	192	43.1	1.8
	Waikato	112	69.6	164	94.6	276	82.4	1.4
	Lakes	23	53.8	36	78.1	59	65.1	1.5
	Bay of Plenty	55	61.0	84	89.8	139	75.2	1.5
	Tairawhiti	13	63.8	18	97.9	31	81.5	1.5
	Hawke's Bay	33	51.0	41	58.9	74	54.9	1.2
	Taranaki	18	36.2	61	118.3	79	77.3	3.3
	MidCentral	30	39.6	69	82.7	99	61.6	2.1
	Whanganui	17	60.2	25	79.1	42	69.7	1.3
	Capital & Coast	61	42.0	142	97.4	203	70.4	2.3
	Hutt Valley	42	63.4	70	84.0	112	80.2	1.3
	Wairarapa	12	84.0	50	305.1	62	193.3	3.6
South Island	Nelson Marlborough	38	63.8	89	160.0	127	110.3	2.5
	West Coast	8	45.0	19	132.2	27	87.2	2.9
	Canterbury	116	47.5	265	114.7	381	80.9	2.4
	South Canterbury	11	43.6	27	111.6	38	76.5	2.6
	Otago	43	48.7	99	108.1	142	78.9	2.2
	Southland	26	48.4	38	72.3	64	60.3	1.5
	Overseas and undefined	3	..	7	..	10	..	

Source: New Zealand National Minimum Dataset

Notes:

1. The rate shown is the age-standardised rate per 100,000 population, standardised to the WHO standard world population.
2. .. Not available.

Table 18 and Figure 28 show the age-standardised rates of hospitalisation for each DHB by sex, based on three years' accumulated data (2005–2007). The New Zealand age standardised rate for this three-year period has been calculated based on the New Zealand estimated resident populations as at 30 June 2006 and standardised to the WHO standard world population. The national figure is 67.1 intentional self-harm hospitalisations per 100,000 population over the three years: this is shown by the horizontal line in Figure 28. Confidence intervals are also provided to aid interpretation.

Table 18: Numbers, rates and female-to-male rate ratios of intentional self-harm hospitalisations, by DHB of domicile, 2005, 2006 and 2007 accumulated data

	DHB	Males		Females		Total		F:M
		Number	Rate	Number	Rate	Number	Rate	rate ratio
North Island	Northland	128	66.6	231	109.3	359	88.0	1.6
	Waitemata	335	45.7	584	74.9	919	60.4	1.6
	Auckland	202	29.2	217	31.6	419	30.2	1.1
	Counties Manukau	224	34.3	305	44.6	529	39.2	1.3
	Waikato	286	59.0	558	109.3	844	84.6	1.9
	Lakes	68	50.9	167	115.5	235	83.1	2.3
	Bay of Plenty	152	57.2	227	83.0	379	70.1	1.5
	Tairawhiti	32	51.9	61	97.7	93	75.1	1.9
	Hawke's Bay	87	45.6	154	73.4	241	59.7	1.6
	Taranaki	98	68.1	182	118.6	280	93.6	1.7
	MidCentral	148	66.5	271	110.3	419	88.7	1.7
	Whanganui	44	54.7	72	80.3	116	67.6	1.5
	Capital & Coast	150	34.4	367	82.4	517	59.2	2.4
	Hutt Valley	113	57.3	266	124.8	379	91.3	2.2
	Wairarapa	51	111.8	118	237.9	169	173.7	2.1
South Island	Nelson Marlborough	115	61.7	276	162.6	391	110.6	2.6
	West Coast	31	60.8	60	131.1	91	95.4	2.2
	Canterbury	341	47.1	766	109.0	1107	77.9	2.3
	South Canterbury	44	66.2	87	129.1	131	96.7	2.0
	Otago	145	55.0	292	107.1	437	81.2	1.9
	Southland	76	47.7	133	84.5	209	65.9	1.8
	Overseas and undefined	11	..	14	..	25	..	

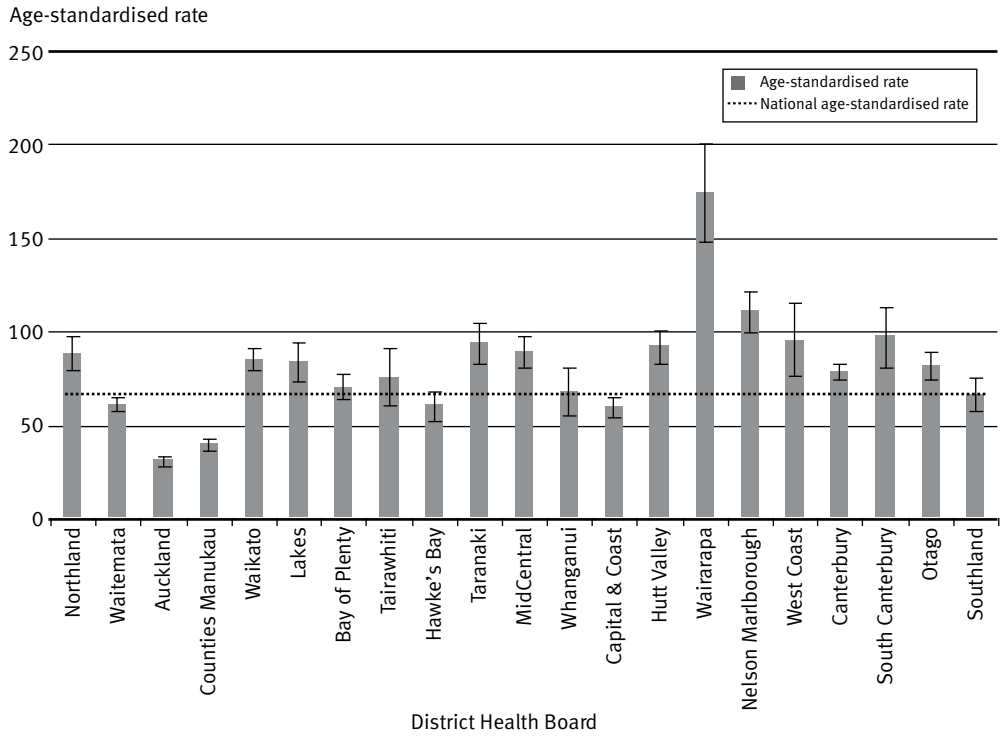
Source: New Zealand National Minimum Dataset

Notes:

1. The rate shown is the age-standardised rate per 100,000 population, standardised to the WHO standard world population.
2. .. Not available.

Figure 28 shows clearly that Northland, Waikato, Lakes, Taranaki, MidCentral, Hutt Valley, Wairarapa, Nelson Marlborough, West Coast, Canterbury, South Canterbury and Otago DHBs had a significantly higher rate for intentional self-harm hospitalisations than the national average over the last three years. Auckland, Counties Manukau, and Capital and Coast DHBs had significantly lower rates than the national rate.

Figure 28: Total age-standardised hospitalisation rates for intentional self-harm, by DHB of domicile, 2005, 2005 and 2007 (accumulated data)



Source: New Zealand National Minimum Dataset

Note: The rate shown (ASR) is the age-standardised rate per 100,000 population, standardised to the WHO standard world population.

Technical Notes

Data

Population denominator

The suicide and self-harm hospitalisation rates presented in this report and last year's publication, *Suicide Facts: Deaths and intentional self-harm hospitalisations 2006*, will differ from those earlier editions of *Suicide Facts* (for example, Ministry of Health 2007). In 2006 and 2007 data, any population analysis is based on New Zealand population estimates as calculated by Statistics New Zealand. In previous publications different population denominators have been used. Please note: the only exception to this is the deprivation data, where population projections have been used.

Suicide deaths

All suicide mortality data in this publication was obtained from the New Zealand Mortality Collection, except for international comparisons, which were obtained from 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 relating to the death that need to be investigated first. Consequently, a provisional suicide classification may be made before a coroner's verdict. The suicide mortality data contained in this report are provisional 2007 data. Thirty of the deaths that were registered in 2007 are still subject to coroners' findings, and neither a final nor a provisional cause of death had been assigned to them at the time of data extraction.

The number of provisionally classified deaths from suicide in 2007 presented in this report may differ slightly from the number for the same year presented in future reports, when data has been finalised. The Ministry of Health will release the final data in the publication Mortality and Demographic Data.

The suicide data in this report is based on the date the death is registered, which is usually soon after the death. However, this system may mean that a few deaths (approximately 2 percent) are registered as occurring in later years.

Hospitalisation for intentional self-harm

The motivation for intentional self-harm varies, and therefore hospitalisation data is not a measure of suicide attempts. Hospitalisation data has been used from 1996 onwards because earlier years' data would not be able to be analysed consistently. Please also note that data from July 2005 onwards is currently provisional, as not all publicly funded hospital data has yet been processed and coded by the Ministry of Health.

The hospitalisation data used in this report has been filtered to remove information on patients who were discharged from the emergency department and stayed less than two days in hospital. There are huge variations between the numbers of short-stay emergency department admissions recorded by DHBs because admission practices vary, and so filtering was necessary to allow better comparisons between DHBs and over time. The removal of this data is explained more fully at the beginning of the section on intentional self-harm hospitalisation.

It is important to note that readmissions to hospital for a self-harm event within two days of a previous intentional self-harm discharge have also been removed. This was to ensure that admissions relating to transfers between DHBs were excluded, because different DHBs have different procedures for transfers. It is also important to note that hospitalisations for intentional self-harm represent individual events of self-harm, rather than individual people. As a result, a single person can contribute numerous unique intentional self-harm events to the dataset.

Since 1996 there have been two hospitalisations reported for intentional self-harm among children aged under five. For simplicity, these admissions have not been excluded.

The data-filtering methods used in this report mean that data within this publication cannot be compared with that in any previous documents published by the Ministry of Health except the 2008 publication Suicide Facts: Deaths and intentional self-harm hospitalisations 2006.

Percentage calculations

All percentage calculations comparing numbers or rates between years have been undertaken using the raw data. Due to rounding, this may mean that the resultant information may be slightly different to any calculations based on tabular data supplied in this publication.

International Classification of Diseases (ICD) codes

The *International Statistical Classification of Diseases and Related Health Problems, 10th Revision, Australian Modification (ICD-10-AM)* codes used for mortality were X60–X84: Intentional self-harm (National Centre for Classification in Health 2008). External causes codes of ICD-9-CMA-II E950–E958 were used for intentional self-harm hospitalisations. Note that code E959 was excluded from hospitalisation data in this publication, since it covers 'late effects', and hence is not relevant to current episodes.

The International Statistical Classification of Diseases and Related Health Problems, 9th Revision, Clinical Modification (ICD-9-CM) codes E950–E959: Suicide and self inflicted injury (National Centre for Classification in Health 2002) were used for 1986–1999 data.

Definitions

Age-specific rates

An age-specific rate refers to the frequency with which an event occurs relative to the number of people in a defined age group. In this document age-specific rates are given in both five year age groups and life-cycle age groups.

Age-standardised rates and 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 two rates, taking into account differences in the group size and age structure.

This publication has used the WHO standard world population in determining age-standardised rates and rate ratios.

Comparison with international data

Care should be taken when comparing the New Zealand data presented in this report with that of other countries. Many factors affect the recording and classification of suicide in different countries, including the level of proof required for a verdict; stigma associated with suicide within a particular society; the religion, social class or occupation of the victim; 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 the differences. Confidence intervals have therefore been excluded from the section on international comparisons. The data used in this publication to make international comparisons are the most recent available.

Deprivation

The New Zealand Social Deprivation Index is a measure of socioeconomic status calculated for small geographic areas. The calculation uses a range of variables from the 2001 Census of Population and Dwellings, which represent nine dimensions of social deprivation. The Social Deprivation Index is calculated at the level of meshblocks (geographical units containing a median of 90 people), and the Ministry of Health maps these to domicile codes, which are built up to the relevant geographic scale using weighted average census usually resident population counts. The nine variables (proportions in small areas) in the index, by decreasing weight, are:

1. income: people aged 18–59 receiving a means-tested benefit
2. employment: people aged 18–59 who are unemployed
3. income: people living in an equivalised household whose income is below a certain threshold
4. communication: people with no access to a telephone
5. transport: people with no access to a car
6. support: people aged under 60 living in a single-parent family
7. qualifications: people aged 18–59 with no qualifications
8. living space: people living in an equivalised household below a bedroom occupancy threshold
9. owned home: people not living in their own home.

Note that the 2001 index is used in this publication, with data coded using 2001 domiciles at DHB level, because the 2006 domicile codes were not introduced until 2008 and therefore do not apply. Further information can be obtained from: http://www.moh.govt.nz/moh.nsf/pagesmh/3357?Open

District Health Board rates

Age-standardised rates were calculated for each DHB region. Caution should be exercised when interpreting regional differences in hospitalisation rates for intentional self-harm among DHBs, because DHBs differ in their reporting practices and patient management.

Ethnicity

There are different methods for outputting ethnicity data. This publication uses 'prioritised ethnicity', by which each person represented in the data 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 important in terms of policy are not swamped by the European ethnic group (Ministry of Health 2004). This method is also a more robust method of dealing with the low rate of multiple ethnicities in health sector data.

This publication used two ethnic classifications for analysing suicides and intentional self-harm hospitalisations: the first is Māori, Pacific peoples, Asian peoples and European/other; and the second divides the population into Māori and non-Māori.

Prior to 1996, the concept of ethnicity was based on biological race (that is, percentage of blood) as recorded on death registration forms, and on a sociocultural concept (that is, cultural affiliation) as defined in the Census. From September 1995 death certificates have included a question comparable with the self-identified ethnicity question in the 1996 Census, which allows for multiple ethnic identities. *New Zealand Census – Mortality Study* adjustors can be applied to mortality counts from 1996 to 1999. These adjust data to allow for an undercount of Māori and Pacific peoples. From 2000 onwards comparisons across all 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).

Numbers, rates and ratios

The number of suicide deaths refers to the actual number of people who have died by suicide. The number of hospitalisations refers to the number of discharges from hospital with an intentional self-harm code on the patient record.

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.

The rate ratio refers to the frequency with which these events are reported in one population group compared with another.

R^2 value: the co-efficient of determination

The R^2 value is a statistical measure used to assess the variability of data in relationship to some other factor. Used in trend analysis in this publication, it explains how much of the variation in a dataset can be explained by a trend over time. It is computed as a value between 0 (0 percent) and 1 (100 percent): the higher the value, the better the evidence for a trend. If the R^2 value is low then it is not possible to assume that the values (for example, age-standardised rates) are decreasing (or increasing) over time: essentially the variation in the data is unexplained.

Statistical significance

Confidence intervals have been calculated for age-standardised rates at the 95 percent level using the methods presented in Keyfitz 1996.

A confidence interval is a range of values used to describe the uncertainty around a single value (such as an age-standardised rate) used to estimate the true values in a population, such as the underlying or true rate. Confidence intervals describe how different the estimate could have been if chance had led to a different set of data. They are calculated with a stated probability: typically 95 percent (which would indicate there is a 95 percent chance that the true value lies within the confidence intervals).

Confidence intervals may assist in comparing rates over time; if two confidence intervals do not overlap, then it is reasonable to assume that the difference is not due to chance (that is, is statistically significant). If two confidence intervals overlap it is not possible to draw any conclusion about the significance of any difference between them.

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Appendix 1: Further Tables

Table A1: Estimated New Zealand resident population for mean year 31 December 2007, five-year age groups

		Five-year age group																	
	Total	0–4	5–9	10–14	15–19	20–24	25–29	30–34	35–39	40–44	45–49	50–54	55–59	60–64	65–69	70–74	75–79	80–84	85+
Total																			
Total	4,230,700	292,360	290,030	306,000	319,750	293,840	266,750	277,980	314,470	318,890	312,750	270,280	243,320	197,970	162,880	122,520	104,330	75,780	60,860
Males	2,072,000	149,800	148,270	156,970	162,950	147,560	130,410	132,610	149,870	153,950	152,320	132,960	120,210	97,420	79,270	58,450	48,120	31,420	19,410
Females	2,158,800	142,550	141,760	149,030	156,800	146,280	136,340	145,370	164,600	164,940	160,430	137,320	123,110	100,540	83,600	64,080	56,210	44,360	41,450
Māori																			
Total	633,100	76,750	70,660	69,890	67,040	50,490	43,620	42,630	43,210	40,300	36,740	28,080	21,700	15,040	11,650	7590	4490	2170	1080
Males	310,300	39,410	36,230	35,930	33,710	24,470	20,710	19,920	20,170	19,130	17,280	13,460	10,460	7180	5580	3530	1950	850	360
Females	322,800	37,340	34,430	33,960	33,330	26,020	22,910	22,710	23,040	21,180	19,460	14,620	11,230	7860	6070	4060	2540	1320	720
Non-Māori																			
Total	3,597,600	215,610	219,370	236,110	252,710	243,350	223,130	235,350	271,260	278,590	276,010	242,200	221,620	182,930	151,230	114,930	99,840	73,610	59,780
Males	1,761,700	110,390	112,040	121,040	129,240	123,090	109,700	112,690	129,700	134,820	135,040	119,500	109,750	90,240	73,690	54,920	46,170	30,570	19,050
Females	1,836,000	105,210	107,330	115,070	123,470	120,260	113,430	122,660	141,560	143,760	140,970	122,700	111,880	92,680	77,530	60,020	53,670	43,040	40,730

Source: Statistics New Zealand

Table A2: Estimated New Zealand resident population, by five-year age group and sex, as at 30 June 2007, by DHB

		Five-year age group																	
	TOTAL	0–4	5–9	10–14	15–19	20–24	25–29	30–34	35–39	40–44	45–49	50–54	55–59	60–64	65–69	70–74	75–79	80–84	85+
Northland																			
Total:	153,800	10,860	11,610	12,740	11,350	6,840	6,520	8,100	10,080	11,190	11,740	10,830	10,060	8810	7730	5550	4480	3010	2320
Male:	75,500	5450	5910	6550	5930	3550	3050	3790	4730	5330	5600	5310	4970	4330	3930	2770	2200	1360	790
Female:	78,300	5420	5700	6190	5420	3290	3470	4300	5350	5860	6140	5510	5090	4480	3790	2780	2280	1650	1530
Waitemata																			
Total:	513,300	35,560	35,360	37,390	38,670	34,870	31,770	34,580	41,700	42,120	39,540	32,240	28,680	23,290	18,190	13,330	11,130	8240	6670
Male:	251,200	18,400	18,040	19,200	19,770	17,830	15,580	16,310	19,840	20,270	19,170	15,690	14,050	11,340	8740	6280	5110	3440	2130
Female:	262,100	17,160	17,320	18,190	18,910	17,040	16,190	18,270	21,870	21,850	20,370	16,550	14,620	11,950	9450	7050	6020	4800	4540
Auckland																			
Total:	433,200	28,250	24,770	25,490	30,020	43,420	41,870	36,860	35,340	33,440	30,260	25,390	21,400	16,070	12,720	8880	7360	5940	5750
Male:	212,600	14,580	12,760	13,160	15,020	21,150	20,570	17,900	17,120	16,490	14,850	12,480	10,690	7940	6170	4240	3340	2380	1730
Female:	220,700	13,660	12,010	12,340	15,000	22,270	21,300	18,950	18,220	16,950	15,410	12,910	10,710	8130	6550	4640	4020	3560	4020
Counties Manukau																			
Total:	464,600	39,500	38,350	39,460	39,210	32,670	29,620	30,630	35,660	35,610	32,750	27,010	23,450	18,960	14,600	9940	7880	5310	4030
Male:	227,200	20,330	19,470	20,110	20,000	16,160	13,980	14,200	16,810	17,200	15,940	13,300	11,490	9310	7100	4700	3610	2230	1290
Female:	237,400	19,180	18,880	19,350	19,210	16,520	15,640	16,430	18,840	18,410	16,800	13,710	11,960	9650	7510	5230	4280	3080	2740
Waikato																			
Total:	353,100	25,500	25,770	27,160	27,860	24,560	21,210	21,480	24,590	25,060	25,230	22,440	20,150	16,740	14,100	10,810	9210	6260	4990
Male:	173,400	12,800	13,200	14,130	14,090	12,540	10,660	10,300	11,630	12,020	12,180	11,020	9910	8160	6880	5240	4280	2700	1630
Female:	179,800	1,290	12,570	13,020	13,770	12,030	10,560	11,180	12,970	13,040	13,040	11,430	10,240	8580	7220	5570	4930	3570	3360
Lakes																			
Total:	101,400	7930	7880	8270	7600	5400	5800	6490	7410	7320	7670	6460	5870	4890	4090	2960	2480	1680	1250
Male:	49,800	4080	4080	4230	3930	2760	2740	3090	3540	3470	3760	3120	2840	2390	2030	1440	1190	680	400
Female:	51,700	3860	3800	4040	3660	2650	3070	3400	3870	3860	3910	3340	3030	2500	2070	1520	1290	990	850
Bay of Plenty																			
Total:	203,300	13,970	14,840	15,840	14,370	9450	9980	11,520	13,830	14,560	15,040	13,720	12,320	10,920	10,010	7810	6740	4850	3590
Male:	99,000	7240	7710	8050	7420	4730	4830	5450	6380	6910	7240	6560	6060	5230	4770	3750	3240	2120	1250
Female:	104,400	6730	7130	7780	6950	4710	5150	6070	7450	7640	7800	7160	6250	5690	5240	4060	3500	2720	2340
Tairawhiti																			
Total:	45,900	3750	3830	4110	3740	2400	2350	2700	3130	3150	3380	3060	2720	1990	1720	1350	1120	770	630
Male:	22,300	1910	1970	2050	1930	1150	1130	1270	1440	1510	1570	1540	1390	980	830	630	500	310	180
Female:	23,600	1840	1860	2060	1810	1250	1220	1430	1690	1640	1800	1520	1340	1010	890	720	620	460	450
Hawke's Bay																			
Total:	153,000	10,950	11,430	12,210	11,520	7440	7770	9080	10540	11130	11540	10160	9760	7870	6570	5000	4350	3140	2560
Male:	74,400	5570	5790	6300	5800	3840	3740	4270	5010	5300	5530	4970	4780	3900	3150	2390	1990	1250	830
Female:	78,600	5370	5640	5910	5730	3610	4030	4820	5540	5830	6010	5190	4970	3960	3420	2600	2360	1890	1730
Taranaki																			
Total:	107,300	7220	7620	8060	8090	5510	5750	6520	7380	7820	8100	7240	6530	5430	4530	3740	3320	2570	1910
Male:	52,900	3750	3940	4100	4190	2890	2870	3110	3530	3820	3940	3590	3280	2680	2210	1790	1550	1010	650
Female:	54,400	3470	3680	3960	3900	2620	2880	3410	3850	4000	4160	3650	3250	2760	2330	1950	1770	1560	1260
MidCentral																			
Total:	164,200	11,000	11,160	12,030	13,510	12,270	9,480	9,530	10,900	11,450	11,760	10,190	9470	7960	7050	5600	4740	3420	2700
Male:	79,900	5600	5610	6120	6770	6250	4630	4570	5170	5470	5770	4900	4610	3890	3410	2670	2200	1420	850
Female:	84,300	5400	5550	5910	6750	6020	4850	4960	5730	5980	5990	5280	4850	4070	3630	2930	2540	2010	1840
Whanganui																			
Total:	63,500	4190	4470	5090	4950	3240	3030	3440	4120	4550	4780	4380	3850	3250	2900	2400	2140	1520	1210
Male:	31,000	2100	2330	2570	2580	1700	1530	1630	1970	2210	2290	2200	1910	1560	1360	1090	1010	620	370
Female:	32,500	2080	2140	2510	2370	1540	1500	1810	2150	2340	2490	2180	1940	1690	1540	1310	1130	910	840
Capital & Coast																			
Total:	281,500	18,550	17,320	17,440	20,370	25,150	22,820	21,950	23,000	22,130	19,990	16,630	14,760	11,640	9330	6910	5680	4280	3510
Male:	136,100	9420	8750	8950	9900	11870	11290	10460	10950	10650	9750	8080	7200	5690	4460	3250	2550	1780	1110
Female:	145,400	9130	8570	8490	10470	13280	11530	11490	12050	11480	10240	8550	7560	5950	4860	3670	3140	2510	2400
Hutt Valley																			
Total:	141,500	10,290	10,400	10,660	10,940	8,700	8,220	9,580	11,110	10,980	10,910	8970	7990	6340	5120	3750	3290	2390	1900
Male:	69,600	5330	5370	5460	5610	4380	3940	4590	5410	5290	5330	4440	4000	3160	2510	1740	1470	990	550
Female:	72,000	4960	5030	5190	5320	4320	4280	4990	5690	5690	5580	4530	3980	3180	2600	2010	1820	1400	1350
Wairarapa																			
Total:	39,500	2590	2660	3010	2720	1530	1690	2040	2590	2710	3080	2970	2880	2390	2040	1550	1380	950	770
Male:	19,300	1310	1360	1510	1420	810	790	1000	1200	1310	1460	1480	1430	1200	1000	770	620	390	230
Female:	20,200	1290	1300	1500	1300	710	900	1040	1390	1400	1620	1490	1440	1190	1040	780	760	550	530
Nelson Marlborough																			
Total:	134,600	8210	8520	9320	9120	5970	6610	7790	9620	10,300	11,070	9940	9640	7890	6320	4770	3990	3030	2450
Male:	66,600	4180	4400	4870	4810	3150	3280	3810	4620	4880	5410	4930	4740	4020	3150	2330	1850	1300	850
Female:	68,000	4020	4120	4450	4300	2830	3320	3980	5000	5420	5670	5010	4910	3860	3170	2440	2140	1730	1600
West Coast																			
Total:	32,200	1930	2030	2390	2130	1430	1650	1870	2340	2570	2790	2470	2190	1820	1540	1100	900	610	490
Male:	16,350	1050	1040	1210	1120	770	800	870	1120	1280	1450	1330	1150	930	790	570	460	270	160
Female:	15,900	880	990	1180	1010	660	840	1000	1220	1290	1340	1130	1040	890	750	530	440	330	340

Table A2: Estimated New Zealand resident population, by five-year age group and sex, as at 30 June 2007, by DHB (continued)

		Five-year age group																	
	Total	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80-84	85+
Canterbury																			
Total:	490,100	31,370	30,660	32,430	35,650	35,820	30,070	32,190	37,200	37,010	36,670	32,050	29,280	23,530	19,250	14,970	13,520	10,230	8180
Male:	240,200	16,090	15,550	16,540	18,520	18,520	14,790	15,360	17,920	17,950	18,060	15,750	14,430	11,550	9350	7000	6030	4190	2610
Female:	249,900	15,280	15,120	15,890	17,130	17,300	15,280	16,830	19,280	19,050	18,610	16,300	14,860	11,980	9900	7970	7490	6030	5570
South Canterbury																			
Total:	55,300	3130	3490	4000	3730	2130	2340	2930	3670	4050	4360	4040	3940	3260	2930	2400	2170	1540	1170
Male:	27,200	1590	1810	2080	1950	1150	1140	1420	1780	1910	2130	2060	1990	1620	1410	1130	1040	580	380
Female:	28,100	1530	1680	1920	1780	980	1200	1510	1890	2140	2240	1980	1950	1640	1520	1270	1130	950	790
Otago																			
Total:	185,800	10,250	10,530	11,360	16,630	17,490	10,030	10,820	12,040	12,810	13,730	12,420	11,500	9240	7940	6130	5540	4100	3240
Male:	90,700	5200	5440	5840	8170	8570	4990	5290	5710	6230	6690	6290	5670	4640	3910	2910	2550	1650	980
Female:	95,100	5040	5100	5520	8470	8920	5040	5530	6330	6580	7040	6130	5830	4600	4030	3220	2990	2450	2260
Southland																			
Total:	110,400	7360	7210	7680	7330	6810	7340	7720	8220	8550	8590	7360	6600	5200	4470	3460	2920	1930	1680
Male:	55,300	3820	3710	4000	3800	3490	3670	3880	4000	4190	4300	3800	3430	2660	2230	1670	1360	770	480
Female:	55,200	3540	3500	3680	3530	3320	3670	3850	4220	4360	4290	3550	3170	2540	2240	1790	1560	1160	1200
Other and unspecified																			
Total:	420	5	10	10	5	20	25	35	30	30	45	50	45	45	30	15	10	5	0
Male:	280	0	5	5	5	15	20	25	20	15	30	35	30	30	25	10	10	5	0
Female:	140	0	5	5	5	5	5	10	5	10	15	15	15	15	10	10	0	0	0
Total																			
Total:	4,228,300	292,390	289,910	306,140	319,510	293,140	265,940	277,860	314,510	318,530	313,030	270,030	243,100	197,530	163,170	122,410	104,370	75,760	60,990
Male:	2,070,800	149,810	148,230	157,040	162,720	147,270	130,010	132,590	149,900	153,710	152,450	132,880	120,070	97,240	79,410	58,370	48,150	31,440	19,470
Female:	2,157,600	142,580	141,680	149,100	156,790	145,870	135,930	145,280	164,600	164,830	160,570	137,150	123,030	100,290	83,760	64,040	56,220	44,320	41,530

Source: Statistics New Zealand

Table A3: New Zealand projected deprivation quintile population by sex and five-year age group, 2007

		Age group																	
	Total	0–4	5–9	10–14	15–19	20–24	25–29	30–34	35–39	40–44	45–49	50–54	55–59	60–64	65–69	70–74	75–79	80–84	85+
Total population																			
Total:	4,167,750	269,095	287,845	302,925	326,095	299,080	252,340	267,595	305,840	313,265	310,745	268,460	242,870	194,515	161,050	121,095	105,130	75,235	64,570
Male:	2,049,755	137,780	147,565	155,955	166,475	152,745	127,125	129,770	146,570	151,285	151,290	132,140	120,600	95,990	78,450	57,235	48,110	30,650	20,020
Female:	2,117,995	131,315	140,280	146,970	159,620	146,335	125,215	137,825	159,270	161,980	159,455	136,320	122,270	98,525	82,600	63,860	57,020	44,585	44,550
Quintile 1																			
Total:	773,844.0	44,628.6	51,638.9	56,849.4	58,623.3	47,144.9	39,566.8	46,194.1	60,355.5	67,568.3	69,435.4	60,355.6	52,000.5	37,387.1	27,235.8	18,506.4	15,725.8	10,965.3	9662.2
Male:	385,095.7	22,931.2	26,381.6	29,237.7	30,387.4	25,077.7	19,963.9	22,010.0	28,392.0	32,411.9	34,100.0	30,266.7	26,666.6	19,193.4	13,868.0	9176.8	7405.5	4630.9	2994.3
Female:	388,748.3	21,697.3	25,257.3	27,611.7	28,235.9	22,067.2	19,602.9	24,184.1	31,963.5	35,156.4	35,335.4	30,089.0	25,333.9	18,193.7	13,367.8	9329.6	8320.3	6334.4	6668.0
Quintile 2																			
Total:	813,137.7	47,445.6	53,593.8	58,460.0	59,818.0	50,452.6	45,671.0	51,126.3	62,910.1	65,241.5	65,325.4	56,091.8	50,754.3	40,087.5	32,260.4	23,977.2	20,829.3	15,346.3	13,746.5
Male:	401,062.5	24,175.3	27,590.2	30,052.8	30,941.9	26,363.4	23,128.1	24,703.4	29,865.5	31,751.0	32,075.5	27,721.5	25,396.7	19,829.4	15,731.3	11,456.5	9689.7	6326.1	4264.2
Female:	412,075.3	23,270.4	26,003.6	28,407.2	28,876.1	24,089.2	22,542.9	26,422.9	33,044.6	33,490.5	33,250.0	28,370.4	25,357.6	20,258.1	16,529.1	12,520.7	11,139.6	9,020.2	9,482.3
Quintile 3																			
Total:	847,183.4	52,104.0	54,851.9	57,375.9	61,924.3	60,407.1	54,755.0	57,250.5	63,158.2	62,965.7	61,717.4	53,768.5	49,799.3	41,304.6	34,854.5	26,439.2	23,262.0	16,535.7	14,709.8
Male:	417,000.2	26,600.2	27,964.7	29,546.8	32,149.9	30,977.9	27,666.7	28,144.9	30,673.3	30,659.6	30,136.7	26,340.1	24,522.1	20,249.7	16,975.1	12,469.6	10,664.5	6723.3	4535.3
Female:	430,183.2	25,503.8	26,887.2	27,829.1	29,774.4	29,429.2	27,088.3	29,105.6	32,484.9	32,306.1	31,580.7	27,428.4	25,277.2	21,054.9	17,879.4	13,969.6	12,597.5	9,812.4	10,174.5
Quintile 4																			
Total:	893,476.4	58,496.7	60,146.7	62,171.7	69,009.8	66,706.5	56,292.6	57,846.9	62,680.9	61,993.5	61,361.1	53,049.2	49,298.9	42,327.2	38,041.6	30,165.6	27,084.2	19,996.9	16,806.4
Male:	434,441.3	29,903.4	30,769.7	32,118.9	34,961.6	33,427.1	28,381.6	28,173.1	30,517.8	29,760.2	29,516.8	25,751.4	23,778.7	20,339.8	17,927.8	13,876.0	12,097.1	7926.6	5213.9
Female:	459,035.0	28,593.3	29,377.0	30,052.9	34,048.2	33,279.4	27,911.0	29,673.8	32,163.1	32,233.3	31,844.3	27,297.8	25,520.2	21,987.4	20,113.8	16,289.6	14,987.1	12,070.4	11,592.5
Quintile 5																			
Total:	837,522.8	66,252.2	67,441.9	67,901.4	76,581.4	74,225.3	55,914.3	55,010.2	56,535.9	55,297.3	52,659.5	44,945.9	40,805.9	33,239.4	28,566.8	21,962.2	18,188.3	12,362.2	9632.7
Male:	410,700.6	34,071.4	34,765.1	34,903.1	37,952.0	36,807.1	27,911.4	26,636.4	27,016.1	26,602.4	25,321.1	21,924.5	20,121.7	16,268.9	13,895.9	10,238.3	8228.1	5029.7	3007.3
Female:	426,822.2	32,180.7	32,676.8	32,998.3	38,629.4	37,418.2	28,002.9	28,373.8	29,519.8	28,694.9	27,338.4	23,021.4	20,684.2	16,970.5	14,670.9	11,723.9	9960.2	7332.5	6625.4
Other and unspecified																			
Total:	2585.8	168.0	171.8	166.6	138.2	143.6	140.3	167.1	199.5	198.7	246.2	249.0	211.2	169.1	90.9	44.4	40.4	28.6	12.3
Male:	1454.8	98.4	93.7	95.6	82.2	91.8	73.4	102.2	105.5	99.8	140.0	135.8	114.3	108.7	52.0	17.8	25.1	13.4	5.0
Female:	1131.0	69.6	78.1	71.0	56.0	51.8	66.9	64.9	94.0	98.9	106.2	113.1	96.9	60.4	38.9	26.6	15.3	15.2	7.3

Source: Ministry of Health

Table A4: Suicides and age-specific rates by five-year age group and sex, 1997

Age group	Males		Females	
	Number	Rate	Number	Rate
5–9	0	–	0	–
10–14	1	–	1	–
15–19	30	18.4	12	7.7
20–24	41	27.8	11	7.5
25–29	33	25.3	6	4.4
30–34	45	33.9	7	4.8
35–39	46	30.7	15	9.1
40–44	35	22.7	17	10.3
45–49	38	24.9	8	5.0
50–54	29	21.8	11	8.0
55–59	19	15.8	11	8.9
60–64	12	12.3	7	7.0
65–69	10	12.6	0	–
70–74	9	15.4	0	–
75–79	10	20.8	0	–
80–84	9	28.6	3	–
85+	3	–	4	–
Total	370	17.4	113	4.9

Source: New Zealand Mortality Collection

Note: Rates for some age groups have been suppressed because of small numbers of deaths in these categories.

Table A5: Suicide deaths and age-standardised rates, by DHB, 2003–2007

DHB	Number	Rate
Northland	116	17.1
Waitemata	240	9.2
Auckland	223	9.5
Counties Manukau	259	11.9
Waikato	197	11.3
Lakes	62	12.5
Bay of Plenty	152	15.6
Tairawhiti	41	18.5
Hawke's Bay	112	15.3
Taranaki	73	14.4
MidCentral	127	15.4
Whanganui	50	16.8
Capital & Coast	132	8.9
Hutt Valley	59	8.6
Wairarapa	37	20.3
Nelson Marlborough	83	11.9
West Coast	24	13.8
Canterbury	306	11.9
South Canterbury	30	11.7
Otago	110	11.3
Southland	82	15.4

Source: New Zealand Mortality Collection

Note: The rate shown is the age-standardised rate per 100,000 population, standardised to the WHO population tables.

Table A6: Suicide deaths, by five-year age-group and sex, 1948–2007

		Age Groups																						
		Total	0–	1–	2–	3–	4–	5–	10–	15–	20–	25–	30–	35–	40–	45–	50–	55–	60–	65–	70–	75–	80–	85+
	Total	187	0	0	0	0	0	0	0	6	12	8	17	17	14	16	24	14	18	19	12	9	1	0
1948	Male	134	0	0	0	0	0	0	0	5	11	6	9	9	10	12	18	8	15	15	7	8	1	0
	Female	53	0	0	0	0	0	0	0	1	1	2	8	8	4	4	6	6	3	4	5	1	0	0
	Total	176	0	0	0	0	0	0	0	5	13	16	19	11	14	19	17	16	16	14	10	2	2	2
1949	Male	119	0	0	0	0	0	0	0	4	9	9	12	10	7	15	11	9	10	8	10	1	2	2
	Female	57	0	0	0	0	0	0	0	1	4	7	7	1	7	4	6	7	6	6	0	1	0	0
	Total	172	0	0	0	0	0	0	0	8	6	4	13	15	13	15	13	22	13	23	17	2	5	3
1950	Male	128	0	0	0	0	0	0	0	8	6	3	9	12	8	8	8	17	6	19	14	2	5	3
	Female	44	0	0	0	0	0	0	0	0	0	1	4	3	5	7	5	5	7	4	3	0	0	0
	Total	188	0	0	0	0	0	0	0	4	8	9	20	15	17	22	22	20	12	16	14	6	2	1
1951	Male	141	0	0	0	0	0	0	0	4	7	6	15	11	12	20	17	12	8	14	9	5	1	0
	Female	47	0	0	0	0	0	0	0	0	1	3	5	4	5	2	5	8	4	2	5	1	1	1
	Total	198	0	0	0	0	0	0	1	6	7	18	13	11	15	14	20	24	21	13	13	13	7	2
1952	Male	148	0	0	0	0	0	0	1	5	7	12	9	8	10	10	12	21	12	11	10	12	7	1
	Female	50	0	0	0	0	0	0	0	1	0	6	4	3	5	4	8	3	9	2	3	1	0	1
	Total	196	0	0	0	0	0	0	1	4	8	7	9	15	23	14	24	24	16	19	17	11	1	3
1953	Male	140	0	0	0	0	0	0	1	4	6	6	8	7	18	10	18	14	11	12	15	7	1	2
	Female	56	0	0	0	0	0	0	0	0	2	1	1	8	5	4	6	10	5	7	2	4	0	1
	Total	177	0	0	0	0	0	0	1	2	3	19	10	13	10	9	20	26	15	20	15	9	3	2
1954	Male	134	0	0	0	0	0	0	1	2	3	13	10	11	7	8	14	18	8	16	12	7	2	2
	Female	43	0	0	0	0	0	0	0	0	0	6	0	2	3	1	6	8	7	4	3	2	1	0
	Total	187	0	0	0	0	0	0	0	3	9	19	11	10	18	19	20	25	17	11	13	7	4	1
1955	Male	136	0	0	0	0	0	0	0	2	5	15	10	9	14	16	13	18	10	3	10	6	4	1
	Female	51	0	0	0	0	0	0	0	1	4	4	1	1	4	3	7	7	7	8	3	1	0	0
	Total	199	0	0	0	0	0	0	0	2	6	12	10	14	24	22	36	19	17	14	8	10	3	2
1956	Male	132	0	0	0	0	0	0	0	1	5	10	7	10	11	13	25	13	11	11	4	7	2	2
	Female	67	0	0	0	0	0	0	0	1	1	2	3	4	13	9	11	6	6	3	4	3	1	0
	Total	215	0	0	0	0	0	0	1	4	12	13	21	12	15	21	29	19	20	21	14	10	3	0
1957	Male	153	0	0	0	0	0	0	1	4	11	9	16	11	9	15	18	11	11	18	8	8	3	0
	Female	62	0	0	0	0	0	0	0	0	1	4	5	1	6	6	11	8	9	3	6	2	0	0
	Total	220	0	0	0	0	0	0	2	7	9	11	10	17	23	29	34	14	17	17	11	8	4	7
1958	Male	164	0	0	0	0	0	0	2	6	7	8	9	12	16	23	26	9	12	13	6	7	2	6
	Female	56	0	0	0	0	0	0	0	1	2	3	1	5	7	6	8	5	5	4	5	1	2	1
	Total	204	0	0	0	0	0	0	0	6	11	13	15	18	23	23	19	20	11	9	14	11	9	2
1959	Male	157	0	0	0	0	0	0	0	5	9	10	13	16	17	18	15	14	5	5	11	9	8	2
	Female	47	0	0	0	0	0	0	0	1	2	3	2	2	6	5	4	6	6	4	3	2	1	0
	Total	230	0	0	0	0	0	0	0	6	8	16	12	19	32	33	19	27	17	12	16	8	4	1
1960	Male	165	0	0	0	0	0	0	0	3	7	15	9	14	23	26	13	18	9	6	11	7	3	1
	Female	65	0	0	0	0	0	0	0	3	1	1	3	5	9	7	6	9	8	6	5	1	1	0
	Total	204	0	0	0	0	0	0	1	4	13	18	12	22	16	22	19	27	7	18	14	7	3	1
1961	Male	155	0	0	0	0	0	0	1	4	11	16	8	19	13	13	14	20	6	13	8	6	3	0
	Female	49	0	0	0	0	0	0	0	0	2	2	4	3	3	9	5	7	1	5	6	1	0	1
	Total	208	0	0	0	0	0	0	0	5	8	14	19	20	28	20	18	17	23	9	12	9	3	3
1962	Male	142	0	0	0	0	0	0	0	4	4	10	17	12	18	11	13	9	18	6	8	8	2	2
	Female	66	0	0	0	0	0	0	0	1	4	4	2	8	10	9	5	8	5	3	4	1	1	1
	Total	244	0	0	0	0	0	0	0	5	18	9	14	15	27	35	28	28	20	12	20	7	5	1
1963	Male	157	0	0	0	0	0	0	0	5	14	7	11	12	19	21	14	14	12	8	13	3	3	1
	Female	87	0	0	0	0	0	0	0	0	4	2	3	3	8	14	14	14	8	4	7	4	2	0
	Total	207	0	0	0	0	0	0	0	2	11	13	12	11	18	27	25	30	30	10	11	5	2	0
1964	Male	127	0	0	0	0	0	0	0	1	4	8	9	8	15	20	14	16	18	5	3	5	1	0
	Female	80	0	0	0	0	0	0	0	1	7	5	3	3	3	7	11	14	12	5	8	0	1	0
	Total	242	0	0	0	0	0	0	0	6	15	14	15	17	20	29	32	25	24	9	16	13	6	1
1965	Male	161	0	0	0	0	0	0	0	2	11	9	9	11	15	20	25	17	13	6	10	7	5	1
	Female	81	0	0	0	0	0	0	0	4	4	5	6	6	5	9	7	8	11	3	6	6	1	0
	Total	246	0	0	0	0	0	0	3	10	13	4	11	20	23	28	39	26	25	14	18	6	5	1
1966	Male	156	0	0	0	0	0	0	2	4	7	2	8	12	16	21	22	13	18	8	13	5	4	1
	Female	90	0	0	0	0	0	0	1	6	6	2	3	8	7	7	17	13	7	6	5	1	1	0
	Total	274	0	0	0	0	0	0	1	6	21	11	21	27	27	27	26	32	24	18	15	11	5	2
1967	Male	191	0	0	0	0	0	0	1	5	16	8	18	24	19	19	16	20	18	9	6	8	3	1
	Female	83	0	0	0	0	0	0	0	1	5	3	3	3	8	8	10	12	6	9	9	3	2	1
	Total	265	0	0	0	0	0	0	2	8	17	10	18	27	23	34	33	25	29	22	7	5	4	1
1968	Male	179	0	0	0	0	0	0	1	6	14	8	12	21	16	23	18	17	15	17	4	4	2	1
	Female	86	0	0	0	0	0	0	1	2	3	2	6	6	7	11	15	8	14	5	3	1	2	0
	Total	278	0	0	0	0	0	0	2	13	23	21	18	15	25	31	22	31	22	25	14	10	4	2
1969	Male	181	0	0	0	0	0	0	2	6	16	16	11	9	20	20	10	20	14	13	10	8	4	2
	Female	97	0	0	0	0	0	0	0	7	7	5	7	6	5	11	12	11	8	12	4	2	0	0

Table A6: Suicide deaths, by five-year age-group and sex, 1948–2007 (continued)

		Age Groups																						
		Total	0–	1–	2–	3–	4–	5–	10–	15–	20–	25–	30–	35–	40–	45–	50–	55–	60–	65–	70–	75–	80–	85+
	Total	271	0	0	0	0	0	1	2	15	24	12	11	17	33	26	28	28	18	24	16	7	9	0
1970	Male	178	0	0	0	0	0	1	2	12	18	8	10	11	26	19	17	13	7	16	8	5	5	0
	Female	93	0	0	0	0	0	0	0	3	6	4	1	6	7	7	11	15	11	8	8	2	4	0
	Total	237	0	0	0	0	0	0	2	15	21	14	10	20	19	28	29	22	22	11	13	7	2	2
1971	Male	149	0	0	0	0	0	0	2	10	14	7	5	15	16	17	16	12	12	6	9	5	1	2
	Female	88	0	0	0	0	0	0	0	5	7	7	5	5	3	11	13	10	10	5	4	2	1	0
	Total	262	0	0	0	0	0	0	2	12	24	20	25	13	24	22	28	27	19	17	17	7	1	4
1972	Male	173	0	0	0	0	0	0	1	10	13	12	15	9	16	16	20	19	13	8	12	5	1	3
	Female	89	0	0	0	0	0	0	1	2	11	8	10	4	8	6	8	8	6	9	5	2	0	1
	Total	261	0	0	0	0	0	0	3	19	20	18	17	12	14	29	35	21	24	14	16	11	5	3
1973	Male	181	0	0	0	0	0	0	2	14	13	12	15	11	10	22	22	15	12	7	13	7	3	3
	Female	80	0	0	0	0	0	0	1	5	7	6	2	1	4	7	13	6	12	7	3	4	2	0
	Total	273	0	0	0	0	0	0	2	13	23	24	17	20	24	26	19	28	31	19	17	3	4	3
1974	Male	187	0	0	0	0	0	0	1	10	17	13	12	15	14	21	13	15	19	16	12	3	3	3
	Female	86	0	0	0	0	0	0	1	3	6	11	5	5	10	5	6	13	12	3	5	0	1	0
	Total	293	0	0	0	0	0	0	1	20	32	25	16	25	24	30	20	26	28	20	10	5	7	4
1975	Male	195	0	0	0	0	0	0	1	12	25	17	9	19	15	20	13	16	17	12	7	4	5	3
	Female	98	0	0	0	0	0	0	0	8	7	8	7	6	9	10	7	10	11	8	3	1	2	1
	Total	291	0	0	0	0	0	0	1	15	27	28	18	17	24	25	22	31	31	19	18	11	3	1
1976	Male	198	0	0	0	0	0	0	1	11	23	18	13	13	16	15	11	21	22	15	8	9	1	1
	Female	93	0	0	0	0	0	0	0	4	4	10	5	4	8	10	11	10	9	4	10	2	2	0
	Total	365	0	0	0	0	0	0	2	26	44	41	33	34	25	30	29	28	20	20	11	11	8	3
1977	Male	256	0	0	0	0	0	0	1	23	36	29	23	20	18	25	20	13	13	12	6	8	6	3
	Female	109	0	0	0	0	0	0	1	3	8	12	10	14	7	5	9	15	7	8	5	3	2	0
	Total	322	0	0	0	0	0	0	3	18	37	29	22	20	23	29	25	30	32	15	20	13	4	2
1978	Male	208	0	0	0	0	0	0	2	17	30	21	16	12	15	16	15	13	17	9	13	8	3	1
	Female	114	0	0	0	0	0	0	1	1	7	8	6	8	8	13	10	17	15	6	7	5	1	1
	Total	302	0	0	0	0	0	0	0	23	24	31	26	21	19	31	27	23	24	16	17	14	5	1
1979	Male	213	0	0	0	0	0	0	0	17	19	22	21	14	14	24	22	12	17	9	9	8	4	1
	Female	89	0	0	0	0	0	0	0	6	5	9	5	7	5	7	5	11	7	7	8	6	1	0
	Total	337	0	0	0	0	0	0	2	34	47	34	30	24	19	16	34	20	15	17	19	13	7	6
1980	Male	225	0	0	0	0	0	0	2	20	38	25	17	18	13	11	16	16	13	10	12	6	5	3
	Female	112	0	0	0	0	0	0	0	14	9	9	13	6	6	5	18	4	2	7	7	7	2	3
	Total	320	0	0	0	0	0	0	4	17	43	26	27	30	20	24	19	25	25	15	23	11	8	3
1981	Male	241	0	0	0	0	0	0	4	14	36	16	21	25	17	19	12	19	17	12	17	6	3	3
	Female	79	0	0	0	0	0	0	0	3	7	10	6	5	3	5	7	6	8	3	6	5	5	0
	Total	364	0	0	0	0	0	0	1	18	45	34	35	29	19	18	23	47	26	21	25	10	10	3
1982	Male	257	0	0	0	0	0	0	1	16	36	27	28	21	12	10	14	27	15	17	18	7	6	2
	Female	107	0	0	0	0	0	0	0	2	9	7	7	8	7	8	9	20	11	4	7	3	4	1
	Total	352	0	0	0	0	0	0	4	24	46	37	27	34	29	18	21	27	19	30	15	14	5	2
1983	Male	250	0	0	0	0	0	0	3	20	38	26	22	25	15	12	12	20	11	24	8	9	4	1
	Female	102	0	0	0	0	0	0	1	4	8	11	5	9	14	6	9	7	8	6	7	5	1	1
	Total	389	0	0	0	0	0	0	4	25	47	49	38	30	29	23	22	27	25	18	18	16	14	4
1984	Male	297	0	0	0	0	0	0	2	21	36	41	28	26	22	17	16	18	18	13	14	12	11	2
	Female	92	0	0	0	0	0	0	2	4	11	8	10	4	7	6	6	9	7	5	4	4	3	2
	Total	338	0	0	0	0	0	0	5	30	45	36	28	21	21	23	21	25	16	25	20	14	6	2
1985	Male	255	0	0	0	0	0	0	2	25	35	26	25	15	15	17	17	14	12	20	14	11	5	2
	Female	83	0	0	0	0	0	0	3	5	10	10	3	6	6	6	4	11	4	5	6	3	1	0
	Total	414	0	0	0	0	0	0	4	38	53	43	31	41	37	23	30	23	28	22	14	15	9	3
1986	Male	301	0	0	0	0	0	0	2	29	39	34	19	32	29	19	20	14	22	14	10	9	7	2
	Female	113	0	0	0	0	0	0	2	9	14	9	12	9	8	4	10	9	6	8	4	6	2	1
	Total	463	0	0	0	0	0	0	8	36	77	64	39	30	30	33	27	35	18	18	11	17	16	4
1987	Male	363	0	0	0	0	0	0	7	29	64	51	28	24	26	24	18	26	16	14	8	14	11	3
	Female	100	0	0	0	0	0	0	1	7	13	13	11	6	4	9	9	9	2	4	3	3	5	1
	Total	484	0	0	0	0	0	0	2	54	77	53	48	28	31	34	23	30	32	17	25	19	10	1
1988	Male	381	0	0	0	0	0	0	2	47	59	40	32	24	28	32	18	27	19	12	21	14	6	0
	Female	103	0	0	0	0	0	0	0	7	18	13	16	4	3	2	5	3	13	5	4	5	4	1
	Total	465	0	0	0	0	0	1	7	58	73	66	35	30	34	31	26	15	24	25	17	7	11	5
1989	Male	372	0	0	0	0	0	1	7	50	61	50	29	26	27	23	20	10	16	21	10	7	10	4
	Female	93	0	0	0	0	0	0	0	8	12	16	6	4	7	8	6	5	8	4	7	0	1	1
	Total	455	0	0	0	0	0	0	2	44	86	53	40	42	34	27	25	25	22	14	14	13	10	4
1990	Male	363	0	0	0	0	0	0	2	37	74	43	29	35	22	23	19	20	19	9	10	8	9	4
	Female	92	0	0	0	0	0	0	0	7	12	10	11	7	12	4	6	5	3	5	4	5	1	0
	Total	474	0	0	0	0	0	0	4	45	80	65	49	42	39	41	28	13	18	18	14	10	7	1
1991	Male	380	0	0	0	0	0	0	4	41	68	53	42	33	27	31	19	11	13	15	6	9	7	1
	Female	94	0	0	0	0	0	0	0	4	12	12	7	9	12	10	9	2	5	3	8	1	0	0

Table A6: Suicide deaths, by five-year age-group and sex, 1948–2007 (continued)

		Age Groups																					
		Total	0–	1–	2–	3–	4–	5–	10–	15–	20–	25–	30–	35–	40–	45–	50–	55–	60–	65-–	70–	75–	80–	85+
1992	Total	493	0	0	0	0	0	0	5	44	85	71	42	39	34	33	30	27	34	13	15	8	7	6
	Male	397	0	0	0	0	0	0	4	39	73	60	38	34	25	24	18	18	27	9	13	5	6	4
	Female	96	0	0	0	0	0	0	1	5	12	11	4	5	9	9	12	9	7	4	2	3	1	2
1993	Total	443	0	0	0	0	0	0	3	40	86	50	55	36	33	35	19	17	17	20	13	12	5	2
	Male	349	0	0	0	0	0	0	2	34	76	38	40	33	22	29	11	13	9	18	9	10	4	1
	Female	94	0	0	0	0	0	0	1	6	10	12	15	3	11	6	8	4	8	2	4	2	1	1
1994	Total	512	0	0	0	0	0	0	7	56	81	53	63	32	38	34	25	23	25	20	24	10	14	7
	Male	409	0	0	0	0	0	0	5	44	67	44	49	27	32	26	17	19	23	17	17	6	10	6
	Female	103	0	0	0	0	0	0	2	12	14	9	14	5	6	8	8	4	2	3	7	4	4	1
1995	Total	543	0	0	0	0	0	0	6	59	97	66	50	47	38	44	29	23	14	26	16	15	10	3
	Male	427	0	0	0	0	0	0	4	45	77	58	38	38	29	35	20	20	9	21	14	9	8	2
	Female	116	0	0	0	0	0	0	2	14	20	8	12	9	9	9	9	3	5	5	2	6	2	1
1996	Total	540	0	0	0	0	0	0	7	59	84	73	69	49	31	38	25	24	15	20	22	8	10	6
	Male	428	0	0	0	0	0	0	3	38	67	64	57	42	24	27	19	21	13	18	16	5	8	6
	Female	112	0	0	0	0	0	0	4	21	17	9	12	7	7	11	6	3	2	2	6	3	2	0
1997	Total	561	0	0	0	0	0	0	8	72	70	83	71	51	50	31	29	24	18	13	17	10	9	5
	Male	440	0	0	0	0	0	0	5	53	60	70	54	40	36	22	21	17	16	12	15	7	9	3
	Female	121	0	0	0	0	0	0	3	19	10	13	17	11	14	9	8	7	2	1	2	3	0	2
1998	Total:	577	0	0	0	0	0	0	12	66	74	80	56	56	56	40	23	28	22	16	22	14	8	4
	Male:	445	0	0	0	0	0	0	8	40	65	66	45	46	37	30	17	24	19	14	14	14	4	2
	Female:	132	0	0	0	0	0	0	4	26	9	14	11	10	19	10	6	4	3	2	8	0	4	2
1999	Total:	516	0	0	0	0	0	0	6	48	72	67	59	61	48	33	33	23	15	9	18	13	8	3
	Male:	385	0	0	0	0	0	0	3	29	54	56	50	45	29	25	26	19	13	4	14	10	6	2
	Female:	131	0	0	0	0	0	0	3	19	18	11	9	16	19	8	7	4	2	5	4	3	2	1
2000	Total:	458	0	0	0	0	0	0	4	42	54	71	55	51	31	30	31	26	16	14	13	5	9	6
	Male:	375	0	0	0	0	0	0	3	31	50	58	47	40	25	23	25	21	11	12	13	5	6	5
	Female:	83	0	0	0	0	0	0	1	11	4	13	8	11	6	7	6	5	5	2	0	0	3	1
2001	Total:	507	0	0	0	0	0	0	3	43	67	59	62	57	61	27	23	20	21	17	13	17	13	4
	Male:	388	0	0	0	0	0	0	1	30	57	42	50	46	50	18	15	16	15	13	10	14	7	4
	Female:	119	0	0	0	0	0	0	2	13	10	17	12	11	11	9	8	4	6	4	3	3	6	0
2002	Total:	466	0	0	0	0	0	0	0	40	55	52	56	57	48	35	30	28	18	14	12	6	6	9
	Male:	353	0	0	0	0	0	0	0	25	40	43	39	43	40	27	21	25	13	11	10	5	4	7
	Female:	113	0	0	0	0	0	0	0	15	15	9	17	14	8	8	9	3	5	3	2	1	2	2
2003	Total:	517	0	0	0	0	0	0	5	51	46	46	55	60	51	47	41	25	24	12	17	17	14	6
	Male:	376	0	0	0	0	0	0	4	35	31	35	44	37	44	34	28	21	18	8	11	14	9	3
	Female:	141	0	0	0	0	0	0	1	16	15	11	11	23	7	13	13	4	6	4	6	3	5	3
2004	Total:	488	0	0	0	0	0	0	6	50	63	50	45	57	47	41	24	32	20	11	12	12	9	9
	Male:	379	0	0	0	0	0	0	4	34	49	44	32	44	40	31	17	23	17	9	8	11	7	9
	Female:	109	0	0	0	0	0	0	2	16	14	6	13	13	7	10	7	9	3	2	4	1	2	0
2005	Total:	511	0	0	0	0	0	0	2	45	63	56	54	55	51	41	39	42	15	18	5	12	6	7
	Male:	380	0	0	0	0	0	0	0	36	48	44	40	42	33	32	31	29	13	13	3	8	2	6
	Female:	131	0	0	0	0	0	0	2	9	15	12	14	13	18	9	8	13	2	5	2	4	4	1
2006	Total:	526	0	0	0	0	0	0	6	61	58	54	48	53	54	38	43	46	14	13	16	4	6	12
	Male:	388	0	0	0	0	0	0	2	49	46	36	37	37	38	30	31	36	13	8	11	1	4	9
	Female:	138	0	0	0	0	0	0	4	12	12	18	11	16	16	8	12	10	1	5	5	3	2	3
2007 Provisional	Total:	483	0	0	0	0	0	0	2	42	52	39	52	61	52	46	40	30	19	10	9	10	12	7
	Male:	370	0	0	0	0	0	0	1	30	41	33	45	46	35	38	29	19	12	10	9	10	9	3
	Female:	113	0	0	0	0	0	0	1	12	11	6	7	15	17	8	11	11	7	0	0	0	3	4

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 10-051

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:

Sector Services
Information Directorate
Ministry of Health
PO Box 5013
Wellington
Ph: (04) 496 2000
Fax: (04) 816 2898
Email: data-inquiries@moh.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 contact:
Wickliffe Limited
PO Box 932
Dunedin
Ph: (04) 496 2277
Email: moh@wickliffe.co.nz
Quote: HP 4977