

# 2008

## the social report

te pūrongo oranga tangata  
2008





# Ministerial Foreword



The Government welcomes the publication of the seventh report charting changes in our social wellbeing. *The Social Report 2008* is full of information about how individuals, families, communities and regions are faring in areas of life that New Zealanders hold to be particularly important. I regard the social report as a critical document in terms of accountability for progress in these areas.

I am delighted to see positive proof of change in many of the measures included in the social report. It is encouraging to see improvements in life expectancy, cigarette smoking, qualifications of school leavers, unemployment, poverty and income inequality. It is particularly pleasing to see that the income inequality measure used in the social report has reduced for the first time for two decades.

Achieving a just and fair society is an ongoing effort, and we will continue to strive towards this goal. The social report usefully points us to where some of this work lies.

The positive results evident in *The Social Report 2008* could not have been achieved without the close relationship between government and the community and voluntary sectors. I would like to take this opportunity to acknowledge and thank the people involved in these sectors for their work and enduring commitment.

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

**Ruth Dyson**  
Minister for Social Development and Employment

# Chief Executive's Preface



*The Social Report 2008* is intended to enable community and regional organisations, researchers, government departments and others to understand how our social conditions are changing over time. The report provides a comprehensive picture of New Zealanders' social wellbeing and quality of life.

This is the seventh edition of the social report. As well as updating the set of indicators included in previous editions, this year's report introduces a new indicator on potentially hazardous drinking. I am pleased that we will be able to monitor changes in this area, which is of concern to many New Zealanders.

Many of the indicators have now been disaggregated to regional and territorial authority level to assist regional and local authorities monitor community outcomes and facilitate planning.

Drawing information together from a wide range of sources enables us to see how outcomes are changing for the New Zealand population. This report provides important information on outcomes for Māori, Pacific peoples, and where possible Asian and other ethnic groups. It outlines differences in social outcomes for men and women, and for socio-economic groups.

The report also provides a useful comparison of the wellbeing of New Zealanders' compared to that of people living in other countries.

This edition is the result of a lot of hard work by Ministry of Social Development staff together with input, support and advice from other government agencies and community organisations. I would like to acknowledge the contribution of everyone who has been involved. I hope that you will continue to find the report a valuable resource.

A handwritten signature in black ink, consisting of a large, stylized 'P' followed by 'eter Hughes'.

**Peter Hughes**  
Chief Executive  
Ministry of Social Development

# Introduction

## *The Social Report 2008*

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**The social report is an annual publication that monitors the wellbeing of New Zealanders**

The social report uses a set of statistical indicators to monitor trends across 10 “domains”, or areas of people’s lives. Together these domains provide a picture of wellbeing and quality of life in New Zealand.

*The Social Report 2008* is the seventh in the annual series. It builds on the social monitoring framework first established by *The Social Report 2001* and uses the same domains as those used last year.

The regional and territorial authority information, provided for the first time in 2005, has been updated on the social report website ([www.socialreport.msd.govt.nz](http://www.socialreport.msd.govt.nz)). The regional information is also published in companion books to *The Social Report 2008* (*The Social Report 2008 Regional Indicators*). As well as providing the most recent data for regions and territorial authorities, we include time series information where it is available. This allows councils and others working locally to assess progress over time and to compare themselves with other regions. The regional information is a core part of the social report and we will continue to update it.

## **Purpose of the social report**

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The social report has four key aims:

- to provide and monitor over time measures of wellbeing and quality of life that complement existing economic and environmental indicators
- to compare New Zealand with other countries on measures of wellbeing
- to provide greater transparency in government and to contribute to better-informed public debate
- to help identify key issues and areas where we need to take action, which can in turn help with planning and decision making.

The report enables us to examine the current level of wellbeing in New Zealand, how this has changed over time, and how different groups in the population are faring. It helps us to identify adverse trends in social outcomes at an early stage. While the report cannot always illuminate what is driving these trends, it can point to the need for further research to understand what is happening and what actions need to be taken to address them.

Government policy, as well as individuals, families, communities, businesses and international factors, influence the outcomes we report on. The cross-cutting nature of many social issues means the social report is not a tool for evaluating the effectiveness of specific government policies.

## Social wellbeing

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### **Social wellbeing comprises those aspects of life we care about as a society**

To get a sense of the level of wellbeing in New Zealand and how it has changed over time, we first need to identify what is meant by the notion of wellbeing.

In the context of this report, “wellbeing” means those aspects of life that society collectively agrees are important for a person’s happiness, quality of life and welfare.

Many of the constituent components of wellbeing will be common to all New Zealanders. For example, Professor Mason Durie, Deputy Vice-Chancellor (Māori) and Professor of Māori Research and Development, Massey University, has noted that important outcomes for Māori are likely to include outcomes relevant to the rest of society such as good health and a high standard of living.<sup>1</sup> However, the needs and aspirations of different people and different communities will also vary in important ways. For example, for people who get comfort and strength from their religion, an important outcome could be spiritual wellbeing, and this might mean having access to a place of worship. The social report focuses on those aspects of wellbeing most people hold in common.

The New Zealand Royal Commission on Social Policy (1988) is a useful source of research on what New Zealanders agree constitutes wellbeing and a decent quality of life. The Commission concluded that:

*[New Zealanders] have said that they need a sound base of material support including housing, health, education and worthwhile work. A good society is one which allows people to be heard, to have a say in their future, and choices in life ... [they] value an atmosphere of community responsibility and an environment of security. For them, social wellbeing includes that sense of belonging that affirms their dignity and identity and allows them to function in their everyday roles.<sup>2</sup>*

*The Social Report 2008* identifies 10 discrete components of wellbeing. We refer to these components as “desired social outcomes”, and they are listed in Table IN1 on pages 8 and 9. Nine of these domains were used in the prototype *The Social Report 2001*. We made a number of changes to these domains in subsequent reports as a result of stakeholder consultation on the content of the report in 2002. The most significant amendment was the addition of a new Leisure and Recreation domain in the 2004 report. We have not made any changes to the outcomes framework this year.

The outcome domains are interconnected. Doing well or poorly in one domain is often likely to impact on performance in another outcome domain. For example, participation in leisure and recreation is a good thing in itself, but it may also lead to improved physical and mental health, and better social networks.

## Social indicators

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**Progress towards the desired outcomes within each domain is measured using a set of social indicators**

Social indicators are signposts that help measure progress towards a desired outcome. Indicators are chosen because they measure the outcome of interest directly (for example, the unemployment rate in the Paid Work domain) or because they are known to be a good predictor of, or are associated with, that outcome (for example, cigarette smoking in the Health domain).

The use of social indicators means we can measure trends over time by compressing the sizeable body of statistical information in an outcome domain to a few high-level measures. For example, we use four indicators to represent the desired outcomes in the Knowledge and Skills domain. Though the indicators do not describe the state of knowledge and skill acquisition in New Zealand in detail, they provide important summary information on outcomes in that domain (for example, educational attainment of the adult population) or they act as key predictors of future outcomes (for example, participation in early childhood education).

One of the key features of a social indicator is that any change can be interpreted as progress towards, or a movement away from, the desired outcome. This distinguishes social indicators from some social statistics that cannot be interpreted in this way. For example, while a change in the average age at which New Zealand women give birth to their first child is an important social statistic, it cannot be said to be necessarily “good” or “bad” for social wellbeing.

Indicators have been selected against the following criteria, first established in *The Social Report 2001*:

- ***relevant to the social outcome of interest*** – the indicator should be the most accurate statistic for measuring both the level and extent of change in the social outcome of interest, and it should adequately reflect what it is intended to measure
- ***based on broad support*** – ideally there should be wide support for the indicators chosen so they will not be changed regularly
- ***grounded in research*** – there should be sound evidence on key influences and factors affecting outcomes
- ***able to be disaggregated*** – it should be possible to break the data down by age, sex, socio-economic status, ethnicity, region and, where possible, to the individual (or smallest group possible), so we can compare outcomes for different groups
- ***consistent over time*** – the usefulness of indicators is related directly to the ability to track trends over time, so indicators should be consistent over time
- ***statistically sound*** – the measurement of indicators needs to be methodologically rigorous
- ***timely*** – data needs to be collected and reported regularly and frequently to ensure indicators are providing up-to-date information
- ***enable international comparisons*** – as well as reflecting the social goals of New Zealanders, indicators need to be consistent with those used in international programmes so we can make comparisons.

As some indicators perform well against some criteria and poorly against others, trade-offs are necessary. For example, we base most of the Economic Standard of Living indicators on Household Economic Survey data, rather than on data from the New Zealand Income Survey attached to the Household Labour Force Survey. We do this because it provides a more accurate measure of annual income and hence is a more relevant indicator to the outcome of interest. The trade-off is we are only able to update these indicators every three years, rather than every year, and the sample size is smaller.

In some outcome domains, such as Health, there is an abundance of good data from which to draw appropriate indicators. In other outcome domains, in particular Physical Environment and Cultural Identity, there is less good-quality, relevant data available, resulting in fewer indicators in these domains.

We use the most recently published data available. This has the advantage of accuracy, as the numbers have been verified, but it means some of the data is two or three years old. Outcomes may have changed in the intervening time due to the impact of policy changes or for other reasons. We provide references to the original sources of all information used.

## Disaggregation of social report indicators

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### Data limitations restrict the extent of disaggregation

Ideally, it would be possible to break down each indicator by sub-populations of interest, such as age, sex, ethnicity, socio-economic status, disability status and by regional and local authority. Most indicators can be broken down by age, sex and ethnicity.<sup>3</sup> For the majority of indicators, disaggregation by socio-economic status or disability status is not possible because the indicators rely on data sources that do not collect this type of information, or the sample sizes are too small to allow this type of breakdown.

For some indicators (for example, unemployment and employment) detailed disaggregations are possible. However, the social report's two-page format means we cannot include more information than we currently provide.

There is an increasing demand for information on social wellbeing at a regional and local authority level. This largely results from the introduction of the Local Government Act 2002, which requires regional and local authorities to monitor community outcomes. In response to this demand, since 2005, we have disaggregated those social report indicators for which there is subnational data to regional and territorial authority boundaries. This information is intended to help local authorities identify areas of comparative strength and weakness within their communities, as well as to assist central government agencies in their work at a local level.

This year, we have updated those indicators where more recent data is available. Time series information is provided where historical data is available. The regional and territorial authority indicators are in the regional section of the social report website ([www.socialreport.msd.govt.nz](http://www.socialreport.msd.govt.nz)). Information for the 16 regions only is published in companion books to the social report.

## Domains and indicators for *The Social Report 2008*

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### **There are 41 indicators in this year's report**

There have been no changes to the outcome domains in this year's report, but there have been changes to some indicators. An indicator on potentially hazardous drinking has been included in the Health domain. The reporting period for the market income per person indicator has changed from March years to December years. The indicator on the proportion of the population with low incomes no longer includes a breakdown by ethnicity. The participation in physical activity indicator is now based on the Ministry of Health's Health Survey. The telephone and internet access in the home indicator is now based on the census. The drinking water quality indicator has had a change in the reporting period for data collected after 2005. Drinking water quality is now assessed for compliance with one of two standards. A full summary of these changes is provided in Appendix 1.

Thirty of the 41 indicators in the report have been updated this year. Those that have not been updated are either based on surveys that are not repeated annually or new data was not available in time for it to be included in this report.

The indicators for *The Social Report 2008* are set out on the following pages, with the updated indicators highlighted in bold. Technical details about indicator construction are in Appendix 2.

Table IN1 **The Social Report 2008 outcome domains and indicators** (updated indicators in bold)

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### Health

DESIRED OUTCOME STATEMENT

Everybody has the opportunity to enjoy a long and healthy life. Avoidable deaths, disease and injuries are prevented. Everybody has the ability to function, participate and live independently or appropriately supported in society.

INDICATORS

**Health expectancy**  
**Life expectancy**  
**Suicide**  
**Cigarette smoking**  
**Obesity**  
**Potentially hazardous drinking**

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### Knowledge and Skills

DESIRED OUTCOME STATEMENT

Everybody has the knowledge and skills needed to participate fully in society. Lifelong learning and education are valued and supported.

INDICATORS

**Participation in early childhood education**  
**School leavers with higher qualifications**  
**Participation in tertiary education**  
**Educational attainment of the adult population**

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### Paid Work

DESIRED OUTCOME STATEMENT

Everybody has access to meaningful, rewarding and safe employment. An appropriate balance is maintained between paid work and other aspects of life.

INDICATORS

**Unemployment**  
**Employment**  
**Median hourly earnings**  
**Workplace injury claims**  
 Satisfaction with work-life balance

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### Economic Standard of Living

DESIRED OUTCOME STATEMENT

New Zealand is a prosperous society, reflecting the value of both paid and unpaid work. Everybody has access to an adequate income and decent, affordable housing that meets their needs. With an adequate standard of living, people are well-placed to participate fully in society and to exercise choice about how to live their lives.

INDICATORS

**Market income per person**  
**Income inequality**  
**Population with low incomes**  
**Housing affordability**  
 Household crowding

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### Civil and Political Rights

DESIRED OUTCOME STATEMENT

Everybody enjoys civil and political rights. Mechanisms to regulate and arbitrate people's rights in respect of each other are trustworthy.

INDICATORS

**Voter turnout**  
**Representation of women in government**  
**Perceived discrimination**  
**Perceived corruption**

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## Cultural Identity

### DESIRED OUTCOME STATEMENT

New Zealanders share a strong national identity, have a sense of belonging and value cultural diversity. Everybody is able to pass their cultural traditions on to future generations. Māori culture is valued and protected.

### INDICATORS

**Local content programming on New Zealand television**

Māori language speakers

**Language retention**

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## Leisure and Recreation

### DESIRED OUTCOME STATEMENT

Everybody is satisfied with their participation in leisure and recreation activities. They have sufficient time to do what they want to do and can access an adequate range of opportunities for leisure and recreation.

### INDICATORS

Satisfaction with leisure time

**Participation in physical activity**

Participation in cultural and arts activities

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## Physical Environment

### DESIRED OUTCOME STATEMENT

The natural and built environment in which people live is clean, healthy and beautiful. Everybody is able to access natural areas and public spaces.

### INDICATORS

**Air quality**

**Drinking water quality**

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## Safety

### DESIRED OUTCOME STATEMENT

Everybody enjoys physical safety and feels secure. People are free from victimisation, abuse, violence and avoidable injury.

### INDICATORS

**Assault mortality**

Criminal victimisation

Fear of crime

**Road casualties**

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## Social Connectedness

### DESIRED OUTCOME STATEMENT

People enjoy constructive relationships with others in their families, whānau, communities, iwi and workplaces. Families support and nurture those in need of care. New Zealand is an inclusive society where people are able to access information and support.

### INDICATORS

**Telephone and internet access in the home**

Regular contact with family/friends

Trust in others

Loneliness

Contact between young people and their parents

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## Structure of the report

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### The remainder of this report is divided into three sections

The first, the People section, provides background and contextual information on the size and composition of the New Zealand population.

The second section is the core of the report and is organised around the 10 outcome domains listed earlier. The outcome domains contain a two-page summary of how well New Zealanders are doing in each of the indicators.

The final section, the Conclusion, looks across the report and summarises how social wellbeing has changed since the mid-1990s and how different population subgroups are faring.

## Other indicator reports

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Many government agencies publish indicator reports on a wide range of different outcomes, which are useful complements to the social report. One such report is the Economic Development Indicators report. This report is published by the Ministry of Economic Development, The Treasury and Statistics New Zealand. This bi-annual publication, the most recent of which was published in 2007, provides a picture of New Zealand's economic performance. A core set of national environmental indicators was agreed in 2006. These were reported on for the first time in the Ministry for the Environment's recent state of the environment report launched in January 2008. *Environment New Zealand 2007* reports on key aspects of the New Zealand environment and tracks how these have changed over time.

## The future

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### A comprehensive programme of social statistics will enable us to develop new indicators and to update more of the current indicators on a more regular basis

Statistics New Zealand has led a major review of its official social statistics that, in the long term, should lead to the more regular collection of a wider set of social statistics. Statistics New Zealand is also leading the Linked Indicators project, one of the aims of which is to identify a common set of indicators across the social, economic, environmental and cultural domains. Progress on this work can be found on the Statistics New Zealand website [www.stats.govt.nz](http://www.stats.govt.nz). As well, Statistics New Zealand is developing a complementary set of more detailed indicators targeted at community outcomes. These will also be available on the website.

The Ministry of Social Development is continuing to look at ways to make the social report more useful at a subnational level. As well as providing subnational disaggregations of indicators on the social report website, we are working with the Big Cities group to improve the alignment of outcomes and indicators of social wellbeing at a national and subnational level.<sup>4</sup>

As previously noted, we produce the social report on an annual basis. We will continue to refine the desired social outcomes and indicators, and we welcome your feedback and suggestions as to how you think this might be done.

Comments can be made to:

The Social Report Project Manager, Ministry of Social Development  
PO Box 1556, Wellington 6140, New Zealand  
**email:** [socialreport@msd.govt.nz](mailto:socialreport@msd.govt.nz)

The social report monitors outcomes for the New Zealand population. This section contains background information on the size and characteristics of the population to provide a context for the indicators that follow.

# People

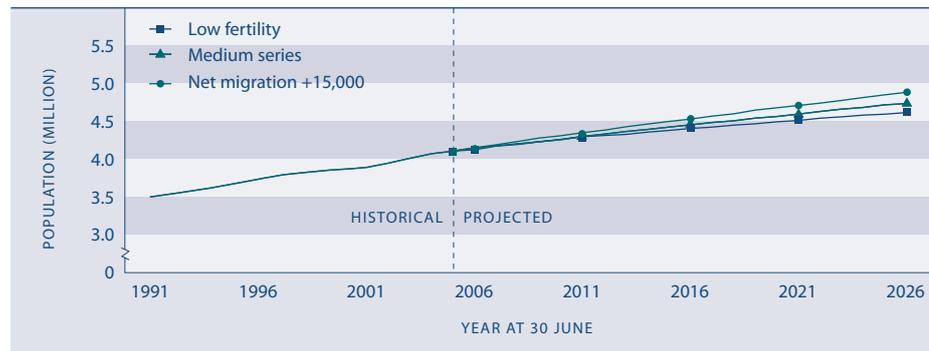
## Population size and growth

New Zealand's resident population reached 4 million in 2003 and was estimated to be 4.25 million at the end of December 2007.

During 2007, the population grew by 41,200 or 1.0 percent. This rate of growth was lower than that recorded in 2006 (50,400 or 1.2 percent) and lower than the average annual increase during the decade ended December 2007 (45,000 or 1.1 percent).

Under 2006-based medium population projection assumptions, the population growth rate is expected to drop from 1.0 percent in 2007 to 0.9 percent by 2011. Natural increase will account for three-quarters of this growth, and net migration the remaining quarter. Assuming net migration of 10,000 people per year after that, the growth rate is expected to slow to 0.7 percent per year between 2021 and 2026. Such a growth rate would add around 711,500 people to the population between 2007 and 2026.<sup>5</sup>

Figure P1 **Estimated and projected resident population, 1991–2026**



Source: Statistics New Zealand

Note: All three projection series assume medium mortality (life expectancy at birth 84.5 years for males, 88.0 years for females by 2061). The low fertility series (total fertility rate of 1.7 births per woman by 2026) and the medium series assume a long-term annual net migration gain of 10,000 from 2010. The medium series and the high migration series assume medium fertility (total fertility rate of 1.9 births per woman)

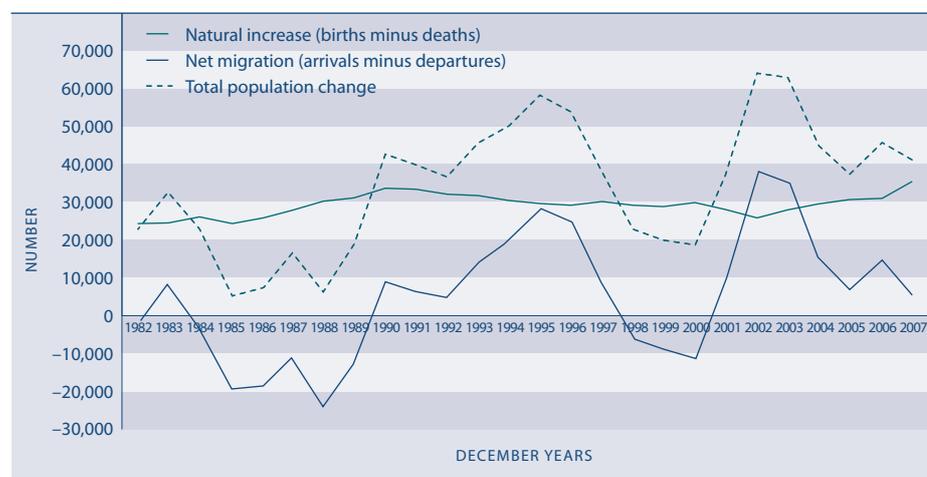
## Components of population change

Changes in national population size are driven by two factors: natural increase (births minus deaths) and net external migration.

Births exceeded deaths by 35,500 in the December 2007 year, an increase from 30,900 in 2006. Historically, natural increase has been the main component of population growth in New Zealand, but its contribution is set to decline gradually as the population ages and fertility remains stable. By 2021, natural increase is projected to be about 25,000 a year.

The number of people coming to live in New Zealand in 2007 exceeded those leaving the country to live elsewhere by 5,500, well below the net migration gain of 14,600 in 2006. In the December 2007 year, the net gain from permanent and long-term migration accounted for 13 percent of population growth.

Figure P2 **Components of population change, 1982–2007**



Source: Statistics New Zealand

Note: Before 1991, estimated population change was based on the de facto population concept. From 1991 onwards, population change was based on the resident population concept

The decline in net long-term migration in 2007 was mainly due to an increase in long-term departures to Australia, from 34,000 in 2006 to 41,600 in 2007. However, net long-term migration inflows from other countries more than offset the net outflow to Australia. The main contributing countries were the United Kingdom (7,100), India (3,600), the Philippines (3,200), and Fiji (2,500). The United Kingdom has been New Zealand's leading net source of migrants since 2004.

Two-thirds (67 percent) of New Zealand nationals returning home in 2007 after a long-term absence came from either Australia or the United Kingdom. These two countries were also the most popular destinations for New Zealand citizens departing for a permanent or long-term absence.

The net inflow of non-New Zealand citizens more than doubled between 2000 and 2002 (from 26,600 to 54,900), fell to 32,000 in 2005, then rose to 38,200 in 2006 and 2007.

In the decade to 2007, New Zealand had a net gain of 98,400 migrants. Two age groups contributed most of this gain: adults aged 25–49 years (60 percent) and children aged under 15 years (25 percent). Most new migrants settle in Auckland.

## People born overseas

Overseas-born people make up an increasing proportion of the New Zealand population. At the time of the 2006 Census there were 879,500 overseas-born people living in New Zealand, making up 23 percent of the country's population compared with 19 percent in 2001 and 17 percent in 1996.

The composition of New Zealand's overseas-born population is also changing, reflecting the changes in New Zealand's immigration patterns. The United Kingdom and Ireland – historically the major sources of New Zealand's immigrants – still account for the largest share of New Zealand's overseas-born population, but at 29 percent in 2006 this is considerably lower than the 1996 figure of 38 percent. Over the same period there were also falls in the proportion of overseas-born residents who were born in Australia, the Pacific Islands and the other countries of North-West Europe.

The largest growth was in the North-East Asia category. This was mainly because of an increase in the number of people born in the People's Republic of China from 19,500 to 78,100 between 1996 and 2006. The Southern and Central Asia category also increased markedly, reflecting a more-than-threefold increase in the Indian-born population from 12,800 to 43,300. The largest proportionate increase was in the sub-Saharan Africa group, largely the result of an almost fourfold increase in the South African born population, from 11,300 to 41,700.

Table P1 **Birthplaces of the overseas-born population, 1996 and 2006**

Birthplace	Census year			
	1996		2006	
	Number	Percent	Number	Percent
Australia	54,711	9.0	62,742	7.1
Pacific Islands	99,258	16.4	135,852	15.4
United Kingdom and Ireland	230,049	38.0	251,688	28.6
North-West Europe	39,168	6.5	44,103	5.0
Southern and Eastern Europe	16,431	2.7	23,964	2.7
North Africa and the Middle East	7,245	1.2	16,533	1.9
South-East Asia	37,332	6.2	58,266	6.6
North-East Asia	61,179	10.1	135,168	15.4
Southern and Central Asia	19,410	3.2	57,699	6.6
The Americas	22,629	3.7	34,383	3.9
Sub-Saharan Africa	17,439	2.9	59,118	6.7
<b>Total with overseas birthplace specified</b>	<b>604,851</b>	<b>100.0</b>	<b>879,516</b>	<b>100.0</b>

Source: Statistics New Zealand (2007e) Table 7

Significant proportions of New Zealand's immigrant population are relatively recent arrivals in the country. In 2006, almost a third (32 percent) of overseas-born residents had lived here less than five years, while a further 17 percent had lived here between five and nine years.

New Zealand's immigrant population is disproportionately concentrated in the Auckland region. In 2006, over half (52 percent) of the overseas-born population lived in Auckland, which was home to 32 percent of the country's total population. People born in Pacific and Asian countries had particularly high concentrations in Auckland (73 percent and 66 percent respectively). Overseas-born people were under-represented in all other regions with the exception of Wellington, which was home to 11 percent of both the overseas-born and the total populations.

## Fertility

Fertility rates for the year 2007 indicate that New Zealand women average 2.17 births per woman. This is higher than the rate of 2.01 births per woman in 2006 and just above the level required by any population to replace itself without migration (2.1 births per woman). Several other OECD countries have experienced a recent rise in fertility, including the United States (now second after New Zealand with a rate of 2.1 births per woman in 2006) and Australia. Despite the increase, most other developed countries have sub-replacement fertility rates, including France (1.9 births per woman in 2005), Norway and England and Wales (1.9 in 2006), Denmark, Sweden, Finland and Australia (1.8 in 2006), the Netherlands (1.7 in 2006), Canada (1.5 in 2005) and Japan (1.3 in 2006). The comparatively high rate in New Zealand reflects, in part, the higher fertility rates of Māori women (2.94 births per woman in 2007) and Pacific women (2.95 in 2005–2007).

The median age of New Zealand women giving birth has risen from 27 years in the 1980s to just over 30 years since 2002. For women having their first birth, the median age is 28 years. Age at childbearing varies widely by ethnicity, with European and Asian mothers having the highest median age (31 years in 2006), followed by Pacific mothers (28 years) and Māori mothers (26 years).

In 2007, the teenage fertility rate was 31.6 births per 1,000 females aged 15–19 years, an increase from 28.4 per 1,000 in 2006. The teenage fertility rate fell between 1997 and 2002 (from 33.2 to 25.8 per 1,000) but rose by almost as much between 2002 and 2007. Over the same period, the Māori teenage fertility rate fell from 84.0 per 1,000 in 1997 to 61.8 per 1,000 in 2002, rising to 78.7 per 1,000 by 2007. For non-Māori females under 20 years, the pattern was similar but less pronounced: a fall in the rate between 1997 and 2003 (from 19.9 to 15.7 per 1,000), followed by a rise to 18.9 per 1,000 in 2007. The birth rate for Pacific females aged 15–19 years declined from 47.4 per 1,000 in 2000–2002 to 42.5 per 1,000 in 2005–2007.

New Zealand has a relatively high rate of childbearing at young ages compared with most other developed countries. At 31.6 births per 1,000 females aged 15–19 years in 2007, the New Zealand teenage birth rate is higher than the rate in England and Wales (26.6 per 1,000 in 2006) but considerably lower than that of the United States (41.9 per 1,000 in 2006).

## Distribution of the population

Over three-quarters (76 percent) of the population live in the North Island, and nearly a third (32 percent) in the Auckland region.

Reflecting the impact of migration, the population growth in the Auckland region accounted for half (50 percent) of the total population growth between the 2001 and 2006 censuses.

The Māori population is heavily concentrated in the North Island (87 percent), but only 24 percent of Māori live in the Auckland region.

The New Zealand population is highly urbanised. At the 2006 Census, 86 percent of the population was living in an urban area. This includes 72 percent living in main urban areas (population of 30,000 or more), 6 percent living in secondary urban areas (10,000–29,999) and 8 percent living in minor urban areas (1,000–9,999).

There are marked ethnic differences in urbanisation, with the vast majority of Pacific peoples, Asian and Other ethnic groups living in main urban areas and very few in rural areas.

Table P2 **Urban and rural residence (%), by ethnic group, 2006**

	European	Māori	Pacific peoples	Asian	Other	Total
Main urban area (30,000+)	69	65	92	94	91	72
Secondary urban area (10,000–29,999)	7	7	3	2	2	6
Minor urban area (1,000–9,999)	9	13	2	2	3	8
Total urban	84	84	97	98	96	86
Rural	16	16	2	2	4	14
<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>

Source: Statistics New Zealand, 2006 Census, unpublished data

Note: New Zealander is included in European

## Ethnic composition of the population

The ethnic diversity of the New Zealand population continues to increase.

While the European ethnic group still has the largest share (78 percent) of the total population, the number of people identifying as European increased by only 8 percent in the 15 years between 1991 and 2006. Over the same period, the number who identified as Māori increased by 30 percent, the Pacific peoples ethnic group increased by 59 percent, and the number of Asian people increased by 255 percent. While people of all other ethnicities still make up less than 1 percent of the population, they grew in number faster than any of the major ethnic groups (by 440 percent).

Table P3 **Ethnic distribution of the population, 1991–2006**

Ethnic group <sup>(1)</sup>	1991	%	1996	%	2001	%	2006	%
European <sup>(2)</sup>	2,783,028	83.2	2,879,085	83.1	2,871,432	80.1	2,997,051	77.6
Māori	434,847	13.0	523,374	15.1	526,281	14.7	565,329	14.6
Pacific peoples	167,070	5.0	202,233	5.8	231,798	6.5	265,974	6.9
Asian	99,759	3.0	173,502	5.0	238,176	6.6	354,549	9.2
Other	6,597	0.2	15,804	0.5	24,885	0.7	36,237	0.9
<b>Total people with ethnicity specified</b>	<b>3,345,741</b>		<b>3,466,515</b>		<b>3,586,641</b>		<b>3,860,163</b>	

Source: Statistics New Zealand (2007e) Table 1, and unpublished 2006 Census data (for European/New Zealander and Other)

Notes: (1) Includes all of the people who stated an ethnic group, whether as their only ethnic group or as one of several ethnic groups. Where a person reported more than one ethnic group, they have been counted in each applicable group. Totals therefore do not add up to 100 percent (2) Before the 2006 Census, people who specified their ethnicity as "New Zealander" were included in the European ethnic group. The 429,429 people who identified as "New Zealander" in 2006 have been included in the European ethnic group to maintain consistency over time (3) Up to three responses were used for 1991 and 1996; up to six for 2001 and 2006. Previous social reports used data based on up to three ethnicity responses for 1991, 1996 and 2001, therefore the 2001 count for ethnic groups in the table above is slightly higher than that published in previous social reports

In 2006, Māori made up 15 percent of the total New Zealand population compared with 13 percent in 1991. At 9 percent, the Asian ethnic group is now the third largest group, ahead of Pacific peoples (7 percent). According to 2006-based medium population projections, by 2026 the Māori share of the population is projected to be 17 percent, the Pacific peoples' share 10 percent and the Asian share 16 percent.<sup>6</sup>

Ethnic diversity varies by age: among those aged under 25 years at the 2006 Census, Europeans made up 72 percent, Māori 22 percent, Pacific peoples and Asians each 11 percent, and people of all other ethnicities 1 percent. Among those aged 65 years and over, Europeans made up 91 percent, Māori 5 percent, Asians 3 percent, Pacific peoples 2 percent and people of other ethnicities 0.2 percent.

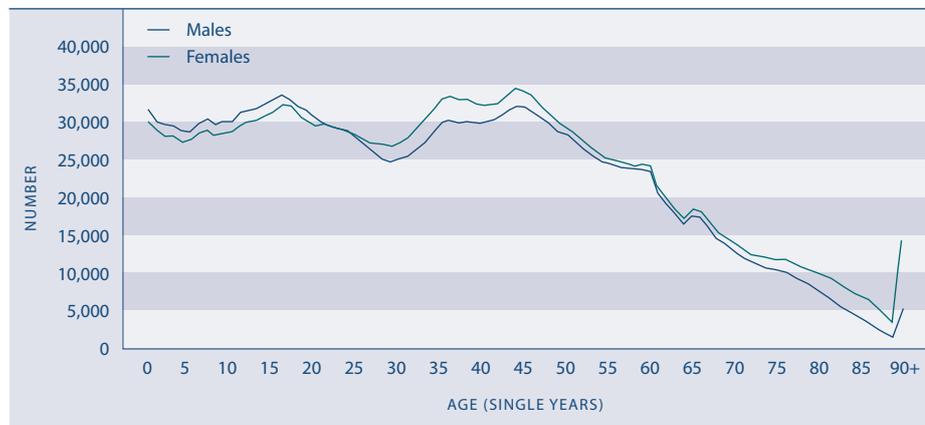
The number of people with multiple ethnic identities is increasing. In 2006, 90 percent of the population identified with only one ethnicity, down from 95 percent in 1991. Younger people are far more likely to identify with more than one ethnicity than older people, with 19.7 percent of children aged under 15 years reported as belonging to two or more ethnic groups in 2006, compared with 3.5 percent of people aged 65 years and over. Birth registration data for 2006 shows that 25 percent of babies were identified with more than one ethnicity, compared with 13 percent of mothers.<sup>7</sup> Having multiple ethnic identities is most common among Māori: 65 percent of Māori children born in 2006 had more than one ethnicity, compared with 49 percent of Pacific babies, 31 percent of Asian babies and 30 percent of European babies.

The figures for the ethnic distribution used in this section are based on the number of people identifying with each ethnicity. Because people can identify with more than one ethnicity, the total number of ethnic responses may be greater than the number of people. Elsewhere in the report, the approach to measuring ethnicity varies with the data source used.

## Age and sex structure of the population

Just over half the New Zealand population (51 percent) is female. Males outnumber females among children and youth, but females predominate among adults. More males are born than females, but males have higher mortality rates than females at all ages, particularly at ages 20–29 years. The imbalance in the middle years is partly an outcome of sex differences in net migration. At older ages, the difference reflects higher male mortality rates.

Figure P3 **Population, by age and sex, 2007**



Source: Statistics New Zealand

The New Zealand population is ageing: the median age of the total population was 36 years in 2006, and is expected to rise to 38 years by 2016, and to 40 years in 2026.<sup>8</sup>

The proportion of the population under 15 years of age has declined from 25 percent in 1985 to 22 percent in 2006. The population aged 65 years and over has increased from 10 percent of the total population in 1985 to 12 percent in 2006.

Age structure varies by ethnic group. In 2006, the European or Other population was the oldest, with a median age of 38 years, followed by the Asian population (28 years), the Māori population (23 years) and Pacific peoples (22 years). By 2026, half of all Māori will be older than 25 years and half of all Pacific peoples will be older than 23 years. Over the same period, the median age of Asian

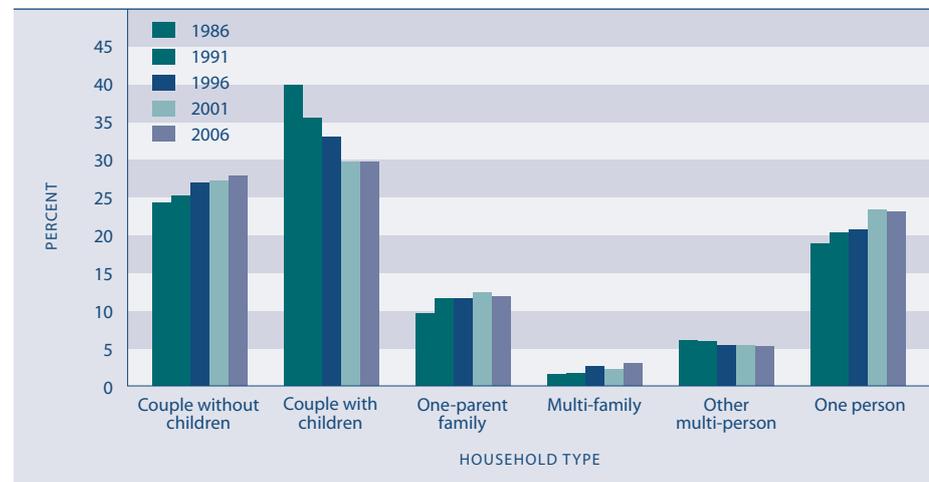
New Zealanders is expected to rise to 36 years, while for European or Other New Zealanders it will rise to 43 years.<sup>9</sup>

## Households

A household may contain a single person living alone, or two or more people who usually live together and share facilities, either as families (couples, parents with children) or as groups of individuals flatting together. There were 1.45 million households in New Zealand at the 2006 Census, an increase of 8 percent over the number recorded in 2001 and 34 percent higher than the number in 1986.

Twenty-eight percent of households contained couples without children in 2006, 30 percent contained two-parent families with children, 12 percent were one-parent family households, 3 percent contained more than one family, 5 percent comprised a group of individuals and 23 percent were one-person households.

Figure P4 **Distribution of households, by household type, 1986–2006**



Source: Statistics New Zealand

Couple-only and one-person households are the fastest growing household types and are projected to increase the most over the next 15 years. Population ageing is the major factor behind both of these changes. But declining fertility and the closing gap between male and female life expectancy are also contributing to the rising number of couples without children. Delayed marriage, divorce and changing lifestyle preferences are other factors contributing to the growing number of one-person households.

## Housing tenure

Most New Zealand householders own their own homes but they are less likely to do so than in the past. Between 1991 and 2001, the proportion of New Zealand households owning their dwellings either with or without a mortgage or in a family trust fell from 74 percent to 68 percent. Since 2001 the decline has been less marked, with a fall from 68 percent to 67 percent in 2006.<sup>10</sup> Between 2001 and 2006, there was a decline in home ownership among all age groups from 25–74 years but it was most marked among those aged between 35–54 years. The proportion of 35–44 year olds who owned or partly owned their own dwellings fell from 65 percent to 61 percent over the five years, while among 45–54 year olds the figure fell from 76 percent to 72 percent. The only age group to experience a significant increase in home ownership was the 75 years and over age group.

## Families with children

In 2006, there were 641,500 families with children living within New Zealand households. Of these families, 515,800 (80 percent) had dependent children (aged under 18 years and not in full-time employment).<sup>11</sup>

The number of families with dependent children increased by 8 percent in the five years to 2006, the largest increase since the census count of families began in 1976. The number of two-parent families with dependent children grew faster than the number of one-parent families (9 percent, compared with 3 percent). As a result, the proportion of families with dependent children headed by one parent fell slightly, from 29 percent in 2001 to 28 percent in 2006. For many of these families there will be parents living in another household who are actively involved in the care and upbringing of the children.

Table P4 **Families with dependent children, by family type, 1976–2006**

	1976	1981	1986	1991	1996	2001	2006
<b>Number</b>							
Two-parent family	398,772	380,886	363,489	339,681	346,086	339,159	370,809
One-parent family	46,296	62,280	82,632	110,055	126,585	140,178	145,032
<i>Mother only</i>	39,153	52,938	71,388	92,028	107,394	117,018	120,996
<i>Father only</i>	7,143	9,342	11,244	18,024	19,191	23,163	24,036
<b>Total families</b>	<b>445,068</b>	<b>443,166</b>	<b>446,121</b>	<b>449,736</b>	<b>472,671</b>	<b>479,337</b>	<b>515,841</b>
<b>Percentage distribution</b>							
Two-parent family	89.6	85.9	81.5	75.5	73.2	70.8	71.9
One-parent family	10.4	14.1	18.5	24.5	26.8	29.2	28.1
<i>Mother only</i>	8.8	11.9	16.0	20.5	22.7	24.4	23.5
<i>Father only</i>	1.6	2.1	2.5	4.0	4.1	4.8	4.7
<b>Total families</b>	<b>100.0</b>						

Source: Statistics New Zealand, published and unpublished census data

Note: The census definition of child dependency has changed over time. From 1996, a dependent child is a person in a family aged less than 18 years who is not in full-time employment. For earlier years, a dependent child is a person in a family under 16 years or aged 16–18 years and still at school

Compared to other OECD countries, New Zealand has a relatively high proportion of families with children under 18 years headed by sole parents (28 percent), second only to the United States (33 percent in 2006) and higher than the United Kingdom (25 percent in 2006), Australia and Canada (both 22 percent in 2006).

## Official languages

New Zealand has three official languages: English, Māori (from 1987) and New Zealand Sign Language (from April 2006). The 2006 Census recorded that 96 percent of people could speak English, 4 percent of people could speak Māori, and 0.6 percent could converse in New Zealand Sign Language.<sup>12</sup>

In 2006, eight out of 10 people (79 percent) spoke English as their only language while a further 17 percent spoke English along with at least one other language. Of the 4 percent of New Zealanders who could not speak English, almost half (49 percent) were children under the age of five, most of whom would still be learning to speak. There were also relatively high proportions of non-English speakers in some ethnic groups: 16 percent of people belonging to the Asian ethnic group could not speak English, along with 14 percent of people of Middle-Eastern, Latin American or African ethnicity and 10 percent of Pacific peoples.

The number of people able to converse in New Zealand Sign Language was 24,000 in 2006, a decline from 27,300 in 2001. This fall of 12 percent followed an

increase of 3 percent between the 1996 and 2001 censuses. In 2006, 9 percent or 2,200 of those people who were able to converse in New Zealand Sign Language indicated it was their only language. A further 89 percent were also able to converse in English, 26 percent in Māori and 25 percent in other languages (either alone or in combination).

## New Zealanders experiencing disability

In 2006, an estimated 660,300 New Zealanders reported a disability, representing 17 percent of the total population.<sup>13</sup>

Disability increases with age. In 2006, the prevalence of disability ranged from 10 percent of children (0–14 years) to 45 percent of people aged 65 years and over.

For children with disabilities, conditions or health problems that existed at birth and disease or illness were the most common causes. Disease or illness, accidents or injuries and ageing were the most common causes of disability for adults.<sup>14</sup>

Table P5 **Number and prevalence (%) of people experiencing disabilities (total population residing in households and residential facilities), by age group and sex, 2006**

Age group (years)	Males		Females		Total	
	Number	Rate (%)	Number	Rate (%)	Number	Rate (%)
0–14	53,500	12	36,500	9	90,000	10
15–44	73,800	9	67,600	8	141,500	9
45–64	104,700	21	103,800	19	208,500	20
65+	95,600	43	124,700	46	220,300	45
<b>Total</b>	<b>327,700</b>	<b>17</b>	<b>332,600</b>	<b>16</b>	<b>660,300</b>	<b>17</b>

Source: Statistics New Zealand, 2006 Disability Survey

The total disability rate for Māori (17 percent) was higher than the disability rate for Pacific peoples (11 percent) but lower than the disability rate for Europeans (18 percent). The Asian population had the lowest rate (5 percent). Because Māori and Pacific peoples have a younger age structure than Europeans, disability rates should be compared by age group. In every age group, Māori had a higher disability rate than other ethnic groups.

Many New Zealanders experiencing disability face barriers to full participation in society. For example, only 60 percent of 15–64 year olds with a disability were employed in 2006, compared with 80 percent of non-disabled 15–64 year olds.<sup>15</sup>

## Gay, lesbian, bisexual and transgender people

There is little information available about gay, lesbian, bisexual, fa'afafine, takatāpui, intersex, transgender and transsexual people in New Zealand, or the size of this group of people in relation to the total population.

Some information about same-sex couples who share a residence has been collected in censuses since 1996. The 2006 Census recorded just over 12,300 adults living with a partner of the same sex, making up 0.7 percent of all adults living in couples. This is an increase from the 10,000 recorded in the 2001 Census when they made up 0.6 percent of all couples and the 6,500 recorded in the 1996 Census when they made up 0.4 percent of all couples. However, it is difficult to know whether the change in numbers represents a real increase in the number of same-sex couples living together, or a greater willingness on their part to report living arrangements and partnership status. According to Statistics New Zealand, it is likely that the figures understate the actual number of same-sex couples because of the inconsistent way people responded to the census question.

## DESIRED OUTCOMES

Everybody has the opportunity to enjoy a long and healthy life. Avoidable deaths, disease and injuries are prevented. Everybody has the ability to function, participate and live independently or appropriately supported in society.

# Health

## INTRODUCTION

Good health is critical to wellbeing. Without good health, people are less able to enjoy their lives to the fullest extent, their options are limited and their general levels of contentment and happiness are likely to be reduced.

Good health has two core dimensions: how long people live and the quality of their lives. The desired outcomes recognise both aspects. As well as enjoying long lives, people want to be free from the pain, suffering and incapacity that result from injury or illness.

The desired outcomes also acknowledge that not everybody can live a fully independent life. For some people, illness or disability means they need support from families, government agencies or other networks to overcome barriers to their participation in society. Getting this support is an important part of social wellbeing.

People with injuries or illness (both mental and physical) may experience barriers to participating in education, training and employment, thus reducing their economic standard of living. These barriers can also reduce people's ability to participate in other areas of life, such as family life, socialising with friends, joining community activities and taking part in recreation and leisure pursuits, which can lead to feelings of frustration and isolation.

A range of factors affect and are affected by health outcomes, including genetic predisposition, behaviour, the physical and social environment and the availability of health services. Increasing attention is being paid to the interaction between socio-economic and health outcomes. People with low incomes, poor housing and few qualifications are likely to have disproportionately poorer health.<sup>16</sup>

## INDICATORS

Six indicators are used in this chapter. Together they provide a picture of the current state of the nation's health and the likely trends in the future. They cover the length and quality of life and include both physical and mental health. The indicators are: health expectancy, life expectancy, suicide, cigarette smoking, obesity and potentially hazardous drinking.

The first three indicators are relevant to the current state of the nation's health. Together, they directly measure the desired outcomes relating to long and healthy lives, and people's ability to participate in society. The last three indicators are strong predictors of future health outcomes.

Health expectancy refers to the number of years a person can expect to live independently, ie free of any disability requiring the assistance of another person or complex assistive device. This is a summary measure of a population's health integrating both fatal (life expectancy) and non-fatal (disability requiring assistance) health outcomes.

Life expectancy measures the survival experience of the population: how long people live. It is an indicator of fatal health outcomes.

The suicide death rate serves as a proxy for the mental health status and social wellbeing of the population. The indicator covers the suicide death rate for society as a whole and includes details for subsets of the population. New Zealand's suicide death rates are trending down, but our youth suicide death rates remain high compared with other OECD countries.

The links between cigarette smoking and poor health are widely recognised. For example, cigarette smoking (active and passive) is a risk factor for many cancers and respiratory and cardiovascular diseases, and has been linked with low birth weight, Sudden Infant Death Syndrome, and other adverse child health outcomes. Obesity is linked with poor health outcomes, such as an increased risk of heart attacks, strokes, type 2 diabetes and some cancers.<sup>17</sup>

Alcohol is the most commonly used recreational drug in New Zealand, with the majority of New Zealanders consuming alcohol at least occasionally.<sup>18</sup> Potentially hazardous drinking is an established pattern of alcohol consumption that carries a high risk of future damage to physical or mental health, but may not yet have resulted in significant adverse effects.<sup>19</sup> Alcohol also contributes to death and injury due to traffic accidents, drowning, suicide, assaults and domestic violence.<sup>20</sup>

# Health expectancy

## DEFINITION

The number of years a person could expect to live in good health if current mortality and morbidity rates persist.

The particular measure of health expectancy used here is the number of years a person could expect to live independently, ie live without any functional limitation requiring the assistance of another person or complex assistive device. Hence it is also described as independent life expectancy. The measure uses information from the 1996, 2001 and 2006 Disability Surveys to calculate disability-adjusted life expectancy estimates.

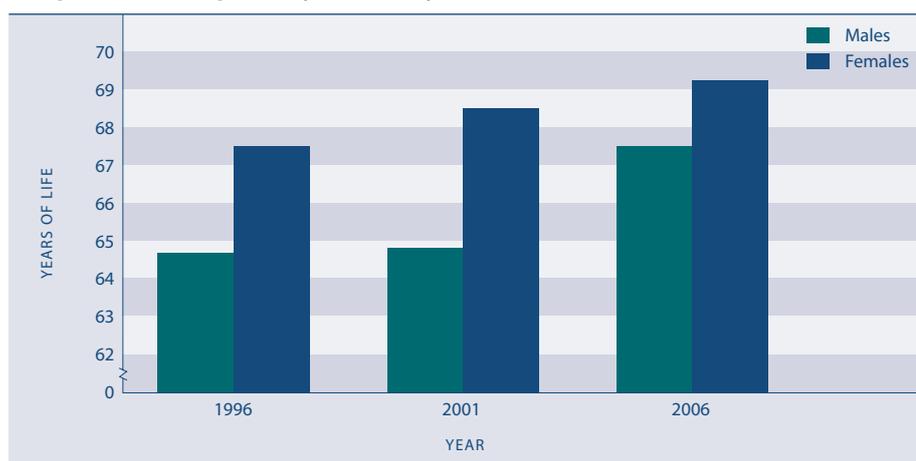
## RELEVANCE

Health expectancy is a summary measure of a population's health that captures both the "quantity" and "quality" of life dimensions of health. Independent life expectancy at birth is a positive measure, capturing expectations of a life free from functional limitation that requires assistance. Improvements in health expectancy reflect changes in social and economic conditions, lifestyle changes, medical advances and better access to health services.

## CURRENT LEVEL AND TRENDS

In 2006, males and females had an independent life expectancy at birth of 67.5 years and 69.2 years respectively. The overall sex gap in independent life expectancy at birth is 1.7 years, down two years since 2001. For the total population, independent life expectancy at birth has improved since 1996 (an increase of 2.8 years for males, 1.7 years for females). Note that the estimates for 2006 are provisional, as the official life tables for 2005–2007 are not yet available. In addition, the 2006 Disability Survey reported a significant decline in the levels of disability reported in the previous survey, due to a range of methodological and other factors. Statistics New Zealand has advised that caution should be exercised when comparing the results with those from previous surveys.

Figure H1.1 **Independent life expectancy at birth, by sex, 1996, 2001 and 2006**



Source: Ministry of Health, provisional data

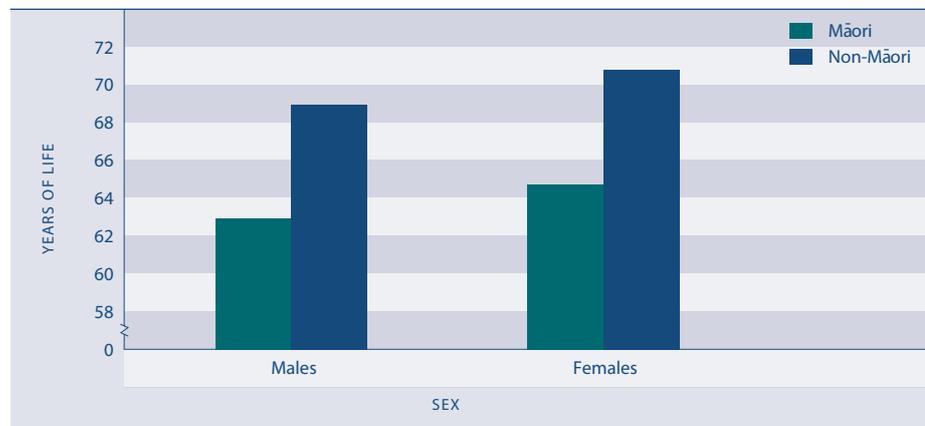
## ETHNIC DIFFERENCES

Independent life expectancy for Māori was produced in the same way as for the total New Zealand population. These ethnic-specific statistics are comparable with those for the total population.

Māori males had an independent life expectancy at birth of 62.9 years in 2006. The figure for Māori females was 64.7 years, a gender gap of 1.8 years. There are large ethnic inequalities in health expectancy, despite a very rapid improvement in survivorship for Māori in recent years. In 2006, the gap in independent life expectancy at birth between Māori and non-Māori was 6.0 years for males and 6.1 years for females (the independent life expectancy at birth for non-Māori was 68.9 years and 70.8 years for males and females respectively).

Figure H1.2

### Independent life expectancy at birth, Māori and non-Māori population, by sex, 2006



Source: Ministry of Health, provisional data

# Life expectancy

## DEFINITION

Life expectancy at birth indicates the total number of years a person could expect to live, based on the mortality rates of the population at each age in a given year or period.

## RELEVANCE

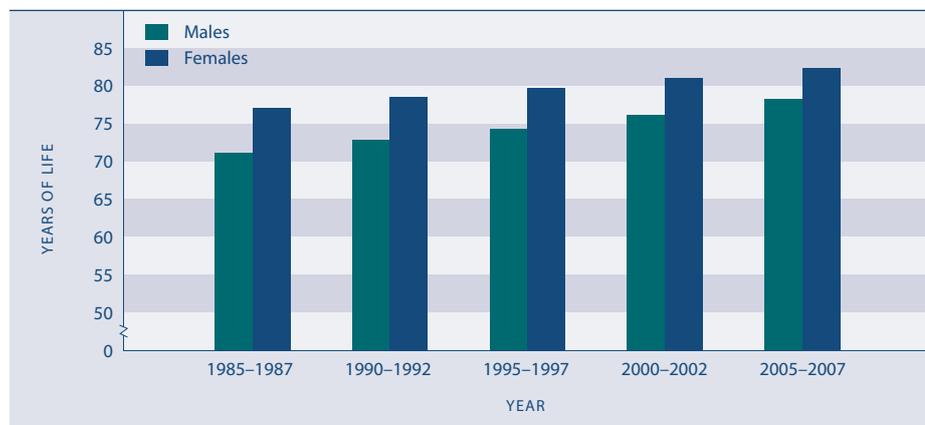
Life expectancy at birth is a key summary indicator of fatal health outcomes, ie the survival experience of the population.

## CURRENT LEVEL AND TRENDS

Based on the mortality experiences of New Zealanders in the period 2005–2007, life expectancy at birth was 78.1 years for males and 82.2 years for females. Since the mid-1980s, gains in longevity have been greater for males than for females. Between 1985–1987 and 2005–2007, life expectancy at birth increased by 7.0 years for males and 5.1 years for females. As a result, the sex gap in life expectancy narrowed from 6.0 years to 4.1 years over this period.

With the decline in the infant mortality rate (from 11.2 deaths per 1,000 live births in 1986 to 4.9 per 1,000 in 2007), the impact of infant death on life expectancy has lessened. The gains in life expectancy since the mid-1980s can be attributed mainly to reduced mortality in the middle-aged and older age groups (45–84 years).

Figure H2.1 **Life expectancy at birth, by sex, selected years, 1985–1987 to 2005–2007**



Source: Statistics New Zealand  
Note: Abridged life table data has been used 2005–2007

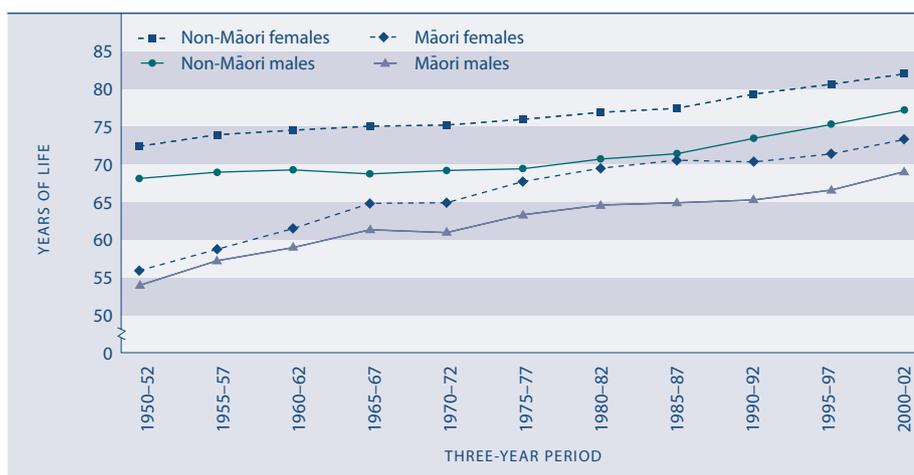
## ETHNIC DIFFERENCES

There are marked ethnic differences in life expectancy. In 2000–2002, male life expectancy at birth was 77.2 years for non-Māori and 69.0 years for Māori, a difference of 8.2 years. Female life expectancy at birth was 81.9 years for non-Māori and 73.2 years for Māori, a difference of 8.8 years.

The pace of improvement in life expectancy has varied by ethnic group. For non-Māori, there was a fairly steady increase in life expectancy at birth over the period from 1985–1987 to 2000–2002, with males gaining 5.8 years and females 4.5 years. For Māori, there was little change during the 1980s, but a dramatic improvement in the five years to 2000–2002. While the gain in Māori life expectancy over the whole period 1985–1987 to 2000–2002 (4.1 years for males, 2.7 years for

females) was less than that for non-Māori, Māori gained more than non-Māori in the latter five-year period. As a result, the gap in life expectancy at birth between non-Māori and Māori, which widened by 2.4 years between 1985–1987 and 1995–1997, reduced by 0.6 years in the five years to 2000–2002.

Figure H2.2 **Life expectancy at birth, by ethnic group and sex, 1950–1952 to 2000–2002**



Source: Statistics New Zealand; Ministry of Health

Note: Ministry of Health data has been used for 1980–1982 to 1995–1997. It includes an adjustment for the undercount of Māori deaths relative to the Māori population by linking mortality to census records

## SOCIO-ECONOMIC DIFFERENCES

There is an association between life expectancy and the level of deprivation in the area where people live. In 2000–2002, males in the least deprived 10th of small areas in New Zealand could expect to live 8.9 years longer than males in the most deprived 10th of small areas (79.9 versus 71.0 years). For females, the difference was smaller, but still substantial, at 6.6 years (83.8 versus 77.2 years). These figures illustrate the links between socio-economic status and health.<sup>21</sup>

## INTERNATIONAL COMPARISON

In 2005–2006, New Zealanders' life expectancy at birth was 81.9 years for females and 77.9 years for males. This was slightly below the OECD median of 82.3 years for females and slightly above the OECD median of 77.1 years for males. Out of 30 OECD countries, New Zealand was ranked 19th equal, with the Netherlands and Luxembourg, for females, and eighth for males. In 1960–1961, New Zealand's ranking was ninth for females and seventh equal for males. Over the 1970s and 1980s, longevity improved faster in many other OECD countries than in New Zealand. Since the early-1990s, faster-than-average gains in life expectancy in New Zealand, particularly for males, have improved its relative position. In 2006, life expectancy at birth was highest for females in Japan (85.8 years) and highest for males in Iceland (79.4 years). Compared to New Zealand, female life expectancy was higher in Australia (83.5 years) and Canada (82.7 years in 2005), but lower in the United Kingdom (81.1 years in 2005) and the United States (80.4 years in 2005). Male life expectancy was higher in Australia (78.7 years), similar in Canada (78.0 years in 2005), and lower in the United Kingdom (77.1 years in 2005) and the United States (75.2 years in 2005).<sup>22</sup>

# Suicide

## DEFINITION

The number of suicide deaths per 100,000 population, expressed as a three-year moving average age-standardised rate, for the population aged 5 years and over.

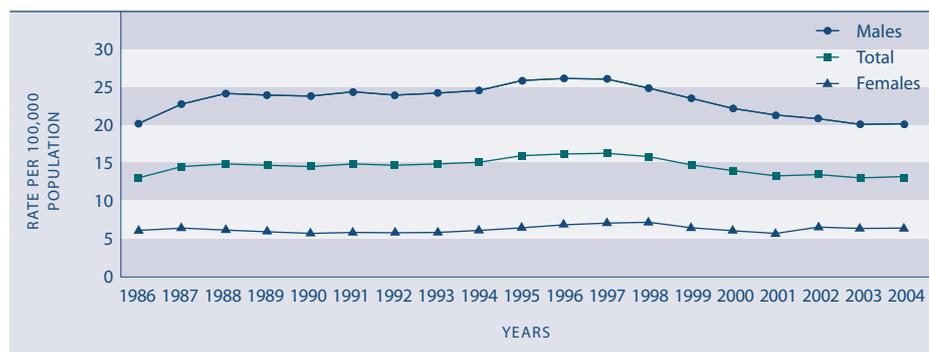
## RELEVANCE

Suicide is an indicator of the mental health and social wellbeing of society and a major cause of injury-related death in the population.

## CURRENT LEVEL AND TRENDS

In 2005, 502 people died by suicide, an increase from the 488 people who died in 2004.<sup>23</sup> The three-year moving average age-standardised<sup>24</sup> suicide death rate was 13.2 per 100,000 population in 2003–2005, compared with 13.1 per 100,000 in 2002–2004. Over the 1980s and 1990s there was an upward trend in the suicide death rate, which reached a peak of 16.3 per 100,000 in 1995–1997 and 1996–1998. The rate for 2003–2005 (13.2 deaths per 100,000 people) was similar to the rate for 1985–1987 (13.1 per 100,000).

Figure H3.1 Age-standardised suicide death rate, three-year moving average, by sex, 1985–2005



Source: Ministry of Health, Public Health Intelligence

Notes: (1) The three-year moving average rates are plotted on the mid-point year (eg 2004 is the mid-point year of 2003–2005)  
(2) 2005 figures are provisional (3) Age-standardised to WHO standard population

## AGE DIFFERENCES

People aged 25–34 years had the highest three-year moving average suicide death rate in 2003–2005 (18.6 per 100,000 population, with 108 deaths in 2005), followed by people aged 15–24 years (18.1 per 100,000, also with 108 deaths in 2005).

Figure H3.2 Suicide death rate, three-year moving average, by age, 1985–2005



Source: Ministry of Health, Public Health Intelligence

Notes: (1) The three-year moving average rates are plotted on the mid-point year (eg 2004 is the mid-point year of 2003–2005)  
(2) 2005 figures are provisional

The youth (15–24 year olds) suicide death rate increased steeply in the late-1980s, peaking at 27.2 per 100,000 people aged 15–24 years in 1995–1997. It has fallen by 33 percent since then, but is still higher than the 1985–1987 rate of 15.8 per 100,000. The pattern is similar for 25–34 year olds. Suicide death rates have been falling among people aged 45 years and over. These age patterns may reflect, in part, cohort effects.

## SEX DIFFERENCES

Males have a much higher rate of death by suicide than females, with 20.3 deaths per 100,000 males in 2003–2005, compared with 6.5 deaths per 100,000 females.<sup>25</sup> The male suicide rate increased sharply in the late-1980s, declined after 1996–1998, and in 2003–2005 was the same as the 1985–1987 rate of 20.3 deaths per 100,000 males. In comparison, the female rate has been relatively stable over the last 20 years. Because of the small numbers involved, it is more reliable to consider the trend over several years.

While the suicide death rate is higher for males, more females than males are hospitalised for intentional self-harm. In 2006, the female–male rate ratio for intentional self-harm in New Zealand was 2.0 female hospitalisations to every male hospitalisation per 100,000 population. Females more commonly choose methods that are less likely to be fatal.<sup>26</sup>

## ETHNIC DIFFERENCES

In 2005, there were 100 Māori deaths from suicide, accounting for 20 percent of all suicide deaths in that year. The three-year moving average age-standardised rate of suicide deaths in 2003–2005 was 17.9 per 100,000 population for Māori, compared to 12.0 per 100,000 for non-Māori. The suicide death rate for Māori youth (15–24 year olds) in 2003–2005 was 33.2 per 100,000, compared with the non-Māori rate of 14.6 per 100,000. Suicide death rates for both Māori and non-Māori, for all ages and youth, were lower in 2003–2005 than in 1996–1998. Because of the small numbers, trends in Māori suicide rates should be treated with caution.

## INTERNATIONAL COMPARISON

A comparison of the latest age-standardised suicide death rates in 13 OECD countries between 2002 and 2005 shows New Zealand's (2005) rate was the fourth highest for males (18.2 per 100,000 males) and the fifth highest for females (5.9 per 100,000 females).<sup>27</sup> Finland had the highest male suicide death rate (28.1 per 100,000 in 2004), while Japan had the highest female rate (9.5 per 100,000 in 2004). Australia (16.0 in 2003) had a lower rate of male suicide deaths than New Zealand, as did Canada and the United States (each 16.5 in 2002). The United Kingdom had the lowest male suicide death rate (9.8). Canada and Australia (4.7), the United States (3.8) and the United Kingdom (2.9) all reported lower female suicide death rates than New Zealand.

New Zealand had the second highest male youth (15–24 years) suicide death rate (after Finland), and the third highest female youth suicide death rate (after Finland and Japan). New Zealand is one of a small number of countries which have higher suicide death rates at younger ages than at older ages.<sup>28</sup>

# Cigarette smoking

## DEFINITION

The proportion of the population who currently smoke cigarettes. Up to 2005, the survey population was people aged 15 years and over (ACNielsen survey). From 2006, the survey population is people aged 15–64 years (New Zealand Tobacco Use Survey, New Zealand Health Survey).

## RELEVANCE

Tobacco smoking is a well-recognised risk factor for many cancers and for respiratory and cardiovascular diseases. In addition, exposure to environmental tobacco smoke (particularly maternal smoking) is a major risk factor for Sudden Infant Death Syndrome and respiratory problems in children. Smoking has been identified as the major cause of preventable death in OECD countries.<sup>29</sup>

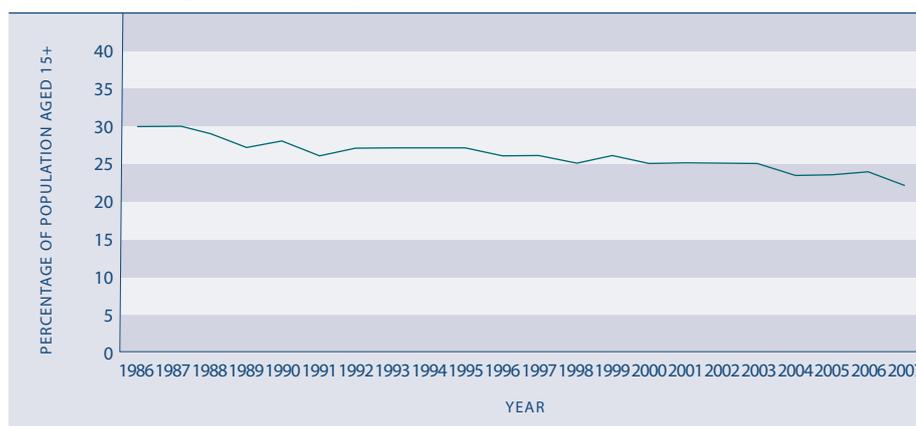
## CURRENT LEVEL AND TRENDS

In 2006/2007, 22 percent of people aged 15–64 years were cigarette smokers, according to the New Zealand Health Survey. This is below the 24 percent derived from the New Zealand Tobacco Use Survey conducted in the first quarter of 2006.

Long-term trends are available only for the population aged 15 years and over. For this population, smoking prevalence fell to 19.9 percent in 2006/2007. This was below the 24 percent derived from the ACNielsen survey for 2005 and the lowest level in over three decades. Among the population aged 15 years and over, smoking has declined from 30 percent in 1986, with most of the decline occurring between 1987 and 1991.

It is important to note that there are methodological differences between these three surveys and some caution should be used when comparing figures. Ongoing monitoring in the social report will be based on the New Zealand Tobacco Use Survey. As this survey is carried out in two out of every three years, it allows the most frequent updates.

Figure H4.1 **Prevalence of cigarette smoking, 1986–2007**



Source: Ministry of Health

Notes: (1) Data not standardised for age (2) 1986–2005: population aged 15+ years; 2006, 2007: population aged 15–64 years

## AGE AND SEX DIFFERENCES

Smoking rates for females and males have been similar since the mid-1980s. In 2006/2007, 23 percent of males and 21 percent of females smoked. However, this sex difference was not statistically significant.

In 2006/2007, smoking was most prevalent among people aged 25–34 years, followed by those aged 15–24 years. People aged 55–64 years had a significantly lower smoking prevalence than younger age groups. Since the mid-1980s, people aged 55 and over have experienced the greatest decline in smoking prevalence.<sup>30</sup>

Daily smoking rates for 14–15 year olds have declined considerably since 1999. Between 1999 and 2006, the prevalence of daily smoking declined by 56 percent for males in this age group (from 14 percent to 6 percent) and by 42 percent for females (from 17 percent to 10 percent).

## ETHNIC DIFFERENCES

Smoking prevalence is significantly higher among Māori and Pacific peoples, at around 44 percent and 28 percent respectively, than among the total population aged 15–64 years in 2006/2007. It is significantly lower among Asian ethnic groups (12 percent) in that year. Among Māori, the prevalence of smoking is significantly higher for women than for men. The opposite is the case among Pacific peoples and Asians. European women and men have similar smoking rates.

Since 1990, smoking prevalence has declined by seven percentage points for Māori and by three percentage points for the European/Other ethnic groups.<sup>31</sup>

Table H4.1 **Age-standardised prevalence (%) of cigarette smoking, by sex and ethnicity, 2006/2007**

	Percentage in each ethnic group who smoke cigarettes				
	European/Other	Māori	Pacific peoples	Asian	Total
Male	22.3	40.3	34.5	19.4	23.4
Female	21.1	47.3	21.8	5.3	20.9
<b>Total</b>	<b>21.7</b>	<b>44.1</b>	<b>27.9</b>	<b>11.9</b>	<b>22.1</b>

Source: Ministry of Health (2008d)

Notes: (1) Rates are age-standardised using the WHO world population (2) People who reported more than one ethnic group are counted once in each group reported

## SOCIO-ECONOMIC DIFFERENCES

In 2006/2007, the smoking prevalence rate in the most deprived areas (NZDep2006 deciles 9–10) was 2.8 times the rate in the least deprived areas (deciles 1–2).<sup>32</sup>

## INTERNATIONAL COMPARISON

In an OECD comparison of daily smoking rates for adults aged 15 years and over, New Zealand had a rate of 21 percent in 2006, compared with an OECD median of 24 percent.<sup>33</sup> New Zealand ranked seventh lowest out of 30 OECD countries. Smoking prevalence was highest in Greece (39 percent in 2004) and lowest in Sweden (16 percent in 2005). New Zealand's rate was lower than that of the United Kingdom (22 percent in 2006), but higher than those of Australia (18 percent in 2004), the United States and Canada (both 17 percent in 2006 and 2005 respectively). Compared to other OECD countries, New Zealand's smoking levels are relatively low for males and relatively high for females.<sup>34</sup>

## TOBACCO CONSUMPTION

In 2007, tobacco consumption was 1,002 cigarette equivalents per person aged 15 years and over, down slightly from 1,006 in 2006. Since 1991, tobacco consumption has decreased by 42 percent. Over this period, the drop in tobacco consumption has been more rapid than the drop in smoking prevalence.

Figure H4.2 **Tobacco consumption, cigarette equivalents per person aged 15 years and over, 1991–2007**



Sources: Ministry of Health (2006c) Table D1; Statistics New Zealand (2008a)

# Obesity

## DEFINITION

The proportion of the population aged 15 years and over who are obese, and the proportion of children aged 5–14 years who are obese.

For adults aged 18 years and over, obesity is defined as having a body mass index (BMI) greater than or equal to 30 kg/m<sup>2</sup> (for all ethnic groups).<sup>35</sup> For those under 18 years, internationally defined sex and age specific BMI cut-off points have been used.<sup>36</sup>

## RELEVANCE

Obesity is associated with a long list of adult health conditions, including heart disease, high blood pressure and strokes, type 2 diabetes, various types of cancer, and psychological and social problems. Obese children are likely to be obese into adulthood.<sup>37</sup>

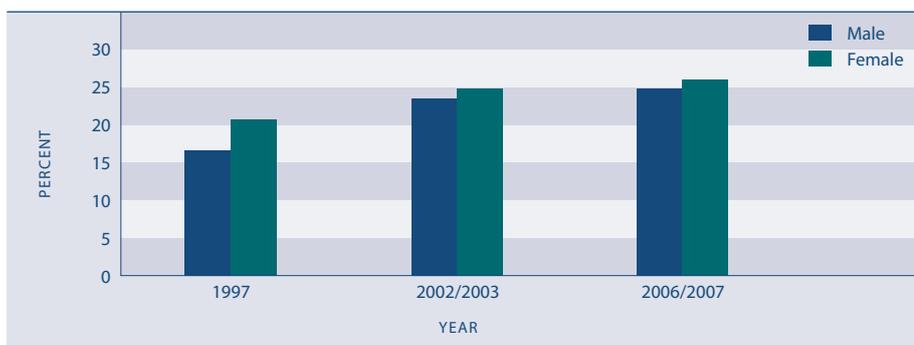
## CURRENT LEVEL AND TRENDS

In 2006/2007, the age-standardised obesity prevalence rate for the population aged 15 years and over was 25 percent. This was similar to the 2002/2003 rate of 24 percent but a significant increase from the 1997 rate of 19 percent.<sup>38</sup>

In 2006/2007, 8 percent of children aged 5–14 years were obese, a prevalence rate similar to that of 2002 (9 percent).<sup>39</sup>

The major drivers of the increase in obesity rates have been changing dietary and physical activity patterns, reflecting an environment that promotes the over-consumption of energy-dense foods and drinks and limits the opportunities for physical activity.<sup>40</sup>

Figure H5.1 **Age-standardised prevalence of obesity, total population aged 15 years and over, by sex, 1997, 2002/2003, 2006/2007**



Source: Ministry of Health, Public Health Intelligence

## AGE AND SEX DIFFERENCES

Age-standardised prevalence rates for 2006/2007 showed no significant sex difference in the proportion of the population aged 15 years and over who were obese (males, 25 percent; females, 26 percent). This was also the case in 2002/2003. In 1997, the age-standardised rate for females was significantly higher than the rate for males.

Among children aged 5–14 years, there was no significant difference by sex or age in the prevalence of obesity, either in 2002 or in 2006/2007.

Among those aged 15 years and over in 2006/2007, the prevalence of obesity was highest in the 55–64 years age group (36 percent), followed by the 65–74 years age group.

Table H5.1 **Prevalence (%) of obesity, by age group and sex, 2006/2007**

	5–14	15–24	25–34	35–44	45–54	55–64	65–74	75+
Males	8.1	12.7	22.2	29.9	30.8	35.9	29.9	21.7
Females	8.6	15.7	26.6	26.9	30.2	35.9	35.7	20.1
<b>Total</b>	<b>8.3</b>	<b>14.2</b>	<b>24.4</b>	<b>28.4</b>	<b>30.5</b>	<b>35.9</b>	<b>32.8</b>	<b>20.8</b>

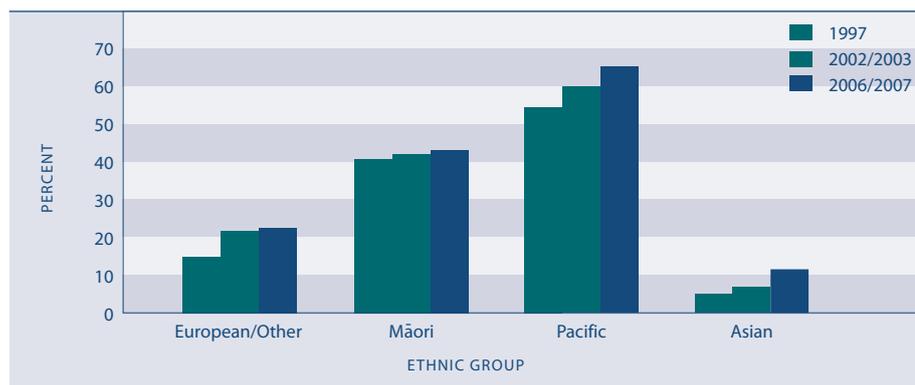
Source: Ministry of Health, Public Health Intelligence

## ETHNIC DIFFERENCES

There are large differences in the prevalence of obesity by ethnicity. Among the population aged 15 years and over in 2006/2007, Pacific peoples (65 percent) and Māori (43 percent) had significantly higher age-standardised obesity rates than the total population in this age group, while Asians (12 percent) had a significantly lower rate. The obesity rate of European/Other was (23 percent). For Māori, there was no significant change from 1997 to 2006/2007 in the prevalence of obesity, adjusted for age, either for men or for women. Between 2002/2003 and 2006/2007, only Asians had a statistically significant increase in obesity.

Among children aged 5–14 years in 2006/2007, the pattern of ethnic differences in the prevalence of obesity was similar to that of the population aged 15 years and over. Pacific children had the highest rate (26 percent), followed by Māori children (13 percent), Asian children (6 percent) and children of European/Other ethnic groups (5 percent).

Figure H5.2 **Age-standardised prevalence of obesity, population aged 15 years and over, by ethnic group, 1997, 2002/2003, 2006/2007**



Source: Ministry of Health, Public Health Intelligence

Note: People who reported more than one ethnic group are counted once in each group reported

## SOCIO-ECONOMIC DIFFERENCES

The prevalence of obesity is higher in relatively deprived neighbourhoods. In 2006/2007, 38 percent of the population aged 15 years and over living in NZDep2006 quintile 5 (the most disadvantaged fifth of neighbourhoods) were obese, compared with 26 percent of those living in quintile 4, 23 percent of those living in quintile 3 and 21 percent of those living in quintiles 1 and 2.

## INTERNATIONAL COMPARISON

New Zealand has a relatively high prevalence of obesity compared with other OECD countries. In 2006/2007, New Zealand's rate was 25 percent, compared to an OECD median of 13 percent. New Zealand was ranked 28th out of 30 OECD countries reporting obesity prevalence from 1999–2006. However, most countries use the self-reporting method to measure obesity whereas New Zealand and five other countries use actual measurements recorded by an interviewer.<sup>41</sup> Out of the six countries that use actual measurements, New Zealand was ranked second highest with a lower obesity rate than the United States (34 percent in 2006), and a similar rate to the United Kingdom (24 percent in 2006) and Australia (22 percent in 1999). Of all OECD countries, Japan and Korea had the lowest prevalence of obesity (both 4 percent in 2005).<sup>42</sup>

# Potentially hazardous drinking

## DEFINITION

The proportion of the population aged 15 years and over who drink alcohol, who scored eight or more on the Alcohol Use Disorders Identification Test (AUDIT), as measured in the New Zealand Health Surveys conducted by the Ministry of Health in 1996/1997, 2002/2003 and 2006/2007.

The AUDIT is a 10-item questionnaire covering alcohol consumption, alcohol-related problems and abnormal drinking behaviour.

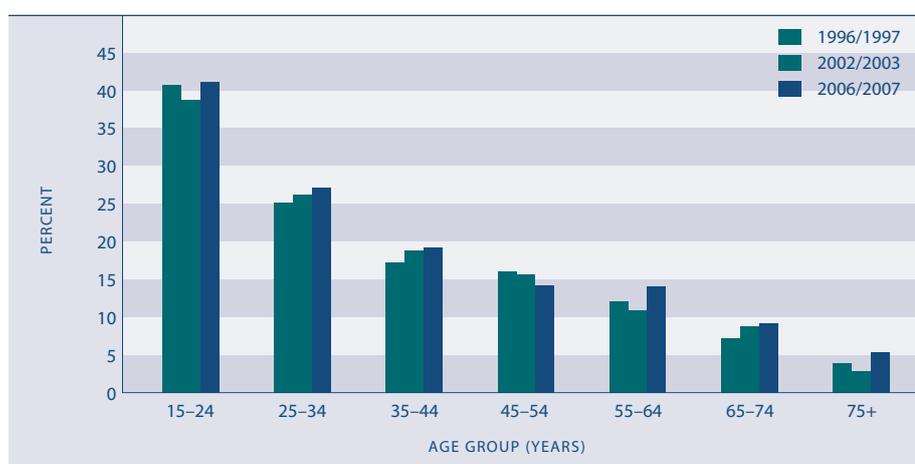
## RELEVANCE

Potentially hazardous drinking, defined by an AUDIT score of eight or more, is an established pattern of alcohol consumption that carries a high risk of future damage to physical or mental health, but may not yet have resulted in significant adverse effects.<sup>43</sup> Alcohol also contributes to death and injury due to traffic accidents, drowning, suicide, assaults and domestic violence.<sup>44</sup>

## CURRENT LEVEL AND TRENDS

In 2006/2007, 22.9 percent of drinkers aged 15 years and over had a potentially hazardous drinking pattern, as indicated by an AUDIT score of eight or more. This was similar to the proportions recorded in the 1996/1997 and 2002/2003 surveys (22.3 percent and 22.5 percent, respectively).<sup>45</sup>

Figure H6.1 **Potentially hazardous drinking among drinkers, by age, 1996/1997, 2002/2003, 2006/2007**



Source: Ministry of Health, Public Health Intelligence

## AGE AND SEX DIFFERENCES

For both males and females, the proportion of drinkers with a potentially hazardous drinking pattern is highest among those aged 15–24 years and declines at older ages.

In 2006/2007, male drinkers (29.2 percent) were significantly more likely than female drinkers (13.0 percent) to have a potentially hazardous drinking pattern. This was the case for all age groups and in each survey year.

Table H6.1 **Proportion (%) of drinkers with a potentially hazardous drinking pattern, by age group and sex, 1996/1997, 2002/2003, 2006/2007**

	15–24	25–34	35–44	45–54	55–64	65–74	75+
<b>1996/1997</b>							
Male	49.8	35.7	25.5	25.2	21.1	12.6	7.3
Female	31.6	13.9	8.1	6.0	1.8	1.0	0.8
<b>Total</b>	<b>40.8</b>	<b>24.9</b>	<b>17.1</b>	<b>16.0</b>	<b>12.0</b>	<b>7.3</b>	<b>3.9</b>
<b>2002/2003</b>							
Male	45.8	36.1	28.0	23.5	18.1	16.4	4.4
Female	31.0	16.0	9.3	7.1	3.0	1.1	1.0
<b>Total</b>	<b>38.7</b>	<b>26.1</b>	<b>18.7</b>	<b>15.7</b>	<b>10.8</b>	<b>8.7</b>	<b>2.7</b>
<b>2006/2007</b>							
Male	49.2	36.2	29.0	21.1	23.1	14.7	7.9
Female	32.6	18.2	9.5	7.3	4.3	3.0	2.5
<b>Total</b>	<b>41.1</b>	<b>27.1</b>	<b>19.2</b>	<b>14.2</b>	<b>14.0</b>	<b>9.1</b>	<b>5.2</b>

Source: Ministry of Health, Public Health Intelligence

## ETHNIC DIFFERENCES

Māori and Pacific drinkers are significantly more likely than drinkers in the total population to have a potentially hazardous drinking pattern. Asian drinkers are significantly less likely to have such a pattern. These ethnic differences are evident for both sexes.

Table H6.2 **Age-standardised potentially hazardous drinking prevalence rate (%), for drinkers aged 15 years and over by ethnic group and sex, 1996/1997, 2002/2003, 2006/2007**

	European/ Other	Māori	Pacific peoples	Asian	Total 15+
<b>1996/1997</b>					
Male	31.0	46.1	48.2	11.6	30.9
Female	12.0	30.6	20.8	5.1	13.3
<b>Total</b>	<b>21.6</b>	<b>38.3</b>	<b>38.1</b>	<b>9.4</b>	<b>22.3</b>
<b>2002/2003</b>					
Male	29.9	42.4	44.1	11.5	30.6
Female	13.3	24.1	24.3	4.8	14.2
<b>Total</b>	<b>21.7</b>	<b>32.9</b>	<b>36.1</b>	<b>8.6</b>	<b>22.5</b>
<b>2006/2007</b>					
Male	32.1	46.8	46.6	12.9	31.2
Female	14.5	28.5	25.8	3.8	14.7
<b>Total</b>	<b>23.1</b>	<b>37.5</b>	<b>37.7</b>	<b>8.9</b>	<b>22.9</b>

Source: Ministry of Health, Public Health Intelligence

Notes: (1) Rates are age-standardised using the WHO world population (2) People who reported more than one ethnic group are counted once in each group reported

## SOCIO-ECONOMIC DIFFERENCES

The proportion of drinkers aged 15 years and over with a potentially hazardous drinking pattern in 2006/2007 was significantly higher (at 30.8 percent) in the most deprived small areas (NZDep2006 quintile 5) than in all other areas (quintiles 1–4), where proportions ranged from 19–24 percent.

## INTERNATIONAL COMPARISON

Because of the paucity of international data using the AUDIT method of identifying potentially hazardous drinking, this section uses information on annual per person alcohol consumption compiled by the OECD. New Zealand had the 14th lowest level of alcohol consumption out of 30 OECD countries in 2003–2006, with a per person consumption of 9.4 litres in 2006. New Zealand's alcohol consumption was higher than that of the United States (8.4 litres in 2005) and Canada (8.0 litres in 2005), similar to that of Australia (9.8 litres in 2005), but lower than that of the United Kingdom (10.9 litres in 2006). The OECD median in 2003–2006 was 9.8 litres of alcohol per person.

## DESIRED OUTCOMES

Everybody has the knowledge and skills needed to participate fully in society. Lifelong learning and education are valued and supported.

# Knowledge and Skills

## INTRODUCTION

Knowledge and skills enhance people's ability to meet their basic needs, widen the range of options open to them in every sphere of life, and enable them to influence the direction their lives take. The skills people possess can also enhance their sense of self-worth, security and belonging.

We live in a society where access to information and proficiency with technology are becoming more important. An inclusive society will increasingly require everybody to have high levels of knowledge and skills.

Knowledge and skills include education and training, as well as abilities gained through daily life. The experiences of very young children within their families affect their acquisition and use of knowledge and skills, and influence their capacity to learn. Adults acquire skills through their work and non-work activities – for example, parenting skills or skills relevant to recreation or leisure activities.

For many people, the acts of learning and mastering new skills are important in themselves. Possession of knowledge and skills can be integral to a person's sense of belonging and self-worth: many people define themselves by what they can "do", not only in employment but elsewhere in life.

Knowledge and skills relate directly to employment decisions and to career choices. Those with relatively few educational qualifications are more likely to be unemployed and, on average, have lower incomes when in work. This affects people's economic standard of living as well as their security and ability to make choices about their lives. Knowledge and skills are important for gaining access to services and for understanding and exercising civil and political rights.

## INDICATORS

Four indicators are used in this chapter. Each provides a snapshot of New Zealanders' acquisition of knowledge and skills at a particular stage in their lives, from early childhood to school-leaving age to adulthood. They are: participation in early childhood education, school leavers with higher qualifications, participation in tertiary education and the educational attainment of the adult population. The focus of the indicators is on formal education and training. This reflects the importance of formal education and training and also the availability of data – there is little data that captures the contribution of informal, on-the-job training to acquiring knowledge and skills.

The indicators are relevant to current and future social wellbeing. Participation in early childhood education contributes significantly to a child's later development. Going to a kindergarten, kōhanga reo or some other early childhood service prepares children for further learning, helps equip them to cope socially at school and develops their bodies and minds to better prepare them for adult life. Quality early childhood programmes can help narrow the achievement gap between children from low-income families and children from more advantaged families.<sup>46</sup>

Students who obtain higher qualifications at school tend to have more options for tertiary education and future employment. Those who leave school early have a greater risk of unemployment or low incomes.<sup>47</sup>

Participation in tertiary education opens up career opportunities and improves the skills people need to participate in society. This has become particularly important with the increasing dependence on "knowledge" industries that require well-educated, highly skilled workforces. It also captures aspects of lifelong learning through participation in tertiary education.

Educational attainment of the adult population provides a broad picture of New Zealanders' possession of knowledge and skills. It is influenced by factors not measured in the other indicators, such as adults gaining new qualifications and new migrants arriving with qualifications.

# Participation in early childhood education

## DEFINITION

The number of enrolments of children aged 3 and 4 years in early childhood centres or home-based education programmes as a proportion of all 3 and 4 year olds.

The measure includes all forms of organised and sustained centre and home-based programmes designed to foster learning and emotional and social development in children. The measure overestimates participation because children enrolled in more than one early childhood centre will be double-counted. Information from an alternative measure which avoids double counting – the proportion of Year 1 students who participated in early childhood education – is also included.

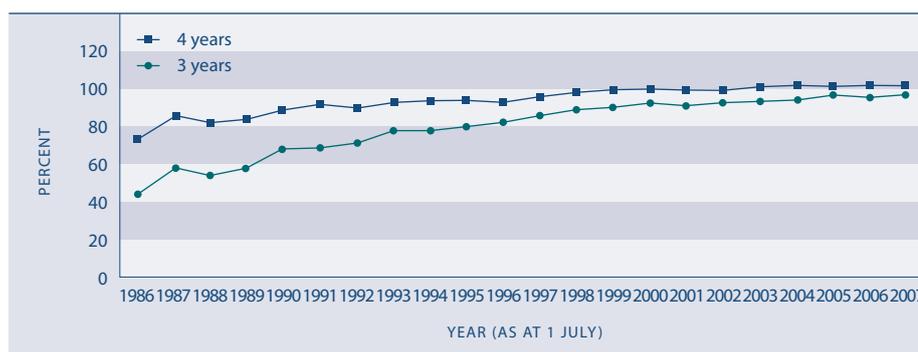
## RELEVANCE

Evidence from New Zealand and international research shows that the early childhood years are vital to a child’s development and their future ability to learn.<sup>48</sup> Quality early childhood programmes prepare young children socially, physically and academically for entry into primary education and can help narrow the achievement gap between children from low-income families and those from more advantaged families.

## CURRENT LEVEL AND TRENDS

As at 1 July 2007, the “apparent” early childhood education participation rate was 97 percent for 3 year olds and 102 percent for 4 year olds, confirming that some children attend more than one service. These figures represent a substantial increase from 43 percent and 73 percent respectively in 1986. Much of the growth in participation in early childhood education occurred in the five years between 1986 and 1991. Between 1997 and 2007, the participation of 3 year olds increased by 11.3 percentage points and by 5.7 percentage points for 4 year olds.

Figure K1.1 **Early childhood education apparent participation rate, 3 and 4 year olds, 1986–2007**



Source: Ministry of Education; Ministry of Social Development

Note: These figures overestimate the true participation rate. Rates in excess of 100 percent are possible because children can be enrolled in more than one service

## SEX DIFFERENCES

Participation in early childhood education does not appear to vary by sex: boys make up just over half (51 percent) of all enrolments of children aged 3 and 4 years, the same proportion as in the population.

## PARTICIPATION BY TYPE OF EARLY CHILDHOOD EDUCATION SERVICE

In 2007, childcare centres (44 percent) and kindergartens (37 percent) had the largest number of enrolments of 3 and 4 year olds in early childhood education. Much smaller numbers of children were enrolled in playcentres (5 percent) and kōhanga reo (4 percent).

## PRIOR PARTICIPATION BY YEAR 1 STUDENTS

The prior participation rate is an alternative measure that avoids double counting. The percentage of new school entrants who have previously participated in early childhood education services has increased over the last seven years, from 91 percent in July 2000 to 95 percent in July 2007.

## ETHNIC DIFFERENCES

New Zealand European children are the most likely to have attended an early childhood education service before entering primary school: 98 percent compared with 96 percent of Asian, 91 percent of Māori and 84 percent of Pacific Year 1 students in 2007. From 2000 to 2004, the prior participation rate for both Māori and Pacific new entrants increased faster than the rate for New Zealand European new entrants, narrowing the difference between these groups. However, since 2004, the growth in the rate for Māori has slowed, and there has been a slight decline in the proportion of Pacific new entrants who had attended early childhood education services before starting school.

Table K1.1 **Early childhood education attendance (%) by Year 1 students, by ethnic group, as at 1 July 2000–2007**

	European	Māori	Pacific	Asian	Other	Total
2000	95.4	84.8	76.1	89.2	83.0	91.0
2001	96.0	85.3	76.3	89.8	84.1	91.4
2002	96.6	86.5	79.4	92.1	86.6	92.3
2003	97.4	88.4	83.4	92.4	88.9	93.6
2004	97.6	89.3	84.7	94.1	89.4	94.1
2005	97.7	89.9	84.5	95.1	89.9	94.3
2006	98.0	89.9	84.2	96.0	91.7	94.5
2007	98.2	90.6	84.0	96.0	93.6	94.7

Source: Ministry of Education

Note: These figures exclude cases where attendance was unknown

## SOCIO-ECONOMIC DIFFERENCES

Year 1 children in low decile schools (those that draw their students from communities with the highest degree of socio-economic disadvantage) are much less likely to have attended an early childhood education service than children in high decile schools. In 2007, only 83 percent of new entrants in decile 1 schools had previously attended early childhood education services, compared with 97 percent in decile 6 schools and 99 percent in decile 10 schools.

## REGIONAL DIFFERENCES

In 2007, prior participation in early childhood education was highest in the Canterbury region (99 percent) and Otago (98 percent), and lowest in Northland (91 percent), Auckland and Gisborne (both 92 percent).

# School leavers with higher qualifications

## DEFINITION

The proportion of secondary school leavers who left school with a qualification at National Certificate of Educational Achievement (NCEA) Level 2 or above.

## RELEVANCE

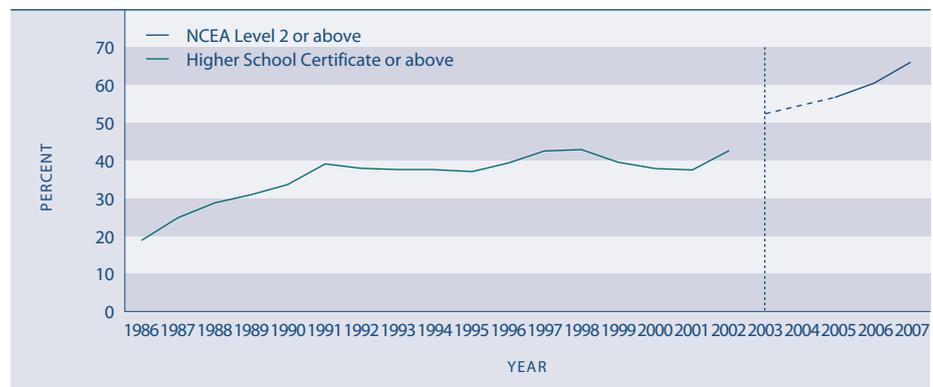
Upper secondary school qualifications serve as the foundation for higher (post-secondary) learning and training opportunities as well as the preparation for direct entry into the labour market. Those who leave school early with few qualifications are at a much greater risk of unemployment or vulnerability in the labour force and of having low incomes.<sup>49</sup>

## CURRENT LEVEL AND TRENDS

In 2007, 66 percent of school leavers (37,000 students) left school with a qualification at NCEA Level 2 or above, an increase from the 2006 figure of 60 percent (34,000 students).<sup>50</sup> Because of changes in the qualification structure, it is not possible to compare exactly the attainment of upper secondary school students who left school before 2003 with those who left school in 2003 and later. To illustrate the trend in higher school attainment over the long term, Figure K2.1 includes the proportion of school leavers who left with Higher School Certificate and above for the years 1986 to 2002.

Figure K2.1

**Proportion of school leavers with Higher School Certificate or above, 1986–2002 and NCEA Level 2 or above, 2003, 2005–2007**



Source: Ministry of Education

Notes: (1) A direct comparison cannot be made between rates up to and including 2002 with rates for 2003 on, due to the change in the qualification structure (see Appendix 2 for details) (2) Because of methodological changes, 2004 is not comparable with other years and has been omitted

## SEX DIFFERENCES

Female students are more likely than male students to leave school with an upper secondary school qualification. Between 2006 and 2007, the proportion of school leavers with NCEA Level 2 or above increased for both sexes but there was a slightly larger increase for females than for males. As a result, the sex difference in school attainment widened slightly between 2006 and 2007, from 8.7 percentage points to 9.3 percentage points.

Table K2.1 **Proportion (%) of school leavers with NCEA Level 2 or above, by sex, 2003, 2005–2007**

	Males	Females
2003	47.6	57.9
2005	52.0	62.3
2006	55.8	64.5
2007	60.9	70.2

Source: Ministry of Education

Note: Because of methodological changes, 2004 is not comparable with other years and has been omitted

## ETHNIC DIFFERENCES

The proportion of school leavers with upper secondary school qualifications varies widely by ethnic group. Asian students who left school in 2007 had the highest proportion with NCEA Level 2 or above, followed by European school leavers, then Pacific and Māori school leavers. Between 2006 and 2007, there was an increase for all ethnic groups in the proportion of students leaving with a qualification at NCEA Level 2 or above. The increase was greater for Māori and Pacific students than for European and Asian students.

Table K2.2 **Proportion (%) of school leavers with NCEA Level 2 or above, by ethnic group, 2003, 2005–2007**

	European	Māori	Pacific peoples	Asian	Other	Total
2003	57.4	28.8	42.3	75.1	54.2	52.6
2005	63.0	32.7	45.3	79.9	55.8	57.1
2006	65.4	36.7	49.6	82.2	63.5	60.2
2007	70.6	43.9	56.0	84.2	67.0	65.5

Source: Ministry of Education

Note: Because of methodological changes, 2004 is not comparable with other years and has been omitted

## SOCIO-ECONOMIC DIFFERENCES

Young people from schools that draw their students from low socio-economic communities are less likely than other young people to attain higher school qualifications. In 2007, only 49 percent of school leavers from deciles 1–3 schools (in the most disadvantaged communities) attained qualifications at NCEA Level 2 or above, compared with 62 percent of those leaving deciles 4–7 schools and 79 percent of those leaving deciles 8–10 schools.

## REGIONAL DIFFERENCES

The Otago, Wellington and Auckland regions had the highest proportion (70 percent) of 2007 school leavers with qualifications at NCEA Level 2 or above, followed by Canterbury (68 percent). The West Coast had the lowest proportion (45 percent), followed by Gisborne (55 percent) and Tasman (57 percent).

# Participation in tertiary education

## DEFINITION

The proportion of the population aged 15 years and over enrolled at any time during the year in formal tertiary education leading to a recognised New Zealand qualification.

Tertiary education providers include public institutions (universities, polytechnics, wānanga) and private tertiary education providers receiving government funding or approval and registered with the New Zealand Qualifications Authority. Qualifications range from certificates and diplomas to bachelor and post-graduate degrees. Domestic students only are included. Students who were enrolled at more than one qualification level have been counted in each level.

## RELEVANCE

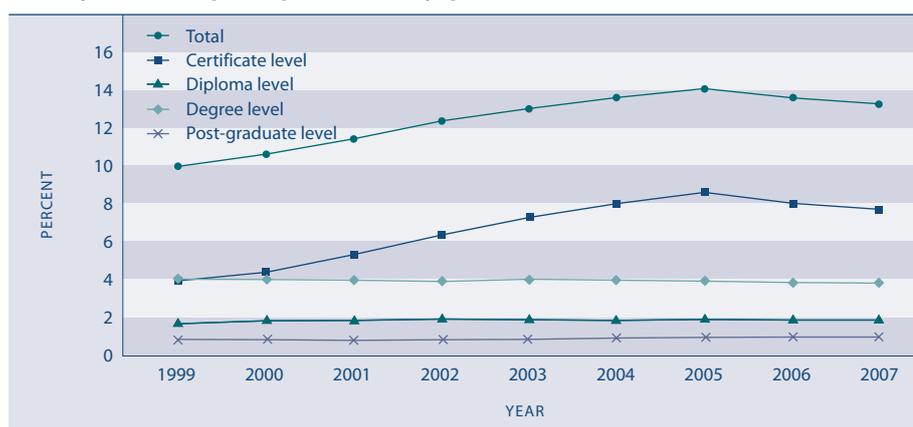
The acquisition of a tertiary qualification provides individuals with additional skills and knowledge to participate in society and in the economy.

## CURRENT LEVEL AND TRENDS

During 2007, 13.3 percent of people aged 15 years and over (444,000 people) were enrolled in formal tertiary education, a slight decline from 13.6 percent (448,000 people) in 2006. This followed a slight fall in the previous year and may be partly attributable to changes in funding policies in 2005. These policy changes focused on reducing the number of low quality or low relevance qualifications being offered below degree level.

Most of the decline in tertiary education participation between 2005 and 2007 was due to a fall in the number of people taking Levels 1–3 certificate courses. The rate of participation in certificate level courses as a whole (ie Levels 1–4) grew strongly between 1999 and 2005 (from 3.9 percent to 8.6 percent), then fell to 7.7 percent in 2007. In total, 9.6 percent of people aged 15 years and over were enrolled in sub-degree tertiary education courses in 2007, up from 5.6 percent in 1999. In comparison, the proportion enrolled in degree and post-graduate courses remained fairly steady at around 5 percent over the period 1999–2007.

Figure K3.1 **Tertiary education participation rate, by qualification level, 1999–2007**



Source: Ministry of Education

## AGE AND SEX DIFFERENCES

Tertiary education participation is highest among 18–19 year olds (46.0 percent in 2007), followed by 20–24 year olds (32.9 percent). The participation rate for 18–19 year olds increased slightly between 2005 and 2007, while the rate for 20–24 year olds remained steady. Participation rates declined for other age groups, particularly for under 18 year olds and people aged 25–39 years.

Since the mid-1990s, women have been more likely than men to participate in tertiary study at ages 18 years and over. However, as the fall in enrolments by

females in certificate level qualifications accounted for most of the decline in enrolments between 2005 and 2007, the sex gap has narrowed. In 2007, there was no sex difference in the proportion enrolled in sub-degree courses (9.6 percent of males and females), but females were more likely than males to be enrolled in degree and post-graduate courses (5.7 percent and 3.9 percent, respectively).

Table K3.1 **Tertiary participation rates (%), by age and sex, selected years, 1999–2007**

	Under 18	18–19	20–24	25–39	40+	Total
<b>Males</b>						
1999	9.2	40.3	28.9	9.9	2.7	9.1
2003	9.9	38.6	29.8	14.1	5.3	11.6
2005	14.5	40.9	29.7	15.1	6.7	12.9
2006	10.8	42.3	30.7	14.6	7.0	12.8
2007	10.3	42.7	31.2	14.3	6.8	12.5
<b>Females</b>						
1999	8.3	46.5	31.1	12.7	4.3	10.8
2003	9.0	46.7	36.0	19.0	7.5	14.5
2005	12.3	48.6	35.9	19.6	8.5	15.4
2006	9.2	48.8	34.8	17.8	8.0	14.4
2007	8.7	49.6	34.6	16.9	7.8	14.0

Source: Ministry of Education, Table PPN.1

## ETHNIC DIFFERENCES

In 2007, the age-standardised tertiary education participation rate was highest for Māori at 18 percent, followed by the Asian ethnic group (14 percent), Europeans and Pacific peoples (both 12 percent). The increase in the age-standardised rate between 2001 and 2007 was higher than average for the Māori, Pacific and Asian ethnic groups. The slight fall in the age-standardised rate between 2006 and 2007 occurred across all ethnic groups except Pacific peoples.

In the peak tertiary education age group, 18–19 years, the Asian and European ethnic groups had considerably higher participation rates than Māori and Pacific peoples. However, in the 20–24 years age group the differences between the ethnic groups were much smaller.

At older ages, Māori had the highest tertiary participation rates in 2007, followed by the Asian, Pacific peoples and European ethnic groups.

Table K3.2 **Tertiary participation rates (%), by age and ethnic group, 2007**

Age group	European	Māori	Pacific peoples	Asian
Under 18	8.9	12.6	7.7	4.1
18–19	46.1	34.6	37.4	46.8
20–24	33.5	28.7	26.8	27.5
25–39	13.5	22.5	15.6	14.8
40+	5.8	15.6	8.2	11.0

Source: Ministry of Education, Table PPN.5

In 2007, Māori and Pacific students (each 3.1 percent) were less likely to be enrolled in degree-level courses than students from the Asian (5.6 percent) or European (3.7 percent) ethnic groups. However, Māori females (4.0 percent) and Pacific females (3.9 percent) were more likely than European males (2.8 percent) to be enrolled in bachelor's degree courses.

Almost all of the decline in Māori enrolments between 2005 and 2007 was due to fewer Māori taking certificate-level courses.

## INTERNATIONAL COMPARISON

There are no robust measures of tertiary participation across OECD countries. Some indication of New Zealand's relative standing can be gained from the proportion of people enrolled in education at diploma and degree level at various ages. In 2005, 30 percent of 20–29 year olds (the age group that is usually only enrolled in tertiary education) were enrolled in education, placing New Zealand seventh out of 28 countries. This was above the OECD median of 24 percent. The New Zealand rate was higher than those of the United Kingdom (29 percent) and the United States (23 percent) but below the rate for Australia (33 percent).<sup>51</sup>

# Educational attainment of the adult population

## DEFINITION

The proportion of adults aged 25–64 years with an educational attainment of at least upper secondary school level, defined in the International Standard Classification of Education (ISCED 1997) as Level 3 and above, and including tertiary qualifications at bachelor’s degree and above (Level 5A/6).

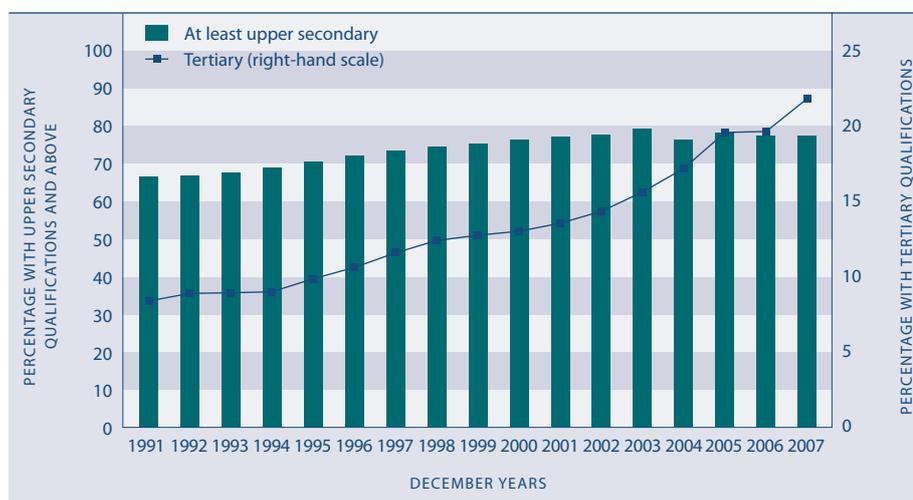
## RELEVANCE

The educational attainment of the adult population is an indicator of the skills available in the economy. The level of formal educational qualifications in the population is a commonly used proxy for the stock of “human capital”, ie the skills available in the population and labour force.

## CURRENT LEVEL AND TRENDS

In the year ended December 2007, 76 percent of the population aged 25–64 years (1.64 million people) had attained an educational qualification at upper secondary level or above. This was a slightly lower than in 2006 (77 percent) but a substantial increase from 67 percent in 1991. Over the same period the proportion of adults with a bachelor’s degree or higher qualification rose from 8 percent to 22 percent (472,000 people).

Figure K4.1 **Proportion of adults aged 25–64 years with an educational attainment of at least upper secondary level and tertiary level, 1991–2007**



Source: Statistics New Zealand, Household Labour Force Survey

Notes: (1) Tertiary equals bachelor’s degree or higher (2) This measure has been revised – see Appendix 2 for details

## AGE AND SEX DIFFERENCES

Younger adults aged 25–34 years are much more likely to have at least upper secondary school qualifications or a bachelor’s degree or higher than adults aged 55–64 years.

Sex differences in educational attainment have narrowed over time. For younger age groups, women are more likely than men to have higher qualifications.

Table K4.1 **Proportion (%) of population aged 25–64 years with higher qualifications, by age and sex, 2007**

	25–34	35–44	45–54	55–64	Total 25–64
<b>At least upper secondary</b>					
Males	80.4	78.8	76.0	71.3	76.9
Females	83.9	78.2	75.0	60.7	75.3
<b>Total</b>	<b>82.2</b>	<b>78.4</b>	<b>75.5</b>	<b>66.0</b>	<b>76.1</b>
<b>Tertiary</b>					
Males	25.7	22.6	19.7	17.3	21.5
Females	32.8	23.5	18.2	12.3	22.2
<b>Total</b>	<b>29.4</b>	<b>23.0</b>	<b>18.9</b>	<b>14.8</b>	<b>21.8</b>

Source: Statistics New Zealand, Household Labour Force Survey, December years

Notes: (1) Tertiary equals bachelor's degree or higher (2) This measure has been revised – see Appendix 2 for details

## ETHNIC DIFFERENCES

Māori and Pacific adults are much less likely than adults in the European and Other ethnic groups to have higher qualifications. In the year ended December 2007, 63 percent of Māori and 50 percent of Pacific adults aged 25–64 years held at least upper secondary qualifications, compared with 80 percent of Europeans. Similarly, just 9 percent of Māori and 8 percent of Pacific adults held a tertiary qualification at bachelor's degree level or above, compared with 22 percent of Europeans. However, while the proportion of adults with a tertiary qualification at bachelor's degree level or above almost doubled in the decade to 2007, it more than trebled for Māori and Pacific adults. The Other ethnic group (which includes Asians and, in 2007, the category "New Zealander") has consistently had the highest proportion of adults with a tertiary qualification, almost double that of the total adult population in 2007.

Table K4.2 **Proportion (%) of population aged 25–64 years with higher qualifications, by ethnic group, selected years, 1996–2007**

	European	Māori	Pacific	Other	Total
<b>At least upper secondary</b>					
1996	75.3	48.4	45.1	79.4	71.8
2001	78.8	59.9	65.8	85.1	76.8
2006	80.2	61.0	53.6	83.6	77.4
2007	80.1	62.9	49.7	72.7	76.1
<b>Tertiary</b>					
1996	10.8	2.5	1.9	27.4	10.6
2001	13.2	5.0	5.6	32.0	13.4
2006	18.9	8.5	7.1	39.0	19.5
2007	21.6	9.4	8.4	39.3	21.8

Source: Statistics New Zealand, Household Labour Force Survey, December years

Notes: (1) In this data, Other includes Asian ethnic groups (2) Tertiary equals bachelor's degree or higher (3) This measure has been revised – see Appendix 2 for details

## INTERNATIONAL COMPARISON

In 2005, 79 percent of New Zealand adults had at least upper secondary level qualifications, compared with an OECD average of 68 percent.<sup>52</sup> New Zealand ranked 10th equal (with Finland) out of 29 OECD countries. New Zealand also ranked 12th equal (with Spain) out of 30 OECD countries in the proportion of adults who have bachelor's degrees or higher, with a rate of 20 percent (just above the OECD average of 19 percent). Countries which had higher proportions of adults with qualifications at this level included the United States and Norway (each 30 percent – the highest rate), Canada and Australia (each 23 percent), and the United Kingdom (21 percent). New Zealand is among the 22 OECD countries in which females aged 25–34 years are more likely than males of that age to have tertiary qualifications at bachelor's degree level or higher.

## DESIRED OUTCOMES

Everybody has access to meaningful, rewarding and safe employment. An appropriate balance is maintained between paid work and other aspects of life.

# Paid Work

## INTRODUCTION

Paid work has an important role in social wellbeing. It provides people with incomes to meet their basic needs and to contribute to their material comfort, and gives them options for how they live their lives. Paid work is also important for the social contact and sense of self-worth or satisfaction it can give people.

The desired outcomes highlight four aspects of paid work: access to work, the financial return from work, the safety of the working environment and the balance between work and other areas of life.

For most people, income from paid work is the main factor determining their material standard of living. On average, about two-thirds of total household income is derived directly from labour market income, and the figure is substantially greater for most households.<sup>53</sup> Income saved during their working life contributes to the standard of living of many retired people.

The social and personal dimensions of paid work are both important. Ideally, work should not only be materially rewarding but it should contribute to other aspects of wellbeing. Meeting challenges at work can contribute to a sense of satisfaction and self-worth. Paid work is more likely to be satisfying where people can find employment to match their skills and abilities.

Social contact is an important part of wellbeing. For many people, much of their social contact is through their jobs. People often gain a sense of belonging or identity from their jobs, identifying themselves and others because of the organisation they work for or the type of work they do.

Conversely, unemployment can isolate people from society and cause them to lose self-confidence. Unemployment is associated with poorer mental and physical health, and lower levels of satisfaction with life.<sup>54</sup>

The quality of work is critically important. A meaningful job can enhance people's satisfaction with their work. An unsafe job, on the other hand, places people's wellbeing at risk.

Work can also be stressful. People may be required to work longer hours than they want to or need to. The desired outcomes acknowledge that wellbeing is best served by maintaining a balance between paid work and other aspects of life including spending time with the family, taking part in leisure and recreational activities, and doing unpaid work such as housework and voluntary work. Where that balance lies will differ from person to person.

## INDICATORS

Five indicators are used in this chapter. They are: the unemployment rate, the employment rate, median hourly earnings, workplace injury claims and satisfaction with work-life balance.

Together, these indicators present a picture of people's access to employment, the financial rewards from employment, the safety of employment and the balance between work and other areas of life.

The first indicator is the unemployment rate. The unemployment rate measures the proportion of the total labour force who are without a paid job, who are available for work and who are either actively seeking work or who are about to start a new job. This is a relatively narrow measure of unemployment but it accords closely with the OECD standard measure, allowing international comparisons. Information about long-term unemployment is also provided.

The second indicator is the employment rate. The employment rate provides an alternative picture of people's access to paid work. It is influenced not only by the amount of work available but also by trends in labour force participation. The indicator measures the proportion of the working-age population aged 15–64 years employed for one hour or more a week. Information is provided on the breakdown between full-time and part-time employment. The employment rate complements the unemployment rate as an indicator. The employment rate can be affected by factors including changes in the number of discouraged workers who are not employed but who are not actively seeking work and changes to the working-age population.

Both the unemployment and the employment rates are affected by several factors, including economic conditions, migration flows, people's qualifications and abilities, and their decisions on whether to undertake paid work.

The third indicator measures median hourly earnings from waged and salaried employment. The level of financial return from paid employment independent of the number of hours worked is central to the quality of paid work.

The fourth indicator is the rate of workplace injury claims per 1,000 full-time equivalent employees. Workplace safety is important in its own right, but may also be a proxy for the quality of employment. Jobs should not pose an unreasonable risk to people's lives or physical wellbeing.

The final indicator measures the proportion of the population in paid employment who are satisfied with their work-life balance.

# Unemployment

## DEFINITION

The unemployment rate is the number of people aged 15 years and over who are not employed and who are actively seeking and available for paid work, expressed as a percentage of the total labour force.

The labour force is defined as the population aged 15 years and over who are either employed or unemployed.

## RELEVANCE

This is a key indicator of labour market outcomes and the lack of access to employment. The unemployment rate is an important reflection of overall economic conditions and gives some sense of the ease with which people are able to move into employment.

## CURRENT LEVEL AND TRENDS

In 2007, 3.6 percent of the labour force (or 79,900 people) were unemployed and actively seeking work, a decline from 3.8 percent (or 82,600 people) in 2006. The unemployment rate has declined steadily since 1998 and is considerably lower than the peak rate of 10.4 percent in 1992 (176,000 people unemployed). The 2007 unemployment rate was lower than the rate of 4.1 percent in 1986 when records began (70,000 people unemployed).

In 2007, 17 percent of the surveyed unemployed who specified their duration of unemployment had been unemployed for a continuous period of six months or more, a decline from 20 percent in 2006. The 2007 level of long-term unemployment was below that recorded in 1986 (23 percent) and substantially lower than the peak of 53 percent recorded in 1992.

Figure PW1.1 **Unemployment rate, 1986–2007**



Source: Statistics New Zealand, Household Labour Force Survey

## AGE AND SEX DIFFERENCES

Unemployment rates among different age groups have followed similar trends. The unemployment rate for 15–24 year olds has, in every year, been greater than that for older age groups because those with fewer skills and less experience take longer to find suitable employment. Unemployment rates were higher for males than females in the peak years of unemployment but, since 2002, females have had slightly higher unemployment rates than males.

Table PW1.1

**Unemployment rates (%), by age and sex, selected years, 1986–2007**

Year	15–24	25–44	45–64	Total 15+	Males	Females
1986	7.9	3.2	1.9	4.1	3.6	4.8
1991	18.8	8.8	6.1	10.3	10.9	9.6
1996	11.8	5.2	3.9	6.1	6.1	6.1
2001	11.8	4.4	3.4	5.3	5.3	5.3
2006	9.6	2.9	2.1	3.8	3.5	4.1
2007	9.7	2.7	1.8	3.6	3.3	3.9

Source: Statistics New Zealand, Household Labour Force Survey

Note: Average for December years

**ETHNIC DIFFERENCES**

The Māori unemployment rate rose from 11.3 percent in 1986 to a peak of 25.4 percent in 1992. It had fallen to 7.7 percent by 2007, the lowest rate since the Household Labour Force Survey began. Between 1986 and 1991, the unemployment rate for Pacific peoples rose from 6.6 percent to 28 percent, the highest rate for any ethnic group. Since the early-1990s, the Pacific peoples' unemployment rate has declined more than that of Māori and was 6.5 percent in 2007. This was lower than the rate in 1986.

The unemployment rate is lowest among people of European ethnicity. Their unemployment rate rose from 3.3 percent in 1986 to a peak of 7.9 percent in 1992 and had dropped to 2.6 percent by 2007. The unemployment rate of the Other ethnic group category (which includes Asians) increased from 3.7 percent in 1986 to 14.8 percent in 1992, before falling to 5.5 percent in 2007. This group includes many recent migrants.

Figure PW1.2

**Unemployment rate, by ethnic group, 1986–2007**

Source: Statistics New Zealand, Household Labour Force Survey

Note: The Other ethnic group includes Asian

**INTERNATIONAL COMPARISON**

In 2007, out of 27 OECD countries, New Zealand ranked fourth (after Norway, South Korea and the Netherlands) with a standardised unemployment rate of 3.6 percent, compared with the OECD average of 5.6 percent. Since the mid-1980s, New Zealand's unemployment rate relative to other OECD countries has ranged from one of the lowest (fifth in 1986 with a rate of 4.1 percent) to one of the highest (18th in 1992 with a rate of 10.4 percent). The New Zealand unemployment rate in 2007 was lower than those of Japan (3.9 percent), Australia (4.4 percent), the United States (4.6 percent), the United Kingdom (5.3 percent), and Canada (6.0 percent).<sup>55</sup> In 2007, New Zealand had the fifth lowest proportion of unemployed who had been unemployed for six months or longer.<sup>56</sup>

# Employment

## DEFINITION

The employment rate is the proportion of the population aged 15–64 years who are employed for at least one hour per week.

## RELEVANCE

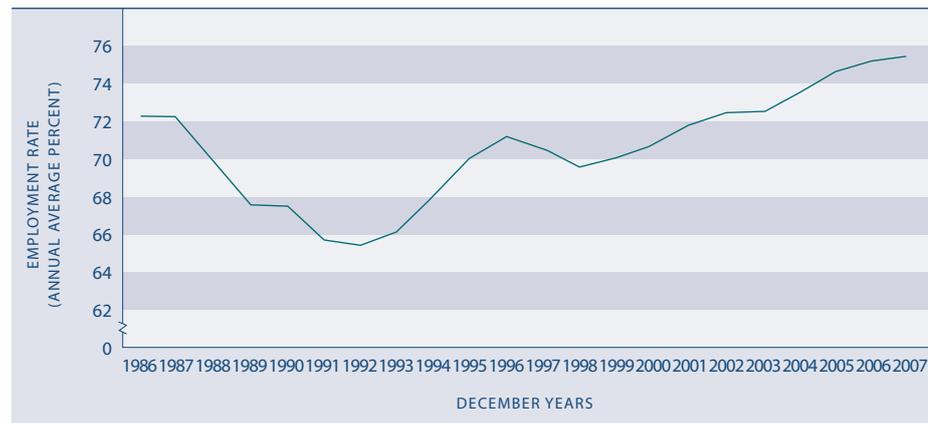
The employment rate is the best available indicator of the prevalence of paid employment. It is affected by trends in both unemployment and labour force participation (the proportion of the working-age population either employed or unemployed).

## CURRENT LEVEL AND TRENDS

In 2007, 75.4 percent of 15–64 year olds (2.086 million people) were employed. This was an increase from 75.2 percent in 2006 and higher than the rate recorded in 1986 (72.3 percent). The employment rate has been rising since 1992, except during the economic downturn in 1997 and 1998. The increase from 65.4 percent in 1992 to 75.4 percent in 2007 corresponds to a rise of 582,000 in the number of employed people aged 15–64 years. Over the same period, the number of people aged 15–64 years increased by 465,300.

The full-time employment rate for 15–64 year olds declined sharply between 1986 (60.4 percent) and 1992 (51.5 percent), and had almost recovered to the mid-1980s level by 2007 (59.0 percent). The part-time employment rate increased throughout the period, from 11.9 percent in 1986 to 16.4 percent in 2007. Although the part-time rate has almost doubled for men since 1986, women continue to have a higher part-time employment rate than men (24.0 percent compared with 8.6 percent in 2007).

Figure PW2.1 **Employment rate, 1986–2007**



Source: Statistics New Zealand, Household Labour Force Survey  
Note: Based on population aged 15–64 years

## AGE AND SEX DIFFERENCES

The fall in the employment rate between 1987 and 1992 affected all age groups but was most pronounced for young people aged 15–24 years. Youth employment rates have remained relatively low during the period of employment growth since 1992, possibly due to a growth in their participation in tertiary education and training. Conversely, employment rates for people aged 45–64 years have grown strongly since 1992, driven mainly by the phasing in of the higher age of eligibility for New Zealand Superannuation, the rise in employment among women, and an increase in the demand for labour.

The employment rate for women is significantly lower than that for men. This is mainly because women spend more time on childcare and other unpaid household work, and are more likely than men to undertake some form of study or training. The sex gap in the employment rate is narrowing as female employment grew more rapidly than male employment between 1992 and 2007.

Table PW2.1

**Employment rates (%), by age and sex, selected years, 1986–2007**

Year	15–24	25–44	45–64	65+	Males 15–64	Females 15–64	Total 15–64
1986	68.7	79.3	64.8	8.8	84.6	60.2	72.3
1991	55.0	74.0	61.5	6.0	74.0	57.5	65.7
1996	59.5	77.3	70.2	6.6	79.0	63.4	71.1
2001	55.8	77.9	73.5	8.6	79.1	64.8	71.8
2006	58.8	80.7	78.7	12.5	82.1	68.4	75.2
2007	58.6	81.0	79.2	14.1	82.1	69.0	75.4

Source: Statistics New Zealand, Household Labour Force Survey

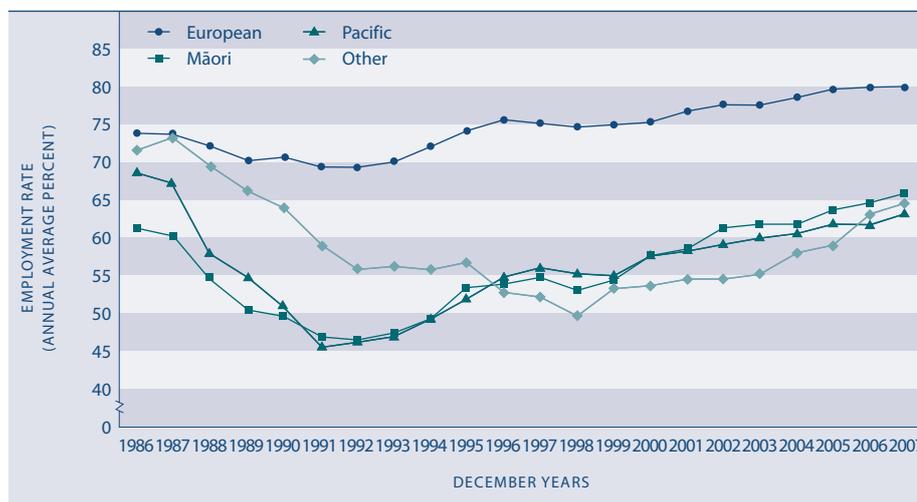
Note: Average for December years

## ETHNIC DIFFERENCES

The employment rates for Māori and Pacific peoples showed the steepest fall between 1987 and 1992, but have also shown the strongest recovery since then. In 2007, the Māori employment rate, at 65.7 percent, had surpassed the 1986 level (61.2 percent). However, Pacific peoples were still less likely to be employed in 2007 (63.2 percent) than in 1986 (68.4 percent).

The European ethnic group, with the highest employment rate, has also surpassed the level of the mid-1980s (79.9 percent employed in 2007, compared with 73.8 percent in 1986). The employment rate for the Other ethnic group fell from being the second highest in the late-1980s to being the lowest over recent years. However, in 2007 their employment rate (64.5 percent) was just above that of Pacific peoples.

Figure PW2.2

**Employment rate, by ethnic group, 1986–2007**

Source: Statistics New Zealand, Household Labour Force Survey

Notes: (1) Based on population aged 15–64 years (2) The Other ethnic group includes Asian

## INTERNATIONAL COMPARISON

In 2007, New Zealand was ranked sixth highest of 30 OECD countries with an employment rate of 75.4 percent for people aged 15–64 years. This was well above the OECD average of 66.6 percent. Iceland had the highest employment rate in 2007 (85.7 percent). The New Zealand rate in 2007 was higher than those of Canada (73.6 percent), the United Kingdom (72.3 percent), Australia (72.9 percent) and the United States (71.8 percent). New Zealand had a higher female employment rate than the United Kingdom, the United States and Australia in 2007.<sup>57</sup>

# Median hourly earnings

## DEFINITION

Real median hourly earnings from all wages and salaries for employees earning income from wage and salary jobs, as measured by the New Zealand Income Survey.

## RELEVANCE

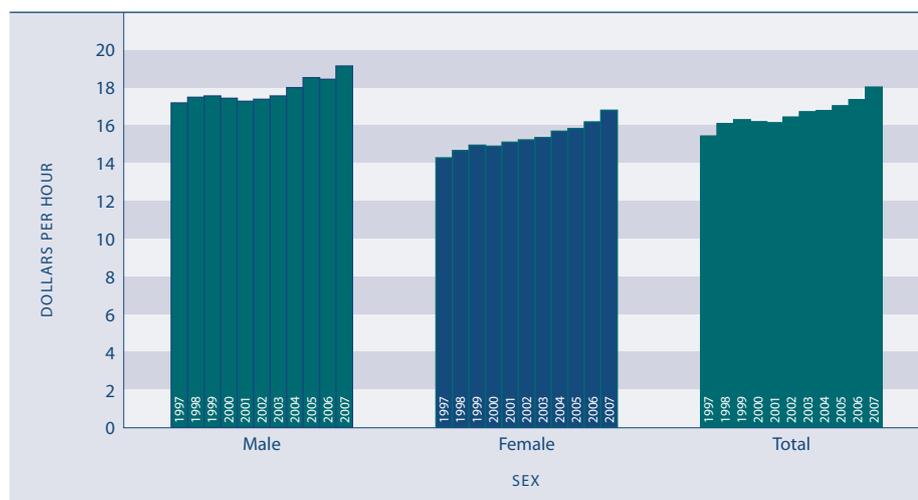
Median hourly earnings from wage and salary jobs is an indicator of the financial return from paid employment, independent of the number of hours worked.

## CURRENT LEVEL AND TRENDS

In June 2007, half of all people employed in wage and salary jobs earned more than \$18.00 an hour. The median hourly wage for male employees was \$19.10, while for female employees it was \$16.78.

Real median hourly earnings increased by \$2.65 an hour or 17 percent in the 10 years to June 2007. The increase over this period was greater for female employees (18 percent) than for male employees (11 percent). The ratio of female to male median hourly earnings was 88 percent in June 2007. It rose from 83 percent in June 1997 to 88 percent in June 2001 but has not risen above that level since.

Figure PW3.1 **Median hourly earnings from wage and salary jobs (in June 2007 dollars), by sex, June 1997–June 2007**



Source: Statistics New Zealand, New Zealand Income Survey

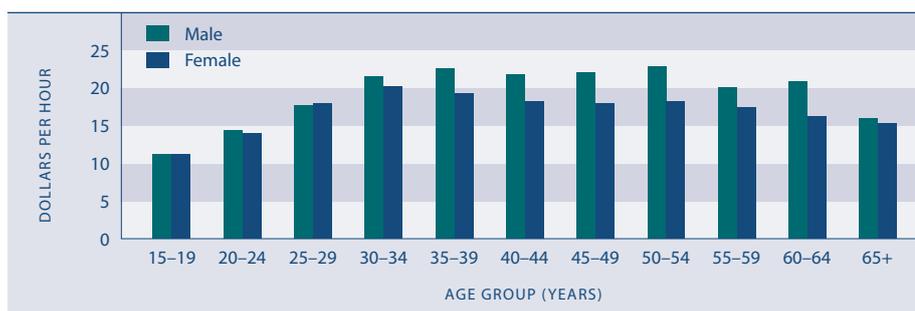
## AGE DIFFERENCES

In 2007, median hourly earnings from wage and salary jobs were highest at ages 30–34 years and 35–39 years (\$20.91 an hour). This compares with \$11.25 an hour for 15–19 year olds. By five-year age groups, the increase in employees' real median hourly earnings between 1997 and 2007 was largest for those aged 15–19 years (23 percent) and those aged 30–34 years (22 percent), and smallest for those aged 20–24 years (7 percent). Across broad age groups, real median hourly earnings increased by 7 percent for those aged 15–24 years, 18 percent for those aged 25–44 years, 14 percent for those aged 45–64 years and 16 percent for those aged 65 years and over.

## SEX DIFFERENCES

In 2007, the difference between the sexes in median hourly earnings for wage and salary earners was most evident in the over 30 years age groups. The gap was greatest at ages 60–64 years and 50–54 years, where the ratio of female to male median earnings for employees was 78 percent and 79 percent respectively. There was little difference between the earnings of men and women in the under 30 years age groups.

Figure PW3.2 **Median hourly wage and salary earnings, by age and sex, June 2007**



Source: Statistics New Zealand, New Zealand Income Survey

## ETHNIC DIFFERENCES

In June 2007, Europeans had the highest median hourly earnings for wage and salary earners at \$18.94 an hour. In comparison, the Other ethnic group (including Asian) had median hourly earnings of \$15.82. The median hourly earnings of Māori and Pacific ethnic groups were the lowest at \$15.34 and \$15.00, respectively. The ratio of Māori to European median hourly earnings was over 85 percent between 1998 and 2006 but fell to 81 percent in 2007. The ratio of Pacific peoples to European median hourly earnings was around 80 percent over the same period.

Over the 10 years to June 2007, increases in inflation-adjusted median hourly earnings from wage and salary jobs were highest for Europeans (19 percent), followed by Pacific peoples (16 percent) and Māori (15 percent). Employees from the Other ethnic group (including Asian) experienced the lowest increase in real median hourly earnings from wage and salary jobs (3 percent).

## REGIONAL DIFFERENCES

In 2007, workers in Wellington had substantially higher earnings than those in other regions. The median hourly wage for wage and salary earners was \$20.00 in Wellington, \$19.18 in Auckland, and \$17.50 in Canterbury. Median hourly wages were lowest in Gisborne-Hawke's Bay (\$16.00) and Manawatu-Wanganui (\$16.11). Over the period 1998–2007, real median hourly wages increased most in the Northland and the Nelson/Tasman/Marlborough/West Coast regions (both 17 percent). All regions experienced positive growth in real hourly wages over the period.

# Workplace injury claims

## DEFINITION

The number of workplace accident insurance claims reported to the Accident Compensation Corporation (ACC) per 1,000 full-time equivalent employees, excluding those employees who received accident and emergency treatment only.

## RELEVANCE

Safety at work is an important contributor to wellbeing and the risk of work-related accidents or illness can be seen as one component of the quality of work. The best currently available measure of the incidence of workplace injuries comes from the database of claims made to the ACC.

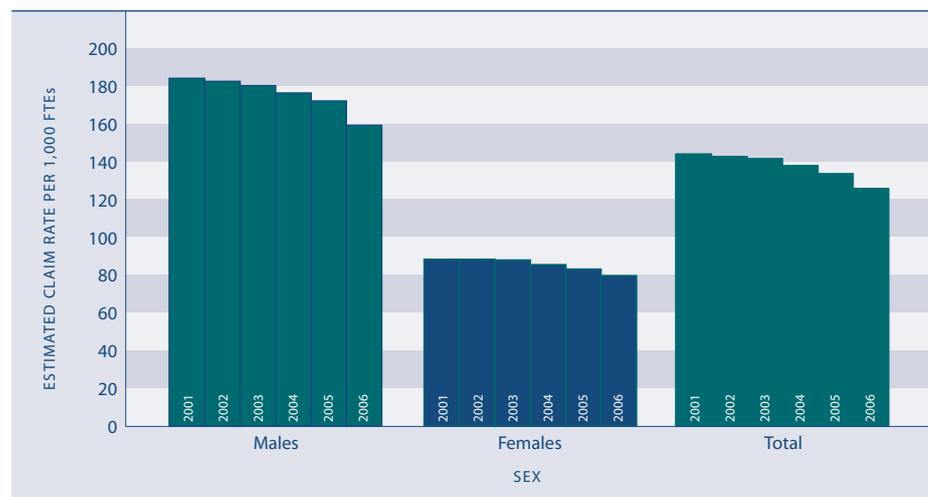
## CURRENT LEVEL AND TRENDS

Provisional data for the 2006 calendar year shows 235,200 work-related injury claims had been reported to the ACC by 31 March 2007. This represents a rate of 126 claims per 1,000 full-time equivalent employees (FTEs), lower than the provisional rate for the previous year based on claims reported by 31 March 2006 (132 per 1,000 FTEs).

Using final data for the years 2001 to 2005, the injury claim rate declined from 143 per 1,000 to 134 per 1,000 FTEs.

Figure PW4.1

**Estimated injury claim rate per 1,000 full-time equivalent employees, by sex, 2001–2006**



Source: Statistics New Zealand (2007c)

Note: 2006 data is provisional and subject to change

The majority (89 percent) of injury claims for 2006 reported by March 2007 were for medical treatment only (ie not including weekly compensation or other entitlements). Eighty-three percent of the claims were for employees, and people who employed others in their own business. The injury claim rate for the self-employed not employing others was much higher than for the rest of the workforce (187 per 1,000 FTEs compared with 118 per 1,000 FTEs).

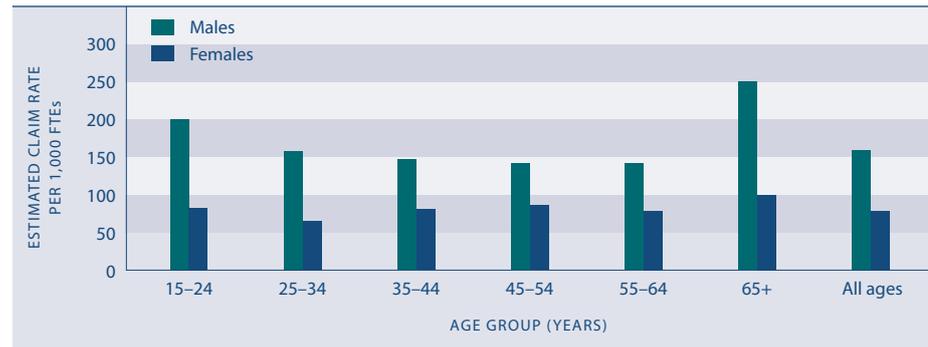
Injury claims for 2006 reported by March 2007 included 81 work-related fatalities. This is likely to be an underestimation of the final number of fatalities, because some workers may have died later from injuries received in the period. For example, the number of claims for fatal injuries inflicted in 2005 that were recorded by March 2006 was 86; the final number of fatal injury claims for 2005 was 92. Moreover, not all fatal work-related accidents result in a claim to the ACC.

## AGE AND SEX DIFFERENCES

Provisional 2006 data shows that males were around twice as likely as females to suffer workplace injuries involving a claim to the ACC (159 per 1,000 FTEs for males compared with 80 per 1,000 FTEs for females). This reflects in part a male predominance in relatively dangerous occupations (eg elementary occupations, agriculture and fishing, and plant and machine operating and assembly, where the injury claim rates were 277, 259 and 243 per 1,000 FTEs respectively in 2006). Although workers aged 65 years and over made only 4 percent of injury claims, they had the highest injury incidence rate of 199 claims per 1,000 FTEs. The next highest injury incidence rate was recorded for those aged under 25 years (149 per 1,000 FTEs). Age differences in injury claim rates for females were less pronounced than those for males.

Figure PW4.2

### Estimated injury claim rate per 1,000 full-time equivalent employees, by age and sex, 2006



Source: Statistics New Zealand (2007c)

Note: 2006 data is provisional and subject to change

## ETHNIC DIFFERENCES

Workplace injury claim rates are higher for Māori and Pacific peoples than for other ethnic groups (165 per 1,000 FTEs and 149 per 1,000 FTEs respectively in 2006). This reflects their over-representation in more dangerous occupations. In 2006, the injury claim rate for the Other ethnic group (including Asian) was 133 per 1,000 FTEs. The rate was lowest for Europeans (114 per 1,000 FTEs).

Table PW4.1

### Workplace injury claims, by ethnicity, 2006

Ethnic group	Number of claims	Rate per 1,000 FTEs
European	162,900	114
Māori	29,400	165
Pacific peoples	12,900	149
Other (including Asian)	24,500	133
<b>Total</b>	<b>235,200</b>	<b>126</b>

Source: Statistics New Zealand (2007c) Table 2

Notes: (1) Data is provisional (2) Total includes ethnicity not specified

## INDUSTRY DIFFERENCES

The agriculture, forestry and fishing industries group had the highest injury claim rates in 2006, with 177 claims per 1,000 FTEs. There were also relatively high rates in the mining and manufacturing industries (both 165 claims per 1,000 FTEs) and in construction (152 per 1,000 FTEs). However, mining accounted for less than 1 percent of full-time equivalent employees in 2006, while manufacturing and construction employed more than a fifth (23 percent) of all full-time equivalent employees. The lowest injury claim rate was for people working in finance and insurance (19 per 1,000 FTEs). In 2006, the work-related fatality rate was highest for the agriculture, forestry and fishing industries group (15 per 1,000 FTEs) followed by construction (13 per 1,000 FTEs).

## REGIONAL DIFFERENCES

The highest work-related injury claim rates in 2006 were in the Bay of Plenty and Gisborne/Hawke's Bay, with rates of 174 and 171 claims per 1,000 FTEs, respectively. Wellington had the lowest rate of 69 claims per 1,000 FTEs.

# Satisfaction with work-life balance

## DEFINITION

The proportion of employed people who are “satisfied” or “very satisfied” with their work-life balance, as reported in the Quality of Life Survey 2006.

## RELEVANCE

It is important that people find a balance between paid work and other aspects of their lives. When this balance is not found, people may suffer from stress or anxiety. Long working hours or non-standard working hours (eg night shifts) may compromise work-life balance.

## CURRENT LEVEL

Results from the Quality of Life Survey 2006 show most employed New Zealanders (75 percent) are satisfied or very satisfied with their work-life balance. People in part-time employment (83 percent) are more likely to be satisfied or very satisfied with their work-life balance than people in full-time employment (71 percent).

Figure PW5.1 **Satisfaction with work-life balance, by employment status, 2006**



Source: Quality of Life Survey 2006

## AGE DIFFERENCES

Those least likely to be satisfied with their work-life balance in 2006 were employed people aged 25–49 years (71 percent). Those aged 65 years and over (84 percent) were the most satisfied age group.

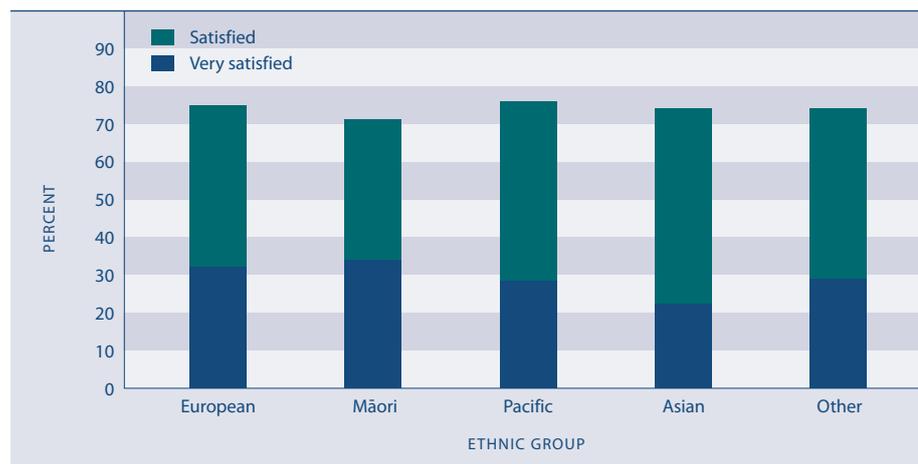
## SEX DIFFERENCES

Employed females (74 percent) have similar rates of satisfaction with work-life balance to employed males (76 percent). Among full-time workers, however, males (74 percent) are more likely to be satisfied or very satisfied with their work-life balance than females (67 percent). Work-life balance satisfaction rates are highest for both male and female part-time workers (both 83 percent).

## ETHNIC DIFFERENCES

Employed people in the different ethnic groups have similar rates of work-life balance satisfaction. For employed Pacific peoples the rate was 76 percent in 2006, for Europeans 75 percent and the Asian and Other ethnic groups both had work-life balance satisfaction rates of 74 percent. Employed Māori had the lowest rate of satisfaction with work-life balance (71 percent).

Figure PW5.2 **Satisfaction with work-life balance, employed people, by ethnic group, 2006**



Source: Quality of Life Survey 2006

## SOCIO-ECONOMIC DIFFERENCES

Employed New Zealanders whose personal incomes are \$20,000 or less are the most likely to be satisfied overall with their balance of work and life (80 percent). This group includes many women who work part-time.

Figure PW5.3 **Satisfaction with work-life balance, employed people, by personal income, 2006**



Source: Quality of Life Survey 2006

## REGIONAL DIFFERENCES

Satisfaction with work-life balance among employed people varies across cities. Those people with the highest levels of satisfaction live in Porirua and Auckland (both 77 percent). Manukau City and North Shore recorded the lowest levels of satisfaction (both 69 percent).

## DESIRED OUTCOMES

New Zealand is a prosperous society, reflecting the value of both paid and unpaid work. Everybody has access to an adequate income and decent, affordable housing that meets their needs. With an adequate standard of living, people are well-placed to participate fully in society and to exercise choice about how to live their lives.

# Economic Standard of Living

## INTRODUCTION

Economic standard of living concerns the physical circumstances in which people live, the goods and services they are able to consume and the economic resources they have access to. It is concerned with the average level of resources in New Zealand as well as the distribution of those resources across New Zealand society.

Basic necessities such as adequate food, clothing and housing are fundamental to wellbeing. The 1972 Royal Commission on Social Security agreed that a useful standard for adequacy was a level of resources that allowed individuals not just to survive but also to participate. They defined participation as meaning “no-one is ... so poor that they cannot eat the sort of food that New Zealanders usually eat, wear the same sort of clothes, [and] take a moderate part in those activities which the ordinary New Zealander takes part in as a matter of course”.<sup>58</sup>

The desired outcomes statement points to the importance of not only everyone enjoying a decent standard of living, but also of our society being as prosperous as possible. Such prosperity gives people choice over how to live their lives.

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## INDICATORS

Five indicators are used in this chapter to provide information on different aspects of economic standards of living. They are: market income per person, income inequality, the population with low incomes, housing affordability and household crowding.

The focus is largely on objective measures of economic living standards. Together, the indicators provide information about overall trends in living standards, levels of hardship and how equitably resources are distributed. All are relevant to the adequacy of people's incomes and their ability to participate in society and make choices about their lives.

Market income per person gives an indication of the average level of income and therefore the overall material quality of life available to New Zealanders. This is an internationally-recognised measure, allowing comparisons between New Zealand and other countries. We also provide an estimate of the economic value of unpaid work.

Income inequality is measured by comparing the incomes of the top 20 percent of households with the incomes of the bottom 20 percent. High levels of inequality are associated with lower levels of social cohesion and personal wellbeing, even when less well-off people have adequate incomes to meet their basic needs.

The proportion of the population with low incomes also provides information about how equitably resources are distributed and how many people are likely to be on incomes that do not allow them to participate fully in society.

Housing affordability measures the proportion of the population spending more than 30 percent of their disposable income on housing. Housing costs have a major impact on overall material living standards.

The final indicator measures the number of people living in overcrowded houses. Housing is a basic need, and this indicator provides a direct measure of the adequacy of housing people can afford.

# Market income per person

## DEFINITION

The total value of goods and services available to New Zealanders, expressed in inflation-adjusted dollars, per head of population, also known as real gross national disposable income (RGNDI) per person.

## RELEVANCE

Per person RGNDI measures the average income available to New Zealanders. A nation with a rising per person RGNDI will have a greater capacity to deliver a better quality of life and standard of living to the population.

## CURRENT LEVEL AND TRENDS

In the year to December 2007, RGNDI per person was \$30,255 in 1995/1996 dollars. This was 4 percent above RGNDI per person for the year ended December 2006 (\$29,104). Between 1988 and 1990, RGNDI per person was just over \$23,000. It then fell sharply to a low of \$20,976 in 1992. From 1992, RGNDI per person grew continuously except for slight decreases in 1997 and 2006. The average annual growth rate over the whole period from 1988 to 2007 was 1.4 percent.

Figure EC1.1 **Real gross national disposable income per person, 1988–2007**



Source: Statistics New Zealand

## INTERNATIONAL COMPARISON

While gross domestic product (GDP) per person is the measure most commonly used to compare income levels between countries, gross national income (GNI) per person more closely corresponds to the measure used in this indicator. To facilitate comparison, both measures are expressed in US dollars at current prices and current purchasing power parities (PPPs). By either measure, New Zealand was ranked 22nd out of 30 OECD countries in 2006, the same ranking as in the previous five years.<sup>59</sup> Using GDP per person, New Zealand was the 18th most prosperous out of 26 countries in 1986 and the ninth most prosperous in 1970. Using GNI per person, the rankings for New Zealand were 19th in 1986 and eighth in 1970.

Between 1986 and 2006, real GDP per person (using US dollars and PPPs for the year 2000), grew by 30 percent in New Zealand compared with an OECD average of 46 percent.

## ECONOMIC VALUE OF UNPAID WORK

RGNDI does not take into account the value of unpaid work such as looking after one's own children, cooking meals at home, fixing the car, doing home maintenance, or doing voluntary work in the community. Using data from the 1998/1999 Time Use Survey, the value of unpaid work in 1999 was estimated to be \$39,637 million (1998/1999 dollars), equivalent to 39 percent of GDP, or \$10,333 per person.<sup>60</sup>

# Income inequality

## DEFINITION

The extent of disparity between high income and low income households.

The measure used is the ratio of the 80th percentile to the 20th percentile of the equivalised disposable household income distribution (ie the ratio of a high household income to a low household income, after adjusting for household size and composition). The higher this ratio, the greater the level of inequality.

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## RELEVANCE

The degree of income inequality is often regarded as an important aspect of the fairness of the society we live in. A high level of income inequality may also be detrimental to the level of social connectedness across society.

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## CURRENT LEVEL AND TRENDS

In 2007, the equivalised disposable income of a household at the 80th percentile was 2.6 times larger than that of a household at the 20th percentile, a decrease from 2.7 times larger in 2004. In 1988, the ratio was 2.2. Income inequality rose between 1988 and 1991, briefly plateaued, then rose again from 1994 to 2004.

Most of the observed increase in income inequality between 1988 and 2004 was due to a larger overall rise in incomes for those in the top 20 percent of incomes – around a quarter once adjustments for inflation are made. In that period, incomes for those in the bottom 20 percent of incomes decreased a little. Incomes for the middle 60 percent climbed more overall for those closer to the top 20 percent than for those closer to the bottom 20 percent.

From 2004 to 2007, incomes for households in the low to middle income range grew strongly, whereas incomes for the top 40 percent grew by only 2 percent to 4 percent in real terms. This led to the decline in the 80:20 percentile ratio from 2004 to 2007.

Figure EC2.1

**Ratio of the 80th percentile of equivalised disposable household income to the 20th percentile of equivalised disposable household income, 1988–1998, 2001, 2004 and 2007**

Source: Derived from Statistics New Zealand's Household Economic Survey (1988–2007), by the Ministry of Social Development  
 Notes: (1) Since 1998, the Household Economic Survey has been conducted on a three-yearly basis, rather than annually  
 (2) This measure adjusts for household size and composition

**INTERNATIONAL  
COMPARISON**

Comparisons with other OECD countries are available using a different measure, the Gini coefficient.<sup>61</sup> Gini coefficients measure income inequality, with a score of 100 indicating perfect inequality and a score of 0 indicating perfect equality. The most recent OECD comparison (from 2004) gives New Zealand a score of 34, indicating higher inequality than the OECD median of 30 and a ranking of 23rd equal out of 30 countries. The New Zealand Gini score was below that of the United States (38), the same as that of the United Kingdom (34), and slightly above those of Australia (30), Canada (32) and Ireland (33). Denmark and Sweden had the lowest income inequality with Gini scores of 23.<sup>62</sup> The 2007 Gini score for New Zealand was still 34.

# Population with low incomes

## DEFINITION

The proportion of the population in households with equivalised disposable income net-of-housing-cost below two thresholds.

Incomes are after deducting tax and housing costs, and adjusting for household size and composition. The thresholds are 50 and 60 percent of 1998 household disposable income median, with 25 percent deducted to allow for average housing costs. The thresholds are adjusted for inflation to keep them fixed in real terms.

## RELEVANCE

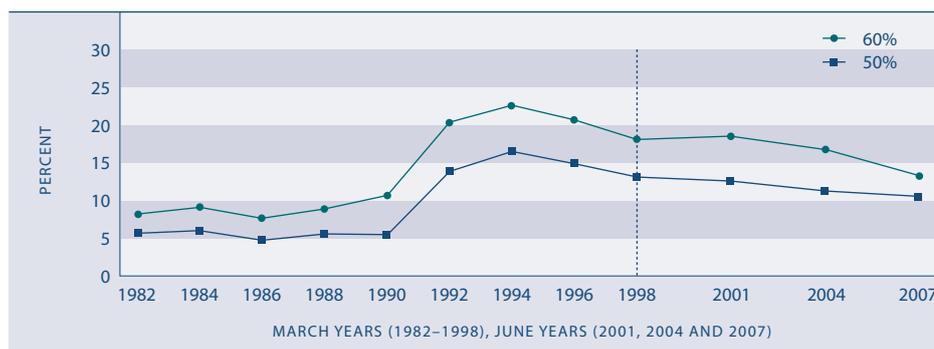
Insufficient economic resources limit people's capability to participate in and belong to their community and wider society and otherwise restrict their quality of life. Furthermore, long-lasting low family income in childhood is associated with negative outcomes, such as lower educational attainment and poorer health.

## CURRENT LEVEL AND TRENDS

In the year to June 2007, 13 percent of the population was living below the 60 percent threshold, down from 17 percent in the previous survey year to June 2004. The proportion of the population with low incomes rose sharply from 1990, reached a peak in the mid-1990s and has generally declined since then. However, in 2007, the proportion was still above what it had been in the 1980s.

The increase in the proportion of the population with low incomes in the early-1990s is attributable to declining household incomes arising from high rates of unemployment and reduced levels of social assistance. The improvement since the mid-1990s reflects more robust economic (and income) growth, the steady decline in unemployment, the increase in housing assistance and the increase in tax credits for families with children. Rates remain higher in 2007 than they were in the 1980s partly because housing costs for low-income households have risen significantly as a proportion of their household incomes.

Figure EC3.1 **Proportion of population with net-of-housing-cost household incomes below thresholds, 1982–1998, 2001, 2004 and 2007**



Source: Derived from Statistics New Zealand's Household Economic Survey (1982–2007), by the Ministry of Social Development

## AGE AND SEX DIFFERENCES

In 2007, a lower proportion of older people than younger people were below the 60 percent threshold, although the difference between younger and older people was much smaller in 2007 than a decade before. The relatively low rates for older New Zealanders reflect their high rate of mortgage-free home ownership.

In 2007, 16 percent of dependent children were in households with incomes below the 60 percent threshold, a substantial decline from 23 percent in 2004. The 2007 rate was less than half of the peak rate of 35 percent in 1994, but it was still above the levels of the mid-1980s (11 percent). Rates for females aged 15 years and over have generally been a little higher than those for males of the same age group from 1986 to 2007.

Table EC3.1 **Proportions (%) in low-income households (60 percent threshold), by age and sex, selected years, 1986–2007**

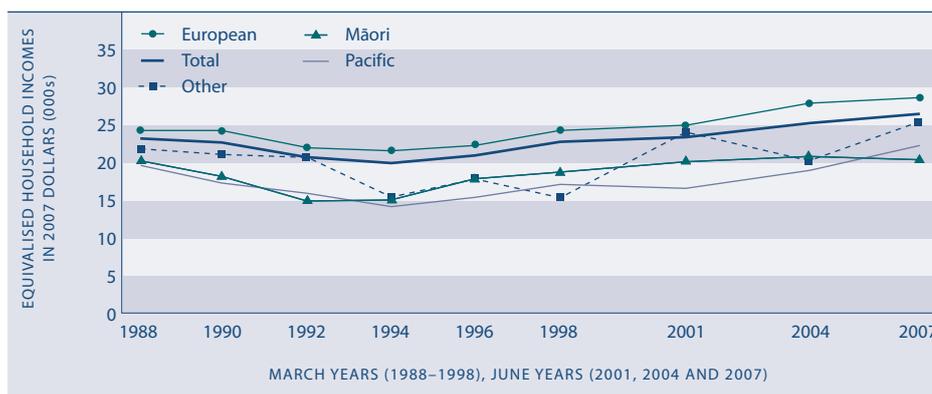
Year	Children 0–17	18–24	25–44	45–64	65+	Males 15+	Females 15+	Total
1986	11	5	8	5	4	5	7	8
1990	16	8	12	6	6	8	9	11
1994	35	20	23	15	8	17	20	23
1998	28	16	18	12	9	13	16	18
2001	29	21	18	14	7	14	17	19
2004	23	22	17	13	7	15	15	17
2007	16	17	13	11	8	11	13	13

Source: Derived from Statistics New Zealand's Household Economic Survey (1986–2007), by the Ministry of Social Development

## ETHNIC DIFFERENCES

Sample sizes in the source data are not large enough to support a reliable time series for proportions below the 60 percent threshold by ethnic group (see Appendix 2 for more details). Trends in real equivalised median household incomes are less volatile and are used to give an idea of the relativities between ethnic groups. Median incomes for all ethnic groups rose from the low point in 1994 through to 2007, although for Māori median incomes remained almost unchanged from 2004 to 2007.

Figure EC3.2 **Real equivalised median household incomes, by ethnic group, 1988–1998, 2001, 2004 and 2007**



Source: Derived from Statistics New Zealand's Household Economic Survey (1988–2007), by the Ministry of Social Development  
Note: Household ethnicity is defined by the presence, within the household, of an adult of a particular ethnic group

## HOUSEHOLD AND FAMILY TYPE DIFFERENCES

Since 2001, the proportion of people in families with dependent children who were below the 60 percent threshold has declined. Between 2001 and 2007, the rate for those in two-parent families fell from 19 percent to 9 percent, while the rate for those in sole-parent families fell from 61 percent to 40 percent. Households with three or more children have a higher proportion under the 60 percent threshold than those with fewer children (19 percent and 14 percent respectively in 2007). The proportion of those under 65 years in one-person households who were below the threshold increased from around 12 percent in the late-1980s to 30 percent in the mid-1990s and was still 30 percent in 2007.

## INTERNATIONAL COMPARISON

For international comparisons, a different measure is used. The OECD measure is 50 percent of median (current year median rather than fixed line) equivalent disposable household income, which does not take into account housing costs. In 2004, 11 percent of New Zealanders were living in households with incomes below this threshold. The most recent OECD comparison (from 2004) places New Zealand 16th out of 30 OECD countries, and only just above the OECD median (10 percent). New Zealand's rate is similar to those of Germany, Canada and Australia (11–12 percent) and well below that of the United States (17 percent).<sup>63</sup> Sweden and Denmark have the lowest proportion of their populations with low incomes (5–6 percent). By 2007, the New Zealand rate was 12 percent.

# Housing affordability

## DEFINITION

The proportion of households and the proportion of people within households spending more than 30 percent of their disposable income on housing.

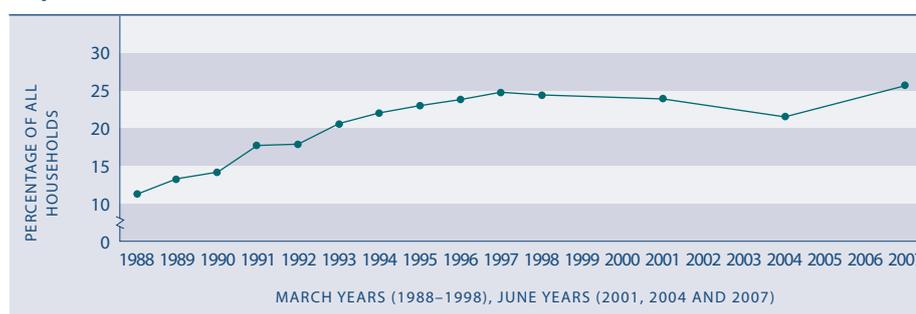
## RELEVANCE

Affordable housing is important for people's wellbeing. For lower-income households especially, high housing costs relative to income are often associated with severe financial difficulty, and can leave households with insufficient income to meet other basic needs such as food, clothing, transport, medical care and education. High outgoings-to-income ratios are not as critical for higher-income households, as there is still sufficient income left for basic needs.

## CURRENT LEVEL AND TRENDS

In 2007, 26 percent of New Zealand households spent more than 30 percent of their disposable income on housing costs, an increase from 21 percent in 2004. Since the late-1980s, there has been a substantial increase in the proportion of households spending more than 30 percent of their income on housing. Between 1988 and 1997, the proportion rose from 11 percent to 25 percent of households, before levelling off at 24 percent in 1998 and 2001.

Figure EC4.1 **Proportion of households with housing cost outgoings-to-income ratio greater than 30 percent, 1988–1998, 2001, 2004 and 2007**



Source: Derived from Statistics New Zealand's Household Economic Survey (1988–2007), by the Ministry of Social Development  
Note: Since 1998, the Household Economic Survey has been conducted on a three-yearly basis, rather than annually

There are other measures of housing affordability, which focus on the ability of people to purchase a house and meet subsequent mortgage repayments. These show a slight improvement in housing affordability between 2007 and 2008.<sup>64</sup>

## SOCIO-ECONOMIC DIFFERENCES

High housing costs relative to household income are of more concern for low-income households. The proportion of households in the lowest 20 percent (lowest quintile) of the equivalised household income distribution spending more than 30 percent of their income on housing rose from 16 percent in 1988 to a peak of 48 percent in 1994. The rate levelled off at 41–42 percent over the period 1996–2001, then fell to 34 percent in 2004 and 33 percent in 2007. While the change since 2001 represents a substantial improvement, the proportion of low-income households spending more than 30 percent of their income on housing was still twice as high in 2007 as it was in 1988.

Households in the lowest income quintile were the only income group to have an improvement in housing affordability from 2004 to 2007. In each of the other four quintiles housing affordability deteriorated. For example, in the third (middle) quintile the proportion of households spending more than 30 percent of their income on housing rose from 21 percent in 2004 to 29 percent in 2007, a higher level than at any other time since 1988.

## AGE AND SEX DIFFERENCES

In 2007, 32 percent of children under 18 years lived in households with housing costs exceeding 30 percent of their disposable income, an increase from 26 percent in 2004. There was a similar increase for the 25–44 years age group, many of whom are parents living with children. These changes reflect the increase in the proportion of households spending more than 30 percent of their income on housing in the second and third income quintiles.

In 2007, females aged 15 years and over (25 percent) were slightly more likely than males in the same age group (22 percent) to be living in households spending more than 30 percent of their income on housing.

Table EC4.1

### Proportion (%) of the population in households with housing cost outgoings-to-income ratio greater than 30 percent, selected years, 1988–2007

	1988	1993	1998	2001	2004	2007
<b>Total population</b>	<b>10.6</b>	<b>20.6</b>	<b>24.9</b>	<b>24.1</b>	<b>21.3</b>	<b>26.0</b>
Population aged 15 years and over	9.9	19.0	21.9	20.9	19.7	23.6
Males aged 15 years and over	10.3	18.8	21.0	19.9	20.0	22.2
Females aged 15 years and over	9.5	19.3	22.7	21.9	19.5	25.1
<b>Age groups</b>						
Under 18 years	11.9	25.6	33.1	31.8	26.4	31.7
18–24 years	12.4	24.6	26.3	28.6	28.4	28.9
25–44 years	14.7	26.3	31.1	28.3	25.0	32.8
45–64 years	5.0	12.3	13.8	15.6	15.2	19.0
65 years and over	3.2	4.0	7.1	7.1	5.8	9.1

Source: Derived from Statistics New Zealand's Household Economic Survey (1988–2007), by the Ministry of Social Development

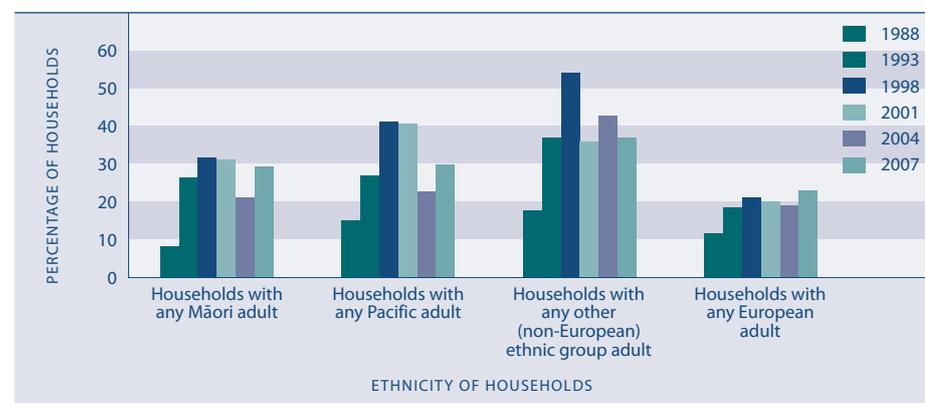
Note: Data is for March years in 1988, 1993 and 1998 and June years in 2001, 2004 and 2007

## ETHNIC DIFFERENCES

From 2004 to 2007, there was an increase in the proportion of households with at least one European, Māori or Pacific adult spending more than 30 percent of their disposable income on housing. This is consistent with the worsening of housing affordability across the top four quintiles.<sup>65</sup> Households with housing costs in excess of 30 percent of income are more common when they have at least one non-European adult. For households with at least one Māori adult, the proportion increased from 8 percent in 1988 to a peak of 36 percent in 1997, falling to 21 percent in 2004, then rising to 29 percent in 2007, close to the 2001 level (31 percent). For households with at least one Pacific adult, the proportion increased from 15 percent in 1988 to 48 percent in 1997, then fell to 23 percent in 2004 and then rose to 30 percent in 2007.

Figure EC4.2

### Proportion of households with housing cost outgoings-to-income ratio greater than 30 percent, by ethnic group, selected years, 1988–2007



Source: Derived from Statistics New Zealand's Household Economic Survey (1988–2007), by the Ministry of Social Development

Notes: (1) Data is for March years in 1988, 1993 and 1998 and June years in 2001, 2004 and 2007 (2) Household ethnicity is defined by the presence, within the household, of an adult of a particular ethnic group

# Household crowding

## DEFINITION

The proportion of the population living in crowded housing (ie requiring one or more additional bedrooms, as defined by the Canadian Crowding Index).

The Canadian Crowding Index is a proxy measure to monitor the incidence of “crowding” in the population.

## RELEVANCE

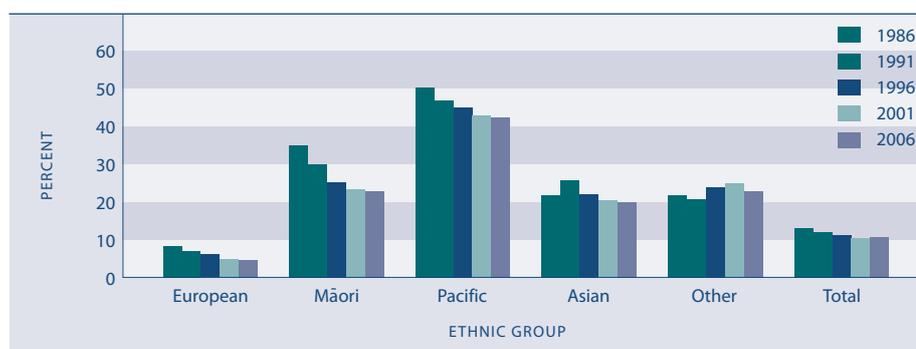
Housing space adequate to the needs and desires of a family is a core component of quality of life. National and international studies show an association between the prevalence of certain infectious diseases and crowding<sup>66</sup>, between crowding and poor educational attainment, and between residential crowding and psychological distress.<sup>67</sup>

## CURRENT LEVEL AND TRENDS

In 2006, 389,600 people, or 10 percent of the New Zealand resident population, lived in households requiring one or more additional bedrooms to adequately accommodate household members, based on the criteria in the Canadian Crowding Index (see Appendix 2). This was similar to the level of crowding in 2001. The proportion of people in crowded households has reduced since 1986, when 13 percent of the population were living in crowded conditions (392,700 people).

The Canadian Crowding Index also shows how many people live in houses where two or more bedrooms are required. In 2006, there were 131,100 people or 3.5 percent of the usually resident population in this situation, compared to 118,700 people (3.9 percent) in 1986.

Figure EC5.1 **Proportion of population living in households requiring at least one additional bedroom, by ethnic group, 1986–2006**<sup>68</sup>



Source: Statistics New Zealand

## AGE AND SEX DIFFERENCES

Living in a crowded household is more likely to be experienced by younger people than by older people. In 2006, 17 percent of children under the age of 10 years lived in households requiring at least one more bedroom, compared to 15 percent of 10–14 year olds. Among the population aged 15 years and over, 9 percent lived in crowded households but this ranged from 17 percent of 15–24 year olds, to 10 percent of 25–44 year olds, 5 percent of 45–64 year olds and just 3 percent of those aged 65 years and over.

Between 1986 and 2006 there was little change in the proportion of children under the age of 15 years living in crowded households, defined either as needing

one or more additional bedrooms (17 percent in both years) or as needing at least two more bedrooms (just over 5 percent in 1986 and just under 6 percent in 2006).

There is very little difference by sex in the likelihood of living in crowded households.

## ETHNIC DIFFERENCES

Pacific peoples are far more likely to be living in crowded households than other ethnic groups. In 2006, 43 percent of Pacific peoples lived in households requiring extra bedrooms. Māori and those in the Other ethnic group were the next most likely, with 23 percent of each group requiring at least one extra bedroom, followed by Asians (20 percent). Partly reflecting their older age profile, only 4 percent of European New Zealanders were living in houses that met the definition of crowding used here. The Other ethnic group was the only ethnic group to have an increased incidence of crowding between 1986 and 2006 (from 22 percent to 23 percent). One possible explanation for this trend is that recent migrants, common in this ethnic group, are more likely to live in crowded households.<sup>69</sup>

The largest group of those living in households requiring at least one extra bedroom were those who identified as European (32 percent), followed by Māori (30 percent), Pacific peoples (27 percent), Asian (17 percent) and the Other ethnic group (just 2 percent).<sup>70</sup> Of those living in more severe crowding situations (households requiring two or more bedrooms), Pacific peoples and Māori made up the largest groups (37 percent and 32 percent, respectively).

Cultural attitudes and economic conditions are two primary factors that account for the extreme variation in crowding levels between ethnic groups. The variance in population age structures is also a factor: the Māori and Pacific peoples ethnic groups both have younger age structures than the European population.

## SOCIO-ECONOMIC DIFFERENCES

Unemployed people are more likely to be living in crowded households than those with full-time jobs (20 percent and 7 percent, respectively). Seventeen percent of people who receive income support were living in crowded households in 2006, up slightly from 16 percent in 2001.<sup>71</sup>

There is a clear correlation between levels of income and levels of crowding: in 2006, 5 percent of households in the bottom quartile of equivalised household income required one or more bedrooms, compared with less than 1 percent of those in the top income quartile.

Households in rental accommodation were more likely to be crowded (10 percent) than those in dwellings owned with a mortgage (4 percent) or mortgage-free (2 percent).

## REGIONAL DIFFERENCES

The proportion of people living in crowded households varies considerably across the country. Manukau City has by far the highest proportion, with 25 percent of people living in households requiring one or more extra bedrooms in 2006. The next highest levels were in Opotiki District (19 percent), Kawerau District (18 percent), Porirua City and Auckland City (both 17 percent). In all of the South Island local authorities, the proportions of people living in crowded households were well below the average, with the lowest being in Waimate (2 percent).

## DESIRED OUTCOMES

Everybody enjoys civil and political rights. Mechanisms to regulate and arbitrate people's rights in respect of each other are trustworthy.

# Civil and Political Rights

## INTRODUCTION

The enjoyment of civil and political rights is crucial to people's ability to participate in society, make choices about their lives and live with dignity.

Civil and political rights fall into two broad categories. The first requires that people are protected from interference or abuse of power by others. The second requires that society is organised in a way that enables all people to develop to their full potential.<sup>72</sup>

Rights are defined in various international treaties and in domestic legislation. The New Zealand Bill of Rights Act 1990 sets out many of the rights New Zealanders enjoy. These include rights to life and security, voting rights, and rights to freedom of expression, peaceful assembly, association, thought, conscience, religion and belief. They also include rights to freedom from discrimination, and various rights relating to justice and criminal procedures. Other laws, such as the Privacy Act 1993, also provide protection for specific rights.

The relationship between Māori and the Crown is guided by the Treaty of Waitangi.

New Zealand has also signed six core United Nations treaties, covering: civil and political rights; economic, social and cultural rights; the elimination of racial discrimination; the elimination of discrimination against women; the rights of children; and protection against torture and other cruel, inhuman or degrading treatment and punishment.

Civil and political rights are important for wellbeing in many ways. At a fundamental level, they protect people's lives and their physical wellbeing (for example, by recognising rights to freedom from torture and arbitrary arrest).

Wellbeing depends on people having a sense of choice or control over their lives, and on being reasonably able to do the things they value. This is only possible if people can exercise the many rights referred to above.<sup>73</sup> People's ability to take part in society, and their senses of belonging and identity, also depend on the exercise of these rights.

## INDICATORS

New Zealand is internationally recognised as having an excellent human rights record.<sup>74</sup> The court system is independent and courts can enforce the rights affirmed in the New Zealand Bill of Rights Act 1990, although there is no power to strike down legislation inconsistent with the Act. Other institutions exist to protect people from government power (examples include the Privacy Commissioner and the Ombudsmen) or to help people resolve issues of unlawful discrimination (such as the Human Rights Commission and the Human Rights Review Tribunal). New Zealand regularly reports to the United Nations on its record of protecting rights.

However, the direct measurement of civil and political rights is not a simple matter.

This chapter uses four indicators to show how New Zealand's formal commitments to civil and political rights are reflected in reality. They are: voter turnout, the representation of women in government, perceived discrimination and perceived corruption.

A fundamental right in any democracy is the right to vote. Voter turnout figures provide an indication of the confidence the population has in, and the importance the population attaches to, the nation's political institutions. High voluntary voter turnout rates show people see these institutions as relevant and meaningful to them, and they believe their individual vote is important.

An effective and relevant political system should broadly reflect the society it represents. The second indicator measures the proportion of women in elected positions in government.

Equality before the law and freedom from unlawful discrimination are fundamental principles of democratic societies. According to the Human Rights Commission, discrimination occurs when a person is treated differently from another person in the same or similar circumstances, although not all forms of discrimination are unlawful.<sup>75</sup> Measuring the extent to which New Zealanders actually experience discrimination is problematic. Research suggests a significant proportion of people who experience discrimination will not make a complaint.<sup>76</sup> Perceived discrimination is a subjective measure of people's views about the level of discrimination against different groups in New Zealand society.

Corruption undermines the democratic process and the rule of law. It is difficult to measure levels of corruption by reference to the number of prosecutions or court cases as this will, to some extent, be driven by the efficient functioning of the justice system. The fourth indicator measures the level of perceived corruption among politicians and public officials.

# Voter turnout

## DEFINITION

**General elections:** The proportion of the estimated voting-age population (aged 18 years and over) who cast a vote in general elections.

**Local authority elections:** The proportion of all enrolled electors (both resident and ratepayer) who cast a vote in contested local authority elections.

## RELEVANCE

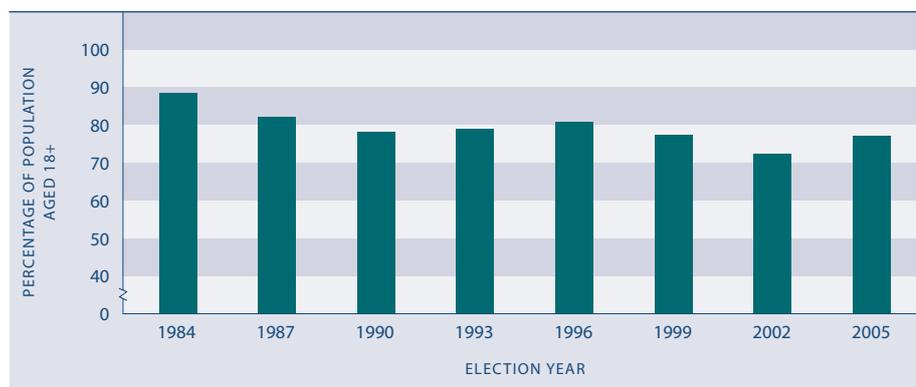
Voter turnout rates are an indicator of the extent to which citizens participate in the political process, and the confidence the population has in, and the importance they attach to, political institutions.

## CURRENT LEVEL AND TRENDS

### 1. General elections

Voter turnout of the eligible population in 2005 was 77 percent. Voter participation in general elections declined sharply from 89 percent in 1984 to 78 percent in 1990, increased slightly to 81 percent in 1996, then declined again to a new low of 72.5 percent in 2002. In 2005, the turnout recovered to the level recorded in the 1999 election.

Figure CP1.1 **Proportion of estimated voting-age population who cast votes, 1984–2005**



Sources: Electoral Commission (2002); Electoral Commission (2005)  
Note: 1984 and 2005 figures calculated by the Ministry of Social Development

## AGE, SEX, ETHNIC AND SOCIO-ECONOMIC DIFFERENCES

Because of the nature of the secret ballot, information on differences in participation rates among various sectors of the New Zealand population is not directly available. Nevertheless, results from New Zealand election surveys over a number of years show non-voters are more likely to be people on lower incomes, younger people and members of Māori or Pacific ethnic groups. There are few differences in voter turnout rates between men and women.

## REGIONAL DIFFERENCES

There are few discernible differences in voter turnout rates between rural and urban voters, although non-voting tends to be lowest in provincial cities.

## INTERNATIONAL COMPARISON

Using a different definition of voter turnout (the proportion of the registered population who voted), New Zealand was ranked eighth out of 30 OECD countries with a voter turnout rate of 81 percent in 2005.<sup>77</sup> The New Zealand rate was higher than the OECD median of 71 percent for recent elections, but lower than that of Australia, where voting is compulsory (95 percent in 2007). Countries with lower voter turnout rates than New Zealand included the United States (69 percent in 2004), Canada (65 percent in 2006), and the United Kingdom (62 percent in 2005).

## CURRENT LEVEL AND TRENDS

### 2. Local authority elections

Voter turnout in the 2007 local authority elections was 44 percent. This was the lowest voter turnout since 1989. A major restructuring of local government in 1989 was initially accompanied by a noticeable increase in voter turnout, peaking at 61 percent in 1992. Voter turnout has declined steadily since then, with the exception of the 1998 elections.

The drop in voter turnout between 2004 and 2007 was relatively constant across all local authority types, with falls of two or three percentage points.

In 2007, there were 249 elected local authorities in New Zealand: 12 regional councils, 21 district health boards, 16 city councils, 57 district councils and 143 community boards.

Table CP1.1

**Voter turnout (%) in local authority elections, 1989–2007**

	1989	1992	1995	1998	2001	2004	2007
<b>Regional councils</b>	56	52	48	53	49	45	43
<b>District health boards</b>	–	–	–	–	50	46	43
<b>Territorial authorities</b>							
City councils	52	48	49	51	45	43	41
City mayors	50	48	49	51	45	43	41
District councils	67	61	59	61	57	51	49
District mayors	67	61	59	59	56	52	49
<b>Community boards</b>	54	49	50	50	46	42	41

Source: Department of Internal Affairs (2006) Table 3.3 and unpublished data for 2007

Note: District health boards were established in 2001

The 2007 results continued the pattern of previous local authority elections, with small and South Island communities tending to register a higher voter turnout across all elected local authority types. The highest voter turnout in regional council elections was for the West Coast Regional Council (57 percent), followed by the Tasman District Council (55 percent). Turnouts tended to be lowest in regions with large urban centres – Waikato, Auckland, Wellington and Canterbury had the lowest voter turnout rates, ranging between 37 percent and 44 percent.

Local authority voter turnout is highest for district councils, with their more rural population base, especially those in the South Island. In the 2007 district council elections, voter turnout in the South Island was 53 percent, compared with 47 percent in the North Island. Smaller regional councils and small district health boards also attracted a higher voter turnout than larger local authorities. Voter turnout rates ranged from 54 percent for small district councils to 39 percent for large city councils.

# Representation of women in government

## DEFINITION

The proportion of elected Members of Parliament (MPs) and local government bodies who are women.

## RELEVANCE

The representation of women in government can be seen as an indicator of political representation more generally. Representative political institutions engage a wide range of communities in the political process, draw on the talents and skills of the broadest group of people, and provide checks and balances on the use of political power.

## CURRENT LEVEL AND TRENDS

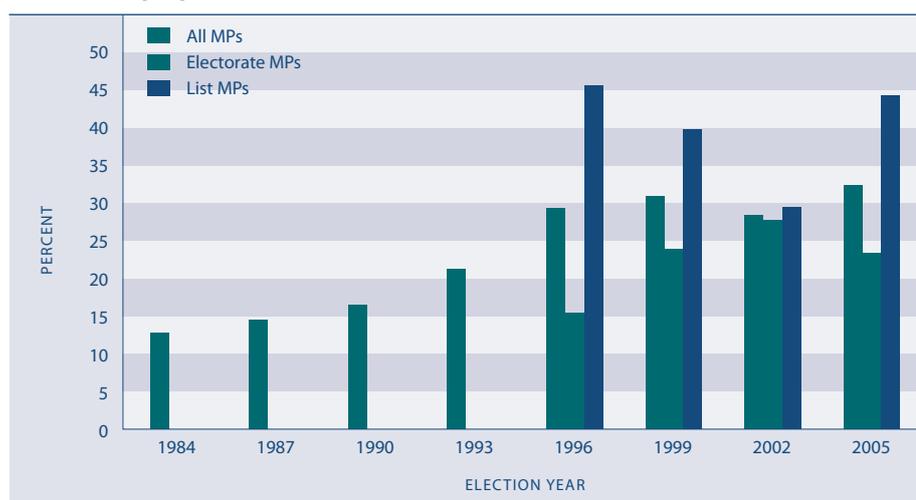
### 1. General elections

As a result of the 2005 general election, women held 39 of the 121 seats in Parliament, or 32 percent. This was up from 28 percent in 2002. Under the first-past-the-post electoral system, women's representation in Parliament increased from 13 percent in 1984 to 21 percent in 1993, then rose sharply to 29 percent in the first mixed-member-proportional (MMP) election held in 1996. There was a further small rise to 31 percent in 1999, followed by a decline to 28 percent in 2002.

In 2005, women made up a far higher proportion of list MPs (44 percent) than electorate MPs (23 percent). In the 2002 election, the female proportions were similar in both categories.

The majority of women elected to Parliament in 2005 were list MPs (59 percent). The proportion of female electorate MPs increased from 29 percent in 1996 to 56 percent in 2002, but fell to 41 percent in 2005.

Figure CP2.1 **Women as a proportion of elected Members of Parliament, 1984–2005**



Sources: Electoral Commission (2002) p176; Electoral Commission (2006)

## INTERNATIONAL COMPARISON

At 33 percent in 2008, the percentage of women in New Zealand's Parliament is considerably higher than the OECD median of 23 percent in recent years.<sup>78</sup> New Zealand ranks ninth out of 30 OECD countries. Sweden has the highest proportion of women MPs with 47 percent, followed by Finland (42 percent), the Netherlands (39 percent), Denmark (38 percent), Spain and Norway (each 36 percent). Australia (27 percent), Canada (21 percent), the United Kingdom (20 percent) and the United States (17 percent) all have much lower female representation in national government than New Zealand.

## CURRENT LEVEL AND TRENDS

### 2. Local authority elections

In the 2007 local government elections, 579 women were elected to local authorities.<sup>79</sup> This represented 32 percent of elected members. The proportion of elected members who were women increased from 25 percent in 1989 to 31 percent in 1998 and remained at around that level in the two subsequent elections. Until the early-1990s women were more highly represented in local government than in national government. Since the first MMP election in 1996, women have had similar levels of representation in both Parliament and local authorities.

Female candidates were more likely than male candidates to be elected to local authorities in each election year from 1989 to 1998, but this was reversed in 2001, when 41 percent of female candidates and 44 percent of male candidates were elected. In 2004, the proportions were more even (48 percent of female and 49 percent of male candidates elected). In 2007, female candidates were again more likely than male candidates to be elected (50 percent compared with 46 percent).

In 2007, women's representation was highest on district health boards (46 percent), followed by city councils (37 percent). Between 2004 and 2007, the share of elected members who were women increased in all local authority types except community boards and licensing and land trusts

Table CP2.1

#### Proportion (%) of members who were women, by type of local body, 1989–2007

	1989	1992	1995	1998	2001	2004	2007
Regional councils	22	25	29	28	26	25	27
District health boards	–	–	–	–	44	42	46
City councils	35	35	33	36	39	34	37
District councils	19	23	26	27	26	26	28
Community boards	29	32	33	35	31	32	33

Source: Department of Internal Affairs (2006) Table 6.4 and unpublished data for 2007

Note: District councils 2001 data revised by Department of Internal Affairs

The number of women elected to city council mayoral positions has remained fairly steady at three or four since 1989. Between 2004 and 2007 the figure fell from four to three out of 16 mayoral positions. In contrast, the number of women mayors in district councils increased rapidly from six (out of 59) in 1989 to 15 in 1998, fell sharply to eight in 2001 and rose slightly to 10 in both 2004 and 2007.

Table CP2.2

#### Women mayors, 1989–2007

	1989	1992	1995	1998	2001	2004	2007
City councils	4/14	4/15	3/15	4/15	4/15	4/16	3/16
District councils	6/59	9/59	12/59	15/59	8/58 <sup>(1)</sup>	10/58 <sup>(2)</sup>	10/57 <sup>(3)</sup>

Source: Department of Internal Affairs (2006) Table 6.5 and unpublished data for 2007

Notes: (1) There was no election in Rodney District in 2001 (2) Tauranga became a city council in 2004 (3) Banks Peninsula District was abolished and included in Christchurch City in 2006

# Perceived discrimination

## DEFINITION

The proportion of people aged 18 years and over who perceived selected groups as being the targets of “some” or a “great deal” of discrimination, as reported in surveys commissioned by the Human Rights Commission.

## RELEVANCE

The freedom from unlawful discrimination is a core principle of democratic societies. Surveys on perceived discrimination towards groups of people provide one indication of the level and type of discrimination in New Zealand. As they do not measure actual levels of discrimination, it is not possible to conclude whether levels of discrimination have increased or decreased.

## CURRENT LEVEL AND TRENDS

In November 2007, 68 percent of respondents to the Human Rights Commission Survey 2007 thought Asian people were subject to a great deal or some discrimination, the highest proportion for any group. This was followed by recent immigrants, people on welfare and people who are overweight (all 62 percent). Perceived discrimination against Asians and recent immigrants has decreased since February 2006, by 4 percentage points and 8 percentage points respectively. There has been little change in perceived discrimination against people on welfare and a slight increase in perceived discrimination against people who are overweight.

Table CP3.1 **Proportion (%) of survey respondents who perceived selected groups as being subject to a great deal or some discrimination, December 2000–November 2007**

Group	Dec 2000	Dec 2001	Jan 2003	Jan 2004	Feb 2006	Nov 2007
Asians	73	73	79	78	72	68
Recent immigrants	–	68	77	72	70	62
People on welfare	75	70	68	66	63	62
People who are overweight	72	65	65	68	59	62
Refugees	–	68	72	70	63	56
Gays and lesbians	74	65	61	58	57	54
People with disabilities	61	55	53	55	53	52
Pacific peoples	71	65	65	57	54	51
Māori	70	62	57	53	51	48
Older people	53	48	49	46	44	46
Women	50	44	41	38	38	39
Men	–	–	–	–	30	29

Source: Human Rights Commission (2008)

Over half of the survey respondents in 2007 thought refugees, gays and lesbians, people with disabilities and Pacific people were the target of a great deal or some discrimination. Just under half thought Māori and older people were discriminated against.

Between December 2001 and November 2007, the perception different groups were subject to some or a great deal of discrimination fell for all groups. The biggest falls in perceived discrimination were for Māori and Pacific peoples, both declining by 14 percentage points between 2001 and 2007. There was also a big drop in perceived discrimination against refugees and gays and lesbians over the same period.

# Perceived corruption

## DEFINITION

The perceived level of corruption – defined as “the abuse of public office for private gain” – among New Zealand politicians and public officials, on a scale of 0 (highly corrupt) to 10 (highly clean).

A country’s score in the Corruption Perceptions Index is derived by Transparency International from a number of different surveys of business people and country analysts.

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## RELEVANCE

Corruption undermines democracy and the rule of law and threatens domestic and international security. Corruption also has adverse social and economic consequences for a country. The Corruption Perceptions Index is a good proxy indicator of the values and norms that underpin public institutions.

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## CURRENT LEVEL AND TRENDS

New Zealand’s score in the Corruption Perceptions Index 2007 was 9.4, similar to its score of 9.6 in 2004–2006. Since the index was first developed in 1995, New Zealand has consistently scored well, with more than 9 out of a possible 10 in each period reported.

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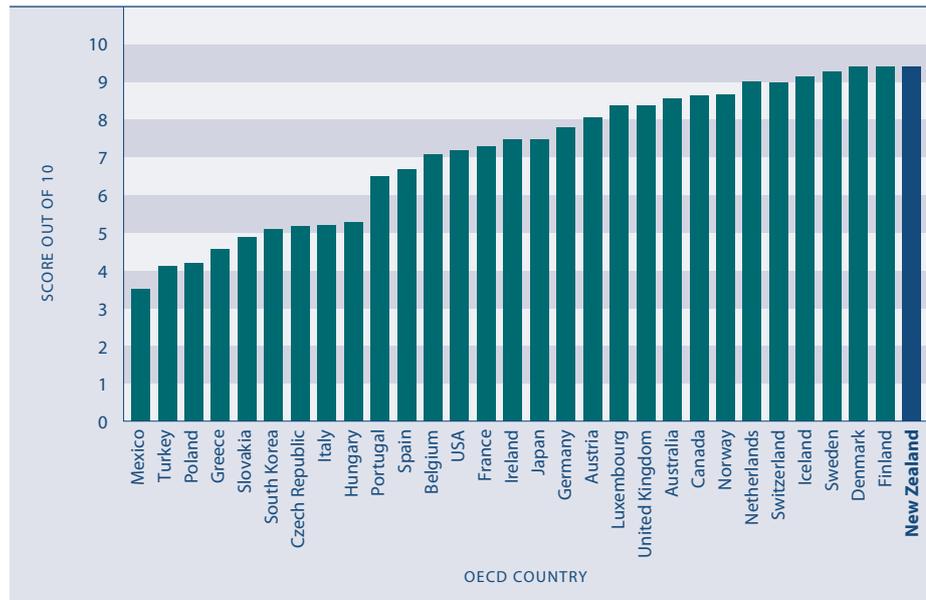
## INTERNATIONAL COMPARISON

In the Corruption Perceptions Index 2007, New Zealand was ranked first equal with Finland and Denmark as the least corrupt nations out of 30 OECD countries. Since 1995, New Zealand has consistently been among the top four OECD nations perceived as highly clean.

New Zealand scored higher in the perceived corruption index than Canada (eighth equal, 8.7), Australia (10th, 8.6), the United Kingdom (11th equal, 8.4), and the United States (18th, 7.2).

Figure CP4.1

**Corruption Perceptions Index scores (0=highly corrupt, 10=highly clean), OECD countries, 2007**



Source: Transparency International (2007)

## DESIRED OUTCOMES

New Zealanders share a strong national identity, have a sense of belonging and value cultural diversity. Everybody is able to pass their cultural traditions on to future generations. Māori culture is valued and protected.

# Cultural Identity

## INTRODUCTION

Culture refers to the customs, practices, languages, values and world views that define social groups such as those based on nationality, ethnicity, region or common interests. Cultural identity is important for people's sense of self and how they relate to others. A strong cultural identity can contribute to people's overall wellbeing.

Cultural identity based on ethnicity is not necessarily exclusive. People may identify themselves as New Zealanders in some circumstances and as part of a particular culture (eg Māori, Chinese or Scottish) in other circumstances. They may also identify with more than one culture.

The desired outcomes recognise it is important for people to feel a sense of national identity and also to be able to belong to particular social or ethnic groups. They recognise New Zealand is a multicultural society, while also acknowledging that Māori culture has a unique place. Under the Treaty of Waitangi, the Crown has an obligation to protect the Māori language.

Defining a national identity is not simple. New Zealand is a diverse nation, made up of many cultural groups, with many different customs and traditions. While people may describe themselves as "New Zealanders", how they define their "New Zealand-ness" will vary from person to person. For example, some people might see a New Zealand identity in aspects of New Zealand history or in New Zealand achievements in sporting, artistic or other endeavours, while others might see it through a sense of national characteristics or traits, or through national symbols and icons. Māori culture may form one aspect of national identity, since it is both unique to New Zealand and a part of our identity in the outside world.

Cultural identity is an important contributor to people's wellbeing. Identifying with a particular culture makes people feel they belong and gives them a sense of security. It also provides access to social networks, which provide support and shared values and aspirations. Social networks can help to break down barriers and build a sense of trust between people – a phenomenon sometimes referred to as social capital. However, strong cultural identity expressed in the wrong way can contribute to barriers between groups. An established cultural identity has also been linked with positive outcomes in areas such as health and education.<sup>80</sup>

Conversely, members of minority cultures can feel excluded from society if the majority of those in authority obstruct, or are intolerant of, their cultural practices. This happened to the Māori language and culture through much of New Zealand's history.

Culture can also play a part in promoting social wellbeing in other ways. A strong national culture or identity, and strength in creative endeavours, can be a source of economic strength and higher material standards of living.

## INDICATORS

Three indicators are used in this report. They are local content programming on New Zealand television, people identifying as Māori who can speak in Māori, and the retention of their first language (other than English and Māori) by identified ethnic groups.

While these indicators cannot provide an exhaustive picture of New Zealand's cultural identity, they do provide snapshots of the health of particular aspects of it. There is a strong focus on the health of Māori culture.

The first indicator, the amount of New Zealand content programming on television, provides one way of measuring the strength of New Zealanders' sense of national identity.

The second indicator measures the current health of the Māori language. Language is a central component of culture and a necessary skill for full participation in Māori society.

The final indicator, the proportion of people who can speak the first language (other than English and Māori) of their ethnic group, is an indicator of the degree to which people are able to retain their culture and traditions and to pass them on to subsequent generations.

# Local content programming on New Zealand television

## DEFINITION

The number of hours of local content screened on New Zealand television channels during prime-time (6pm to 10pm), as a proportion of the total prime-time schedule.

Local content is generally defined as material that is both predominantly made in New Zealand and reflective of New Zealand identity and culture. In 2005 the indicator included for the first time information from Māori Television Service and Prime Television, in addition to the core channels of TV One, TV2 and TV3. In 2006 it also included for the first time information from C4.

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## RELEVANCE

Television is the dominant cultural medium for most New Zealanders. The 1998/1999 Time Use Survey indicated that New Zealanders spend almost two hours a day watching television or videos.<sup>81</sup> Ninety-eight percent of New Zealand households have at least one television set.<sup>82</sup> For many people, television is a major source of news, information and entertainment and strongly influences their sense of local and national identity. A local content measure reflects the extent to which we see our culture reflected through this medium.

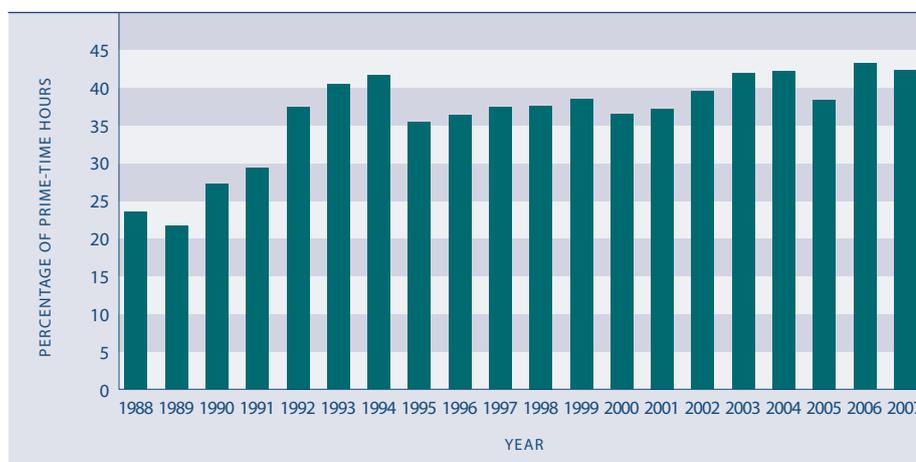
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## CURRENT LEVEL AND TRENDS

In 2007, local content on six national free-to-air television channels made up 43 percent of the prime-time schedule – similar to the level in 2006 and higher than in previous years going back to 1988. The proportion of local content on the three main free-to-air channels rose from 24 percent in 1988 to a peak of 42 percent in 1994, before dropping to 35 percent in 1995. It reached 42 percent again in 2003 and 2004. The fall to 38 percent in 2005 was mainly attributable to the inclusion of Prime Television which had a low level of local content. The subsequent addition of more local sport to Prime Television's schedule and to those of other free-to-air channels, along with the inclusion of C4's local entertainment programming, were important factors behind the increase in 2006.

The percentage of local content in prime-time transmission hours in 2007 differs across the channels: TV One: 56 percent, TV2: 20 percent, TV3: 44 percent, Prime: 17 percent, Māori Television: 62 percent, and C4: 56 percent. Between 2006 and 2007, percentages of local content in prime-time television declined for TV One, TV2 and C4, increased for TV3 and Prime, and remained steady for Māori Television.

Figure C1.1.1 **Proportion of local content on prime-time television, 1988–2007**



Source: NZ On Air

Notes: (1) Up to 2004, the figures are for prime-time (6pm-10pm) local content on TV One, TV2 and TV3 only (2) Figures from 2005 include Prime Television and Māori Television (2005 Māori Television figure derived by Ministry of Social Development) (3) Figures from 2006 include C4

Four programme types accounted for over three-quarters of the local content hours in 2007: news and current affairs (27 percent), information programmes (18 percent), sports (16 percent) and entertainment (15 percent). This was similar to the pattern in 2006, although information programmes accounted for a slightly greater proportion of local programming in 2007.

Table C1.1.2 **Percentage share of total hours of local content, by programme type, selected years, 1988–2007**

Programme type	1988	1990	1995	2000	2001	2002	2003	2004	2005	2006	2007
News, current affairs	26	23	21	30	33	29	32	34	31	27	27
Information	10	5	8	17	21	18	19	17	15	15	18
Sports	24	39	31	20	13	18	14	14	11	17	16
Entertainment	14	12	9	7	9	10	8	9	13	17	15
Children's	15	13	15	10	8	8	10	8	8	8	8
Drama/comedy	2	1	7	6	6	6	6	6	5	6	8
Māori	6	3	3	6	6	5	6	6	9	4	3
Documentaries	2	3	5	4	4	5	5	6	7	6	6
<b>Total New Zealand content hours</b>	<b>2,112</b>	<b>4,249</b>	<b>5,018</b>	<b>6,185</b>	<b>6,190</b>	<b>7,201</b>	<b>6,526</b>	<b>6,423</b>	<b>9,306</b>	<b>10,255</b>	<b>10,784</b>

Source: NZ On Air

Notes: (1) Information on types of local programmes in prime-time hours was not published before 2005 (2) These figures relate to a 24-hour period up to 2002; from 2003 on, figures relate to 18 hours (6am to midnight) (3) Up to 2004, the figures are for TV One, TV2 and TV3 only; figures from 2005 include Prime Television and Māori Television (2005 Māori Television figure derived by Ministry of Social Development); figures from 2006 include C4

## INTERNATIONAL COMPARISON

International comparisons are difficult due to the inconsistencies in measurement approaches by different countries. However, in 1999, local content accounted for 24 percent of total transmission time in New Zealand, a smaller proportion than in 10 other surveyed countries. This was compared to the United States (90 percent), the United Kingdom (BBC only, 78 percent), Canada (60 percent), Norway (56 percent), Finland (55 percent), Australia (which mandates a local content transmission quota of 55 percent on all free-to-air commercial networks) and Ireland (RTE only, 41 percent).<sup>83</sup> Note this is a measure of total air-time programming, rather than prime-time programming, which is the measure this indicator is based on.

# Māori language speakers

## DEFINITION

The number of Māori who reported in the five-yearly population census they could hold a conversation about everyday things in the Māori language (te reo Māori), as a proportion of the Māori population.<sup>84</sup>

## RELEVANCE

Māori language is a central component of Māori culture, and an important aspect of participation and identity. It also forms part of the broader cultural identity and heritage of New Zealand. In 1987, the Māori language was recognised as an official New Zealand language.

## CURRENT LEVEL AND TRENDS

Almost one-quarter of all Māori (24 percent, or 131,600 people) reported in the 2006 Census they could hold a conversation in Māori about everyday things. Of the 157,100 people (or 4 percent of the total New Zealand population) who could speak Māori in 2006, 84 percent were Māori.

The proportion of Māori who were fluent Māori speakers declined markedly over the last century, particularly following the rapid urbanisation of the Māori population in the 1950s and 1960s. The first national Māori language survey in 1973 estimated the proportion of fluent speakers had fallen to 18 percent. By the 1996 Census, the proportion of Māori who could hold a conversation in te reo Māori had risen to 25 percent and was still at that level in 2001. Although around 1,100 more Māori could speak Māori in 2006 than in 2001, the Māori population had grown by a greater number (39,000 people) and so the proportion of Māori language speakers recorded in the census declined slightly, from 25 percent in 2001 to 24 percent in 2006.

Information is also available from the two surveys on the health of the Māori language, conducted in 2001 and 2006. These show that the proportion of Māori aged 15 years and over with some level of speaking proficiency increased from 42 percent in 2001 to 51 percent in 2006. The increase was greatest at the higher proficiency levels, particularly among younger people. In 2006, 14 percent of Māori aged 15 years and over could speak Māori “well” or “very well”, up from 9 percent in 2001. The proportion of younger people (those aged 15–24 years and 25–34 years) with a high proficiency in te reo Māori more than doubled. The data is not directly comparable with census data because of differences in the way the information is collected and because the survey is designed to measure proficiency in te reo, rather than simply asking whether people can converse in the language.<sup>85</sup>

Figure CI.2.1 **Proportion of Māori speakers in the Māori population, by age, 2001 and 2006**



Source: Statistics New Zealand, 2001 and 2006 censuses

## AGE DIFFERENCES

Older Māori are considerably more likely than younger Māori to be able to converse about everyday things in Māori. In the 2006 Census, almost half (49 percent) of Māori aged 65 years and over and more than one-third (36 percent) of Māori aged 55–64 years reported being able to converse in the Māori language, compared with less than one-fifth (18 percent) of Māori aged under 15 years.

The decline of te reo speakers recorded in the census between 2001 and 2006 occurred among young and older Māori but was most pronounced at ages 55–64 years.

Table CI2.1

### Proportion (%) of Māori speakers in the Māori population, by age group and sex, 2001 and 2006

	Under 15	15–24	25–44	45–54	55–64	65+	Total
<b>Males</b>							
2001	18.9	22.9	24.5	31.7	45.2	55.3	24.6
2006	17.2	21.5	23.7	28.0	37.8	49.6	23.1
<b>Females</b>							
2001	21.2	26.0	23.7	29.2	42.5	53.5	25.7
2006	18.9	24.5	24.0	27.1	34.3	47.9	24.4
<b>Total</b>							
<b>2001</b>	<b>20.0</b>	<b>24.5</b>	<b>24.1</b>	<b>30.4</b>	<b>43.8</b>	<b>54.3</b>	<b>25.2</b>
<b>2006</b>	<b>18.1</b>	<b>23.0</b>	<b>23.9</b>	<b>27.5</b>	<b>36.0</b>	<b>48.7</b>	<b>23.7</b>

Source: Statistics New Zealand, 2001 and 2006 censuses

## SEX DIFFERENCES

Sex differences in the proportion of Māori language speakers among Māori were also apparent, with females being slightly more likely to be able to converse in Māori than males. However, the difference varied by age. From age 45 years onwards, Māori males were more likely than Māori females to speak Māori. For those younger than 25 years, a higher proportion of females than males could speak Māori.

## ETHNIC DIFFERENCES

After Māori, Pacific peoples had the highest proportion who could speak Māori (4 percent), followed by Europeans (1.6 percent), the Other ethnic group (1.1 percent) and Asians (0.5 percent).<sup>86</sup> In contrast to Māori, the ability to speak te reo Māori was higher at younger ages than at older ages in these ethnic groups.

## REGIONAL DIFFERENCES

Māori who live in areas with a high proportion of Māori residents are the most likely to be Māori language speakers. In 2006, the regions with the highest proportions of people with conversational Māori skills were Gisborne (32 percent), the Bay of Plenty (31 percent), Northland (28 percent), and Waikato and Hawke's Bay (each 26 percent).

# Language retention

## DEFINITION

The proportion of people who can speak the “first language” (excluding English) of their ethnic group, for ethnic groups (other than Māori) with an established resident population in New Zealand, as recorded in the 2006 Census.

The ability to speak a first language is defined as being able to hold an everyday conversation in that language. First language refers to a language associated with a given ethnicity, as opposed to the first language of a person. Sign language is not treated as a first language for the purposes of this indicator.

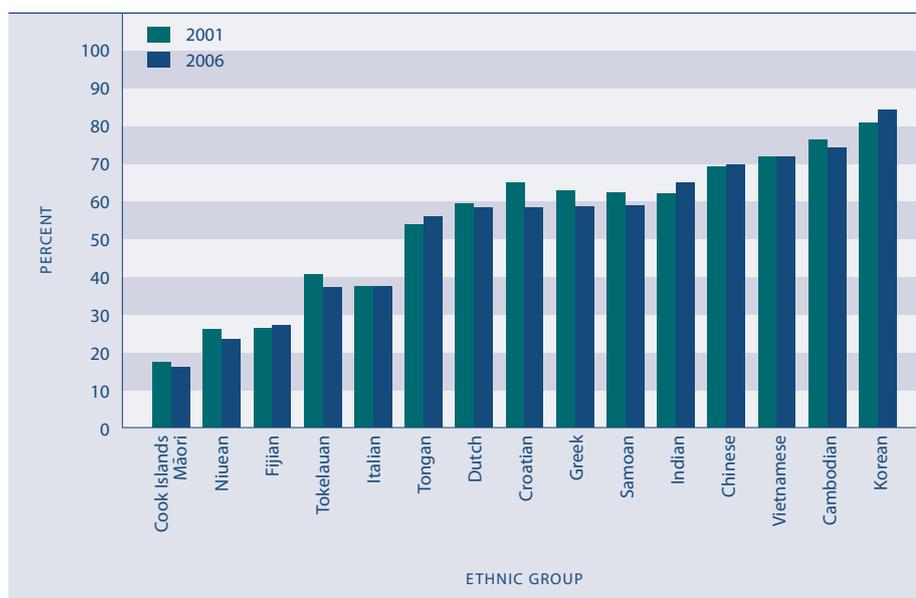
## RELEVANCE

The ability of people to speak the language of their identified ethnicity is an indicator of the ability of ethnic groups to retain and pass on their culture and traditions to future generations. Language is a central component of cultural identity.

## CURRENT LEVEL

In 2006, the proportion of people who could hold everyday conversations in the first language of their ethnic groups varied widely between ethnic groups, from 16 percent of Cook Islands Māori to 84 percent of Koreans. Between 2001 and 2006, most ethnic groups experienced little change in the proportion of people who could speak their first language, although there were slight increases for Tongan, Indian and Korean ethnic groups and slight decreases for most Pacific and European ethnic groups.

Figure CI.3.1 **Proportion of people who could speak the first language of their ethnic group, 2001 and 2006**



Source: Statistics New Zealand, Census of Population and Dwellings, unpublished data

For all ethnic groups, those who were born in New Zealand were considerably less likely to be able to speak the first language of their ethnic group than those who were born overseas.

Figure CI3.2 **Proportion of people who could speak the first language of their ethnic group, by birthplace, 2006**



Source: Statistics New Zealand, Census of Population and Dwellings, unpublished data

## AGE AND SEX DIFFERENCES

In all ethnic groups, younger people were less likely than older people to be able to hold an everyday conversation in the first language of their ethnic group. In Pacific and Asian ethnic groups, females tended to be slightly more likely than males to speak the first language of their ethnic group, but the reverse was true in most European ethnic groups.

Table CI3.1 **Proportion (%) of people in selected ethnic groups who can speak the first language of their ethnic group, by age group and sex, 2006**

	Age (years)			Sex		Total
	0–24	25–49	50+	Male	Female	
<b>Pacific</b>						
Samoan	46	71	88	58	60	59
Cook Islands Māori	6	23	50	15	17	16
Tongan	45	69	79	55	57	56
Niuean	10	34	61	22	24	23
Tokelauan	22	53	77	35	38	37
Fijian	16	35	48	27	27	27
<b>Asian</b>						
Chinese	60	75	83	68	72	70
Indian	53	71	79	63	67	65
Cambodian	63	84	87	71	77	74
Vietnamese	62	80	84	68	75	72
Korean	81	87	89	83	85	84
<b>European</b>						
Dutch	20	62	80	58	58	58
Greek	23	66	86	59	58	58
Croatian	30	62	80	61	56	58
Italian	13	46	67	38	36	37

Source: Statistics New Zealand, Census of Population and Dwellings, unpublished data

## DESIRED OUTCOMES

Everybody is satisfied with their participation in leisure and recreation activities. They have sufficient time to do what they want to do and can access an adequate range of opportunities for leisure and recreation.

# Leisure and Recreation

## INTRODUCTION

Leisure and recreation are both crucial components of a balanced and healthy lifestyle. Leisure time is a time when people can do what they want to do, away from work and other commitments.

Recreation and leisure play an important role in social wellbeing by providing people with a sense of identity and personal autonomy. Involvement in leisure-time activities adds meaning to individual and community life and contributes to people's overall quality of life. Recreation can encourage personal growth and self-expression and provide increased learning opportunities, satisfying needs not met in people's non-leisure time.

For many people, participation in leisure and recreation improves their physical and mental health. Recreation often involves a physical activity or sport. Research clearly shows increased physical activity can lead to fewer health problems and higher productivity at work, especially when combined with a balanced diet and a healthy lifestyle.

The benefits for mental health are equally important. Several studies have demonstrated links between regular physical activity and a reduction in the symptoms of mild or moderate depression, stress and anxiety. Passive leisure also has benefits for mental health, by providing an outlet for the mind. It may provide physical rest, tension release and opportunities to enjoy nature and escape from the daily routine.

Participation in leisure and recreation activities can also have social benefits. It creates opportunities for socialisation and contributes to social cohesion by allowing people to connect and network with others. It can also contribute to family bonding when families do things together in their leisure time.

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## INDICATORS

Three indicators are used in this chapter. They are: satisfaction with leisure time, participation in physical activity and participation in cultural and arts activities. Together, these indicators present a picture of how people feel about their leisure time and also what they do in their leisure time.

The first indicator is satisfaction with leisure time. This measures how people feel about both the quantity and quality of leisure time available to them.

The second indicator measures people's participation in physical activity. It gives us a sense of how active New Zealanders are. Moderate physical activity can improve a number of health outcomes.

The final indicator measures people's involvement in cultural and arts activities. Cultural activities contribute to individual growth and provide opportunities for social cohesion and passing on cultural traditions.

# Satisfaction with leisure time

## DEFINITION

The proportion of people aged 15 years and over who are “satisfied” or “very satisfied” with their leisure time as reported in the Quality of Life Survey 2006.

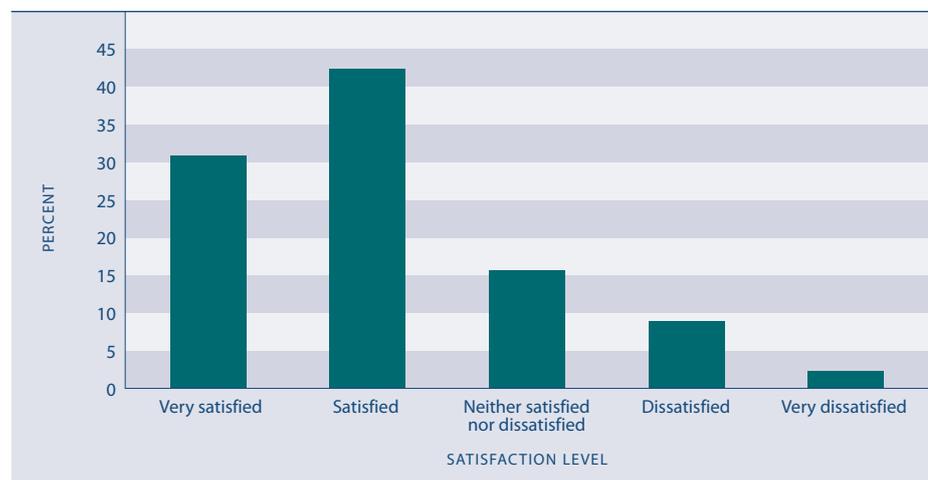
## RELEVANCE

Leisure time is a crucial component of a balanced and healthy lifestyle. It is a time when people can do what they want to, separate from work and other commitments.

## CURRENT LEVEL

According to the Quality of Life Survey 2006, almost three-quarters of New Zealanders (73 percent) were satisfied overall with their leisure time. Of these, 42 percent were satisfied and 31 percent were very satisfied.

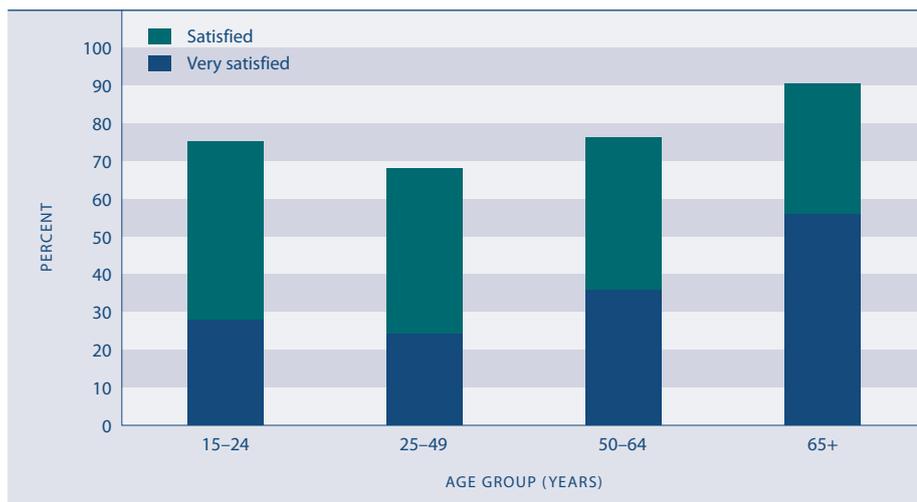
Figure L1.1 **Satisfaction with leisure time, people aged 15 years and over, 2006**



Source: Quality of Life Survey 2006

## AGE DIFFERENCES

While the majority of New Zealanders were satisfied with their leisure time, those aged 25–49 years were less satisfied overall (67 percent). This age group tends to have larger work and family commitments than other groups, which may impinge on the time available for leisure. In comparison, those aged 15–24 years and those aged 50–64 years were more likely to report being satisfied with their leisure time, with total satisfaction levels of 75 percent and 76 percent respectively. People aged 65 years and over reported the highest levels of overall satisfaction with their leisure time (90 percent).

Figure L1.2 **Satisfaction with leisure time, by age, 2006**

Source: Quality of Life Survey 2006

## SEX DIFFERENCES

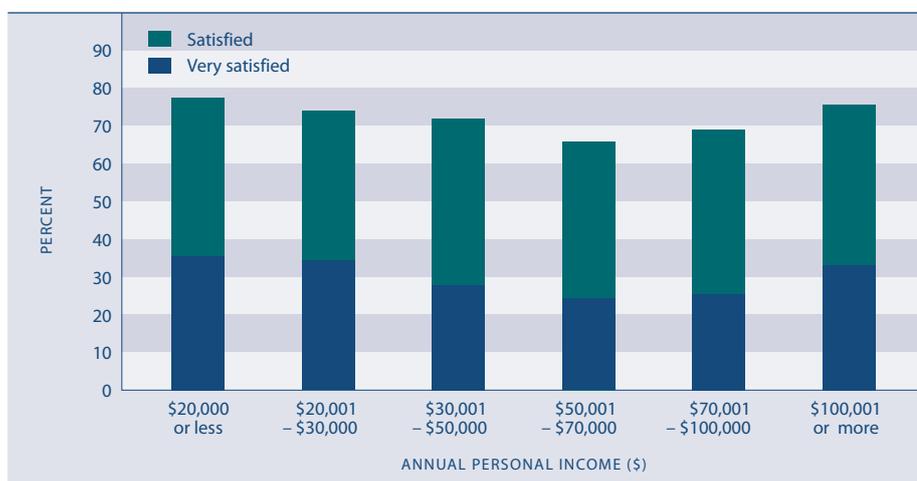
There was little difference between the sexes in reported satisfaction with leisure time. Seventy-four percent of men and 72 percent of women reported they were satisfied or very satisfied with their leisure time.

## ETHNIC DIFFERENCES

Most New Zealanders, regardless of their ethnicity, were satisfied with their leisure time. In 2006, the European ethnic group (75 percent) and Pacific peoples (73 percent) had higher levels of satisfaction with their leisure time than Māori (68 percent) or Asian New Zealanders (63 percent). The small remaining group of people from the Other ethnic group reported the highest level of total satisfaction (76 percent).

## SOCIO-ECONOMIC DIFFERENCES

People's levels of satisfaction with their leisure time varied slightly by the levels of their personal income, but not in a consistent way. In 2006, satisfaction with leisure time was highest for people with an annual personal income of \$20,000 or less, with 77 percent of the people in this income range saying they were either very satisfied or satisfied with their leisure time. Two income groups had below average levels of satisfaction – those with a personal income between \$50,001 and \$70,000 (66 percent), and those with an income between \$70,001 and \$100,000 (69 percent).

Figure L1.3 **Satisfaction with leisure time, by personal income, 2006**

Source: Quality of Life Survey 2006

# Participation in physical activity

## DEFINITION

The proportion of the population aged 15 years and over who met physical activity guidelines (ie were physically active for at least 30 minutes a day on five or more days over the last week), as measured by the 2002/2003 and 2006/2007 New Zealand Health Surveys.

## RELEVANCE

Participation in physical activity is a source of enjoyment and has positive benefits for people's physical and mental health. It can also contribute to personal growth and development and is a good way to meet new people.

## CURRENT LEVEL AND TRENDS

In 2006/2007, 51 percent of New Zealanders aged 15 years and over met physical activity guidelines, reporting they had been physically active for at least 30 minutes a day on five or more days over the last week. In 2002/2003, the proportion was 53 percent. However, the change between 2002/2003 and 2006/2007 was not statistically significant. The rates used in this section have been adjusted for age.

## SEX AND AGE DIFFERENCES

Males were significantly more likely than females to meet physical activity guidelines. In 2006/2007, 54 percent of males reported being physically active for at least 30 minutes a day on five or more days in the last week, compared to 47 percent of females.

Activity levels tend to decline with age. In 2006/2007, the proportion of the population who met physical activity guidelines was highest for age groups under 35 years and lowest for age groups over 65 years. Only for those aged 75 years and over were the proportions significantly lower than the rate for all ages.

Between 2002/2003 and 2006/2007, men in the 35–44 years and 45–54 years age groups recorded a decline in the proportion who met physical activity guidelines, as did women aged 55–64 years.

Table L2.1 **Proportion (%) of the population aged 15 years and over who met physical activity guidelines in the last week, by age and sex, 2002/2003 and 2006/2007**

Age group	Males		Females		Total	
	2002/2003	2006/2007	2002/2003	2006/2007	2002/2003	2006/2007
15–24	63.6	63.4	47.0	47.0	55.3	55.2
25–34	53.2	57.5	51.0	48.7	52.0	52.9
35–44	57.9	52.5	47.7	49.6	52.6	51.0
45–54	59.9	51.6	50.4	51.9	55.1	51.8
55–64	54.8	50.2	57.7	50.3	56.2	50.2
65–74	51.5	51.3	46.3	43.5	48.7	47.2
75+	36.1	40.6	29.8	26.3	32.6	32.4
<b>Total</b>	<b>56.2</b>	<b>54.0</b>	<b>48.4</b>	<b>47.3</b>	<b>52.1</b>	<b>50.5</b>

Source: Ministry of Health, Public Health Intelligence

## ETHNIC DIFFERENCES

Asians aged 15 years and over were significantly less likely than the population in that age group in general to have met physical activity guidelines in the previous week. In 2006/2007, the age-standardised rate for Asians was 40 percent while the rate for all New Zealanders aged 15 years and over was 51 percent. In each ethnic group other than Pacific peoples, males were significantly more likely than females to have met physical activity guidelines. These patterns were similar in 2002/2003.

Table L.2.2 **Proportion (%) of the population aged 15 years and over who met physical activity guidelines in the last week, by ethnic group and sex, 2002/2003 and 2006/2007**

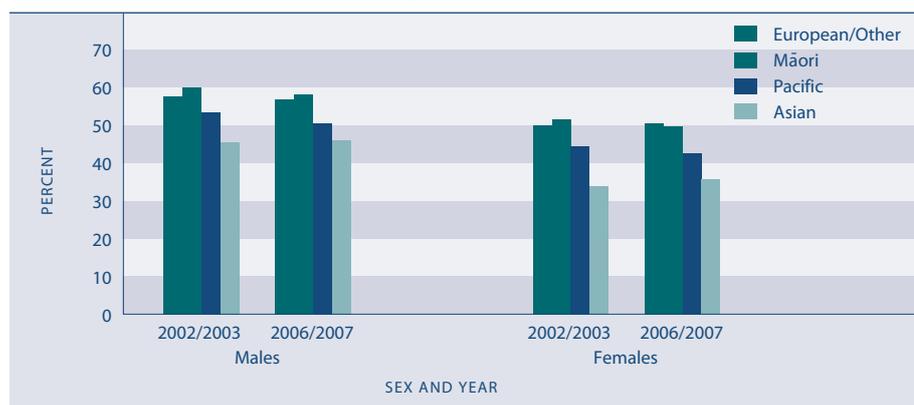
Ethnic group	Males		Females		Total	
	2002/2003	2006/2007	2002/2003	2006/2007	2002/2003	2006/2007
European/ Other	57.4	56.6	49.9	50.3	53.5	53.3
Māori	59.7	57.9	51.2	49.4	55.2	53.4
Pacific peoples	53.2	50.4	44.2	42.3	48.5	46.1
Asian	45.3	45.8	33.8	35.6	39.1	40.4
<b>Total</b>	<b>56.7</b>	<b>54.9</b>	<b>48.6</b>	<b>47.9</b>	<b>52.5</b>	<b>51.3</b>

Source: Ministry of Health, Public Health Intelligence

Notes: (1) People who reported more than one ethnic group are counted once in each group reported (2) Age-standardised using WHO world population

Between 2002/2003 and 2006/2007, there were no significant increases in the rate at which the population aged 15 years and over met physical activity guidelines for any ethnic group.

Figure L.2.1 **Proportion of the population aged 15 years and over who met physical activity guidelines in the last week, by ethnic group and sex, 2002/2003 and 2006/2007**



Source: Ministry of Health, Public Health Intelligence

Notes: (1) People who reported more than one ethnic group are counted once in each group reported (2) Age-standardised using WHO world population

## SOCIO-ECONOMIC DIFFERENCES

In 2006/2007, there was no association between physical activity and the level of neighbourhood deprivation (as measured by NZDep2006 quintiles).

# Participation in cultural and arts activities

## DEFINITION

The proportion of the population aged 15 years and over who had experienced one or more of the cultural activities included in the 2002 Cultural Experiences Survey.

Respondents were asked to report on activities they experienced over either a 12-month period (for goods and services accessed or experienced relatively infrequently) or a four-week recall period (for activities experienced on a more regular basis).

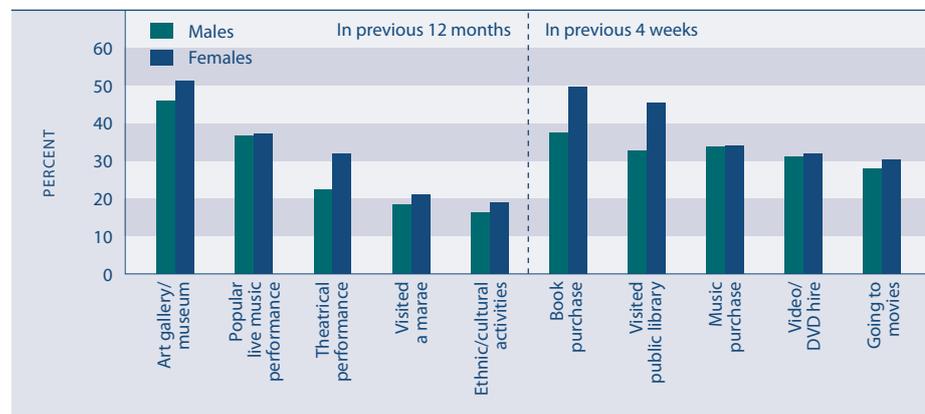
## RELEVANCE

Cultural activities are an integral part of leisure and recreation. People participate in cultural activities for a wide variety of reasons: for enjoyment and entertainment, for personal growth and development, as a means of expression, to learn new skills, to meet new people and to pass on cultural traditions.

## CURRENT LEVEL

Ninety-three percent or 2.6 million people aged 15 years and over experienced one or more of the cultural activities included in the 2002 Cultural Experiences Survey. The most popular activities (those undertaken in the four weeks before the survey) were purchasing books (43 percent) and visiting a public library (39 percent). Of the less popular activities (those experienced over the past year) the most preferred were visiting an art gallery or museum (48 percent) and attending a popular live music performance (37 percent). A lack of time and cost were the main barriers to experiencing cultural activities more often, or at all.

Figure L3.1 **Proportion of the population aged 15 years and over who experienced cultural activities, by activity type and sex, 2002**



Source: Statistics New Zealand (2002a)

## AGE DIFFERENCES

Younger people were more likely to experience at least one of the cultural activities than people in older age groups. In 2002, 98 percent of 15–24 year olds and 96 percent of 25–44 year olds took part in one or more of the surveyed activities. Participation was lowest among people aged 65 years and over (81 percent). Popular activities among younger people included hiring a video or DVD (53 percent) and purchasing music (49 percent). Older people (65 years and over) were more likely to visit a public library than other age groups, with 46 percent reporting this activity.

**SEX DIFFERENCES**

Women were slightly more likely to experience one or more of the cultural activities included in the survey than men (95 percent compared with 92 percent). More women than men purchased a book, visited a library and went to a theatrical performance. There was no difference in the proportion of men and women who purchased music.

**ETHNIC DIFFERENCES**

Māori were more likely to have participated in at least one of the cultural activities included in the survey than European or Pacific peoples (Māori 97 percent, European 93 percent, Pacific peoples 92 percent). Popular activities experienced by Māori included visiting a marae (69 percent) and attending a popular live music performance (40 percent). European New Zealanders were more likely to report visiting an art gallery or museum than other groups (51 percent), while Pacific peoples had the highest rate of participation in community-based ethnic or cultural activities (39 percent).

Table L3.1 **Proportion (%) of the population aged 15 years and over who had participated in cultural activities, by activity type and ethnic group, 2002**

	Māori	Pacific peoples	European
<b>In the previous 12 months</b>			
Art gallery/museum	42	27	51
Popular live music performance	40	27	39
Theatrical performance	18	19	30
Visited a marae	69	22	14
Ethnic/cultural activities	20	39	14
<b>In the previous four weeks</b>			
Book purchase	40	29	45
Visited public library	34	31	39
Music purchase	32	33	34
Video/DVD hire	39	26	31
Going to movies	23	21	30
<b>Any cultural activity</b>	<b>97</b>	<b>92</b>	<b>93</b>

Source: Statistics New Zealand (2002a)

**REGIONAL DIFFERENCES**

In 2002, 94 percent of people living in urban areas experienced one or more of the cultural activities included in the survey, compared to 93 percent of people living in secondary urban areas and 91 percent of those living in minor urban and rural areas. The Wellington Regional Council area had the highest proportion of people who experienced at least one of the surveyed activities (97 percent), while Taranaki had the lowest level of participation (87 percent).

## DESIRED OUTCOMES

The natural and built environment in which people live is clean, healthy and beautiful. Everybody is able to access natural areas and public spaces.

# Physical Environment

## INTRODUCTION

The physical environment includes land, air, water, plants and animals, buildings and other infrastructure, and all of the natural resources that provide our basic needs and opportunities for social and economic development.

A clean, healthy environment is important for people's physical and emotional wellbeing. At a fundamental level, elements such as clean air and good quality drinking water are vital for people's physical health. Other environmental factors such as noise pollution can cause both physical harm and psychological stress.

The cleanliness and beauty of the environment is also important for people's sense of wellbeing. For many people, access to an attractive physical environment contributes to their contentedness with life. A healthy environment provides recreational opportunities, allowing people to take part in activities they value. For New Zealanders, the "clean, green" environment is an integral part of their national identity. They see guardianship of the land and other aspects of the physical environment as an important part of social wellbeing.<sup>87</sup> This image is also vital for the health of New Zealand's economy. It is a key contributor in attracting tourists and it underpins the nation's success as an exporter of primary products.

Harm to the environment can reduce the quality of life not only for people alive today but also for those born many years in the future. The concept of sustainability is an important aspect of social wellbeing. It acknowledges that social and economic developments need to take place in ways that do not harm present and future wellbeing by damaging the natural environment, and do not harm future wellbeing by using natural resources in unsustainable ways.

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## INDICATORS

Two indicators are used in this chapter: air quality and drinking water quality. Both measure important aspects of the environment that have a direct impact on individual wellbeing. Because of a lack of adequate data, there is no direct measure of people's access to natural areas and public spaces.

The two indicators provide an insight into current and future wellbeing. They relate to the health, cleanliness and beauty of the environment. Pollution in the air or water can have significant adverse effects on people's health, as well as being detrimental to the beauty of the environment.

The first indicator measures the levels of fine particles in the air at certain sites. Fine particles are known to have a harmful effect on people's health. Prolonged exposure to elevated levels has been linked with the aggravation of existing respiratory and cardiovascular diseases and premature death.

The second indicator measures the percentage of the population receiving drinking water that complies with either the 2000 Drinking Water Standards or the 2005 Drinking Water Standards. Poor-quality drinking water can create health risks from water-borne diseases and contaminants. It is also likely to be associated with poor-quality sewerage infrastructure and electricity supply.

# Air quality

## DEFINITION

The average annual PM<sub>10</sub> levels in selected sites above the ambient air quality guideline for PM<sub>10</sub>.

PM<sub>10</sub> is airborne particulate matter that is smaller than 10 microns in diameter. It is produced by the combustion of wood and fossil fuels (such as petrol), and from some natural sources (such as pollen). The ambient air quality guideline for PM<sub>10</sub> is 20 micrograms per cubic metre (20µg/m<sup>3</sup>), averaged annually.

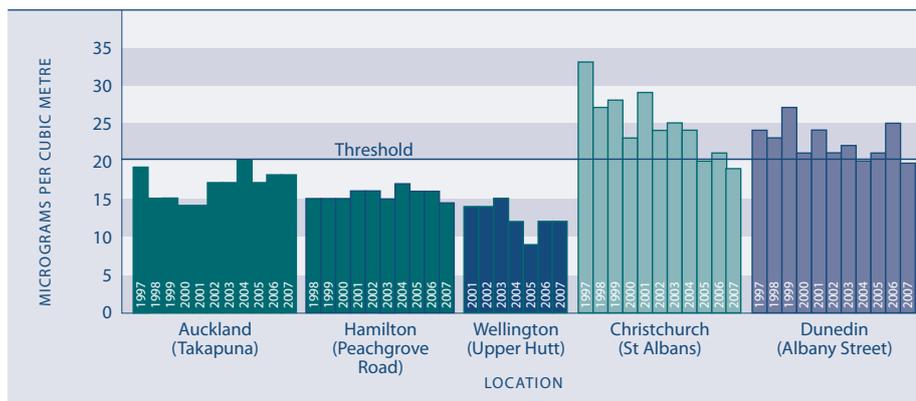
## RELEVANCE

Good air quality is an important component in maintaining our quality of life and the health of our people, plants and animals. Clean air also contributes to the attraction of New Zealand's natural environment to tourists and immigrants. PM<sub>10</sub> is the primary contaminant of concern in New Zealand. Poor air quality is known to adversely affect the health of many people, particularly older people, infants, people with respiratory problems and people with chronic diseases such as heart disease.<sup>88</sup> The health effects associated with this contaminant include increased premature mortality, the aggravation of existing respiratory and cardiovascular diseases, hospital admissions and emergency department visits, school absences, lost work days and restricted activity days.

## CURRENT LEVEL AND TRENDS

Figure EN1.1 shows the average annual PM<sub>10</sub> levels in the air at selected monitoring sites in the five major cities. In 2007, all five sites averaged PM<sub>10</sub> levels that were below the annual guideline. The Christchurch and Dunedin results were only just below the annual guideline in 2007. Both sites have been above the guideline for most of the years between 1997 and 2006. Christchurch has had improving annual results, while Dunedin's results have fluctuated. The Auckland site has averaged PM<sub>10</sub> levels at or below the annual guideline since 1997. Although Auckland's results have deteriorated since 1998, they have still met the guideline each year. The recorded average annual PM<sub>10</sub> levels at the Hamilton and Wellington sites have been consistently below the New Zealand annual guideline.

Figure EN1.1 **Average annual PM<sub>10</sub> levels, at selected sites, 1997–2007**



Source: Ministry for the Environment, unpublished data

Notes: (1) 2007 data for Auckland is provisional (2) The 2007 Dunedin average is based on an incomplete year of data. Data was not collected from 1 January 2007 until 23 March 2007 due to maintenance issues with the instrument (3) Data is unavailable for Wellington before 2001 and Hamilton before 1998

In September 2005, the Ministry for the Environment introduced a new air quality standard that uses a daily measure rather than the annual measure reported above. The National Environmental Standard for PM<sub>10</sub> is 50 micrograms per cubic metre (50µg/m<sup>3</sup>), averaged daily over 24 hours. The standard must be met every day of the year, but one. When sufficient time series data is available for this measure, we will expand the reporting against this standard. The standard is monitored by regional councils in “airsheds”, areas within the region where air quality may, or is known to, exceed the standard or may require management in the future. To date, regional and unitary authorities have declared 69 airsheds within New Zealand that meet these criteria. Compliance with the daily PM<sub>10</sub> standard is discussed below.

In 2007, the Christchurch airshed exceeded the average daily PM<sub>10</sub> concentration on 14 days, the Auckland urban airshed exceeded on seven days and the Dunedin airshed (which includes central and north Dunedin, but not south Dunedin), exceeded the daily average on two days. Between 2006 and 2007, the Christchurch and Dunedin airsheds significantly reduced the number of days they exceeded the daily PM<sub>10</sub> standard, from 27 days and 7 days respectively. Auckland exceeded the daily guidelines in 2006 on six days, a similar number of days to that recorded in 2007. The Wellington and Hamilton City airsheds did not exceed the daily standard on any day in 2007.

Some smaller locations outside the main cities have issues with air quality. In 2005, Alexandra, Nelson, Richmond, Timaru and Tokoroa each exceeded the daily standard on over 30 days of the year.<sup>89</sup>

In New Zealand, poor air quality resulting from PM<sub>10</sub> emissions is typically associated with urban areas and is a product of domestic home heating (nationally) and vehicle emissions (Auckland). Lesser sources of PM<sub>10</sub> are industrial and agricultural emissions and the natural sources of small particles, dust pollens and sea spray. Weather conditions and geography also influence air quality. Wind can disperse pollution, temperature inversions (where a layer of warm air stops cold air close to the ground from rising) can trap pollution and the topography of valleys can encourage air pollution to build-up.

## INTERNATIONAL COMPARISON

Ambient air quality is particular to one location. It is reasonable to compare particular sites between countries but not to compare countries.

In 2006, the average annual levels of PM<sub>10</sub> were similar between the five main centre New Zealand sites and the 20 sites in the Australian regions of Sydney and Port Phillip (which includes Melbourne). The New Zealand sites had average annual levels of PM<sub>10</sub> ranging from 12–25µg/m<sup>3</sup>, while the sites in the two Australian regions had average annual PM<sub>10</sub> levels ranging from 14–26µg/m<sup>3</sup>.<sup>90</sup> In 2006, 62 urban sites in the United Kingdom compared poorly to the five New Zealand sites. Three of New Zealand’s main centre sites (Wellington, Auckland and Hamilton) had annual PM<sub>10</sub> levels below or equal to the lowest annual PM<sub>10</sub> levels for the United Kingdom sites. Over half of the 62 United Kingdom urban sites had annual levels at or above 24µg/m<sup>3</sup>, with the highest being 40µg/m<sup>3</sup>.<sup>91</sup> In 2006, only one of the five New Zealand sites (Dunedin) had an annual level at or above 24µg/m<sup>3</sup>.

# Drinking water quality

## DEFINITION

The percentage of the estimated resident population who receive their water from community water supplies whose drinking water complies with either the 2000 or 2005 Drinking Water Standards of New Zealand relating to *E. coli* and *Cryptosporidium*.

## RELEVANCE

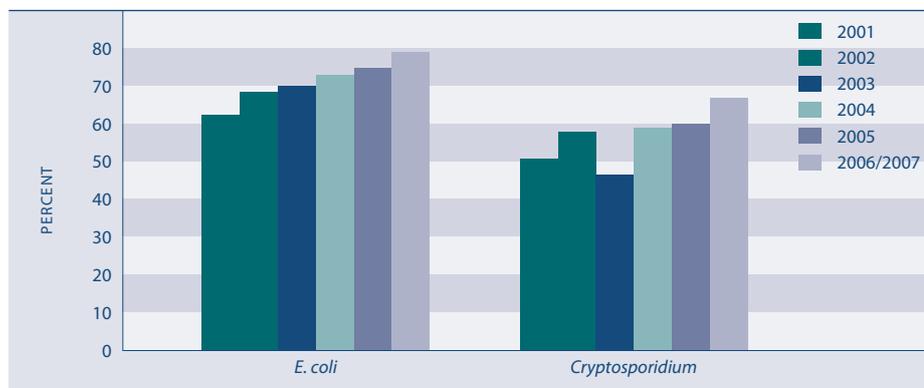
Good quality drinking water is critical for people’s health and their quality of life. The health risk to consumers from water-borne diseases in drinking water supplies comes from three main types of microorganisms: bacteria (such as *Campylobacter* and pathogenic *E. coli*), parasites (such as *Giardia* and *Cryptosporidium*) and viruses such as Norovirus. Improvements in this indicator suggest less of the population is at risk of water-borne diseases and other microbiological contaminants.

## CURRENT LEVEL AND TRENDS

Most New Zealanders are supplied with drinking water that complies with the microbiological standards. However, many smaller communities are supplied with microbiologically non-compliant drinking water. In 2006/2007, the proportion of the total population whose drinking water, measured at the tap, complied with the Drinking Water Standards for *E. coli* was 79 percent. This was an increase from 75 percent in 2005 and a considerable improvement from 62 percent in 2001. Most water supplies serving large population areas are fully compliant with the Drinking Water Standards. A significant reason for non-compliance is inadequate monitoring rather than proven contamination of drinking water.

Compliance with the Drinking Water Standards for *Cryptosporidium* is assessed at the water treatment plant rather than at the tap. In 2006/2007, the *Cryptosporidium* compliance rate was 67 percent. This was an improvement on the 2005 rate of 60 percent, and on the 2001 rate of 51 percent. Compliance rates for *Cryptosporidium* dropped in 2003 to 47 percent, but recovered to 59 percent in 2004. The drop in the compliance rate in 2003 was largely due to non-compliance at the Waitakere plant, which has since been resolved.

Figure EN2.1 **Proportion of the population served with water that meets the relevant Drinking Water Standards, 2001–2006/2007**



Source: ESR (Environmental Science and Research), customised data

Notes: (1) The measurement of compliance has moved from a calendar year to the fiscal year (2) These compliance rates may differ when compared to Ministry of Health publications due to methodological differences explained in Appendix 2

**REGIONAL DIFFERENCES** The current transition between the 2000 and 2005 Drinking Water Standards is scheduled to take several years to complete, with drinking water suppliers choosing which of these standards to operate under in the meantime. Therefore, some regions will have moved to the 2005 standards while others will still be using the 2000 standards.

There is considerable regional variation in the population served with drinking water that is fully compliant with the 2000 or 2005 Drinking Water Standards for *E. coli* and *Cryptosporidium*. Between 2002 and 2005, less than 5 percent of the population in the Marlborough region was served with drinking water that fully complied with the Drinking Water Standards for *E. coli*. In 2006/2007 this significantly increased to 75 percent. The West Coast region had low compliance rates with *E. coli* standards in 2004 (34 percent) and 2005 (33 percent), and did not improve in 2006/2007 (35 percent). Compliance was highest in the Nelson (93 percent), and Auckland and Canterbury (both 91 percent) regions.

In 2006/2007, none of the population in the Marlborough and Gisborne regions was supplied with drinking water that fully complied with the Drinking Water Standards for *Cryptosporidium*. None of the population in Marlborough has had drinking water that complied with the standards for *Cryptosporidium* since 2001. In 2006/2007, less than 1 percent of the population in the West Coast region and less than 5 percent of the population in the Tasman region were supplied with fully-compliant drinking water. Compliance with *Cryptosporidium* standards was highest in the Nelson (97 percent), Auckland (88 percent) and Wellington (84 percent) regions.

## INTERNATIONAL COMPARISON

Overall, the quality of New Zealand's drinking water is comparable with other developed countries. New Zealand's water supplies are free of many of the pathogens that result in sickness and death in some parts of the world. However, the incidence of *Giardia* infection in New Zealand is 85 per 100,000 people, which is considered high compared to the reported rates for other western countries.<sup>92</sup> The contribution of contaminated drinking water to the incidence of giardiasis is not known.

## DESIRED OUTCOMES

Everybody enjoys physical safety and feels secure. People are free from victimisation, abuse, violence and avoidable injury.

# Safety

## INTRODUCTION

Safety is fundamental to wellbeing: violence and avoidable injuries, at their most extreme, threaten life itself. In other cases, they reduce the quality of life for the victim and other people in various ways.

Both safety and security are important. Safety is freedom from physical or emotional harm, while security is freedom from the threat or fear of harm or danger. The desired outcomes recognise threats come in many forms, ranging from deliberate violence to accidental injury.

Violence and injury corrode quality of life in many ways. Physical injury causes pain and incapacity, reducing victims' enjoyment of life and their ability to do things that are important to them.

Property crime, such as burglary, also affects people's wellbeing. In addition to the direct losses associated with crime of this sort, evidence suggests the threat of burglary is a more significant worry for many people than the threat of violence.<sup>93</sup>

Psychological effects are often as important as the physical ones. Victims of violence or injury often retain emotional scars long after their physical wounds have healed. They may suffer from depression or face other mental health issues.

Crime affects not only individuals but also society as a whole. The victim's family and friends are likely to suffer grief and anger. They may have to care for someone who is temporarily or permanently incapacitated and who may lose their livelihood. Crime and the fear of crime may also reduce social cohesion within communities.

Crime may restrict people's choices about how to live their lives. For example, they may stay away from certain areas or avoid going out because of a fear of crime.

The costs to society as a whole range from the expense of hospital care and law enforcement to the loss of the victim's input into their work and community. Children who grow up surrounded by violence may themselves become violent adults, perpetuating a negative cycle.

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## INDICATORS

Four indicators are used in this chapter: assault mortality, criminal victimisation, fear of crime and road casualties. The first three indicators provide a picture of the level and impact of violence in the community.

Assault mortality provides a picture of intentional violence across society. Reducing interpersonal violence in families and communities is critical to social and personal wellbeing. This indicator measures deaths resulting from violence, the tip of the violence pyramid. Young children and youth are particularly vulnerable.

Measuring criminal victimisation from police records is difficult, as many crimes are not reported to the police. This is particularly true of domestic violence, sexual violence and child abuse. The second indicator uses survey results to give a more comprehensive picture of the level of criminal victimisation in society, including the level of violence.

The third indicator is fear of crime. Feeling unsafe harms people's quality of life by producing anxiety and reducing their options in life. However, there is some evidence fear is not necessarily linked to the actual risk of becoming a crime victim. For example, people may feel unsafe and have their quality of life reduced even when the actual likelihood of their being victimised is relatively small.

People should also be able to live in a society free from the risk of avoidable death or injury. The leading cause of avoidable injury and death is motor vehicle crashes. In economic terms, the social cost of motor vehicle crashes has been estimated at \$3.1 billion annually.<sup>94</sup> The final indicator is road casualties.

Workplace accidents are another form of avoidable injury. They are discussed in the chapter on Paid Work.

# Assault mortality

## DEFINITION

The number of people who have died as the result of an assault, per 100,000 population.

## RELEVANCE

Reducing interpersonal violence in families and communities is critical to social and personal wellbeing. This indicator measures deaths resulting from violence, the tip of the violence pyramid. Young children and youth are particularly vulnerable.

## CURRENT LEVEL AND TRENDS

In the five years to 2005, 296 people died as the result of an assault, a decline from 300 people in 1996–2000, 316 people in 1991–1995, and 346 people in 1986–1990.

The provisional age-standardised assault mortality rate for the year 2005 was 1.7 per 100,000 population, up from 1.2 per 100,000 in 2004. In the early-1980s, the assault mortality rate was around 1.5 per 100,000. It increased to around 2.0 per 100,000 between 1986 and 1992, falling back to around 1.5 per 100,000. It should be noted that rates based on small numbers are volatile, and trends can be difficult to discern over the short term.

Figure SS1.1 **Age-standardised assault mortality rate, by sex, 1980–2005**



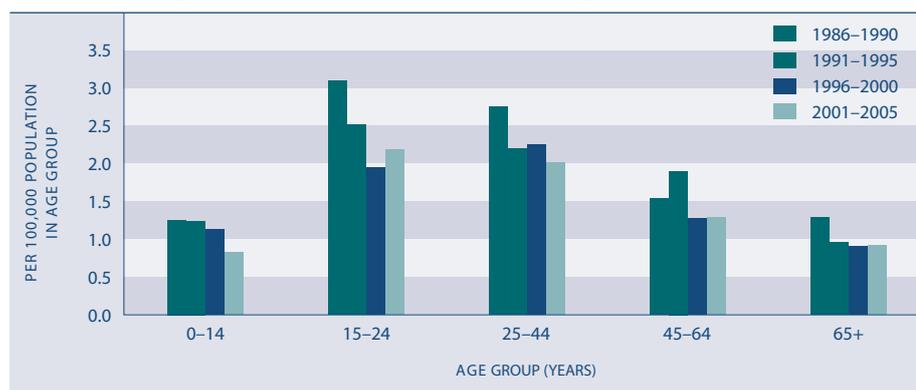
Source: Ministry of Health, New Zealand Health Information Service  
Note: 2005 data is provisional

## AGE AND SEX DIFFERENCES

Five-year average annual assault death rates for the period 2001–2005 were highest among youth aged 15–24 years (2.2 deaths per 100,000), followed by adults aged 25–44 years (2.0 per 100,000) and those aged 45–64 years (1.3 per 100,000). Children under 15 years and older people aged 65 years and over had the lowest rates (0.8 and 0.9 per 100,000 respectively). For children, the risk of dying from an assault is highest at younger ages. In the five years to 2005, the assault death rate for children under 5 years was 1.6 deaths per 100,000, more than three times higher than the rate for 5–14 year olds (0.5 per 100,000). In all age groups, rates were lower in the period 2001–2005 than they had been in the late 1980s.

Males are more likely than females to die from an assault. The provisional 2005 age-standardised death rate was 1.8 per 100,000 for males, and 1.6 per 100,000 for females. The rise in the assault mortality rate in the late-1980s and early-1990s was the result of an increase in the male rate in that period.

Figure SS1.2 **Five-year average annual assault mortality rates, by age, 1986–1990 to 2001–2005**



Source: Ministry of Health, New Zealand Health Information Service

## ETHNIC DIFFERENCES

Māori are considerably more likely than non-Māori to die as the result of an assault. In 2005, the age-standardised rate for Māori was 3.5 deaths per 100,000 compared with 1.2 per 100,000 for non-Māori. The age-standardised rate for Māori males (4.1 per 100,000) was higher than the rate for Māori females (3.0 per 100,000).

In the five years from 2001 to 2005, Māori children aged under 15 years died from an assault at an average annual rate of 1.5 per 100,000 children. Over the same period, non-Māori children died at an average annual rate of 0.6 per 100,000 children.

## INTERNATIONAL COMPARISON

OECD homicide rates are standardised to the 1980 OECD population and differ from the rates shown in this indicator. In 2003, the average homicide death rate for 27 OECD countries was 1.8 per 100,000 for males and 0.9 per 100,000 for females. New Zealand homicide rates were lower than the OECD average for males (1.7 per 100,000) and higher than average for females (1.1 per 100,000). New Zealand's male homicide rate was the same as Australia's but lower than Canada's (2.0 deaths per 100,000) and higher than the United Kingdom's (0.7 per 100,000). New Zealand had a higher female homicide rate than Canada (1.0 deaths per 100,000), Australia (0.9 per 100,000) and the United Kingdom (0.2 per 100,000). Death rates from homicide are highest in the United States; the rate for males in 2003, at 9.7 per 100,000, was five times greater than the OECD average, while the female rate of 2.6 per 100,000 was three times greater.

International comparison information for child maltreatment deaths is not available on an annual basis. Results of a 2003 UNICEF study of child maltreatment deaths in rich countries in the 1990s showed that New Zealand had the third highest child maltreatment death rate (1.2 per 100,000 children under the age of 15 years).

# Criminal victimisation

## DEFINITION

The proportion of the population aged 15 years and over who had been victims of one or more incidents of criminal offending in 2005 as measured by the New Zealand Crime and Safety Survey 2006.

## RELEVANCE

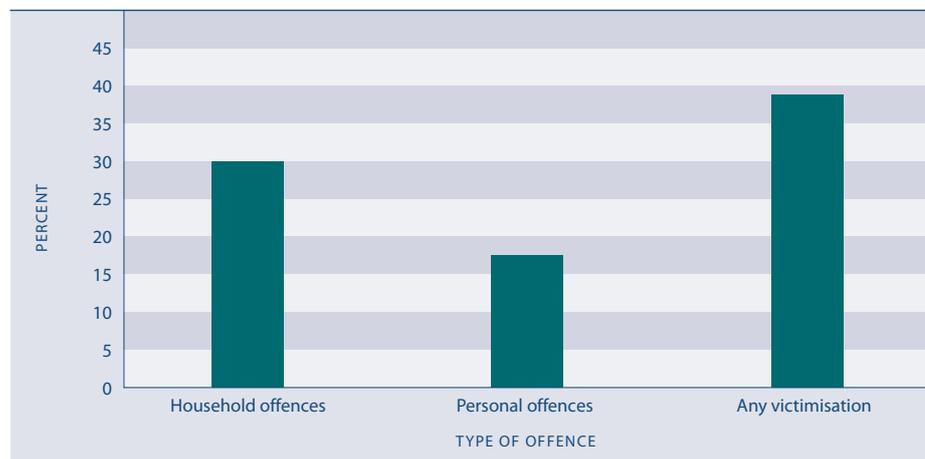
The criminal victimisation rate provides a broad measure of personal safety and wellbeing. Surveys of criminal victimisation generally provide a more comprehensive picture of victimisation than police data, as not all offending is reported to or recorded by the police.

## CURRENT LEVEL

The survey data shows 39 percent of New Zealanders aged 15 years and over experienced some form of criminal victimisation in 2005. Comparisons with data from earlier surveys are not possible owing to changes in the survey design.<sup>95</sup>

Thirty percent of households had been victims of some kind of household crime in 2005. The most common offences were burglaries (14 percent) and vandalism to household property (9 percent). Over the same period, 18 percent of individuals had been victims of some type of personal offence, the most common being assaults and threats (both 9 percent). A relatively small number of people accounted for the majority of victimisations: just 6 percent of people had been victimised five or more times during the survey period but they experienced 51 percent of all victimisations.

Figure SS2.1 **Criminal victimisation prevalence rate, by type of victimisation, 2005**



Source: Mayhew and Reilly (2007b) Table 3.1

## AGE AND SEX DIFFERENCES

Young people are more likely than others to be victims of crime, and the likelihood of being victimised decreases with age. Among people in the 15–24 years age group, 55 percent were victims of either personal or household offences in 2005. This compares with 46 percent of 25–39 year olds, 37 percent of 40–59 year olds and 20 percent of those aged 60 years and over. Young people aged 15–24 years also had the highest rates of victimisation for confrontational offences: 13 percent

were victims of confrontational offences committed by partners, 10 percent were victimised by people who were well known to them, and 16 percent by other offenders.

The overall rate of victimisation did not vary by sex, with 39 percent of both men and women experiencing some form of criminal victimisation in 2005. The pattern of victimisation by age was also similar for both sexes. With confrontational offences, men were as likely as women to have been victimised at least once by a partner (6 percent compared with 7 percent for women). However, women experienced more offences than men did (26 incidents per 100 women, compared with 18 incidents per 100 men).<sup>96</sup> Prevalence rates did not differ by sex for offences committed by people well known to the victim (5 percent for both men and women), but men were more likely than women to be victims of confrontational offences by people who were not known to them (9 percent compared with 6 percent).

Women were around twice as likely as men to be the victims of sexual offences (4 percent compared with 2 percent), with the highest rate experienced by women aged 15–24 years (12 percent). Over a third of sexual offences were committed by the victims' current partners.

Table SS2.1 **Criminal victimisation prevalence rate (%), by age and sex, 2005**

Age group	Rate per 100 persons in each group		
	Men	Women	Total
15–24	53	56	55
25–39	44	47	46
40–59	36	37	37
60+	21	19	20
<b>Total</b>	<b>39</b>	<b>39</b>	<b>39</b>

Source: Mayhew and Reilly (2007b) Table C3

## ETHNIC DIFFERENCES

The likelihood of being a victim of crime varies by ethnicity. Among both Māori and Pacific peoples aged 15 years and over, 47 percent had experienced some form of criminal victimisation in 2005. This compared with 43 percent of Asians and 37 percent of Europeans. The high rates for Māori and Pacific peoples are likely to be due, at least in part, to these populations having a high incidence of other risk factors associated with victimisation – for instance they are more likely to be young, to be unemployed, to be sole parents and to live in more socio-economically deprived areas.

Māori had a relatively high rate of victimisation for confrontational offences: 14 percent for offences committed by partners, and 11 percent both for offences committed by people well known to them and for offences committed by other offenders. For Māori women, the risk of being assaulted or threatened by a partner was three times the average (18 percent compared with 6 percent for all respondents). Comparable figures for Pacific peoples are not reliable owing to the small size of the sample.

## OTHER GROUPS AT RISK

Other groups reporting a high level of victimisation included sole parents with children (60 percent had experienced some form of criminal victimisation in 2005), students and people living with flatmates (57 percent and 54 percent, respectively), people who were single or in de facto relationships (50 percent and 49 percent), people who rented their homes either from private landlords or public agencies (49 percent and 45 percent), those who were unemployed and/or on benefits (48 percent), and those who lived in the most deprived fifth of New Zealand areas (45 percent). Many of these characteristics are closely inter-related.

# Fear of crime

## DEFINITION

The proportion of the population aged 15 years and over who said fear of crime had a moderate or high impact on their quality of life (scoring its effect at 4 or higher on a scale from 0–10, where 0 is no effect and 10 is total effect on quality of life), as measured by the New Zealand Crime and Safety Survey 2006.

## RELEVANCE

Anxiety and worries about victimisation detract from wellbeing, and may cause people to alter their behaviour to avoid being victimised. This limits people's options and can reduce their freedom.

## CURRENT LEVEL

In 2005, 40 percent of New Zealanders said that fear of crime had a moderate or high impact on their quality of life, scoring its effect at 4 or higher on a 0–10 scale. A third (33 percent) scored its effect at 4–7, while 7 percent scored it at 8–10. People who had been a victim of any crime were more likely than average to report that fear of crime affected their quality of life.

## AGE AND SEX DIFFERENCES

Women were more likely than men to report that fear of crime had a moderate or high impact on their quality of life, with 45 percent of females and 34 percent of males scoring its effect at 4 or above on the impact scale. Thirty-seven percent of females and 28 percent of males reported a moderate impact (scoring it at 4–7), while 8 percent of females and 6 percent of males reported a high impact on their quality of life (scoring it at 8–10).

People aged 25–39 years were the most likely to report that fear of crime affected their quality of life, while people aged 60 years and over were the least likely to do so. In all age groups, women were more likely than men to say fear of crime had an impact on their quality of life.

Table SS3.1 **Proportion (%) of the population aged 15 years and over who reported that fear of crime had a moderate or high impact on their quality of life, by age and sex, 2005**

Age group	Males			Females		
	High impact (score of 8–10)	Moderate impact (score of 4–7)	Moderate or high impact (score of 4–10)	High impact (score of 8–10)	Moderate impact (score of 4–7)	Moderate or high impact (score of 4–10)
15–24	4	32	36	8	39	47
25–39	8	31	39	10	44	54
40–59	7	27	33	9	34	43
60+	4	24	29	6	31	37

Source: Mayhew and Reilly (2007a) Table B21

Note: Combined scores may not add up because of rounding

## ETHNIC DIFFERENCES

At 60 percent, Asian people were far more likely than other ethnic groups to report that fear of crime affected their quality of life, either moderately or a great deal. Europeans were the least likely to do so (36 percent), while Māori and Pacific peoples fell in the middle of the range, at 47 percent. Asians also had the largest proportion of any group rating the impact of fear of crime on their quality of life as high (18 percent). In each ethnic group, women were more likely than men to report that fear of crime affected their quality of life.

Table SS3.2

### Proportion (%) of the population aged 15 years and over who reported that fear of crime had a moderate or high impact on their quality of life, by ethnic group, 2005

	High impact (score of 8–10)	Moderate impact (score of 4–7)	Moderate or high impact (score of 4–10)
European	5	31	36
Māori	10	37	47
Pacific	13	33	47
Asian	18	43	60

Source: Mayhew and Reilly (2007a) Table B21

Note: Combined scores may not add up because of rounding

## SOCIO-ECONOMIC DIFFERENCES

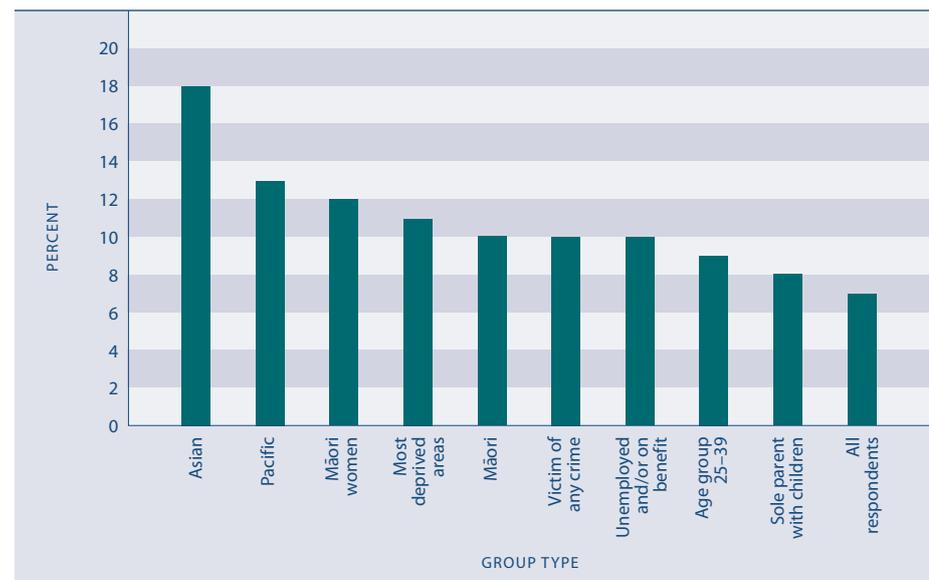
People living in the most deprived areas of New Zealand were much more likely to report that fear of crime affected their quality of life (49 percent) than those living in the least deprived areas (33 percent). People in deprived areas were more than twice as likely as those in the least deprived areas to score the effect of fear of crime on their quality of life at the high end of the scale (11 percent and 5 percent, respectively).

## DIFFERENCES BY HOUSEHOLD COMPOSITION

Among households, sole parents living with their children had the highest proportion reporting that fear of crime affected their quality of life (46 percent), followed by couples with children (44 percent). People living alone (38 percent) and couples without children (34 percent) were less likely than average to say fear of crime affected their quality of life.

Figure SS3.1

### Groups whose quality of life is highly affected (score of 8–10) by fear of crime, 2005



Source: Mayhew and Reilly (2007a) Table B21

# Road casualties

## DEFINITION

The number of people killed or injured in motor vehicle crashes as a proportion (per 100,000) of the total population.

## RELEVANCE

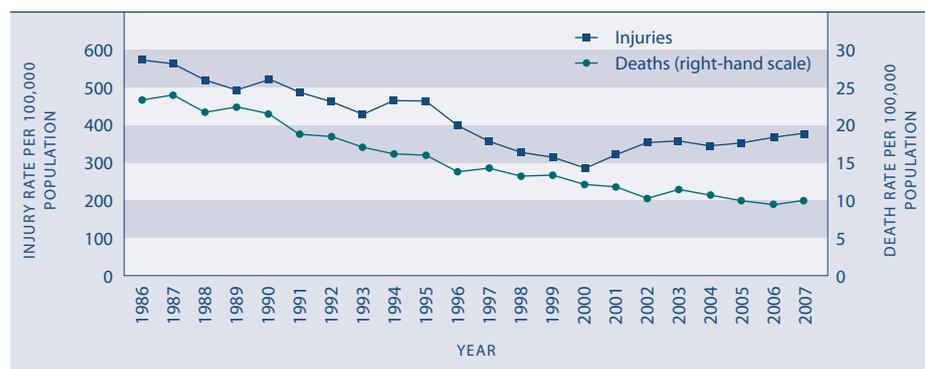
Motor vehicle crashes are a major cause of premature death, especially among younger age groups. Deaths, injuries and disability resulting from motor vehicle crashes inflict considerable pain and suffering on individuals, families and communities, as well as on other road users, emergency service providers, health workers and others.

## CURRENT LEVEL AND TRENDS

In 2007, 423 people died as a result of motor vehicle crashes, a rate of 10.0 deaths per 100,000 population. Provisional reported injury data for 2007 shows a further 15,902 people were injured, a rate of 376 injuries per 100,000 population.<sup>97</sup> In 2006, the death rate was 9.4 per 100,000 and the injury rate was 363 per 100,000. Deaths and injuries from motor vehicle crashes have declined substantially since 1986, when the rates were 23.1 and 570 per 100,000 population, respectively. The number of people killed in motor vehicle crashes was 45 percent lower in 2007 than it was in 1986. Although the number of people injured has risen since 2000 (partly because of better recording by police), there were 16 percent fewer people injured in 2007 than in 1986.

There is no conclusive evidence on the reasons for the reduction in road casualties since 1986. Better roads and better vehicles, as well as legislation, enforcement and education aimed at reducing road casualties, may all have contributed to an improvement in drivers' attitudes and behaviour.

Figure SS4.1 **Road traffic injury and death rates, 1986–2007**



Source: Ministry of Transport  
Note: 2002–2006 data has been revised using new population estimates

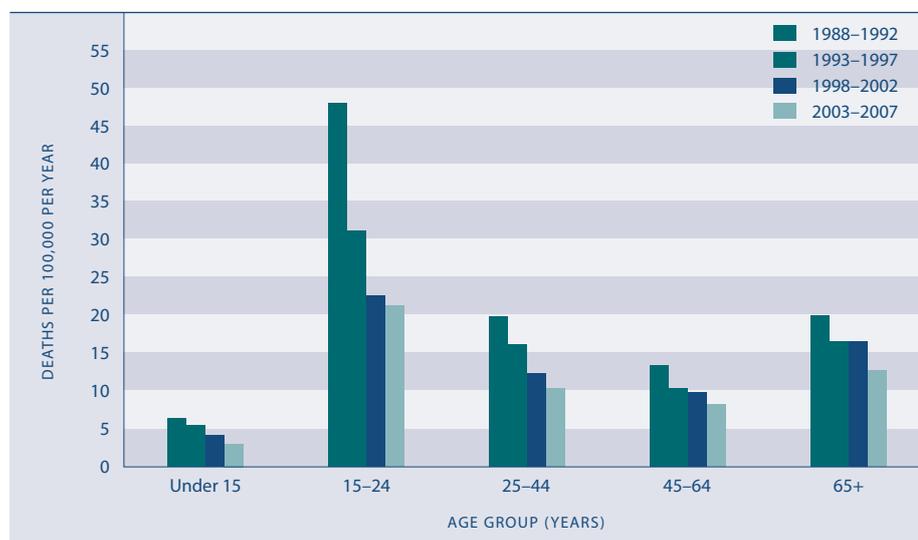
## AGE AND SEX DIFFERENCES

Young people aged 15–24 years have more than double the death rate from motor vehicle crashes than the population as a whole. The risk of dying in a crash is relatively low in middle age, then increases at older ages, partly because the very old are more fragile.

The death rate for all age groups has fallen steadily over the period since 1986. The decline has been particularly marked among 15–24 year olds, who had an average annual rate of 21 deaths per 100,000 in the period 2003–2007, a big improvement on the average annual rate of 48 deaths per 100,000 for the 1988–1992 period.

Males are much more likely than females to be killed in motor vehicle crashes. Between 2003 and 2007, the average annual death rate for males was 14 deaths per 100,000 males, while the rate for females was 6 deaths per 100,000 females. For both sexes this was considerably lower than the average annual rate for the 1988–1992 period (30 deaths per 100,000 for males and 12 per 100,000 for females).

Figure SS4.2 **Five-year average annual road death rates, by age, 1988–1992 to 2003–2007**



Source: Ministry of Transport, rates derived by Ministry of Social Development

## ETHNIC DIFFERENCES

Māori are much more likely than other ethnic groups to die in motor accidents, with a provisional age-standardised death rate of 20 per 100,000 population in 2005. In comparison, the provisional death rate for the European and Other ethnic groups in 2005 was 10 per 100,000 and for Pacific peoples, 9 per 100,000.

Table SS4.1 **Land transport accident death rates, by ethnicity, 2000–2005**

Year	Age-standardised rate per 100,000 population			
	Māori	Pacific peoples	European and Other	Total
2000	22	12	11	13
2001	17	12	11	12
2002	20	12	10	12
2003	24	9	11	12
2004	20	7	9	11
2005	20	9	10	12

Source: Ministry of Health, New Zealand Health Information Service

Notes: (1) The injury mortality classification changed in 2000 and, as a result, data from earlier years is not comparable  
(2) 2005 data is provisional

A 1998 survey showed that, per distance driven, the risk of being hospitalised as a result of a crash was more than three times as high for Māori drivers, and only slightly less than three times as high for Pacific drivers, compared to European drivers.<sup>98</sup>

## INTERNATIONAL COMPARISON

In 2006, New Zealand was ranked 16th out of 27 OECD countries, with a road death rate of 9.4 per 100,000 people.<sup>99</sup> This was similar to the OECD median of 9.3 deaths per 100,000. The Netherlands had the lowest road death rate (4.5 per 100,000), followed by Sweden (4.9 per 100,000). New Zealand's road death rate was lower than that of the United States at 14.7 per 100,000, but higher than those of Canada (9.1 per 100,000), Australia (7.7 per 100,000) and the United Kingdom (5.4 per 100,000). New Zealand's road death rate for youth aged 15–24 years (16.9 per 100,000) ranked 18th, just above the OECD median of 16.0 deaths per 100,000 people aged 15–24 years.

## DESIRED OUTCOMES

People enjoy constructive relationships with others in their families, whānau, communities, iwi and workplaces. Families support and nurture those in need of care. New Zealand is an inclusive society where people are able to access information and support.

# Social Connectedness

## INTRODUCTION

Social connectedness refers to the relationships people have with others.

Social connectedness is integral to wellbeing. People are defined by their social roles, whether as partners, parents, children, friends, caregivers, teammates, staff or employers, or a myriad of other roles. Relationships give people support, happiness, contentment and a sense they belong and have a role to play in society.<sup>100</sup> They also mean people have support networks in place they can call on for help during hard times.

Social connectedness also refers to people joining together to achieve shared goals that benefit each other and society as a whole – this may range from working together as part of a business to contributing to their communities through voluntary groups.

One of the most important aspects of social connectedness is the relationship people have with a spouse or a partner. Studies have consistently found having a partner contributes to a person's reported level of wellbeing.<sup>101</sup>

Several studies have demonstrated links between social connectedness and the performance of the economy and positive outcomes for individual health and wellbeing.<sup>102</sup>

Social connectedness is fostered when family relationships are positive, and when people have the skills and opportunities to make friends and to interact constructively with others. Good health, employment, and feeling safe and secure all increase people's chances of developing positive relationships.

There can be many barriers to social connectedness. The tendency to make connections outside the family varies between cultures and communities. Factors such as language differences, high levels of inequality and tensions between members of different ethnic groups can create barriers between people.

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## INDICATORS

Five indicators are used to measure New Zealand's levels of social connectedness. These are: telephone and internet access in the home, regular contact with family/friends, trust in others, the proportion of the population experiencing loneliness and contact between young people and their parents.

Together, the five indicators measure the opportunities for and the actual levels of connection between people, both within their immediate social groups and within the wider community. Access to the internet is significant. It improves people's ability to access information and, as a consequence, it provides more opportunities for people to participate in society. Both the telephone and the internet enable people to keep in touch without seeing each other face to face. This means social connectedness can be maintained when people are in different cities or even in different countries. It also means new social networks can be opened up across geographical boundaries between people who may never have met.

For most people, social networks centre on family and friends. The second indicator measures the proportion of people who keep in touch with family and friends by having them over for a meal at least once a month.

Trust in others, the third indicator, measures the extent to which people expect others to act fairly and honestly towards them. High levels of trust enhance wellbeing by facilitating co-operative behaviour among people who otherwise do not know each other. Trust also enhances people's ability to develop positive relationships with others.

The fourth indicator measures levels of loneliness. Feelings of isolation and loneliness undermine overall wellbeing and can be detrimental to people's physical and emotional health, resulting in stress, anxiety or depression.

The final indicator, the proportion of young people who report getting enough time each week with their parents, is a measure of the extent to which people in need of care and nurturing receive that support.

# Telephone and internet access in the home

## DEFINITION

The proportion of the population with telephone access (either landline or cellphone) and internet access in the home.

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## RELEVANCE

Access to a telephone and access to communication via the internet helps to maintain social connectedness. It enables social contact with friends and family in the absence of frequent face-to-face contact. The telephone also ensures an adequate line of communication in times of need and emergency.

The internet is an important means of accessing a wide range of information and services. People who are unable to access information technologies or who are without the skills to use them run the risk of being excluded from possible social, educational, cultural and economic benefits. This may have adverse effects on their educational outcomes, employment prospects and other aspects of wellbeing.

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## CURRENT LEVEL AND TRENDS

In 2006, 98 percent of New Zealand residents lived in households with telephones, an increase from 96 percent in 2001.

The 2006 Census, for the first time, collected information separately on cellphones and landline telephones. It showed that 79 percent of people lived in households with cellphones available in the dwelling all or most of the time, while 92 percent lived in households with landline telephones.

At the 2006 Census, 66 percent of people lived in households with access to the internet, a considerable increase from 43 percent in 2001.

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## AGE AND SEX DIFFERENCES

There are only minor differences in telephone access by age and sex. Access increases slightly with age, with those aged 45 years and over being the most likely to have telephones in the household (99 percent). However, the gaps between younger and older people narrowed between 2001 and 2006.

Similarly, there are only minor age differences in the level of internet access up to the age of 65 years but the level falls considerably for people aged over 65 years. In 2006, between 68 percent and 71 percent of age groups below 65 years lived in households with internet access, compared with just 39 percent of those aged 65 years and over. However, between 2001 and 2006 those aged 65 years and over experienced a proportionately greater increase in internet access than younger people.

There is very little difference in telephone or internet access between the sexes, although women are slightly more likely than men to have telephone access and slightly less likely to have internet access. These differences are more pronounced at older ages, particularly in the case of the internet. In 2006, 45 percent of males and 35 percent of females aged 65 years and over had internet access.

Table SC1.1

**Proportion (%) of the population with telephone and internet access in the home, by population characteristics, 2001 and 2006**

	Telephone access		Internet access	
	2001	2006	2001	2006
<b>Age</b>				
0–14 years	94.6	97.6	45.6	69.1
15–24 years	95.3	97.6	47.5	68.0
25–44 years	96.1	98.0	47.0	70.8
45–64 years	97.7	98.6	45.6	70.9
65 years and over	98.4	98.9	16.4	39.2
<b>Total</b>	<b>96.3</b>	<b>98.1</b>	<b>42.9</b>	<b>66.4</b>
<b>Sex</b>				
Male	96.0	97.9	44.1	67.2
Female	96.5	98.3	41.8	65.5
<b>Ethnicity</b>				
European	98.1	98.9	45.5	70.4
Māori	88.3	94.4	25.3	46.7
Pacific peoples	87.0	95.1	20.4	37.7
Asian	97.8	98.7	61.5	77.4
Other	97.3	98.5	55.6	72.9
<b>Family type</b>				
One parent with dependent children	87.3	95.1	27.9	50.3
Two parents with dependent children	96.5	99.1	54.9	79.3
All families with dependent children	93.8	98.0	47.0	71.2

Source: Statistics New Zealand, Census of Population and Dwellings, 2001 and 2006

**ETHNIC DIFFERENCES**

Māori and Pacific peoples have the lowest levels of household access to telephones and the internet. However, they experienced by far the greatest increases in both these areas between 2001 and 2006.

Access to telephones increased from 88 percent to 94 percent among Māori and from 87 percent to 95 percent among Pacific peoples between 2001 and 2006. Telephone access for European, Asian and Other ethnic groups increased slightly over this period, reaching 99 percent in 2006. In 2006, the difference in telephone access between Māori and Pacific peoples and the total population was larger for landline telephones than for cellphones.

Between 2001 and 2006 access to the internet increased from 25 percent to 47 percent among Māori and from 20 percent to 38 percent among Pacific peoples. These levels were still well below those of Asians (77 percent), the Other ethnic group (73 percent) and Europeans (70 percent) in 2006.

**DIFFERENCES BY FAMILY TYPE**

Among families with dependent children, 98 percent had telephone access and 71 percent had internet access in their homes in 2006. One-parent families were less likely than two-parent families to have access to either telephones or the internet, but they experienced proportionately greater increases in access between 2001 and 2006. In 2006, 95 percent of one-parent families and 99 percent of two-parent families had access to telephones while 50 percent of one-parent families and 79 percent of two-parent families had access to the internet.

**INTERNATIONAL COMPARISON**

International comparisons show the proportion of households with internet access, rather than the proportion of people living in households with internet access. By this measure, New Zealand compares relatively favourably with other countries, ranking 11th out of 30 OECD countries surveyed between 2003 and 2006. With 65 percent of households having internet access in 2006, New Zealand's figure is higher than the OECD median of 57 percent. New Zealand's figure is similar to those of Canada (64 percent in 2005) and the United Kingdom (63 percent in 2006) and higher than those of Australia (60 percent in 2005) and the United States (55 percent in 2003).<sup>103</sup>

# Regular contact with family/friends

## DEFINITION

The proportion of the population who had family or friends over for a meal at least once a month, as measured by the New Zealand Living Standards Surveys.

## RELEVANCE

The extent to which people are in regular contact with family and friends is an important reflection of social connectedness.

## CURRENT LEVEL AND TRENDS

Seventy percent of adults aged 18 years and over had friends or family over for a meal at least once a month in 2004. This was about the same level as in 2000 when 69 percent had family or friends over for a meal.

Table SC2.1 **Proportion (%) of the population having family/friends over for a meal, by population characteristics, 2000 and 2004**

	Have family/friends over for a meal	
	2000	2004
<b>Population estimates</b>		
Total population aged 18 and over	68.6	70.0
<b>Age groupings</b>		
Adults aged 18–64 years	70.0	71.1
Adults 65 years and over	60.2	63.7
<b>Economic family ethnicity</b>		
Māori economic family	70.2	73.3
Pacific economic family	79.5	69.9
European economic family	65.8	65.8
Other economic family	68.2	78.0
<b>Families with dependent children</b>		
One-parent with dependent children	64.8	64.8
Two-parent with dependent children	70.8	73.4
All families with dependent children	69.1	70.8
<b>Family employment/income status</b>		
18–64 year olds, main income earner in full-time employment	69.4	72.4
18–64 year olds, main income earner not in full-time employment	67.7	62.9
65 year olds and over, with employment or other income (above New Zealand Superannuation)	75.3	79.7
65 year olds and over, with little or no other income (above New Zealand Superannuation)	56.5	61.8

Sources: Ministry of Social Development (2003a); Ministry of Social Development (2006)

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## AGE AND SOCIO-ECONOMIC DIFFERENCES

People aged 65 years and over who had employment income or other income in addition to New Zealand Superannuation were the group most likely to have friends or family over for a meal (80 percent). In contrast, those in the same age group with little income above New Zealand Superannuation were the least likely to have people over for a meal (62 percent). Similarly, among adults under 65 years, families where the main earner in the family was not in full-time employment were less likely than those with the main earner in full-time employment to have people over for dinner (63 percent compared with 72 percent).

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## ETHNIC DIFFERENCES

According to the 2004 New Zealand Living Standards Survey, people living in Other economic families were the most likely to have friends or family over for a meal at least once a month (78 percent). Māori were also slightly more likely than average to do this (73 percent). Those living in European families had below-average levels of having people over for a meal (66 percent), while Pacific families had average levels (70 percent). Between 2000 and 2004, the biggest increase in the proportion of families having friends or family over for a meal was among Other families (up 10 percentage points) and the biggest decrease was among Pacific families (down 10 percentage points).

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## DIFFERENCES BY FAMILY TYPE

Sole-parent families were less likely than two-parent families to have friends or family over for a meal (65 percent compared to 73 percent). Two-parent families were slightly more likely to have friends or family over for a meal in 2004 than in 2000, but there was no change for sole-parent families.

# Trust in others

## DEFINITION

The proportion of the population aged 15 years and over reporting people can “almost always” or “usually” be trusted, as reported in the Quality of Life Survey 2006.

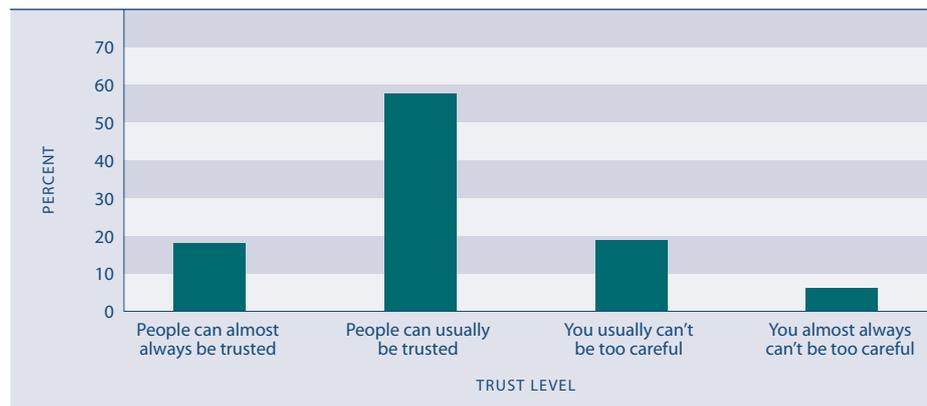
## RELEVANCE

Trust in others is an important indicator of how people feel about members of their community. High levels of trust facilitate co-operative behaviour among people and contribute to people’s ability to develop positive relationships with others.

## CURRENT LEVEL

In 2006, 76 percent of New Zealanders said they believed people can be trusted, with 18 percent reporting people can almost always be trusted and 58 percent reporting people can usually be trusted.

Figure SC3.1 **Levels of trust in other people, 2006**



Source: Quality of Life Survey 2006

## AGE AND SEX DIFFERENCES

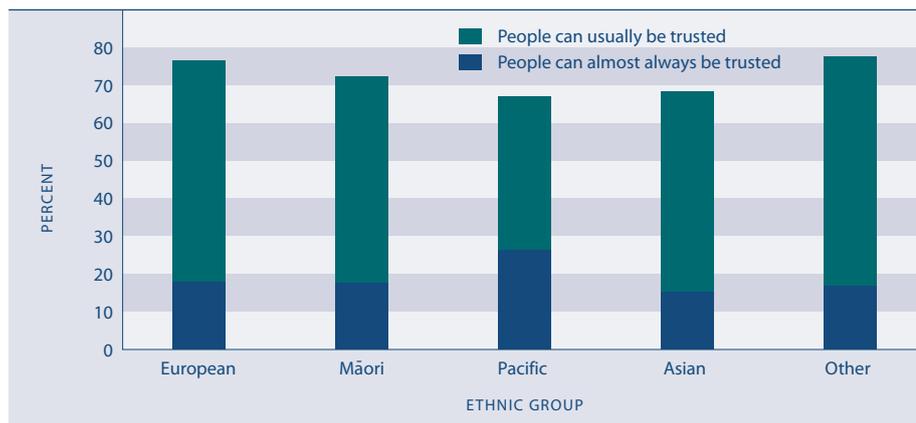
The proportion of those reporting people can be trusted was similar for males (75 percent) and females (76 percent). Nineteen percent of males and 17 percent of females agreed people can almost always be trusted and 56 percent of males and 59 percent of females responded people can usually be trusted.

Those reporting that people can almost always or usually be trusted ranged from 72 percent at ages 15–24 years to 78 percent for 50–64 year olds.

## ETHNIC DIFFERENCES

People in the European and Other (excluding Asian) ethnic groups reported a slightly higher level of trust in people (each 77 percent) than Māori (72 percent). Asian and Pacific peoples had the lowest proportions who felt people could be trusted (68 percent and 67 percent, respectively).

Figure SC3.2

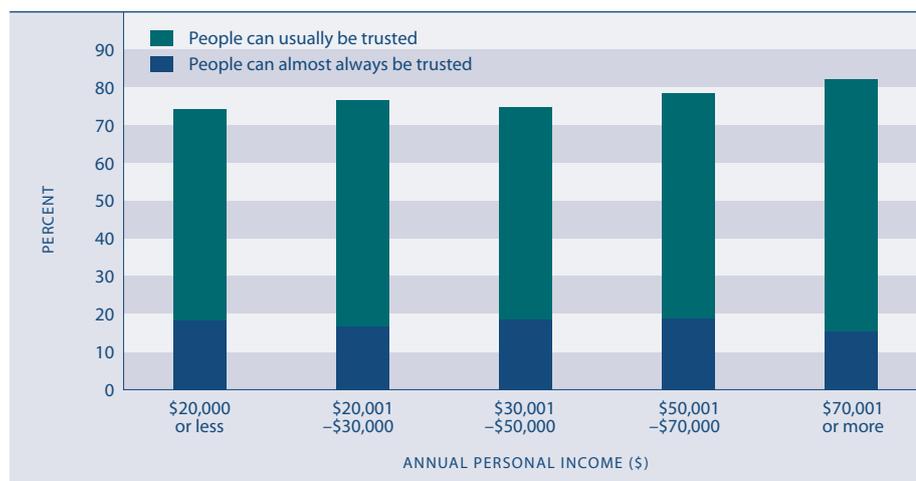
**Proportion of people reporting that people can almost always or usually be trusted, by ethnic group, 2006**

Source: Quality of Life Survey 2006

**SOCIO-ECONOMIC DIFFERENCES**

Across all income levels, a majority of New Zealanders indicated people could almost always or usually be trusted. Reported trust increased with personal income level. People with incomes over \$70,000 reported the highest overall level of trust (82 percent), while people with incomes of \$20,000 or less reported the lowest level (74 percent).

Figure SC3.3

**Proportion of people reporting that people can almost always or usually be trusted, by personal income, 2006**

Source: Quality of Life Survey 2006

**REGIONAL DIFFERENCES**

Across all New Zealand's largest cities, a majority of New Zealanders indicated people could almost always or usually be trusted. Reported levels of trust were highest in Wellington and Dunedin (both 84 percent) and lowest in Waitakere (66 percent) and Manukau (68 percent).

**INTERNATIONAL COMPARISON**

New Zealanders' level of trust in other people in 2004 compares well with those of people in European Union countries in 2005, and to that of people in Canada in 2003. New Zealand had the seventh highest reported level of trust in other people (almost always trust or usually trust) out of 25 OECD countries.<sup>104</sup>

New Zealand's reported level of trust in other people (69 percent) is above the OECD median of 56 percent. Norway had the highest reported level of trust in people (87 percent) followed by Denmark and Sweden (both 84 percent). Canada (53 percent) and the United Kingdom (55 percent) reported lower levels of trust in other people than New Zealand.

# Loneliness

## DEFINITION

The proportion of people aged 15 years and over who reported feeling isolated or lonely “sometimes”, “most of the time” or “always” during the previous 12 months, in the Quality of Life Survey 2006.

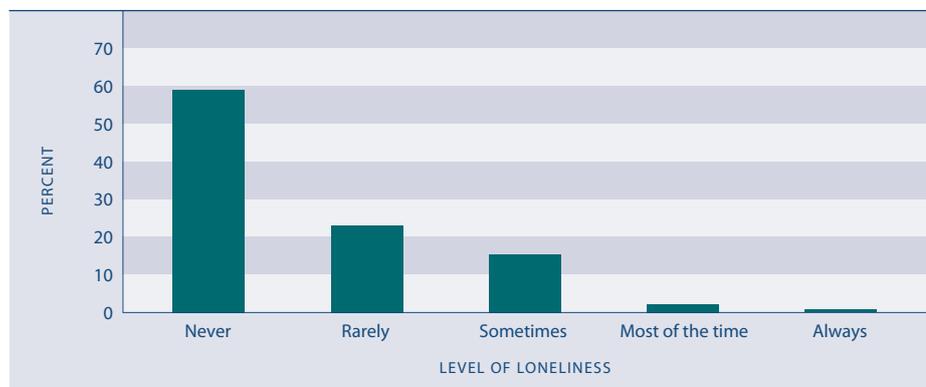
## RELEVANCE

Social contact is fundamentally important to people: humans are social creatures. Self-assessed loneliness is a proxy indicator of whether people are happy with the amount and quality of social contact they have. As well as being an undesirable state in itself, loneliness may also contribute to poor outcomes in other areas, including adverse health problems such as stress, anxiety or depression.

## CURRENT LEVEL

In 2006, 18 percent of New Zealanders reported feeling lonely during the last 12 months. Fifteen percent said they felt lonely sometimes, 2 percent said they were lonely most of the time and fewer than 1 percent said they always felt lonely. Feelings of isolation or loneliness are strongly associated with self-rated quality of life. Those who rated their quality of life as “extremely good” or “good” were far less likely to have felt isolated in the past 12 months (8 percent and 19 percent, respectively) than those who rated their quality of life as “poor” (60 percent).<sup>105</sup>

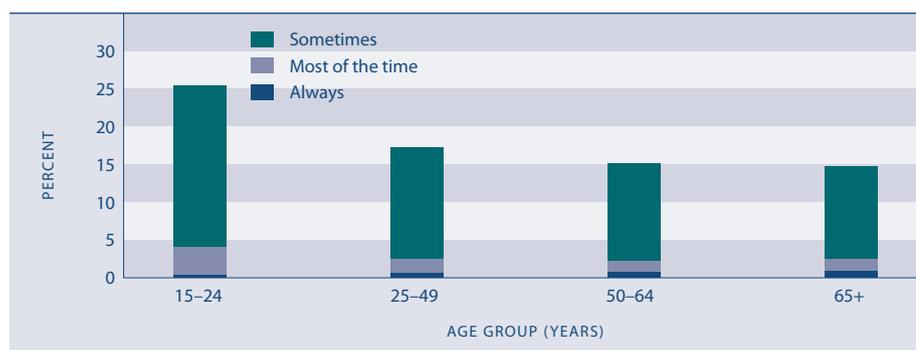
Figure SC4.1 **Proportion of people experiencing loneliness, 2006**



Source: Quality of Life Survey 2006

## AGE DIFFERENCES

Loneliness is most prevalent among people aged 15–24 years, followed by those aged 25–49 years. Twenty-five percent of 15–24 year olds and 17 percent of those aged 25–49 years reported feeling lonely sometimes, most of the time, or always. Levels of loneliness were lower among those aged 50–64 years and 65 years and over (both 15 percent).

Figure SC4.2 **Proportion of people experiencing loneliness, by age, 2006**

Source: Quality of Life Survey 2006

**SEX DIFFERENCES**

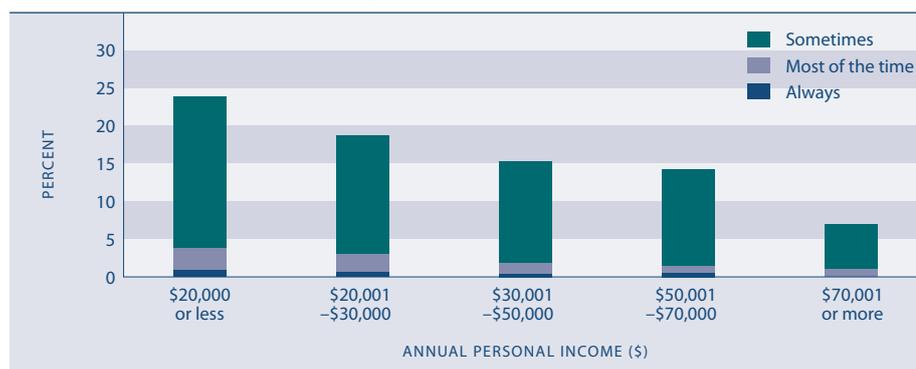
Females (20 percent) were more likely than males (16 percent) to have reported feeling lonely during the last 12 months. Seventeen percent of females said they were lonely sometimes compared to 14 percent of males.

**ETHNIC DIFFERENCES**

Europeans reported the lowest rate of loneliness with 16 percent reporting they were lonely sometimes, most of the time or always. Eighteen percent of Māori, 22 percent of people in the Other (excluding Asian) ethnic group and 23 percent of Pacific peoples reported they were sometimes, most of the time or always lonely. Asian peoples (27 percent) reported the highest rates of loneliness.

**SOCIO-ECONOMIC DIFFERENCES**

Experiencing loneliness declines as personal income rises. People with personal incomes of \$20,000 or less reported higher rates of loneliness than people with higher incomes: 24 percent said they felt lonely sometimes, most of the time or always in the past 12 months. This compares with a loneliness rate of 7 percent for those with a personal income over \$70,000.

Figure SC4.3 **Proportion of people experiencing loneliness, by personal income, 2006**

Source: Quality of Life Survey 2006

**REGIONAL DIFFERENCES**

People living in Manukau City had the highest reported incidence of loneliness with 21 percent reporting they felt lonely sometimes, most of the time or always. Those living in Dunedin had the lowest reported incidence of loneliness (12 percent).

# Contact between young people and their parents

## DEFINITION

The proportion of secondary school students aged 12–18 years who were able to spend enough time with Mum and/or Dad (or someone who acts as Mum and/or Dad) most weeks, as reported in Youth2000 – New Zealand Youth: A Profile of their Health and Wellbeing.

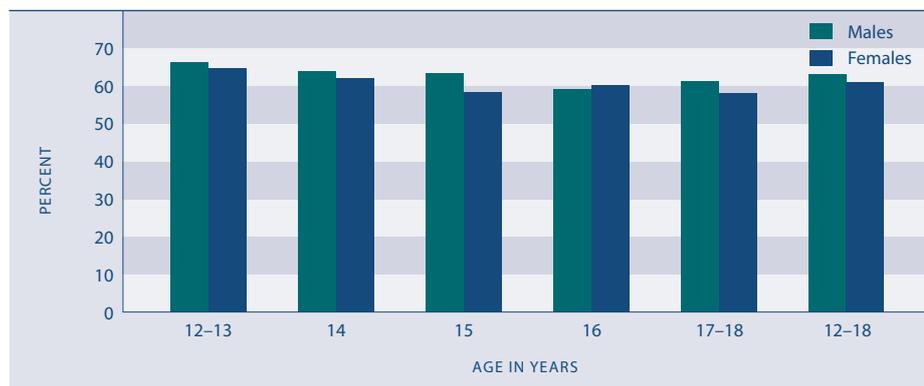
## RELEVANCE

Healthy relationships are built through both the quantity and quality of time spent together. Young people having enough time with their parents is a proxy indicator of the extent to which those in need of care and nurturing receive appropriate support.

## CURRENT LEVEL

In 2001, 63 percent of male secondary school students and 61 percent of female secondary school students reported that most weeks they were able to spend enough time with at least one parent.

Figure SC5.1 **Students reporting they spent enough time with their parent(s), by age and sex, 2001**



Source: Adolescent Health Research Group (2003a)

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### AGE DIFFERENCES

Girls at 15 years of age were less likely to report that most weeks they were able to spend enough time with Mum and/or Dad than younger boys and girls (12–13 years).

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### SEX DIFFERENCES

There were no significant differences by sex in the proportion of students reporting they spent enough time with at least one parent.

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### ETHNIC DIFFERENCES

Fifty-five percent of Māori students and 65 percent of European students reported that most weeks they were able to spend enough time with Mum and/or Dad. The difference was statistically significant after adjusting for age, sex and socio-economic differences between the two ethnic groups. Pacific students (60 percent), Asian students (65 percent) and students of the Other ethnic group (60 percent) showed no statistically significant difference from European students after adjusting for age, sex and socio-economic differences.

# Conclusion

In this section, we summarise the changes in social outcomes for New Zealanders since the mid-1990s, based on the updated indicators, and we compare New Zealanders' wellbeing with that of people living in other countries. We summarise the changes for Māori, Pacific peoples, Asian and Other ethnic groups since this time. We also consider the differences in social outcomes for men and women and the differences between socio-economic groups.

## Changes in social wellbeing over time

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### **Social wellbeing in New Zealand has improved since the mid-1990s**

Overall, New Zealanders have a good level of wellbeing and our wellbeing continues to improve across a number of domains. This report shows most social outcomes have improved strongly since the mid-1990s, as did previous reports. New Zealanders on average are living longer, are more highly educated and are more prosperous than they were in the mid-1990s.

Most of the indicators for which 10-year trends are available show improvements in wellbeing. A small number of these indicators have improved since the mid-1990s, but more recently have been static or have declined slightly.

We use 41 indicators in this report. Together, these indicators provide a snapshot of wellbeing in New Zealand, how it has changed over time, how different groups within our society are faring, and how New Zealand compares with other countries. This section summarises the findings from these indicators, 30 of which have been updated with new data this year.

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### **New Zealanders have better health outcomes compared with the mid-1990s**

Life expectancy improved between 1995–1997 and 2005–2007 for males and females, with males experiencing a greater improvement than females over this period. The proportion of the population who smoke cigarettes fell four percentage points between 1997 and 2006/2007 to 22 percent.<sup>106</sup> The suicide death rate has also improved since 1997, although the rate was slightly higher in 2003–2005 than it was in 2002–2004. The obesity rate has worsened by 6.8 percentage points since 1997 – a quarter of New Zealanders aged 15 years and over were obese in 2006/2007. The proportion of drinkers aged 15 years and over with a potentially hazardous drinking pattern has not changed since 1996/1997.

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### **There have been gains in the knowledge and skills of New Zealanders since the mid-1990s**

The participation rate in early childhood education improved by 11.3 percentage points for 3 year olds and by 5.8 percentage points for 4 year olds between 1997 and 2007. Since the introduction of the National Certificate of Educational Achievement (NCEA) in 2003, the proportion of school leavers gaining NCEA Level 2 or above has improved. A higher proportion of the population aged 15 years and over participated in tertiary education in 2007 than in 1999, although the rate has fallen slightly since 2005. Most of this decline was due to a fall in the number of people taking Levels 1–3 certificate courses rather than courses at a bachelor's degree level or higher, reflecting an emphasis on improving the quality of tertiary qualifications. The proportion of adults with a bachelor's degree or higher qualification has almost doubled since 1997. The proportion of adults who

have an educational qualification at upper secondary school level or above increased by three percentage points between 1997 and 2007, but has fluctuated since 2003.

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**The indicators in the Paid Work domain all show an improvement compared with the mid-1990s**

In 2007, the unemployment rate was three percentage points lower than the rate in 1997 (3.6 percent compared to 6.6 percent), and the lowest it has been over this period. Unemployment has remained under 4 percent since 2004. Over this same 10-year period, the employment rate increased by 4.9 percentage points, to reach a high of 75.4 percent. Real median hourly earnings increased by \$2.65 between 1997 and 2007 (from \$15.35 to \$18.00). The rate of workplace injury claims fell between 2001 and 2006. In 2006, three-quarters of New Zealanders in employment reported being satisfied with their work-life balance.

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**The majority of indicators in the Economic Standard of Living domain have improved since the mid-1990s**

In the Economic Standard of Living domain, market income per person was higher in 2007 than it was in the mid-1990s. Income inequality worsened between 1997 and 2004, but had improved by 2007 to be at a level similar to that in 1997. The proportion of the population with low incomes was considerably lower in 2007 than in the mid-1990s. In 2007, 13 percent of the population was living in households with incomes below the threshold of 60 percent of median income after deducting housing costs, compared with 22 percent living below this threshold in 1997. The proportion of households spending more than 30 percent of their disposable income on housing was similar in 2007 to what it was in 1997, reversing an improvement from 1997 to 2004. For households in the lowest 20 percent of the income distribution, housing affordability continued to improve after 2004, and the proportion with high housing costs was substantially lower in 2007 than in 1997. Household crowding has improved from 1996, although the rate deteriorated slightly between 2001 and 2006.

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**The picture is mixed in the Civil and Political Rights domain**

Between December 2001 and November 2007, the perception that different groups were subject to some or a great deal of discrimination fell for all groups. Māori, Pacific peoples, refugees and gays and lesbians experienced the greatest reduction in perceived discrimination over this period. There has been little change in New Zealand's level of perceived corruption over the last 10 years and we continue to remain a world leader in this area. The proportion of women in Parliament improved from 29 percent in 1996 to 32 percent in 2005. Voter turnout has declined over this period and although there was an increase in voter turnout between the 2002 and 2005 general elections it remains below the 1996 level. Voter turnout also declined for local government elections between the 1998 and 2007 elections.

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**Cultural Identity outcomes are mixed**

In the Cultural Identity domain, more local content is being broadcast on television than there was in the mid-1990s. There has been a five percentage point improvement in local content in prime-time television hours between 1997 and 2007. The proportion of Māori who can speak Māori declined slightly between 2001 and 2006 although the total number of Māori who can do so increased over this period. Between 2001 and 2006, most ethnic groups experienced little change

in the proportion of people who could speak the first language of their ethnic group. There were slight increases in the proportion of first-language speakers for the Tongan, Indian and Korean ethnic groups and slight decreases for most Pacific and European ethnic groups. The proportion of people who could hold an everyday conversation in the first language of their ethnic group varied widely.

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**There has been no change in New Zealanders' physical activity levels**

Data is not available to draw comparisons to the mid-1990s for many of the indicators in the Leisure and Recreation domain. Around one half of New Zealanders aged 15 years and over met the guidelines for being physically active in 2006/2007. A similar proportion met the guidelines in 2002/2003. Almost three quarters of New Zealanders aged 15 years and over were satisfied overall with their leisure time in 2006. In 2002, 93 percent of New Zealanders experienced one or more of the cultural activities included in the 2002 Cultural Experiences Survey.

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**The Physical Environment outcomes have generally improved**

In the Physical Environment domain, there has been an improvement in compliance with the Drinking Water Standards for *E. coli* and *Cryptosporidium* between 2001 and 2006/2007. All five major cities averaged PM<sub>10</sub> levels better than the air quality guidelines in 2007.

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**In the Safety area, there are fewer deaths but more injuries as a result of road accidents, and a similar number of deaths from an assault or intentional injury**

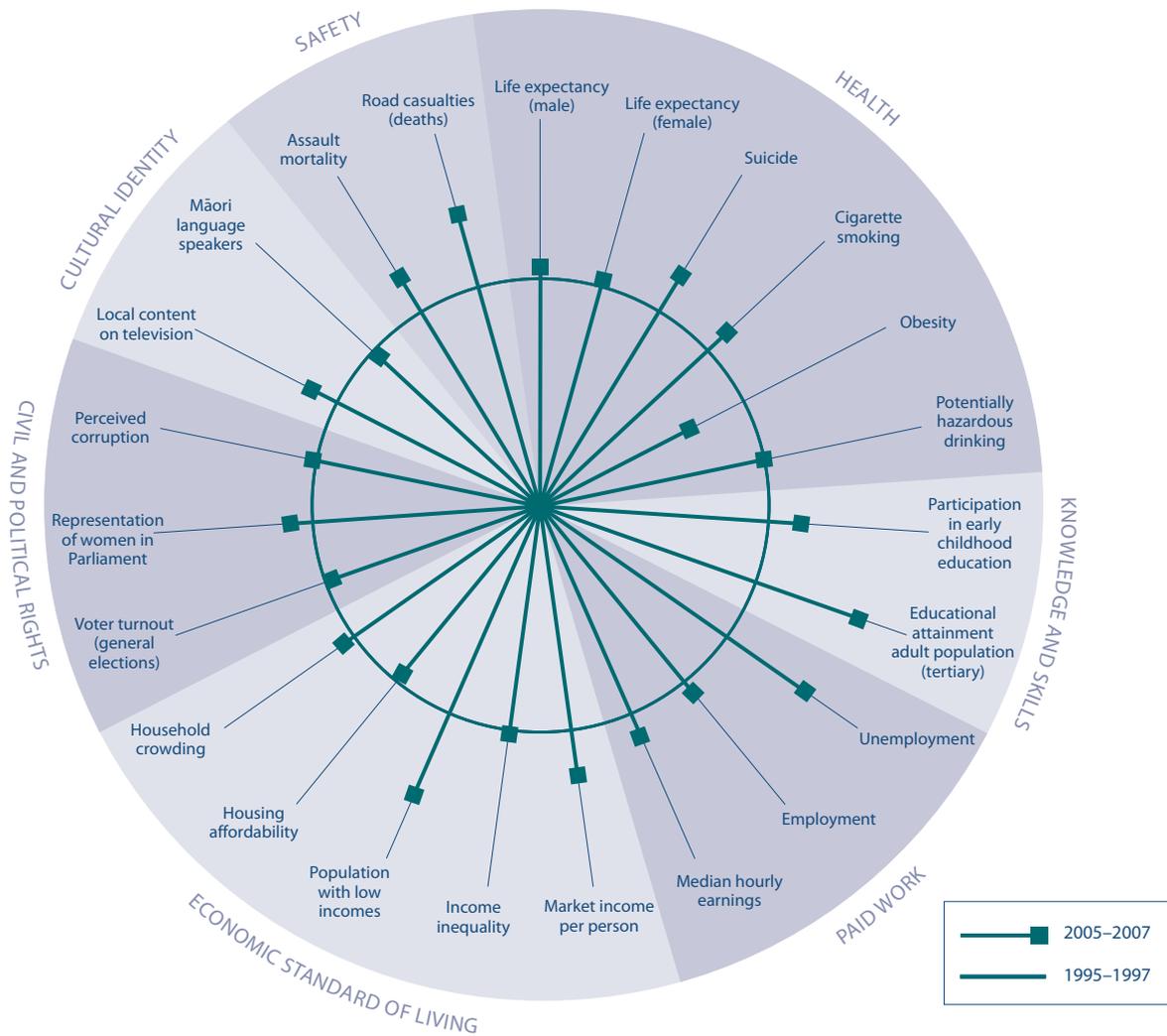
The motor vehicle accident death rate was lower in 2007 than it was in 1997, although it worsened slightly between 2006 and 2007. The motor vehicle accident injury rate fell between 1997 and 2000, but has increased since this time. The 2007 motor vehicle accident injury rate was higher than the 1997 rate. The assault mortality rate fluctuated between 1995 and 2005. The 2005 provisional assault mortality rate increased sharply from 2004, but was below the peak rates in 1996 and 1997. It should be noted rates based on small numbers are volatile, and trends can be difficult to discern over the short term. In 2005, 40 percent of New Zealanders aged 15 years and over said fear of crime had a moderate or high impact on their quality of life and 39 percent of New Zealanders reported experiencing some form of criminal victimisation. Comparisons with earlier results are not possible due to changes in the survey design.

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**There have been improvements in the Social Connectedness domain**

In the Social Connectedness domain, there was a 23 percentage point improvement between 2001 and 2006 in the proportion of people who lived in households with access to the internet. The proportion of people who had access to a telephone in their home increased by two percentage points to 98 percent over the same period. A similar proportion of adults aged 18 years and over had friends or family over for a meal at least once a month in 2000 and 2004. In 2006, 76 percent of New Zealanders said they believed people can be trusted and 18 percent of New Zealanders reported feeling lonely during the past 12 months. In 2001, around 60 percent of secondary school students reported that most weeks they were able to spend enough time with either their mum or dad.

Figure CO1 **Changes in social wellbeing, 1995–1997 to 2005–2007**



### Interpreting “Changes in social wellbeing, 1995–1997 to 2005–2007”

The circle ○ represents average outcomes for each indicator between 1995 and 1997, and the spokes —■ represent outcomes between 2005 and 2007. Where possible, the data is averaged over the three-years in these two time periods. Where a spoke falls outside the circle, this means outcomes have improved since the mid-1990s; the further from the circle it falls, the larger the improvement. Where a spoke falls within the circle, outcomes in this area have deteriorated since the mid-1990s; the further the spoke

is from the circle, the more pronounced the deterioration. There are, however, some important limitations on this style of presentation. In particular we cannot directly compare the size of changes for different indicators. The absence of trend data for some indicators limits the number of indicators displayed above to 23. Most of the latest data is from 2005–2007, with the exception of suicide and assault mortality (both 2003–2005).

## Social wellbeing in New Zealand compared to OECD countries

### Wellbeing in New Zealand compares favourably to that of other OECD countries

For many indicators, New Zealand compares very well with other countries. New Zealand is at or above the OECD median for two-thirds of the 22 indicators for which there is internationally comparable data.

New Zealand performs extremely well in the Civil and Political Rights domain. New Zealand consistently has one of the lowest levels of perceived corruption in the OECD; in 2007 we had the lowest level of perceived corruption along with Denmark and Finland. New Zealand is in the top half of the OECD for the proportion of women in Parliament and for voter turnout.

Paid Work is another area in which New Zealand performs strongly, with a relatively high employment rate and a relatively low unemployment rate. In 2007, our unemployment rate was fourth lowest in the OECD and we had the sixth highest employment rate.

New Zealand also performs very well in the Social Connectedness area, with New Zealanders having a high level of trust in others and a high level of households with internet access.

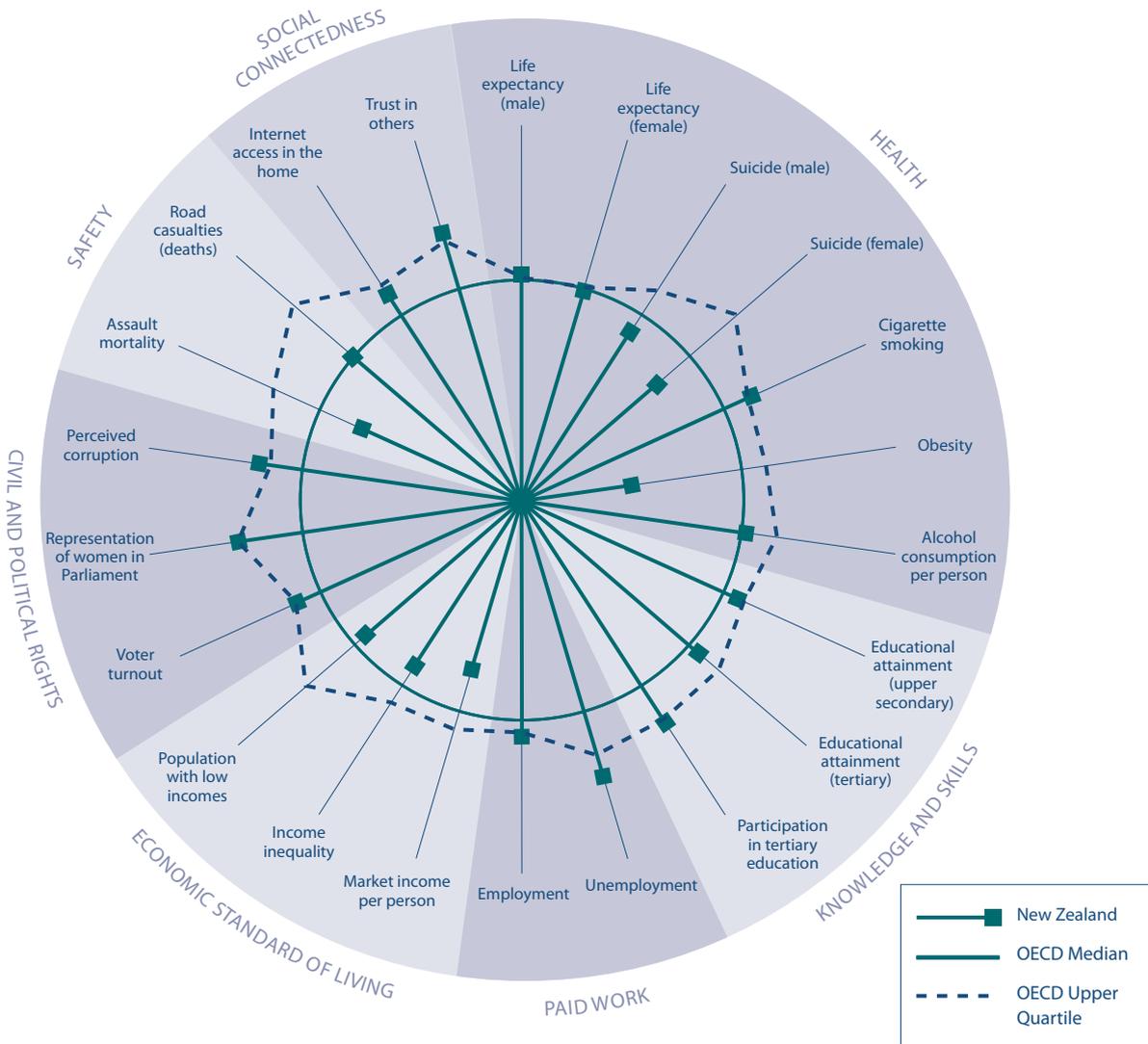
In the area of Knowledge and Skills, New Zealand is above the OECD median for the proportion of adults who have at least upper secondary school qualifications, for those who have a bachelor's degree or higher, and for participation in tertiary education among 20–29 year olds.

In the Health domain, New Zealand's results are mixed. Our life expectancy is similar to the OECD median, although there is a relatively narrow range of outcomes across the OECD for this indicator. New Zealand's cigarette smoking rate and per person consumption of alcohol are slightly better than the OECD median. Our obesity rate is similar to those of Australia and the United Kingdom, lower than that of the United States, but higher than the reported rates in most of the other OECD countries that use a less robust measurement method. We have relatively high suicide death rates.

New Zealand's rate of road deaths is about the same as the OECD median, while New Zealand's assault mortality rate was higher than the OECD median using data from 2001–2003.

Our Economic Standard of Living results tend to be lower than those in many OECD countries. In 2004, New Zealand was near the middle of the OECD for population with low incomes and was higher than the OECD median for income inequality. In 2006, New Zealand was below the OECD median for market income per person.

Figure C02 **Social wellbeing in New Zealand, relative to the OECD**



### Interpreting “Social wellbeing in New Zealand, relative to the OECD”

This figure shows New Zealanders’ social wellbeing relative to the OECD for 22 indicators. The circle ○ represents the OECD median for each indicator, and the spokes —■ represent New Zealand’s outcomes relative to the OECD median. The irregularly shaped line outside the OECD median circle - - - - represents outcomes of the OECD upper quartile relative to the OECD median. Where a spoke falls inside the circle, New Zealand is in the bottom half of the OECD. Where the spoke falls outside the circle, outcomes in New Zealand are better than the OECD median. Where a

spoke falls past the irregularly shaped line, New Zealand is in the top quarter of OECD outcomes. For each indicator, the most recent data has been used where possible. Most of the data comes from between 2005 and 2007, but the population with low incomes and income inequality data comes from 2004 and the assault mortality data comes from 2001–2003. **SOME CAUTION IS REQUIRED WITH THIS DATA:** international comparisons are difficult to interpret because of the different methods countries use to collect, classify and record social data.

## Changes in wellbeing for different population subgroups

The indicators used in *The Social Report 2008* enable us to compare how social wellbeing differs across groups within the New Zealand population. Across a wide range of indicators Māori, Pacific peoples and people of Other ethnicity tend to experience poorer average outcomes than the rest of the population. People living in deprived areas also experience poorer outcomes. Comparisons between women and men reveal a more mixed picture.

It is worth noting these comparisons are for population group averages and, in most cases, the variation in outcomes between members of any one group is much greater than those between groups. It is also important to note the risk of poor outcomes often varies by age. For example, younger age groups have higher rates of unemployment, suicide death, road casualties and criminal victimisation and lower incomes than older age groups. For ethnic groups with a young age profile, such as Māori and Pacific peoples, this means poor outcomes relative to those of other ethnic groups may be partly attributable to the different age structures of the groups. This should be kept in mind when comparing outcomes between ethnic groups for indicators where the data has not been age standardised.

### MĀORI

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#### Outcomes for Māori have improved since the mid-1990s for the majority of indicators

The majority of indicators for which we have time series data show improvements in wellbeing for Māori since the mid-1990s. In many instances, improvements have been greater for Māori than for the total population over this period. Life expectancy, participation in tertiary education, and unemployment and employment rates have all improved at a greater rate for Māori than the total population over this period. Despite these improvements, in these areas and in others, average outcomes for Māori tend to be poorer than average outcomes for the total population.

Life expectancy for Māori has increased, with a considerable improvement in the five years to 2000–2002. Life expectancy for Māori males was 69 years in 2000–2002 compared to 66.6 years in 1995–1997, and for Māori females it was 73.2 years compared to 71.3 years, respectively. Despite these improvements, Māori still have a shorter life expectancy than non-Māori. In 2006, the gap in independent life expectancy at birth between Māori and non-Māori was 6 years for males and 6.1 years for females. Suicide death rates for Māori have improved since 1997, as they have for non-Māori. However, the rate for Māori worsened between 2002 and 2004. Māori women have the highest cigarette smoking rate of any ethnic group (47 percent) followed by Māori men (40 percent). There has been a decline in cigarette smoking for Māori since the mid-1990s. There was no significant change from 1997 to 2006/2007 in the prevalence of obesity either for Māori men or Māori women. Māori had the second highest prevalence of obesity in 2006/2007. Māori drinkers are significantly more likely to have a potentially hazardous drinking pattern than drinkers in the total population. Since 1996/1997, Māori females have been significantly more likely to have a potentially hazardous drinking pattern than female drinkers in the total population.

In the Knowledge and Skills domain, since 2000 there has been an improvement in the participation of Māori children in early childhood education. While the rate of participation for Māori children in 2007 is still lower than that for European children, the gap has narrowed. The proportion of Māori students leaving school with a qualification at NCEA Level 2 or above increased by 15.1 percentage

points between 2003 and 2007. This was the greatest improvement experienced by any ethnic group over this period. However, Māori school leavers have the lowest level of educational attainment of any ethnic group at this level. Māori have had the highest participation rate in tertiary education of any ethnic group since 2001. Māori participation is higher at older age groups and in Levels 1–3 certificate courses than for other ethnic groups. Between 1997 and 2007, the proportion of the Māori adult population with upper secondary education increased by 11.9 percentage points, reaching its highest level in 2003, before declining. This increase reduced the gap between Māori and Europeans. The percentage of Māori with tertiary qualifications more than trebled between 1997 and 2007. Despite this, the percentage point gap between Māori and Europeans with tertiary qualifications increased.

Employment and unemployment rates for Māori have improved since the mid-1990s with the unemployment rate for Māori more than halving over this period. This was the greatest percentage point improvement in the rate of unemployment for any ethnic group over this period and it reduced the difference in the unemployment rate between Māori and Europeans from 12 percentage points in 1997 to 5.1 percentage points in 2007. However, Māori had the highest unemployment rate of any ethnic group throughout this period. The employment rate for Māori increased by 11.1 percentage points between 1997 and 2007, narrowing the gap between the employment rates of Māori and Europeans from 20.4 percentage points to 14.2 percentage points. Between June 1997 and June 2007, the real median hourly earnings of Māori increased by 15 percent. The ratio of Māori to European median hourly earnings was over 85 percent between 1998 and 2006, but fell to 81 percent in 2007. Māori have a higher rate of workplace injury claims than any other ethnic group. This is likely to reflect the relatively greater representation of Māori in more dangerous industries and occupations. Māori had the lowest level of satisfaction with their work-life balance of any ethnic group in 2006.

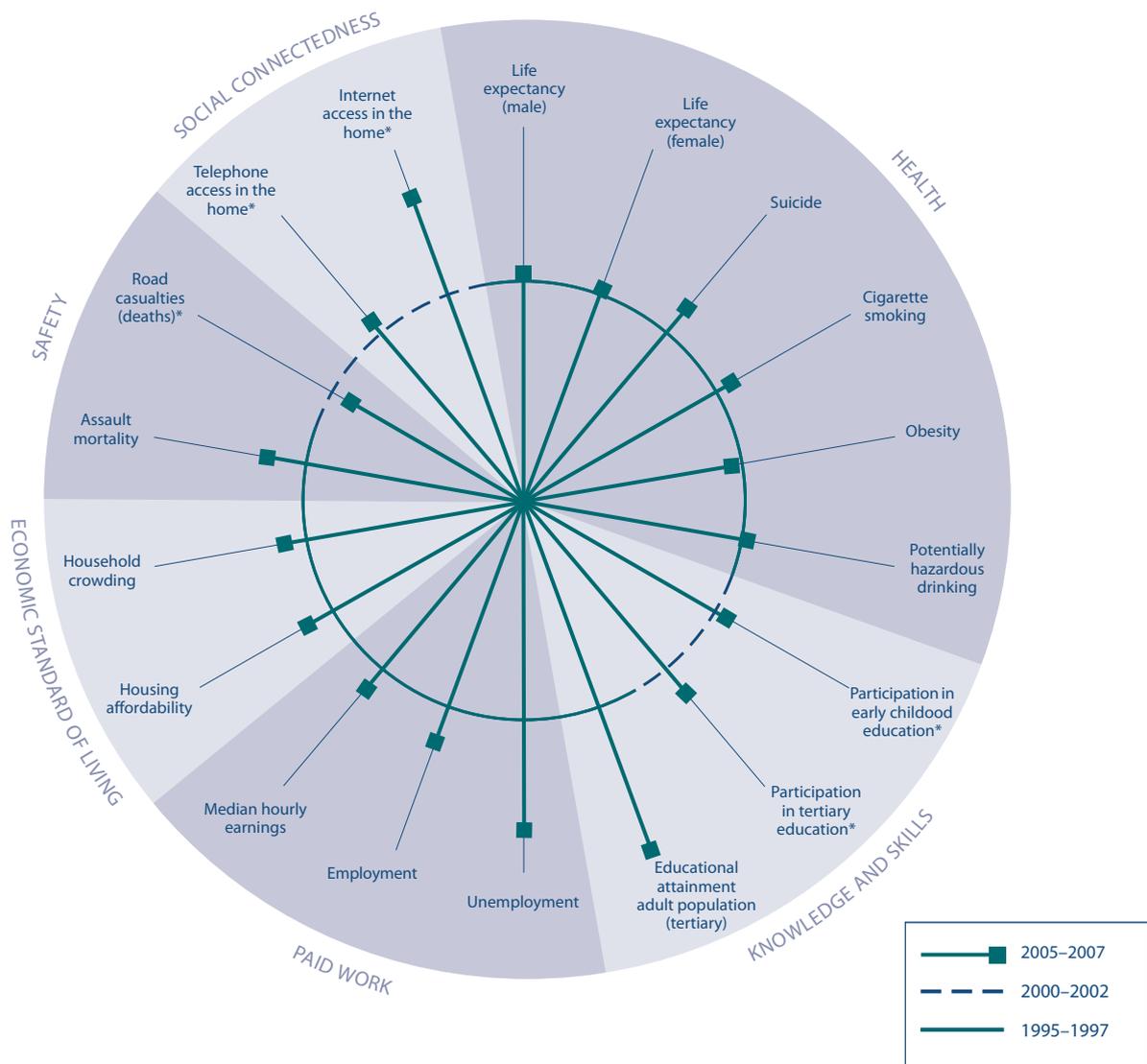
In the Economic Standard of Living domain, the proportion of households with at least one Māori adult spending more than 30 percent of their disposable income on housing was better in 2007 than in 1997, although it worsened between 2004 and 2007. Median household incomes for Māori improved between 1997 and 2004, and have remained almost unchanged since 2004. The proportion of Māori experiencing household crowding fell between 1996 and 2006.

Between 2001 and 2006, the proportion of Māori who can speak Māori declined slightly while the total number of Māori who can do so increased over this period.

Despite a stronger improvement for Māori than non-Māori in the assault mortality rate between 1996 and 2005, Māori are considerably more likely to die from an assault or intentional injury than non-Māori. In 2005, the age-standardised rate for Māori was 3.5 deaths per 100,000 compared with 1.2 per 100,000 for non-Māori. Māori are also almost twice as likely as the total population to die in motor vehicle accidents. Māori are more likely to be the victims of crime than Europeans (47 percent compared with 37 percent for Europeans). While 36 percent of Europeans reported that fear of crime impacted on their quality of life, 47 percent of Māori reported this.

Māori experienced one of the largest increases in internet access in the home, with a 21 percentage point increase between 2001 and 2006. However, Māori still have a lower level of internet access than the total population. Māori had one of the lowest levels of telephone access in the home in 2001 and 2006, but experienced one of the greatest increases over this period. In 2006, Māori had the second lowest rate of loneliness. Māori are more likely than Europeans to participate in cultural and arts activities and to have regular contact with family and friends.

Figure CO3 **Changes in social wellbeing for Māori, 1995–1997 or 2000–2002 and 2005–2007**



### Interpreting “Changes in social wellbeing for Māori”

The circle ○ represents average outcomes for Māori against each indicator between 1995 and 1997, or 2000 and 2002. Indicators with an asterisk \* do not have data from the mid-1990s to 2005–2007. Therefore, the circle represents 2000–2002 rather than 1995–1997 for these five indicators. The spokes —■ represent the most recent outcomes, averaged where possible, over the most recent three years, 2005–2007. Where a spoke falls outside the circle this means outcomes for Māori are better now than they were in the earlier time period. The further the spoke is from the circle,

the greater the improvement. Where a spoke falls inside the circle, the outcomes for Māori are worse now than they were in the earlier time period. The further the spoke is from the circle the more pronounced this effect. There are, however, some important limitations on this style of presentation. In particular, we cannot directly compare the size of changes for different indicators. Most of the latest data is from 2005–2007, with the exception of suicide, assault mortality, road casualties (all 2003–2005) and life expectancy (2000–2002).

## PACIFIC PEOPLES

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### **Outcomes for Pacific peoples have improved for most of the indicators we can compare to the mid-1990s**

Pacific peoples, like Māori, have experienced real gains in wellbeing over this period. While a number of these improvements have been greater than for the total New Zealand population, Pacific peoples outcomes overall are poor compared to the total population.

Pacific peoples have the highest prevalence of obesity of any ethnic group and the second highest cigarette smoking rate. The rate of potentially hazardous drinking by Pacific peoples in 2006/2007 was similar to the level in 1996/1997, with Pacific peoples having the highest rate along with Māori.

The educational attainment of Pacific peoples has improved since the mid-1990s, but recent changes are mixed. The proportion of Pacific children who participated in early childhood education before attending primary school increased by 7.9 percentage points between 2000 and 2007, a faster rate than that for European or Māori children. This reduced the gap between Pacific peoples and the European population from 19.3 percentage points to 14.2 percentage points. The proportion of Pacific students leaving school with a qualification at NCEA Level 2 or above increased by 13.7 percentage points between 2003 and 2007. Between 2001 and 2007, the proportion of Pacific peoples who participated in tertiary education increased by 3.1 percentage points. The proportion of Pacific peoples with upper secondary qualifications increased between 1997 and 2003, but has declined since so the rate in 2007 is similar to that in 1997. Despite a three-fold increase in the proportion of Pacific peoples with tertiary qualifications between 1997 and 2007, the percentage point gap between Pacific peoples and the total population has increased.

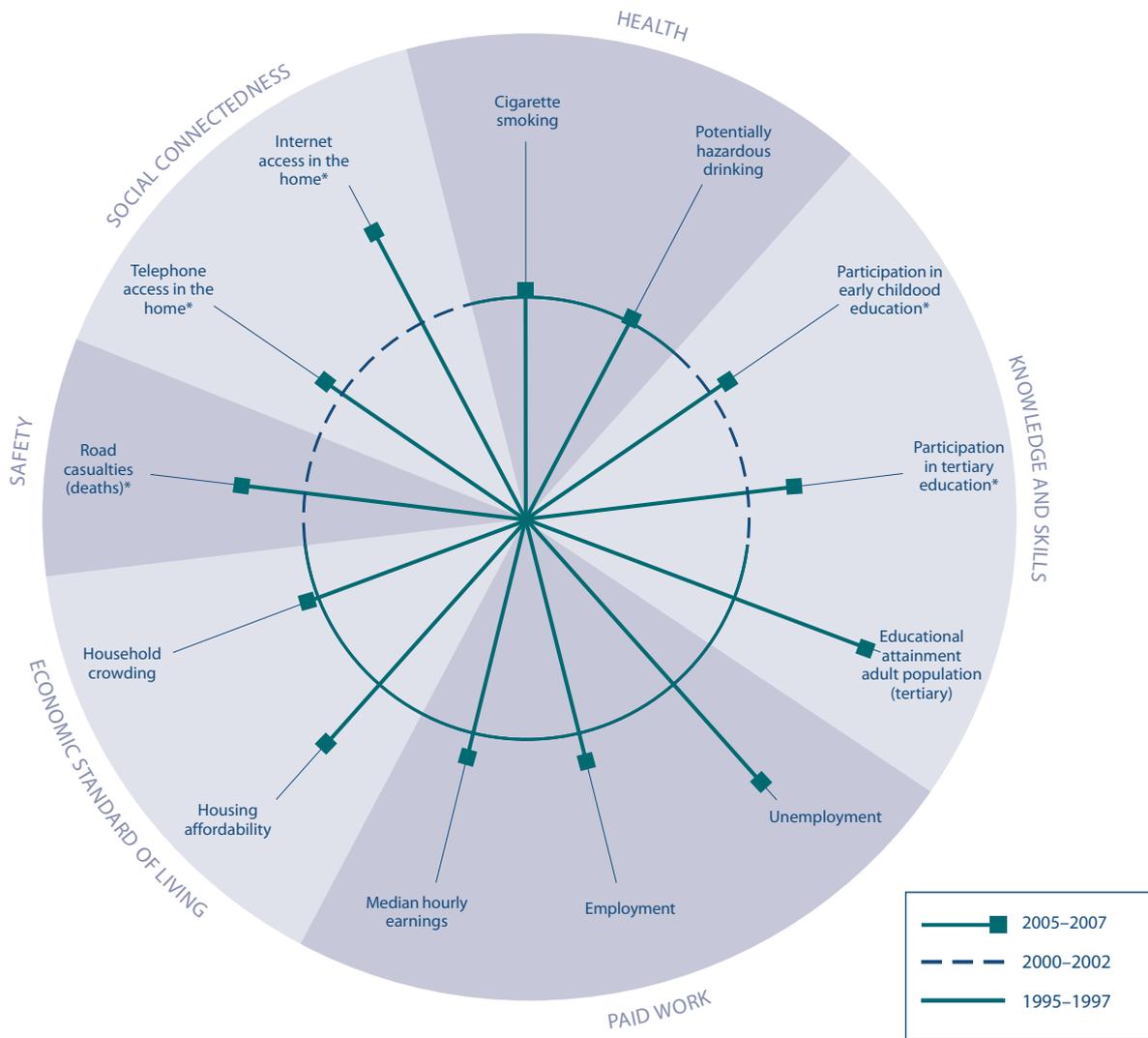
All three indicators in the Paid Work domain where data for Pacific peoples is available since the mid-1990s show a strong improvement in outcomes. The unemployment rate for Pacific peoples, like that of Māori, has fallen markedly, by 8.7 percentage points since 1997. The employment rate for Pacific peoples has improved by 7.3 percentage points since 1997. Real median hourly earnings increased by 16 percent for Pacific peoples between 1997 and 2007. The ratio of Pacific peoples to European median hourly earnings was around 80 percent between 1997 and 2007. Pacific peoples have the second highest rate of workplace injury after Māori.

The proportion of households with at least one Pacific adult spending more than 30 percent of their disposable income on housing was better in 2007 than in 1997, although it worsened between 2004 and 2007. Median household incomes for Pacific peoples improved between 1997 and 2007. The proportion of Pacific peoples experiencing household crowding fell between 1996 and 2006. However, Pacific peoples are almost twice as likely as Māori and almost 10 times as likely as Europeans to live in households requiring at least one additional bedroom.

In 2006/2007, Pacific peoples had lower rates of participation in physical activity than Māori or Europeans. Pacific peoples experienced the greatest improvement in telephone access in the home between 2001 and 2006. Over this same time, their access to the internet almost doubled but Pacific peoples still had the lowest rate of internet access in the home.

Since 2003, Pacific peoples have had the lowest death rate as a result of motor vehicle crashes. In 2005, 47 percent of Pacific peoples were victims of crime and the same proportion reported that fear of crime impacted on their quality of life. In 2006, Pacific peoples recorded the lowest level of trust in others. Pacific peoples also reported the highest level of satisfaction with their work-life balance in 2006.

Figure CO4 **Changes in social wellbeing for Pacific peoples, 1995–1997 or 2000–2002 and 2005–2007**



### Interpreting “Changes in social wellbeing for Pacific peoples”

The circle ○ represents average outcomes for Pacific peoples against each indicator between 1995 and 1997, or 2000 and 2002. Indicators with an asterisk \* do not have data from the mid-1990s to 2005–2007. Therefore, the circle represents 2000–2002 rather than 1995–1997 for these five indicators. The spokes —■ represent the most recent outcomes, averaged where possible, over the most recent three years, 2005–2007. Where a spoke falls outside the circle this means outcomes for Pacific peoples are better now than they were in the earlier time period. The further

the spoke is from the circle, the greater the improvement. Where a spoke falls inside the circle, the outcomes for Pacific peoples are worse now than they were in the earlier time period. The further the spoke is from the circle the more pronounced this effect. There are, however, some important limitations on this style of presentation. In particular, we cannot directly compare the size of changes for different indicators. Most of the latest data is from 2005–2007, with the exception of road casualties (2003–2005).

## OTHER ETHNICITIES

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### Outcomes for the Other ethnic group are mixed

Ethnicities other than European, Māori and Pacific peoples are referred to as Other. Some surveys used in this report provide separate data on Asian people. In other cases, data on Asian people is included in the Other ethnicities category. This, along with the diverse make-up of the Other category, probably contributes to the mixed outcomes evident for this group. The number of indicators available for this group is limited.

Asians aged 15–64 years had the lowest cigarette smoking rate of all ethnic groups in 2006/2007. The Asian population aged 15 years and over have the lowest obesity rate of all ethnic groups, although it worsened between 1997 and 2006/2007 as it did for the population as a whole. Between 2002/2003 and 2006/2007, only Asians aged 15 years and over had a statistically significant increase in obesity. Asian drinkers are significantly less likely than drinkers in the total population to have a potentially hazardous drinking pattern.

After European children, Asian children are the most likely to have attended an early childhood education service before going to primary school, followed by children of the Other ethnic group. The rate of attendance of children from both these groups grew faster than the rate for European children between 2000 and 2007. Asian school leavers were the most likely to leave school with a qualification at NCEA Level 2 or above in 2007, and the Other ethnic group experienced a 12.8 percentage point improvement between 2003 and 2007. Asians aged 15 years and over had the second highest participation rate in tertiary education in 2007, after Māori, but they had the highest participation rates for degree level qualifications. A high proportion of adults from the Other (including Asian) ethnic group have at least upper secondary school qualifications and have tertiary qualifications at bachelor's degree level or higher. The proportion of adults from the Other (including Asian) ethnic group with tertiary qualifications is almost double the total for the New Zealand population.

The Other (including Asian) ethnic group has the second lowest rate of unemployment, after Europeans. Between 1997 and 2005, partly as a result of more international students studying in New Zealand, the Other ethnic group (including Asian) had the lowest rate of employment of any ethnic group. In 2006 and 2007, the employment rate of the Other ethnic group was higher than that for Pacific peoples. Since 1997, the Other ethnic group (including Asian) has consistently had the second highest level of median hourly earnings, after Europeans. The level has been falling since 2003, which has contributed to the Other ethnic group experiencing the lowest percentage increase in real median hourly earnings from wage and salary jobs over the 10 years to June 2007. The Other (including Asian) ethnic group had the second lowest rate of work-related injury claims in 2006.

Median household incomes for the Other ethnic group fluctuated between the mid-1990s and 2007. While the long-run trend is positive, robust comparisons between survey years are not possible. The proportion of households with at least one adult from the Other ethnic group spending more than 30 percent of their disposable income on housing was better in 2007 than in 1997, but similar to the 2001 level. The proportion of people in the Asian and Other ethnic group experiencing household crowding improved between 1996 and 2006.

Asian people were the group most likely to be perceived as being subject to a great deal or some discrimination in 2007. The perception of discrimination against Asian people worsened between 2000 and 2003, but had improved by 2007.

Asians aged 15 years and over were the least likely to meet the physical activity guidelines in 2006/2007. In 2006, people of the Other ethnic group reported the highest equal level of trust in others (77 percent). The rate for Asian people was 68 percent, which was the second to lowest rate behind Pacific peoples. Asian people were the most likely to report that fear of crime impacted on their quality of life. In 2006, the criminal victimisation rate for Asians aged 15 years and over was 43 percent (compared to 47 percent for Māori and Pacific peoples and 37 percent for Europeans).

In 2001 and in 2006, Asian people and the Other ethnic group had the highest levels of internet access in the home, and a high level of telephone access in the home. People living in Other economic families were the most likely to have friends or family over for a meal at least once a month and experienced the largest increase in this activity between 2000 and 2004. In 2006, Asian people aged 15 years and over reported the highest rate of loneliness (27 percent). Twenty-two percent of people in the Other ethnic group reported they were sometimes lonely. Europeans had the lowest reported rate, at 16 percent.

## WOMEN AND MEN

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**While women's and men's outcomes are similar across many domains, women's outcomes for Health and Knowledge and Skills are better than men's, but men have better outcomes in Paid Work**

Outcomes between women and men are mixed. Although women, on average, are healthier and increasingly better educated than men, women lag behind men in outcomes for Paid Work. Improvements for males in Health outcomes and improvements for females in Paid Work outcomes mean the gaps in outcomes are narrowing in these areas. Outcomes in the Knowledge and Skills domain are improving faster for females than for males.

On average, females live longer than males, but the sex gap in life expectancy is decreasing, reflecting gains for males. The gap has narrowed from 5.3 years in 1995–1997 to 4.1 years in 2005–2007. There is a marked sex gap in the suicide death rate. The suicide death rate for males is over three times that for females. The rate for both groups has fallen since 1997. Females have a higher rate of injury from intentional self harm than males. Obesity has increased for both males and females since the mid-1990s. There is no significant difference in obesity rates between the sexes. Females and males share similar rates of cigarette smoking. Male drinkers were more than twice as likely as female drinkers to have a potentially hazardous drinking pattern.

In 2007, 70 percent of females left school with NCEA Level 2 or above compared with 61 percent of males. Women are also more likely than men to participate in tertiary education, although the decline in participation between 2005 and 2007 was greater for women than for men. Men have a higher rate of attainment of upper secondary level or above qualifications than women. This has narrowed over time, to less than two percentage points since 2005. Since 1999, women in the 25–34 years age group are more likely than men in any age group to have upper secondary level or above qualifications. Since 1997, women have improved their attainment of tertiary qualifications at a faster rate than men, and by 2007 women had a slightly higher rate of attainment than men at this level.

In 2007, the unemployment rate was 3.3 percent for men and 3.9 percent for women. Men are more likely to be employed than women, although the female employment rate increased at a faster rate than the male rate between 1997 and 2007. In 2007, men had higher real median hourly earnings than women. The

dollar gap between female and male hourly earnings reduced between 1997 and 2003, but has fluctuated since this time. Men are almost twice as likely as women to suffer workplace injuries involving a claim to ACC. This reflects in part a male predominance in relatively dangerous industries and occupations. Between 2001 and 2006, there was a greater improvement for males in the rate of workplace injuries than for females. Employed men and employed women have similar rates of satisfaction with their work-life balance. Among full-time workers, men are more likely to be satisfied than women.

Between 1997 and 2007, females were slightly more likely than males to be living in households with low incomes and in households that were spending more than 30 percent of their disposable income on housing. There is very little difference by sex in the likelihood of living in crowded households.

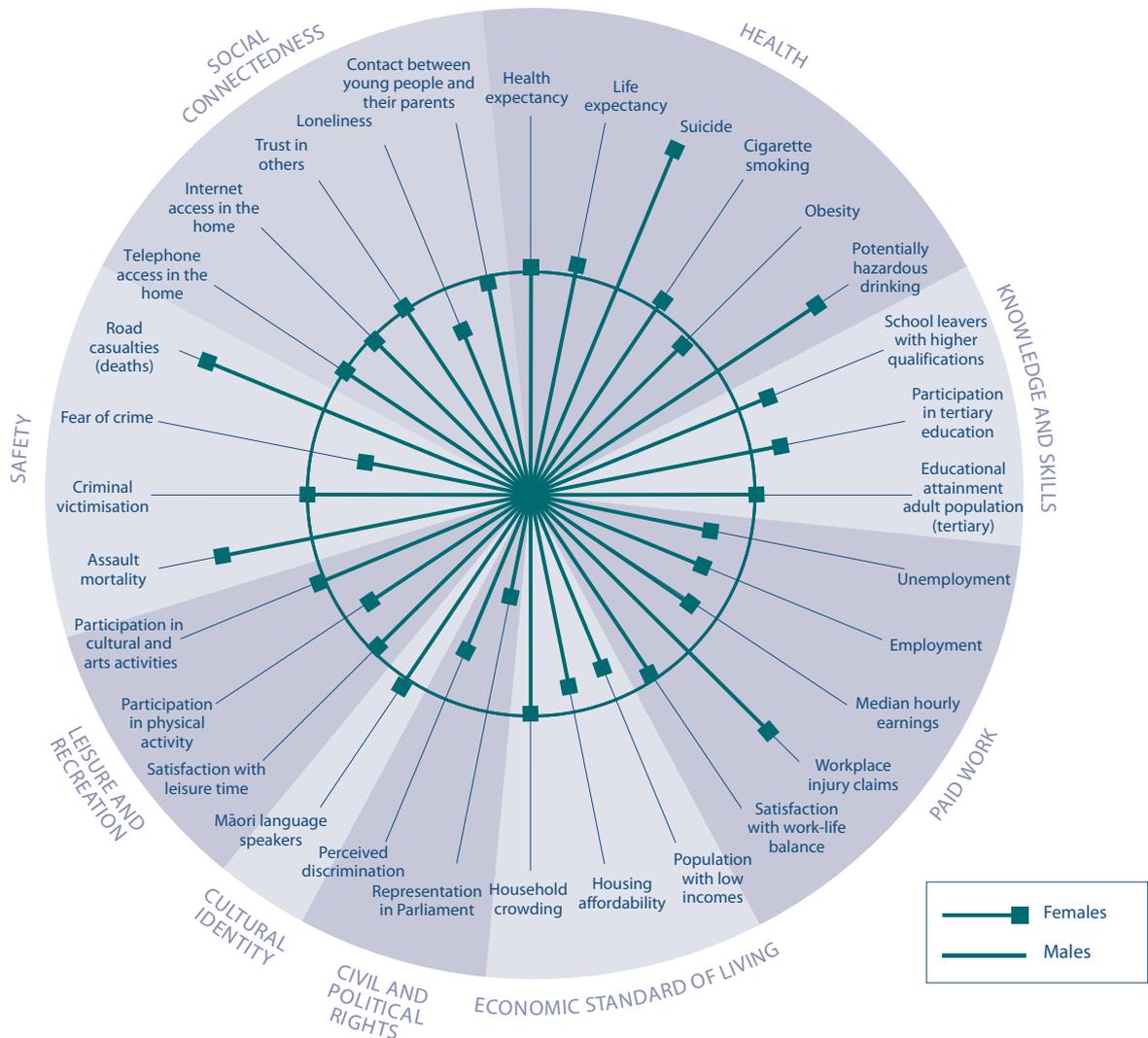
There are fewer female than male Members of Parliament. As a result of the 2005 general election, women hold 32 percent of the seats in Parliament. In the 2007 local government elections, 32 percent of elected members were women.

In 2006/2007, 54 percent of men and 47 percent of women met the physical activity guidelines. These figures were similar to the 2002/2003 levels for both men and women. In 2006, there was very little difference between the sexes in reported satisfaction with leisure time. Women were slightly more likely to experience one or more of the cultural activities included in the 2002 Cultural Experiences Survey.

In the Safety domain, males and females are equally as likely to experience some form of criminal victimisation. Although females were twice as likely as males to be the victims of sexual offences, males were more likely to be the victims of confrontational offences by people they did not know. Despite having the same criminal victimisation rate, females affected by partner violence were the victims of more incidents per person on average than males affected by partner violence.<sup>107</sup> Women were more likely than men to report that fear of crime impacted on their quality of life. Males are more likely to die from an assault or intentional injury and are more likely to be injured or killed in motor vehicle accidents. Although road accident deaths have declined substantially for both sexes, the male road accident death rate has remained double that for females.

In the Social Connectedness domain, men and women reported a similar level of trust in others, but women were more likely than men to have felt lonely during the past 12 months. There is little difference between men and women in access to the internet and a telephone in their homes.

Figure C05 **Social wellbeing for females, relative to males, 2005–2007**



### Interpreting “Social wellbeing for females, relative to males”

The circle ○ represents average outcomes for males. The spokes —■ represent average outcomes for females. Where a spoke falls outside the circle, the outcome for females is better than for males. The further the spoke is from the circle, the better the outcome for females relative to males. Where a spoke falls inside the circle, the outcome for females is worse than for males. There are, however, some

important limitations on this style of presentation. In particular, we cannot directly compare the size of changes for different indicators. Where possible, the data represents three-yearly averages. Most of the data is from 2005–2007 except for: suicide and assault mortality (2003–2005), participation in cultural and arts activities (2002) and contact between young people and their parents (2001).

## SOCIO-ECONOMIC DIFFERENCES

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### **People living in deprived areas experience poorer outcomes, particularly in health**

Health outcomes for people who live in the most deprived areas of New Zealand are worse than for people who live in the least deprived areas, as defined by the New Zealand Index of Deprivation (NZDep). In 2000–2002 males from the 10 percent most deprived areas could expect to live 8.9 fewer years, and females 6.6 fewer years compared to those living in the least deprived areas. In 2006, cigarette smoking, obesity and potentially hazardous drinking were also more prevalent among people living in lower socio-economic areas. Cigarette smoking rates were almost three times higher for people living in the most deprived quintile, compared to those living in the least deprived quintile. Obesity rates were also higher in the two most deprived quintiles, than in the two least deprived quintiles. Potentially hazardous drinking was significantly higher among people living in the most deprived quintile, compared to people in all other quintiles. The Ministry of Health publication, *Tracking Disparity: Trends in ethnic and socioeconomic inequalities in mortality, 1981–2004*, provides a more detailed account of health disparities.

Year 1 students attending schools drawn from communities with the lowest socio-economic characteristics are more likely not to have participated in early childhood education, when compared to Year 1 students attending schools drawn from high socio-economic areas. The educational outcomes of school leavers from lower decile schools are below those of school leavers from higher decile schools. In 2007, 49 percent of students from deciles 1–3 schools left with a qualification at NCEA Level 2 or above, compared to 79 percent of school leavers from deciles 8–10 schools. Low decile schools have been improving: there was a 10.7 percentage point increase in the percentage of students from deciles 1–3 schools leaving with a qualification at NCEA Level 2 or above between 2005 and 2007, compared to a 6.9 percentage increase for school leavers from deciles 8–10 schools.

In 2007, a similar proportion of households in the bottom three quintiles spent more than 30 percent of their disposable income on housing, between 29 percent and 33 percent. Since 1997, the proportion of households in the lowest quintile spending more than 30 percent of their incomes on housing declined, while the proportion in the middle quintile increased. In 2006, 5 percent of households with low incomes were crowded compared to 1 percent of households with high incomes. Since 2001, the household crowding rate for people in low income households has fallen slightly, from 6 percent. Unemployment and ethnicity are better markers of household crowding outcomes than household income.

The deprivation level of a community has no association with rates of participation in physical activity of people within the community. However, people living in the most deprived areas are slightly more likely to be victims of crime than those living in the least deprived areas.

## Summary of indicators

Indicators	Current level of updated indicators (most recent year) and the change from the previous result ☺ better ☹ same ☹ worse ⓧ not updated ⊖ not comparable	Longer-term change	Variation within the population	Comparison with the OECD
<b>HEALTH</b>				
Health expectancy	☺ Males 67.5 years Females 69.2 years (2006)	Improved, faster for males than females	Lower for males and Māori	No comparison available
Life expectancy	☺ Males 78.1 years Females 82.2 years (2005–2007)	Improved, faster for males than females	Lower for males, Māori and those living in deprived areas	Average
Suicide	☺ 13.2 deaths per 100,000 (three-year moving average age-standardised rate for all ages) (2003–2005) ☹ Youth 15–24 years, 18.1 deaths per 100,000 (three-year moving average) (2003–2005)	Improved since 1998	Suicide deaths higher for males, youth, young adults and Māori; attempted suicide higher for females	Average for all ages, poor for youth
Cigarette smoking	☺ 22 percent of population aged 15–64 years (2006/2007)	15+ years population: improved to 1991, steady to 2003, improved to 2005; 15–64 years population: improved between 2006 and 2006/2007	Higher rates among younger adults, Māori, Pacific peoples and those living in deprived areas	Good for males, poor for females
Obesity	☹ 25 percent of population aged 15+ years (age-standardised rate) (2006/2007) 8 percent of children 5–14 years (2006/2007)	Increased since 1997 but no statistically significant increase in age-adjusted rate between 2002/2003 and 2006/2007	Higher for Pacific peoples, Māori, and people in deprived areas	Poor
Potentially hazardous drinking	☺ 22.9 percent of drinkers aged 15 years and over (2006/2007)	Similar to levels in 1996/1997 and 2002/2003	Higher among males, young people, Māori and Pacific people	Alcohol consumption average
<b>KNOWLEDGE AND SKILLS</b>				
Participation in early childhood education	☺ “Apparent” participation rate: 97 percent for 3 year olds and 102 percent for 4 year olds (2007)	Improved	Māori and Pacific rates lower than European	No robust comparison available
School leavers with higher qualifications	☺ 66 percent of school leavers with NCEA Level 2 or above (2007)	No comparable trend available	Proportions lower for males, Māori and Pacific school leavers	No comparison available
Participation in tertiary education	☹ 13.3 percent of population aged 15 years and over enrolled in tertiary education institutions (2007)	Improved	Lower rates for males, higher for Māori at ages under 18 and over 25 years	No direct comparison available for total population aged 15 years and over, good for 20–29 year olds
Educational attainment of the adult population	☺ 76 percent of the population aged 25–64 years with at least an upper secondary qualification (2007) ☺ 22 percent of the population aged 25–64 years with tertiary (bachelor degree+) qualifications (2007)	Improved	Proportions lower for older people, women, Māori and Pacific peoples; Other adults had the highest proportion with tertiary qualifications	Good for upper secondary, average for tertiary
<b>PAID WORK</b>				
Unemployment	☺ 3.6 percent of the labour force (2007)	Improved since 1998, to below mid-1980s levels	Higher rates for young people, Māori, Pacific peoples and Other ethnic groups	Very good
Employment	☺ 75.4 percent of the population aged 15–64 years (2007)	Improved since 1998 to above mid-1980s levels	Lower rates for young people, women, Māori, Pacific peoples and Other ethnic groups	Very good
Median hourly earnings	☺ \$18.00 an hour for wage and salary earners (\$19.10 for males; \$16.78 for females) (2007)	Improved	Lower for Māori, Pacific peoples, youth and females over 30	No comparison available

Indicators	Current level of updated indicators (most recent year) and the change from the previous result ☺ better ☹ same ☹ worse ☹ not updated ⊖ not comparable	Longer-term change	Variation within the population	Comparison with the OECD
<b>PAID WORK</b> CONT.				
Workplace injury claims	☺ 126 claims per 1,000 full-time equivalent employees (2006, provisional)	Improvement since 2001	Higher rates for men, Māori and Pacific peoples	No comparison available
Satisfaction with work-life balance	☹ 75 percent of employed people say they are satisfied with their work-life balance (2006)	Data not comparable	Māori and people aged 25–49 years are less likely to be satisfied with their work-life balance	No comparison available
<b>ECONOMIC STANDARD OF LIVING</b>				
Market income per person	☺ RGNDI of \$30,255 per person (in constant 1995/1996 dollars) (year to December 2007)	Improved	Not measured	Poor
Income inequality	☺ The equivalised disposable income of a household at the 80th percentile was 2.6 times larger than the income of a household at the 20th percentile (2007)	Around the same as the mid-1990s	Not relevant	Higher inequality than OECD median around 2004
Population with low incomes	☺ 13 percent of population lives in households with incomes below 60 percent of the median (2007)	Improved considerably since mid-1990s	Higher rates among children, people aged 18–24 years, sole-parent families and large families	Average
Housing affordability	☹ 26 percent of households spend more than 30 percent of income on housing (2007)	Improved from 1998 to 2004 but worsened between 2004 and 2007	Higher proportions among low-income households, Māori, Pacific peoples and Other ethnic groups	No comparison available
Household crowding	☹ 10 percent of individuals live in households requiring one or more additional bedrooms (2006)	Improved	More common among families with young children, youth, people in rental housing, Māori and Pacific peoples and in South Auckland	No comparison available
<b>CIVIL AND POLITICAL RIGHTS</b>				
Voter turnout (general elections)	☹ 77 percent of the population eligible to vote (2005)	Fallen	Non-voters more likely to be on lower incomes, younger people, Māori or Pacific peoples	Above average for general election
Voter turnout (local authority elections)	☹ 44 percent of enrolled electors (2007)	Fallen		
Representation of women in government	☹ 32 percent of seats in Parliament (2005 general election) ☺ 32 percent of elected members (2007 local authority elections)	Improved Improved	Not relevant	Very good for central government
Perceived discrimination	☺ Asians most common group perceived to be subject to discrimination (2007)	Improved	Since 2001, perceptions of discrimination lower for all groups	No comparison available
Perceived corruption	☺ New Zealand ranked first equal as least corrupt nation with a Corruption Perceptions Index score of 9.4 (2007)	Steady	Not relevant	Very good
<b>CULTURAL IDENTITY</b>				
Local content programming on New Zealand television	☺ 43 percent of the prime-time schedule (2007)	Improved	Not relevant	Below average
Māori language speakers	☹ 24 percent of Māori report ability to converse in Māori (2006)	Slightly lower in 2006 than in 1996	Speakers more likely to be older	Not relevant
Language retention	☺ Varied from 16 percent of Cook Islands Māori to 84 percent of Koreans (2006)	Little change for most ethnic groups	Not relevant	No comparison available

Indicators	Current level of updated indicators (most recent year) and the change from the previous result 😊 better 😐 same 😞 worse 🚫 not updated ⊖ not comparable	Longer-term change	Variation within the population	Comparison with the OECD
<b>LEISURE AND RECREATION</b>				
Satisfaction with leisure time	🚫 73 percent of the population are satisfied overall with their leisure time (2006)	No trend available	Those aged 25–49 years report lower satisfaction rates	No comparison available
Participation in physical activity	😊 51 percent of the population aged 15 years and over were physically active (age-standardised rate) (2006/2007)	Steady	Women and older people were less likely to be physically active than men and young people	No comparison available
Participation in cultural and arts activities	🚫 93 percent of the population aged 15 years and over took part in cultural activities (2001/2002)	No trend available	Higher participation rates among young people	No comparison available
<b>PHYSICAL ENVIRONMENT</b>				
Air quality	😊 Auckland below guideline (2007) 😊 Hamilton below guideline (2007) 😊 Wellington below guideline (2007) 😊 Christchurch below guideline (2007) 😊 Dunedin below guideline (2007)	Fluctuating Steady Improved Improved Fluctuating, but improving overall	Not reported	Similar to sites in the Australian regions of Port Phillip (including Melbourne) and Sydney, better than urban sites in the United Kingdom
Drinking water quality	😊 <i>E. coli</i> compliance 79 percent (2006/2007) 😊 <i>Cryptosporidium</i> compliance 67 percent (2006/2007)	Improved Improved	Not reported Not reported	No comparison available No comparison available
<b>SAFETY</b>				
Assault mortality	😞 All ages: Age-standardised rate of 1.7 deaths per 100,000 people (2005, provisional) Children under 15 years: five-year average annual rate of 0.8 per 100,000 (2001–2005)	Improved since early 1990s	Highest among males, youth aged 15–24 years and Māori	Below average for males, above average for females
Criminal victimisation	🚫 39 percent of population aged 15 years and over were victims of criminal offending, either as individuals or members of households (2005)	No trend available	Young people, Māori and Pacific peoples more likely to have been a victim of crime	No reliable comparison available
Fear of crime	🚫 40 percent of adults said that fear of crime had a moderate or high impact on their quality of life (2005)	No trend available	Fear higher among females, Māori, Pacific peoples and those in socio-economically deprived areas	No comparison available
Road casualties	😞 10.0 deaths per 100,000 population (2007) 😞 376 injuries per 100,000 population (2007, provisional)	Improved Improved since mid-1980s	High rates among men, young people, Māori and those aged 65 years and over	Average for road deaths

Indicators	Current level of updated indicators (most recent year) and the change from the previous result ☺ better ☹ same ☹ worse ⓧ not updated ⓧ not comparable	Longer-term change	Variation within the population	Comparison with the OECD
<b>SOCIAL CONNECTEDNESS</b>				
Telephone and internet access in the home	☺ Telephone 98 percent (2006) ☺ Internet access 66 percent (2006)	Big improvement for internet access	Access less likely among Māori and Pacific families, families with unemployed adults and sole-parent families	Above average for internet
Regular contact with family/friends	ⓧ 70 percent of adults had family or friends over for dinner at least once a month in the previous year (2004)	Steady	Sharing a meal at home less common among those not in full-time employment	No comparison available
Trust in others	ⓧ 76 percent of people aged 15 years and over reported that people can be trusted (2006)	No trend available	Māori, Pacific peoples and those with incomes less than \$20,000 reported lower levels of trust	Good
Loneliness	ⓧ 18 percent of people aged 15 years and over reported having felt lonely in the past 12 months (2006)	No trend available	People of Other ethnicity, young people, people whose incomes are less than \$20,000, unemployed people, and people living in South Auckland reported higher levels of loneliness	No comparison available
Contact between young people and their parents	ⓧ 63 percent of male and 61 percent of female students spent enough time with Mum and/or Dad (2001)	No trend available	Māori students more likely to report not getting enough time with their Mum and/or Dad	No comparison available

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# Changes to *The Social Report 2008*

No changes have been made to the outcome domains used in this year's edition of the social report. Changes have been made to a small number of indicators used in the report. These are detailed in Table AP1.

Table AP1 **Changes to the indicators in *The Social Report 2008***

<b>Outcome Domain</b>	<b>Change</b>
Health	An indicator on potentially hazardous drinking has been added to the Health domain. Potentially hazardous drinking is defined as an established pattern of drinking that carries a high risk of future damage to physical or mental health, but may not yet have resulted in significant adverse effects.
Economic Standard of Living	<p>The market income per person indicator is now based on December years, rather than on March years. This change will enable each edition of the social report to use very recent data for this indicator. Reporting on the basis of a March year meant data was often over a year old.</p> <p>In previous social reports, the indicator on population with low incomes has included an ethnic breakdown. This edition does not. The Ministry of Social Development considers the sample size in the Household Economic Survey, which is the data source for this indicator, is not large enough to continue to support a reliable time series for an analysis by ethnicity. Statistics New Zealand supports this assessment.</p>
Leisure and Recreation	The participation in physical activity indicator is now based on the Ministry of Health's Health Survey. It was previously based on data from Sport and Recreation New Zealand's (SPARC's) continuous monitor survey, which was a temporary measure until a more robust data source became available.
Social Connectedness	The telephone and internet access in the home indicator is now based on census data. It was previously based on the New Zealand Living Standards Survey. The census is a more robust data source.
Physical Environment	Two changes are being made to the drinking water quality indicator due to a change in the reporting period for data collected after 2005 and the introduction of a new Drinking Water Standard. After 2005, data will be reported on the basis of the financial year rather than a calendar year. For a transitional period, drinking water quality will be assessed against either the Drinking Water Standards 2000 or the Drinking Water Standards 2005. This approach is in line with the Health (Drinking Water) Amendment Act 2007. This Act allows suppliers to opt to comply with either the 2000 or 2005 standards. The indicator will report on compliance by suppliers with either standard.

# Technical details

## People

**Limitations of data:** The family data presented in this report relates to families within households. In official statistics, a family is defined as two or more people living in the same household who comprise either a couple, with or without children, or one parent and their children. The children do not have partners or children of their own living in the same household. People who were temporarily away from home on census night are included as part of the family. There is no data available on parents and children who live in different households.

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### Data sources:

**Population size and growth:** *Statistics New Zealand, National Population Estimates Information Release; Census of Population and Dwellings; National Population Projections, 2006(base), mid-range Series 5, assuming medium fertility, medium mortality, long-term annual net migration gain of 10,000, Series 2 (low fertility), assuming medium mortality and net migration gain of 10,000, Series 6 (high migration), assuming medium fertility and mortality; External Migration Information Release, INFOS series VTBA.SJT (natural increase) and EMIQ.S3E (net migration).*

**Overseas-born:** *Statistics New Zealand (2007e) QuickStats About Culture and Identity: 2006 Census, Tables 6, 7, 12, 13.*

**Fertility:** *Statistics New Zealand (2008b) Birth Tables: Age-specific fertility rates for the total and Māori populations; Age-specific fertility rates for the major ethnic groups, 2001 and 2006. International comparison for total fertility rate and teenage (under 20 years) fertility rate: Statistics New Zealand (2008d) Demographic Trends 2007, Tables 2.12, 2.13, latest years available; UK: United Kingdom Office for National Statistics (2007) Birth Statistics, England and Wales, 2006, Table 3.1; US: United States Department of Health and Human Services, Centers for Disease Control and Prevention (2007) "Births: Preliminary Data for 2006", National Vital Statistics Report, Volume 56 No 7, December 5, 2007, p 2 (TFR), Table 2 (15–19 years fertility rate), [www.cdc.gov/nchs/data/nvsr/nvsr56/nvsr56\\_07.pdf](http://www.cdc.gov/nchs/data/nvsr/nvsr56/nvsr56_07.pdf)*

**Geographic and ethnic distribution of the population:** *Statistics New Zealand (2002c) 2001 Census: Regional Summary, Table 2; Statistics New Zealand (2006b) 2006 Census: Regional Summary, Tables 1, 2; Statistics New Zealand (2008h) National Ethnic Population Projections: 2006(base)–2026. Urban/rural distribution: Statistics New Zealand, 2006 Census, unpublished data.*

**Age and sex structure of the population:** *Statistics New Zealand (2008i) National Population Estimates, by single year of age, mean for the year ended December 2007, National Population Estimates Information Release. Median age by ethnic group: Statistics New Zealand, Projected Population Characteristics, 2006(base)–2061 (Table Builder); Statistics New Zealand (2008h) National Ethnic Population Projections: 2006(base)–2026, Information Release, 2 April, Tables 3a, 3e, 3m, 3p.*

**Household structure:** *Statistics New Zealand (1998a) 1996 Census: Families and Households, Table 1; Statistics New Zealand (2002b) 2001 Census of Population and Dwellings: National Summary, Table 36; 2006 Census, Classification Counts, Table 55.*

**Housing tenure:** *Statistics New Zealand (2002b) 2001 Census: National Summary, Tables 20, 41; Statistics New Zealand (2006c) QuickStats About New Zealand's Population and Dwellings, 2006 Census; and unpublished 2006 Census data.*

**Families with dependent children:** *Sources for Table P4: Families with dependent children, by family type, 1976–2006: Statistics New Zealand, 1976, 1981, 1986, unpublished census data; 1991 Census: New Zealanders at Home, Tables 16, 17; 1996 Census: Families and Households, Tables 16, 21, 26; 2001 Census: Families and Households, Tables 13, 24; 2006 Census, unpublished data. International comparison for families with dependent children: UK: United Kingdom Office for National Statistics (2008) General Social Survey 2006, Table 3.6, Family type, and marital status of lone parents: 1971 to 2006 (families with dependent children under 18); US: United States Census Bureau (2007) Current Population Survey Reports, 2006 March CPS, America's Families and Living Arrangements, Table FG7, Family groups with own children under 18; Australia: Australian Bureau of Statistics, unpublished data from the 2006 Census (families with dependent children under 18); Canada: Statistics Canada (2007) 2006 Census, Cat. No 97-553-XCB2006022, Families with children under 18.*

**Official languages:** *Statistics New Zealand (2007e) QuickStats About Culture and Identity, 2006 Census, Tables 15, 17, 19, 22, 23.*

**People with disability:** *Statistics New Zealand (2007a) 2006 Disability Survey, Information Release, data downloaded from Table Builder on Statistics New Zealand website, [www.stats.nz](http://www.stats.nz), and unpublished customised data.*

**Same-sex couples:** *Statistics New Zealand (2002b) 2001 Census: Families and Households, Tables 7, 11; Statistics New Zealand (2006a) 2006 Census: Classification Counts, Table 63. Note: The number of adults has been derived by multiplying the number of couples by two.*

# Health

## H1 HEALTH EXPECTANCY

**Definition/formulae:** The total number of years a newborn can expect to live without any self-reported functional limitation requiring the assistance of another person or a complex assistive device.

The 2006 figures were estimated by Sullivan's method using provisional abridged life tables supplied by Statistics New Zealand, and disability rates from the post-census 2006 Disability Survey (supplied by support need level by Statistics New Zealand). The total population projections were 2006-based and produced in 2007, while the ethnic-specific (Māori and European, estimates for non-Māori) projections were 2001-based and produced in 2005. The life tables (and hence the health expectancy estimates) are provisional, as the official life tables for 2005–2007 will not be available from Statistics New Zealand until later in 2008.

**Limitations of data:** The ability to monitor health expectancy on a regular basis depends on the availability of mortality and disability data (the latter from the post-census disability survey). Both variables are required by narrow age group (at least 10-year age groups), sex and ethnicity, and the disability prevalence data is required by support need level. Hence both mortality and disability data are subject to smoothing before they can be used in the Sullivan life table. Comparability of the disability data over time cannot be guaranteed, even though efforts are made to ensure the comparability of the disability survey from wave to wave.

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**Data source:** Ministry of Health, provisional data.

## H2 LIFE EXPECTANCY

**Definition/formulae:** The expected number of years a person would live if they were subject throughout their lives to the current age-specific mortality rates.

**Note:** Ethnic-specific estimates for the period 1980–1982 to 1995–1997 have been adjusted for undercounting in the ethnic mortality statistics by linking census to mortality records. They were revised after the official release of the 2000–2002 complete life tables in March 2004. The figures differ from those published by Statistics New Zealand for the same period and are not comparable with earlier estimates.

The analysis associating life expectancy with levels of deprivation is based on the NZDep2001, a small-area index of deprivation based on a principal-component analysis of nine socio-economic variables from the 2001 Census. The index has been converted to a scale ranging from 1 to 10, where 1 represents the least deprived 10 percent of small areas, and 10 represents the most deprived 10 percent. The small areas are about the size of a census meshblock and have populations of approximately 100 people.

In the international comparison section, New Zealand's ranking in 1960/1961 is based on complete period life table data for 1960–1962 (the 1961 figure in the OECD data). In addition, Canada and Italy are included in the comparison, using 1961 data. For all other countries, 1960 data is used. As a result of these changes, New Zealand's ranking is slightly different from that shown in earlier social reports.

**Limitations of data:** Available annually only for the total population. Official Māori/non-Māori data is available five-yearly only, based on a three-year period around census years.

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**Data sources:** Statistics New Zealand (2008j) *New Zealand Abridged Life Tables, 2005–2007*, [www.stats.govt.nz/tables/abridged-period-life-tables.htm](http://www.stats.govt.nz/tables/abridged-period-life-tables.htm); Statistics New Zealand (2004b) *New Zealand Life Tables: 2000–2002, Table 1*; Statistics New Zealand (2008c) *Births and Deaths: December 2007 quarter* ([www.stats.govt.nz](http://www.stats.govt.nz)). Ministry of Health (ethnic-specific data for 1985–1987, 1990–1992); Ministry of Health (1999b) *Our Health, Our Future: Hauora Pakari, Koiora Roa, The Health of New Zealanders 1999, Chapter 2*. Tobias and Cheung (2003) *Monitoring Health Inequalities: Life Expectancy and Small Area Deprivation in New Zealand, Table 3*. OECD (2008e) *OECD Health Data 2008, Frequently requested data*.

### H3 SUICIDE

**Definition/formulae:** The number of suicide deaths per 100,000 population, expressed as a three-year moving average age-standardised rate, for the population aged 5 years and over.

Age-standardised to the World Health Organization standard population.

*Note:* The figures for 2004 and 2005 are provisional and subject to revision.

**Limitations of data:** Because suicide is a relatively rare event in statistical terms, rates of suicide death can vary markedly from year to year. Any interpretation of trends requires an examination of rates over several years. Deaths by suicide are subject to a coroner's inquiry and can only be officially deemed suicide once an inquest is complete. This means there can be a considerable delay in the publication of the final statistics.

Data on the rates of suicide for geographical regions and cities may be of little value for reporting comparisons because of the low numbers, and hence highly variable suicide rates. For example, where populations are small, the rate of suicide can be greatly inflated by one or two deaths.

Data on attempted suicide is available only for those admitted to hospital as inpatients or day patients for self-inflicted injury. Those cared for in hospital but not admitted and those cared for by primary or community care services are not reported. Therefore, the actual rate of attempted suicide is likely to be much higher than that reported in official statistics.

Comparability over time is affected by a change in the population concept in 1991 (from de facto to resident). Because of a change in the ethnicity classification in 1995, comparable data is available only from 1996 onwards. Ethnic-specific mortality data is also subject to some uncertainty due to the differences in collection across different providers.

A comparison of international trends in suicide death is problematic due to the different methods used to classify suicide. The New Zealand age-standardised rate in the international comparison data has been calculated in a manner consistent with the international figures available, and may differ slightly from the rates presented elsewhere (Ministry of Health (2006a) p 15).

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**Data sources:** Ministry of Health (2007b) *Suicide Facts: 2005–2006 data*; Ministry of Health, New Zealand Health Information Service and Public Health Intelligence (unpublished tables); Ministry of Health (2006b) *Suicide Facts: Provisional 2003 Statistics (all ages)*; *Beautrais (2000) Restricting Access to Means of Suicide in New Zealand: A Report Prepared for the Ministry of Health on Methods of Suicide in New Zealand*. World Health Organization (2004).

### H4 CIGARETTE SMOKING

**Definition/formulae:** The proportion of the population aged 15 years and over who ever smoke any ready-made cigarettes or roll-your-own tobacco cigarettes. Up until 2005, information on smoking prevalence was collected from quarterly surveys conducted by ACNielsen Ltd and reported by the Ministry of Health. The historic rates are all crude rates. In 2006 the data came from the New Zealand Tobacco Use Survey (NZTUS) which was run for the first time in the first quarter of 2006. The 2006/2007 data comes from the New Zealand Health Survey conducted by the Ministry of Health. Data presented here may differ from previous reports, as data from the 2006 NZTUS and the 2006/2007 New Zealand Health Survey have been re-analysed using the same methodology.

Ethnic rates are age-standardised using the WHO world population.

**Limitations of data:** The international comparison is affected by differences in the collection and classification of the data. The classification of ethnicity information changed from 1997 onwards. Therefore, ethnic-specific data before and after 1997 may not be comparable.

The 2003 data was collected from people aged 18 years and over and adjusted for the expected proportion of smokers aged 15–24 years.

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**Data sources:** Ministry of Health (2006c) *Tobacco Trends 2006: Monitoring tobacco use in New Zealand*; Ministry of Health (2008d) *A Portrait of Health 2008*. OECD (2008e) *OECD Health Data 2008, Frequently requested data: Tobacco consumption: % of daily smokers among adult population*. Statistics New Zealand (2008a) *Alcohol and Tobacco Available for Consumption, Year Ended December 2007, Information Release*; Statistics New Zealand, *INFOS series SEPA.SBC3BD and SEPA.SBC3AD; estimated resident population, mean year ended December (revised, 2006-base)*.

## H5 OBESITY

**Definition/formulae:** The proportion of the population aged 15 years and over who were obese in the 1997 National Nutrition Survey and the 2002/2003 and 2006/2007 New Zealand Health Surveys; and the proportion of children aged 5–14 years who were obese in the 2002 National Children’s Nutrition Survey and the 2006/2007 New Zealand Health Survey.

Body mass index (BMI) is a measure of weight adjusted for height, and is calculated by dividing weight in kilograms by height in metres squared ( $\text{kg}/\text{m}^2$ ). For all adults aged 18 years and over, the World Health Organization defines obesity as having a BMI greater than or equal to  $30 \text{ kg}/\text{m}^2$  (WHO 2000). For participants under 18 years, BMI cut-off points developed by the International Taskforce on Obesity (IOTF) have been used to define obesity (Cole et al 2000). The IOTF BMI cut-off points are sex and age-specific, and have been designed to coincide with the WHO BMI cut-off points for overweight and obesity. In compliance with international practice, the same cut-off points have been used for all ethnic groups (Ministry of Health (2008d) pp 104, 105).

Data presented here may differ from previous reports, as data from the 1997 National Nutrition Survey and the 2002/2003 New Zealand Health Survey have been re-analysed using the same methodology. In past surveys higher BMI cut-off points were used to classify Māori and Pacific peoples aged 18 years and over as obese (greater than or equal to  $32 \text{ kg}/\text{m}^2$ ). When international BMI cut-off points are adopted for all adults aged 18 years and over, the proportion of Māori and Pacific adults classified as obese is approximately 11 percentage points higher, and the proportion of all adults classified as obese is 2 percentage points higher. For more information about BMI calculations using the New Zealand Health Survey, see Ministry of Health (2008b) *Body Size Technical Report: Measurements and classifications in the 2006/07 New Zealand Health Survey*.

**Limitations of data:** BMI cut-offs are intended to identify populations at increased risk of poor health conditions associated with excess body fat, not to measure body fatness as such.

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**Data sources:** Ministry of Health (2008d) *A Portrait of Health*. OECD (2008e) *OECD Health Data 2008*, Frequently requested data.

## H6 POTENTIALLY HAZARDOUS DRINKING

**Definition/formulae:** Potentially hazardous drinking is defined as the proportion of the population aged 15 years and over who drink alcohol, who scored eight or more on the Alcohol Use Disorders Identification Test (AUDIT). AUDIT is a 10-item questionnaire covering alcohol consumption, alcohol-related problems and abnormal drinking behaviour. It was developed by the World Health Organization as a screening tool for health professionals to identify people at risk of developing alcohol problems. Each question is scored from zero to four, so the questionnaire has a maximum score of 40. Potentially hazardous drinking is defined as an established pattern of drinking that carries a high risk of future damage to physical or mental health, but has not yet resulted in significant adverse affects. It is commonly identified from an AUDIT score of eight or more.

Information on hazardous drinking is based on the 1996/1997, 2002/2003 and 2006/2007 New Zealand Health Surveys.

**Limitations of data:** The information is self-reported and information from a sample survey is subject to sampling error. This has been minimised where possible and all differences commented on have been found to be significant using 95 percent confidence intervals. Data presented here may differ from previous reports on potentially hazardous drinking, as data from the 1996/1997 and 2002/2003 New Zealand Health Surveys have been re-analysed using the same methodology used for the 2006/2007 New Zealand Health Survey. Please see Methodology report for the 2006/2007 New Zealand Health Survey (Ministry of Health 2008d) for further information on the analysis of the New Zealand Health Surveys.

As men and women have been assigned the same cut-off score, this may underestimate potentially hazardous drinking in women, who generally have lower alcohol tolerance than men (Alcohol Advisory Council of New Zealand 2008).

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**Data sources:** Ministry of Health (2008d) *A Portrait of Health*. Key Results of the 2006/07 New Zealand Health Survey. OECD (2008e) *OECD Health Data 2008*, Frequently requested data.

## Knowledge and Skills

### K1 PARTICIPATION IN EARLY CHILDHOOD EDUCATION

**Definition/formulae:** The number of children aged 3 and 4 years enrolled in early childhood education (ECE) programmes as a proportion of the estimated population aged 3 and 4 years. ECE programmes include: licensed ECE services (kindergartens, playcentres, education and care services, home-based services, casual education and care (no regular roll), correspondence school and te kōhanga reo); licence-exempt ECE services (early childhood development funded playgroups, Pacific peoples early childhood groups, and playcentres); and licence-exempt kōhanga reo.

**Limitations of data:** Rates of participation are only “apparent” because children may be enrolled in more than one ECE centre. The rates may therefore be inflated. The measure does not provide information on the length of participation or on the quality of the programmes, both of which are relevant to positive educational outcomes. Due to methodological changes in 2006, recent figures from licence-exempt groups are not directly comparable with earlier years.

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**Data sources:** Ministry of Education, *Early Childhood Education, Licensed Services and Licence-exempt Groups 2007*, [www.educationcounts.govt.nz/statistics/ece/ece\\_staff\\_return/licensed\\_services\\_and\\_licence-exempt\\_groups/17812](http://www.educationcounts.govt.nz/statistics/ece/ece_staff_return/licensed_services_and_licence-exempt_groups/17812); Ministry of Education, *Early Childhood Education Enrolments (Licensed Services and Licence-exempt ECE Groups): Time-series*; Ministry of Education, *Prior participation in early childhood education: new entrants*, [www.educationcounts.govt.nz/indicators/student\\_participation/early\\_childhood\\_education/prior\\_participation\\_in\\_early\\_childhood\\_education\\_new\\_entrants](http://www.educationcounts.govt.nz/indicators/student_participation/early_childhood_education/prior_participation_in_early_childhood_education_new_entrants); Ministry of Education (various years) *Education Statistics of New Zealand, Education Statistics News Sheet, Volume 10 No 1, March 2001; unpublished tables.*

### K2 SCHOOL LEAVERS WITH HIGHER QUALIFICATIONS

**Definition/formulae:** The proportion of secondary school leavers who left school with a qualification at National Certificate of Educational Achievement (NCEA) Level 2 or above.

In Figure K2.1, the data up to 2002 includes school leavers with:

- National Certificate Level 4
- A or B Bursary/National Certificate Level 3
- Entrance Qualification/42 or more credits National Certificate Level 3 or above/Accelerated Christian Education Certificate or overseas award at Year 13 Level
- Higher School Certificate/14–41 credits National Certificate Level 3 or above
- National Certificate Level 2/1–13 credits National Certificate Level 3 or above.

The data for 2003 also includes leavers who attained NCEA Level 2.

The data for 2005 and 2006 includes qualifications at NCEA Level 2 or above.

**Limitations of data:** School leaver data collection was changed as a result of the introduction of NCEA in 2002. A direct comparison cannot be made between rates up to and including 2002 with rates for 2003 on, due to the change in the qualification structure. Previous qualifications, such as School Certificate, were awarded to students if they had completed the assessment and met attendance requirements, independent of the grade awarded. The new qualification structure is designed to award students credits when they have met achievement rather than participation criteria.

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**Data sources:** Ministry of Education (various years) *Education Statistics of New Zealand*; Ministry of Education, *Education Counts website, Indicators, Education and Learning, Qualifications, School leavers with NCEA Level 2 or above*, [www.educationcounts.govt.nz/indicators/education\\_and\\_learning\\_outcomes/qualifications/1781](http://www.educationcounts.govt.nz/indicators/education_and_learning_outcomes/qualifications/1781); unpublished data from the Ministry of Education.

## K3 PARTICIPATION IN TERTIARY EDUCATION

**Definition/formulae:** Participation in tertiary education is calculated by the number of students aged 15 years and over enrolled with a tertiary education provider (see below) in formal qualifications (or programmes of study) of greater than 0.03 equivalent full-time tertiary study at any time during the year. The data excludes all non-formal learning, on-the-job industry training and private training establishments that did not receive tuition subsidies. Domestic students only are included.

Modern Apprenticeship students and other industry trainees who are doing courses that fit into the above definition are included in the statistics (typically, doing block courses at a polytechnic). If their learning is totally on the job, they will not be included.

Community education courses are excluded from the statistics.

Public tertiary education institutions include: universities, polytechnics, and wānanga. Formerly, they also included colleges of education but these were disestablished between 1992 and 2006. Private tertiary education providers include: private providers receiving a tuition subsidy and private providers receiving a grant as a result of a decision by the Minister of Education.

**Limitations of data:** The data in this report relates to students enrolled at any time during the year (from 1999). In social reports up to 2006, it related to students enrolled at 31 July in each year. Therefore, the data in this indicator is not comparable with the data in the social reports up to 2006.

Changes in the number of institutions, the status of institutions, and the types of courses offered affect comparisons over time.

Students who were enrolled at more than one qualification level have been counted in each level. Consequently, the sum of the students in each level may not add to the total number of students.

Students who identify with more than one ethnic group have been counted in each group. Consequently, the sum of the students in each group may not add to the total number of students.

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**Data sources:** Ministry of Education, Education Counts website, Statistics, Tertiary, Participation, Provider-based enrolments, Tables ENR2, ENR4, ENR5, ENR9; Participation Rates, Tables PPN1, PPN2, PPN5, PPN7, downloaded from [www.educationcounts.govt.nz](http://www.educationcounts.govt.nz) on 4 June 2008. OECD (2007a) Education at a Glance 2007, Table C2.1.

## K4 EDUCATIONAL ATTAINMENT OF THE ADULT POPULATION

**Definition/formulae:** The proportion of adults aged 25–64 years with an educational attainment of at least upper secondary school level, defined in the International Standard Classification of Education (ISCED 1997) as Level 3 and above, and including tertiary qualifications at bachelor's degree and above (Level 5A/6).

*ISCED 3 includes:* local polytechnic certificate or diploma, trade certificate or advanced trade certificate, University Bursary, Scholarship, Higher School Certificate, Sixth Form Certificate, University Entrance in one or more subjects, School Certificate in one or more subjects, other school qualification.

*ISCED 4 includes:* technician's certificate, New Zealand certificate or diploma, and other specified tertiary (the latter was previously included in 5B).

*ISCED 5B includes:* university certificate or diploma, teacher's certificate or diploma, nursing certificate or diploma.

*ISCED 5A/6 includes:* post-graduate degree, certificate or diploma, bachelor's degree.

**Limitations of data:** The data for this indicator refers to December years (up to 2006 it was for June years). This change was made in 2007 to align the indicator with other indicators based on data from the Household Labour Force Survey.

As a result of a change to the 2005 New Zealand standard classification of ethnicity in the December 2007 quarter of the Household Labour Force Survey, the category "New Zealander" is included in the Other ethnic group in the data for that quarter. Previously "New Zealander" was included in the European ethnic group.

Statistical weights used to rate sample data up to population estimates are updated every five years following each population census. This requires a revision of historical data. The latest revision was in June 2004.

Statistics New Zealand has recently recoded "other specified tertiary" from Level 5B to Level 4. This change should not have affected the data in this indicator.

The international comparison of the adult population with "at least upper secondary education" should be viewed with caution. There are substantial differences in the typical duration of ISCED 3 programmes between countries, ranging from two to five years of secondary schooling. The Tertiary Level A (bachelor's degree and above) comparison is more robust.

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**Data sources:** Statistics New Zealand, Household Labour Force Survey, unpublished tables. OECD (2007a) Education at a Glance 2007, Tables A1.2a, A1.2b, A1.2c (at least upper secondary education) and A1.3a, A1.3b, A1.3c (Tertiary-type A and advanced research programmes), downloaded 12 May 2008, via Statlink on page 35 of online edition of Education at a Glance 2007, [www.oecd.org/dataoecd/4/55/39313286.pdf](http://www.oecd.org/dataoecd/4/55/39313286.pdf)

## Paid Work

### PW1 UNEMPLOYMENT

**Definition/formulae:** The unemployment rate is the number of people aged 15 years and over who are not employed and who are actively seeking and available for paid work, expressed as a percentage of the total labour force.

The labour force is defined as the population aged 15 years and over who are either employed or unemployed.

The unemployed are defined in the Household Labour Force Survey as those who are without a paid job (or unpaid work in a relative's business) and who have actively sought work in the four weeks before the survey, who are available to take work or who have a new job to start within the next four weeks. "Actively seeking" includes any actions such as contacting an employer, asking friends and relatives and contacting an employment agency or Work and Income but excludes those who have only checked newspaper advertisements.

Standardised unemployment rates used for international comparisons are seasonally-adjusted rates.

**Limitations of data:** Data is based on a sample survey and is therefore subject to sampling error. The definition of the unemployed excludes some people who regard themselves as unemployed, including the "discouraged unemployed" – those not meeting the "actively seeking work" criterion. This group is classified in the "not in the labour force" category. The unemployment rate also excludes those who have part-time employment but who are seeking to work more hours.

The unemployment rate is not specifically a measure of youth who are inactive or at risk of poor transitions into work or higher education.

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**Data sources:** Statistics New Zealand (2008g) Household Labour Force Survey. OECD (2008f) OECD Main Economic Indicators, Standardised Unemployment Rate, downloaded from [www.oecd.org](http://www.oecd.org) on 16 April 2008; OECD (2008c) OECD Employment Outlook 2008, Statistical Annex, Table G p 355.

### PW2 EMPLOYMENT

**Definition/formulae:** The employment rate is the proportion of the population aged 15–64 years employed for at least one hour per week. The employed are those who worked for pay or profit for one hour or more in the week before the survey or who worked unpaid in a relative's business or who have a job but did not work that week because of leave, sickness or industrial disputes.

The indicator relates to the population aged 15–64 years, rather than to those aged 15 years and over. As well as capturing the main working ages, restricting the subject population to ages 15–64 years helps adjust for differences in age structure between males and females, between ethnic groups, and between populations in different countries.

**Limitations of data:** Data is based on a sample survey and is therefore subject to sampling error. The definition of employment includes those working one hour or more a week, so this will include some people who are likely to regard their status as closer to unemployment than to employment. For example, people on the unemployment benefit and searching for work but working a few hours a week will be counted as employed.

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**Data sources:** Statistics New Zealand (2008g) Household Labour Force Survey. The Household Labour Force Survey figures were rebased using the latest census information in the June 2004 quarter. The data for all quarters was revised and there may be some differences between the numbers in this report and those published in earlier editions. OECD (2008c) OECD Employment Outlook 2008, Statistical Annex, Table B, pp 336–338.

### PW3 MEDIAN HOURLY EARNINGS

**Definition/formulae:** Median hourly earnings for employees earning income from wage and salary jobs as measured by the New Zealand Income Survey, an annual supplement to the Household Labour Force Survey.

**Limitations of data:** The final data set consists of approximately 28,000 valid person records including 4,000 imputed person records. Hourly earnings relate to the number of hours usually worked and the usual income rather than to the number of hours actually worked and the actual income. Proxy interviewing may be used to collect data on income under certain circumstances. Estimates from sample surveys are subject to error.

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**Data sources:** Statistics New Zealand (2008k) New Zealand Income Survey, Hot Off the Press, June 1997 to June 2003 (revised), June 2004 to June 2007 Table 10; and unpublished data derived by the Ministry of Social Development.

## PW4 WORKPLACE INJURY CLAIMS

**Definition/formulae:** The number of work-related accident claims reported to the ACC per 1,000 full-time equivalent employees (one part-time employee = 0.5 full-time employee).

Full-time equivalent employee data is as estimated by Statistics New Zealand's Household Labour Force Survey.

**Limitations of data:** The data does not include workplace accidents where no claim was made to the ACC. In some cases, there are also delays from when the accident happened to when the claim is reported to the ACC. For example, there were 240,500 injuries reported for the 2003 calendar year by March 2004, and 246,600 for the same year by March 2005, an increase of 3 percent.

Information on workplace injuries for 2005 and 2006 is based on a new set of indicators developed by Statistics New Zealand. Comparable figures are available for 2001–2004 but information from these years is not directly comparable with previous figures on workplace injuries. The data for 2002–2004 was revised by Statistics New Zealand in 2006.

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**Data source:** Statistics New Zealand (2007c) *Injury Statistics – Claims for Work-Related Injuries (2006)*, Information Release.

## PW5 SATISFACTION WITH WORK-LIFE BALANCE

**Definition/formulae:** The proportion of employed people who are “satisfied” or “very satisfied” with their work-life balance according to the Quality of Life Survey 2006.

**Limitations of data:** Subjective measures of wellbeing reflect people's perceptions of their own situation, which may differ from their objective status. The survey had a low response rate (22 percent) which means care should be taken in interpreting the data.

**Note:** Ethnicity is based on multiple responses and is sourced from unpublished tables produced by the Ministry of Social Development.

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**Data source:** Quality of Life Project (2007). The survey was commissioned by 12 of New Zealand's cities and districts, in partnership with the Ministry of Social Development, to monitor trends in wellbeing. The total (national) sample size in the 2006 survey was 7,720, which has a maximum margin of error of +/- 1.1 percent at the 95 percent confidence interval. Interviews were conducted to meet gender, ethnicity, age and ward/region quotas to ensure the sample was representative of the New Zealand population as a whole.

## Economic Standard of Living

### EC1 MARKET INCOME PER PERSON

**Definition/formulae:** Real Gross National Disposable Income (RGNDI) measures the real purchasing power of national disposable income. It takes into account changes in the terms of trade and real gains from net investment and transfer income with the rest of the world. GNDI is Gross National Income (GNI), plus net international transfers. Real Gross Domestic Product (GDP) per person (as used in the OECD comparisons) is real income produced inside the New Zealand economic boundary, excluding the international transfers included in GNDI.

**Derivation of RGNDI:** In the published tables, RGNDI is calculated as follows: Chain-volume gross domestic product (production-based measure), plus

Real trading gain/loss, plus

Real total net investment income, plus

Real total net transfers.

Real trading gain/loss is defined as current price exports deflated by an imports implicit price index less the chain-volume measure of exports. Real total net investment income equals investment income credits less investment income debits, both deflated by an imports implicit price index. Real net transfers equals transfers credits less transfers debits, both deflated by an imports implicit price index.

**Limitations of data:** Major limitations to the use of RGNDI as an indicator of wellbeing include its failure to include non-marketed (and, therefore, non-priced) activities (barring the exception of imputed rentals on owner-occupied dwellings). RGNDI provides no information on income distribution. Finally, evidence suggests monetary measures have a very weak cross-sectional and a limited time series correlation with self-assessed measures of wellbeing.

**Note:** The use of real GDP for OECD comparisons may over-state New Zealand's relative position because of New Zealand's growing and high per capita net external debt.

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**Data sources:** Statistics New Zealand, *Real GNDI per capita, customised unadjusted quarterly data for years ended December from the December 2007 quarterly GDP released on 28 March 2008, compatible with INFOS series SNCA.S6RB06NZ*; Statistics New Zealand (2001b) *Measuring Unpaid Work in New Zealand 1999*, Table 1 p 15, Table 4 p 17. OECD (2008b) *National Accounts of OECD Countries, Main Aggregates, Volume 1, 1995–2006, Part III, Comparative Tables based on PPPs*, Table B5: *Gross domestic product per head at current prices and current PPPs (US dollars)*, and Table B7: *Gross domestic product per head at the price levels and PPPs of 2000 (US dollars)*; OECD (2008d) *OECD Factbook 2008: Economic, Environmental and Social Statistics, Gross national income per capita, time series table from Statlink on p 37*.

## EC2 INCOME INEQUALITY

**Definition/formulae:** The ratio of the 80th percentile of equivalised disposable household income to the 20th percentile of equivalised disposable household income, when individuals are ranked by their household incomes. This indicator takes into account household size and composition. For international comparisons, we have compared Gini coefficients.

Adjustment for family size was made by means of a per capita equivalisation process based on the 1988 Revised Jensen Equivalence Scale.

**Limitations of data:** International comparisons have been made with data from years around 2004.

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**Data sources:** *Statistics New Zealand Household Economic Survey. (Access to the data used in this study was provided by Statistics New Zealand under conditions designed to give effect to the confidentiality provisions of the Statistics Act 1975. The results presented in this study are the work of the Ministry of Social Development.) Source for international comparisons: Förster and Mira d'Ercole (2007).*

## EC3 POPULATION WITH LOW INCOMES

**Definition/formulae:** The income measure used is equivalised disposable household income after deducting housing costs. Equivalised disposable household income is the total income from all sources for all individuals in the household, after deducting tax, adding tax credits and adjusting for household size and composition.

The adjustment for household size and composition is based on the 1988 Revised Jensen Equivalence Scale.

Housing costs is the sum of annualised accommodation expenditure (includes mortgage payments (principal and interest), payments to local authorities, property rent, rent of a private dwelling, boarding house and student accommodation not paid with formal fees). In this indicator the Accommodation Supplement is counted as income.

Individuals are ranked by their household's equivalised disposable income (after deducting housing costs).

The two low-income thresholds used are of the "fixed line" type, set at 50 percent and 60 percent of the 1998 median household disposable income, less 25 percent to allow for average housing costs. The two thresholds are held constant in real terms by an adjustment using the CPI. (See Perry (2008) for further details – especially Appendices 4 and 5.)

Individuals are grouped according to selected individual, family or household characteristics for the different analyses. For this indicator, family means one- or two-parent families with dependent children, whether living in a separate household or with others in a wider household.

The ethnicity of individuals aged 15 years and over is as reported by the individual. Children under 15 years are attributed with the ethnicity of the survey respondent.

The methodology used to calculate the figures used in the international comparison section follows that used by the OECD: the income concept is equivalised household disposable income; the equivalence scale is the square root scale (ie equivalence scale elasticity = 0.5); equivalent household income is attributed to all individuals in the household; individuals are ranked by their attributed equivalent disposable income to get the median for that year; the threshold is set at 50 percent of this (contemporary) median, a "moving line" approach. There is no adjustment for housing costs.

**Note:** The data in Table EC3.1 is for March years in 1986–1998, and June years in 2001, 2004 and 2007. In this table, children refers to dependent children, aged under 18 years and not in full-time employment.

**Limitations of data:** The equivalised disposable income measure (whether before or after deducting housing costs) is taken as an indicator of a household's access to economic resources or of its potential living standards, all else being equal. The measure is an imperfect indicator of actual living standards, which are influenced by factors other than current income and

## POPULATION WITH LOW INCOMES CONT.

housing cost. People with the same current income level can have different standards of living as a result of their different net assets, the extent to which they receive assistance from others, and the extent to which they have atypical expenditure commitments (eg unusually high medical costs, debt repayments, transport costs and electricity costs). People who experience a lengthy period of very low income are likely to have different life outcomes to those who experience only a transient episode.

Since 1994 the trend for those of Other ethnicity has been volatile, but up to 2004 the trends for Māori and Pacific peoples have moved in the expected positive direction and were consistent with information from other data sources. Reporting by ethnicity in these circumstances was considered to be justified. The volatility of the trend for those of Other ethnicity was explained in a footnote. Analysis of the 2007 Household Economic Survey data shows a very large improvement for Pacific peoples and for those in the Other ethnic grouping compared with 2004, while for Māori there was no measurable change. These results do not align with the information sources used for a cross-check. The Ministry of Social Development considers it would be misleading to report these improvements, as the small overall sample numbers for these groups and the decreasing numbers below the low-income threshold combine to increase the sampling error to unacceptable levels. The population with low incomes indicator, therefore, does not include a breakdown by ethnicity. Instead, it includes trends in median household incomes that show less volatility while still giving an idea of the relativities between ethnic groups.

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**Data sources:** Statistics New Zealand Household Economic Survey. (Access to the data used in this study was provided by Statistics New Zealand under conditions designed to give effect to the confidentiality provisions of the Statistics Act 1975. The results presented in this study are the work of the Ministry of Social Development (see Perry B (2008) Household incomes in New Zealand: trends in indicators of inequality and hardship 1982 to 2007).) Source for international comparisons: Förster and Mira d'Ercole (2007).

## EC4 HOUSING AFFORDABILITY

**Definition/formulae:** The proportion of households and the proportion of people within households with housing cost outgoings-to-income ratio greater than 30 percent of disposable income.

Household incomes have been equivalised using the 1988 Revised Jensen Equivalence Scale.

Housing costs are the sum of annualised accommodation expenditure (includes mortgage payments (principal and interest), payments to local authorities, property rent, rent of a private dwelling, boarding house and student accommodation not paid with formal fees). In this indicator the Accommodation Supplement is counted as income.

**Limitations of data:** Measures of housing affordability do not shed light on the issues of housing quality, suitability or sustainability; nor do they explain why affordability problems may exist, or the extent to which inadequate housing is occupied to avoid affordability problems. Furthermore, marginally-housed families are often hidden from official statistics and are not counted among those with an affordability problem.

Household ethnicity is defined in this indicator by the presence of an adult of a particular ethnic group. The figures for households defined in this way are not mutually exclusive.

The Massey University Housing Affordability Index is based on median house prices, average personal income and mortgage interest rates. The personal income data only includes income from wage and salary earnings. It does not include the accommodation supplement or tax credits. This index does not take account of the rental market.

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**Data source:** Derived from the Statistics New Zealand Household Economic Survey by the Ministry of Social Development.

## EC5 HOUSEHOLD CROWDING

**Definition/formulae:** The Canadian National Occupancy standard sets the bedroom requirements of a household according to the following compositional criteria:

- There should be no more than two people per bedroom
- Parents or couples share a bedroom
- Children under 5 years, either of the same or of the opposite sex, may reasonably share a bedroom
- Children under 18 years of the same sex may reasonably share a bedroom
- A child aged 5–17 years should not share a bedroom with one under 5 of the opposite sex
- Single adults 18 years and over and any unpaired children require a separate bedroom.

**Limitations of data:** There is no contemporary official statistic or index of household crowding in New Zealand. There are many frameworks or models used in many countries for analysing the incidence of crowding. It is unlikely any single measure of crowding could adequately summarise such a complex and multi-faceted issue as crowding.

There is no definitive evidence crowding leads to negative social outcomes, but there are associations between living in crowded circumstances and negative outcomes. The mechanisms by which these outcomes result are not clear.

The Canadian Crowding Index is not an objective index of crowding. The extent to which household members will perceive themselves as living in crowded circumstances is dependent on many factors including social and cultural expectations. Furthermore, it cannot be assumed households requiring one or more additional bedrooms (based on the Canadian index) will suffer negative social outcomes.

The Canadian Crowding Index is used here as it is sensitive to both household size and composition. The measure sets a bedroom requirement for households based on precise criteria.

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**Data sources:** *Statistics New Zealand (1998b) New Zealand Now: Housing*, pp 56–63; *Statistics New Zealand, unpublished data from the 1986, 1991, 1996, 2001 and 2006 population censuses.*

## Civil and Political Rights

### CP1 VOTER TURNOUT

**Definition/formulae:** General elections: the proportion of the estimated voting-age population (aged 18 years and over) who cast a vote in general elections. Local authority elections: the proportion of all enrolled electors (both resident and ratepayer) who cast a vote in contested local authority elections.

To be eligible to vote in general elections, a person must be at least 18 years old and meet residential and certain other criteria. The estimated eligible voting population on election day has been calculated by Statistics New Zealand for each general election from 1987. The 1984 general election voter turnout rate was calculated by the Ministry of Social Development (MSD) by dividing the total number of votes cast by the estimated de facto population aged 18 years and over, as at 30 June 1984. The 2005 voter turnout rate was calculated by MSD by dividing the total number of votes cast by the estimated eligible voting population.

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**Data sources:** *Electoral Commission (2005), www.electionresults.govt.nz; Statistics New Zealand, estimated de facto population by age as at 30 June 1984; estimated eligible voting population on election day, 1987–2005. Department of Internal Affairs (2006) Local Authority Election Statistics 2004, and unpublished data for 2007. Inter-Parliamentary Union (2008a) PARLINE Database, Last election.*

### CP2 REPRESENTATION OF WOMEN IN GOVERNMENT

**Definition/formulae:** The proportion of elected Members of Parliament and local government bodies who are women.

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**Data sources:** *Electoral Commission (2002) The New Zealand Electoral Compendium, 3rd edition. Department of Internal Affairs (2006) Local Authority Election Statistics 2004, and unpublished data for 2007. Inter-Parliamentary Union (2008b) Women in National Parliaments, Situation as of 31 March 2008.*

### CP3 PERCEIVED DISCRIMINATION

**Definition/formulae:** The proportion of people aged 18 years and over who perceived selected groups as being the targets of discrimination (ie subject to “some discrimination” or “a great deal of discrimination”).

**Limitations of data:** Surveys on perceived discrimination do not measure actual levels of discrimination against groups.

The margin of error for a 50 percent figure at the 95 percent confidence level is 3.6 percent.

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**Data source:** *Human Rights Commission (2008) Perceived Discrimination in New Zealand, Omnibus Results (November–December 2007).*

## CP4 PERCEIVED CORRUPTION

**Definition/formulae:** The degree of corruption perceived to exist among New Zealand politicians and public officials, according to surveys of business people, academics and risk analysts is used by Transparency International to construct the Corruption Perceptions Index. Corruption is defined as the “abuse of public office for private gain”. Scores range from 0 (highly corrupt) to 10 (highly clean).

Due to a small change in methodology, the index no longer reflects a three-year rolling average of pooled survey results; it now uses only two years of data. The reason for this change was to improve topicality; it may enable individual country assessments to reflect recent developments without lowering measurement precision.

The Corruption Perceptions Index 2007 was based on data from 2006 and 2007 drawn from 14 different polls and surveys from 12 independent institutions. The New Zealand data was drawn from six surveys and the overall score of 9.4 was within a confidence range of 9.2–9.6.

**Limitations of data:** The Corruption Perceptions Index score is a subjective measure; there is no hard empirical data on levels of corruption that can be used for cross-country comparison. The index was not designed to provide comparisons over time, since each year the surveys included in the index vary. The index is a relative measure: New Zealand’s ranking depends not only on perceptions of corruption in New Zealand but also on perceptions of corruption in the other countries surveyed. If comparisons with earlier years are made, they should be based on a country’s score, not its rank.

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**Data source:** Transparency International (2007) *Corruption Perceptions Index 2007*.

## Cultural Identity

### CI1 LOCAL CONTENT PROGRAMMING ON NEW ZEALAND TELEVISION

**Definition/formulae:** The hours of local content broadcast on TV One, TV2 and TV3 (to 2004), Prime Television, Māori Television (from 2005) and C4 (from 2006) in prime-time, expressed as a percentage of the total prime-time schedule. TV3 commenced in November 1989. New Zealand content programming includes first runs and repeats across all six channels.

**Limitations of data:** The number of local content hours broadcast on other free-to-air or pay channels is not included in the data presented here. Up until 2002 the hours data in Table CI1.1 was measured over 24 hours; from 2003 on it was measured over 18 hours (6am to midnight).

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**Data sources:** NZ On Air (2008) *Local Content, New Zealand Television, 2007 [May 2008]*; NZ On Air (1999) *Local Content and Diversity: Television in Ten Countries*.

### CI2 MĀORI LANGUAGE SPEAKERS

**Definition/formulae:** Māori language speakers as a proportion of the Māori ethnic group. Māori language speakers are defined as those able to hold a conversation about everyday things in Māori.

**Limitations of data:** The data relies on self-assessment rather than on measuring the actual level of fluency in the population. The census data comes from a single question about conversational language ability. More detailed information on the level of fluency among Māori language speakers is available from two nationwide surveys done in 2001 and 2006. This data is not directly comparable with the census data because of differences in the samples and methodology. For example, the Māori language surveys used face-to-face interviews, asked a range of questions about language skill, and asked respondents to place themselves on a five-category proficiency scale.

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**Data sources:** Statistics New Zealand (2002b) *2001 Census of Population and Dwellings: National Summary, Table 13a*; Statistics New Zealand (2006c) *QuickStats About New Zealand’s Population and Dwellings, National Highlights: 2006 Census, Tables 1, 9, 10*; Statistics New Zealand (2007g) *QuickStats About Māori: 2006 Census, Tables 9, 10*; Statistics New Zealand (2007e) *QuickStats About Culture and Identity: 2006 Census, Table 19*; and unpublished data from the 2006 Census. Te Puni Kōkiri (2001) *Provisional results of the 2001 Survey of the Health of the Māori Language*; Te Puni Kōkiri (2007) *The Māori Language Survey Fact Sheet*.

## CI3 LANGUAGE RETENTION

**Definition/formulae:** The proportion of people who can speak the “first language” (excluding English) of their ethnic group, for ethnic groups (other than Māori) with an established resident population in New Zealand, as recorded in the 2006 Census. The ability to speak a language is defined as being able to hold an everyday conversation in that language. “First language” refers to an indigenous language associated with a given ethnicity rather than the first language of an individual.

**Limitations of data:** While a direct link can be usually be made between a language and an ethnic group, this is not always the case. Some ethnicities are associated with several languages and one language can span several ethnicities. While English is an official language of some groups selected in these tables, the census does not distinguish between different varieties of the English language. English has therefore been excluded as a first language within these tables. Because both the ethnic group and language spoken census variables allow more than one response, there may be some individuals who appear in more than one ethnic group category.

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**Data source:** Statistics New Zealand, unpublished data from the Census of Population and Dwellings, 2001, 2006.

## Leisure and Recreation

### L1 SATISFACTION WITH LEISURE TIME

**Definition/formulae:** The proportion of people aged 15 years and over who are “satisfied” or “very satisfied” with their leisure time, according to the Quality of Life Survey 2006.

**Limitations of data:** For more information see PW5 Satisfaction with work-life balance.

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**Data source:** Quality of Life Project (2007). For more information see PW5 Satisfaction with work-life balance.

### L2 PARTICIPATION IN PHYSICAL ACTIVITY

**Definition/formulae:** The proportion of the population aged 15 years and over who met physical activity guidelines (ie were physically active for at least 30 minutes a day on five or more days over the last week), as measured by the 2002/2003 and 2006/2007 New Zealand Health Surveys.

**Limitations of the data:** Survey estimates are subject to sampling error and small differences between groups may not be statistically significant. This has been minimised where possible and all differences commented on have been found to be significant using 95 percent confidence intervals and t-tests where these overlap. Data presented here may differ from previous reports, as data from the 2002/2003 New Zealand Health Survey has been re-analysed using the same methodology as that used for the 2006/2007 New Zealand Health Survey. Please see Methodology report for the 2006/2007 New Zealand Health Survey (Ministry of Health 2008c) for further information on the analysis of the New Zealand Health Surveys.

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**Data source:** Ministry of Health, unpublished data from the 2002/2003 and 2006/2007 New Zealand Health Surveys.

### L3 PARTICIPATION IN CULTURAL AND ARTS ACTIVITIES

**Definition/formulae:** The proportion of the population aged 15 years and over who experienced a cultural activity as measured in the 2002 Cultural Experiences Survey. Respondents were asked to report on activities they experienced over either a 12-month period (for goods and services accessed or experienced relatively infrequently) or a four-week recall period (for activities experienced on a more regular basis). The survey was undertaken as a supplement to the 2002 March-quarter Household Labour Force Survey.

**Limitations of data:** This was an ad hoc survey, and is not comparable with the indicator in *The Social Report 2001*. The focus of this survey was on experience/consumption; it did not include participation such as acting or performing.

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**Data source:** Statistics New Zealand (2002a) 2002 Cultural Experiences Survey.

## Physical Environment

### EN1 AIR QUALITY

**Definition/formulae:** The level of ambient concentrations of PM<sub>10</sub> averaged annually are reported for five major urban centres in New Zealand. These levels are compared with the government's PM<sub>10</sub> guideline value of 20µg/m<sup>3</sup> (20 micrograms per cubic metre). PM<sub>10</sub> is particulate matter that is less than 10 microns in diameter. A new air quality standard based on average daily PM<sub>10</sub> concentrations was introduced in 2005. This National Environmental Standard for PM<sub>10</sub> is 50 micrograms per cubic metre (50µg/m<sup>3</sup>), averaged daily over 24 hours. The standard must be met every day of the year, but one. The standard is monitored by regional councils in "airsheds", areas within the region where air quality may, or is known to, exceed the standards or may require management in the future. The Ministry for the Environment's website on air quality in airsheds has a map of airsheds within each region.

**Limitations of data:** Data is reported only at specific sites in the five major cities and does not always represent the pollution levels that will be experienced over an entire town or city. The data, being so location-specific, cannot be compared with an OECD median. In September 2005, the new air quality standards based on average daily PM<sub>10</sub> concentrations were introduced. When sufficient time series data is available for this measure, we will expand the reporting against this standard. Any data used in this report that may be subject to volatile loss has been adjusted by a regionally-determined factor, where available.

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**Data sources:** Collated by the Ministry for the Environment from regional council publications; Ministry for the Environment (2008) *Environment New Zealand 2007*. Department of Environment and Climate Change, New South Wales Government (2008) *Quarterly Air Quality Monitoring Reports*, [www.environment.nsw.gov.au/air/dataareports.htm#quarterlies](http://www.environment.nsw.gov.au/air/dataareports.htm#quarterlies). Environment Protection Authority Victoria (2007) *Victoria's Air Quality 2006 – Air Monitoring Data Tables*, [www.epa.vic.gov.au/air/monitoring/air\\_monitoring\\_report\\_2006.asp](http://www.epa.vic.gov.au/air/monitoring/air_monitoring_report_2006.asp). Department for Food, Environment and Rural Affairs, United Kingdom (2008) *Statistics about Air Quality: Concentration of Particles, Data Tables*, [www.defra.gov.uk/environment/statistics/airqual/aqconcparticulate.htm](http://www.defra.gov.uk/environment/statistics/airqual/aqconcparticulate.htm)

### EN2 DRINKING WATER QUALITY

**Definition/formulae:** The 2000 and 2005 Drinking Water Standards for New Zealand (DWSNZ:2000 and DWSNZ:2005) require that all water leaving a treatment plant must be free of both faecal coliform bacteria (including *E. coli*) and *Cryptosporidium*. Adequate monitoring and the use of a registered laboratory are required to demonstrate full compliance with this standard. The indicator is the percentage of the estimated resident population receiving their water from community water supplies whose drinking water complies with either the 2000 or 2005 Drinking Water Standards of New Zealand relating to *E. coli* and *Cryptosporidium*. There is a transition period as the new DWSNZ:2005 is phased in. This transition is scheduled to take several years to complete and drinking water suppliers may elect which of the two standards to operate under. Compliance is assessed against the standard the supplier has chosen to comply with at this time. This approach is in line with the Health (Drinking Water) Amendment Act 2007. Section 14(3) of this Act allows suppliers to opt to comply with either the 2000 or 2005 Drinking Water Standards, to ease the transition for those suppliers who are more comfortable with the 2000 standards. Compliance is measured at the treatment plant for *Cryptosporidium* and at the tap for *E. coli*.

For the *Cryptosporidium* measure, the approach followed for the social report differs from that used by the Ministry of Health (MoH). The MoH measure is an estimate based on all treatment plants supplying each distribution zone. The measure used in the social report is based on the worst result from the various treatment plants supplying a distribution zone. The first approach double counts populations where a distribution zone is supplied by multiple plants; the later approach avoids this by measuring only one plant. The approach followed in the social report will become the standard measure when the transition to DWSNZ:2005 is completed.

The *E. coli* compliance results reported in the social report may also differ from those reported by MoH, as their results are based on district health board regions, while the social report results are based on regional council areas. When aggregating results from different geographic areas, sometimes there can be small discrepancies due to different population counts.

**Limitations of data:** Drinking water rated not fully compliant may be the result of failing one of the two microbiological criteria, of failing to adequately demonstrate compliance by using a non-registered laboratory, or of no or inadequate monitoring.

In this report the measurement of compliance has moved from a calendar year to the fiscal year. For this reason the data points jump from the 2005 calendar year to the 2006/2007 fiscal year. This change, combined with the transition in standards, will result in some lack of data continuity across these periods.

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**Data source:** Institute of Environmental Science and Research Ltd, customised data.

## Safety

### SS1 ASSAULT MORTALITY

**Definition/formulae:** The number of people who have died as a result of an assault, per 100,000 population.

The data was drawn from the following International Classification of Diseases codes: ICD-9, E960–E969 (up to 1999); ICD-10, X85–Y09 (from 2000).

**Limitations of data:** Because of the changes in the classification of ethnicity in death-registration data in September 1995, ethnicity data for 1996 and later years is not comparable with data from before 1996.

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**Data sources:** New Zealand Health Information Service, *Deaths from Homicide and injury purposely inflicted by other persons (Assault mortality data in ICD-10), 1948–2005*. UNICEF (2003) "A League Table of Child Maltreatment Deaths in Rich Nations", *Innocenti Report Card No 5, Table 1(a) p 4*; OECD (2007b) *OECD Health Data 2007*.

### SS2 CRIMINAL VICTIMISATION

**Definition/formulae:** The proportion of the population aged 15 years and over who had been victims of one or more incidents of criminal offending in 2005 as measured by the New Zealand Crime and Safety Survey 2006 (NZCASS). The survey covers people in private households. It does not cover commercial victimisation, "victimless" crimes (such as drug or alcohol abuse), or crimes against people younger than 15 years.

**Limitations of data:** Changes in survey design limit the comparisons that can be made between NZCASS and the two earlier surveys, the 1996 and 2001 New Zealand National Survey of Crime Victims.

The overall response rate in the 2006 NZCASS was 59 percent in the main sample and 56 percent in the Māori booster sample. The respective figures in the 2001 survey were 65 percent and 57 percent and in the 1996 survey, 56 percent and 66 percent. In the authors' view, it is difficult to say how the small drop in the response rate in the 2006 NZCASS has affected risk estimates (Mayhew and Reilly (2007b) p 23).

Victimisation surveys are subject to a number of methodological limitations such as selective recounting and differences between groups in willingness to report offences, particularly offences of a sexual or domestic nature where the offender is known. There are also limitations in asking people to remember victimisation incidents and to locate them accurately in time.

A victimisation survey will give a higher count of crime because it counts unreported crime. A third of all NZCASS offences became known to the police. Offences regarded as serious were more likely to be reported, but there was a wide variation between offence types, with 84 percent of vehicle thefts being reported compared with 9 percent of sexual offences (Mayhew and Reilly (2007b) p 35).

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**Data source:** Mayhew and Reilly (2007b) *New Zealand Crime and Safety Survey 2006: Key Findings*.

## SS3 FEAR OF CRIME

**Definition/formulae:** The proportion of people who reported that fear of crime had a moderate or high impact on their quality of life (scoring its effect at 4 or higher on a scale from 0–10, where 0 is no effect and 10 is total effect), as measured by the New Zealand Crime and Safety Survey 2006 (NZCASS).

The data comes from the survey question “How much is your own quality of life affected by fear of crime, on a scale from 0 to 10, where 0 is no effect and 10 is total effect on your quality of life?” The overall response rate in the 2006 NZCASS was 59 percent in the main sample and 56 percent in the Māori booster sample.

**Limitations of data:** The question elicits a subjective assessment of the extent to which fear of crime affects respondents’ quality of life, which is also subjectively defined. While the question demonstrates an ability to differentiate between groups, it is not a reliable measure of the actual status of respondents. Also, although the results reflect people’s perceptions of their own situation in a general and ongoing way, they may be influenced by significant events and subject to fluctuation over time.

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**Data source:** Mayhew and Reilly (2007a) *Community Safety: Findings from the New Zealand Crime and Safety Survey 2006*.

## SS4 ROAD CASUALTIES

**Definition/formulae:** The number of deaths caused by motor vehicle crashes per 100,000 population. The number of persons injured as a result of motor vehicle crashes as reported to the police, per 100,000 population. Pedestrians or cyclists killed or injured by motor vehicles are included.

The data was drawn from the following International Classification of Diseases codes: ICD-9, 810–819 (1996–1999); ICD-10, V01–V89 (2000).

**Limitations of data:** The collection of ethnicity data changed during 1995 for both mortality and hospitalisation data. For mortality data, the basis of ethnicity has changed from a biological concept to a concept of self-identification; in mid-1995 hospitalisation data recorded multiple ethnic groups, whereas previously only one ethnic group could be recorded. Consequently, a comparison of 1996 ethnic-specific data with previous years is misleading: 1996 is the start of a new time series for ethnic-specific data.

Because of a revision of the International Classification of Diseases, rates for 2000 are not comparable with rates for 1996–1999.

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**Data sources:** Ministry of Transport; Land Transport New Zealand; New Zealand Health Information Service; New Zealand Travel Surveys; Statistics New Zealand; International Road Traffic and Accident Database (OECD), Issued September 2005. Road casualty data comes from two main sources: injury data from the traffic crash reports completed by police officers who attend the fatal and injury crashes; and mortality and hospitalisation data from the New Zealand Health Information Service (NZHIS). Ethnic-specific rates of death or hospitalisation are only available from NZHIS. The New Zealand Travel Survey 1997/1998 was based on a sample of approximately 14,000 people and the survey report compared results from a similar survey conducted in 1989/1990.

## Social Connectedness

### SC1 TELEPHONE AND INTERNET ACCESS IN THE HOME

**Definition/formulae:** The number of people living in households with access to telephones (either landlines or cellphones) and the internet, as a percentage of the total population.

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**Data sources:** Statistics New Zealand, *Census of Population and Dwellings, 2001 and 2006*, unpublished data. OECD (2007c) *Key ICT Indicators*, [www.oecd.org/document/23/0,3343,en\\_2649\\_34449\\_33987543\\_1\\_1\\_1\\_1,00.html](http://www.oecd.org/document/23/0,3343,en_2649_34449_33987543_1_1_1_1,00.html)

### SC2 REGULAR CONTACT WITH FAMILY/FRIENDS

**Definition/formulae:** The proportion of the population who had family or friends over for a meal at least once a month, as measured by the 2000 and 2004 New Zealand Living Standards Surveys.

The 2000 survey was in two parts: one of 3,060 people aged 65 years and over and the other of 3,682 working-age adults (18–64 years). Both surveys involved face-to-face interviews with nationwide representative samples. The 2004 survey was a nationally representative sample of 4,989 respondents answering on behalf of their economic family.

Family ethnicity is defined in this indicator by the presence of an adult of a particular ethnic group. The figures for families defined in this way are not mutually exclusive.

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**Data source:** Ministry of Social Development 2004, and revised 2000, *Living Standards Surveys*, unpublished analysis results produced by the Ministry of Social Development.

### SC3 TRUST IN OTHERS

**Definition/formulae:** The proportion of the population who report people can “almost always” or “usually” be trusted, as reported in the Quality of Life Survey 2006.

**Limitations of data:** For more information see PW5 Satisfaction with work-life balance.

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**Data sources:** Quality of Life Project (2007) *Quality of Life Survey 2006* (data analysis by the Ministry of Social Development). For more information see PW5 Satisfaction with work-life balance and United Kingdom Performance and Innovation Unit (2002).

### SC4 LONELINESS

**Definition/formulae:** The proportion of the population who are lonely “sometimes”, “most of the time”, or “always”, as reported in the Quality of Life Survey 2006.

**Limitations of data:** For more information see PW5 Satisfaction with work-life balance.

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**Data source:** Quality of Life Project (2007) *Quality of Life Survey 2006* (data analysis by the Ministry of Social Development). For more information see PW5 Satisfaction with work-life balance.

### SC5 CONTACT BETWEEN YOUNG PEOPLE AND THEIR PARENTS

**Definition/formulae:** The percentage of secondary school students who reported in 2001 that most weeks they got enough time to spend with Mum and/or Dad (or someone who acts as Mum and/or Dad).

**Limitations of data:** Estimates from sample surveys are subject to error. The achieved sample size for the Youth2000 survey was 9,699 students, 4 percent of the total 2001 New Zealand secondary school roll.

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**Data sources:** Adolescent Health Research Group (2003a) *New Zealand Youth: A Profile of their Health and Wellbeing*, Table on p 46; Adolescent Health Research Group (2003b) *New Zealand Youth: A Profile of their Health and Wellbeing: Regional reports*.

# Endnotes

## INTRODUCTION

- 1 Durie (2001)
- 2 Royal Commission on Social Policy (1988) Volume II p 472
- 3 Disaggregation by ethnicity is problematic. Definitions of ethnicity are inconsistent across data sources and change over time. The way we present the data is constrained by the way it has been collected.
- 4 The Big Cities group comprises 12 major metropolitan territorial local authorities: Auckland, Rodney, North Shore, Waitakere, Manukau, Tauranga, Hamilton, Wellington, Porirua, Hutt, Christchurch and Dunedin. The group jointly commissioned the Quality of Life in New Zealand's Largest Cities Surveys which collected comparable information on social, economic and environmental outcomes within each of the urban areas. From 2004, the Quality of Life Survey has been done in partnership with the Ministry of Social Development. The survey now provides a national sample as well as city samples.

## PEOPLE

- 5 Statistics New Zealand (2007d)
- 6 Statistics New Zealand (2008h) p 7
- 7 Statistics New Zealand (2008d) p 36
- 8 These figures are from 2006-based medium population projections (Series 5), assuming medium fertility, medium mortality and a long-term annual net migration gain of 10,000.
- 9 These figures are from 2006-based medium population projections (Series 6), assuming medium fertility, medium mortality, medium inter-ethnic mobility and medium long-term annual net migration of -3,000 for the European or Other population (from 2010), -3,000 for the Māori population (from 2010), 12,000 for the Asian population (from 2010) and 500 for Pacific peoples (from 2008).
- 10 Comparability between 2001 and 2006 data may be affected by a change in the census question. Before 2006, the census asked whether anyone who lived in the dwelling owned it with or without a mortgage. The 2006 Census included an additional question on whether any of the occupants held the dwelling in a family trust. People who did hold the dwelling in a trust in 2006 have been counted as owning the dwelling. In previous years, some people in this category may have simply said they did not own the dwelling and would not have been counted as homeowners. Consequently, the actual decline in home ownership between 2001 and 2006 may have been slightly greater than the census figures indicate.

- 11 The family data relates to families within households. In official statistics, a family is defined as two or more people living in the same household who comprise either a couple, with or without children, or one parent and their children. The children do not have partners or children of their own living in the same household. People who were temporarily away from home on census night are included as part of the family. There is no data available on parents and children who live in different households.
- 12 More information on speakers of te reo Māori is provided in the Māori language speakers indicator.
- 13 Disability is defined as any perceived limitation in activity resulting from a long-term condition or health problem; lasting or expected to last six months or more and not completely eliminated by an assistive device. See Statistics New Zealand (2007a) p 26
- 14 Statistics New Zealand (2007a)
- 15 These employment rates are for people in households.

## HEALTH

- 16 Howden-Chapman and Tobias (2000)
- 17 Ministry of Health (1999b) p 351
- 18 Ministry of Health (2007a)
- 19 Babor et al (2001)
- 20 Conner et al (2005)
- 21 Tobias and Cheung (2003)
- 22 OECD (2008e)
- 23 2004 figures have been revised; 2005 data is provisional
- 24 Three-year moving average age-standardised rates are the average age-standardised rates for rolling three-year periods; that is, 2000–2002, 2001–2003, 2003–2005, etc. The three-year moving averages are plotted on the mid-point year. For example, the 2003–2005 three-year moving average is plotted on the year 2004. Rates based on individual years tend to exhibit pronounced variation, especially when the event of interest is relatively rare. Using the three-year moving average “smoothes” this variation so the underlying trends over time can be more clearly illustrated. Three-year moving averages have been used to present suicide data in this publication because the numbers involved are relatively small. As individuals under 5 years of age are not included in the analysis of either suicide mortality or self-harm hospitalisations, the World Health Organization (WHO) standard population for this group has been excluded and the weights recalculated accordingly (Ministry of Health 2007b).

- 25 These are three-year moving average age-standardised rates.
- 26 Ministry of Health (2006b) p 14
- 27 The international rates are annual rates re-calculated by the New Zealand Health Information Service to enable geographic comparisons of data collected by the World Health Organization. These rates are therefore different to those used elsewhere in this chapter. The rates refer to the following years: Ireland, 2005; Finland, Japan, Norway, Netherlands, Germany and the United Kingdom, 2004; France and Australia, 2003; Sweden, Canada and the United States, 2002.
- 28 World Health Organization (2004)
- 29 Ministry of Health (1999b) p 344
- 30 Ministry of Health (2006c) Table C2 p 39
- 31 Ministry of Health (2006c) Table C2 p 39; Ministry of Health (2008d)
- 32 Ministry of Health (2008d)
- 33 OECD (2008e)
- 34 OECD (2008e)
- 35 The World Health Organization defines obesity as having a BMI greater than or equal to 30 kg/m<sup>2</sup> (WHO 2000). In compliance with international practice, the same cut-off points have been used for all ethnic groups (Ministry of Health (2008d) pp 104, 105)
- 36 Cole et al (2000)
- 37 Ministry of Health (2008d) p 104
- 38 Rates for 1997 and 2002/2003 have been revised by Public Health Intelligence, Ministry of Health.
- 39 The rate for 2002 has been revised by Public Health Intelligence, Ministry of Health.
- 40 Ministry of Health (2004c) p 36
- 41 OECD (2008e)
- 42 OECD (2008e)
- 43 Babor et al (2001)
- 44 Conner et al (2005)
- 45 Age-standardised rates have been used for comparison over time.

## KNOWLEDGE AND SKILLS

- 46 See, for example, Wylie (1999)
- 47 OECD (2007a)
- 48 Wylie (1999); Boocock (1995); Wylie et al (2001); Wylie et al (2004)
- 49 OECD (2007a)
- 50 Due to methodological changes in the allocation of attainment levels in 2004, the percentage of leavers with qualifications higher than NCEA Level 1 in 2004 is not comparable with other years and has been omitted.
- 51 OECD (2007a). The OECD data used here also includes international students. This group is not included in the analysis in this section.
- 52 OECD (2007a)

## PAID WORK

- 53 This includes wages and other payments to employees and entrepreneurial income. 1999 Statistics New Zealand data, cited in Department of Labour (1999)
- 54 Wilson (1999)
- 55 OECD (2008f), downloaded from [www.oecd.org](http://www.oecd.org) on 16 April 2008
- 56 OECD (2008c) Statistical Annex, Table G p 355
- 57 OECD (2008c) Statistical Annex, Table B pp 336–338

## ECONOMIC STANDARD OF LIVING

- 58 Royal Commission on Social Security in New Zealand (1972)
- 59 Revised data has moved Greece ahead of New Zealand, lowering New Zealand's ranking from 21st to 22nd for the years 2000–2005.
- 60 Statistics New Zealand (2001b) Table 1 p 15, Table 4 p 17. Per person value calculated by the Ministry of Social Development.
- 61 For a description of the Gini co-efficient, see Statistics New Zealand (1999) p 118
- 62 Förster and Mira d'Ercole (2007) Annex Table A.1.4
- 63 Förster and Mira d'Ercole (2007) Annex Table A.5.3
- 64 See, for example, the Massey University Housing Affordability Index June 2008, <http://property-group.massey.ac.nz>
- 65 While the data is robust enough to give a general indication of relativities between ethnic groups, the relatively small sample sizes for the non-European ethnic groups can lead to some volatility in trends for each group separately. Robust data is not available for low-income households by ethnicity.
- 66 Baker et al (2000)
- 67 Evans (2003)
- 68 The trend in household crowding for the total population cannot be inferred from the trends for the ethnic groupings because some census respondents did not provide ethnicity data.
- 69 Statistics New Zealand (2003) p 33
- 70 Percentages do not add to 100 as some people identified with more than one ethnic group.
- 71 Persons who received income support in the 12 months before the census. Excludes those who received ACC or New Zealand Superannuation.

## CIVIL AND POLITICAL RIGHTS

- 72 Ministry of Foreign Affairs and Trade (1998)
- 73 The 1988 Royal Commission on Social Policy found that New Zealanders felt wellbeing was strongly associated with the ability to make choices and to not have choices imposed on them. Royal Commission on Social Policy (1988)
- 74 For example, see the section on New Zealand in the United States State Department Bureau of Democracy, Human Rights and Labour (2003) Country Reports on Human Rights Practices, [www.state.gov/g/drl/rls/hrrpt/2003/27783.htm](http://www.state.gov/g/drl/rls/hrrpt/2003/27783.htm)

- 75 Human Rights Commission (2007)
- 76 Marsh and Sahin-Dikmen (2002) pp 40, 41
- 77 Inter-Parliamentary Union, PARLINE database, Last election
- 78 Inter-Parliamentary Union, Women in National Parliaments
- 79 These figures exclude Licensing and Land Trusts.

## CULTURAL IDENTITY

- 80 Durie et al (2002); Durie (1999)
- 81 Statistics New Zealand (2001a)
- 82 ACNielsen (2005)
- 83 NZ On Air (1999) p 3
- 84 All those who identified as Māori in the census are counted as part of the Māori ethnic group in this indicator.
- 85 “Very well” refers to being able to talk about almost anything in Māori. “Well” refers to being able to talk about many things in Māori. “Fairly well” refers to being able to talk about some things in Māori. “Not very well” refers to only being able to talk about simple/basic things in Māori.
- 86 The census ethnicity question is a multiple-response question and the high proportion of Pacific peoples who can speak Māori may reflect the high proportion of people who identified with both ethnic groups in the last census. This is also the case for the European ethnic group. In this section, “New Zealanders” have been included with the European ethnic group, using customised data that counts individuals once only.

## PHYSICAL ENVIRONMENT

- 87 The 1988 Royal Commission on Social Policy identified “guardianship of the physical resource” as a major part of the “safe prospect” aspect of social wellbeing.
- 88 Fisher et al (2007)
- 89 Ministry for the Environment (2008) p 148
- 90 Department of Environment and Climate Change, New South Wales Government (2008); Environment Protection Authority Victoria (2007)
- 91 Department for Food, Environment and Rural Affairs, United Kingdom (2008)
- 92 Statistics New Zealand (1993)

## SAFETY

- 93 Morris et al (2003) pp 222–224
- 94 National Road Safety Committee (2000)
- 95 Mayhew and Reilly (2007b) pp 24–26
- 96 Mayhew and Reilly (2007b) p 54. The incidence figure for men for this type of offence [confrontational offences committed by partners] has a relative standard error between 15 percent and 25 percent and should be viewed with caution.
- 97 2006 injury data has been revised
- 98 Land Transport Safety Authority (2000)
- 99 OECD (2008a) International Road Traffic and Accident Database (accessed 11 March 2008)

## SOCIAL CONNECTEDNESS

- 100 Spellerberg (2001)
- 101 Donovan and Halpern (2002) p 27
- 102 Noll and Berger-Schmitt (2000)
- 103 OECD (2007c)
- 104 Statistics Canada (2004); European Commission (2005)
- 105 Quality of Life Project (2007) Figure 6.5.6 p 224

## CONCLUSION

- 106 The mid-1990s data for cigarette smoking comes from the ACNielsen Survey and the 2006/2007 data comes from the Ministry of Health’s Health Survey.
- 107 Mayhew and Reilly (2007b) p 54. The incidence figure for men for this type of violence [confrontational offences committed by partners] has a relative standard error between 15 percent to 25 percent and should be viewed with caution.







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