

New Zealand **Suicide Prevention** Action Plan

2008–2012

The Evidence for Action



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Cover description: The paua shell represents the protective structure that nurtures and supports the individual, the family/whānau, and the community.

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MANATŪ HAUORA

Foreword

The suicide of a loved one has a devastating impact on friends, family and communities. At a personal level the grief of losing someone to suicide can be overwhelming. As a society it is a tragedy that our most vulnerable members feel they have no other option than to take their own lives.

Suicide is complex and its prevention requires the combined efforts of many individuals and organisations across a wide range of sectors. We can all contribute at different points in people's lives and in a variety of environments. I believe by taking a long term and collaborative approach we can make a difference to the lives of New Zealanders.

In recent years there have been many achievements in suicide prevention. We now know a great deal more about the risk factors for suicide, we have a comprehensive range of policies, programmes and services across sectors, and we have seen almost a 20 percent decrease in suicide since the late 1990s. However, there are still too many New Zealanders taking their own lives and there is still much more we need to do.

I was proud to release the *New Zealand Suicide Prevention Strategy 2006–2016*, which is a comprehensive document providing a national framework for suicide prevention. This Action Plan provides more detail about how the high level goals of the Strategy will be achieved. It describes the types of actions required across the range of sectors involved in suicide prevention.

The Action Plan is made up of two companion documents. This document, *The Evidence for Action*, provides detail about the evidence, rationale and context underlying the actions. It should be read alongside the companion document *The Summary for Action*, which provides detailed tables outlining outcomes, actions, milestones, whānau ora considerations, timeframes and agencies responsible for implementing the actions.

Together the Strategy and Action Plan will help guide and co-ordinate suicide prevention. But it is the broad range of people working together throughout New Zealand who really make a difference. I recognise that there are already many people with a great deal of expertise and commitment to suicide prevention.

I hope this Action Plan will help us move towards the vision of the New Zealand Suicide Prevention Strategy – of a society where people feel they are valued and nurtured, where they value their own life, where they are supported and strengthened if they experience difficulties, and where they do not want to take their lives or harm themselves.



Hon Jim Anderton
Associate Minister of Health

Acknowledgements

The development of this Action Plan has involved input from a wide range of people, all with a sincere and enduring commitment to working to reduce rates of suicide and suicidal behaviour and its devastating impact on loved ones and society as a whole. As Appendix 1 shows, those involved have included researchers, funders, government agencies, community organisations, people providing support and services to those at risk of suicide and their families/whānau, people who have experienced suicidal thoughts or behaviour, and those who have lost a loved one to suicide.

The development process has been complex and has challenged us all as we have endeavoured to balance diverse perspectives and agree on a programme of action that will make the most meaningful impact. We trust that the resulting Action Plan provides a strong, evidence-based and practical framework for guiding implementation of the *New Zealand Suicide Prevention Strategy 2006–2016* for the next five years.

We would like to express our sincere gratitude to all who contributed to this process and our appreciation for the support and encouragement we have received. We would particularly like to acknowledge the valuable contributions of:

- the Suicide Prevention Action Plan Taskforce
- the Suicide Prevention Action Plan Māori Caucus
- the Suicide Research Network Advisors
- the Inter-Agency Committee on Suicide Prevention
- the Suicide Prevention Action Plan Pacific Advisors
- the Te Kōkiri Work Group District Health Board representatives
- New Zealand reviewers
- international peer reviewers.

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Introduction

The Suicide Prevention Action Plan 2008–2012

The *New Zealand Suicide Prevention Strategy 2006–2016* (the Strategy) (Associate Minister of Health 2006) outlines a high-level framework to reduce rates of suicide and suicide attempt in New Zealand. The *New Zealand Suicide Prevention Action Plan 2008–2012* (the Action Plan) – published as two companion documents, *The Evidence for Action* and *The Summary for Action* – outlines in more detail the programme of action to achieve the aims of the Strategy.

Based on the best available evidence, and considering the New Zealand context, the Action Plan is intended as a guide for all suicide prevention activities over the next five years.

This document, *The Evidence for Action*, provides more detail about the evidence underlying each goal area, and the rationale for the proposed actions. It also provides contextual information for agencies who will be implementing actions on relevant issues for a range of population groups.

The Evidence for Action needs to be read alongside the companion document, *The Summary for Action* which summarises the rationale for each of the Strategy's goals and identifies outcomes, actions, milestones, whānau ora considerations, timeframes and the lead agency or agencies responsible for implementing the actions.

Framework of the Strategy and Action Plan

The high-level framework of the Strategy and Action Plan consists of a vision, purposes, goals and guiding principles.

Vision

The inspiration of the Strategy is a vision of a society where all people feel they:

- are valued and nurtured
- value their own life
- are supported and strengthened if they experience difficulties
- do not want to take their lives or harm themselves.

Purposes

The overall purposes of the Strategy and Action Plan are to:

- reduce the rate of suicide and suicidal behaviour
- reduce the harmful effect and impact associated with suicide and suicidal behaviour on families/whānau, friends and the wider community
- reduce inequalities in suicide and suicidal behaviour.

Because suicide and suicidal behaviour are not confined to a single age group, the *New Zealand Suicide Prevention Strategy* and this Action Plan provide an all-ages response. Having an all-ages approach does not, however, preclude taking a targeted approach to groups at high-risk or with specific needs. For example, given that young people and Māori continue to have high rates of suicidal behaviour, a targeted approach may be most effective for some initiatives.

Goals

In order to achieve the above purposes, the Strategy and Action Plan set out broad areas for action, described as seven goals. Covering the spectrum of prevention and setting the directions for New Zealand's efforts for the next 10 years, the seven goals are as follows.

1. Promote mental health and wellbeing, and prevent mental health problems.
2. Improve the care of people who are experiencing mental disorders associated with suicidal behaviour.
3. Improve the care of people who make non-fatal suicide attempts.
4. Reduce access to the means of suicide.
5. Promote the safe reporting and portrayal of suicidal behaviour in the media.
6. Support families/whānau, friends and others affected by a suicide or suicide attempt.
7. Expand the evidence about rates, causes and effective interventions.

Guiding principles

All suicide prevention initiatives undertaken under the framework of the Strategy are expected to reflect the following principles.

- **Be evidence based:** Where possible, all suicide prevention initiatives should be based on the best available research and supported by the experiences and knowledge of those working in suicide prevention. In areas where robust evidence is lacking, a plan to build the evidence base that includes appropriate evaluations is necessary.
- **Be safe and effective:** It is imperative that initiatives are carefully developed, informed by evidence and best practice, assessed for safety issues and comprehensively evaluated to ensure they make a positive difference and do not place vulnerable people at an increased risk of suicide.
- **Be responsive to Māori:** While acknowledging that there are a range of different strategic frameworks and responses that guide work to achieve whānau ora, it is essential that all interventions are accessible and effective, and appropriately reflect realities and priorities for Māori. Achieving whānau ora requires measures that will ensure that the needs and aspirations of Māori are accounted for in all of an organisation's activities – in particular, in its core business activities.
- **Recognise and respect diversity:** To be effective, the design and delivery of prevention programmes and services must be responsive to and respectful of the realities and needs of the population they target, such as those based on ethnicity, culture, gender, sexual orientation and age.
- **Reflect a co-ordinated multisectoral approach:** Services will be most effective when they are co-ordinated, integrated, and supported by collaboration across sectors and communities.
- **Demonstrate sustainability and long-term commitment:** Suicide prevention is a complex issue and requires sustained action at a range of levels, supported by a commitment to long-term investment.
- **Acknowledge that everyone has a role in suicide prevention:** Suicide prevention is a shared responsibility for the whole of New Zealand society. It is most effective when everyone is clear about their specific role and is participating within the parameters of evidence and safety towards a common goal.
- **Have a commitment to reduce inequalities:** It is important that all approaches to suicide prevention focus on addressing the factors that contribute to higher rates of suicide and suicidal behaviour for particular population groups, including Māori.

Suicide in New Zealand

Extent of the problem

Every year approximately 500 New Zealanders die by suicide and there are approximately 10 times that number of hospitalisations for intentional self-harm.¹ Over their lifetime, 15.7 percent of New Zealanders will report experiencing suicidal ideation, 5.5 percent will make a suicide plan, and 4.5 percent will attempt suicide (Oakley Browne et al 2006).

Although there are many limitations related to making international comparisons, it appears that New Zealand's suicide rates are high compared with selected countries of the Organisation for Economic Co-operation and Development (OECD). This status is particularly evident for young people aged 15–24 years (Ministry of Health 2007a).

High-risk groups

Research has shown several populations are at high risk for suicide and suicide attempt. These include young people (aged 15–24 years); Māori children and young people; children and young people who are in welfare care; those who have made previous suicide attempts; those in custody or incarcerated (in prisons or police cells); those who are gay, lesbian or bisexual; and those who are socially isolated or excluded (Beautrais et al 2005).

In 2003–2005, the subgroups with the highest rate of suicide were males, Māori (as opposed to non-Māori), those aged between 25 and 44 years old and those residing in the most deprived areas of New Zealand. The subgroup that appears to have an emerging and concerning upward suicide trend is Māori aged 15 to 35 years, in particular, Māori aged 15 to 24 years (Ministry of Health 2007a).

In 2006 the subgroups with the highest rate of hospitalisation for self-harm were females, Māori (as opposed to non-Māori), those aged between 15 to 24 years, and those residing in the most deprived areas of New Zealand (Ministry of Health 2007a).

The higher suicide rates for these groups reflect the general patterns of health inequalities within the New Zealand population. Māori health status is demonstrably poorer than other New Zealanders in all dimensions of health. Likewise, gender and geographic location of residence are important factors in health inequalities (Ministry of Health 2002a).

Trends over time

Overall trends

To understand the extent of the problem today, and therefore where the best efforts for prevention should focus, it is important to consider historical trends in suicide. High rates of suicide were recorded in the early 1920s to mid 1930s. Rates were then relatively stable until the mid 1980s, when the rates increased noticeably until the late 1990s (Ministry of Health 2006a). Over more recent years, suicide rates have shown a stable downward trend from a peak of 16.3 deaths per 100,000 in 1996–1998, to 13.2 deaths per 100,000 in 2003–2005.² The latest figure represents a 19 percent decrease over this period (Ministry of Health 2007a).

1 Intentional self-harm is used in New Zealand as a proxy measure for suicide attempt.

2 Three-year moving averages are the average rates for rolling three-year periods (that is, 2000–2002, 2001–2003, 2002–2004 etc). When three-year moving averages are used, variation between individual years is smoothed so that underlying trends over time can be more clearly illustrated.

The rate of hospitalisation for intentional self-harm shows a steadily increasing trend over recent decades (Ministry of Health 2006a). The total rate in 2006 (151.9 per 100,000) represents an increase by 48.5 percent when compared with the rate in 1997 (102.3 per 100,000) (Ministry of Health 2007a). However, the extent to which this figure is at least partially a result of improved recording and reporting methods or shows a real increase in the number of episodes of self-harm is not known.

Within the overall suicide and hospitalisation trends, there are variations across age, gender, ethnicity and deprivation (Ministry of Health 2006a, 2007a).

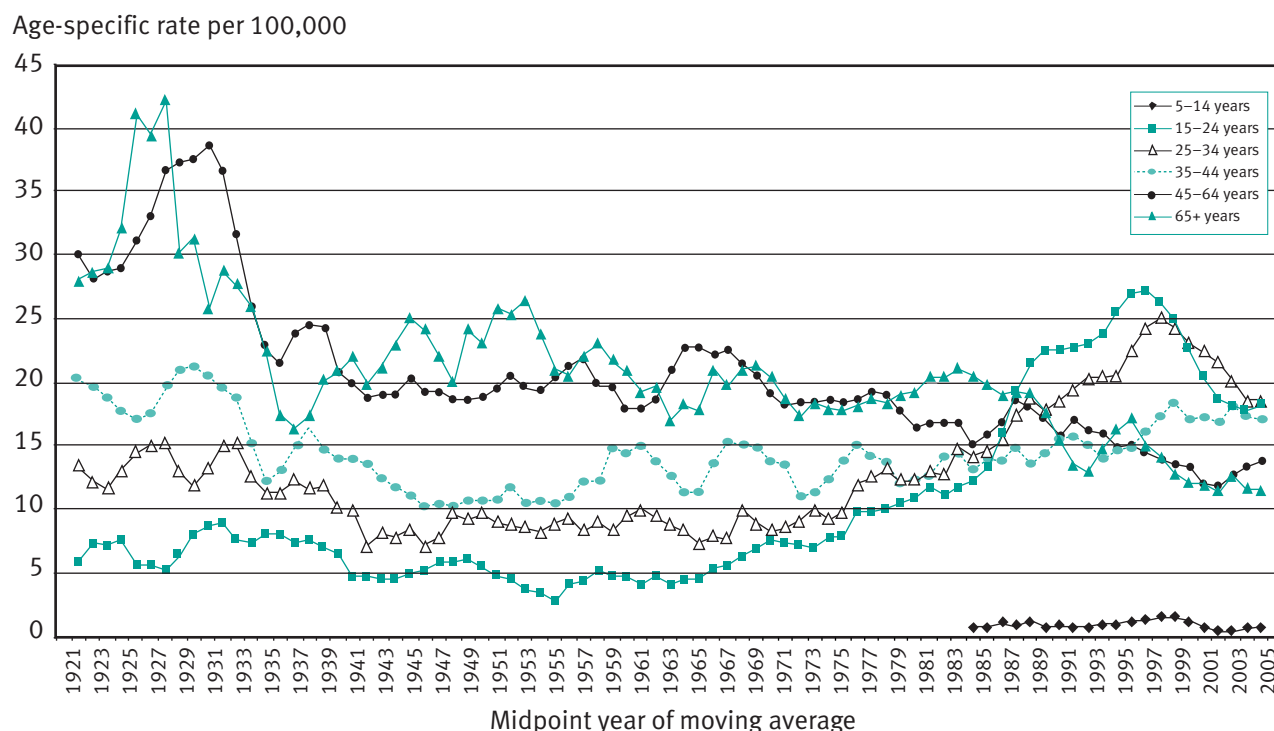
Trends by age

From the 1920s to mid 1930s, those aged 45 years and over had the highest suicide rates (Figure 1). From the mid 1980s the differences in rates between the age groups reduced markedly, and there was a crossover of the age groups that had the highest and lowest suicide rates. In recent years those aged 65 years and over had the lowest suicide rates (second to children aged 5–14 years) and those aged 15–44 years now have the highest suicide rates (Ministry of Health 2006a).

The rate of suicide among children aged 5–14 years is very low, and has been relatively stable in recent years. Among Māori, suicide and hospitalisation for intentional self-harm have largely been confined to those aged under 35 years (Ministry of Health 2006a).

Youth (aged 15–24 years) have consistently had the highest rate of hospitalisation for intentional self-harm across recent decades (Ministry of Health 2006a). The rate has steadily trended upward, reaching 299.9 per 100,000 in 2006 (Ministry of Health 2007a).

Figure 1: Age-specific suicide rate, by age group, three-year moving average, 1921–2005



Source: New Zealand Health Information Service

Trends by gender

Males have a higher rate of suicide than females (a ratio of 3:1 in 2003–2005) (Ministry of Health 2007a). The female rate has remained relatively stable over recent decades. The male rate increased during the recent peak of the late 1990s and subsequently has been trending downward (Ministry of Health 2006a).

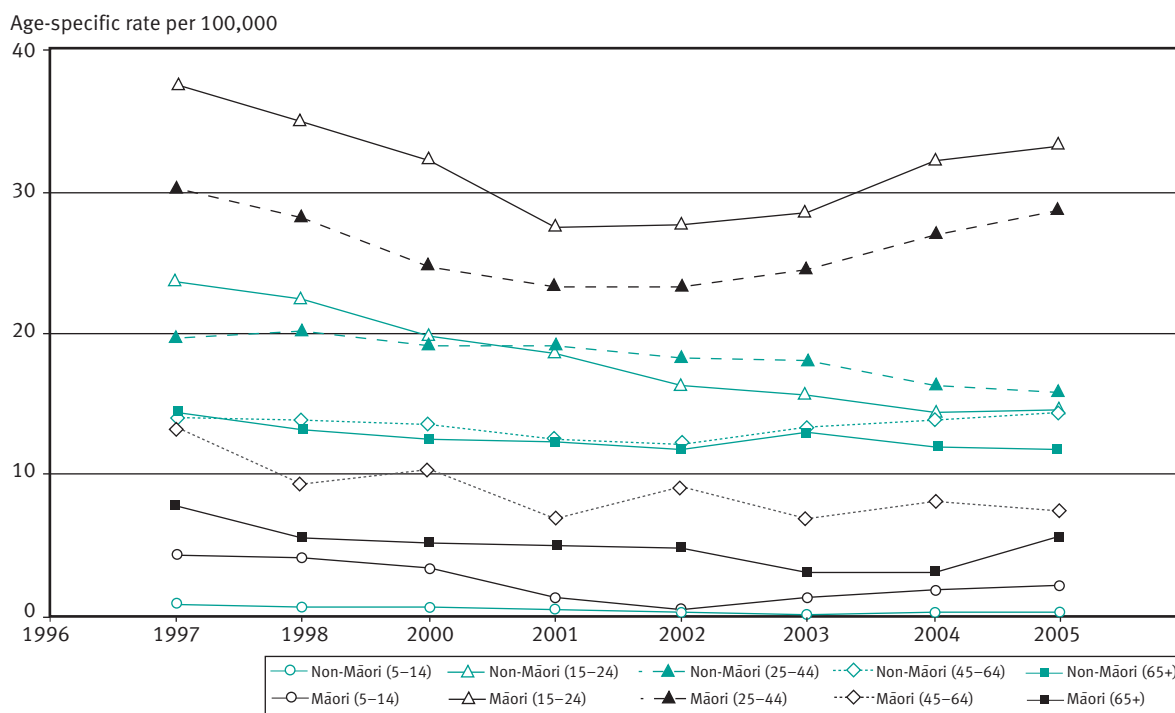
Conversely, females have a higher rate of hospitalisation for intentional self-harm (a ratio of 2:1 in 2006) (Ministry of Health 2007a). Although the rates of hospitalisation for intentional self-harm for both sexes have consistently trended upwards over recent decades, female rates in particular increased markedly from 1998–2000 to 2004–2006. As a result, in 2006 the difference between females and males was at its widest (Ministry of Health 2006a, 2007a).

Trends by ethnicity

Māori have the highest rate of suicide, followed by European/Other, Pacific and Asian. Although the Māori rate has decreased by 14 percent since the peak in the late 1990s, this decline is less than that of non-Māori, whose rate decreased by 21 percent during the same period. In 2003–2005 the average suicide rate for Māori was 17.9 per 100,000, compared with the non-Māori rate of 12.0 per 100,000. The overwhelming majority of Māori suicides are in the age range of 15–35 years (Ministry of Health 2007a).

Māori also have the highest rate of hospitalisation for intentional self-harm (209.6 per 100,000 in 2006), followed by European/Other (145.4 per 100,000), Pacific (90.4 per 100,000) and Asian (54.4 per 100,000). Overall, the Māori hospitalisation rate was one-and-a-half times that of non-Māori (141.3 per 100,000) (Ministry of Health 2007a). Although Māori females have the highest rates of hospitalisation for intentional self-harm compared with any other group determined by a combination of gender and ethnicity, these rates appear to have similarly increased for both Māori and non-Māori females since the late 1990s (Ministry of Health 2006a, 2007a).

Figure 2: Age-specific suicide rates, by ethnicity (Māori and Non-Māori) and age group, three-year moving averages, 1996–2005



Source: New Zealand Health Information Service

Trends by socioeconomic status

Rates of both suicide and hospitalisation show a clear pattern of increasing rates with increasing deprivation. Those who live in the most socioeconomically deprived areas of New Zealand have significantly higher rates of suicide and hospitalisation for self-harm than those who live in the least deprived areas (Ministry of Health 2006a, 2007a).

Risk factors and pathways to suicide

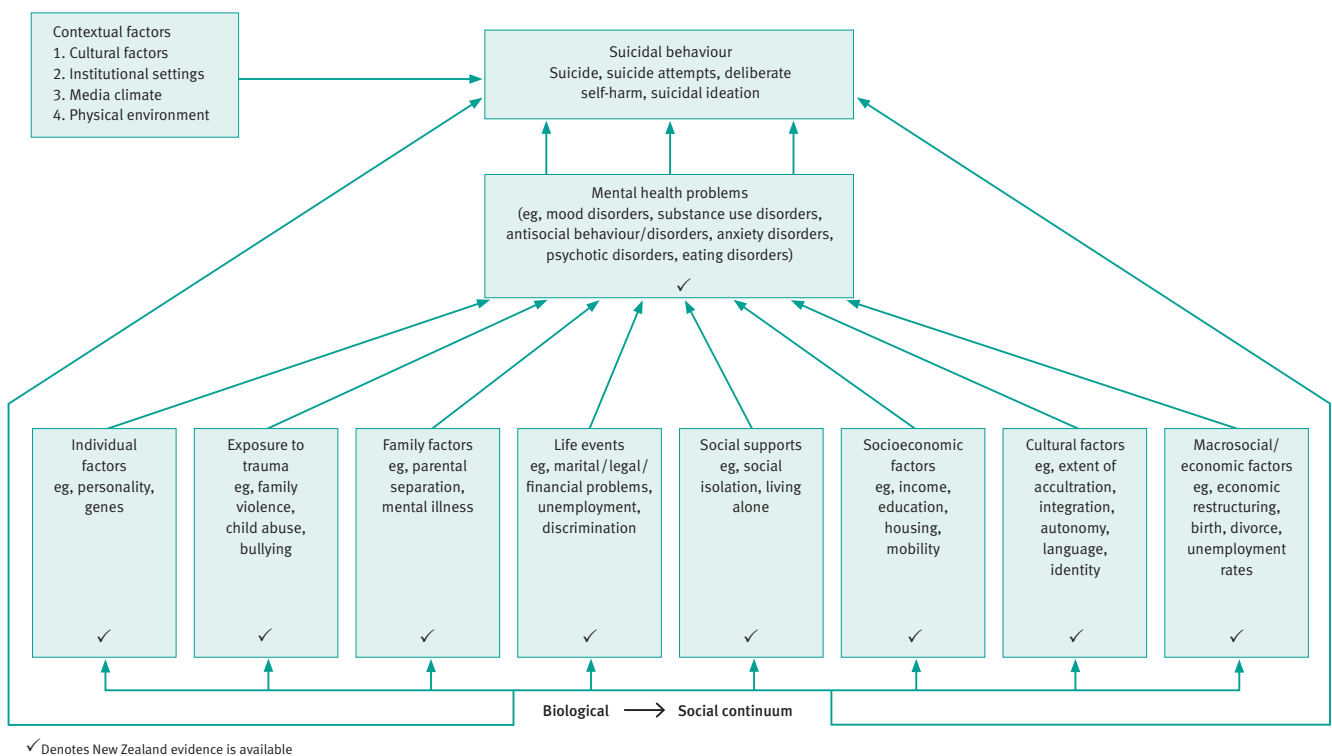
There are a number of factors involved in the development of suicidal behaviours. These factors range from individual factors (eg, genes, personality) to macro-social factors (eg, unemployment rates) (see Figure 3). Suicidal behaviours most often result from an accumulation of these risk factors.

Risk factors can contribute to suicidal behaviours directly, but can also contribute indirectly by influencing individual susceptibility to mental health problems (Beautrais et al 2005; Collings and Beautrais 2005). Evidence shows that the majority of those dying by suicide have a recognisable mental health problem and that mental health disorders are a factor in up to 70 percent of suicides and suicide attempts (Beautrais et al 2005).

Contextual factors may also influence the extent to which exposure to risk factors contributes to suicidal behaviours. These contextual factors include cultural factors, institutional settings, media climates and the availability of methods of suicide within the physical environment.

As the factors contributing to suicide are so wide ranging, the prevention of suicide requires a multicomponent and multisectoral approach that integrates a number of approaches at both individual and population levels to reduce the factors that are associated with suicidal behaviour (Beautrais et al 2005).

Figure 3: Pathways to suicidal behaviour



Source: *New Zealand Suicide Prevention Strategy 2006–2016* (Associate Minister of Health 2006)

Māori as tangata whenua

Suicidal behaviour among Māori

Since 2000, when trends in mortality by ethnicity for the total population were first presented, the ethnic group with the highest suicide rate has been Māori (Ministry of Health 2006a). For Māori males and females, the average suicide rates in 2003–2005 were 28.4 and 8.3 deaths per 100,000 population respectively. By comparison, for non-Māori males and females, the average suicide rates

were 18.4 and 5.9 deaths per 100,000 population respectively (Ministry of Health 2007a). The disparity between the suicide rates of Māori and non-Māori males in 2002–2004 is the widest it has been in the previous eight years.

Māori suicide is largely confined to those aged under 35 years. Among youth and young adults (15–34 years), Māori suicide rates are generally higher than non-Māori rates. Both Māori and non-Māori suicide rates have declined for the 15–34 year age groups in recent years, and the suicide rate for Māori aged 45–64 years has decreased overall, in contrast, the non-Māori suicide rates for this age group has been relatively stable (NZHIS data).

Results from *Te Rau Hingengaro*, show that Māori also have the highest rates of suicidal ideation of all ethnic groups and very high rates of having a suicide plan and making suicide attempts (Oakley Browne et al 2006).

In 2006 the Māori hospitalisation rate for intentional self-harm was nearly one-and-a-half times the non-Māori rate. The hospitalisation rate for Māori males was over 1.8 times the rate for non-Māori males (Ministry of Health 2007a). Over at least the last 30 years, Māori females have consistently had higher rates of hospitalisation than all other combinations of gender and ethnic group (Ministry of Health 2006a).

Protective factors

Cultural identity can contribute to good mental health and wellbeing and therefore may play an important role in suicide prevention. Recent research found associations between cultural identity and suicide attempt among Māori (Coupe 2005). However, further research is needed to establish how important cultural identity is relative to other key risk factors (eg, poor mental health) and whether there are causal links.

In Māori, age is also a protective factor. The risk of suicide is very low among Māori aged 45 years and over (Ministry of Health 2007a).

Māori understandings of health

Māori understandings of health and wellbeing are holistic and embrace physical, mental, spiritual and community aspects of health. Examples of Māori models of health include *te pae mahutonga* (Durie 1999), *te whare tapa whā* (Durie 1994) and *te wheke* (Pere 1984).

Te pae mahutonga presents elements of health promotion in the shape of the southern cross. The four central stars of the constellation represent *mauriora* (cultural identity), *waiora* (physical environment), *toiora* (healthy lifestyles) and *te oranga* (participation in society). The two pointers represent *ngā manukura* (community leadership) and *te mana whakahaere* (autonomy) (Durie 1999).

The *whare tapa whā* model of health demonstrates that good health is dependent on a balance of factors (Durie 1994). It describes four components (*wairua*/spiritual, *hinengaro*/mental, *tinana*/physical and *whānau*/family), which represent the four walls of a house, and the idea that if one of these walls fails, the house will fall.

The concept of *te wheke*, the octopus, is used to define family health. Pere (1984) describes the head of the octopus as *te whānau*, the eyes of the octopus as *waiora* (total wellbeing for the individual and family) and each of the eight tentacles as representing a specific dimension of health. The tentacles are interwoven to represent the close relationship of each of these dimensions.

Approaches and engagement when working with Māori

He Korowai Oranga: The Māori Health Strategy (Minister of Health and Associate Minister of Health 2002) and *Whakatātaka Tuarua: Māori Health Action Plan 2006–2011* (Minister of Health and Associate Minister of Health 2006) together provide a framework for improving Māori health. The overall aim of He Korowai Oranga is whānau ora: Māori families supported to achieve their maximum health and wellbeing. It requires recognition of whānau as the principal source of strength, support, security and identity for Māori.

Effective health service provision for Māori

Effective health services for Māori need to be co-ordinated around the needs and realities of whānau. In addition, they need to incorporate Māori cultural views, beliefs and practices. Given the diverse needs of Māori, it is important that the range of services and programmes – both general population (mainstream) services and by Māori for Māori services – are available and accessible. It is also vital that they are well evaluated to ensure they are effective for Māori. Because the majority of Māori receive most of their health care from general population services, and given the high rate of suicidal behaviour among Māori, considerable effort is required to reorient general population services, providers and systems so that they prioritise the needs of Māori (Ministry of Health 2002a).

Māori health providers and the Māori health workforce are key players in improving access to effective and appropriate services for whānau, hapū and iwi (Ministry of Health 2002a). One of the objectives of He Korowai Oranga is to increase the capacity and capability of Māori providers to deliver effective health and disability services for Māori. Māori providers have become established in hapū, iwi and Māori communities and are well placed to understand and meet the needs of Māori (Ministry of Health 2002a). Ensuring the availability and high quality of suicide prevention services to Māori requires building up both the numbers and the skills of the Māori health workforce. Across the health sector, there are several workforce development plans in place. Specific to the mental health sector, *Kia Puawai Te Ararau: National Māori Mental Health Workforce Development Strategic Plan 2006–2010* (Te Rau Matatini and Ministry of Health 2006) provides a strategic direction for the Māori mental health workforce for the next five years and a means of aligning with Māori mental health needs.

Issues for population groups

Males and females

Suicidal behaviour

In English-speaking western countries, across all age groups, males consistently show higher completed suicide rates than females (Maskill et al 2005). This trend is true for New Zealand in particular, where there are over three male suicides to every female suicide (Ministry of Health 2007a).

However, in relation to a broader range of non-fatal suicidal behaviours, such as suicidal ideation, having a suicide plan and making a suicide attempt, females appear to have a greater tendency to suicidal behaviour than men (Beautrais et al 2005). In New Zealand, twice as many females as males are hospitalised for intentional self-harm (Ministry of Health 2007a), and over a lifetime females have higher rates of suicidal ideation, planning and attempts (Oakley Browne et al 2006). Suicidal behaviours are therefore a problem for both sexes.

Risk factors

The higher overall rates of suicidal behaviours in women may arise because some risk factors for suicide are more prevalent among females. For example, depression is the most common risk factor for suicidal behaviour in both men and women, but occurs at approximately twice the rate in women as in men (Oakley Browne et al 2006). Females are also more likely than males to experience childhood sexual abuse, which is associated with a subsequent increased risk of mental health problems, suicidal ideation and suicide attempt (Beautrais 2006). Women are also more likely to be victims in serious family violence incidents and, where those incidents involve serious injury, they are more likely to report depression, anxiety and suicidal ideation (Fergusson, Horwood and Ridder 2005).

Explanations for the higher rates of suicide deaths among males focus on differences in the lethality of suicide method chosen (Maskill et al 2005). Females are more likely to use less lethal methods, such as self-poisoning, and males are more likely to use more lethal methods, such as a firearm, vehicle exhaust gas or hanging (Beautrais 2003b). (There is, however, some evidence that the gender differences may be reducing due to young women's increasing use of more lethal methods.) Other explanations for gender differences in suicide deaths highlight the higher rates of alcohol abuse among men (Beautrais 2003b; Maskill et al 2005).

Implications for suicide prevention

Given the apparent paradox that females show higher rates of suicidal behaviour while males die by suicide more frequently, it is important that all policies and services recognise that suicidal behaviour is an important issue for both genders.

Children and young people

Suicidal behaviour and mental disorders

Young people (aged 15–24 years) have the highest suicide rates for females and the second highest rates for males. They also had higher rates of mental disorders, suicidal ideation, suicide plan, suicide attempt and self-harm hospitalisations compared with any other age group (Oakley Browne et al 2006; Ministry of Health 2007a). In addition, among secondary school students in New Zealand, 4.7 percent of males and 10.5 percent of females reported having made a suicide attempt in the last 12 months. Serious symptoms of depression were found in 9 percent of male students and 18.3 percent of female students (Adolescent Health Research Group 2003; Fleming et al 2007).

Risk and protective factors

The experience of adversity during childhood increases the risk of later suicidal behaviour among young people. Adverse experiences include sexual, physical or emotional abuse, neglect, family breakdown, family violence and parental mental illness. Risk is also increased by exposure to stressful or adverse life events such as relationship loss or breakdown, legal or disciplinary crises (Beautrais et al 2005) or partner violence (Fergusson, Horwood and Ridder 2005). Adverse childhood and life events appear to play a stronger role for young people in terms of suicide risk than they do for older populations (Beautrais et al 2005). These experiences of adversity tend to act cumulatively: young people at highest risk are those who have experienced multiple or severe childhood adversities (Beautrais et al 2005).

Other risk factors for young people include depression, alcohol abuse, non-heterosexual attractions, having a friend or family member attempt suicide (Fleming et al 2007) and certain personality traits (eg, low self-esteem, hopelessness) (Beautrais et al 2005). It is important to identify and support children and young people with exposure to adverse events or other risk factors.

Childhood and adolescence are important life stages for promoting resilience to adverse events by facilitating the development of positive coping strategies, problem-solving skills and self-esteem (Beautrais et al 2005). Warm and caring families and safe schools and communities are also associated with decreased rates of suicide attempt in this population group (Fleming et al 2007).

Access to health services

Despite their high levels of mental disorder and suicidal behaviour, young people aged 16–24 years are the least likely of any age group to visit a health service for a mental health reason (Oakley Browne et al 2006). This trend suggests that there is a significant unmet need for young people who are experiencing mental disorders.

Surveys of New Zealand young people have identified several barriers to accessing primary health care services, including cost, embarrassment, access issues and lack of cultural appropriateness (Mathias 2002). Evidence strongly indicates that young people use primary health services more when those services are targeted, youth-friendly and provided in a physically separate or otherwise distinct setting (eg, a school-based or ‘one-stop shop’ health centre) (Mathias 2002; Ministry of Health 2002b).

Older people

Suicidal behaviour and mental disorders

In New Zealand, adults aged 65 years and over have the lowest rates of suicide and hospitalisation for suicide attempts of all age groups (except those aged 5–14 years) (Ministry of Health 2006a, 2007a). Suicide rates for this age group have decreased by 35 percent since the early 1980s (Ministry of Health 2006a). New Zealand adults 65 years and over also have lower rates of mental disorder, suicidal ideation, suicide plan and suicide attempt than other adult age groups (Oakley Browne et al 2006). These trends contrast with those in most developed countries, where suicide rates are highest for older adults (Beautrais et al 2005).

Suicide attempts are usually more lethal in older people for several reasons. They are more physically frail; they more often live alone, which decreases their chances of being found in time for life-saving assistance to be given; they tend to choose more lethal methods of suicide; and tend to make suicide attempts that are more carefully planned and implemented (Beautrais et al 2005).

Due to the progressive ageing of the population, it is likely that rates and absolute numbers of suicide amongst older people will increase (Beautrais et al 2005).

Risk factors

Major depressive disorder is by far the most significant suicide risk factor for older people. Other mental disorders, particularly substance use disorder, also increase risk considerably. Stressful life events such as bereavement or relationship problems, social isolation and multiple physical illnesses are other risk factors for this group (Beautrais 2002; O’Connell et al 2004).

Approaches

Due to the role of mood disorders in suicidal behaviour of older people, improved detection, treatment and management of depression may be the most important focus for working with this population (Beautrais et al 2005).

In New Zealand, less than half of people aged 65 years and over made a health care visit for a mental health reason in a 12-month period but almost all made a health care visit for another reason (Oakley Browne et al 2006). It is suggested, therefore, that opportunistic screening by primary care professionals for depression and suicidal ideation of older people would be beneficial for preventing suicide (O'Connell et al 2004). Educating health care providers about healthy ageing, factors that may contribute to the development of depression in this population, and signs and symptoms of depression may be necessary to facilitate screening (Beautrais et al 2005).

Some population-level interventions to improve the mental health of older people, such as exercise and improving social support through befriending, have proven to be effective (WHO 2004b). For more targeted interventions, research has shown that access to telephone helplines and emergency response services may be effective in reducing suicide through improving social contact, support and integration into the community (De Leo et al 2002).

Gay, lesbian, bisexual, transgender and intersex people

Suicidal behaviour

Recent research strongly suggests that people of non-heterosexual orientation are at increased risk of developing mental disorders and have higher rates of suicidal behaviour (Fergusson, Horwood and Ridder et al 2005; Herrell et al 1999; Russell and Joyner 2001; Skegg et al 2003). Among New Zealand young adults, the rate of mental health problems was higher for those with a predominantly same-sex orientation than for their exclusively heterosexual peers – five times higher for males and twice as high for females (Fergusson, Horwood and Ridder et al 2005). A United States study of high school students found that those with a same-sex orientation were twice as likely to attempt suicide as their heterosexual peers (Russell and Joyner 2001). Initial indications are that transgender and intersex populations are also at increased risk (Fitzpatrick et al 2005; Johannsen, Ripa et al 2006).

Isolation, discrimination and victimisation

The higher suicide risk for the gay, lesbian, bisexual, transgender and intersex (GLBTI) population may be related to the social discrimination and stigma they experience, which can result in social isolation and victimisation (Hershberger and D'Augelli 1995; McDaniel et al 2001; Pega and Coupe 2007).

Suicide attempts among GLBTI youth often occur after awareness of sexual feelings but before disclosure of their sexual orientation to others. However, disclosing non-heterosexual orientation may result in isolation if family and friends then withdraw their emotional support (D'Augelli 1998). Many GLBTI young people are also targets of bullying in schools (Carragher and Rivers 2002; Le Brun et al 2004; Nairn and Smith 2003).

Health service considerations

GLBTI people can face obstacles that make it difficult for them to access health services or to receive quality health care. Some health professionals may assume that all their clients are heterosexual (Semp 2006), and GLBTI people may fear discrimination or withdrawal of care if they disclose their sexual orientation or gender identity. In these circumstances, this population may have difficulty raising issues related to their sexuality even where they believe these issues are directly relevant to their health concern (Huygen 2006). To ensure effective health care for GLBTI people, services must be aware and accepting of their sexual orientation and gender identity (Semp 2006). Appropriate training for health professionals about key issues for this population is therefore important (McDaniel et al 2001).

Many GLBTI people who attempt suicide have not disclosed their sexual orientation or gender identity to others, or to only a very few (D'Augelli 1998). Health professionals need to be aware of potential differences in how much people know about the GLBTI person's circumstances and to be able to deal with disclosure sensitively. Health professionals and postvention workers should also be aware that many GLBTI people consider their friends to be their 'family of choice' (McDaniel et al 2001).

Pacific peoples

Pacific peoples currently make up 6.9 percent of the New Zealand population and their numbers are expected to increase by 59 percent from 2001 to 2021 (Statistics New Zealand 2007b; 2007c). The six main Pacific ethnic groups in New Zealand are Samoan, Cook Islands Maori, Tongan, Niuean, Fijian and Tokelauan. Although these groups have distinct cultural beliefs, values, traditions and languages they have many broad social and cultural similarities.

Suicidal behaviour

Suicide deaths of Pacific peoples are recorded as occurring at a lower rate than for the population as a whole (an age standardised rate of 11.1 per 100,000 population compared to 14.2 per 100,000 for the general population) (Ministry of Health 2006b). However, Pacific peoples have higher rates of suicide plans and attempts than all other ethnic groups, and high rates of suicidal ideation (Oakley Browne et al 2006).

There are some notable differences in suicidal behaviour between Pacific peoples who were born in New Zealand and those who migrated from the Pacific aged 18 years or older. New Zealand-born Pacific peoples have higher rates of suicide plan and attempt than Pacific peoples who migrated to New Zealand as adults. These trends suggest that environmental factors in New Zealand may be detrimental to the mental health and wellbeing of Pacific communities (Oakley Browne et al 2006).

Suicide among Pacific peoples is most common in the age group of 15–44 years and is rare over the age of 45 years (Ministry of Health 2007a). Given the expected increase in the Pacific population by 2021 and the prediction that its relatively youthful structure will continue (Statistics New Zealand 2007b), it is likely that Pacific suicide numbers will increase in the medium term.

Mental disorders

Overall, Pacific peoples in New Zealand have higher rates of mental disorders than the general population but they are also less likely to access health services for mental health reasons (Oakley Browne et al 2006). Pacific peoples born in the Pacific Islands are also far less likely than New Zealand-born Pacific peoples to visit a mental health service when they are experiencing mental illness (Oakley Browne et al 2006).

Cultural views of mental health and suicide

Traditional Pacific approaches to health and wellbeing are based on a balance of mental, physical, familial and environmental domains. Mental health problems are seen to occur when one or more of these factors are out of balance (Faleafa et al 2007). According to these beliefs, mental disorders may also result from a breach of customs or other offences against family, superiors, sacred symbols or places. It is traditionally believed that such a breach causes the person to be cursed or possessed by spirits (Faleafa et al 2007; Mental Health Commission 2007).

In traditional Pacific communities, there is stigma associated with suicidal behaviours. A family may feel ashamed that they have failed to adequately support the individual who has acted suicidally. This stigma can lead individuals to hide thoughts of suicide from their families. There is also shame and

stigma associated with mental illness, which may be a barrier to individuals seeking support from families and to families seeking help for the individual (Faleafa et al 2007).

As Pacific peoples increasingly become acculturated to New Zealand, it is likely that traditional beliefs about mental health will become less common.

Working with Pacific communities

There are two broad approaches that are most likely to be effective in the area of suicide prevention when working with Pacific communities in New Zealand. First, community development approaches that take the form of activities to strengthen protective factors and reduce exposure to risk factors for suicide (eg, promoting good mental health) rather than raise awareness about suicide. The second effective approach would involve interventions that build on family and social support systems, such as church and community networks (Simmons and Voyle 1997).

Asian immigrants and refugees

Asian people are the fourth largest ethnic group in New Zealand, and made up 9.2 percent of the population in 2006 (Statistics New Zealand 2007c). Asian people are culturally diverse and have acculturated to varying degrees into New Zealand society. The two largest subgroups of Asian peoples in New Zealand are Chinese and Indian.

Only a minority of the Asian population in New Zealand were born here and approximately 30 to 40 percent have lived here for less than five years (Ministry of Health 2006b). Many Asian people come to New Zealand as refugees.

Suicidal behaviour

Generally, Asian people, particularly Asian males, have lower rates of suicide and hospitalisation for intentional self-harm than the total population. The exception to this trend is Indian female youth, who have a higher rate of hospitalisation for intentional self-harm than the total population (Ministry of Health 2006a).

Risk factors

Several risk factors commonly experienced by Asian refugees and immigrants may mean they are more likely than the general New Zealand population to develop mental disorders. These risk factors are:

- traumatic experiences or prolonged stress prior to migration
- separation from family and community
- isolation from people of similar ethnic or cultural background
- lack of ability to speak English
- unemployment or underemployment
- drop in socioeconomic status
- experiencing discrimination or negative public attitudes in New Zealand (Ellis and Collings 1997; Ho et al 2002).

Refugees are at a higher risk of developing mental disorders, particularly post traumatic stress disorder, than are immigrants (Kizito 2001).

Cultural views of mental health

In traditional Asian cultures, mental illness may be seen as a supernatural punishment for wrongdoing. There is also a high level of stigma associated with mental illness for the individual and their family. Inadequate knowledge of English, lack of awareness of services and cultural differences in treating mental illnesses may also act as barriers to accessing mental health services (Ho et al 2002). These barriers could be lowered by increasing health service knowledge of Asian cultural issues, providing interpreters, and developing educational materials to counter stigma and promote earlier help-seeking (Asian Public Health Project Team 2003; Ho et al 2002).

Working with Asian communities

Approaches for working with Asian immigrants and refugees to promote good mental health include increasing public support for cultural diversity, improving access to English language education and developing community programmes to allow immigrants and refugees to interact with people of the same ethnicity (Ellis and Collings 1997).

People with disabling physical health conditions and long-term impairments

It is estimated that approximately one in six people living in New Zealand have an intellectual, physical or psychiatric disability (Statistics New Zealand 2007a). Māori have the highest age-standardised rates of disability of all ethnic groups (Ministry of Health 2005).

Of people with a disability who live in a household, 12 percent have a severe level of disability and 44 percent have a moderate level of disability. The most common forms of disability among adults relate to mobility, hearing and agility. The most common causes of impairment for adults are disease or illness (40 percent), accident or injury (34 percent) and ageing (18 percent). Only 10 percent of adults with a disability had the condition at birth (Ministry of Health 2005).

Chronic and disabling physical health conditions

The risk of suicidal behaviour is higher with a range of chronic and debilitating conditions, including multiple sclerosis, spinal cord injury, epilepsy, stroke, renal disorders, HIV and cancer (Feinstein 2002; Hartkopp et al 1998; Hem et al 2004; Kelly et al 1998; Kurella et al 2005; Sanders and Bell 2004; Stenager et al 1998).

As with the general population suicidal ideation in these populations is strongly associated with major depression (Kishi et al 2001). It may be that factors associated with these conditions such as functional disability, disruption of social support and chronic pain increase the risk of developing a depressive disorder (Druss and Pincus 2000).

For many conditions (such as cancer, HIV or stroke), the risk of suicidal behaviours is highest shortly after diagnosis and may be increased with greater severity of illness or impairment (Hem et al 2004; Kelly et al 1998; Teasdale and Engberg 2001). In addition, illnesses that are potentially terminal may lead to a sense of hopelessness among some individuals, exacerbating the risk of suicidal ideation (Chochinov et al 1998).

All health and disability professionals working with these populations should ensure that attention is paid to the mental health of individuals as well as their physical health through detecting and treating depressive symptoms and screening for suicidal ideation (Kishi et al 2001).

Intellectual disabilities

People with intellectual disabilities are at high risk for developing mental disorders and may experience mood disorders at a higher rate than the general population (Hurley 2006; Merrick et al 2006). Those at higher risk include those who have experienced sexual abuse, have co-morbid physical disabilities, have moderate intellectual disability and lack social or family support (Merrick et al 2006).

While historically it was assumed that people with intellectual disabilities lacked the capacity to plan or carry out a suicide, recent research findings do not support this view. Professionals working with people with intellectual disability should be aware of the risk of suicidal behaviours and should be aware that individuals in this population may not display many of the classic signs of mood disorder (Merrick et al 2006).

Sensory disabilities

Deaf people have higher rates of mental disorder than those who are hearing, while at the same time they encounter difficulties in accessing mental health services. These factors may increase the risk of suicide. Possible suicide prevention strategies include developing specific screening tools, training clinical staff, promoting deaf awareness, and increasing the availability of specialist mental health services for deaf people (Turner et al 2007).

Research has also found an increased risk of suicide for males over 65 with visual impairment (Waern et al 2002).

Goal 1: Promote mental health and wellbeing, and prevent mental health problems

Introduction

The purpose of this goal is to promote mental health and wellbeing, and prevent the development of mental health problems associated with suicidal behaviour. This chapter outlines a number of key areas in which policy may contribute to mental health promotion and mental illness prevention. For each area, it gives a brief review of the evidence and provides examples of current government policies and programmes.

Rationale

A wide range of factors has been shown to contribute to vulnerability and resiliency to mental health problems and subsequent suicidal behaviours (Beautrais et al 2005; Collings and Beautrais 2005; Institute of Medicine 2002). These factors include individual, social, family, cultural and economic factors. Risk factors either may contribute to the mental health problems that can lead to suicide or may directly increase vulnerability to suicidal behaviours, protective factors may have the converse effect. These findings prompt consideration of the ways in which population-based social, educational, economic and health policies across different government agencies, as well as associated programmes run by non-government organisations, may contribute to suicide prevention.

With reference to Goal 1, there are two ways in which policies may contribute to suicide prevention. First, policies may reduce population exposure to the risk factors that are known to, directly or indirectly, increase risk of suicidal behaviour. For example, New Zealand studies have shown that exposure to family violence is a risk factor that increases rates of both mental health problems and suicidal behaviours (Fergusson, Horwood and Ridder 2005). Policies that reduce rates of family violence, therefore, have the potential to improve population mental health and to reduce rates of suicidal behaviours.

Second, policies may improve resilience and coping skills by providing social and related supports that mitigate the effects of exposure to risk factors. For example, the adverse effects of family violence may be mitigated by social supports and services.

Reducing risk factors for mental health problems and enhancing protective factors can promote mental health and prevent mental illness (Jane-Llopis et al 2005; WHO 2004a, 2004b). The associations among suicide, mental illness and a range of risk and protective factors suggest that, by reducing population exposure to risk and increasing exposure to protective factors, it is theoretically possible to reduce risks of both mental disorder and suicidal outcomes.

Key policy areas contributing to suicide prevention

This section outlines a number of key areas in which policy may contribute to suicide prevention. For each area, it gives a brief review of the evidence and outlines current major government policies and programmes.

Childhood and family policy

Exposure to childhood and family adversity is an important factor in determining the vulnerability and resiliency of individuals to mental health problems and suicidal behaviours. These factors include exposure to: child abuse and neglect (Fergusson and Lynskey 1997); childhood sexual abuse (Fergusson et al 2003); family violence (Fergusson and Horwood 1998); compromised parenting skills (Beautrais, Joyce and Mulder 1996); family difficulties (Fergusson et al 2000); and parental conflict (Beautrais 2001b). The role of these factors in suicide and mental health has been reviewed in more detail in a series of New Zealand and international papers (Beautrais et al 2005; Lewinsohn et al 1994; Molnar et al 2001).

Several features of these childhood and family factors are important for policy. First, the effects of various child and family factors tend to be linked suggesting the need for co-ordinated policy responses. Second, these factors tend to act cumulatively to determine risks of mental health problems and suicide. This tendency suggests the need for policies that focus on multiple sources of risk and resilience, rather than on a single factor. Third, childhood and family factors have their greatest influence on risks of suicidal behaviour earlier in life. Correspondingly, the effects of childhood and family factors decline progressively over the life course. Nevertheless, adults and older adults with suicidal behaviour tend to have histories of childhood adversity, suggesting that early exposure to adversity may still have an influence on suicide throughout the life course (Beautrais et al 2005). These findings suggest the need to recognise that different policies may be needed for different sectors of the population.

As a whole, these considerations demonstrate the need to develop effective childhood and family policies that address a range of issues relating to family functioning, parenting, family violence and child abuse.

A range of government policies currently address child and family issues. These policies are focused on reducing violence and child abuse, strengthening families, supporting vulnerable families, providing parenting assistance and ensuring families are connected to services and communities.

Examples of key policies and programmes are:

- Taskforce for Action on Violence within Families (Ministry of Social Development)
- Campaign for Action on Family Violence (Ministry of Social Development)
- Violence Intervention Programme (Ministry of Health)
- Taskforce for Action on Sexual Violence (Ministry of Justice)
- Family Start/Early Start (Ministry of Social Development and Ministry of Education)
- Strengthening Families (Ministry of Social Development)
- Well Child (Ministry of Health)
- Strategies with Kids Information for Parents (SKIP) (Ministry of Social Development)
- care and protection of at risk children (Child, Youth and Family, Ministry of Social Development).

Alcohol and drug policy

Alcohol and drug dependence and abuse are risk factors for suicidal behaviours (Sher 2006a); substance use disorders represent the second most common group of mental disorders associated with suicide and suicide attempts (Beautrais 2001b). This clinical evidence is supported by the finding that suicide rates are positively associated with per capita alcohol consumption in several OECD countries (Sher 2006b).

There is also some evidence that policies to reduce total alcohol consumption may contribute to reducing suicide rates. An example is the 34.5 percent reduction in suicide rates observed between 1984 and 1988 following the introduction of heavy restrictions on alcohol sales in the former Soviet Union (Wasserman et al 1994). Accordingly, public health policies that encourage safe drinking, the avoidance of drug use, and harm minimisation have a key role in the area of suicide prevention.

Currently New Zealand has a wide range of initiatives to address alcohol and drug issues. The National Drug Policy, led by the Ministry of Health, is the Government's key policy on preventing and reducing the harms that are linked to alcohol and other drugs. The policy document includes a range of strategies for supply control, demand reduction and problem limitation.

Examples of key policies and programmes are:

- National Drug Policy (Ministry of Health)
- social marketing to change New Zealand's drinking culture (Alcohol Advisory Council of New Zealand)
- Community Action on Youth and Drugs projects (Ministry of Health).

Life stress and trauma

Exposure to various life stresses increases the risk of suicidal behaviours. Problems with regard to relationships, employment, finance, health, housing and the law contribute to suicide risk (Beautrais et al 1997; Blakely et al 2003; Cavanagh et al 1999; Gould et al 1996; Platt and Hawton 2000; Rubenowitz et al 2001). A related area of research has identified bullying at school as a factor that increases suicidal behaviours in children and adolescents (Dake et al 2003; Juvonen et al 2003). In addition, exposure to early life trauma and maltreatment, in interaction with the serotonin transporter polymorphism (5-HTTLPR) gene, is associated with increased vulnerability to suicidal behaviour (Caspi et al 2003). Taken together, these findings suggest that social policies aimed at buffering and reducing population exposure to stresses may contribute to suicide prevention (Knox et al 2003; Lubell and Vetter 2006).

In addition, following recent tsunamis, hurricanes, earthquakes and terrorist acts there has been increasing awareness of the contribution that natural and human disasters may make to both mental health problems and suicidal behaviours (Coker et al 2006; Davidson and McFarlane 2006). These considerations clearly suggest that well-developed disaster planning at social, community and individual levels may reduce the adverse effects of disasters which may therefore reduce suicidal behaviours (Bryant and Njenga 2006; Davidson 2006).

Policies to promote resilience and reduce exposure to the various life stresses associated with suicide are necessarily wide-ranging and apply to a number of different settings and groups. Among them are policies that: encourage healthy relationships; provide employment, education and training opportunities; provide financial assistance during times of employment difficulties; assist young people in transition to adult life; assist people to stay in employment by helping them resolve difficulties, including financial problems; assist people with legal problems; promote resilience; and reduce violence and bullying in schools.

Examples of key policies and programmes are:

- Student Well Being Mental Health Education Initiative (Ministry of Education)
- Youth Offending Strategy (Ministry of Justice)
- Youth Transition Services (Ministry of Social Development)
- Eliminating Violence Programme (Ministry of Education)
- employment and income assistance policies (Work and Income, Ministry of Social Development)
- alternative education programmes (Ministry of Education)
- Effective Intervention Package – community sentencing, rehabilitation, restorative justice (Ministry of Justice)
- Health and Physical Education in the New Zealand Curriculum (Ministry of Education)
- Psychosocial Recovery Plan (Ministry of Health)
- Mentally Healthy Schools (Ministry of Health)
- Travellers (school-based programme) (Ministry of Health).

Socioeconomic inequalities

Individuals from socially and economically disadvantaged backgrounds are at increased risk of suicidal behaviour (Bucca et al 1994; Gunnell et al 1995; Johansson et al 1997; Lewis and Sloggett 1998; Qin et al 2003). New Zealand findings from the Canterbury Suicide Project, the Christchurch Health and Development Study and the New Zealand Mental Health Survey all show that rates of suicidal ideation, suicide attempt and suicide are elevated among individuals from socially disadvantaged backgrounds (Beautrais et al 1998; Fergusson et al 2000; Oakley Browne et al 2006). These findings suggest that policies directed at reducing inequalities may play a role in suicide prevention.

The range of policies aimed at reducing social and economic inequalities includes:

- educational policies to increase access to education and reduce social disparities
- income support, taxation and related policies to address sources of income inequality and poverty
- housing policies to provide access to suitable and affordable housing
- health policies to reduce inequalities in health and in access to health care
- policies to increase workforce participation.

Social cohesion and support

In an early contribution to suicide theory, Durkheim argued that rates of suicide tend to vary according to societal conditions. Specifically, they change based on the extent of social integration (ie, binding of the individual to society via shared social values and norms) and social regulation (ie, constraints on the aspirations and behaviours of individuals imposed by prevailing social norms and values) (Durkheim 1897 (1951)).

These views are supported by studies of social restructuring in the former Soviet bloc, which reported that rapid increases in suicidal behaviours coincided with the disintegration of Soviet society (Makinen 2006). More generally, the results of these studies suggest that processes of economic modernisation or reform may reduce levels of social integration and influence suicide rates (Stack 2000a, 2000b).

The New Zealand Census-Mortality Study investigated the change in association between socioeconomic factors and suicide over a 20-year period of major economic and social restructuring. The study concluded that multiple risk factors for suicide had become more concentrated among those with low incomes (Collings et al 2005).

These considerations suggest that communities with strong social support, connectedness and participation may provide a context that promotes mental health, prevents mental illness and can support more targeted goals and actions of the *New Zealand Suicide Prevention Strategy* (Collings and Beautrais 2005; Kawachi and Berkman 2001; Sartorius 2003).

Government policies to enhance social cohesion and support range widely, from broad policies to increase the capacity of the voluntary sector through to local-level community development initiatives. Some policies and programmes focus on particular settings or populations. For example, some initiatives promote social connectedness within schools. Other policies and programmes aim to increase social support and integration for potentially isolated groups, such as older people, refugees and gay, lesbian, bisexual, transgender and intersex people. Promoting social inclusion for people with experience of mental illness is particularly important because of the association between mental illness and suicide.

Examples of key policies and programmes are:

- Student Well Being Mental Health Education Initiative (Ministry of Education)
- Health and Physical Education in the New Zealand Curriculum (Ministry of Education)
- Mentally Healthy Schools (Ministry of Health)
- Connecting Diverse Communities (Ministry of Social Development and Office of Ethnic Affairs, Department of Internal Affairs)
- Settling In (Ministry of Social Development)
- Government Policy on Volunteering (Office of the Community and Voluntary Sector, Ministry of Social Development)
- Community Action on Youth and Drugs Project (Ministry of Health)
- Kia Piki te Ora (Ministry of Health)
- Social Inclusion and Participation Guide for Policy and Planning (Ministry of Social Development)
- Like Minds, Like Mine programme (Ministry of Health).

Cultural identity

Alienation from one's own culture is considered to be a risk factor for suicide. Conversely, where culture provides a sense of belonging, purpose, self-worth and guidance, it may act as a protective factor for suicide (Lawson Te Aho 1998).

In many countries, indigenous minority populations have higher suicide rates than those in the majority population. This disparity applies to Māori in New Zealand (Hirini and Collings 2005), possibly due to the impact of colonisation on cultural identity. Some New Zealand research has explored these issues and found associations between Māori cultural identity and suicide attempts (Coupe 2005). Cultural identity for Māori could be strengthened through increased access to Māori language, family networks, community structures, customary land and traditional arts (Durie 1998).

Recent immigrants who are isolated from people with a similar cultural background (such as some Asian immigrants) may have difficulties adapting to New Zealand culture and may experience mental health problems. Programmes that focus on connecting new immigrants with appropriate community groups may help to maintain strong cultural identity in this group (Ho et al 2002).

Cultural alienation may also be a significant risk factor for the second generation of immigrants – that is, those who are born in New Zealand from immigrant parents. For example, many New Zealand-born Pacific peoples have experienced significant language loss, weakened extended family structures and diminished traditional belief systems and values. Strengthening these aspects of cultural identity may be important for the mental health of these communities (Minister of Health 2002).

A range of policies across government aim to promote acceptance of cultural diversity and strengthen cultural identity.

Examples of key policies and programmes are:

- He Korowai Oranga: Māori Health Strategy (Ministry of Health)
- Māori Potential Approach (Te Puni Kōkiri)
- Te Rautaki Reo Māori: Māori Language Strategy (Te Puni Kōkiri)
- Pacific Health and Disability Action Plan (Ministry of Health)
- intercultural awareness and communication training (Office of Ethnic Affairs, Department of Internal Affairs)
- ethnic advisory services (Office of Ethnic Affairs, Department of Internal Affairs)
- New Zealand Diversity Action Programme (Human Rights Commission).

Discrimination

People with experience of mental illness, gay, lesbian, bisexual, transgender and intersex (GLBTI) people, refugees and immigrants, and minority ethnic groups may experience various forms of discrimination. Discrimination is associated with a poorer sense of wellbeing and lower self-esteem as well as with mental health problems (Brown et al 2000; Kessler et al 1999; Williams and Williams-Morris 2000).

People with experience of mental illness report discrimination in many aspects of their lives, ranging from employment and housing issues, to discrimination from friends, family and the community (Mental Health Foundation 2004). Reducing discrimination against people with experience of mental illness is important because of the strong associations between mental illness and suicide, and because discrimination is considered to be one of the greatest barriers to recovery for people with mental illness.

Non-heterosexual sexual orientation and non-conforming gender identity are related to increased risk of suicidal behaviour (de Graaf et al 2006; Fergusson et al 1999; Fergusson, Horwood and Ridder et al. 2005; Skegg et al 2003). It is suggested that these increased risks reflect the consequences of social stress and discrimination faced by gay, lesbian and bisexual individuals (de Graaf et al 2006). Evidence is more limited in relation to those with non-conforming gender identity (transgender and intersex individuals) but it is reasonable to assume that they face similar pressures (Fitzpatrick et al 2005; Street and Kromrey 1995). These findings suggest that social policies that aim to reduce the discrimination faced by GLBTI people may contribute to suicide prevention.

Refugees, migrants and people of minority ethnic groups may also face discrimination, rejection and negative public attitudes (Ellis and Collings 1997). Less than friendly reception by the host population of a country may be associated with increased risk of mental disorder among immigrants. Programmes that increase public awareness of the benefits of cultural diversity may help to encourage positive community attitudes to immigrants (Ho et al 2002).

In New Zealand, the Human Rights Commission has the role of protecting and promoting human rights and preventing discrimination in a range of areas. Reducing discrimination against people with experience of mental illness is led by the Ministry of Health, through the Like Minds, Like Mine programme. The Ministry of Social Development has established a policy function to raise awareness among government agencies of issues impacting on GLBTI people, and to support government efforts to develop inclusive policy.

Examples of key policies and programmes are:

- Like Minds, Like Mine (Ministry of Health)
- GLBTI policy function (Ministry of Social Development)
- Out There Queer Youth Development Project (Department of Internal Affairs)
- New Zealand Action Plan for Human Rights (Human Rights Commission)
- Transgender Inquiry (Human Rights Commission).

Addressing the interface between policy and prevention

New Zealand has a strong policy base to address the wide range of factors that may influence population and individual levels of vulnerability and resilience to both mental health problems and suicidal behaviours. However, little of this policy has been developed as a response to the problems of suicide. Most policy has evolved as a result of wider concerns about the interface between social conditions and wellbeing. This pattern of development suggests some areas where there is potential for greater linkages between suicide prevention and related policy areas, such as:

- strengthening collaboration and co-operation among agencies involved in the development and implementation of policies and programmes that may contribute to suicide prevention
- including themes and messages about suicide prevention in related policies, where appropriate and feasible
- including measures of suicidal behaviours in programme evaluation, where appropriate and feasible
- reviewing the existing portfolio of policies and programmes to identify gaps.

Promoting mental health and wellbeing and preventing mental health problems for Māori/tangata whenua

As well as the general protective factors discussed above, factors that contribute to mental health and wellbeing for Māori include secure cultural identity and access to Māori culture, for example te reo, whenua, whakapapa, marae, iwi, hapū and whānau (Durie 1998).

Conversely, as well as being exposed to the general risk factors that contribute to mental health problems and suicidal behaviours, Māori experience specific risk factors such as cultural alienation (Durie 1998), institutional racism (Harris et al 2006), and the influence of historical, political and social processes (Hirini and Collings 2005).

It is important that all policies and programmes are appropriate for Māori, that there are specific policies to reduce risk and increase resilience for Māori, and that policies promote the wellbeing of Māori society. The effective application of Māori health frameworks, for example the whānau ora approach in *He Korowai Oranga* (Minister of Health and Associate Minister of Health 2002), may assist in the development and implementation of policies discussed above in relation to Goal 1.

Issues for Pacific peoples

Cultural values and beliefs and strong family and community connections are considered essential to maintain good mental health among many Pacific peoples. It may be that these are protective factors with particular relevance to Pacific communities. Conversely, cultural alienation is likely to be a significant risk factor for Pacific peoples. This may be a particular issue for New Zealand-born Pacific peoples who have experienced significant language loss and weakened extended family structures (Minister of Health 2002).

Key areas for action

The broad aims of Goal 1 are to encourage the development of policies and programmes that minimise risk, maximise resiliency and provide a context for the more targeted policies discussed under later goals. This chapter does not lead to recommendations for specific new policies or programmes. Instead, it focuses on strengthening intersectoral collaboration and co-operation on policies and programmes that may contribute to the outcome of suicide prevention. These considerations and the material reviewed in this chapter suggest the following actions.

- 1.1 Strengthen linkages. There is a need to continue to strengthen mechanisms for interagency collaboration and co-operation to ensure that issues relating to suicide are recognised and incorporated into policies, programmes and their evaluation.
- 1.2 Address the needs of Māori. There is a need to develop structures to ensure that all policies and programmes are appropriate and effective for Māori.
- 1.3 Focus on reducing inequalities. All policies and programmes that may contribute to suicide prevention should include a focus on reducing inequalities. Funders, planners and service providers need to consider how their policies and programmes address the needs of those in their population who are most at risk.

Goal 2: Improve the care of people who are experiencing mental disorders associated with suicidal behaviour

Introduction

The purpose of this goal is to develop strategies, policies and services that improve recognition, treatment and management of people who are experiencing mental disorders that contribute to the development of suicidal behaviour. Achieving this purpose means identifying a range of actions that are safe and evaluated for effectiveness, particularly for those groups that have high rates of, or are at risk of, experiencing mental disorders.

Rationale

New Zealand and international research has found that mental disorders are the strongest risk factors for suicidal behaviour. Between 70 and 90 percent of people who make serious suicide attempts or die by suicide have a recognised mental disorder at the time of the attempt, and more than 80 percent are untreated for that disorder when they die (Cavanagh et al 2003). These trends have been reported in a series of New Zealand studies, (Fergusson et al 2000, Nada-Raja et al 2004, MaGPIe Research Group 2003, Beautrais 2001b, 2003a, 2004a, Oakley-Browne et al 2006, Coupe 2005, Tiatia 2003).

Almost all mental disorders are associated with an increased risk of suicide. The disorders most commonly associated with suicidal behaviour are mood disorders (Lonnqvist 2000), substance use disorders (Murphy 2000; Sher 2006a), anxiety disorders (Allgulander 2000) and personality disorders (Linehan et al 2000). While schizophrenia and eating disorders are relatively uncommon in the general population, risks of suicide and suicide attempt are particularly high within these groups (Appleby et al 1999; Herzog et al 2000). Multiple mental disorders are common among those with suicidal behaviour. Such comorbidity substantially increases risk of suicidal behaviour (Beautrais, Joyce, Mulder et al 1996).

Theoretically, if mental disorders could be eliminated from the New Zealand population, rates of suicide and suicide attempt could be reduced by up to 75 percent (Beautrais 2000b, 2002; Beautrais, Joyce, Mulder et al 1996). The elimination of major depression alone could (theoretically) reduce population rates of suicide by over 50 percent (Beautrais, Joyce, Mulder et al 1996).

A further issue is that substantial percentages of those who die by suicide have tested positive for using alcohol and drugs (CDC 2006). Alcohol and drugs may also facilitate suicidal behaviour, possibly by increasing impulsivity and aggression (Sher 2006b).

Policy context

Goal 2 and the actions that accompany it sit within New Zealand's overarching mental health and addiction policy framework. The two recent documents that provide a foundation for the provision of suicide prevention initiatives are *Te Tāhuhu – Improving Mental Health 2005–2015: The Second New Zealand Mental Health and Addiction Plan* (Minister of Health 2005) and its action plan *Te Kōkiri: The Mental Health and Addiction Action Plan 2006–2015* (Minister of Health 2006). The *New Zealand Suicide Prevention Strategy 2006–2016* (Associate Minister of Health 2006) and this accompanying Action Plan will build on these documents by focusing specifically on ways of meeting the needs of people with suicidal behaviours.

Key areas for consideration

Focus in four key areas could potentially reduce suicidal behaviour. These areas are:

1. population-based initiatives that encourage greater recognition of and responsiveness to mental disorders
2. community-based initiatives that enhance the skills of people in the community, institutions and other organisations to identify and improve access to health care by facilitating help-seeking for people experiencing mental health problems
3. improvements in the organisation and delivery of quality mental health services, including Māori models of health
4. mental health programmes within institutional settings.

Population approaches

Many people experiencing mental disorders do not seek treatment or support from any source, in particular, Māori, young people and Pacific peoples (Oakley Browne et al 2006). Reticence to help-seeking is likely to increase the susceptibility to suicidal behaviours (Murray and Lopez 1996). Therefore, improving access to health services is an important prerequisite to improving the care of those who are experiencing mental disorders associated with suicidal behaviour.

Population-based approaches include improving public awareness of mental health and addiction problems, increasing public acceptance and understanding of these problems and destigmatising mental illness, and encouraging people to seek appropriate help. A further population-based approach is providing telephone counselling services that offer support and referral to health services for those who may be experiencing distress. It is important that all population approaches are evaluated for their effectiveness and responsiveness and that barriers to accessing services are addressed, particularly for those populations most at risk of suicidal behaviour.

Depression awareness campaigns

Depression makes the largest single contribution to suicidal behaviour. Given this link, one strategy to reduce suicidal behaviour is to conduct population-level campaigns that seek to improve public understanding of depression and to encourage people to seek help.

Such campaigns are especially significant for populations with high risks of suicidal behaviour and poor access to services. For example, compared with non-Māori, Māori are less likely to identify signs of depression, less likely to talk openly about depression, and less likely to seek help or encourage another whānau member to see a general practitioner or a mental health professional (Wyllie and Mackinlay 2007).

Internationally, such campaigns have been found to increase understanding about and improve attitudes towards depression, improve recognition of depressive symptoms and increase public perceptions that depression can be treated effectively (Goldney et al 2007; Highet et al 2006; Jorm et al 2006). However, little is known about the extent to which such campaigns are associated with behaviour changes (such as help-seeking and adhering to treatment) that might, in the long term, reduce rates of depression or suicidal behaviours.

Mental illness destigmatisation programmes

One major barrier to accessing services and recovering from mental illness is the stigma and discrimination associated with experiencing mental illness (Mason et al 1996). Throughout the world, investments have been made in public education campaigns designed to increase the public's awareness and understanding of mental illness (Corrigan and Penn 1999). Although the primary focus of these campaigns is to reduce discrimination and stigma, they may contribute to suicide prevention as well by encouraging better use of services and support for those experiencing mental illness and by providing a more supportive environment to assist their recovery.

Telephone counselling services

Through their availability, accessibility and anonymity, telephone counselling services have the potential to be an important population-level approach for helping those who are experiencing distress, mental disorder and suicidal behaviours. Helplines may be effective in reducing callers' psychological distress (King et al 2003), sense of hopelessness (Kalafat et al 2007) and suicidal behaviour (Gould et al 2007; Kalafat et al 2007; King et al 2003). They may also facilitate access to more specialist assistance by providing information and referral to services. Despite the widespread use of helplines by suicidal people and those in crisis, there has been relatively little evaluation of their effectiveness in alleviating caller distress and in reducing suicidal behaviours (Mishara et al 2007). The effectiveness of telephone counselling services for Māori is not known, however, evaluating existing programmes should improve understanding in this area.

Current New Zealand initiatives

The National Depression Initiative

The National Depression Initiative (NDI) was launched in October 2006. This multimedia campaign aims to reduce the impact of depression through increasing understanding of the symptoms of depression, increasing public awareness of effective interventions and encouraging people experiencing depression to seek help. Results from the evaluations show that the messages are far-reaching, with 90 percent recall by the total population and 96 percent recall by Māori (Wyllie and Mackinlay 2007). The challenge now is to look at the effectiveness of the campaign in changing behaviours, specifically in increasing help-seeking behaviours.

The NDI also aims to improve the capability of health providers to respond appropriately to people seeking help for depression. As part of this initiative, the *Guidelines for the Treatment and Management of Depression by Primary Healthcare Professionals* (National Health Committee 1996) have been revised and will be implemented over the next few years.

Reducing stigma and discrimination associated with mental illness (Like Minds, Like Mine)

Like Minds, Like Mine began in 1997. This national programme aims to reduce the stigma of mental illness and the discrimination experienced by people with mental illness. It includes a national advertising campaign and several strategies to meet regional needs, such as education and training, working with the media and advising on agency policy initiatives in areas such as employment,

education and housing. The programme has been shown to be effective in changing the New Zealand public's awareness of and attitudes to mental illness (Vaughan 2004).

Telephone counselling services

New Zealand has a wide range of telephone counselling services available, including Lifeline, Youthline, Samaritans, What's Up, Gay/Lesbian line, the Depression Helpline, the Alcohol and Drug Helpline, and various sexual abuse/rape survivors counselling lines. Increasingly services are diversifying to provide text and email support.

Community approaches

A second approach to achieving this goal is to undertake programmes and initiatives that provide advice and support to community workers to improve their understanding about and recognition of mental health problems and suicidal behaviours, and to subsequently facilitate help-seeking. These programmes and initiatives are provided to people who, as part of their day-to-day role, have contact with those who may be experiencing mental health and addiction problems (including hazardous drinking behaviours) and suicidal behaviours. This approach also includes the development of policies and protocols that workers in institutions and organisations can use to effectively identify, manage and facilitate access to services. Examples of such community, institutional and organisational workers are: clergy; kaumātua; marae workers; Māori wardens; hapū and iwi workers; youth workers; police; and those who work in schools, kura kaupapa, kōhanga reo, whare wānanga, universities, prisons, community probation services, social services, residential care units, youth justice centres, homes for the elderly, and Pacific community organisations. In the literature on suicide prevention, these workers as a whole are commonly described as 'gatekeeper' groups.

The rationale for the provision of such programmes and initiatives is that community knowledge of mental disorders and suicidal behaviours is often limited. Lack of knowledge contributes to stigmatising attitudes and limits support that people might otherwise provide. Research shows that those who attend training programmes to address this issue improve their attitudes to and increase their knowledge of mental health and addiction problems, and increase their helping behaviours. Such training may also improve the mental health and wellbeing of participants themselves (Kitchener and Jorm 2006).

Two large-scale institution-based programmes, in the United States Air Force (Knox et al 2003) and the Norwegian Army (Melhlum and Schweps 2000), have led to reductions in suicide rates. The evaluations suggest that certain conditions are required for the success of such programmes. These conditions include relatively constrained institutional settings that require accountability and in which lines of communication are strong, and re-presentation of the programme at regular intervals. The positive findings from the air force and army studies should encourage evaluation of existing community and institutional programmes to identify their effective components and the extent to which they reduce suicidal behaviours.

The development of community, institutional and organisational programmes or initiatives poses a number of important issues. First, any such programme or initiative should be based on well-developed guidelines that take into account the context within which the programme or initiative will operate. Second, it is important to implement the guidelines in a way that ensures that community, institutional or organisational workers have the skills, capacities and resources to work within the guidelines. Third, measures should be in place to ensure that the programme or initiative continues to be effectively implemented over time. Fourth, it is important to weigh issues of safety carefully. This last consideration includes ensuring that those who receive training have both suitable supervisory processes (if applicable) and clear and effective referral pathways to appropriate health services for those who are identified as needing mental health assessment.

The development of a community approach must be tailored to the New Zealand context. When programmes are being designed, it is imperative to consider whether they are culturally effective within the communities at which they are targeted. For example, initiatives within Māori communities need to adhere to cultural protocols of engagement with the appropriate individuals, leaders and/or groups, such as kaumātua, hapū and iwi.

There is potential for ill-considered programmes or initiatives to have unexpected harmful effects. For example, there have been serious concerns about some school-based programmes that enlist students in ‘gatekeeper’ roles (Bennett et al 2003; Hazell and King 1996). For these reasons, it is important that the development of such programmes and initiatives includes processes of monitoring, evaluation, review, audit and other mechanisms to ensure the safety of the programme.

Current New Zealand initiatives

The Living Works ASIST Programme

The Applied Suicide Intervention Skills Training (ASIST) programme is a two-day workshop that trains participants to recognise and respond to those at imminent risk of suicide. The target audience for this programme is community workers who, as part of their day-to-day lives, are in contact with people at risk of suicide. An evaluation of ASIST in New Zealand showed that the programme enhanced the skills of participants to provide proactive help in situations of imminent suicide risk (Hyde et al 2006). Originally developed in Canada, it is currently being modified to reflect the New Zealand context more accurately.

Mental health literacy

The development of a new mental health literacy programme has been funded and will commence in 2008. This community-based programme involves the provision of workshops and information resources. It aims to increase behaviour that promotes mental health, increase ability to recognise signs and symptoms of mental health problems, increase supportive behaviour towards friends, family and colleagues with mental illness, increase uptake of effective self-help strategies and appropriate professional help-seeking, and reduce stigma and discrimination towards people with experience of mental illness.

Other ‘gatekeeper’ initiatives

There is an array of community ‘gatekeeper’ programmes and guidelines for recognising and responding appropriately to people experiencing mental health and addiction problems or suicidal behaviours. Guidelines exist, for example, for school staff (Beautrais, Coggan et al 1998), social workers (Child, Youth and Family 2000), prison staff (Le Quesne 1995) and police, and are soon to be developed for people who work in income support services. There is an ongoing need for evaluation of the extent to which the guidelines approach is effective in changing knowledge, attitudes and practice and in improving care.

Health services approaches

Most people who die by suicide have been in contact with primary health care providers or mental health services prior to their suicide attempt (Beautrais 2001b; Luoma et al 2002). These findings suggest that there is considerable potential for the improved management of mental disorders in clinical settings to reduce rates of suicidal behaviour. Less is known specifically about primary health care contact made by Māori who die by suicide.

Organisation of service delivery

The ways in which health services are organised and delivered can substantially affect rates of mental disorders and suicidal behaviours. Services that use a model of integrated care linking population, community, clinical and client-based services offer the most effective approach. The work of the Nuremburg Alliance Against Depression illustrates the value of developing an integrated approach to managing depression and reducing suicidal behaviour (Hegerl et al 2006). The key elements of this model were: public education about depression; education of community workers; education, training and support for general practitioners; support for guided self-help activities; and targeted support for high-risk groups.

In the New Zealand context, organisation of service delivery must also include recognition and implementation of Māori models and frameworks of health. This approach is relevant to both general population services and Māori-specific health services.

Support and education of primary care providers

Programmes that support primary care practitioners to recognise, treat and manage the mental disorders that contribute to the development of suicidal behaviours are among the most promising approaches to suicide prevention (Mann et al 2005). Educating and training physicians in the management of depression and suicidal behaviours may: increase detection of mental disorders; lead to improved management of mental disorders (particularly major depression); and reduce rates of suicidal behaviours (Green and Gask 2006; Harter et al 2006).

Effective support for primary health organisation (PHO) providers includes the development and active dissemination of best-practice guidelines, clinical education, effective engagement with providers, provision of booster training programmes and ongoing evaluation of efficacy of such education and training. Such education and training programmes may be more effective if they are embedded in integrated organisational interventions such as nurse case management, collaborative care (care shared among a primary care physician, psychiatrist, psychologist, nurse and/or social worker) and intensive quality improvement initiatives (Gilbody et al 2003; Mann et al 2005).

New Zealand regularly develops guidelines for the management of mental health and addiction disorders. However, there is a need for greater focus on the effective implementation of these guidelines. Evaluation is also needed to explore whether the implementation of guidelines leads to changes in practice, improved care and a reduction in suicidal behaviours.

Enhanced treatment and management of mental disorders

A range of evidence-based treatments exist for the management of the mental health and addiction disorders associated with suicidal behaviour. These treatments include pharmacotherapeutic, psychological and psychosocial approaches.

Pharmacotherapeutic (medication) approaches that have been shown to reduce suicidal behaviour include long-term therapy with lithium for bipolar disorder or severe depression (Thies-Flechtner et al 1996), and the use of the antipsychotic medications clozapine and olanzapine for psychotic illnesses, including schizophrenia (Glick et al 2004).

The role of antidepressant medication in reducing suicide has become controversial. At the population level, the widespread introduction and use of selective serotonin reuptake inhibitor (SSRIs)

antidepressants has been associated with decreased suicide rates, particularly for adults (Ludwig and Marcotte 2005). However, as a result of recent concerns about adverse events in clinical trials of SSRIs, a ‘black box’ warning has been added to the health professional labelling of all antidepressant medications. This warning describes an increased risk of suicidal thoughts and behaviour in children and young people being treated with these medications. The extent to which the warning may have changed prescribing practices and affected suicide rates is being evaluated. The likely conclusion seems to be that SSRIs benefit most people but may increase suicide risk in some subgroups of the population (Bridge et al 2007).

A range of psychological therapies and a psychosocial intervention have been shown to reduce symptoms and behaviours including hopelessness, anxiety, depression, suicidal ideation, and in some cases suicide attempts. These interventions have also been shown to increase adherence to treatment (Crawford et al 2007). The therapies include cognitive behavioural therapy (Brown et al 2005), interpersonal behavioural therapy (Guthrie et al 2001), problem-solving therapy (Hawton et al 1999; Hawton 2005; Townsend et al 2001) and dialectical behavioural therapy (Linehan et al 2006). For substance abuse disorders, brief motivational interventions are effective in reducing alcohol consumption (D’Onofrio et al 2005; Vasilaki et al 2006). Psychosocial interventions, whereby mental health services send friendly letters or make telephone calls to provide proactive contact and remind people that assistance is available, reduce mental distress, suicide attempts and suicide (Carter et al 2005; King et al 2006; Motto and Bostrom 2001; Vaiva et al 2006).

Discharge from mental health inpatient care is associated with significantly increased risk of suicide (Appleby et al 1999). Promising interventions addressing this high-risk group include careful discharge planning, proactive follow-up immediately after discharge (Meehan et al 2006), maintaining care beyond the point of recovery (Appleby et al 1999) and interventions such as social contact and occupational activities to address psychosocial needs (De Hert et al 2001; Tidemalm et al 2005).

Current New Zealand initiatives

Improvements in specialist mental health services

The goal of the national mental health strategy *Te Tāhuhu – Improving Mental Health 2005–2015* (Minister of Health 2005) and its accompanying action plan, *Te Kōkiri* (Minister of Health 2006), is to develop a comprehensive and integrated mental health and addiction system. This system will co-ordinate early access to services with improved continuity of care and seamless transitions across health and social services sectors. The primary focus is on building the range and quality of specialist services for people severely affected by mental and addiction disorders, and on addressing key gaps in access to services for Māori, Pacific peoples, children, younger people and older people.

Improvements in primary mental health services

A particular focus recently has been on improving mental health care in primary health care settings, given that these settings are where most people experiencing mental disorders are treated. The following are two key primary health care initiatives.

- **Primary mental health care initiatives:** *Te Tāhuhu – Improving Mental Health 2005–2015* (Minister of Health 2005), *Te Kōkiri* (Minister of Health 2006) and the *Primary Health Care Strategy* (Minister of Health 2001) set the context for building capacity of the primary health care sector to support people experiencing mild to moderate mental disorders that contribute to the development of suicidal behaviour. A range of primary mental health initiatives have been implemented in most primary health organisations (PHOs). These initiatives include: establishing primary mental health co-ordinators to manage multidisciplinary care; education and support for general practitioners; extended general practice consultations; provision of therapy; tailored packages of care; and strengthening links between

primary care and specialist mental health services. Future work will include a focus on building the primary mental health workforce, developing and delivering mental health services over the internet (e-therapy) and implementing a newly revised guideline for assessing, treating and managing depression and other common mental health disorders in primary care.

- **The Primary Health Organisation Performance Management Programme:** This programme supports clinical governance and rewards quality improvement by providing incentive payments to all PHOs who meet targets for specified indicators. Indicators for chronic mental health conditions, such as depression, anxiety and addiction, are being developed.

Improving youth access to health services

A number of youth 'one-stop shops' in New Zealand provide a range of health and social services to young people. These services aim to increase youth access to primary health care by providing an appropriate environment for this particular age group. In addition, 10 to 20 percent of New Zealand schools have a primary health care service on site (Denny et al 2005).

Other youth focused initiatives include:

- District Health Boards (DHBs) and Child, Youth and Family (CYF) working together to increase access to mental health and addiction services for CYF clients
- giving health and education screening to selected young people who have committed offences, before they attend family group conferences
- conducting and evaluating Achievement in Multicultural High Schools (AIMHI) in nine school-based health and social service clinics within low decile schools. This project aims to raise achievement levels of Māori and Pacific students by addressing their social, health and wellbeing needs in an integrated manner.

General approaches

At a general level, approaches to improving mental health care include the following.

- **Best-practice Guidelines for Mental Disorders:** New Zealand best-practice guidelines have been developed for the assessment, treatment and management of mental disorders that are related to suicidal behaviour (depression, bipolar disorder, schizophrenia, anorexia nervosa, substance abuse, panic disorder and agoraphobia, deliberate self-harm) (Boyce et al 2003; Ellis et al 2004; National Health Committee 1999; Royal Australian and New Zealand College of Psychiatrists Clinical Practice Guidelines Team for Anorexia Nervosa 2005; Royal Australian and New Zealand College of Psychiatrists Clinical Practice Guidelines Team for Deliberate Self-harm 2004; Royal Australian and New Zealand College of Psychiatrists Clinical Practice Guidelines Team for Panic Disorder and Agoraphobia 2003). Guidelines that focus specifically on addressing suicidal behaviours have also been developed for primary care providers (Royal New Zealand College of General Practitioners 1999) and emergency department staff (NZGG and Ministry of Health 2003). A revised best-practice guideline has been developed for the assessment, management and treatment of depression and other common mental disorders in primary health care. It covers suicide issues, as well as specific issues for particular population groups, such as young people, women with postnatal depression, and older people. To ensure this guideline is readily adopted by primary health professionals and is embedded in systems of care, it will be accompanied by a comprehensive implementation plan.

- **Workforce development:** Extensive investments have been made in workforce development in order to support the overarching goal of more and better mental health and addiction services. The Ministry of Health funds specific workforce development activities in areas relevant to suicide prevention, including child and youth mental health, Māori mental health, alcohol and other drug services, and workforce research and development. The development of the suicide prevention workforce needs to be linked to this broader mental health and addiction workforce framework.

Institutional settings approaches

Specific mental health and addiction issues may arise within institutional settings, such as schools, universities, the armed services, prisons, police custody, child youth and family (CYF) residential units and related organisations. These settings may provide opportunities for a more structured approach to the delivery of mental health and addiction services and programmes, including mental health promotion, risk assessments and mental health treatments and programmes. A particular focus of such services and programmes needs to be on reducing the high rates of suicide and suicide attempts among those experiencing chronic disorders, such as schizophrenia and bipolar disorder.

Current New Zealand initiatives

Criminal justice system

The Ministries of Health and Justice have led a review of the interface between mental health, alcohol and drug services and the criminal justice system. The New Zealand Police and Department of Corrections also contributed to this work. The review led to the development of a comprehensive programme, *Effective Interventions: First Steps*, which aims to improve mental health, alcohol and drug treatment and access to treatment for people within the criminal justice system.

Correctional facilities

The mental health and addiction needs and suicide/self-harm risks of prisoners are assessed at first entry and at critical points throughout their sentences. Improved assessment tools for identifying mental health and addiction and suicide risk for prisoners are being developed. Prisons provide continuing staff training in suicide risk assessment and management. They also provide primary health care services, have the ability to refer prisoners to regional forensic psychiatric services, and have specific units that address addiction issues, sexual offending and violence prevention.

Educational settings

A range of services are available in educational settings to assist and support the mental health of the students. Secondary schools, and some primary schools, employ counsellors to identify mental health and addiction issues and suicidal behaviours, provide initial assessment and care, and refer to specialist services if required. Some schools provide school based social workers. All primary and secondary schools have access to the Severe Behaviour Service and can access an Interim Response Fund. Both the service and the fund provide support to schools to assist the management of students with behavioural issues, including suicidal behaviour and mental health problems. A growing number of secondary schools have school-based nurse and primary health services, and developments are under way to expand them.

All universities have student health and counselling services. The counselling service at Victoria University, has developed a mental health promotion and suicide prevention policy to better identify and help students at risk of suicide.

Child, Youth and Family Services

Towards Well-Being is a national suicide risk assessment, monitoring and management programme for young people under the care and protection of CYF. Clinical psychologists provide advice to CYF social workers to assist them to develop suicide management plans, monitor these plans and identify referral pathways to specialist mental health services, as required. More than 570 young people are managed in this way at any one time.

Improving the care of Māori/tangata whenua who experience mental disorders associated with suicidal behaviour

Good health and wellbeing are central to everyone. How services can best support good health and wellbeing outcomes, however, necessarily differs both among and within different populations. The way that services support Māori tangata whaiora³ is important because Māori have higher rates of mental disorders compared with non-Māori.

Te Rau Hinengaro: The New Zealand Mental Health Survey (Oakley Browne et al 2006) shows that Māori generally have a higher prevalence of mental disorders, experience more serious disorders and are less likely to visit a health care organisation for a mental health problem compared with most other ethnic groups.

Models of care for general population services must ensure that these services are effective, appropriate, accessible and user friendly for tangata whaiora and their whānau. A particular focus on the delivery of equitable treatment is essential to improve outcomes for Māori (Minister of Health 2000). Prioritising the implementation of Māori-centred evaluations of these services would potentially inform future development of better services and significantly improve the health outcomes for tangata whaiora and their whānau.

Traditionally, Māori have taken a broad view of health, encompassing physical, mental and social wellbeing (Dyall 1997). The introduction section above on Māori as tangata whenua noted some of the many existing and recognised Māori models of health, including te whare tapa whā (Durie 1994). To build on existing and future Māori models of health, it is important to develop them further and evaluate their effectiveness for Māori. A strong focus on population-based strategies is essential if Māori are to have equitable outcomes with non-Māori.

As stated in *Te Kōkiri*, services will improve when Māori take an active role in planning and delivering services and when models of practice incorporate a better understanding of the importance of whānau, Māori approaches to health and the interface between culture and clinical practice (Minister of Health 2006).

Issues for Pacific peoples

Te Rau Hinengaro: The New Zealand Mental Health Survey (Oakley Browne et al 2006) shows that, compared with the general population, Pacific peoples in New Zealand have higher rates of most mental disorders. The prevalence of mental disorder is higher among Pacific peoples born in New Zealand than among those born in the Pacific Islands.

³ This term is translated as 'people seeking wellbeing' and is used to refer to people with experience of mental illness from all age groups: tamariki, mokopuna, rangatahi, taiohi, pakeke, kaumātua.

Despite having higher rates of most mental disorders, Pacific peoples are less likely to access health services. Suggested reasons for this lower uptake include financial barriers and the stigma associated with mental illness for both the individual and their wider family. In addition, some traditional beliefs, such as that the disorder is caused by a spiritual force or a deterioration in family relationships, may encourage the perception that health services cannot help. A further barrier to care may be that health care services are perceived to work only with individuals rather than being inclusive of the wider family (Bathgate and Pulotu-Endemann 1997).

Given these findings of higher rates of mental disorders yet lower rates of access to services among Pacific peoples, Pacific-focused mental health and suicide prevention interventions should receive special consideration. Such interventions would include population-level approaches, programmes and initiatives for community workers (eg, inclusion of Pacific faith-based leaders), and health service approaches. Improvements in the responsiveness of mental health and addiction services for Pacific populations are considered in *Te Kōkiri* (Minister of Health 2006). They include the provision of services based on Pacific frameworks and models of health, the promotion of clinical and cultural competence, access to services based on need, and workforce development issues.

Issues for young people

Young people aged 16–24 years have the highest rates of mental disorder, suicidal ideation, suicide plan and suicide attempt of any age group. A recent New Zealand survey indicates that the rates are particularly high for young Māori (Oakley Browne et al 2006). Young people are also less likely than any other age group to access health services for a mental health reason, which indicates a significant unmet need for treatment among young people who are experiencing mental disorders (Oakley Browne et al 2006). As such, the needs of young people, in particular young Māori, need to be well considered during the development and provision of mental health and suicide prevention services. Improvements in the range and choice of health services for young people are considered in *Te Kōkiri* (Minister of Health 2006).

Key areas for action

Population-based strategies

- 2.1 Implement population-based strategies, including mental health and depression awareness, mental illness destigmatisation and telephone⁴ counselling.
- 2.2 Evaluate the effectiveness of these population-based programmes in leading to improved mental health outcomes and associated reductions in suicidal behaviours. This action includes evaluation of the effectiveness for Māori specifically.

Community-based approaches

- 2.3 Review current guidelines, programmes and initiatives for community, institutional and organisational workers.
- 2.4 Where necessary, develop, implement and evaluate new programmes, initiatives or best-practice guidelines. This action includes evaluating whether programmes, initiatives or guidelines are culturally appropriate and effective for whānau, hapū, iwi and Māori communities.

⁴ Which may include the use of new technologies, using text, email and online video support or counselling.

Health services approaches

- 2.5 To provide a context for this Action Plan, it is important that work continues on the development of more and better mental health and addiction services in New Zealand as described in *Te Tāhuhu – Improving Mental Health 2005–2015* (Minister of Health 2005) and its action plan, *Te Kōkiri* (Minister of Health 2006).
- 2.6 Develop, implement and evaluate a best-practice guideline for primary care providers in the assessment, management and treatment of depression, other common mental disorders and suicidal behaviours. This guideline must include best-practice information for providers working with Māori tangata whaiora.
- 2.7 Develop, implement and evaluate demonstration projects aimed at providing integrated models of care. These projects will include a focus on increasing access to health services and supporting the better management of depression, common mental disorders and suicidal behaviours.
- 2.8 Develop, implement and evaluate interventions to reduce risks of suicide and suicidal behaviours among those experiencing mental disorders just prior to and following discharge from mental health inpatient services.
- 2.9 Develop a process to evaluate the effectiveness of general population health services provided to Māori experiencing mental health and addiction disorders most commonly associated with suicidal behaviours.
- 2.10 Develop a process to evaluate the effectiveness of Māori-specific health services provided to Māori tangata whaiora experiencing mental health and addiction disorders most commonly associated with suicidal behaviours.
- 2.11 Monitor new and/or emerging Māori models of health and, as necessary, evaluate whether the implementation of these models is effective.
- 2.12 Disseminate best-practice examples of implementing Māori models of care to Māori health providers.
- 2.13 Develop, implement and evaluate Pacific models of care for those in the Pacific population who are experiencing mental health and addiction disorders most commonly associated with suicidal behaviours.

Institutional settings approaches

- 2.14 Continue to implement programmes, policies and strategies within institutional settings and, where appropriate, review and evaluate them and address any gaps identified. This action includes evaluating their effectiveness for Māori specifically.

Goal 3: Improve the care of people who make non-fatal suicide attempts

Introduction

The purpose of this goal is to develop policies, strategies and services that lead to better treatment, management and after-care support of those making non-fatal suicide attempts. Achieving this purpose means identifying actions for improving both the acute and longer-term management of those who have made a suicide attempt, providing effective interventions and improving the management of suicide attempts in institutional settings.

Rationale

Several lines of evidence support the conclusion that improving the care of people who make suicide attempts has the potential to reduce the morbidity and mortality from suicidal behaviours. First, people who make suicide attempts are at high risk of dying from suicide and other causes, including road traffic crashes and homicide (Beautrais 2004a; Owens et al 2002). Their risk of suicide is 0.5 to 2 percent within one year of their attempt, and more than 5 percent after nine years (Owens et al 2002).

Second, those who make suicide attempts are at high risk of making further attempts (Beautrais 2004a; Gibb et al 2005). In Christchurch almost one-third of people admitted for a suicide attempt were readmitted at least once within the next 10 years for a further attempt (Gibb et al 2005).

Third, many people who die by suicide have made previous suicide attempts; a history of suicide attempt is a strong predictor of suicide (Neeleman et al 2004).

The reasons for providing support to those making suicide attempts extend beyond suicide prevention. Those who make suicide attempts have high rates of mental health problems, interpersonal difficulties and problems with the law (Beautrais et al 2000; Linsley et al 2007; Sakinofsky 2000). Providing them with effective acute and longer-term care and support may improve their quality of life in addition to reducing their risk of suicidal behaviour.

Key areas for consideration

Through improving and expanding acute and longer-term care and support services following suicide attempts, there is considerable potential to reduce repetitive suicidal behaviour and prevent suicide deaths. Services also need to be responsive to population groups with higher rates of suicide attempts. Such groups include women, younger people, people who have a lower socioeconomic status, Māori and Pacific peoples (Ministry of Health 2006a; Oakley Browne et al 2006). Approaches to improving care and support in health services and institutional settings are outlined below.

Improving the acute management of those who have made a suicide attempt

A series of recommendations and guidelines address the management of suicidal behaviour in acute service settings (Hamilton and Cook 2004; Hawton 2000; Jones and Dargan 2002; Kapur et al 2006; National Collaborating Centre for Mental Health 2004; NZGG and Ministry of Health 2003). These documents focus on management within 48 hours of presentation to hospital emergency departments.

They share common assumptions and principles in terms of the need to:

- provide effective medical treatment of the physical injuries from the suicide attempt
- provide all service users with a full psychiatric and psychosocial assessment by a suitably qualified health professional before they leave the emergency department
- develop a plan for each patient for the effective treatment, management and support of the psychiatric and psychosocial problems that those who have made a suicide attempt face
- involve family, whānau and support people in assessment, treatment, discharge planning and management
- consider and respect service users' cultural needs – in particular, those who identify as Māori should be offered the input of specialist Māori mental health workers and, where possible, Pacific mental health workers should be made available to Pacific peoples
- make systemic changes to the organisation of acute health services to improve the delivery and co-ordination of the required comprehensive care.

Current New Zealand initiatives

Whakawhānaungatanga: the self-harm and suicide prevention collaborative

Whakawhānaungatanga is a current initiative that implements New Zealand's best-practice guidelines for the assessment and management of people at risk of suicide in acute settings (NZGG and Ministry of Health 2003). It is designed to improve the acute care of those who present to emergency departments after making a suicide attempt. Making this improvement involves encouraging effective working relationships among staff from the emergency department, Māori health and mental health. It also requires a collaborative approach with consumers/tangata whaiora and family advisors.

From 2005 to 2007 approximately half of all DHBs participated in this collaborative, and from 2008 it is expected that the remaining DHBs will join the project. Each participating DHB focuses on developing local approaches to provide people who have made a suicide attempt with comprehensive and timely mental health and risk assessments. These approaches include improved discharge planning and follow-up after discharge.

Improving longer-term management of those who have made a suicide attempt

Many people who make a suicide attempt receive no further follow-up or treatment after hospital discharge, despite having high risk of further attempts, psychiatric morbidity, psychosocial problems and mortality (Beautrais et al 2000). To date, there have been few systematic efforts to address follow-up after a suicide attempt. There is a need to develop and evaluate innovative approaches to service delivery that aim to increase the extent and continuity of treatment, care and support for those who have made a suicide attempt. A key purpose of such approaches would be to ensure that health services (primary, secondary and tertiary) and community services (eg, Work and Income, Accident Compensation Corporation, Māori community providers, and CYF services) establish client-centred care pathways and provide co-ordinated, proactive treatment, management and support.

The development of these models will require consultation with key stakeholders, particularly DHBs, about what approaches would best address their population's needs. For example, one model might be based on a clinical co-ordinator role to ensure that those who have made a suicide attempt receive timely, proactive, effective and appropriate care. Alternatively, in larger DHBs the model could mirror that of other health service approaches that use defined multidisciplinary teams, such as stroke units.

It would be also beneficial for Māori mental health services to have follow-up care and support services for tangata whaiora and their whānau evaluated to determine their effectiveness.

Interventions that may reduce further suicide attempts

Systemic changes to improve the acute and longer-term management and support of those making suicide attempts are an important component of suicide prevention efforts. These changes need to be supported by specific therapeutic approaches that may reduce risks of further suicide attempts or suicide.

A range of psychological and psychosocial therapies for the effective treatment of mental health disorders has been developed. Although many of these approaches appear to be less effective in reducing repetition of suicide attempts (Crawford and Kumar 2007; Skegg 2005), those that show promise include: brief interpersonal therapy delivered in the home (Guthrie et al 2001); cognitive behavioural therapy (Brown et al 2005); dialectical behavioural therapy for women with borderline personality disorder (Linehan et al 2006; Verheul et al 2003); problem solving therapy (Hawton et al 1999; Hawton 2005) and maintaining proactive contact by postcards ('friendly letters') or telephone calls (Carter et al 2005; King et al 2006; Motto and Bostrom 2001; Vaiva et al 2006).

The most promising approaches may involve interventions for particular subgroups, such as women who have made repeat attempts, and may have common aspects, such as maintaining proactive contact over time (Comtois and Linehan 2006; Crawford et al 2007; Hawton et al 1999; Skegg 2005). Further study of promising interventions, including adaptations of specific types of programmes for the New Zealand context, is warranted.

Current New Zealand initiatives

The Accident Compensation Corporation (ACC) has funded two studies investigating the effectiveness of interventions to prevent further suicidal behaviour for those who have made a suicide attempt. The first study is exploring the effectiveness of problem-solving therapy in reducing further suicidal behaviour in people who present to an emergency department after making a suicide attempt. The second study explores the extent to which providing a minimal intervention (sending multiple 'friendly letters') to those who have made a suicide attempt, reduces rates of subsequent suicidal behaviour.

Improving the management of suicide attempts in institutional settings

When suicide attempts are made within institutional settings (including schools, universities, CYF residential units, prisons, police custody and armed services), there is a need for additional efforts to minimise risks of repetitive and imitative suicidal behaviour. These issues are commonly addressed by developing best-practice guidelines for the management of suicidal behaviours, and adapting them for specific institutional settings. As with all guidelines, these need to be safe, culturally appropriate, maintained over time, well implemented and evaluated.

Current New Zealand initiatives

Several institutions have initiatives (including guidelines, policies, protocols and assessment tools) for identifying and managing suicidal behaviour. These institutions include: mental health services, in both inpatient and community settings, which have serious incident review policies and procedures; correctional facilities, which have at risk units and incident review procedures; New Zealand Police, which has custodial management instructions; and CYF residential units, which have policies and procedures including critical incident reporting.

Improving the care of Māori/tangata whenua who make non-fatal suicide attempts

Māori rates of hospitalisation for intentional self-harm are consistently higher than the rates of other ethnic groups (Ministry of Health 2006a, 2007a). The overall Māori rate is nearly one-and-a-half times that of non-Māori. The hospitalisation rate for Māori males is over 1.8 times the rate for non-Māori males (Ministry of Health 2007a). Māori females have a higher rate than any other combination of gender and ethnicity (Ministry of Health 2006a).

It is vital that Māori who make a non-fatal suicide attempt receive the full range of quality interventions afterwards. A key priority for improving care will be to ensure that treatment and follow-up are readily available, accessible, effective and culturally appropriate. General population services and Māori service providers need to be mindful that although the whānau most often provide support after a suicide attempt, they may not always do so. Therefore, services need to be responsive to the specific needs of the individual and their whānau.

There is little evidence to show which programmes or interventions are most effective for Māori who make suicide attempts. Ongoing research as well as evaluation of existing services are critical in informing the ongoing development of quality services that make a difference for Māori.

Issues for Pacific peoples

Although national suicide data indicate that Pacific peoples have lower suicide rates than Māori and New Zealand Europeans, a recent survey (Oakley Browne et al 2006) showed that Pacific peoples reported a 12-month prevalence of suicide attempts that was three times the rate of the general population. Particularly high rates of suicide attempts were reported by young Pacific peoples aged 16–24 years. As discussed in previous chapters, there are several challenges around access to and responsiveness of health care services for Pacific peoples. Services providing post-attempt care for Pacific peoples should be clinically and culturally appropriate and should include the wider family, both in the acute stage and in after-care management plans. It is also important that any initiatives to provide targeted post-attempt care are evaluated to ensure they are meeting the needs of Pacific peoples.

Key areas for action

Improving the acute management of those who make suicide attempts

- 3.1 Continue to implement and evaluate the guidelines for the assessment and management of those at risk of suicide in acute settings.

Improving the longer-term management of those who make suicide attempts

- 3.2 Develop, implement and evaluate the effectiveness of services and interventions for the longer-term care for those who have made a suicide attempt.
- 3.3 Develop, implement and evaluate the effectiveness of services and interventions for the longer-term care for Māori who have made a suicide attempt.

Improving the management of suicide attempt in institutional settings

- 3.4 Review and, if necessary, revise and evaluate initiatives (including policies, procedures, assessment tools, forms and guidelines) for managing the aftermath of a suicide attempt in key institutional settings. This action includes evaluating whether these initiatives are culturally appropriate and effective for Māori specifically.

Goal 4: Reduce access to the means of suicide

Introduction

The purpose of this goal is to reduce access to, and the lethality of, the means of suicide, in order to reduce rates of suicide and suicide attempt. ‘Means of suicide’ are objects, substances or locations that are used by a person attempting suicide. This chapter reviews the means of suicide and suicide attempt commonly used in New Zealand and identifies actions to reduce access to them.

Rationale for restricting access to means of suicide

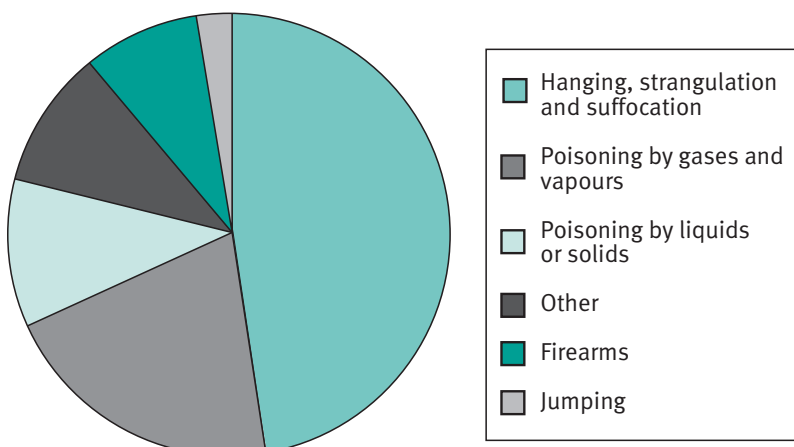
A large body of evidence addresses the extent to which restricting access to means of suicide may reduce rates of mortality and morbidity from suicidal behaviours (Beautrais 2000a; Cantor et al 1996). This evidence shows that restricting access to a specific method frequently results in reduced rates of mortality and morbidity by that method.

However, these reductions may not translate into significant reductions in overall suicide rates. Low base rates of suicide, and of specific methods of suicide, are one reason for this lack of overall impact. Another reason is that people may, over time, switch to using alternative methods. Because of these complex relationships between access to methods and suicidal behaviours, it is important that policies aimed at restricting methods are subject to regular monitoring, evaluation and review.

Key areas for consideration

This section reviews the common methods of suicide and suicide attempt in New Zealand and the potential for intervention with each method. Figure 4 shows the proportion of all suicides in New Zealand by each major method in 2005.

Figure 4: Proportion of suicides by method, 2005



Source: New Zealand Health Information Service

Hanging

Context

Hanging⁵ is the most common method of suicide in New Zealand. In 2005 it accounted for the majority of suicides of males (51 percent, compared to 48 percent for females), the majority of suicides amongst Māori (78 percent, compared to 43 percent for non-Māori) and the majority of suicides amongst youth aged 15–24 years (72 percent) (Ministry of Health 2007b).

Prevention approaches

Because most people have ready access to the means and places for hanging, the potential to reduce suicide rates by restricting access is limited in most circumstances. Within institutional settings, however, where most suicides are by hanging, there are opportunities to control the physical environment and train staff in suicide prevention, risk assessment and management, surveillance and monitoring.

Policies for preventing hanging within institutions may be based on a common set of principles that may be adapted to specific settings. These principles include:

- modifying or removing potential ligatures and ligature points
- requiring removal or restriction of clothing that may be used in suicide attempts
- having emergency first aid equipment readily available and ensuring staff have current cardio-pulmonary resuscitation (CPR) accreditation
- holding practice drills in responding to hanging attempts
- screening for suicide risk on entry and using a suicide risk assessment tool for those who screen positive or who appear to become suicidal during their stay
- using culturally appropriate screening and assessment measures
- instituting observation/monitoring of people assessed as being at risk of suicide and ensuring that cells have clear lines of sight
- incorporating safety features in the design of new institutional buildings
- ensuring regular staff training in suicide prevention, risk assessment and management, monitoring and surveillance
- holding critical debriefing after every suicide or suicide attempt to identify ways of improving suicide detection, monitoring and management (WHO 2000; Hayes 1997; Suicide Prevention Review Group 1995; Māori Suicide Prevention Review Group 1996).

Current New Zealand initiatives

In practice, the interventions listed above can be implemented in two ways: by developing policies for managing suicide risk; and by providing physical environments within institutions that minimise opportunity for self-harm.

Policies

New Zealand institutions with existing policies for preventing suicide include prisons, residential units of CYF Care and Protection and Youth Justice, police cells, court cells and psychiatric inpatient units.

⁵ In this section, suicide deaths or attempts by 'hanging' refers to suicide deaths or attempts coded under the *International Classification of Diseases Tenth Revision* (ICD-10) as being by 'hanging, strangulation and suffocation'.

Physical environments

Many institutions already provide ‘suicide-safe’ areas for people considered at risk of suicide. For example, both New Zealand Police and the Department of Corrections provide some ‘suicide safe’ cells for detainees, prisons have ‘at risk units’, and psychiatric inpatient units are built to safety guidelines. Common features of these areas are the removal of ligatures, ligature points and sharp objects and their design to allow clear lines of sight.

Vehicle exhaust gas

Context

Carbon monoxide poisoning by vehicle exhaust gas⁶ is the second most common method of suicide in New Zealand. It accounted for 23 percent of all male suicides and 17 percent of all female suicides in 2005 (Ministry of Health 2007b). It is more common in people aged over 35 and less common in Māori (Ministry of Health 2006a). It accounts for a small percentage (only 3 percent) of all hospital admissions for suicide attempt (Ministry of Health 2007b).

Rates of suicide by vehicle exhaust gas have declined within the last decade (from 29 percent of all suicides in 1997 to 22 percent in 2005) (Ministry of Health 2007b).

Prevention approaches

In theory, most suicides by vehicle exhaust gas could be eliminated by ensuring all vehicles in the New Zealand fleet are fitted with catalytic converters. When catalytic converters became mandatory for all new vehicles (for environmental purposes) in the United States and the European Union, suicides by vehicle exhaust declined substantially (Amos et al 2001; McClure 2000; Mott et al 2002). These standards reduced the toxicity of carbon monoxide by ensuring that catalytic converters are fitted at the point of manufacture.

The decreasing prevalence of this method of suicide in New Zealand is likely to be due to the importation into the domestic vehicle fleet of an increasing number of cars from countries in which mandatory emissions standards were imposed in the 1990s.

New Zealand has taken steps to set emission standards that will require all vehicles brought into the country to have a catalytic converter (Land Transport Rule: Vehicle Exhaust Emissions 2006). Targeting the existing domestic vehicle fleet by retrofitting catalytic converters or fitting other safety devices (eg, automatic idling devices; carbon monoxide sensors that can immobilise the engine; modifying exhaust pipes (Routley 1998)) is technically and financially more challenging.

Current New Zealand initiatives

The recent regulatory changes to New Zealand vehicle emissions standards noted above will have a gradual impact on the proportion of the domestic fleet fitted with catalytic converters.

⁶ In this section, suicide deaths or attempts by ‘vehicle exhaust gas’ refers to suicide deaths or attempts coded under the *International Classification of Diseases Tenth Revision* (ICD-10) as being by ‘poisoning by gases and vapours’. It is logical to assume that the bulk of deaths and attempts coded in this way were by vehicle exhaust gas.

Self-poisoning

Context

Self-poisoning accounts for a relatively small number of suicide deaths (10 percent of suicides in 2005). However, it makes a far greater contribution to morbidity, accounting for 81 percent of all hospital admissions for suicide attempt in 2006 (Ministry of Health 2007b). Self-poisoning is more common in females than males. Rates of non-fatal suicide attempt by self-poisoning are higher in females, Māori and younger people (less than 30 years) (Ministry of Health 2006a).

The drugs that account for half of all suicides and suicide attempts by self-poisoning each year are: antidepressants, antiepileptics, sedative-hypnotics, antiparkinsonian and psychotropic drugs (New Zealand Health Information Service data). Specifically, tricyclic antidepressants are the primary substance used in 30 percent of suicide deaths by self-poisoning. Opioid analgesics are used in another 20 percent of such deaths. While non-opioid analgesics, such as paracetamol, are rarely involved in deaths, up to 25 percent of all hospital admissions for self-poisoning each year involve non-opioid analgesics (Chemical Injury Surveillance System data 2003–2005).

Further regulating access to these substances could potentially reduce morbidity and mortality from self-poisoning.

Prevention approaches

- **Prescription drugs:** Controlling and restricting access to potentially toxic medications reduces the use of these medications in suicide (Nordentoft 2007) and could be expected to reduce rates of non-fatal suicide attempts. Relevant measures could involve:
 - using ‘close control’ prescriptions, where patients are given smaller amounts of medication at one time
 - in the absence of contraindications and where the degree of effectiveness is similar, prescribing medications that are less toxic in overdose
 - encouraging the public to return unused or out-of-date medications to pharmacies (Jesson et al 2005).
- **Paracetamol:** In the United Kingdom, reducing the sizes of packs of paracetamol and restricting points of sale led to significant reductions in deaths, hospital admissions and liver transplants from paracetamol overdose (Hawton et al 2004). The United Kingdom findings suggest consideration should be given to introducing further restrictive measures in New Zealand to reduce suicide attempts using paracetamol.

Current New Zealand initiatives

The Medicines Act 1981 regulates access to all pharmaceutical drugs in New Zealand, including tricyclic antidepressants, opioid analgesics and paracetamol. The Medicines Classification Committee, set up under the Medicines Act, makes recommendations to the Minister of Health regarding the classification of medicines and access to medicines by health professionals and the public where concerns arise.

Firearms

Context

Firearm-related suicides decreased in New Zealand following the introduction of the Arms Amendment Act 1992. Firearms now account for less than 8 percent of all suicides and 9 percent of youth (15–24 years) suicides (Ministry of Health 2007b). Rates of firearm-related suicides are higher in males and in adults aged over 25 years, but are similar for Māori and non-Māori (NZHIS data). Firearms account for less than 1 percent of hospitalisations for suicide attempts (Gibb and Beautrais 2004).

Prevention approaches

New Zealand and international evidence suggests that well-designed and well-enforced firearms regulations focusing on licensing and safe storage can substantially reduce rates of firearm-related suicides. The New Zealand Arms Amendment Act 1992 was followed by reductions in firearm-related suicide of 46 percent for the total population, and 66 percent for youth aged 15–24 years. However, it is unclear whether these reductions translated into a reduction in overall rates of suicide (Beautrais, Fergusson and Horwood 2006).

Current New Zealand initiatives

Parliament is considering proposed amendments to the Arms Act 1983 that would strengthen requirements for secure storage.

Jumping

Context

In New Zealand, jumping accounts for only a small fraction of suicides (less than 3 percent in 2005) and of hospitalisations for suicide attempt. People with psychosis have higher rates of suicide by jumping (Beautrais 2001a). Rates of suicide by jumping are similar in Māori and non-Māori (Ministry of Health 2007b).

Despite the rarity of this method, there are sound reasons to justify interventions for restricting access. First, an issue of particular concern is that specific sites or structures may acquire a reputation as places for suicide attempts by jumping. Second, most people who survive suicide attempts by jumping do not subsequently die by suicide (Beautrais 2001a).

Prevention approaches

Evidence suggests that the installation of barriers at popular jumping sites reduces suicides from those sites. Because of the low rate of suicide by jumping, such reductions may not translate to reductions in overall rates of suicide. Nevertheless, it is justifiable to install barriers at sites that emerge as popular places for suicide attempts by jumping (Beautrais 2001a).

Current New Zealand initiatives

Barriers were reinstalled at Grafton Bridge in Auckland following an increase in suicides by jumping after the previous barriers had been removed for aesthetic reasons. Although the removal of barriers increased suicides from the bridge, their reinstallation eliminated suicides from that site and produced no subsequent substitution of other sites (Beautrais 2001a).

Overarching actions

An overarching action to consider in support of other key actions under Goal 4 is to establish a suicide mortality review committee. It is proposed that such a committee would meet regularly to review a range of issues, including monitoring trends in methods used and identifying emerging methods or sites. The proposed suicide mortality review committee and its surveillance functions are covered in more detail under Goal 7.

Another action relevant to all methods is educating families and whānau caring for suicidal people about the need to observe closely and to remove potentially lethal means of suicide from the home.

Reducing access to means of suicide for Māori/tangata whenua

Suicide by hanging is more common amongst Māori than non-Māori. While reducing access to the means of hanging is difficult, there are, however, some opportunities to intervene to restrict access to this and other means of suicide.

In the community, practical strategies that may be of particular significance to Māori involve primary care and mental health professionals providing advice to whānau on how to try to prevent suicide when caring for a whānau member at home. These strategies may include removing access to objects (eg, firearms, medications) that could be used for suicide and closely observing the person at risk.

Prisons are another setting in which it is particularly relevant to target restriction of access to means, given that approximately 90 percent of suicides in prison involve hanging and about 50 percent of the New Zealand prison population is of Māori ethnicity (Simpson et al 2003). Research into mental health of prisoners has identified that Māori are less likely to seek help, less likely to be diagnosed with a mental disorder and experience fewer suicidal thoughts than other population groups. However, Māori in prison act suicidally at the same rate as non-Māori and are less likely to receive satisfactory treatment (Simpson et al 2003). These issues were discussed more generally under Goal 2.

Issues for Pacific peoples

The majority of suicides by Pacific peoples occur by hanging. Approximately 80 percent of Pacific people who died by suicide between 2000–2004 used this method (NZHIS data).

As noted above, interventions to reduce access to the means of hanging are only feasible within institutions, such as prisons, police cells, CYF residential units and inpatient psychiatric units.

Key areas for action

Hanging

- 4.1 Review and revise institutional policies for preventing and responding to suicide attempts by hanging, to ensure that these policies meet international evidence-based best-practice guidelines.

Vehicle exhaust gas

- 4.2 Review the feasibility of incorporating changes into the vehicle fleet to achieve reductions in the rate of suicide attempt by vehicle exhaust gas.
- 4.3 Consider the extent to which the regulation of vehicle exhaust might be changed by alignment with clean air and related policies.

Firearms

- 4.4 Continue to promote awareness of personal responsibilities of gun ownership, including secure storage of guns and ammunition.
- 4.5 Strengthen monitoring checks of firearms security of licence holders during the 10-year licensing period and at change of address.
- 4.6 Encourage health professionals to enquire routinely about guns in homes and to advocate for their removal from the home where people are depressed or suicidal.

Self-poisoning

- 4.7 Review the feasibility of tightening regulations to reduce the risks posed by paracetamol.
- 4.8 Ensure that best-practice guidance on the treatment of mental illness includes advice on prescribing less toxic medicines to individuals at risk of suicide.
- 4.9 Continue to institute regular information campaigns to encourage the return of unused medicines.

Jumping

- 4.10 Undertake data surveillance to identify jumping sites that are emerging as favoured locations for suicide by jumping.
- 4.11 Scope the need for guidance on managing favoured jump sites.

Overarching actions

- 4.12 Consider the feasibility of establishing a suicide mortality review committee, with one of its roles being to report regularly on the relationship of method access to suicide and suicide attempt.
- 4.13 Advise family, whānau and others to closely observe people at risk of suicide who are being cared for at home and to remove potential suicide means, such as obvious ligature points, firearms and toxic substances (including unnecessary medications), from the household.

Goal 5: Promote the safe reporting and portrayal of suicidal behaviour by the media

Introduction

This goal aims to promote good practice among the media in reporting and portraying suicidal behaviour, to minimise the potential for ‘copycat’ suicide. It applies to a range of types of media, including print, television, film, radio, drama and the Internet, and to both fictional and non-fictional genres. This chapter is relevant to general population media, Māori media and media targeting other specific groups such as Pacific peoples and youth.

Rationale

A large body of international evidence suggests that the way suicide is reported and portrayed in the media may increase rates of suicidal behaviour (eg, Gould 2001; Hawton and Williams 2001, 2005; Institute of Medicine 2002; Pirkis and Blood 2001; Schmidtke and Schaller 2000; Stack 2005; Sudak and Sudak 2005). This evidence suggests that media depictions may influence suicidal behaviour in the following three ways.

1 Imitation

Reporting a method of suicide may lead to imitative or ‘copycat’ suicide attempts using that method. This result is especially likely if media coverage is repetitive, gives details of methods or highlights the suicide of a celebrity or well-known person. These findings have been produced across different times, places, contexts and cultures (eg, Hawton and Williams 2005; Liu et al 2007; Phillips 1974; Sonneck et al 1994; Yip et al 2006).

2 Contagion

Media depiction may facilitate contagious behaviour. Specifically, the way in which suicides are reported may encourage further suicides within a population of individuals who are interlinked or interrelated. In turn, contagion may lead to the formation of clusters of suicides or suicide attempts. Many case studies and reviews of suicide clusters report exposure to media influences in those who have died by suicide or made suicide attempts (eg, Davidson 1989; Gould 1990; Gould et al 1989; Hazell 1993; Tournant et al 2005; Wilkie et al 1998). Young people, people in institutional settings and indigenous communities are overrepresented in suicide clusters (Earls et al 1990; Gould et al 1990; Hazell 1993).

3 Normalisation

Frequent or repetitive reporting of suicide may encourage the public perception that suicide is a reasonable, understandable and common approach to solving life difficulties (Beautrais et al 2004).

All the above evidence clearly suggests the potential for some ways of reporting and portraying suicidal behaviours to influence vulnerable people to make suicide attempts. There is little evidence to suggest that media reports of suicide will reduce population rates of suicidal behaviour or deter people from suicidal behaviours (Crane et al 2005; Hawton and Williams 2001). There is no evidence to suggest that increases in suicide rates or in the use of a particular method following the report of a suicide in the media simply represent suicides that would have occurred later anyway but that have been brought forward in time (Crane et al 2005).

Features of reporting and portrayal that may increase suicidal behaviour

The risk of increased suicidal behaviour following media reports seems to be most likely when:

- a method of suicide is specified (especially when presented in detail)
- the story is reported or portrayed dramatically and prominently (eg, with photographs or dominant headlines, or placed on the front page)
- suicides of celebrities are reported
- the reporting of suicide is repetitive
- reporting attributes the cause of suicide to a common life stress (Crane et al 2005; Hawton and Williams 2002).

In addition, younger people seem to be most vulnerable to the influence of the media, although limited evidence also shows an impact on older people (Phillips and Carstensen 1988; Stack 1999 cited in Schmidtke and Schaller 2000). Another factor is similarity between the media stimulus or model and the observer in terms of age, gender and nationality (Crane et al 2005; Hawton and Williams 2002).

Perspectives on the evidence

The evidence reviewed above clearly suggests that some types of reporting and portrayal of suicidal behaviours may encourage suicide. Although the evidence has been challenged, some media organisations have recently moved to reflect the evidence available through new Codes of Practice. For example, in late 2006, the Code of Practice Committee of the United Kingdom's newspaper and periodical industry introduced a new press reporting rule designed to minimise risk of imitative suicide (Code of Practice Committee 2006). Some New Zealand media organisations have developed a 'media-owned' protocol on reporting and portrayal of suicide.

The evidence on the linkages between media reporting and suicidal behaviours is likely to remain contentious in some quarters. There is, nonetheless, a growing consensus among researchers, policy makers and media that some types of media reporting and portrayal of suicidal behaviour may increase population rates of suicidal behaviours.

The debate also raises issues about balancing media freedom, public interest and public safety in relation to the evidence. Media organisations consider that some suicides are newsworthy events and journalists have a role to bring information into the public domain (Crane et al 2005). At the same time, journalists do not want to think someone could be moved to suicide after reading their story and are willing to consider what modifications can be made to make their reporting and portrayal safer (Department of Health and Ageing 2006).

It is important to acknowledge that the extent of media influence on suicide rates may be modest. Nevertheless, in some cases this influence may play a crucial role in the final choice of suicide by a vulnerable individual. It is particularly important to pay attention to media influences because, unlike some other contributors to suicide, media influences may be relatively easily modified (Hawton and Williams 2001). There is evidence that modifications of reporting are possible and can lead to significant reductions in suicide (Crane et al 2005).

Legislative context

New Zealand legislation recognises the potential harm of media reporting of suicide. The Coroners Act 2006 limits the publication of details about individual suicides, unless a coroner authorises publication. It has been suggested that the main objectives behind this provision are to prevent suicide contagion, to protect the privacy of the deceased person and to minimise the impact on their family.

Specifically, the Coroners Act 2006 states that no person may make public (including by means of broadcasting, a newspaper, a book, journal, magazine, newsletter, or a sound or visual recording) specific details in cases of suspected or established self-inflicted death without the coroner's authority. The Act provides that the coroner may authorise the particulars of a self-inflicted death (details relating to the manner in which the death occurred, to the circumstances of the death, or to an inquest into the death) to be made public only if that is consistent with public safety.

Fictional portrayal of suicidal behaviour

The evidence about the impact of fictional portrayal of suicide in television dramas and films is less clear than the evidence about non-fictional reporting, but there is some support for an imitation effect (Pirkis et al 2005). The majority of studies have shown unexpected rises in suicidal behaviour after fictional on-screen suicides or have reported mixed results (eg, increases in some locations and not others, or for some subgroups and not others), but some have found no evidence of an effect (Pirkis et al 2005). This evidence suggests a need to err on the side of caution, and to support approaches to minimise the harm from fictional portrayal in films, television and drama.

Key areas for consideration

A number of approaches are needed to minimise the potential harm from media reporting and portrayal of suicide.

Media guidelines/protocols

International context

Many countries have adopted media guidelines to minimise potential harm from reporting and portrayal of both fictional and non-fictional suicidal behaviours.

These established guidelines emphasise that it is important for the media to:

- avoid sensationalising, glamorising or romanticising suicide or giving it undue prominence
- avoid promoting specific details about a suicide, particularly details of method and site
- recognise that by providing 'role models' for suicidal behaviour, the media can have a significant impact on such behaviour
- take the opportunity to educate the public about suicide
- take the opportunity to provide access to help and support services for vulnerable readers or viewers
- consider the aftermath of suicide and the impact of reporting on families and others bereaved by suicide
- acknowledge that journalists are also vulnerable to suicidal behaviour (Pirkis et al 2006).

In producing media guidelines it is essential to: (1) base them on sound scientific evidence; and (2) produce them as a collaborative effort between people working in the media and those working in suicide prevention (Hawton and Williams 2001). Developing guidelines without involving media organisations risks alienating the media with potential negative consequences (Hawton and Williams 2001). Testing whether journalist-led guidelines are more likely to be effective is a potential area of research (Pirkis et al 2006).

When developing and implementing media guidelines, it is important to be sensitive to the need to balance protecting both vulnerable members of the population and the freedom of the press.

The Hunter Institute of Mental Health in Australia provides a model for the implementation of media guidelines (Pirkis et al 2006; Skehan et al 2006). The model employs a range of approaches focusing on personal contact with the media, as well as ongoing evaluation of the reach, awareness and uptake of guidelines and project resources.

Underlying this process is the development of a consensual model in which the media, researchers, clinicians and policy makers are all stakeholders in developing a collaborative policy to minimise any adverse effects of media reporting and portrayal of suicide. This model could be used in the New Zealand context with appropriate adaptations, such as to incorporate effective participation by Māori.

Current New Zealand initiatives

New Zealand took early leadership in writing media guidelines in 1998 (Ministry of Health 1998) and revised them in 1999 (Ministry of Health 1999). These guidelines provide journalists with a comprehensive statement of the evidence, rationale, advice, facts and contacts in regard to media reporting and portrayal of suicide.

However, although New Zealand was successful in writing media guidelines, there has been less success in their implementation. A recent review found a low level of awareness and use of the guidelines by editors and senior journalists (Tully and Elsaka 2004). These findings suggest that a major priority in the development of policy on suicide reporting and portrayal is gaining support from media organisations in developing guidelines and improving their implementation.

In an effort to address these issues, some media organisations, in consultation with the Ministry of Health, have developed a set of ‘media-owned’ reporting protocols. This approach aims to ensure greater media-ownership of the protocols and to encourage greater adherence to them as well. This positive development is welcomed, given the distinct advantages of having industry leadership and self-regulation on this issue, supported by a collaborative relationship with those involved in suicide prevention.

Education and support

Although guidelines and protocols are a key initiative to promote safe reporting and portrayal of suicide, they may be enhanced when they are accompanied by approaches such as:

- ensuring that the media, including Māori media, have a good understanding of the evidence
- providing training to journalists on safe reporting of suicide
- providing people working with the media (eg, media spokespeople) with adequate information to ensure they understand the evidence and are well supported

- supporting opportunities for the media, researchers, policy makers and other stakeholders to have an open dialogue about issues of suicide reporting and portrayal
- developing an agreed approach to responding to concerns about media reporting.

Fictional portrayal of suicide

Although the focus of discussion on this issue is often on news reporting in print and broadcasting, it is important to establish approaches to minimise the harm associated with fictional portrayal of suicide. Many of the features of media guidelines and other approaches for news media are relevant to drama, films and other fictional portrayals, and these media should be included in implementation plans and other approaches to promote safe portrayal.

Internet

It is more difficult to address the increasing concerns about Internet sites that incite and encourage vulnerable individuals to attempt suicide and that provide detailed instructions for doing so (Mehlum 2000; Nordentoft 2006). Media guidelines in their current form are inappropriate for and cannot be applied to Internet sites.

A number of countries are exploring possible actions to reduce the influence of Internet sites that encourage suicide. These actions include:

- legislation that makes it an offence to incite or promote suicide or provide instructions for committing suicide
- exploring ways of increasing knowledge about the dangers of such sites
- exploring with Internet service providers ways in which Internet search engines can give prominence to sites that counsel and offer help and support to vulnerable people who might be suicidal (Bywaters et al 2006; Herrestad 2006; Nordentoft 2006; Pirkis 2006).

National legislation to make it an offence to use the Internet to incite suicide is, however, limited in its reach to Internet sites that are located nationally; such legislation cannot be applied to Internet sites with international origins. This limitation suggests that New Zealand will need to monitor international developments in this rapidly evolving area.

Promote safe reporting and portrayal of suicidal behaviour among Māori/tangata whenua and by Māori media

There is little evidence about the impact of reporting and portrayal of suicide specifically on Māori and other indigenous people, such as indigenous Australians (Department of Health and Ageing 2004). It is important that all media, including Māori media, are aware of the evidence about the risks of media reporting and portrayal of suicide and that they follow any guidelines that are produced. Likewise, it is important to include Māori in other initiatives such as implementation plans, information provision or appropriate discussion among media, researchers and policy makers.

It is also important that the general population media's reporting and portrayal of Māori suicide is culturally appropriate and sensitive to any particular issues for Māori. Although guidelines for reporting and portraying suicide should be followed, it may also be appropriate to consult cultural experts when assessing the portrayal of suicidal behaviour by Māori (Ministry of Health 1999).

Issues for Pacific peoples

Pacific media need to be aware of the evidence about the risks of media reporting and portrayal of suicide; follow any guidelines that are produced; and be included in other initiatives such as implementation plans, information provision or appropriate discussion between media, researchers and policy makers.

Key areas for action

Collaboration

- 5.1 Promote opportunities for exchange of ideas and information, discussion and collaboration among the media, the research community and policy makers, as well as other key stakeholders as appropriate (eg, clinicians, consumers/tangata whaiora and Māori).

Guideline/protocol development, implementation and evaluation

- 5.2 Further develop, implement and evaluate guidelines or protocols for the reporting and portrayal of suicide in the media.

Education and support

- 5.3 Provide ongoing support, information and incentives to the media and those working with the media.
- 5.4 Encourage the inclusion of evidence and issues about media reporting of suicide in journalism training programmes.
- 5.5 Provide guidance about fictional portrayal of suicidal behaviour in films, television and drama. This action may involve considering specific approaches and target groups and including issues about fictional portrayal in more general resources and information.

Internet

- 5.6 Monitor international developments to mitigate potentially harmful effects of Internet sites that encourage suicide.

Goal 6: Support families, whānau, friends and others affected by a suicide or suicide attempt

Introduction

The purpose of this goal is to develop policies, strategies, resources and services to:

- support families, whānau, friends and significant others after a suicide or suicide attempt
- minimise risks of contagious suicidal behaviour and the development of suicide clusters.

Rationale

The death of a loved one is one of the most stressful life experiences. Dealing with a death by suicide may be especially traumatic. Grief following bereavement by suicide has much in common with grief following bereavement from other traumatic deaths. However, bereavement after suicide may last longer. It may also differ from other traumatic bereavement in other ways. For example, suicide deaths may lead to a stronger need to find meaning in the death, and to stronger feelings of guilt, blame and personal responsibility. Furthermore, those who are bereaved by suicide may themselves be at increased risk of suicidal behaviour (Beautrais 2004b; Jordan and McMenamy 2004). Most support after bereavement is provided by family and friends. However, those who require additional support should be able to access a range of services to meet their needs.

Suicidal behaviour that does not result in death can also cause stress and distress to family and friends. After an attempt, those affected need information, support and access to clinical advice (Beautrais 2004c).

The provision of acceptable and effective support services to families and friends after a suicide or suicide attempt is not only a compassionate response, but support may also reduce the risk of suicidal behaviour amongst family and associates. Support services provided to address these needs are often referred to as ‘postvention’ interventions. Their aim is to mitigate the impact of suicidal behaviour on others.

A specific issue related to suicide bereavement concerns the development of suicide clusters. Suicide clusters occur when there are more suicides (usually three or more) than would be expected on the basis of statistical prediction (O’Carroll and Mercy 1990). Clusters are more common among young people and may account for up to 13 percent of youth suicides (Gould et al 1990; Johansson, Lindqvist et al 2006). Clusters often occur within institutions or small rural and indigenous communities (Hazell 1993; Velting and Gould 1994).

One possible mechanism by which clusters may occur is contagion. Contagious behaviour may occur because a suicide death has received publicity and may have been sensationalised or glorified (O’Carroll and Mercy 1990). Contagion may also occur by personal interactions, for example knowing someone who has died by suicide such as a friend, family/whānau member or other influential role model (Gould 1990; Johansson, Lindqvist et al 2006). Comprehensive postvention initiatives include provisions to minimise risks of contagious suicidal behaviour.

Key areas for consideration

The three approaches that will achieve the purpose of this goal are:

1. providing support to families, whānau, friends and significant others bereaved by suicide
2. providing support to families, whānau, friends and significant others after a suicide attempt
3. identifying, managing and preventing suicide clusters.

Providing support to families, whānau, friends and significant others bereaved by suicide

There is widespread advocacy for providing support to individuals and communities after suicide. These support services need to be readily available, accessible, appropriate and responsive to diverse populations.

A range of support services has been developed internationally (Beautrais 2004b; Jordan and McMenemy 2004). Some of these services are provided in the immediate aftermath of a suicide; some in the longer term. Services may include both practical and emotional components. Support may be provided by people who have been bereaved by suicide themselves, or by volunteers or health professionals.

Because suicide has potentially contagious features, support services need to be safe. At present, however, little is known about the types of services and the models of service delivery that are most effective (Beautrais 2004b; Jordan and McMenemy 2004). On the basis of what is known about the processes of bereavement and grief, and about the needs of those bereaved by suicide, effective and safe services in this area must be based on the following principles.

- If support services are provided by the voluntary sector, volunteers should be supported by training, supervision and audit to ensure their safety and the safety of those they are supporting.
- A range of services should be available for those who need them. These services may include information, practical support and advice, assistance and support in preparing for a coronial inquest, peer group support and individual counselling.
- Ideally, services should be organised nationally to ensure a uniform system of support, while enhancing local resources and being tailored to meet local needs.
- All services should be evaluated and monitored to ensure their safety, effectiveness and acceptability.
- All services should be delivered in ways that are culturally appropriate and that recognise variation in cultural attitudes to death, dying and suicide.

Providing support to families, whānau, friends and significant others after a suicide attempt

There is increasing interest in providing services and support to meet the needs of whānau, families, friends and significant others following a suicide attempt (Beautrais 2004c). Although there is little evidence about the best approach to providing such support, it is clear that after a suicide attempt families and carers need information about suicide and mental illness. They are likely to feel ongoing concern and responsibility for the person who made the attempt, and need information and support to allay their anxieties about these responsibilities. Those providing support services to families need to be competent to assess, treat, manage and advise about an individual's level of suicide risk, or facilitate access to appropriate services.

The needs of family/whānau and friends caring for someone who has made a suicide attempt have much in common with the needs of those who care for someone experiencing mental illness. The New Zealand Mental Health Strategy, *Te Tāhuhu – Improving Mental Health 2005–2015* (Minister of Health 2005), has a specific outcome focusing on family/whānau and friends who support people with experience of mental disorder and addiction. This outcome sets expectations for how services need to support family/whānau and friends. It equally applies to people supporting someone who has made a suicide attempt.

Development in this area should focus on a series of mechanisms by which support might be offered. These mechanisms include:

- family psycho-education programmes designed to reduce the stress of caring for a relative who has made a suicide attempt, improve carers' coping skills and address the emotional distress of those affected by suicidal behaviour
- written information, guidelines and resources to supplement information given in meetings or support groups
- improved liaison between carers and health care providers in developing treatment and care plans, accessing help in crises, and proactively providing individual consultation for carers with a health care professional
- addressing family and carer concerns relating to information sharing, privacy and confidentiality.

To ensure safe and effective support, service providers need to receive appropriate training and supervision. Service provision after a suicide attempt should be based on the same principles as those applied to services after a suicide death (as outlined in the previous section).

Identifying, managing and preventing suicide clusters

Suicide clusters and the community concerns they generate have been well-recognised. A series of recommendations to manage and prevent suicide clusters has been developed and disseminated by the Centers for Disease Control (CDC) in the United States (O'Carroll et al 1994; O'Carroll et al 1988). These recommendations include the following key elements.

- There should be a unified community response utilising community resources.
- The suicide cluster should be managed by a supervisory team that has expertise in and understanding of suicidal behaviours, contagion and clusters.
- Efforts should be made to defuse community tensions that may build after a suicide and escalate during an emerging cluster.
- Accurate, appropriate information about suicides should be disseminated in a timely way.
- Specific aspects of media coverage that promote contagion have been identified (including repetitive coverage, glorification of the individual who died, information about the method of suicide) and should be avoided.
- Efforts should be made to identify individuals most susceptible to contagion, including those who have a history of suicide attempt and/or mental disorder, especially young males.
- Sites or methods of suicide that might increase the risk of further suicides should be changed or removed.

A specific aspect of addressing risks of suicide clusters relates to providing support within specific institutional and community contexts. A number of guidelines to provide such support have been developed, tailored for specific institutional settings (eg, Cox et al 2006; Dunne 1992; Ministry of Youth

Development 2005; Rivers 1995). These guidelines build on the CDC recommendations for minimising risks of suicide clusters (see above). As with all guidelines, they need to be well implemented, safe, culturally appropriate and well evaluated.

Current New Zealand initiatives

The Postvention Support Initiative

Given the dearth of evidence to guide programme development in this area, a research approach has been adopted in New Zealand to develop an integrated set of services to provide support to those bereaved by suicide or affected by a suicide attempt and to develop community initiatives to reduce the risk of suicide clusters. The Postvention Support Initiative has four key components. All components are being developed, trialled and evaluated. Currently, these components are in the following form.

1. **Suicide Bereavement Support Service:** This service trials the provision of immediate and ongoing practical and emotional support, information and service liaison for those bereaved by suicide. Service providers (often volunteers) who deliver this service receive training and clinical supervision.
2. **Support after a Suicide Attempt:** This pilot study explores the feasibility and efficacy of interventions to support family and whānau after a suicide attempt.
3. **Postvention Planning for Communities:** This project provides support and guidance to assist communities to prepare postvention plans so that they can respond appropriately should suicides occur.
4. **Flexible Response Team:** This service provides specialist assistance and support to key community groups to increase their capacity to lead a response should a suicide cluster emerge or occur.

Traumatic incidents management support for schools

The Ministry of Education has developed a specific service to assist schools that experience traumatic events, including suicides of students or staff. This service has two components.

1. **Traumatic incident pre-planning:** This service provides assistance with forming appropriate and functional traumatic incident response teams and plans in schools.
2. **Traumatic incident response team service:** This service provides assistance and support to schools after a traumatic event. It includes assistance with maintaining day-to-day operations, provision of immediate support to those who need it, advising on how to communicate with children, young people and the community about the incident, promoting support and self-help strategies, identifying those who may be at risk and accessing professional care, and facilitating links with culturally appropriate networks and services.

Such traumatic incidents management support includes a culturally responsive traumatic incident service. Traumatic incident response from a tikanga Māori perspective is referred to as 'Auē ... He Aituā'. It will most likely be implemented in settings in which the principal language is te reo Māori and where tikanga Māori pervades.

Media reporting of suicide

Initiatives to promote safe reporting and portrayal of suicide in the media are important components of reducing the potential for suicide contagion. This issue is described under Goal 5.

Postvention support for Māori/tangata whenua affected by a suicide or suicide attempt

The high rates of Māori suicide and suicide attempts have a devastating impact on whānau, hapū, iwi and Māori communities. The additional impact for Māori may relate to core beliefs in the physical and spiritual nature of their culture, including the overwhelming sense of loss of the individual's unique contribution to whakapapa (genealogy).

It has been suggested that, in general, every suicide directly affects approximately six people (McIntosh 1993). Given the structure and concept of whānau (extended family), it is likely that the impact may be even more widespread in Māori communities. It is important to recognise that although the whānau most often provides support after a suicide or suicide attempt, it may not always do so. Therefore, regardless of circumstances, services must continue to be responsive to and supportive of the individual and their whānau.

Issues for Pacific peoples

The extended family is an essential building block of most Pacific societies and is integral to the identity of most Pacific peoples in New Zealand. The collective nature of Pacific cultures means that many Pacific peoples (both in New Zealand and in the home island) are likely to be affected by a suicide or suicide attempt. Likewise, the family and community structures such as the church are likely to be the main sources of support for Pacific peoples following bereavement by suicide.

Grief, bereavement and the meaning associated with suicidal behaviours can differ according to culture. In some Pacific communities, discussing suicide can be considered taboo, and a suicide is associated with shame, guilt, stigmatisation and a sense of having failed to have adequately cared for and supported the deceased person (Tiatia and Coggan 2001).

Careful consideration is needed on how best to support and respond to the needs of Pacific families following a suicide. It is important that any support to Pacific families after a suicide includes Pacific workers in the process and takes into account holistic Pacific models of health such as Fonofale. Support should be offered to the family as an entity rather than to individual family members (Henare and Ehrhardt 2004). In addition, service providers should seek to understand cultural and spiritual practices relating to bereavement and support, and cultural rites surrounding suicide for different Pacific groups.

Keys areas for action

Services for those bereaved by suicide, those affected by suicide attempt, and community organisations needing to respond to emerging or occurring clusters

- 6.1 Continue the development of a comprehensive Postvention Support Initiative. This work includes:
- developing an effective suicide bereavement service
 - identifying and monitoring the availability of specialised local services for those bereaved by suicide and responding to emerging needs – which will include consideration of services for specific population groups such as Māori and Pacific peoples
 - developing a service for identifying and responding to emerging or occurring suicide clusters

- providing co-ordinated management plans to ensure communities are prepared to respond in the event of a suicide
- developing appropriate support services for those affected when someone close to them makes a suicide attempt.

All these services must be developed and evaluated to be culturally appropriate and effective for Māori.

6.2 Implement recommendations from the review of the Ministry of Education's Traumatic Incidents Response Service. Specifically, the steps involved are to:

- provide a nationally consistent, evidence-based service – part of this service will be to utilise and revise resources appropriate to age and culture, including a support manual and pre-planning workshops for schools and early childhood services
- develop a communications strategy to inform the sector of this service
- continue to roll out the pre-planning training package to schools and early childhood services
- continue training for traumatic incident staff.

Resources for those bereaved by suicide, those affected by suicide attempt, those working with the bereaved and affected, and key institutions

6.3 Develop, implement and evaluate best-practice guidelines for establishing suicide support groups. These guidelines must be culturally appropriate and effective for Māori.

6.4 Review existing information resources, guidelines and protocols on managing the aftermath of suicide or suicide attempt for:

- people who are bereaved
- key personnel who have regular contact with people who are bereaved
- people who are affected by a suicide attempt
- key institutional settings.

All these resources, guidelines and protocols must be assessed for cultural appropriateness and effectiveness for Māori.

Goal 7: Expand the evidence about rates, causes and effective interventions

Introduction

The purpose of this goal is to improve the quality and timeliness of suicide data; expand current knowledge about the rates of suicidal behaviour, contributing factors and effective interventions; and improve the dissemination of research and information about suicide prevention.

Rationale

Accurate and timely statistical information and research provide an important foundation of a suicide prevention strategy (Institute of Medicine 2002). Relevant work in this area includes:

- monitoring population trends in suicidal behaviours (eg, age and ethnicity trends)
- providing descriptive information about the extent, nature and distribution of suicidal behaviours
- increasing understanding about the complex mix of individual, family, social, economic and cultural factors that contribute to vulnerability and resiliency in relation to suicidal behaviours
- increasing understanding of the attitudes and views of stakeholder groups (eg, the public, the media, those bereaved by suicide) about issues relating to suicidal behaviours
- undertaking evidence-based evaluations of suicide prevention strategies, policies and interventions
- disseminating statistical and research information.

Although it is essential that the *New Zealand Suicide Prevention Strategy 2006–2016* (Associate Minister of Health 2006) builds on the growing international body of evidence in this area, it is also important to conduct local research that addresses the unique features of suicidal behaviour in New Zealand. As discussed later in this chapter, issues relating to Māori suicide are an area of high priority.

Key areas for consideration

The three approaches that will achieve the purpose of this goal are:

1. improving the quality and timeliness of suicide data
2. expanding the research base
3. improving the dissemination of research and information.

Improving the quality and timeliness of suicide data

New Zealand has sophisticated systems for collating annual health data, including data on suicide deaths and hospitalisation for self-harm. The key issues regarding collation of suicide data are the timeliness and quality of the data.

Suicide death data

Classification of a death as suicide is subject to a coroner's inquiry. In some cases, coroners' investigations may take several years to complete, delaying finalisation of suicide statistics. Such delays impact on monitoring and research efforts.

A further issue regarding suicide death data is the amount of detail that is collated in a systematic and accessible form. These details cover characteristics associated with the death, including demographic detail and other potentially relevant information, such as method used or the presence of a diagnosed mental disorder. It is important that such information is collected consistently and is reliable and accessible for informing policy and research.

Hospitalisation for self-harm (suicide attempt) data

Hospitalisation for intentional self-harm is used in New Zealand as a proxy measure for suicide attempt. National data are regionally coded and collated by DHBs, and are centrally collated by NZHIS at the Ministry of Health. Self-harm incidents that do not require admission to hospital are not included in national statistics. Although hospitalisation data do not capture all suicide attempts, they are considered to be a good indicator of trends and patterns of suicide attempts in New Zealand. A further data quality issue is that there is regional variability in recording hospitalisation data for self-harm. Such variation suggests that there is room for improving national consistency by, for example, minimising differences in coding at the DHB level.

Improvements could also be made in the collation of ethnicity, occupational and related data, which could inform targeted suicide prevention efforts. Improvements in classification and collation of ethnicity data are essential for Māori; to understand the extent of the problem of Māori suicide, to inform the priority areas for Māori-specific research, and to consider and evaluate preventive interventions in Māori communities.

One way of gaining a clearer understanding of the extent of self-harm, as demonstrated in the United Kingdom, is by establishing specialist suicide and self-harm data recording sites (Hawton et al 2006). These sites collate complete data of presentations to hospital, and can collate more comprehensive data regarding associated characteristics, such as the presence of mental disorder and previous contact with health services.

Analysis and review of data

Although New Zealand has sound systems for data collation, there is scope to introduce a more systematic and consistent analysis of data to obtain an overview of common themes and trends at national, regional and organisational levels. This kind of data review is useful to identify factors that may prevent deaths, and to ensure that health and social services continue to improve their systems and delivery of services.

Current New Zealand initiatives

The main sources of data and statistical information are as follows.

- **Coronial system:** Since 1999 the Office of the Coroner has maintained a national database containing limited information taken from paper-based coroners' reports. Information from this database is available on request for large research projects. With the passage of the Coroners Act 2006, a number of changes are being implemented that will support improved timeliness and greater consistency of suicide reporting. These changes include: the establishment of a new Office of the Chief Coroner, a new Coronial Services Unit, the appointment of 14 full-time coroners, and the establishment of a central database allowing analysis of trends.
- **Health information services:** The New Zealand Health Information Service collects and disseminates health-related information. Databases that collate suicide and mental health information include the Mortality Data Collection, the National Minimum Dataset and Mental Health Information National Collection. Public Health Intelligence (PHI) is the epidemiology group of the Ministry of Health.

Its work focuses on analysis of health outcomes, including suicidal behaviours, and examining inequalities in health. PHI publishes regular statistical reports analysing trends in suicide and intentional self-harm.

Expanding the research base

Research about the nature, correlates and causes of suicidal behaviours

New Zealand has an extensive body of research on the nature, correlates and causes of suicidal behaviours using a range of research methods (Beautrais 2003b; Bennett et al 2002; Caspi et al 2003; Collings et al 2005; Coupe 2005; Fergusson et al 2000; Nada-Raja et al 2004; Oakley Brown et al 2006; Tiatia 2003). However, continued investment in research about suicide in New Zealand is justified both to sustain the existing research infrastructure and to address areas of emerging interest. Some broad priority areas for future research – each of which contains scope for a wide range of research topics – include the following.

- **Suicidal behaviours within Māori populations:** The high rate of Māori suicide under the age of 35 years is a matter of concern and requires further research. Two approaches to this research have potential. The first is through further analyses of existing databases such as the Youth 2000 and 2007 surveys and *Te Rau Hinengaro: The New Zealand Mental Health Survey*. These surveys contain extensive population-level data on ethnicity, suicidal behaviour, health service access and mental health. The second approach is to conduct further research using a kaupapa Māori approach to examine issues relating to Māori suicide from a Māori perspective. The issues relating to the development of research on Māori suicide from a Māori perspective are discussed later in this chapter.
- **Suicidal behaviours within other ethnic groups:** Parallel to the need for further research on Māori suicide, there is a need for further examination of these issues in both Pacific and Asian populations. Again, the Youth 2000 and 2007 surveys and *Te Rau Hinengaro* provide important resources for addressing these issues. Issues for Pacific peoples are further discussed later in this chapter.
- **Populations at increased risk of suicidal behaviours:** A number of populations may be at increased risk of suicidal behaviour for reasons of discrimination, disability or disadvantage. These populations include: people with severe and chronic mental disorders (eg, schizophrenia, eating disorders); gay, lesbian, bisexual, transgender and intersex populations; prisoners; disabled people; and those experiencing chronic medical illness. It is important to conduct further research with these populations to identify the factors that heighten vulnerability to suicidal behaviours.
- **Measurement of suicidal behaviours:** An ongoing issue in suicide research relates to the definition and measurement of suicidal behaviours, and the linkages of these behaviours with the more general issue of self-harm. In particular, there is increasing evidence to suggest that a substantial amount of self-harm is not undertaken with intent to die, although the terms ‘suicide’, ‘suicide attempt’ and ‘self-harm’ have often been used interchangeably (De Leo et al 2006). Also, little is known about ethnic and cultural differences in attitudes to and reporting on suicidal behaviours.
- **Suicide clusters, media effects and related topics:** Issues relating to the contagious nature of suicide, suicide clusters, the impact of media reporting on suicide remain a source of debate. There is limited New Zealand research on these topics. There is a need for investment in researching suicide clusters, media effects and related topics to inform policy in this area.
- **The views and experiences of people with a history of suicidal behaviour:** Awareness is growing of the need for the voices of those with experience of suicidal behaviour to be heard in suicide research. Their perspectives may provide important insights into the interface between service users and providers and the processes and pathways that lead to recovery.

- **The views of those affected by suicidal behaviours:** Similarly, the views of family, whānau and significant others who are bereaved or affected by a suicide or suicide attempt can make an important contribution to policy and service development (Beautrais 2004b, 2004c; Jordan and McMenamy 2004).
- **Risk and resiliency:** Much research to date has focused on the identification of factors that increase risks of suicidal behaviour. Less attention has been given to the factors that lead to resiliency. Sources of resiliency are likely to span a wide range of factors from genes to cultural factors. For this reason it is important that such research derives from bio-psychosocial models that acknowledge the interplay of biology, the individual and the social environment (Engel 1980).
- **Increasing the understanding of the biological base of suicidal behaviours:** New Zealand research has focused almost exclusively on causes of suicide related to the individual, family, society and culture. An exception to this trend has been the work of Caspi and colleagues in describing the role of the 5HTT gene in suicide and depression (Caspi et al 2003). However, throughout the world there has been increasing work on the linkages between neurobiology and suicidality. This research suggests that suicidal behaviours reflect a complex interplay of genes, neurobiology and the social environment. This work is particularly important for understanding the biological basis of resiliency.

Translational research and evaluation

Although there is still much to be learned about the nature, causes and consequences of suicidal behaviour, research in this area has advanced to a stage where it is possible to develop an evidence-based approach to the prevention of suicidal behaviours (Beautrais et al 2007; Mann et al 2005). Translational research provides a ‘science to practice’ framework to move knowledge about the nature, correlates and causes of suicide into effective policies and programmes that aim to reduce rates of suicidal behaviours.

The general principles of effective programme development and implementation are now the focus of an area that has become known as ‘prevention science’. The following are some key principles of programme development within the prevention science framework.

- The construction of a programme is based on the use of theory and research evidence to develop promising policies and interventions.
- The development of a programme is preceded, wherever possible, by pilot programmes to determine the acceptability of the programme to the population, and the feasibility of implementing the programme. This stage of the process is important to prevent programmes that may be ineffective or even harmful from being prematurely taken to scale and institutionalised.
- Where possible, evaluations are undertaken throughout programme development and implementation to examine the formation of the programme, the processes by which it is delivered and its efficacy, effectiveness and cost-effectiveness. Programme efficacy refers to the effectiveness of the programme under ideal conditions, while programme effectiveness refers to the effectiveness of the programme under real-life operating conditions (Society for Prevention Research nd).

There are two important applications of translational research relevant to this Action Plan. First, programmes, policies and interventions that arise from the actions should be developed using the critical research and evaluation elements of the prevention science approach. The second application is to encourage service- or investigator-driven studies of the effectiveness of specific programmes, policies or strategies.

Workforce development

The need for further suicide research in New Zealand has implications for workforce development. To date, suicide research has been conducted by a relatively small number of researchers and research teams. There is a need to expand this workforce, broaden it out to a variety of disciplines, and consider ways of ensuring the research results are effectively utilised by policy advisors, service planners and service providers. Key workforce priorities include:

- increasing the number of Māori and Pacific researchers in suicide prevention
- making a commitment to adequate and sustained funding for suicide research to ensure that the research workforce is supported
- increasing the awareness among policy advisors, service planners and service providers of emerging suicide research and subsequent implications for their work
- increasing the understanding among researchers of policy development and service provision issues
- increasing collaboration among researchers, policy advisors, service planners and service providers.

Current New Zealand initiatives

Existing frameworks and policies that support the expansion of the research base

The mental health research and development strategy, described in *Te Tāhuhu – Improving Mental Health 2005–2015* (Minister of Health 2005) and *Te Kōkiri* (Minister of Health 2006), can support suicide research by providing:

- strategic information, such as epidemiology of mental health within population groups
- tools to assist evaluators and reviewers, such as outcome tools, outcome measurement and key performance indicators
- research and development, including translational research, to assist the provision of quality and best-practice mental health services.

In addition, the Māori mental health research agenda, described in Action 5.6 of *Te Kōkiri* (Minister of Health 2006), aims to promote kaupapa Māori methods and whānau ora approaches to mental health and addiction to inform service planning and delivery. These approaches can help support suicide prevention.

Funding sources supporting research on suicidal behaviours

The Health Research Council of New Zealand (HRC) is the Crown agency responsible for the management of the Government's investment in health research. It funds research in suicide and related fields and has translational research as a funding priority. In addition, the Ministry of Health has a small pool of funding for research that supports the implementation of the *New Zealand Suicide Prevention Strategy 2006–2016* (Associate Minister of Health 2006).

Other funding sources for suicide research include government agency research funds, lotteries grants, regional research foundations, community bodies, universities and philanthropic bodies.

Existing national survey data available for analysis

Te Rau Hinengaro: The New Zealand Mental Health Survey (Oakley Browne et al 2006) is the first national survey on the prevalence of mental disorders and includes data about suicidal behaviour. The database of this survey may be further analysed to provide additional information about mental disorders and suicidal behaviours in a range of population groups.

Other existing databases that provide scope for further research about suicidal behaviour include the Youth 2000 and 2007 surveys (Adolescent Health Research Group 2003), the Canterbury Suicide Project (Beautrais 2001b, 2003a, 2004a), the Christchurch Health and Development Study (Fergusson et al 2000), the Dunedin Multidisciplinary Health and Development Study (Nada-Raja et al 2004), the Whakamomori Māori Suicide Prevention Study (Coupe 2005) and the Mental Health and General Practice Investigation (MaGPIe Research Group 2003).

Improving the dissemination of research and information

An important component of any information and research programme is the effective, accurate and safe dissemination of statistical information and research evidence. This component includes the provision of practical advice based on the best available evidence about how to contribute to preventing suicide.

Particularly relevant audiences for research findings are policy makers, who have a role in translating research into policy, and practitioners, who need to be kept up to date with the latest research and policy as it influences what services are delivered. Mechanisms for these audiences to access research and for researchers to effectively communicate findings to them need to be established.

The dissemination of information and public health messaging about suicide research and prevention initiatives poses particular challenges. It is important that such information is evidence-based and presented in ways that do not increase the risk of contagion. It is also important to tailor information to specific audiences. There are opportunities for research to explore and evaluate various mechanisms and modes of dissemination that are effective and safe (Chambers et al 2005).

It is necessary to have one or more central points to develop and maintain information networks and disseminate relevant material. A central point for dissemination can also act as a first point of contact for anyone in the community seeking safe and accurate information on suicide prevention. This role is particularly important given various audiences have strong needs for information about suicide prevention programmes that have been carefully developed, evaluated and found to be effective.

Current New Zealand initiatives

Mechanisms to disseminate research and information

Suicide-related information is disseminated by several mechanisms. One major source is Suicide Prevention Information New Zealand (SPINZ), a service of the Mental Health Foundation that is contracted by the Ministry of Health to act as a central point for collection, storage and dissemination of evidence-based suicide prevention information in New Zealand. SPINZ focuses on disseminating information to community-based groups, professionals and agencies.

Another source is the Suicide Research Network (SRN). This Internet-based group of researchers with interests in suicide comments and prepares documents on issues relating to suicide and suicide prevention in New Zealand.

Resources that provide suicide research and information

There is a wide range of suicide prevention resources available. They include best-practice guidelines and toolkits for those delivering services, and information resources for those bereaved or affected by suicidal behaviour. The Ministry of Health also publishes statistics documents annually.

Expanding the evidence base on causes of suicidal behaviour and effective interventions for Māori/tangata whenua

It is critical to invest in further research to achieve equitable outcomes in preventing suicide and suicide attempts by Māori.

A large body of evidence supports generic interventions in addressing the health needs of most New Zealanders. However, there is a lack of research evidence to inform actions that will address the specific health needs of Māori. Research approaches need to be acceptable to Māori. The range of descriptors of relevance for Māori research is described in Appendix 2.

One recent study specifically with Māori by Coupe (2005) found that, secondary to poor mental health status, the key risk factors associated with attempted suicide among Māori were cultural identity, marijuana use and interpersonal abuse. Further research by Māori is required to gain a more in-depth understanding of suicidal behaviour among Māori. In particular, there is a need for research that expands, examines and identifies causes, effects and effective interventions to address the high rate of young Māori female suicide attempt, Māori youth suicide, and the significantly high suicide rates of Māori aged 35 years and under. The establishment and development of a Māori suicide prevention research agenda could provide a practical start.

Issues for Pacific peoples

A key first step in researching suicidal behaviours and mental health issues for Pacific populations is to further analyse information collected in *Te Rau Hinengaro: The New Zealand Mental Health Survey* (Oakley Browne et al 2006). Further analysis of data could inform future planning for services and other interventions aimed at Pacific peoples. Specifically, given that Pacific peoples report lower access to health services for mental health issues, data from the survey could provide more in-depth information about service use by those in the Pacific population who have made a suicide attempt.

Although suicide data are becoming more accurate, there remain concerns that data about Pacific suicides and suicide attempts may be unreliable due to a lack of accurate recording of ethnicity data. To respond better to the needs of Pacific peoples, enhanced collection and reporting of ethnic specific data about prevalence, incidence and service delivery is required.

Other areas requiring research are:

- Pacific family and community attitudes towards suicide and the influence of traditional beliefs and attitudes
- effective suicide prevention interventions for Pacific peoples
- postvention for Pacific families and communities
- improved ethnic-specific data to allow trends within specific Pacific ethnicities to be identified.

Key areas for action

Improving the quality and timeliness of suicide data

- 7.1 Improve the quality of suicide-related data. This action is important to ensure accurate information about suicidal behaviours in New Zealand. It includes improving national consistency of suicide and suicide attempt data, scoping the feasibility of setting up surveillance sites for gathering complete data on suicide attempts, and improving the collection of ethnicity data.
- 7.2 Address issues regarding the timeliness of suicide data. Timely statistical information is needed to monitor the impact of this Action Plan on population rates of suicide and suicide attempt. This action includes developments to improve coronial reporting, such as the establishment of a coronial database to allow ready analysis of trends.
- 7.3 Scope the feasibility of establishing a suicide mortality review committee. The key task of this committee would be to conduct regular reviews of data to identify trends or issues relating to suicide and suicide attempts in New Zealand.

Expanding the research base

- 7.4 Analyse existing suicide-related databases. Extensive population-level data on issues relating to suicide are contained in existing databases, for example, the Youth 2000 and 2007 and *Te Rau Hinengaro* surveys. These databases should be explored for their capacity to further contribute to knowledge about suicide.
- 7.5 Evaluate new suicide prevention initiatives. Adequate evaluation is critical to the success of suicide prevention efforts set out in this Action Plan. For this reason, it is important that initiatives derived from the Action Plan are developed in ways consistent with a prevention science approach, including adequate evaluation.
- 7.6 Continue to fund suicide research through the Health Research Council (HRC). The HRC's current role of providing funding for suicide research should be maintained. In addition, research using a prevention science approach, including a focus on translational research and evaluation, should continue to be emphasised.
- 7.7 Fund research using the Ministry of Health's Suicide Prevention Research Fund to support the implementation of the *New Zealand Suicide Prevention Strategy 2006–2016*.
- 7.8 Invest in Māori suicide research. As noted above, the issue of suicide among Māori is a priority area in this Action Plan. To inform policy development in this area, research into suicidal behaviours among Māori must be supported and funded. Investment in Māori suicide research may include: (a) developing a Māori research agenda; (b) increasing involvement of Māori researchers in the analysis of existing databases; (c) further development of the Māori mental health research workforce; and (d) increasing investment in Māori suicide research using the range of appropriate research methods (see Appendix 2).

Disseminating research and information

- 7.9 Develop, implement and evaluate a suicide prevention research and information dissemination plan. This plan will align research and information needs with specific audiences, and will specifically include meeting the needs of Māori service providers and communities. It will be guided by safe, effective and evidence-based dissemination principles.

Appendix 1:

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Department of Internal Affairs

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Appendix 2: Māori research descriptors

Characteristics	Research not involving Māori	Research involving Māori	Māori-centred research	Kaupapa Māori research
Description	<p>Research where Māori participation and data are neither sought nor considered relevant</p> <p>Research whose results are thought to have no impact on Māori</p>	<p>Research where Māori are involved as participants or subjects, or possibly as junior members of a research team</p> <p>Research where Māori data are sought and analysed</p> <p>Research where Māori may be trained in contemporary research methods and mainstream analysis</p>	<p>Research where Māori are significant participants, and are typically senior members of the research team</p> <p>Research where a Māori analysis is undertaken and that produces Māori knowledge, albeit measured against mainstream standards for research</p>	<p>Research where Māori are significant participants, and where the research team is typically all Māori</p> <p>Research where a Māori analysis is undertaken and that produces Māori knowledge</p> <p>Research that primarily meets expectations and quality standards set by Māori</p>
Māori participation	Nil	Minor	Major	Major, possibly exclusive
Methods/tools	Contemporary – mainstream	Contemporary – mainstream	Contemporary – mainstream and Māori	Contemporary – Māori and mainstream
Analysis	Mainstream	Mainstream	Māori	Māori

Source: Adapted from C Cunningham. 1998. *A Framework for Addressing Māori Knowledge in Research, Science and Technology*. Paper prepared for the Ministry of Research, Science and Technology, p 7.

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