

Background paper to the Community and Public Health Advisory Committee April 2002

An Overview of Youth Suicide¹ - the Bay of Plenty DHB Perspective

Suicide, particularly among young people, is a growing problem in modern societies. By international standards New Zealand's suicide rate is one of the highest in the world.

In 1999 there were 119 youth deaths from suicide. This was the lowest number of deaths since 1987. Males accounted for over two-thirds of youth suicide deaths in 1999. But for every completed suicide there are a greater number of attempted suicides.

Suicide is not a disease that can be cured. Rather, it is a complex problem for which there is no one cause or cure. Instead there are a range of biological, cultural, economic, social and psychological influencing factors. Most suicides, however, can be prevented.

In 1998, the New Zealand Government responded by producing a national strategy to signal the way forward to deal with the challenge of preventing young people from considering suicidal behaviours. The New Zealand Youth Suicide Prevention Strategy was developed by the Ministry of Youth Affairs, Te Puni Kokiri (Ministry of Maori Development) and the Ministry of Health.

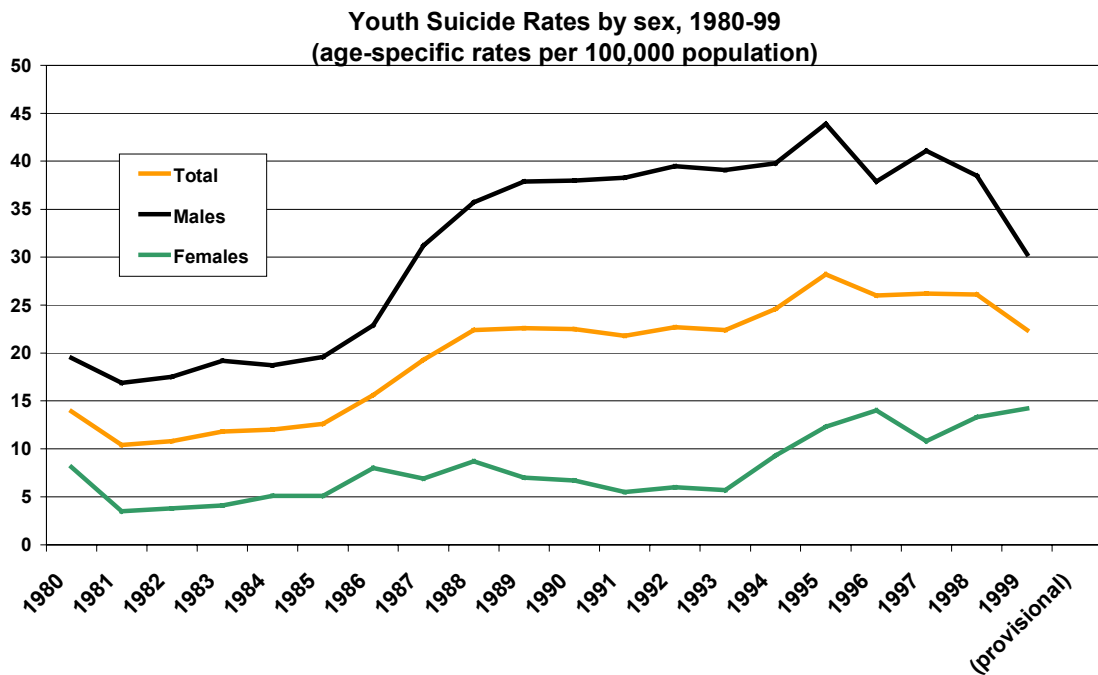
National Suicide Rate Statistics

Youth suicide rates for 1980 to 1999 are shown in the table and graph below. The total rate of youth suicide in 1999 (22.4 per 100,000 population) was the lowest rate since 1993. The rate of male suicide death dropped sharply from 1998 to 1999, while the female rate increased slightly.

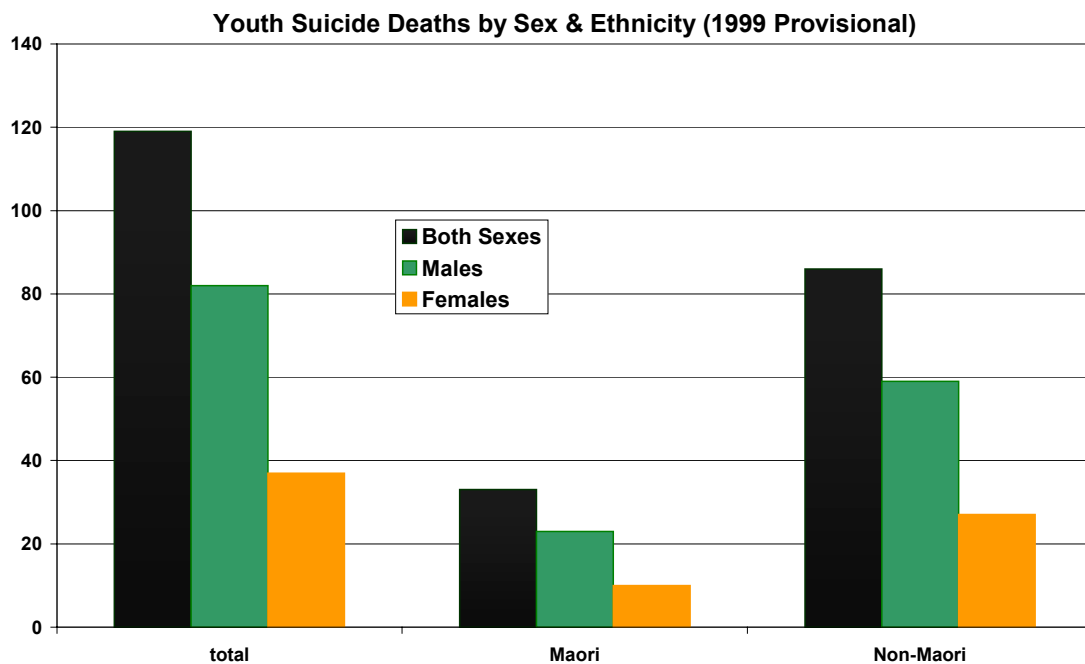
¹ Material sourced from:

- Statistics New Zealand
- BOPDHB Preliminary Health Status Report 2001
- Ministry of Youth Affairs – Youth Suicide Prevention
- Ministry of Health – Suicide Prevention Toolkit; NZHIS
- Suicide Prevention Series: Indigenous suicide in Australia, New Zealand, Canada and the United States. Ernest Hunter, Desley Harvey. Emergency Medicine (2002) 14, 14-23

The male rate of youth suicide in 1999 (30.3 per 100,000) was more than twice the female youth rate (14.2 per 100,000).



The graph below shows provisional youth suicide deaths by ethnicity for 1999. There were 33 Maori deaths in 1999, accounting for 28 percent of total youth suicides.



Bay of Plenty Data: Suicide Mortality Rate² 1996-98

Number of Deaths

- Between 1996 and 1998 there were an average of 30 deaths due to suicide per year in the Bay of Plenty.
- An average of 24 per year were male and 6 per year were female.
- An average of 10 per year were Maori and 20 per year were non-Maori.
- An average of 7 suicide deaths per year were young people aged 15-24 years (5 male and 2 female, 3 Maori and 4 non-Maori)

Age-Specific Rates

- The male age-specific rates were greater than female age-specific rates for all age groups.

Males

- The age group with the highest age-specific rate of suicide was 15-24 years.
- Bay of Plenty age-specific rates were higher than New Zealand age-specific rates for all age groups.
- The Maori rate was greater than the non-Maori rate for all age groups except people aged 45-64 years.

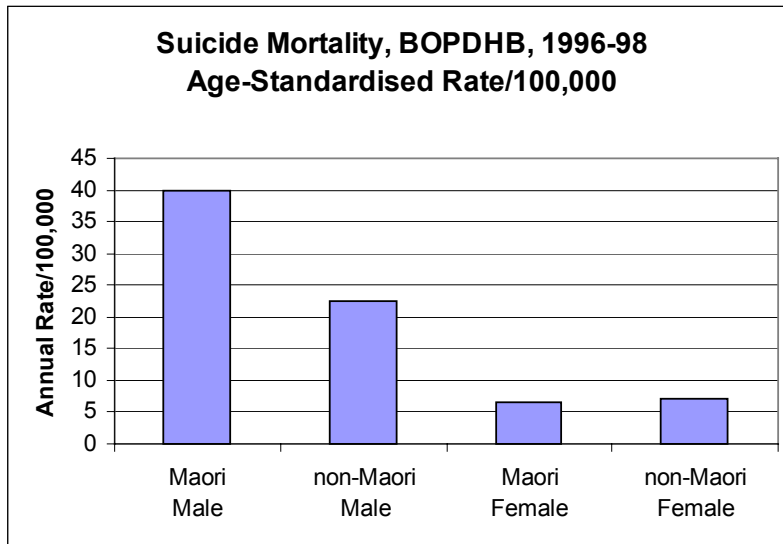
Females

- The age group with the highest age-specific rate of suicide was 15-24 years.
- Bay of Plenty age-specific rates were higher than New Zealand age-specific rates for all age groups except 0-14 years and 25-44 years.
- The Maori rate was greater than the non-Maori rate for all age groups except people aged 45-64 years or 65 years or more.

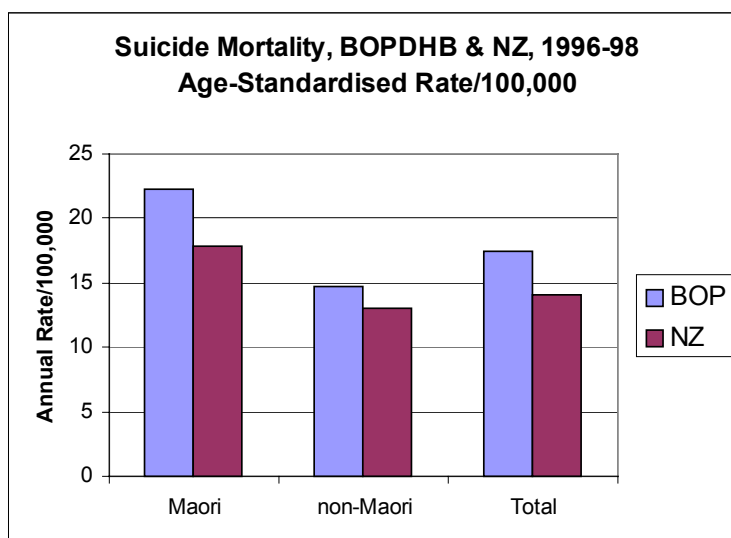
² Excerpt from 'BOPDHB Preliminary Health Status Report November 2001'

Age-standardised Rates

- Maori males had the highest age-standardised suicide mortality rate followed by non-Maori males.



- The age-standardised suicide mortality rate for the Bay of Plenty was higher than the New Zealand rate but this difference was not statistically significant.
- The age-standardised rate for Maori in the Bay of Plenty was higher than the rate for New Zealand Maori but this difference was not statistically significant.



Bay of Plenty Data: Hospitalisation for Attempted Suicide and Self-inflicted Injury 1999/2000

Number of Admissions

- There were 148 hospital admissions for people who usually reside in the Bay of Plenty
- 41 were male and 107 were female
- 41 were Maori and 107 were non-Maori

Age-Specific Rates

For all age groups except 65 years or more the female age-specific rate was higher than the male rate.

Males

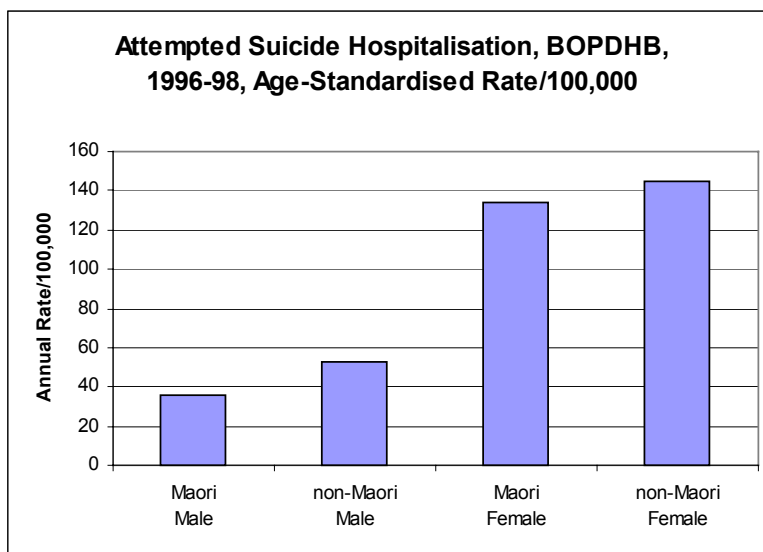
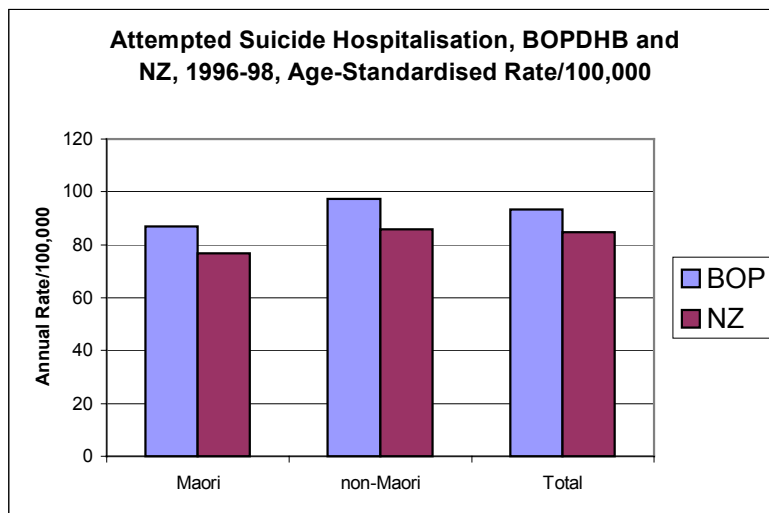
- The age group with the highest age-specific rate was 15-24 years.
- Most Bay of Plenty age-specific rates were lower than New Zealand age-specific rates. However, for males aged 0-14 and 45-64 years, Bay of Plenty age-specific rates were higher than New Zealand rates.
- The non-Maori rate was greater than the Maori rate for all age groups

Females

- The age group with the highest age-specific rate was 15-24 years.
- For the younger age groups (0-14, 15-24 and 25-44 years) Bay of Plenty age-specific rates were higher than New Zealand age-specific rates but for older age groups (45-64 and 65 years or more) Bay of Plenty rates were lower than New Zealand rates.
- The non-Maori rate was greater than the Maori rate for all age groups except people aged 0-14 or 25-44 years.

Age-standardised rates

- Non-Maori females had the highest age-standardised rate of admission for attempted suicide and self inflicted injury followed by Maori females.
- The age-standardised rate for the Bay of Plenty was higher than the New Zealand rate but this difference was not statistically significant.
- The age-standardised rate for Maori in the Bay of Plenty was higher than the rate for New Zealand Maori but this difference was not statistically significant.



A Global View of Suicidal Behaviour

In the year 2000 approximately one million people died by suicide and between 10 and 20 times that number attempted suicide. At least five or six people are affected by an individual's suicidal behaviour and therefore at least one hundred million people worldwide have direct contact with suicidal behaviour each year. Suicidal behaviour is a major public health problem.

Epidemiology

In most countries suicide is more common in males and usually increases with age. However, in Australia and New Zealand there has been a threefold increase in younger males in the last 30 years.

Marriage and strong religious faith appear to be protective.

There are marked differences in method of suicide among countries. For example, the four most common methods in Sweden are poisoning, hanging, firearms use and drowning. In Hungary, they are hanging, poisoning, jumping from a height and drowning. In the USA, they are firearms use, hanging, poisoning, cutting or piercing. In Australia and New Zealand, they are hanging, carbon monoxide poisoning from motor vehicles, poisoning by solid/liquid substances and firearms use.

Theories of Suicide

There is no universally accepted 'theory of suicide' despite intense study into suicidal behaviour. One model that has some face validity is the 'threshold and trigger model'. Factors related to the threshold include:

- Genetic predisposition
- Biochemical / metabolic
- Personality traits
- Emotional states of hopelessness
- Availability of support systems

Triggers can include:

- Mental disorders
- Physical illnesses
- Alcohol &/or substance abuse
- Interpersonal loss
- Rejection

Approaches to Prevention

In 1993, the World Health Organisation presented six broad approaches to the prevention of suicidal behaviour including:

- The treatment of those with mental disorders
- Gun possession control
- Detoxification of domestic gas
- Detoxification of car emissions
- Control of availability of toxic substances
- Toning down of reports of suicide in the media

Mental Illness

Mental illness is an important factor in suicide with studies conducted in many countries, including Australia and New Zealand, demonstrating that over 90% of suicides have recognisable mental illness at the time of their death.

Major depression occurs in 60-70% of suicides. Schizophrenia is less common, although in the under 35-age group, up to 19% of suicides are in this category. Co-morbidity is also frequent, particularly with substance dependence usually alcohol.

Studies inform us that there is often a 'window of opportunity' for preventing suicide, as many who engage in suicidal behaviour have had recent contact with the 'helping professions'. This is so, even for younger age groups where for suicides under the age of 20 years, only 5% have symptoms indicative of mental illness for less than 3 months.

Findings from a number of studies emphasise the importance of the treatment of mental illness in the prevention of suicide. However, all who are suicidal do not necessarily require mental health treatment because a number of interventions, including sensitive assessment and management in Primary Care and Emergency Department settings, as well as support by community mental health case workers, can alleviate much of the distress.

Other Risk Factors

In addition to mental illness, certain signs signal the possibility of suicide. For instance, a youth expressing suicidal intent along with agitation, guilt, hopelessness and constriction of interests with self-absorption are particularly ominous indicators. Certain groups are particularly at risk for suicidal behaviour including:

- those with a past history of attempted suicide
- those with a alcohol and other substance dependence
- young males
- the elderly
- the bereaved
- indigenous groups
- sexual identity conflicts
- migrants
- those in rural areas
- those in prison/custody

- persons with debilitating diseases

Risk Factors for Youth Suicide identified in New Zealand

Suicides and attempted suicides are usually the result of a complex interplay of longer- term risk factors and stressful immediate events. Risk factors for suicide are very similar to risk factors for other problems affecting young people such as depression, substance use problems, offending behaviours and conduct disorder. Other than individual risk factors there are wider social factors which appear to impact on the suicide rate of the population as a whole. Cultural alienation and historical factors for Maori.

The risk factors

Research has identified four main factors that distinguish young people who make suicide attempts from other young people:

- social and educational disadvantage
- a history of exposure to multiple family and parental disadvantages during childhood and adolescence
- the development during adolescence of significant mental health problems or adjustment difficulties
- exposure to a serious or stressful life event immediately prior to the suicide attempt.

Although some risk factors for indigenous youth and taitamariki mirror in part those of non-indigenous people other specific risk factors are as follows:

- the impact of institutional factors (eg mainstream education systems, prison)
- cultural and historical factors (eg social dislocation and breakdown of whanau support and cultural identity).

The presence of mental health, substance use and behavioural disorders

Research has consistently suggested that approximately 90% of young people, who

die by suicide or make suicide attempts will have had a recognisable (but not necessarily recognised) mental disorder at the time.

The three mental disorders most commonly associated with suicidal behaviour are:

- depressive disorders-present in almost three quarters of those making suicide attempts
- alcohol, cannabis and other drug abuse-present in over one-third of those making suicide attempts
- significant behavioural problems (such as conduct disorders and antisocial behaviours) - present in one-third of young people making suicide attempts.

In many cases those making serious suicide attempts will have more than one of these disorders.

Cultural depression

In the international literature on indigenous youth suicide there is increasing support for the existence of a form of cultural depression (Keri Lawson-Te Aho, 1998). This has been variously called sub-clinical depression, accumulative stress, cultural grief and collective post-traumatic stress disorder. Indigenous mental illness is thought to be related to the outcomes of trying to live in two worlds and fitting neither, coupled with histories of cultural genocide over which indigenous peoples have been unable to exercise sufficient control. This reflects the notion of intergenerational, collective cultural suffering.

Risk factors common to other problems

The risk factors for suicidal behaviour are very similar to risk factors for other psychosocial problems, including for example, depressive disorders, substance use disorders, conduct disorder and youth offending behaviours.

Causal or correlated factors

The interplay of these disorders is complex. For example research has shown that while cannabis use is correlated with suicidal behaviour it does not appear to be causative. Likewise there is considerable debate whether unemployment is a cause of suicide and mental disorders or whether suicide and unemployment both arise from similar causal factors.

A typical profile of a young person at risk of suicide

A typical profile of a young person most at risk is:

- they live or has lived in a family environment that is subject to multiple stresses, including abuse and other difficulties
- they have, at a relatively early age, developed adjustment problems that span and include depression, alcohol and other drug use disorders and behavioural difficulties
- at the time of the suicide or suicide attempt, the young person is likely to have been exposed to a significant stress (most commonly involving the breakdown of a supportive emotional relationship or problems with the law).

Indigenous profile

Some research has suggested that the pattern of youth suicide for indigenous youth does not 'fit' the profile promoted for non-indigenous youth (Lawson-Te Aho, 1998). There is a need to understand why Maori are highly represented in the suicide statistics.

Cultural alienation and historical factors

International evidence shows that cultural alienation is a valid explanation for indigenous experiences of being at high 'risk' for drug abuse, alcohol, mental health problems including depression suicide and other adverse behaviours.

Despite a shortage of in-depth research looking at the particular features of Maori suicide, there is evidence that cultural alienation is a significant risk factor for suicide in addition to the risk factors noted above. Keren Skegg et al link cultural alienation of young Maori to increased suicide risk. Mason Durie maintains that a secure Maori identity will act to protect against poor health even in the presence of adverse socio-economic conditions.

Cultural alienation may also place young Pacific people born in New Zealand at increased risk.

Keri Lawson Te-Aho states that the historical impacts of colonisation on indigenous peoples reflect the removal and breakdown of cultural institutions that would have once modified and controlled individual behaviour for collective benefit and for individual good. She notes that the historical facts of removal of land, the forced impoverishment of Maori, and the removal of Maori control over their destinies has

had a profound effect on contemporary Maori society (see A Review of the Evidence: Kia Piki te Ora o te Taitamariki).

Prison as a risk factor

There is debate around whether incarceration is in itself a risk factor for suicide. It is not clear if being imprisoned can be isolated as a risk factor, or if those who are imprisoned are, as a group, more likely to already be at higher risk due to other risk factors, such as depressive or conduct disorders or alcohol and drug abuse disorders. This issue is an important consideration for policy development for the youth justice system and related sectors (health and social welfare).

Sexual Orientation

There is growing international evidence to confirm that young gay, lesbian and bisexual people have higher rates of suicidal behaviour, arising from lack of support for their sexual orientation and the discrimination they face.

Cumulative risk

Research has shown that the more the risk factors the individual is exposed to the more at risk of suicide he/she is. This research shows that serious suicide attempt behaviour and completed suicide are not simply a consequence of a current mental health problem, or a current stressful life event, but rather represents the culmination of negative life events (Fergusson and Horwood, 1998).

Protective factors for suicide

A range of factors appear to have the capacity to protect people who might otherwise be at risk of suicide. These include coping skills, feelings of self-esteem and belonging, connections to family or school, secure cultural identity, supportive family/whānau, hapū and iwi, responsibility for children, and social support. However, while protective factors may act as buffers they do not simply cancel out risk factors. Rather they may limit the negative impact of risk factors when appropriately linked-in with other preventative strategies.

Population risk factors

Other than those factors which affect particular individuals or groups, there appear to be factors which affect the population's suicide rate as a whole. While there has been little research undertaken on this issue in New Zealand, drawing on overseas findings such factors may include economic circumstances, the availability of lethal

methods of suicide (such as guns), the normalisation of suicide, media portrayal of suicide, cultural changes affecting rates

The New Zealand Youth Suicide Prevention Strategy 1998



The purpose of the New Zealand Youth Suicide Prevention Strategy is to provide leadership at a national level by outlining the key interventions that need to be in place to prevent suicide.

The Strategy was published in March 1998 and has two parts 'Kia Piki Te Ora o te Taitamariki', which is the strategy specifically targeting Maori needs and approaches and 'In Our Hands' which is the general population strategy.

The framework of the strategy is broad enough to be long lasting and inclusive enough to guide interventions from a range of sectors, from government, local government, professional groups, non-government organisations, service providers, iwi, hapu, community members and private individuals.

This national level strategy

- recognises the complexity of the problem and the need for a co-ordinated and collaborative response both across government agencies and out to non-governmental entities
- allows for the identification of existing interventions and gaps that need to be addressed
- provides a recognisable and consistent strategic approach to suicide prevention.

It is essential that youth suicide prevention programmes are well-designed in order to ensure that they do no harm. The national approach aims to ensure that best practice is pursued in the development and delivery of youth suicide prevention

What is in the Strategy

The New Zealand Youth Suicide Prevention Strategy has two parts

- Kia Piki Te Ora o te Taitamariki – the strategy specifically targeting Maori needs and approaches
- In our hands – the general population strategy

Kia Piki te Ora o te Taitamariki

Kia Piki te Ora o te Taitamariki (Strengthening Youth Wellbeing) is a strategy developed for Maori which is strongly grounded in a Maori development approach. It focuses more specifically on promoting resilience factors such as cultural identity and belonging.

Kia Piki te Ora o te Taitamariki is inspired by a vision of a society where...

...taitamariki Maori are valued, nurtured and strengthened.

The Mission of *Kia Piki te Ora o te Taitamariki* is...

...to reduce the rate of suicide and suicidal behaviour of taitamariki Maori by strengthening their participation in healthy Maori whanau and communities, which provide safety, security and a uniquely Maori sense of identity.

Goals for Kia Piki te Ora o te Taitamariki

Goal 1: Strengthening Whanau, Hapu, Iwi and Maori

Goal 2: Taitamariki (youth) Development

Goal 3: Cultural Development

Goal 4: Mainstream Responsiveness

Goal 5: Information and Research

In Our Hands

In Our Hands is inspired by a Vision of a society where...

...young people are valued, nurtured and strengthened.

The Mission of *In Our Hands* is...

...to help government, communities, and families/whanau and individuals act together to reduce youth suicide and suicidal behaviour.

In Our Hands has a series of goals and objectives, from promoting resilience factors such as strengthening and supporting families, to ensuring people have the skills to identify and help someone who is suicidal, through to supporting those who have been bereaved by suicide.

Goals for In Our Hands

Goal 1: Promoting Wellbeing

Goal 2: Early Identification and Help

Goal 3: Crisis Support and Treatment

Goal 4: Support After a Suicide

Goal 5: Information and Research

Intervening to reduce youth suicide

The New Zealand Youth Suicide Prevention Strategy as a whole draws together a full range of interventions spread across the two parts of the strategy. The Maori specific component 'Kia Piki te Ora o te Taitamariki' draws strongly on a community development approach. The general population component 'In Our Hands' takes a public health focus.

Suicide prevention requires a multi-faceted approach which focuses on:

- building resiliency of the whole population
- early identification and responding to those at risk
- providing ongoing support to those who may be suicidal or who have long term needs
- support to those that have been affected by a suicide or serious suicide attempt and improving our knowledge and understanding the causes and rates of suicidal behaviours.

The higher rate of Maori youth suicide and the Government's commitment to improving Maori health is being addressed in part by a Maori-specific component to the strategy, *Kia Piki te Ora o te Taitamariki*.

Prevention initiatives need to be well co-ordinated and engage a range of sectors, including central and local government, community, professional groups, iwi, hapu and families/whanau.

Suicide prevention initiatives must take into account research and best practice to minimise the potential to do harm.

Range of interventions

The range of interventions which contribute to the prevention of suicide are generally derived from reducing the impact of identified risk factors and by increasing resiliency by promoting protective factors. In many ways they attempt to interrupt the pathways which can lead to suicidal behaviour.

The New Zealand Youth Suicide Prevention Strategy as a whole draws together the full range of interventions spread across two parts of the strategy. Both merge within one core intervention approach as follows:

- Strengthening families, young people, whanau and communities
- Providing early intervention
- Providing intervention/treatment
- Providing post crisis support.

All of these are supported by research and information.

A summary of interventions for *Kia Piki te Ora o te Taitamariki*

Kia Piki te Ora o te Taitamariki includes some strategies identified above but places a stronger emphasis on improving resiliency through taitamariki, whanau and community empowerment and strengthening cultural identity, and increasing mainstream responsiveness and obligations.

It acknowledges the diversity of Maori society by reference to whanau, hapu, iwi and Maori approaches to the prevention of taitamariki suicide. The diversity of Maori individuals and collectives is addressed in both the mainstream and *Kia Piki te Ora o te Taitamariki* components by the requirement for mainstream programmes and services to provide culturally effective programmes and services, and be responsive to the needs of Maori.

1. To strengthen whanau, hapu, iwi and Maori so they can contribute towards fulfilling the potential of taitamariki:
2. Highlight Te Tiriti o Waitangi in promoting wellness amongst whanau, hapu, iwi and Maori
 - ◆ Encourage whanau, hapu, iwi and Maori to challenge discriminatory attitudes and practices to those with mental illness
 - ◆ Increase awareness and use of holistic Maori models of health
 - ◆ Develop support systems for those affected by suicide
 - ◆ Focus on support systems within community settings eg, marae, schools
 - ◆ Strengthen the development of taitamariki, whanau, hapu, iwi and Maori through traditional roles eg kaumatua
 - ◆ Increase support for 'by Maori for Maori' programmes and services
 - ◆ Increase awareness of the risk factors (eg, alcohol and drug misuse) that impact on health and wellbeing.
3. To strengthen the role of taitamariki Maori by enabling them to provide a valued contribution to Maori development:
 - ◆ Increase taitamariki participation in the socio economic and cultural factors that contribute to Maori development
 - ◆ Taitamariki leadership role in the design, promotion and delivery of programmes and services

- ◆ Increase taitamariki discussion of the social, institutional and risk factors that impact on taitamariki
 - ◆ Increasing taitamariki access to educational opportunities.
4. To increase the role of cultural development and the protective factors for taitamariki Maori:
- ◆ Support wananga on traditional beliefs and responses to suicide
 - ◆ Promote a Maori cultural base in the promotion of taitamariki health and wellness
 - ◆ Encourage the retention and revival of tikanga and te reo to foster taitamariki identity
 - ◆ Enhance Maori healing methodologies in the diagnosis prevention and treatment of Māori mental illness.
5. To encourage and assist mainstream services to respond appropriately and effectively to the needs of taitamariki Maori through the establishment of partnerships with Maori:
- ◆ Promote Maori workforce development and training in mainstream services
 - ◆ Develop effective cultural protocols and training programmes in priority settings
 - ◆ Whanau involvement in mainstream settings case management
 - ◆ Ensure Maori partnership in the development of mainstream policy and service delivery.
6. Information and research:
- ◆ Encourage the development of 'by Maori for Maori' research
 - ◆ Promote the evaluation of 'by Maori for Maori' and mainstream suicide prevention programmes and services
 - ◆ develop and disseminate information on suicide prevention to Maori communities

- ◆ Improve the accuracy of ethnicity recording for Maori for suicide and suicide attempts
- ◆ Encourage collaboration and co-ordination amongst those involved in research on Maori suicide.

A summary of interventions for *In Our Hands*

1. Population based initiatives to promote resiliency and reduce harm:
 - School-based mental health promotion programmes.
 - Mental health destigmatisation programmes
 - family/whanau support programmes and services.
 - Strengthen hapu, iwi and community support structures.
 - Promote help-seeking amongst young people.
 - Information for parents.
 - Modify broader social factors that may contribute to suicide risk.
 - Reduce social inequality, discrimination and abuse which impact of young people.
 - Encourage participation of young people in all aspects of community life.
 - Reduce access to lethal means of suicide, including modifying facilities to make them suicide resistant.
 - Promote good practice in media reporting and portrayal of suicide.
2. Early identification of those who have risk factors:
 - Improve practice with guidelines and training on early identification and assessment of risk (eg, for GPs, school guidance counsellors, police, CYPFS social workers etc).

- Expand and improve youth appropriate health services (including mental health and drug and alcohol services).
 - Improve the cultural appropriateness of mainstream services to Maori, Pacific people and other cultures.
 - targeted family support programmes □ Expand “by Maori for Māori” services (eg, Family Start, PAFT, Whanau Toko i te Ora).
 - Early intervention services (eg, social workers in schools).
3. Improved treatment for those who are at special risk of suicide, including those who have attempted suicide:
- Improve effectiveness and accessibility of crisis support services.
 - Expand and improve youth mental health services.
 - Improve emergency department management and referral of those who have attempted suicide.
 - Improve follow-up support for those who have attempted suicide.
 - Provide support for families/whanau of those who have attempted suicide.
 - Improve co-ordination between services.
4. Effective support and response after a suicide or serious suicide attempt:
- Skilled, accessible and culturally appropriate bereavement support services.
 - Postvention plans for schools, workplaces and communities to reduce potential for cluster suicides.
5. Improved information about the rates and causes of suicide:
- Research into design and evaluation of suicide prevention programmes.
 - Research to increase our understanding of suicidal behaviour, eg. for Maori, Pacific people, media impact, wider social changes, sexual orientation etc.

- Collection and dissemination of research and information to those involved in suicide prevention.
 - Improved statistical information about the trends and rates of suicidal behaviour
6. Improve the classification of ethnicity in date so true rates of Maori and Pacific suicides are known