



PREVENTING INJURY FROM FALLS

The National Strategy 2005-2015

Te Ārai i nga Aitua Hinga Te Rautaki a-Motu 2005-2015

Hon Ruth Dyson, Minister for ACC

PREVENTING INJURY FROM FALLS

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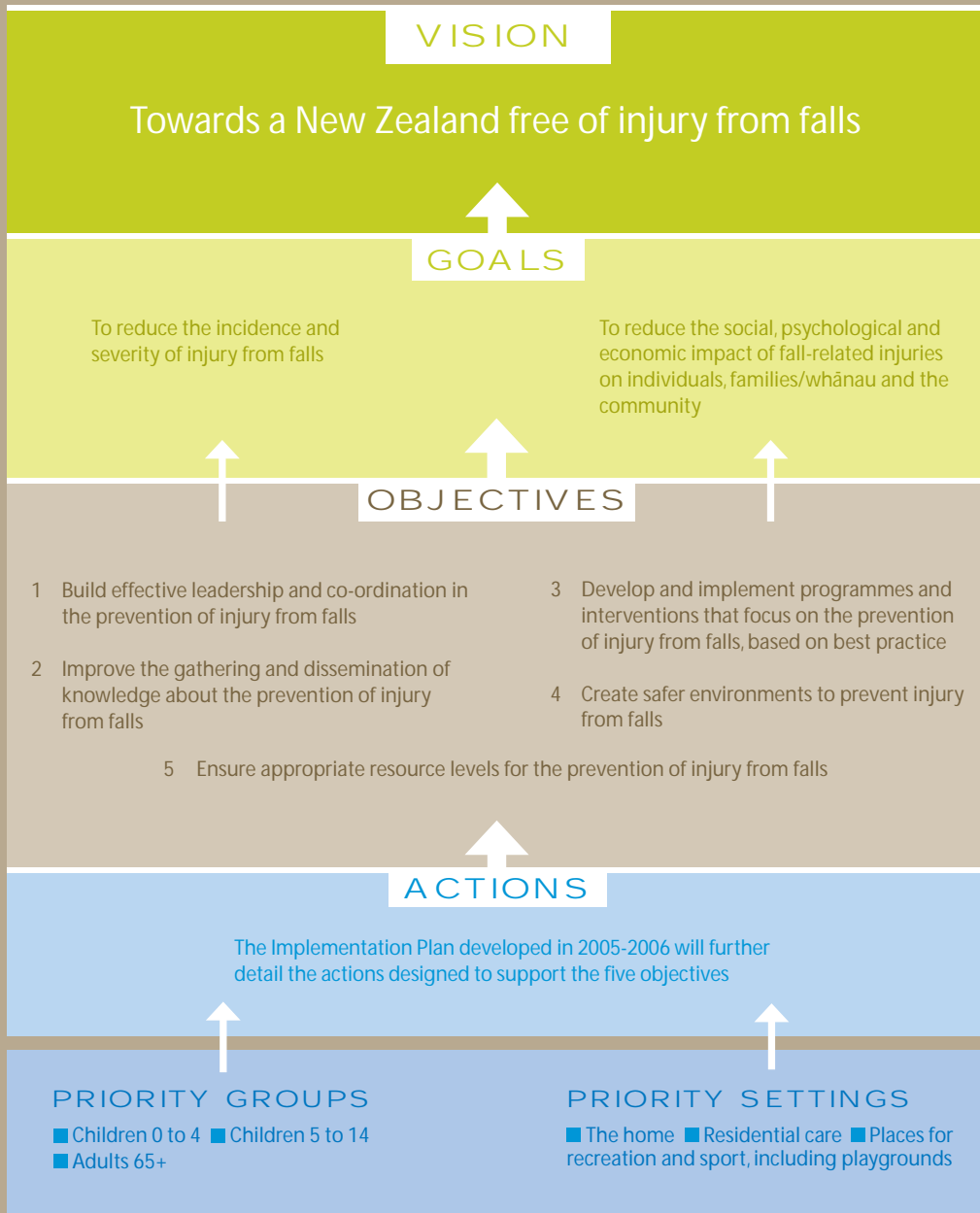
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PRINCIPLES ■ Lead role for government ■ Effectiveness ■ Environments ■ Integration ■ Personal skills and responsibility

PRINCIPLES ■ Equity ■ Appropriateness ■ Anticipate and respond to change ■ Collective action ■ Evidence-based decision-making



FOREWORD



I am pleased to release [Preventing Injury from Falls: The National Strategy 2005-2015](#).

The Strategy aims to reduce the incidence and severity of injury from falls and the impact of fall-related injuries on New Zealanders' health and wellbeing. It directly supports the [New Zealand Injury Prevention Strategy](#) launched by the Government in June 2003, and will assist in co-ordinating and guiding the increasing level of activity nationwide aimed at preventing injury from falls.

Falls are commonplace, and are the leading cause of injury hospitalisation and one of the top three causes of injury-related death in New Zealand. Beyond the physical injuries resulting from falls, there are also well documented psychological effects in some age groups.

Falls are complex events. They occur in a number of settings, have a number of different risk factors, and differ in the degree and type of injury that results. The majority of those who fall and injure themselves are children or older adults. Nonetheless, according to Accident Compensation Corporation (ACC) data, falls are also one of the biggest causes of home injuries for adult New Zealanders in the middle age range (15 to 64 years).

Numbers alone, however, do not reflect the extent of the personal and social impacts on the injured individual's family/whānau and social networks.

There has been a rapid increase in activity around fall prevention over recent years. This Strategy to prevent injury from falls is timely and will guide the activities of central and local government, health agencies, service providers and non-government and community organisations towards providing services in a more co-ordinated and collaborative way.

The Strategy is an expression of the Government's commitment to working with others to improve New Zealand's performance in preventing injury from falls. It was developed with input from a large stakeholder group and has wide relevance and support. I look forward to the measures it outlines being put into place so we can increasingly prevent injury from falls.

A handwritten signature in black ink, appearing to read 'Ruth Dyson'.

Hon Ruth Dyson

Minister for ACC



INTRODUCTION

E mau tō ringa ki te akaaka matua.

'Hold fast to a decent handhold!' This was Tawhaki's advice to his younger brother Karihi as they climbed to the tenth heaven, sometime near the time of the beginning of the world. It offers advice to those climbing or travelling, to make sure they do not fall.

Many people have had a fall that results in a minor injury, or no physical injury. At the other end of the scale some people experience serious injury from falls that result in hospitalisation, or even death.

Even when no physical injury has happened, a fall can result in a loss of independence and confidence, a reluctance to undertake certain activities and a fear of falls happening again. Falls can also have financial and social impacts on an individual's family/whānau and community – for example, if an older person needs to go into residential care as a result of a fall, or a child requires alternative care because their caregiver has been injured in a fall.

Falls are the leading cause of hospitalisation as the result of injury and one of the top three causes of injury-related death in New Zealand. Between 1993 and 2002, more than 160,000 people were hospitalised for fall-related injuries, accounting for 43 percent of all unintentional injury-related hospital admissions, and between 1992 and 2001 nearly 2,300 people died from fall-related causes, accounting for 21 percent of all unintentional injury-related fatalities in New Zealand.¹

This Strategy has been developed with help from a wide range of organisations and individuals who have a role in preventing

injury from falls. Its success depends on achieving multi-sector ownership, together with collaboration, co-ordination and responsiveness at local, regional and national levels.

WHY DO WE NEED A STRATEGY TO PREVENT INJURY FROM FALLS?

Most falls are preventable – they could be avoided, or the severity of the resulting injury reduced, if the environment were safer and individual risk-taking and personal fall risk factors were minimised. While some risk-taking is a usual and healthy part of life, this Strategy supports the management of risks that, if not addressed, could clearly adversely affect the lives of individuals and their families/whānau and the community.

New Zealanders' overall health and quality of life would be improved and health costs reduced if more falls were prevented.

A number of individuals and organisations work in the area of preventing injury from falls – researchers, service providers, advocacy groups, local government, government and non-government agencies, community groups and professional associations. However, there is little overall co-ordination and no recognised leadership highlighting the issues associated with injuries from falls – which means until now there has been no documented common

1. National Injury Query System. Injury Prevention Research Unit, University of Otago. Downloaded on 4 April 2005 from www.otago.ac.nz/ipru.

goal, direction or prioritisation for activities focusing on preventing them.

This Strategy provides a focus for this work and:

- identifies a strategic vision
- identifies the goals to achieve this vision
- details the objectives for activities that will help achieve these goals
- proposes actions for those involved in managing or delivering fall prevention initiatives.

THE STRATEGY'S SCOPE

Preventing Injury from Falls: The National Strategy 2005-2015

primarily addresses preventing falls where they most happen – at home, during sports and recreation activities, in social settings, at schools and early childhood education centres and in facilities for older adults, including rest homes and hospitals.

The Strategy focuses on unintentional injury caused by a fall. Injury that results from an intentional act (such as someone who falls after being pushed) is outside its scope. It also does not address preventing workplace slips, trips and falls as these are a national priority area in the [Workplace Health and Safety Strategy for New Zealand to 2015](#).²

THE STRATEGY'S LIFE

A considerable amount of work is required before the Strategy's goals can be achieved. Some important components, such as research, may take a number of years. It will also take time to identify, develop, pilot and evaluate programmes, and longer still to change people's behaviour.

The Strategy timeframe is therefore 10 years, to enable its broad objectives to remain relevant while the sector has a realistic opportunity to achieve the goals. A review process will allow progress to be monitored and any necessary revisions made to ensure the Strategy remains relevant and responsive to the needs of those who work to prevent injury from falls, and the community.

HOW TO USE THIS STRATEGY

This Strategy is intended for organisations and individuals that

play a role in preventing injury from falls. Many were represented in the Stakeholder Reference Group. They included:

- researchers and academics
- sports and leisure bodies
- early childhood education centres and schools
- residential care settings
- older persons' services and groups
- disabled persons' services and groups
- community health groups
- specialist advocacy groups
- private, personal and public health and injury prevention providers
- general practitioners and other primary health practitioners
- district health boards
- appropriate Ministries and other central and local government departments.

The Strategy is intended to be read in conjunction with other strategies relating to injury prevention. It provides organisations and individuals with a foundation on which to build further actions to reduce the incidence and severity of falls and the impact of fall-related injury and death on New Zealanders' health and wellbeing.

It also indicates priority areas for action for researchers, community organisations and government. This is important when there is limited funding and numerous potential initiatives.

The Strategy should be used as a guide for planning and priority-setting; it will also add weight to the importance of work being undertaken in the wider area of falls injury prevention.

RELATIONSHIP TO OTHER STRATEGIES

Fall prevention is one of six injury prevention priority areas identified in the [New Zealand Injury Prevention Strategy](#), released by the Government in June 2003. The other areas are:

- assault
- workplace injuries
- suicide and deliberate self-harm
- motor vehicle traffic crashes
- drowning and near-drowning.

2. Department of Labour (2005). Workplace Health and Safety Strategy for New Zealand to 2015, p.20.

Current statistics indicate these areas account for at least 80 percent of injury deaths and serious injuries in New Zealand.³

A number of agencies have strategies that contribute to fall prevention by seeking to improve people's health, encouraging safer environments and/or promoting risk identification and minimisation.

There will be some natural overlaps between this Strategy and some of the others – particularly with the [Workplace Health and Safety Strategy for New Zealand to 2015](#), the implementation of which is being led by the Department of Labour. ACC and the Department of Labour will liaise closely when implementing the strategies, to ensure they cover all settings where a fall may happen, for example working at or in a home.

The [Health of Older People Strategy](#), published by the Ministry of Health in April 2002, also links to this Strategy. It specifically highlights ACC's role in injury prevention and rehabilitation in New Zealand and commits the Ministry of Health and district health boards to working collaboratively with ACC on health promotion activities aimed at preventing injury – for example, physical activity and fall prevention for older people.⁴

There are also links with the [National Alcohol Strategy 2000-2003](#)⁵ and the [Alcohol Advisory Council of New Zealand \[ALAC\] 2002-2007 Strategic Plan](#).⁶ Alcohol use across the lifespan has an impact on falls in the home and community. ALAC's [Culture Change Programme](#),⁷ which is designed to change the culture of intoxication in New Zealand, will play a part in reducing falls.

Other documents with links to the Strategy include:

- the [New Zealand Positive Ageing Strategy](#), Ministry of Social Development

- the [New Zealand Disability Strategy](#), Office for Disability Issues
- [He Korowai Oranga – Māori Health Strategy](#), Ministry of Health
- the [Pacific Health and Disability Action Plan](#), Ministry of Health
- district health board annual and strategic plans
- local government annual and strategic plans
- [Healthy Eating, Healthy Action](#), Ministry of Health
- [Urban Design Protocol](#), Ministry for the Environment.

A wide range of legislation, such as the Building Act 2004, also affects the fall prevention area. The Building Code, which is part of regulations under the Act, has requirements for new buildings and new building work that relate to preventing injury from falling.

GOVERNMENT ACTION

Government agencies encourage and support programmes and initiatives that prevent injury from falls, including those developed by and for affected groups. However, it is important that these interventions consider local needs and use local knowledge, capacity and capability.

Agencies involved in preventing injury from falls include:

- the Ministry of Health
- district health boards
- local government
- the Ministry of Social Development
- Sport and Recreation New Zealand (SPARC)
- ACC.

As an example of government agency leadership, co-ordination and collaboration, ACC and the Ministry of Health are working together on the national implementation of programmes to prevent injury from falls by funding provider training and programme delivery.

3. Accident Compensation Corporation (2003). [New Zealand Injury Prevention Strategy](#). ACC:Wellington.

4. Ministry of Health (2002). [Health of Older People Strategy](#). Retrieved on 18 October 2004 from www.moh.govt.nz/publications/hops.

5. Alcohol Advisory Council of New Zealand and Ministry of Health (2001). [National Alcohol Strategy 2000-2003](#). ALAC and Ministry of Health: Wellington.

6. Alcohol Advisory Council of New Zealand (2002). [Alcohol Advisory Council of New Zealand, Kaunihera Whakatupato Waipiro o Aotearoa 2002-2007 Strategic Plan](#). Available at www.alac.org.nz/CorporateReports.aspx.

7. Alcohol Advisory Council of New Zealand (2003). [Corporate Profile: Alcohol and New Zealand, The Alcohol Advisory Council of New Zealand working to reduce alcohol-related harm in New Zealand](#). ALAC: Wellington.



BACKGROUND

DEFINITION

What is a fall?

For the purposes of this Strategy, the definition of a fall is that developed by the Prevention of Falls Network Europe (ProFaNE):

An unexpected event in which the person comes to rest on the ground, floor or lower level.⁸

This definition fits in a wider context that includes factors such as:

- the severity of the injury
- falls that occur within different age groups
- injuries that are due to a collision or external force.

It also includes injuries that happen through slips and trips that result in falls, and falling against something that is at the same level, like a wall. This definition also covers the multiple causes, risk factors and nature of falls.

INCIDENCE AND CONSEQUENCES OF FALLS⁹

Hospitalisations from unintentional falls¹⁰

Between 1993 and 2002, more than 381,000 people were hospitalised for an unintentional injury; of these 162,900 (more than 43 percent) were fall related.

In these years:

- nearly 14,000 children aged 0 to 4 years were hospitalised for unintentional fall-related injuries, accounting for 40 percent of all hospitalisations as a result of unintentional injury in preschoolers. Fifty-two percent of these falls occurred in the home
- more than 35,000 children aged 5 to 14 years were hospitalised for unintentional fall-related injuries, accounting for 52 percent of all unintentional, hospitalised injuries in children in this age group
- falls accounted for 55 percent of all hospitalised unintentional injuries for those aged 65 to 69 years; 65 percent for those aged 70 to 74 years; and 82 percent for people aged 75 and older. Older people's vulnerability and longer recovery periods make falls a particularly serious threat to their health and functioning

8. Lamb SE, Jorstad-Stein EC, Hauer K, Becker C. Development of a common outcome data set for fall injury prevention trials: The Prevention of Falls Network Europe Consensus. *Journal of the American Geriatrics Society* (2005, in press).

9. Data cover all settings including workplaces.

10. National Injury Query System. Injury Prevention Research Unit, University of Otago. Downloaded on 6 April 2005 from www.otago.ac.nz/ipru.

- females accounted for 52 percent of hospitalisations from fall injuries. Adults aged 25 to 39 had the lowest hospitalisation rate (172.1 per 100,000 person years).

Of those hospitalised for falls between 1996 and 2002, 82 percent were New Zealand European/Other, 12 percent were Māori, 4 percent were Pacific people, and 2 percent were Asian people.¹¹

Table 1: Unintentional fall-related hospitalisations 1993 to 2002¹²

Proportions indicated are for each age group

Age group (years)	Number of hospitalised falls 1993-2002	Average number of hospitalised falls per year (10 years)	Rate per 100,000 person years	All hospitalised injuries/unintentional	Falls as % of all hospitalised unintentional injuries	All hospitalised injuries/all intents	Falls as % of all hospitalised injuries/all intents
0-4	13,854	1,385.4	478.2	34,682	40%	35,247	39%
5-14	35,695	3,569.5	622.9	68,166	52%	70,012	51%
15-24	13,883	1,388.3	254.5	62,320	22%	77,585	18%
25-39	14,958	1,495.8	172.1	67,898	22%	84,332	18%
40-59	17,315	1,731.5	190.7	54,990	31%	62,852	28%
60-64	4,915	491.5	334.5	10,352	47%	10,811	45%
65-69	6,182	618.2	464.1	11,142	55%	11,534	54%
70-74	8,579	857.9	735.4	13,215	65%	13,550	63%
75-79	11,986	1,198.6	1,357.9	16,323	73%	16,611	72%
80+	35,533	3,553.3	3,538.8	41,969	85%	42,296	84%
Total	162,900	16,290.0	432.0	381,057	43%	424,830	38%

11. StatsEnquiry (6 April 2005). Data sourced from New Zealand Health Information Service.

12. National Injury Query System. Injury Prevention Research Unit, University of Otago. Downloaded on 6 April 2005 from www.otago.ac.nz/ipru.

Deaths from unintentional falls¹³

Between 1992 and 2001, there were 2,279 unintentional fall-related deaths, accounting for 21 percent of all unintentional injury deaths in New Zealand.

Adults aged 75 or over had the highest fall-related injury death rate (89 per 100,000 person years).

Females accounted for 53 percent of fall-related injury deaths in those below 75 years, and 65 percent in those aged 75 or over. Thirty-one percent of fatal falls (male and female) happened in the home.

Overall, New Zealand European/Other accounted for the majority (91 percent) of fall-related injury deaths, Māori accounted for 6 percent, Pacific people for 2 percent, and Asian people for 2 percent.¹⁴

Table 2: Unintentional fall-related deaths 1992-2001¹⁵

Proportions indicated are for each age group

Age group (years)	Number of fall fatalities	Average number of fall fatalities per year (10 years)	Rate per 100,000 person years	All fatal injuries/unintentional	Falls as % of all fatal unintentional injuries	All fatal injuries/all intents	Falls as % of all fatal injuries/all intents
0-4	9	1	0.3	550	2%	619	1%
5-14	17	2	0.3	454	4%	555	3%
15-24	91	9	1.7	2,191	4%	3,668	2%
25-39	123	12	1.4	2,343	5%	4,353	3%
40-59	146	15	1.7	1,859	8%	3,313	4%
60-64	44	4.4	3.0	327	13%	542	8%
65-69	78	7.8	5.9	377	21%	558	14%
70-74	142	14.2	12.3	427	33%	618	23%
75-79	235	23.5	27.2	541	43%	668	35%
80+	1,394	139.4	143.8	2,013	69%	2,177	64%
Total	2,279	228.3	6.1	11,082	21%	17,071	13%

13. National Injury Query System. Injury Prevention Research Unit, University of Otago. Downloaded on 6 April 2005 from www.otago.ac.nz/ipru.

14. StatsEnquiry (6 April 2005). Data sourced from New Zealand Health Information Service.

15. National Injury Query System. Injury Prevention Research Unit, University of Otago. Downloaded on 6 April 2005 from www.otago.ac.nz/ipru.

Age groups

Most fall injuries happen in two age groups – children and older adults. As a result, national and international research has focused on falls and falls injury prevention in these age groups. Far less is known about how to prevent falls in 15 to 64-year-olds – a group whose fall injuries are also a considerable cost to the ACC scheme, health services and the wider community.

The likelihood of dying from injuries received in a fall increases with age. Five to 14-year-olds have a high number of hospitalisations from falls, but few deaths. There are a comparatively large number of deaths in the next age band – 15 to 64-year-olds – but deaths in this age group are still uncommon when compared with deaths in the 75+ age group.

Where falls occur

Home is the most common place for fall-related injury deaths, especially for children aged 0 to 4 years and adults aged 40 and older. The other common place for fatal falls is residential care settings, particularly for adults aged 75 and older. For those aged between 5 and 39 years, fall-related injury deaths are more likely to happen in 'other specified places':¹⁶

More than a third of fall-related injury hospitalisations happen in the home, followed by 'unspecified place' (30 percent) and 'place for recreation or sport' (14 percent). Home is the most common place of occurrence for fall-related injury hospitalisations among those aged 0 to 4 years and adults aged 60 and older. For those aged 5 to 39, hospitalised falls are reported to occur in either an unspecified place or a place for recreation or sport.¹⁷

Other consequences of falls

Falls among older people have other costs affecting their lives and those of their relatives and carers. For example, fear of falling can be debilitating and lead to severe restrictions in activity and social interaction. An investment in fall prevention can improve older people's quality of life by reducing pain, fear and isolation and increasing independence and wellbeing.

Falls in all age groups can result in ongoing disability. Severe fall-related injuries, particularly to the spinal cord and brain, can lead to lifetime disability or the need for long-term rehabilitation to restore physical and mental function. Serious fractures can result in long-term hospitalisation and restrictions on activity. Time away from work, study and/or play has social and financial costs for the injured person, their carers and families/whānau.

16. Injury Prevention Research Centre (2003). Fall-related injury deaths (1993-1998) and hospitalisations (1993-2001) in New Zealand. [Fact sheet number 61](#). IPRC.

17. Ibid.

CURRENT PREVENTION KNOWLEDGE

Current research on effective fall prevention is strongest in relation to older people. A rapidly growing body of evidence covers the preventability of falls in older adults living in the community, with successful interventions most commonly based on strength and balance programmes or on multi-factorial risk assessment interventions. There is some small but promising evidence on preventing fall injuries among older people living in residential care.

Interventions showing promise for preschool children mainly rely on modifying domestic or play environments, such as altering playground surfaces ([New Zealand Standard, Playground equipment and surfacing, NZS 5828:2004](#))¹⁸ and, within the home, installing stair gates and upper-level window catches.

There is an acknowledged gap in research information on preventing falls and effective interventions for people aged 15 to 64. Behaviours contributing to falls in this age group are also diverse in both risk activity and injury settings.

Across all age ranges, multiple strategies – those that do not use information dissemination alone – appear to be more effective in reducing injury.¹⁹

With acknowledged gaps in our knowledge, it is appropriate that this Strategy addresses and encourages a co-ordinated approach to falls injury prevention research.

18. Standards New Zealand (2004). [New Zealand Standard, Playground equipment and surfacing, NZS 5828:2004](#), effective 30 April 2004.

19. Lund J & Aarø LE (2004). Accident Prevention. Presentation of a model placing emphasis on human, structural and cultural factors. [Safety Science](#) 42 (4), p. 285



PARTICULAR ISSUES

A number of issues are particularly relevant to analysing fall injuries in New Zealand. This Strategy aims to address these, among others.

Low profile for falls injury prevention

While a number of agencies are working to prevent fall injuries, there are few mechanisms to help in co-ordination and improve collaboration, and to address the lack of agreement on priority areas, best practice and communication. This has resulted in fragmentation and a low profile for the fall prevention area.

The ageing population

Adults over 75 have the highest fall-related injury death rate and the highest fall-related injury hospitalisation rate of all age groups. If this trend is not addressed, we can expect to see a greater number of falls as New Zealand's population ages, with a corresponding increase in the need for fall prevention activities.

Lack of information on interventions

There are a number of gaps in fall injury prevention information for 15 to 64-year-olds. While we know that sporting-related falls, slipping and tripping on one level, and falls in the home are common among this age group, we have little scientific evidence on effective prevention interventions.

This is in contrast to the good evidence for effective fall prevention interventions for older adults living in the community²⁰ and a growing base of evidence for older adults in residential care. However, there are very few evaluations for younger age groups that specifically discuss injury prevention as an intervention and go on to produce results data on injury rates in a scientifically rigorous way. Fewer still report specifically on falls prevented as an outcome.

Emerging priority groups and issues

Data show that some population groups, such as children and older adults, are clearly at more risk of injury from falls than the general population. However, other population groups have a potentially higher risk of falls, but data on them still need to be gathered and analysed.

People with disabilities are one such group, as are ethnic groups including Māori, Pacific people, Asian people and new settler communities. In addition, hazardous drinking patterns may lead to an increase in alcohol-related falls.

20. Gillespie LD, Gillespie WJ, Robertson MC, Lamb SE, Cumming RG, Rowe BH (2003). Interventions for preventing falls in elderly people. [The Cochrane Database of Systematic Reviews](#) 2003;4: CD000340.

Promoting increased physical activity

Government and non-government organisations have a strong focus on increasing New Zealanders' physical activity, across all age groups. This is an important and positive strategy.

However, an unintended consequence may be an increase in the number of falls, as people who were previously less active take up walking, running, cycling and other activities. The Strategy must, therefore, take notice of current evidence on fall risk – for example for older adults, the fact that some activities can increase the risk of falls and subsequent injury – and consider the implications for fall prevention work.

THE PRINCIPLES

This Strategy endorses the principles of the [New Zealand Injury Prevention Strategy](#), which should also guide fall prevention activities in the future.

These principles (in no particular order of priority) are:

Lead role for government: central government will support the prevention of injury from falls through legislation, policy, standards and resources.

Collective action: activities for preventing fall injuries require the active participation of regional and local government, community groups, health professionals, iwi, businesses, families/whānau and individuals working in partnership with central government.

Personal skills and responsibilities: activities for preventing fall injuries will encourage the development of personal skills and foster responsibility for personal safety and the safety of others.

Environments: activities for preventing fall injuries will encourage the creation of physical and social environments that reduce the risk of falls.

Equity: activities for preventing fall injuries will aim to reduce inequalities in the outcomes of injuries caused by falls, within and between groups.

Evidence-based decision-making: activities for preventing fall injuries will be based on evidence and good information.

Effectiveness: activities for preventing fall injuries will focus on identifying and implementing interventions that are effective and make the best use of resources (both human and financial).

Integration: activities for preventing fall injuries will be co-ordinated so that interventions will be mutually reinforcing and complementary, and avoid unnecessary duplication.

Anticipate and respond to change: activities for preventing fall injuries will anticipate and respond to changes in fall patterns, exposure to risks, population trends, and emerging knowledge about proven or promising interventions.

Appropriateness: work under the Strategy must recognise that different communities and groups have different needs. What may work for one population group may not work for another. The Strategy must respond to the needs of the different cultures, genders and age groups in New Zealand.

VISION

Towards a New Zealand free of injury from falls

Our vision is for a country with safer environments; strong, effective and appropriate safety policy, legislation and standards; and a population able to identify and minimise risk and effectively manage the impact of injury from falls.

GOALS

Two long-term, measurable goals have been identified to achieve this vision:

- to reduce the incidence and severity of injury from falls
- to reduce the social, psychological and economic impact of fall-related injuries on individuals, families/whānau and the community.

The **first goal** relates to the direct physical effect of a fall on the individual and focuses on reducing the number of people who experience a fall, the number of falls a person experiences and the degree of seriousness of a fall.

The **second goal** considers the broader societal burden of falls. This may include loss of confidence, financial implications (such as health care costs or the cost of having to take time off work), and impacts on the health and wellbeing of the family/whānau and friends of the person who has fallen.

We will know our goals have been achieved when the incidence and severity of falls in New Zealand, and the wider impacts of fall-related injury, have reduced. The [New Zealand Injury Prevention Strategy](#) provides outcome indicators which will be one approach to monitoring our progress towards achieving the Strategy's goals.²¹

OBJECTIVES

Five interrelated objectives indicate how the two long-term goals can be achieved:

1. Build effective leadership and co-ordination in the prevention of injury from falls.
2. Improve the gathering and dissemination of knowledge about the prevention of injury from falls.
3. Develop and implement programmes and interventions that focus on the prevention of injury from falls, based on best practice.
4. Create safer environments to prevent injury from falls.
5. Ensure appropriate resources for the prevention of injury from falls.

21. Cryer C, Langley J, Stephenson S (2004). [Developing Valid Injury Outcome Indicators: A report for the New Zealand Injury Prevention Strategy](#). Report to the Accident Compensation Corporation. Available at www.nzips.govt.nz.

OBJECTIVE 1

Build effective leadership and co-ordination in the prevention of injury from falls

If we are to meet the Strategy's goals, it is important to develop relationships and increase collaboration between central and local government, district health boards, businesses, service providers, iwi, non-government organisations and the wider community.

Sustainable leadership at a national level will:

- help in co-ordinating these individuals and groups
- provide a voice to highlight issues associated with fall injuries
- co-ordinate the development and monitoring of an Implementation Plan to support the Strategy.

Leadership is also necessary at regional and local levels to ensure that plans, policies and activities focusing on preventing fall injuries are co-ordinated.

Inter-sectoral co-ordination will link the Strategy to the wider health and injury prevention sectors, to identify shared needs and resources and to help achieve potential collaboration on mutually relevant projects.

Actions could include (in no particular order):

- the lead agency secretariat overseeing the Strategy's implementation
- developing a Strategy Implementation Plan
- developing a governance framework that ensures appropriate oversight and Strategy monitoring and evaluation
- ensuring that central and local government, businesses and key organisations working on preventing fall injuries take leadership roles in their areas
- maintaining New Zealand's status as an international leader in fall prevention research and intervention development
- in implementing the Strategy, supporting the participation of potential emerging priority groups, such as people with disabilities, and ethnic groups including Māori, Pacific people, Asian people and new settler communities
- enhancing community and sector engagement in preventing fall injuries to ensure local needs are met.





OBJECTIVE 2

Improve the gathering and dissemination of knowledge about the prevention of injury from falls

It is vital to collect information about falls and their effective prevention to provide an evidence base for activities in this area.

New Zealand suffers from a lack of effective and standardised data collection systems, and it will be important to co-ordinate with the Injury Information Manager (Statistics New Zealand) with regard to the work that is already being done in this area.

Currently, there is very little published information about effective fall prevention interventions for the 15 to 64-year age group, and a more balanced fall prevention research approach would be beneficial. The shortage of appropriately skilled and trained research staff also needs to be addressed.

We also need to develop communication networks to ensure information is disseminated in a targeted and meaningful way to service providers and local communities. This will help build public awareness of the impact and preventability of falls, enhance agency awareness of roles and responsibilities, and promote interest in lowering the number and severity of falls.

Actions could include (in no particular order):

- developing a research strategy for preventing fall injuries
- standardising the collection of data relating to falls, including developing a national database that collates information on demographics and relevant factors, for example injury causes, types and settings
- analysing and prioritising research needs on preventing fall injuries
- undertaking a stock-take of fall prevention activities and disseminating the findings after consultation with stakeholders
- developing a central resource of best practice guidelines to increase and maintain knowledge of national and international trends on what works in preventing fall injuries
- improving collaboration and information-sharing between agencies and organisations that collect data on falls and fall injuries
- consolidating and co-ordinating existing and emerging



- information about priority population groups, settings and circumstances that contribute to fall injuries to improve the quality of information gathered about population groups
- enhancing wider public access to fall prevention information and skills, for example by providing information through a range of channels to increase awareness of the impact of falls and how to prevent them, and ensuring that this information is appropriately presented to different population groups
- raising awareness of falls and fall prevention interventions among key stakeholders, for example health professionals, local government, health promoters, teachers, sports groups, residential care settings and early childhood education centres, and among professional groups such as architects, town planners, landscapers and playground equipment manufacturers
- ensuring that the gathering and use of knowledge are appropriate for population groups – for example, using kaupapa Māori methods when researching Māori perspectives on fall prevention and initiative delivery.

OBJECTIVE 3

Develop and implement programmes and interventions that focus on the prevention of injury from falls, based on best practice



Programmes and interventions must be sustainable and include an evaluation component so their effectiveness can be determined and the lessons learnt shared and used to improve consequent interventions.

Research will help in developing and implementing effective programmes and interventions and help identify priority groups and settings. It is important to both identify and promote best practice fall prevention programmes, and support innovative programme development.

Collaboration between relevant agencies is key to minimising duplication and enabling knowledge to be shared. It is also important to align community and regulatory fall prevention models.

Actions could include (in no particular order):

- continuing to implement and evaluate effective programmes and interventions
- analysing injury research data and information to identify potential population groups and settings most in need of fall prevention programmes, including emerging priority groups such as people with disabilities, and ethnic groups including Māori, Pacific people, Asian people and new settler communities
- developing programmes and interventions appropriate to New Zealand communities and incorporating national or international research results and community knowledge and experience
- encouraging innovative new programmes and initiatives and ensuring they are appropriately evaluated before wider implementation
- encouraging collaboration between relevant agencies in developing and implementing programmes and interventions, and sharing evaluation results
- supporting programmes that align with legislation, policy and standards
- using design improvements and technology changes in interventions, including products that will prevent falls or reduce fall injuries
- strengthening capability and capacity in the fall prevention workforce through education and training and encouraging individuals and organisations with skills in preventing fall injuries to practise in the community.

OBJECTIVE 4

Create safer environments to prevent injury from falls



Achieving safer environments will depend on multi-sector collaboration at local, regional and national levels. This will enable resources to be focused on planning to reduce the risk of fall-related injuries through:

- effective policy, legislation and regulations
- good design
- codes of practice and guidelines
- the use of appropriate products
- safer behaviours.

Compliance and enforcement also have key roles to play, and it is recognised that some hazard management is already taking place and there is a need to avoid duplication.

Injury from falls is more likely to happen in places such as the home, playground, residential care settings and places for recreation and sport. It is therefore crucial to design and develop safer environments, systems and products to reduce the likelihood of injuries happening and to encourage individuals and agencies to consider fall prevention when making purchasing and design decisions.

Actions could include (in no particular order):

Hazard management

- establishing systems to identify potential hazards, and procedures for managing them and alerting the public to them. This will include hazards in the home, community, public environments, playgrounds, residential care settings and places for recreation and sport

Product safety

- enhancing product and equipment safety by identifying unsafe products, developing and enforcing product safety design standards and promoting responsible and safe use

Legislation and policy

- ensuring current and future legislative and regulatory frameworks concerning environments promote fall injury prevention
- ensuring appropriate social policy – for example, that frail, older adults at home are adequately supported
- encouraging a wide range of stakeholders to get involved in creating safer environments, for example local government, people with disabilities and iwi.



OBJECTIVE 5

Ensure appropriate resources for the prevention of injury from falls

To achieve the Strategy's goals all available resources, including financial, technological and human resources, need to be used as well as possible – and in line with the full social impact of falls and the potential for preventing fall injuries. This resourcing could include funding organisations, services, programmes and research and evaluation, as well as resources and funding at community level.

It will be necessary to identify existing funding sources and look at ways to improve them, as well as canvass joint funding mechanisms and consider funding sustainability. The Strategy recognises that funding may need to be long term before community-level gains are apparent.

It is important to meet the resource needs of different population groups, including emerging priority groups.

Actions could include (in no particular order):

- identifying existing resources allocated to preventing fall injuries
- developing an appropriate framework for assessing the costs and benefits of initiatives that prevent fall injuries
- completing a stock-take of funding opportunities available and promoting them within the sector
- developing and enhancing cross-sectoral collaborative relationships to minimise duplication and identify gaps
- exploring ways to increase funding, including through sponsorship
- ensuring different groups' resource needs are appropriately met, including those of emerging groups such as people with disabilities, and ethnic groups such as Māori, Pacific people, Asian people and new settler communities.



PRIORITY GROUPS AND SETTINGS

Fall prevention funding is finite, so it's important to set priorities to ensure it is spent in the areas of greatest need.

This requires contributions from all involved in preventing fall injuries and from affected communities, and should involve considering the higher-risk settings and age groups highlighted in Table 3. The Strategy's Implementation Plan will include considering a mechanism to enable effective priority-setting.

Each setting and age group has different needs. For example, it will be a priority to implement existing evidence-based, effective interventions for children aged 0 to 4 years and older people aged 65+. Meanwhile, research will be a priority for 15 to 64-year-olds, reflecting the lack of information on effective interventions for this group.

Table 3: Higher risk settings by age group (see blue boxes), as indicated by current data

	0 to 4	5 to 14	15 to 24	25 to 64	65+
Falls in the home					
Falls related to recreation and sport, including playgrounds					
Falls in residential care settings					

Priority groups identified above do not include those potentially at an increased risk of fall injury but about whom we need to gather and analyse data – such as people with disabilities. We also need data to assess the incidence and impact of fall injuries among ethnic groups including Māori, Pacific people, Asian people and new settler communities. However, these groups should not be overlooked simply because data are not yet available.

Taking a flexible approach

The age groups highlighted in Table 3 should be treated as a guide. For example, a person younger than 65 may require a needs-based process to access effective interventions, even though they are outside the priority age group. This flexibility will ensure fair access to services and equitable outcomes.

It is also important to remember that, while the 15 to 64-year age group is not highlighted as having a high risk of injury from falls compared with the older and younger groups, it incurs the highest ACC costs. Reducing fall injuries in this group would result in considerably less suffering and costs to New

Zealanders. In addition, those who work in preventing fall injuries have identified some higher-risk settings – such as public places and institutions – for which specific data are not available.²²

The current priority groups

We know from research and surveillance data from 1993 to 2002 (hospitalisations) and 1992 to 2001 (deaths) that falls resulting in death or requiring hospitalisation are most likely to occur within three population groups:²³

- **children 0 to 4 years:** nearly 14,000 children aged 0 to 4 years were hospitalised for unintentional fall-related injuries – a rate of 478 per 100,000 person years. They accounted for 40 percent of all unintentional hospitalisations in this age group
- **children 5 to 14 years:** more than 35,000 children aged 5 to 14 years were hospitalised for unintentional fall-related injuries – a rate of 623 per 100,000 person years. They accounted for 52 percent of all hospitalised unintentional injuries in this age group
- **adults aged 65+:** falls accounted for: 55 percent of all hospitalised unintentional injuries for those aged 65 to 69 years – a rate of 464 per 100,000 person years; 65 percent for those aged 70 to 74 years – 735 per 100,000 person years; 73 percent for those aged 75 to 79 – 1,358 per 100,000 person years; and 85 percent for those aged 80+ – 3,539 per 100,000 person years. Adults over 75 had the highest fall-related injury death rate compared with other age groups.

The current priority settings

Many falls resulting in hospitalisation or death happen in unspecified settings. Where the settings are specified, falls are most likely to occur in:²⁴

- **the home:** the most common place of occurrence for fall-related injury hospitalisations and deaths, especially for children aged 0 to 4 years, adults aged 40 and older (deaths) and adults aged 65 and older (hospitalisations)
- **residential care settings:** a common place of occurrence for fatal falls among adults 75 and older
- **places for recreation and sport, including playgrounds and outdoor environments:** for those aged between 5 and 39 years, fall-related injuries leading to hospitalisation occurred either in an unspecified place or in a place for recreation or sport.

The Strategy identifies all these settings as high risk.

Many falls occur in the workplace. These are being addressed in the [Workplace Health and Safety Strategy for New Zealand to 2015](#), so fall prevention initiatives will need to be co-ordinated with the Department of Labour to support both strategies.

22. Litmus (2005). [Preventing Injury from Falls: The National Strategy 2005-2015](#). Summary of Consultation. Report for ACC.

23. National Injury Query System. Injury Prevention Research Unit, University of Otago. Downloaded on 6 April 2005 from www.otago.ac.nz/ipru.

24. Injury Prevention Research Centre (2003). Fall-related injury deaths (1993-1998) and hospitalisations (1993-2001) in New Zealand. [Fact sheet number 61](#). IPRC.



DELIVERING THE STRATEGY

This section outlines the planned approach for ensuring the Strategy's successful implementation.

Successful implementation requires plans that are flexible enough for services to be tailored to specific needs. It involves a wide range of tasks, with some more urgent than others. For example, a Preventing Injury from Falls Strategy Secretariat must be established immediately to maintain momentum and enable key activities to happen in 2005-2006. These activities will include:

- promoting awareness of the Strategy
- co-ordinating a baseline stock-take of fall-related injury prevention activity and research
- developing a full Implementation Plan and evaluation framework
- securing key partners in delivering the Plan
- identifying the necessary resources.

The Strategy's implementation will have three main phases:

Phase One: Establishment of Strategy support frameworks (2005-2006)

Phase Two: Full implementation (2006-2010)

Phase Three: Consolidation and looking to the future (2010-2015)

A number of the Phase Two actions will simply roll over to Phase Three, while others may be revised and updated, added or discontinued. Table 4 on page 32 illustrates the process for implementing and evaluating the Strategy by phase, purpose and publication of relevant documents.

Implementation will rely on many individuals and agencies, including local government, non-government agencies, businesses, health groups, service providers, community groups, families/whānau and individuals. The Stakeholder Reference Group membership will be revised and an appointment process commenced during Phase One. The Secretariat will support the Stakeholder Reference Group, and both will be responsible for maintaining strong relationships across all the key agencies and wider stakeholder groups.

Acknowledging the diversity of the falls injury prevention sector, some activities will require detailed planning and lengthy co-ordination and negotiation between stakeholders, while others may need significant funding. For this reason, many cannot be completed during the first year of implementation; instead, they will be integrated into the full implementation phase (2006-2010).

Phase One: Establishment of Strategy support frameworks (2005-2006)

Activities needed in Phase One have been given priority as they will provide the platform for full implementation from mid-2006.

Structural and operational set-up

This will involve establishing the governance and operational structures to co-ordinate implementation, such as establishing the Secretariat for 2005-2006. The Secretariat will sit within ACC and report to the

Minister for ACC on the progress of the Strategy and its implementation. It will also lead the development of the Implementation Plan and the Strategy's communication in consultation with stakeholders.

Promoting the Strategy

In parallel with establishing governance and operational structures, the Strategy will need to be promoted to appropriate local, regional and national organisations and individuals as the framework for activities focused on preventing fall injuries in New Zealand. This will include developing and implementing a communications plan during 2005-2006.

Developing the Implementation Plan for 2006-2010

At the same time, the Implementation Plan will be developed, along with its monitoring and evaluation framework (including using indicators from the [New Zealand Injury Prevention Strategy](#)). The Implementation Plan will be action oriented and cover:

- specific fall prevention activities for 2006-2010
- the agencies responsible for these activities
- the timeframes within which they will be carried out
- communication of the funding sources.

A further Implementation Plan will be developed in 2009-2010 for the 2010-2015 period. Whether specific actions will be included will depend on the Government's assessment of other options for achieving the goals, and on additional funding being made available in future government or specific agency budgets.

Implementing effective interventions

Some interventions to prevent fall injuries are already proven in New Zealand. These will be identified and prioritised, funding sources will be investigated, and the interventions will be implemented, funding allowing.

Gathering information and identifying needs and funding opportunities

It will be important to identify research gaps, as well as further analyse injury research data and information on priority groups and settings to enable specific targeting and intervention. This will include consulting different communities about appropriate ways of delivering programmes.

There is also a need for a baseline stock-take of existing fall prevention activities, and to explore funding opportunities and promote them to those involved in preventing fall injuries. Once these tasks have been completed, we will have a base of information from which to make decisions on priority programmes and initiatives in Phase Two.

It is expected that by the end of Phase One (June 2006), governance and operating structures will have been agreed and established, and the Implementation Plan and its monitoring and evaluation framework will have been developed. These will be available at www.fallsstrategy.govt.nz and published by mid-2006.

Phase Two: Full implementation (2006-2010)

Working from the Implementation Plan, further programmes and initiatives will be established to prevent fall injuries. These will be key activities required to achieve the Strategy's objectives and goals.

Many will require extensive planning and co-ordination between stakeholders and will rely on identifying (and the availability of) resources. Planning will take place during Phase One to enable full implementation to start in July 2006 and continue until 2010.

At the end of this phase, and using the concurrent evaluation, the Implementation Plan will be revised and updated so it remains relevant to the 2010-2015 timeframe. This will involve evaluating the initiatives implemented to gauge their effectiveness in contributing to the Strategy's goals and objectives, and assessing evidence that has emerged in this period. It will also include considering the results of the monitoring and evaluation and identifying funding needs for the next phase.

This revision will begin in 2009 and the Phase Three Implementation Plan will be produced by mid-2010.

Phase Three: Consolidation and looking to the future (2010-2015)

Programmes and initiatives will continue being implemented, based on the revised and updated Phase Three Implementation Plan. Successful initiatives from earlier years will be adjusted as necessary and continued, while new activities identified in Phase Two may be started.

To support the Strategy's overall aims after 2015, the end stages of Phase Three will include planning for ongoing action from 2016 onwards.

Table 4: Implementation Plan process



APPENDIX

The Stakeholder Reference Group members for
Preventing Injury from Falls: The National Strategy 2005-2015 are:

Accident Compensation Corporation	Jennifer Brown (Public Safety Programmes, Injury Prevention) Ronald Karaitiana (Cultural Strategies, Injury Prevention)
Age Concern New Zealand	Susan Davidson Carol Andrews
Alcohol Advisory Council of New Zealand	Margaret Geddes
Communities Living Injury Free, Auckland City	Catherine Gilhooly
Auckland District Health Board	Sara Bennett
Capital and Coast District Health Board	Benedict Hefford
Department of Building and Housing	Hamish Handley
Department of General Practice and Primary Health Care University of Auckland Royal New Zealand College of General Practitioners	Ngaire Kerse
Falls Prevention Research Group University of Otago Medical School	Clare Robertson
Grey Power	Violet McCowatt
Injury Prevention Research Centre University of Auckland	Mikki Williden Bridget Kool
Injury Prevention Research Unit University of Otago	Jean Simpson
Ministry of Consumer Affairs	Jane Budge
Ministry of Education	Melba Scott
Ministry of Health	Sandy Brinsdon John Wren
New Zealand Injury Prevention Strategy Secretariat	Bhama Rajiv Kumar



Institute of Sport and Recreation Research New Zealand Auckland University of Technology	Patria Hume
New Zealand Orthopaedic Association	Kim Miles
Pacific People's representative Disabled Persons' Assembly (Auckland)	Tanu Toso
Royal New Zealand Plunket Society	Sue Campbell
Safe Waitakere, Waitakere City Council	Margaret Devlin
Safekids New Zealand	Ann Weaver
Sport and Recreation New Zealand	Diana O'Neill
Stay on Your Feet Canterbury Canterbury District Health Board	Alan Lloyd Molly Andreae

Consultation was also undertaken with:

- Local Government New Zealand.

GLOSSARY

Actions	Actions break down the Strategy's five objectives to show how they can be achieved.
Goal	A broad and high-level statement of general purpose to guide planning around an issue.
Health	A state of complete physical, mental and social wellbeing.
Injury setting	The physical location or environment where the injury occurred.
Legislation	The exercise of the power and function of making laws.
Objective	A statement that indicates how the goals can be achieved.
Regulation	Setting and enforcing standards.
Residential care settings	Residential care, both private and public, provided in settings meeting criteria for residential long-term care delivery for people with intellectual, physical, psychiatric or sensory disabilities (or a combination of two or more such disabilities) to provide long-term care and accommodation, for example rest homes and hospitals.
Safety	Freedom from danger or risk of injury.
Standards	An acknowledged measure of comparison that is widely recognised or employed, especially because of its excellence.
Work	Physical or mental effort directed towards doing or making something. Paid employment in a job or trade, occupation or profession.
Workplace	A place at which a person works. Includes mobile workplaces such as road vehicles, aircraft and ships.
Vision	A declaration of the ideal conditions, how things would look if the issues important to you were perfectly addressed.

TE MATAKITETANGA

Kia tupu ai a Aotearoa hei Whenua Kore Aitua Hinga

HE WAWATA

Te whakaheke i te nui me te kino o nga wharanga i nga aitua hinga

Hei whakangawari i te taumahatanga a-pāpori, a-hinengaro, a-ohanga o nga wharanga na nga aitua hinga te take, ma nga tangata takitahi, ma nga whanau, me te hapori

HE WHĀINGA POTO

- 1 Te whakapakari i nga kaiarahi, me te tuitui i nga mahi arai wharanga i nga aitua hinga
- 2 Te whakapai ake i te kohinga me te tohanga o te matauranga arai i te wharanga i nga aitua hinga
- 3 Te whakarite, te whakatinana hoki i nga hōtaka me nga mahi whakatikatika e āraia ai nga wharanga na nga aitua hinga, he mea āta whakanoho i runga i nga tikanga papai
- 4 Te hanga horopaki haumaruru ke atu hei arai i nga wharanga na nga aitua hinga
- 5 Te whakarite i te maha o nga rauemi e tika ana hei arai atu i nga wharanga na nga aitua hinga

NGĀ MAHI

Mā te Mahere Whakatinana i huaina ai i te tau 2005-2006 e āta tātaku ētahi atu mahi hei tautoko i ēnei whāinga poto e 5

NGĀ RŌPŪ MATUA

■ Nga tamariki mai i te 0 ki te 4 ■ Nga tamariki mai i te 5 ki te 14 ■ Nga pakeke kei runga atu te pakeke i te 65

NGĀ TAKIWĀ

■ Te kainga ■ Nga whare kainga noho manaaki tangata ■ Nga wahi hakinakina me nga wahi tākaro, tae atu ki nga papa tākaro

