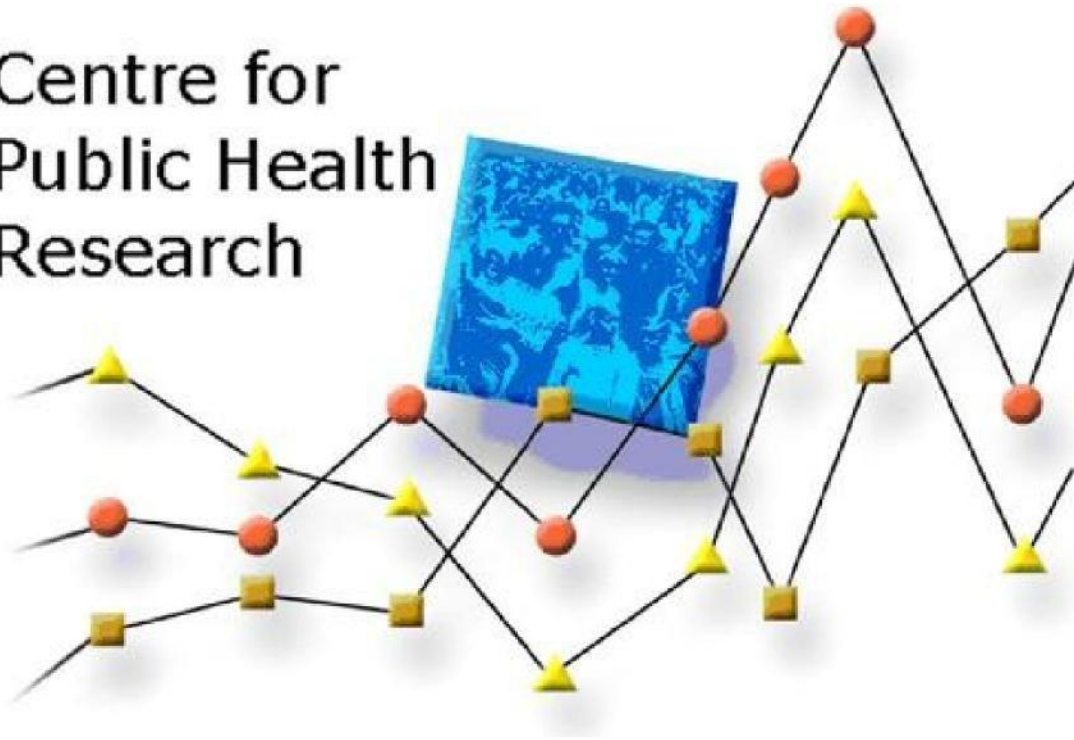


Centre for  
Public Health  
Research



## **Health Needs Assessment**

### **Southern District Health Board**

**For the Ministry of Health**

**Contact Person:**

Associate Professor Barry Borman  
Centre for Public Health Research  
Massey University, Wellington Campus  
PO Box 756, Wellington 6140  
Tel: +64 4 801 5799 extn 62180; Fax: +64 4 380 0600



**MASSEY UNIVERSITY**  
WELLINGTON

# **Health Needs Assessment**

## **Southern District Health Board**

**Helene Marsters**  
**Mathangi Shanthakumar**  
**Caroline Fyfe**  
**Barry Borman**  
**Saira Dayal**

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## EXECUTIVE SUMMARY

The report identifies the unmet health and healthcare needs of the Southern District Health Board (DHB) population by comparing the health status of Māori and non-Māori. The information contained in the report has been designed to assist the Southern DHB in determining priorities for its planning and decision-making to achieve health gain in its population.

### Demographics and social determinants of health

In the 2006 Census, Southern DHB had a population of 294,590 which is predicted to increase to 314,900 by 2026. The proportion of people identifying themselves as Māori in Southern DHB is lower than that of New Zealand as a whole. The Māori population in Southern DHB is younger than the non-Māori population and is dominated by young people. This trend is expected continue over the period to 2026, whilst the non-Māori population is predicted to age over the same period.

In Southern DHB, the distribution of communities across the NZDep06 deprivation scale decreases steadily as level of deprivation increases. Whilst the trend is towards the higher deprivation deciles for the Māori population, the opposite is true for the non-Māori population. This pattern follows, but is less clear cut than, national trends.

### Health status

#### Avoidable mortality and hospitalisations

The leading causes of avoidable mortality for Māori and non-Māori were broadly similar: ischaemic heart disease, motor vehicle accidents, lung cancer, suicide and self-inflicted injuries. However, for Māori, diabetes was an additional leading cause, as was colorectal cancer for non-Māori.

For both Māori and non-Māori in the Southern DHB, the four of the five leading causes of avoidable hospitalisations were: respiratory infections, ENT infections, dental conditions, and angina.

#### Child and youth health

The leading causes of hospitalisations for Māori and non-Māori children aged 0-4 years were: respiratory infections, <sup>1</sup>persons encountering health services in other circumstances, ENT infections, and disorders related to length of gestation and fetal growth.

The leading causes of hospitalisations for children aged 5-14 years of both ethnic groups were: dental conditions, respiratory conditions, ENT infections, and injuries to the elbow and forearm.

---

<sup>1</sup> Persons encountering health services in other circumstances (Z70-Z76) - Health supervision and care of other healthy infant and child.

## **Older people**

For both Māori and non-Māori aged 65+ years, the leading causes of mortality were: ischaemic heart disease, COPD, stroke and lung cancer. For Māori, diabetes was also a leading cause of death, as was colorectal cancer for non-Māori.

COPD, respiratory infections, angina, diabetes and congestive heart failure were the leading causes of hospitalisation for Māori aged 65+ years.

## **Other conditions**

The COPD hospitalisation rate for Māori was statistically significantly higher than the non-Māori rate.

The overall melanoma hospitalisation rates for Māori and Māori men were statistically significantly lower than their non-Māori counterparts.

Māori children (0-14 years) in the DHB (excluding females) also had a statistically significantly higher rate of asthma hospitalisation compared to non-Māori children.

## **Health service utilisation**

Among Māori children, 84.4 percent had received all specified immunisation vaccines by the age of two, compared to 72.0 percent nationally and 85.1 percent for non-Māori children.

In Southern DHB, the rates for both Māori and non-Māori people aged 65 years and over who either received an influenza vaccine, or had an agreement made by a primary health provider to receive an influenza vaccine in the past 12 months, were higher than the comparable national rates. Among Māori, the coverage was 57.5 percent, compared to 54.4 percent nationally. The DHB rate for non-Māori was 62.9 percent, compared to the New Zealand average of 60.9 percent.

The Māori breast cancer screening coverage was 61.7 percent compared to the New Zealand Māori rate of 51.5 percent. The non-Māori rate was 73.1 percent compared to the national average of 65.0 percent.

The Māori cervical cancer screening rate (43.7%) was lower than the national average for Māori (54.4%), but both were considerably lower than the comparable non-Māori rates (77.5% and 75.5% respectively).



## INTRODUCTION

A health needs assessment (HNA) is an analysis of a population's demand and need for health services. Health needs assessments can help create a picture of the health status of District Health Board (DHB) population at a given time.

The current HNA compares the health status between Māori and non-Māori by providing a descriptive analysis of the data, with the statistical information accessible in an easy-to-use format. The most recent data available are presented for each indicator. The report, along with the full suite of data tables that sit behind the figures and text, will be available on CPHROnline (<http://cphronline.massey.ac.nz/>). This is an interactive website which displays a wide range of downloadable public health data in tabular, graph and map formats. CPHROnline also has the capacity to display time trends by DHBs on major health risk factors, behaviours and conditions.

It is intended that this profile of Māori and non-Māori health will provide the basis for a continuous updating of the data on CPHROnline as new data becomes available from the national health data sets (i.e. mortality, hospitalisations, and cancer registrations).

In this HNA, information is presented about the Southern DHB on:

1. Demographic characteristics.
2. Socioeconomic characteristics.
3. The health status, such as rates of cancer, and diabetes.
4. Health service utilisation

The findings of the HNA are summarised in the executive summary, together with key points at the beginning of each chapter. It is anticipated that the information in the report will provide robust, high quality evidence for policy development and decision making across the health sector. It will enable decision makers to lead and manage effectively by being able to respond quickly to a population's health needs and emerging issues of their respective DHB.

# METHODS AND DATA SOURCES

## Data Notes

In the report, information is presented on the most recently available data from a variety of sources (Table 1).

**Table 1:** Data sources for numerators

Source	Data	Period	Type of data
Ministry of Health	Mortality collection data set- mortality	2006-2008	National collection
	National Minimum Data Set (NMDS)- hospitalisations	2007-2009	National collection
	New Zealand Cancer Registrations (NZCR)- cancer registrations	2005-2007	National collection
Statistics New Zealand	Demographics Population	2006	Census
	projections	2006-2026	Official Estimates
	Socioeconomic indicators	2006	Census
District Health Board New Zealand (DHBNZ)	Vaccinations	2009-2010	Primary care
	Breast Cancer Screening	2009-2010	Primary care
	Cervical Cancer Screening	2009-2010	Primary care

## Identifying the Years of Data Collection

In this report '2006-08' denotes three full calendar years of data for mortality, cancer registrations '2005-07', and hospitalisation data are for years '2007-09'.

## National Collections

The Ministry of Health has operational responsibility for national collections of health and disability information which include the mortality collections, national minimum data set (NMDS), and the New Zealand Cancer Registry (NZCR). National collections and systems provide valuable health information to support decision-making in policy development, funding and the point of care. Further information about the national systems can be obtained from the website:

<http://www.health.govt.nz/nz-health-statistics/national-collections-and-surveys/collections>

## **Disease Classification**

The International Classification of Disease Australian Modification, 10<sup>th</sup> revision (ICD-10-AM) has been used to identify diseases/conditions for reporting mortality, hospitalisations and cancer registrations (refer to Appendix 5 for a full list of ICD-10-AM codes).

## **Ethnicity Classification**

Ethnicity data are presented in two ways; 'total response' and 'prioritised'. In 'total response', a respondent is counted in each of the ethnic groups they selected. This means that the sum of the ethnic group population will exceed the total population because people can select more than one ethnic group.

In the 'prioritised' method, each respondent is allocated to a single ethnic group using the priority system (Māori > Pacific peoples > Asian > European/Other). For example a person who selects (when asked their ethnicity) both Māori and European would only be included in the Māori grouping.

Prioritised ethnicity classifies a person as Māori if any one of their recorded ethnicities was Māori. So for Māori, prioritised and total response outputs are the same. All other people were recorded as non-Māori and represent a comparative or reference group.

## **Denominators**

Population information was obtained from Statistics New Zealand. In general the denominators used for calculating the rates were derived from 2006 Census population data. Any other denominators used are indicated in the tables.

## **Rates**

Rates are calculated as the proportion of the population associated with the indicator compared with the total population of interest. Rates are expressed per 100 (percent), per 1000, per 10,000 or per 100,000. Age-specific rates are shown for defined age groups.

In this report, rates have not been calculated for counts less than 5. These have been presented as 0.0 in this report.

## **Age-standardised Rates (ASRs)**

Where appropriate and indicated in the tables, rates have been age-standardised to enable comparison between population groups with different age structures. The standard population used was the 2001 Census Māori population (males and females combined) using five-year age groups up to 84, then 85+. Use of a Māori population standard creates rates that are a close approximation of the crude overall rates for Māori and thus better reflect the experience of the Māori population.

## Confidence Intervals

In the report, 95% confidence intervals for the rates are presented, where appropriate. The confidence interval gives an indication of the margin of error associated with the rate estimates. When the 95% confidence intervals of two rates do not overlap, the difference in rates between the groups is said to be statistically significant with 95% confidence.

Larger populations and more common conditions usually have narrower confidence intervals and so have a greater likelihood of achieving a statistically significant difference than results with smaller numbers.

Certain cells within the mortality, hospitalisation, and cancer registration tables (see Appendices 2-4) have been shaded to indicate whether the age-standardised rates (ASR) between two groups are statistically significant. The two comparisons being made are:

Māori ASR compared to non-Māori ASR within District Health Board:

**Māori ASR statistically significantly higher than non-Māori ASR**

Māori ASR statistically significantly lower than non-Māori ASR

District Health Board ASR compared to New Zealand ASR:

**DHB ASR statistically significantly higher than national ASR**

DHB ASR statistically significantly lower than national ASR

## Ranking of Leading Causes

Ranking the leading causes of mortality and hospitalisations indicates the most frequently occurring causes of death or hospitalisation by using the ASR as the ranking criterion.

## How to interpret tables in this report

The blue shades highlights differences between Māori and non-Māori within the District Health Board

The red/pink shades highlights differences between the District Health Board and New Zealand

Explains what the table is about, and that the data is age-standardised

Age-standardised Rate for the female Māori population in the DHB

The 95 percent confidence interval of the age-standardised rate – and indicator of margin of error

Table 2.1.17: Ischaemic heart disease mortality, 65+ years, age-standardised rate per 100,000 (and 95% confidence intervals), 2006-08

		Māori			non-Māori			Total		
		ASR	95% confidence		ASR	95% confidence		ASR	95% confidence	
DHB	Female	863.7	749.8	- 977.7	536.3	521.5	- 551.0	541.1	526.6	- 555.6
	Male	550.1	463.9	- 636.3	718.4	698.2	- 738.6	721.0	701.3	- 740.8
	Total	919.1	824.6	- 1013.7	622.3	610.1	- 634.5	626.8	614.9	- 638.8
New Zealand	Female	893.9	878.3	- 909.5	394.7	392.6	- 396.7	422.3	420.2	- 424.4
	Male	1416.1	1393.1	- 1439.1	728.8	725.4	- 732.2	765.7	762.3	- 769.1
	Total	1123.8	1110.5	- 1137.0	545.4	543.5	- 547.3	577.2	575.2	- 579.1

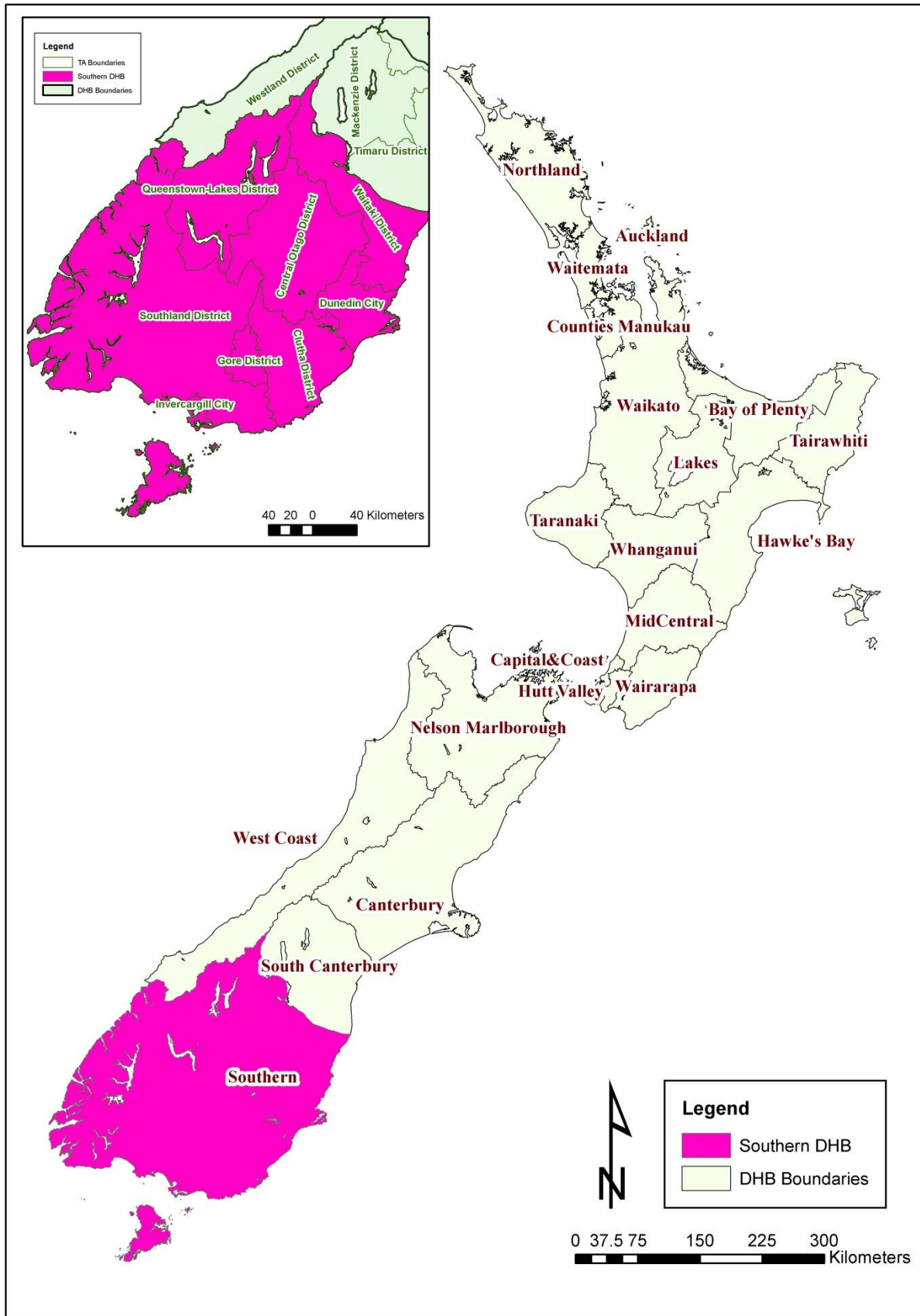
The dark blue shows that the ASR for the total Māori population in the DHB (919.1 per 100,000) is statistically significantly higher than the ASR for the total non-Māori population in the DHB (622.3 per 100,000)

The light blue shows that the ASR for the male Māori population in the DHB (550.1 per 100,000) is statistically significantly lower than the ASR for the male non-Māori population in the DHB (718.4 per 100,000)

The red shows that the ASR for the total population in the DHB (626.8 per 100,000) is statistically significantly higher than the ASR for the total population in NZ (577.2 per 100,000)

The pink shows that the ASR for the total male population in the DHB (721.0 per 100,000) is statistically significantly lower than the ASR for the total male population in NZ (765.7 per 100,000)

## Map of New Zealand District Health Boards



# 1 THE POPULATION

Southern DHB had a population of 294,590 at the last (2006) census, making up approximately 7.0 percent of the total New Zealand population (4,184,580 at the last census). This population is projected to increase by 6.9 percent to 314,900 by 2026. The New Zealand population is predicted to increase by 19.2 percent over the same period.

## 1.1 Ethnicity

The proportion of people identifying themselves as Māori in Southern DHB is less than that of New Zealand as a whole, (7.0% compared to 14.6%). This represents 4.0 percent of the New Zealand Māori population (2006 Census).

## 1.2 Population Distribution by Age and Gender

The majority of the Southern DHB population (67.6%) are of working age (15-64 years), this makes up a slightly higher proportion of the population compared to New Zealand as a whole (66.5%), (Table 1:1). There are fewer young people (aged 0-14 years) and slightly more elderly (aged 65+ years) in the Southern DHB when compared to the New Zealand population. The Southern DHB population has a distinctive peak at 20-24 years, probably due to the large student population in the city of Dunedin (Figure 1).

**Table 1:1:** Percentage population, age and gender, 2006 Census, 2026

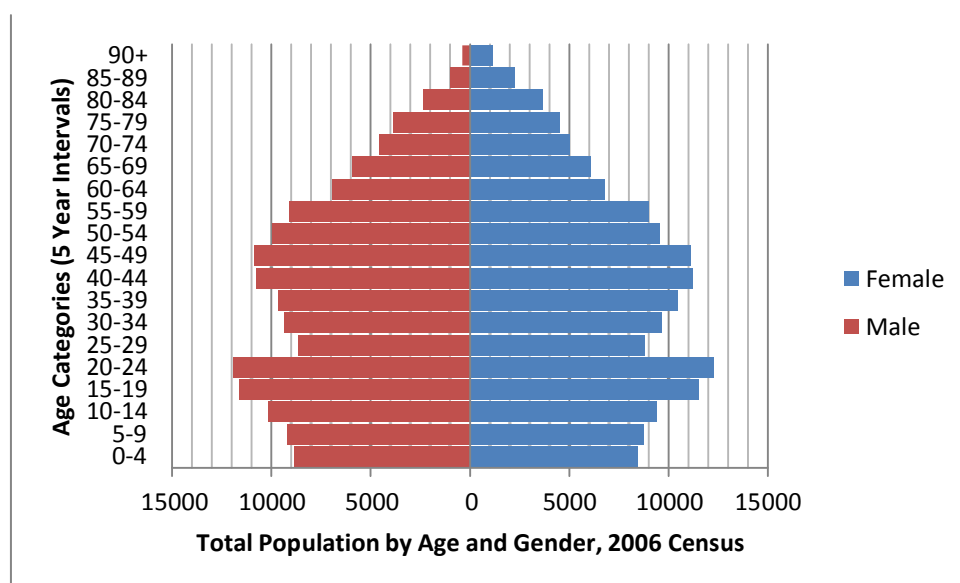
Location	Age Group	2006(Base Population)			2026 (Projected Population)		
		Male	Female	Total	Male	Female	Total
Southern	0-14	19.4	17.7	18.6	17.2	16.0	16.6
	15-64	68.1	67.1	67.6	62.5	61.8	62.1
	65+	12.5	15.1	13.8	20.4	22.2	21.3
New Zealand	0-14	22.2	20.3	21.2	19.4	17.9	18.6
	15-64	66.6	66.5	66.5	62.7	62.2	62.5
	65+	11.2	13.2	12.2	17.9	19.9	18.9

**Table 1:2:** Rate of population change, age and gender, 2006 Census, 2026

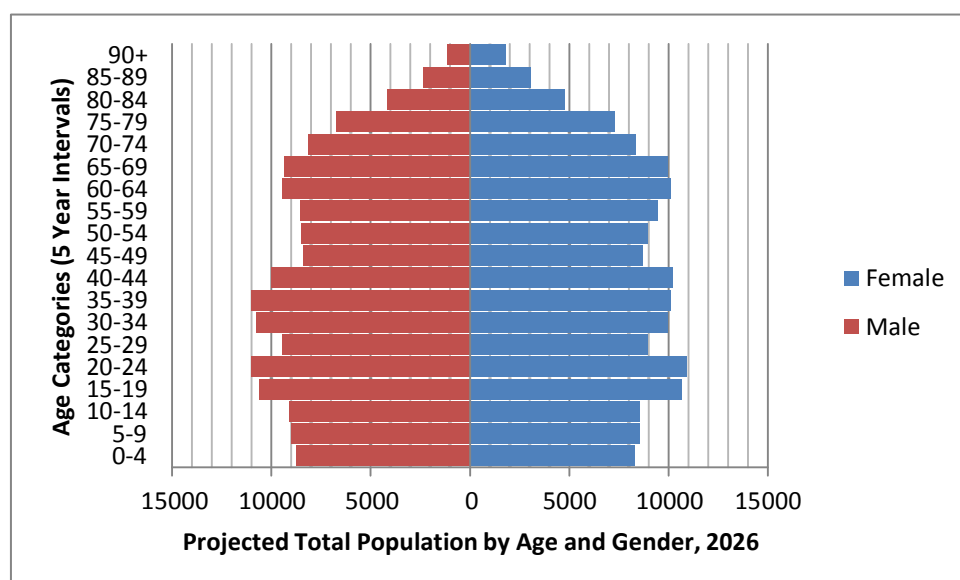
Location	Age Group	2006 (Base)			2026			Percentage Increase 2006-2026		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Southern	0-14	28170	26530	54700	26850	25390	52260	-4.7	-4.3	-4.5
	15-64	98780	100370	199150	97690	97910	195600	-1.1	-2.5	-1.8
	65+	18080	22650	40740	31820	35210	67040	76.0	55.5	64.6
	Total	145030	149550	294590	156360	158510	314900	7.8	6.0	6.9
New Zealand	0-14	454960	433360	888310	477070	451780	928840	4.9	4.3	4.6
	15-64	1364450	1420210	2784650	1545220	1573770	3119010	13.2	10.8	12.0
	65+	228930	282690	511620	440280	503800	944080	92.3	78.2	84.5
	Total	2048340	2136260	4184580	2462570	2529350	4991930	20.2	18.4	19.3

It is projected that by 2026, the proportion of the population in the 65+ age group will have increased by 64.6 percent in Southern DHB, much less than the 84.5 percent predicted nationally. Populations of both young people and those of working age are predicted to decrease, (by 4.5% and 1.8% respectively). Trends for the rest of New Zealand are for small increases in these two age groups (of 4.6% and 12.0% respectively). The population is predicted to become much more evenly distributed over the period to 2026; the peak population is predicted to remain at 20-24 years. Two secondary population peaks however, are predicted to occur at 35-39 years and 60-64 years.

**Figure 1:** Population, age and gender, 2006 Census



**Figure 2:** Projected population, age and gender, 2026

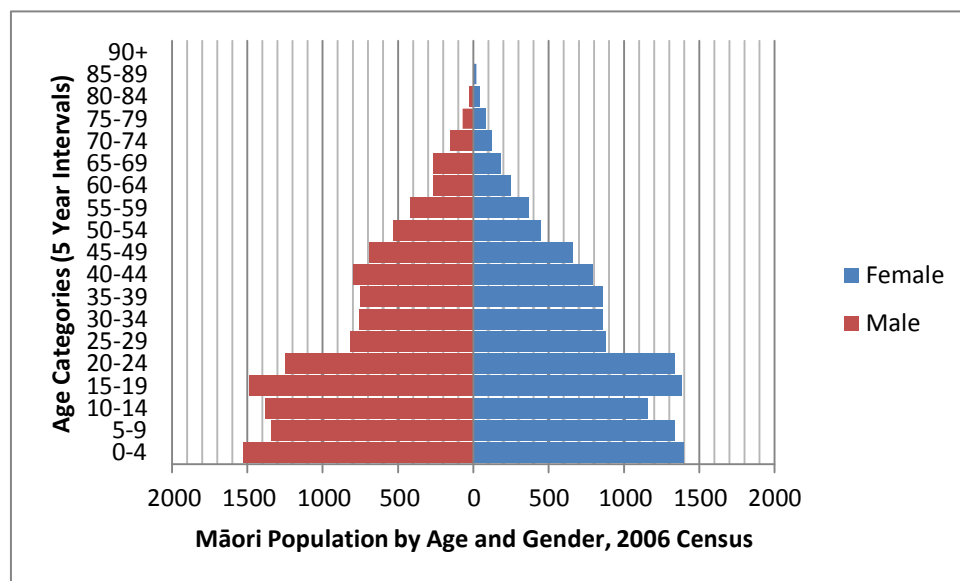




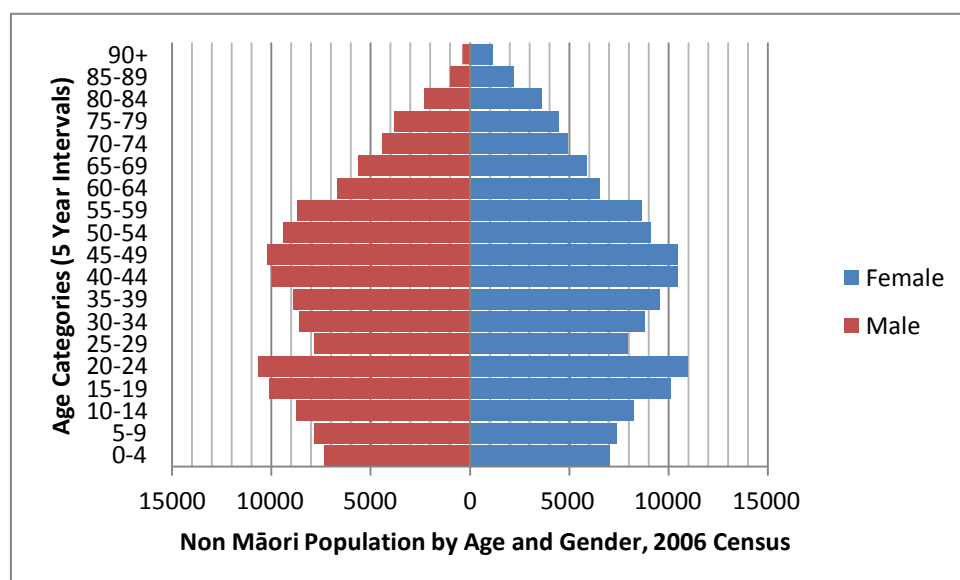
### 1.3 Population distribution by Ethnicity

The Southern DHB Māori population is younger than the non-Māori population. The Māori population is dominated by young people, with peak populations occurring at 0-4 years and 15-19 years. The non-Māori population is generally older in structure than the Māori population. Peak population still occurs at 20-24 years, but with a smaller, secondary, peak at 45-49 years.

**Figure 3:** Māori population, age and gender, 2006 Census



**Figure 4:** Non-Māori population, age and gender, 2006 Census



Over the period 2006-2026, the young (aged 0-14 years) and working age (15-64 years) Māori populations are predicted to increase (by 26.4% and 26.1% respectively). By contrast the young and working age non-Māori populations are predicted to decline over the same period (by 9.9% and 4.2%). The greatest population increase occurs in the elderly population for Māori (206.3%), the

non-Māori population also increases, but more modestly (by 61.1%). This is predicted to lead to overall increases of 33.2 percent in the Māori population, and of 4.5 percent in the non-Māori population.

Whilst young people are predicted to continue to dominate the Māori population, (peak age 20-24 years) in the period to 2026, the non-Māori population is predicted to age over the period 2006-2026, with peak populations at 20-24 years, 35-39 years and 60-69 years.

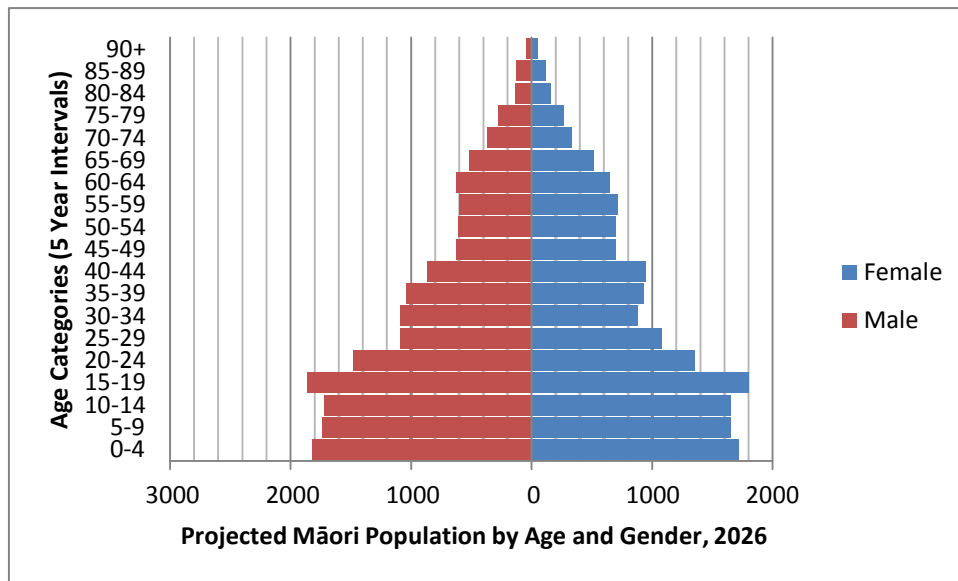
**Table 1:3:** Māori population change, age and gender, 2006 Census, 2026

Location	Age Group	2006(Base)			2026			Percentage increase 2006-2026		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Southern	0-14	4250	3900	8150	5280	5020	10300	24.2	28.7	26.4
	15-64	7780	7840	15620	9900	9770	19690	27.2	24.6	26.1
	65+	520	440	960	1480	1460	2940	184.6	231.8	206.3
	Total	12550	12180	24730	16660	16250	32930	32.7	33.4	33.2
New Zealand	0-14	110480	104810	215310	132290	125860	258150	19.7	20.1	19.9
	15-64	183640	199700	383320	236750	246600	483350	28.9	23.5	26.1
	65+	11680	14010	25710	30830	38330	69150	164.0	173.6	169.0
	Total	305800	318520	624340	399870	410790	810650	30.8	29.0	29.8

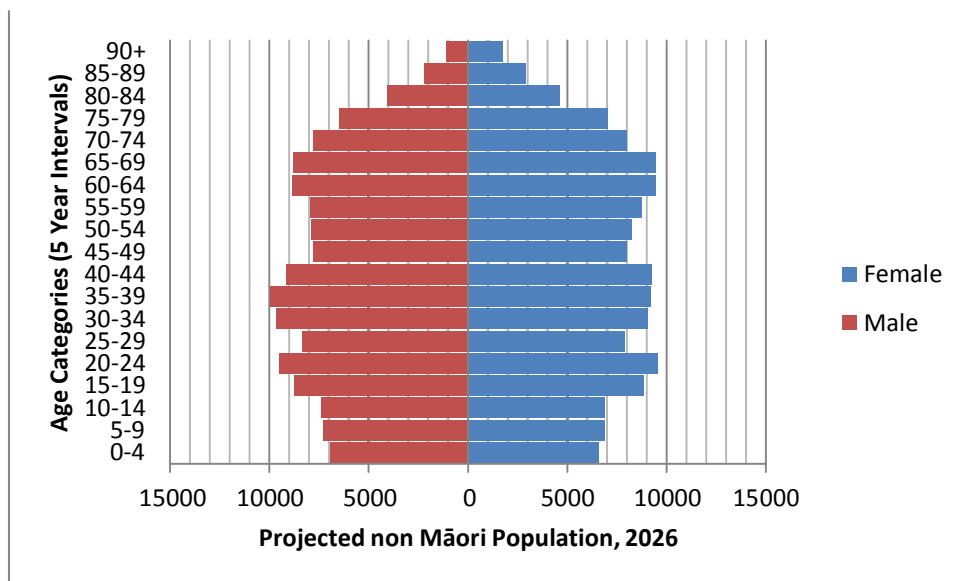
**Table 1:4:** Non-Māori population change, age and gender, 2006 Census, 2026

Location	Age Group	2006(Base)			2026			Percentage increase 2006-2026		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Southern	0-14	23920	22630	46550	21570	20370	41960	-9.8	-10.0	-9.9
	15-64	91000	92530	183530	87790	88140	175910	-3.5	-4.7	-4.2
	65+	17560	22210	39780	30340	33750	64100	72.8	52.0	61.1
	Total	132480	137370	269860	139700	142260	281970	5.4	3.6	4.5
New Zealand	0-14	344480	328550	673000	344780	325920	670690	0.1	-0.8	-0.3
	15-64	1180810	1220510	2401330	1308470	1327170	2635660	10.8	8.7	9.8
	65+	217250	268680	485910	409450	465470	874930	88.5	73.2	80.1
	Total	1742540	1817740	3560240	2062700	2118560	4181280	18.4	16.5	17.4

**Figure 5:** Projected Māori population, age and gender, 2026



**Figure 6:** Projected non-Māori population, age and gender, 2026



## 2 SOCIAL DETERMINANTS OF HEALTH

The World Health Organisation defines the social determinants of health as:

*“..The circumstances, in which people are born, grow up, live, work and age, and the systems put in place to deal with illness. These circumstances are in turn shaped by a wider set of forces: economics, social policies, and politics”, (World Health Organisation, 2008).*

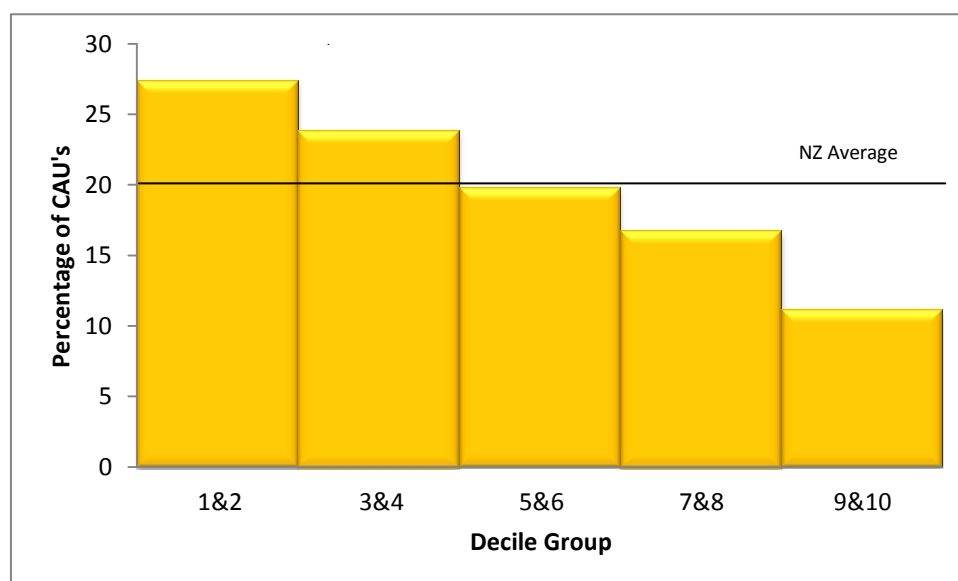
The following section examines social and economic determinants of health through the New Zealand Index of Deprivation and through some of the individual indicators used to determine ‘deprivation’ in New Zealand.

### 2.1 The New Zealand Index of Deprivation (NZDep06)

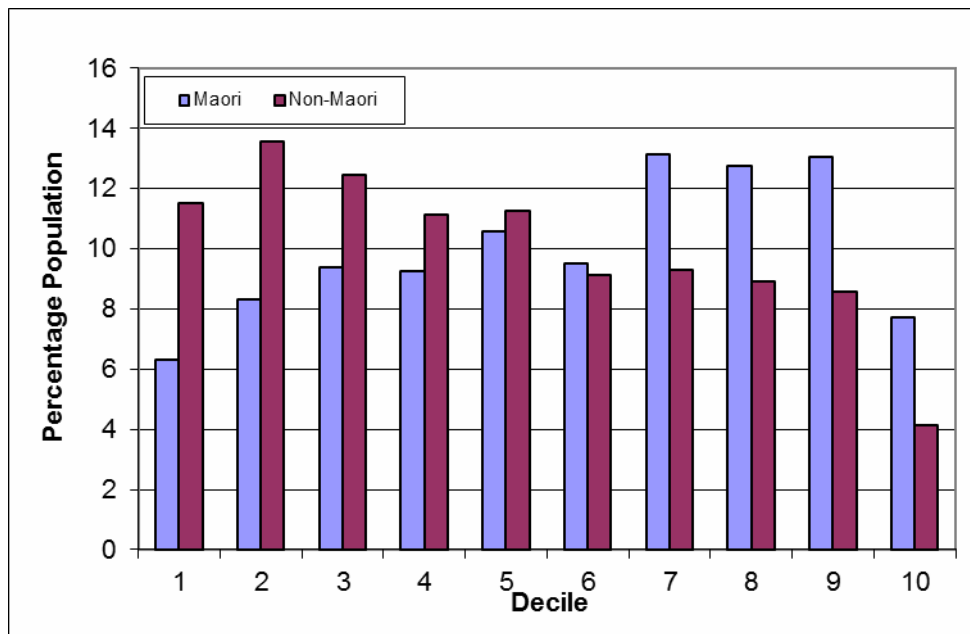
The New Zealand Index of Deprivation (NZDep06) provides a numerical rating of socio economic status by small area unit. This is based on nine indicators taken from the 2006 Census and across eight dimensions of deprivation. The numerical scale is divided into population deciles with 1 representing the least deprived and 10 representing the most deprived, (Salmond, Crampton, & Atkinson, 2007).

In Southern DHB the distribution of communities across the NZDep06 deprivation scale decreases as level of deprivation increases. Whilst the trend is towards the higher deprivation deciles for the Māori population, the opposite is true for the non-Māori population. This pattern follows, but is less clear cut than, national trends.

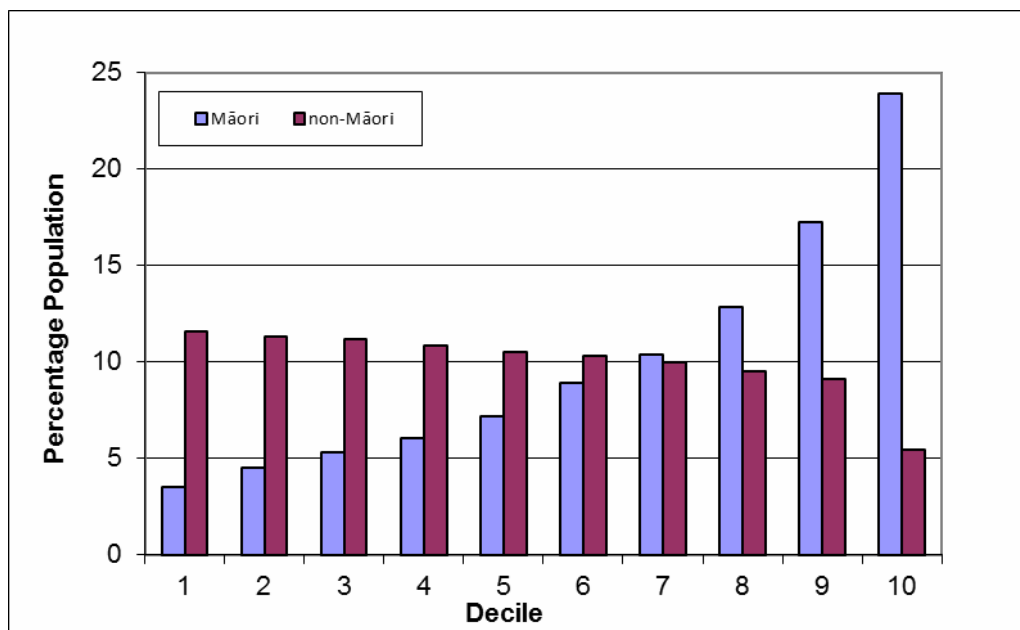
**Figure 7:** Distribution of Southern DHB Area Units across NZDep06 Decile Groups, 2006 Census



**Figure 8:** Southern DHB population, ethnicity and NZDep06 Decile



**Figure 9:** New Zealand population, ethnicity and NZDep06 Decile



## 2.2 Education

The population of Southern DHB has a smaller proportion of university graduates (degree level and above) (11.8%), compared to the New Zealand population (14.2%). It also has a higher rate of people with no qualifications (24.8% compared to 22.4% for New Zealand).

## 2.3 Income

The Southern DHB population has a lower proportion of the population earning over \$30,000 in personal income; 34.3 percent compared to 37.3 percent for New Zealand. This represents a lower proportion of people earning around or above the average annual personal income in New Zealand, which stood at \$33,189 in 2006/07 (Statistics New Zealand, 2012).

## 2.4 Employment

The employment rate for the Southern DHB population is a little higher than that for New Zealand (95.7% compared to 94.9%). In terms of type of employment, there are a lower proportion of professionals and managers in the Southern DHB (32.9% compared to 36.0% nationally) and a higher proportion of machine operators and labourers (21.2% compared to 16.8% nationally).

## 2.5 Housing Tenure

More people own their own homes or hold them in a Family Trust in Southern DHB, and fewer rent, compared to New Zealand.

**Table 2:1:** Proportion of DHB households, housing tenure, 2006 Census

	Unit	Total, dwelling owned or partly owned by usual resident(s)	Total, dwelling not owned or partly owned by usual resident(s)	Total, dwelling held in a family trust by usual resident(s)	Not elsewhere included	Total
Southern	Number	58,077	30,696	15,126	5,937	109,836
	Percentage	52.9	27.9	13.8	5.4	100.0
New Zealand	Number	743955	451965	167925	90333	1454178
	Percentage	51.2	31.1	11.6	6.2	100.0

## 2.6 Communications and Transport

Access to telecommunication in Southern DHB is slightly better than national levels. Only 1.6 percent of people in Southern DHB have no access to telecommunications compared to 2.0 percent nationally.

Access to motor vehicle in Southern DHB is very similar to rates of access for New Zealand as a whole.

### 3 HEALTH STATUS

An understanding of the general health status of a population is important for ensuring the provision of adequate health services. This information is also important for determining priority issues for the District Health Board. This chapter presents information about health status for people living in the Southern DHB district, in comparison to all New Zealanders.

#### Key points

- The leading causes of avoidable mortality for Māori and non-Māori were broadly similar: ischaemic heart disease, motor vehicle accidents, lung cancer, suicide and self-inflicted injuries. However, for Māori, diabetes was an additional leading cause, as was colorectal cancer for non-Māori.
- Breast cancer, lung and colorectal cancers were the leading causes of avoidable mortality for females in the Southern DHB, compared to ischaemic heart disease, suicide and self-inflicted injuries, and motor vehicle accidents for males.
- In the Southern DHB, the age-standardised avoidable hospitalisations rates for females and both genders combined were statistically significantly lower than the comparable New Zealand rates.
- For both Māori and non-Māori in the Southern DHB, the four of the five leading causes of avoidable hospitalisations were: respiratory infections, ENT infections, dental conditions, and angina.
- Females and males had similar leading causes of avoidable hospitalisations: respiratory infections, ENT infections, dental conditions, gastroenteritis, and angina.
- In the Southern DHB, both the female and male age-standardised rates for unintentional injury hospitalisations were statistically significantly lower than the comparable national rates.
- The leading causes of hospitalisations for Māori and non-Māori children aged 0-4 years were: respiratory infections, persons encountering health services in other circumstances, ENT infections, and disorders related to length of gestation and fetal growth.
- Females and males aged 0-4 years in Southern DHB had similar leading causes of hospitalisations: persons encountering health services in other circumstances, disorders related to length of gestation and fetal growth, respiratory infections, ENT infections, and gastro-oesophageal reflux disease.
- The leading causes of hospitalisations for children aged 5-14 years of both ethnic groups were: dental conditions, respiratory conditions, ENT infections, and injuries to the elbow and forearm.
- Both genders aged 5-14 years in Southern DHB had similar leading causes of hospitalisations: dental conditions, respiratory conditions, ENT infections, and injuries to the elbow and forearm.
- For both Māori and non-Māori aged 65+ years, the leading causes of mortality were: ischaemic heart disease, COPD, stroke and lung cancer. For Māori, diabetes was also a leading cause of death, as was colorectal cancer for non-Māori.
- Ischaemic heart disease, lung and colorectal cancers, and stroke were major causes of mortality for males and females aged 65+ years. Breast cancer was also a leading cause of death for females, as was COPD for males.

- COPD, respiratory infections, angina, diabetes and congestive heart failure were the leading causes of hospitalisation for Māori aged 65+ years.
- Females and males aged 65+ years had similar leading causes of hospitalisation: angina, persons encountering health services for specific procedures and health care, COPD, respiratory infections, and heart disease, specifically ischaemic heart disease for males.
- The COPD hospitalisation rate for Māori was statistically significantly higher than the non-Māori rate.
- The cancer specific rates for prostate cancer hospitalisation and colorectal cancer registrations were statistically significantly higher in the Southern DHB compared to the national rates. However, the rate of melanoma hospitalisation was statistically significantly lower than the comparable national rate.
- The overall melanoma hospitalisation rates for Māori and Māori men were statistically significantly lower than their non-Māori counterparts.
- The rate of hospital admissions for unintentional injury was statistically significantly higher for youth (15-24 years) in the Southern DHB compared to the rate for youth in New Zealand.
- The rate of asthma hospitalisation in the Southern DHB was statistically significantly lower compared to the national rate. Similarly, the rate of asthma hospitalisation for children 0-14 years was statistically significantly lower than that observed nationally.
- Māori children (0-14 years) in the DHB (excluding females) also had a statistically significantly higher rate of asthma hospitalisation compared to non-Māori children.
- Children 0-14 years admitted to hospital due to falls had a statistically significantly lower rate than the comparable national rate.



### 3.1 Avoidable Mortality

There was no statistically significant difference between the Māori and non-Māori age-standardised rates for avoidable mortality (Table 3.1).

**Table 3:1:** Avoidable mortality, 0-74 years, age-standardised rates per 100,000 (and 95% confidence intervals), 2006-08

		Māori			non-Māori			Total		
		ASR	95% confidence		ASR	95% confidence		ASR	95% confidence	
Southern	Female	168.5	-52.9	- 389.9	81.8	40.7	- 122.9	88.2	46.6	- 129.7
	Male	224.8	-15.7	- 465.3	133.9	81.9	- 185.9	138.8	88.5	- 189.1
	Total	196.4	34.0	- 358.8	107.5	74.4	- 140.5	113.1	80.6	- 145.6
New Zealand	Female	214.6	168.7	- 260.5	74.2	63.5	- 84.8	88.9	78.2	- 99.6
	Male	308.9	251.4	- 366.5	122.9	109.1	- 136.7	142.4	128.6	- 156.1
	Total	259.8	223.3	- 296.3	98.1	89.4	- 106.8	115.1	106.4	- 123.8

### 3.2 Leading Causes of Avoidable Mortality

The leading causes of avoidable mortality for Māori and non-Māori were broadly similar: ischaemic heart disease, motor vehicle accidents, lung cancer, suicide and self-inflicted injuries (Table 3.2). However, for Māori, diabetes was an additional leading cause, as was colorectal cancer for non-Māori.

**Table 3:2:** Leading causes of avoidable mortality, ethnicity, 0-74 years, 2006-08

	Southern DHB		New Zealand	
	Condition	Rank	Condition	Rank
Māori	Ischaemic heart disease	1	Ischaemic heart disease	1
	Lung cancer	2	Lung cancer	2
	Motor vehicle accidents	3	Diabetes	3
	Diabetes	4	Motor vehicle accidents	4
	Suicide and self-inflicted injuries	5	Suicide and self-inflicted injuries	5
non-Māori	Ischaemic heart disease	1	Ischaemic heart disease	1
	Suicide and self-inflicted injuries	2	Suicide and self-inflicted injuries	2
	Lung cancer	3	Lung cancer	3
	Colorectal cancer	4	Motor vehicle accidents	4
	Motor vehicle accidents	5	Colorectal cancer	5

Breast cancer, lung and colorectal cancers were the leading causes of avoidable mortality for females in the Southern DHB, compared to ischaemic heart disease, suicide and self-inflicted injuries, and motor vehicle accidents for males (Table 3.3). These patterns were similar to the national averages.

**Table 3:3:** Leading causes of avoidable mortality, gender, 0-74 years, 2006-08

	Southern DHB		New Zealand	
	Condition	Rank	Condition	Rank
Female	Breast cancer (female only)	1	Breast cancer (female only)	1
	Lung cancer	2	Lung cancer	2
	Colorectal cancer	3	Ischaemic heart disease	3
	Ischaemic heart disease	4	Colorectal cancer	4
	Complications of perinatal period	5	Diabetes	5
Male	Ischaemic heart disease	1	Ischaemic heart disease	1
	Suicide and self-inflicted injuries	2	Suicide and self-inflicted injuries	2
	Motor vehicle accidents	3	Motor vehicle accidents	3
	Colorectal cancer	4	Lung cancer	4
	Cerebrovascular diseases	5	Diabetes	5
Total	Ischaemic heart disease	1	Ischaemic heart disease	1
	Suicide and self-inflicted injuries	2	Suicide and self-inflicted injuries	2
	Lung cancer	3	Lung cancer	3
	Colorectal cancer	4	Motor vehicle accidents	4
	Motor vehicle accidents	5	Diabetes	5

### 3.3 Avoidable Hospitalisations

In the Southern DHB, the age-standardised avoidable hospitalisations rates for females and both genders combined were statistically significantly lower than the comparable New Zealand rates (Table 3.4).

**Table 3:4:** Avoidable hospitalisations, 0-74 years, age-standardised rates per 100,000 (and 95% confidence intervals), 2007-09

		Māori			non-Māori			Total		
		ASR	95% confidence		ASR	95% confidence		ASR	95% confidence	
Southern	Female	3373.9	2370.1	- 4377.7	2783.1	2444.1	- 3122.1	2818.1	2502.5	- 3133.7
	Male	3740.2	2710.2	- 4770.3	3306.3	2936.8	- 3675.9	3348.2	3004.2	- 3692.1
	Total	3564.3	2844.7	- 4283.8	3048.0	2796.9	- 3299.2	3087.9	2854.1	- 3321.8
New Zealand	Female	4904.4	4671.6	- 5137.1	3156.7	3061.1	- 3252.3	3408.8	3321.6	- 3496.1
	Male	4974.2	4736.0	- 5212.5	3535.8	3435.8	- 3635.9	3746.4	3655.7	- 3837.2
	Total	4946.3	4779.6	- 5112.9	3347.1	3277.8	- 3416.3	3578.9	3516.0	- 3641.9

### 3.4 Leading Causes of Avoidable Hospitalisations

For both Māori and non-Māori in the Southern DHB, the four of the five leading causes of avoidable hospitalisations were: respiratory infections, ENT infections, dental conditions, and angina (Table 3.5). Asthma and gastroenteritis were also major causes for Māori and non-Māori respectively.

**Table 3.5:** Leading causes of avoidable hospitalisations, ethnicity, 0-74 years, 2007-09

	Southern DHB		New Zealand	
	Condition	Rank	Condition	Rank
Māori	Respiratory infections	1	Respiratory infections	1
	ENT infections	2	Dental conditions	2
	Dental conditions	3	Asthma	3
	Asthma	4	ENT infections	4
	Angina	5	Angina	5
non-Māori	Respiratory infections	1	Respiratory infections	1
	ENT infections	2	Gastroenteritis	2
	Dental conditions	3	ENT infections	3
	Gastroenteritis	4	Dental conditions	4
	Angina	5	Angina	5

Note: ENT infections= ear, nose and throat infections

Females and males had similar leading causes of avoidable hospitalisations: respiratory infections, ENT infections, dental conditions, gastroenteritis, and angina (Table 3.6).

**Table 3.6:** Leading causes of avoidable hospitalisations, gender, 0-74 years, 2007-09

	Southern DHB		New Zealand	
	Condition	Rank	Condition	Rank
Female	Respiratory infections	1	Respiratory infections	1
	ENT infections	2	Gastroenteritis	2
	Dental conditions	3	Dental conditions	3
	Gastroenteritis	4	ENT infections	4
	Angina	5	Cellulitis	5
Male	Respiratory infections	1	Respiratory infections	1
	ENT infections	2	Gastroenteritis	2
	Dental conditions	3	ENT infections	3
	Gastroenteritis	4	Dental conditions	4
	Angina	5	Angina	5
Total	Respiratory infections	1	Respiratory infections	1
	ENT infections	2	Gastroenteritis	2
	Dental conditions	3	Dental conditions	3
	Gastroenteritis	4	ENT infections	4
	Angina	5	Angina	5

Note: ENT infections= ear, nose and throat infections

### 3.5 Unintentional Injury Mortality

In the Southern DHB, there was no statistically significant difference between the Māori and non-Māori age-standardised rates for unintentional injury mortality (Table 3.7).

**Table 3:7:** Unintentional injury mortality, all ages, age-standardised rates per 100,000 (and 95% confidence intervals), 2006-08

		Māori			non-Māori			Total		
		ASR	95% confidence		ASR	95% confidence		ASR	95% confidence	
Southern	Female	13.0	-47.2	- 73.1	8.8	-5.5	- 23.1	9.2	-4.6	- 23.0
	Male	56.9	-70.3	- 184.0	24.4	-2.2	- 51.1	27.5	0.5	- 54.4
	Total	34.6	-34.9	- 104.1	16.5	1.4	- 31.6	18.2	3.1	- 33.4
New Zealand	Female	21.2	6.0	- 36.3	7.8	3.8	- 11.8	10.4	6.0	- 14.7
	Male	49.1	25.2	- 73.0	21.6	14.8	- 28.5	26.1	19.1	- 33.0
	Total	34.5	20.7	- 48.4	14.6	10.7	- 18.6	18.1	14.0	- 22.2

### 3.6 Unintentional Injury Hospitalisations

In the Southern DHB, both the female and male age-standardised rates for unintentional injury hospitalisations were statistically significantly lower than the comparable national rates (Table 3.8).

**Table 3:8:** Unintentional injury hospitalisation, all ages, age-standardised rates per 100,000 (and 95% confidence intervals), 2007-09

		Māori			non-Māori			Total		
		ASR	95% confidence		ASR	95% confidence		ASR	95% confidence	
Southern	Female	793.0	307.0	- 1278.9	900.9	718.9	- 1082.9	890.2	722.2	- 1058.3
	Male	1760.0	1050.7	- 2469.3	1785.3	1535.6	- 2035.1	1779.2	1546.2	- 2012.3
	Total	1280.7	850.0	- 1711.3	1343.7	1189.1	- 1498.3	1335.3	1191.6	- 1479.0
New Zealand	Female	1344.0	1220.6	- 1467.5	1133.4	1077.2	- 1189.6	1174.8	1124.1	- 1225.5
	Male	2485.9	2315.3	- 2656.6	2015.8	1942.3	- 2089.3	2095.7	2028.9	- 2162.6
	Total	1900.9	1796.5	- 2005.3	1575.3	1529.0	- 1621.6	1634.3	1592.4	- 1676.3

## 3.7 Child Health (0-14 years)

### 3.7.1 Leading causes of hospitalisations for children 0-4 years by ethnicity

The leading causes of hospitalisations for Māori and non-Māori children aged 0-4 years were: respiratory infections, persons encountering health services in other circumstances, ENT infections, and disorders related to length of gestation and fetal growth (Table 3.9). Asthma was also a major cause for Māori, as was gastro-oesophageal reflux disease for non-Māori children.

**Table 3.9:** Leading causes of hospitalisations, ethnicity, 0-4 years, 2007-09

	Southern DHB		New Zealand	
	Condition	Rank	Condition	Rank
Māori	Respiratory infections	1	Respiratory infections	1
	*Persons encountering health services in other circumstances	2	Persons encountering health services in other circumstances	2
	ENT infections	3	Disorders related to length of gestation and fetal growth	3
	Asthma	4	Gastro-oesophageal reflux disease	4
	Disorders related to length of gestation and fetal growth	5	ENT infections	5
non-Māori	Persons encountering health services in other circumstances	1	Persons encountering health services in other circumstances	1
	Respiratory infections	2	Respiratory infections	2
	ENT infections	3	Disorders related to length of gestation and fetal growth	3
	Disorders related to length of gestation and fetal growth	4	Gastro-oesophageal reflux disease	4
	Gastro-oesophageal reflux disease	5	ENT infections	5

Note: ENT infections= ear, nose and throat infections

\*Persons encountering health services in other circumstances (Z70-Z76). For example, health supervision and care of other healthy infant and child.

### 3.7.2 Leading causes of hospitalisations for children 0-4 years by gender

Females and males aged 0-4 years in Southern DHB had similar leading causes of hospitalisations: persons encountering health services in other circumstances, disorders related to length of gestation and fetal growth, respiratory infections, ENT infections, and gastro-oesophageal reflux disease (Table 3.10).

**Table 3:10:** Leading causes of hospitalisations, gender, 0-4 years, 2007-09

	Southern DHB		New Zealand	
	Condition	Rank	Condition	Rank
Female	*Persons encountering health services in other circumstances	1	Persons encountering health services in other circumstances	1
	Respiratory infections	2	Respiratory infections	2
	Disorders related to length of gestation and fetal growth	3	Disorders related to length of gestation and fetal growth	3
	ENT infections	4	Gastro-oesophageal reflux disease	4
	Gastro-oesophageal reflux disease	5	ENT infections	5
Male	Respiratory infections	1	Respiratory infections	1
	Persons encountering health services in other circumstances	2	Persons encountering health services in other circumstances	2
	ENT infections	3	Disorders related to length of gestation and fetal growth	3
	Disorders related to length of gestation and fetal growth	4	Gastro-oesophageal reflux disease	4
	Gastro-oesophageal reflux disease	5	ENT infections	5
Total	Respiratory infections	1	Respiratory infections	1
	Persons encountering health services in other circumstances	2	Persons encountering health services in other circumstances	2
	ENT infections	3	Disorders related to length of gestation and fetal growth	3
	Disorders related to length of gestation and fetal growth	4	Gastro-oesophageal reflux disease	4
	Gastro-oesophageal reflux disease	5	ENT infections	5

Note: ENT infections= ear, nose and throat infections

\*Persons encountering health services in other circumstances (Z70-Z76). For example, health supervision and care of other healthy infant and child.

### 3.7.3 Leading causes of hospitalisations for children 5-14 years by ethnicity

The leading causes of hospitalisations for children aged 5-14 years of both ethnic groups were: dental conditions, respiratory conditions, ENT infections, and injuries to the elbow and forearm (Table 3.11).

**Table 3:11:** Leading causes of hospitalisations, ethnicity, 5-14 years, 2007-09

	Southern DHB		New Zealand	
	Condition	Rank	Condition	Rank
Māori	Dental conditions	1	Dental conditions	1
	ENT infections	2	Respiratory infections	2
	Respiratory infections	3	ENT infections	3
	Injuries to the elbow and forearm	4	Injuries to the elbow and forearm	4
	Asthma	5	*Persons encountering health services for specific procedures and health care	5
non-Māori	Dental conditions	1	Respiratory infections	1
	Respiratory infections	2	Dental conditions	2
	ENT infections	3	Injuries to the elbow and forearm	3
	Injuries to the elbow and forearm	4	ENT infections	4
	Injuries to the head	5	Persons encountering health services for specific procedures and health care	5

Note: ENT infections= ear, nose and throat infections

\* Persons encountering health services for specific procedures and health care (Z40-Z54) - are intended for use to indicate a reason for care. They may be used for patients who have already been treated for a disease or injury, but who are receiving follow-up or prophylactic care, convalescent care, or care to consolidate the treatment, to deal with residual states, to ensure that the condition has not recurred, or to prevent recurrence.

### 3.7.4 Leading causes of hospitalisations for children 5-14 years by gender

Both genders aged 5-14 years in Southern DHB had similar leading causes of hospitalisations: dental conditions, respiratory conditions, ENT infections, and injuries to the elbow and forearm (Table 3.12).

**Table 3:12:** Leading causes of hospitalisations, gender, 5-14 years, 2007-09

	Southern DHB		New Zealand	
	Condition	Rank	Condition	Rank
Female	Dental conditions	1	Dental conditions	1
	Respiratory infections	2	Respiratory infections	2
	ENT infections	3	ENT infections	3
	Injuries to the elbow and forearm	4	Injuries to the elbow and forearm	4
	Symptoms and signs involving the digestive system and abdomen	5	*Persons encountering health services for specific procedures and health care	5
Male	Dental conditions	1	Dental conditions	1
	Respiratory infections	2	Respiratory infections	2
	ENT infections	3	Injuries to the elbow and forearm	3
	Injuries to the elbow and forearm	4	ENT infections	4
	Injuries to the head	5	Injuries to the head	5
Total	Dental conditions	1	Dental conditions	1
	Respiratory infections	2	Respiratory infections	2
	ENT infections	3	Injuries to the elbow and forearm	3
	Injuries to the elbow and forearm	4	ENT infections	4
	Injuries to the head	5	Persons encountering health services for specific procedures and health care	5

Note: ENT infections= ear, nose and throat infections

\* Persons encountering health services for specific procedures and health care (Z40-Z54) - are intended for use to indicate a reason for care. They may be used for patients who have already been treated for a disease or injury, but who are receiving follow-up or prophylactic care, convalescent care, or care to consolidate the treatment, to deal with residual states, to ensure that the condition has not recurred, or to prevent recurrence.



## 3.8 Older People's Health (65+ years)

### 3.1.1 Older people, leading causes of mortality, 65+ years by ethnicity

For both Māori and non-Māori aged 65+ years, the leading causes of mortality were: ischaemic heart disease, COPD, stroke and lung cancer (Table 3.13). For Māori, diabetes was also a leading cause of death, as was colorectal cancer for non-Māori.

**Table 3:13:** Leading causes of mortality, ethnicity, 65+ years, 2006-08

	Southern DHB		New Zealand	
	Condition	Rank	Condition	Rank
Māori	Ischaemic heart disease	1	Ischaemic heart disease	1
	Lung cancer	2	Lung cancer	2
	COPD	3	COPD	3
	Stroke	4	Diabetes	4
	Diabetes	5	Stroke	5
non-Māori	Ischaemic heart disease	1	Ischaemic heart disease	1
	COPD	2	Stroke	2
	Stroke	3	COPD	3
	Lung cancer	4	Lung cancer	4
	Colorectal cancer	5	Colorectal cancer	5

Note: COPD=chronic obstructive pulmonary disease

### 3.8.1 Older people, leading causes of mortality, 65+ years by gender

Ischaemic heart disease, lung and colorectal cancers, and stroke were major causes of mortality for males and females aged 65+ years (Table 3.14). Breast cancer was also a leading cause of death for females, as was COPD for males.

**Table 3:14:** Leading causes of mortality, gender, 65+ years, 2006-08

	Southern DHB		New Zealand	
	Condition	Rank	Condition	Rank
Female	Ischaemic heart disease	1	Ischaemic heart disease	1
	Stroke	2	Stroke	2
	Colorectal cancer	3	COPD	3
	Lung cancer	4	Lung cancer	4
	Breast cancer (female only)	5	Colorectal cancer	5
Male	Ischaemic heart disease	1	Ischaemic heart disease	1
	Lung cancer	2	Lung cancer	2
	COPD	3	COPD	3
	Colorectal cancer	4	Stroke	4
	Stroke	5	Colorectal cancer	5
Total	Ischaemic heart disease	1	Ischaemic heart disease	1
	COPD	2	Stroke	2
	Stroke	3	COPD	3
	Lung cancer	4	Lung cancer	4
	Colorectal cancer	5	Colorectal cancer	5

Note: COPD=chronic obstructive pulmonary disease

### 3.8.2 Older people, leading causes hospitalisation, 65+ years by ethnicity

COPD, respiratory infections, angina, diabetes and congestive heart failure were the leading causes of hospitalisation for Māori aged 65+ years (Table 3.15).

**Table 3:15:** Leading causes of hospitalisations, ethnicity, 65+ years, 2007-09

	Southern DHB		New Zealand	
	Condition	Rank	Condition	Rank
Māori	COPD	1	Persons encountering health services for specific procedures and health care	1
	Respiratory infections	2	COPD	2
	Angina	3	Respiratory infections	3
	Diabetes	4	Diabetes	4
	Congestive heart failure	5	Angina	5
non-Māori	Angina	1	Persons encountering health services for specific procedures and health care	1
	*Persons encountering health services for specific procedures and health care	2	Angina	2
	Respiratory infections	3	Respiratory infections	3
	COPD	4	Ischaemic heart disease	4
	Other forms of heart disease	5	Other forms of heart disease	5

Note: COPD=chronic obstructive pulmonary disease

\* Persons encountering health services for specific procedures and health care (Z40-Z54) - are intended for use to indicate a reason for care. They may be used for patients who have already been treated for a disease or injury, but who are receiving follow-up or prophylactic care, convalescent care, or care to consolidate the treatment, to deal with residual states, to ensure that the condition has not recurred, or to prevent recurrence.

### 3.8.3 Older people, leading causes of hospitalisation, 65+ years by gender

Females and males aged 65+ years had similar leading causes of hospitalisation: angina, persons encountering health services for specific procedures and health care, COPD, respiratory infections, and heart disease, specifically ischaemic heart disease for males (Table 3.16).

**Table 3:16:** Leading causes of hospitalisations, gender, 65+ years, 2007-09

	Southern DHB		New Zealand	
	Condition	Rank	Condition	Rank
Female	Angina	1	Persons encountering health services for specific procedures and health care	1
	*Persons encountering health services for specific procedures and health care	2	Angina	2
	COPD	3	Respiratory infections	3
	Respiratory infections	4	COPD	4
	Other forms of heart disease	5	Other forms of heart disease	5
Male	Angina	1	Persons encountering health services for specific procedures and health care	1
	Respiratory infections	2	Angina	2
	Persons encountering health services for specific procedures and health care	3	Respiratory infections	3
	Ischaemic heart disease	4	Ischaemic heart disease	4
	COPD	5	Other forms of heart disease	5
Total	Angina	1	Persons encountering health services for specific procedures and health care	1
	Persons encountering health services for specific procedures and health care	2	Angina	2
	Respiratory infections	3	Respiratory infections	3
	COPD	4	Ischaemic heart disease	4
	Other forms of heart disease	5	Other forms of heart disease	5

Note: COPD=chronic obstructive pulmonary disease

\* Persons encountering health services for specific procedures and health care (Z40-Z54) - are intended for use to indicate a reason for care. They may be used for patients who have already been treated for a disease or injury, but who are receiving follow-up or prophylactic care, convalescent care, or care to consolidate the treatment, to deal with residual states, to ensure that the condition has not recurred, or to prevent recurrence.

### **3.9 Other Health Conditions**

Further data on other conditions in Southern DHB are available in the appendices 2-4. Key points are listed here.

#### **3.9.1 Chronic conditions**

The COPD hospitalisation rate for Māori was statistically significantly higher than the non-Māori rate (Appendix 3: Table 3.1.27).

#### **3.9.2 Cancer**

The cancer specific rates for prostate cancer hospitalisation and colorectal cancer registrations were statistically significantly higher in the Southern DHB compared to the national rates (Appendix 3: Table 3.1.8 and Appendix 4: Table 4.1.5). However, the rate of melanoma hospitalisation was statistically significantly lower than the comparable national rate (Appendix 3: Table 3.1.11). The overall melanoma hospitalisation rates for Māori and Māori men were statistically significantly lower than their non-Māori counterparts.

#### **3.9.3 Other conditions**

The rate of hospital admissions for unintentional injury was statistically significantly higher for youth (15-24 years) in the Southern DHB compared to the rate for youth in New Zealand (Appendix 3: Table 3.1.14).

The rate of asthma hospitalisation in the Southern DHB was statistically significantly lower compared to the national rate (Appendix 3: Table 3.1.26). Similarly, the rate of asthma hospitalisation for children 0-14 years was statistically significantly lower than that observed nationally (Appendix 3: Table 3.1.28). Māori children (0-14 years) in the DHB (excluding females) also had a statistically significantly higher rate of asthma hospitalisation compared to non-Māori children.

Children 0-14 years admitted to hospital due to falls had a statistically significantly lower rate than the comparable national rate (Appendix 3: Table 3.1.31).

## 4 HEALTH SERVICE UTILISATION

New Zealanders have access to a variety of health care workers and services in the health and disability sector. This chapter presents information on the use of these services within the Southern DHB compared to the national experience.

Information about service utilisation is an important part of understanding the need and demand for health and disability services. This information, when considered in relation to information in other chapters of this HNA, provides evidence for decision making on DHB priorities for health and disability services.

Recent data was only available for a small number of measures, these being immunisation and screening.

### Key points

- The rates of children being fully immunised in the Southern DHB are higher, especially for Māori, than the comparable national rates. Among Māori children, 84.4 percent had received all specified immunisation vaccines by the age of two, compared to 72.0 percent nationally and 85.1 percent for non-Māori children.
- In Southern DHB, the rates for both Māori and non-Māori people aged 65 years and over who either received an influenza vaccine, or had an agreement made by a primary health provider to receive an influenza vaccine in the past 12 months, were higher than the comparable national rates. Among Māori, the coverage was 57.5 percent, compared to 54.4 percent nationally. The DHB rate for non-Māori was 62.9 percent, compared to the New Zealand average of 60.9 percent.
- The Māori breast cancer screening coverage was 61.7 percent compared to the New Zealand Māori rate of 51.5 percent. The non-Māori rate was 73.1 percent compared to the national average of 65.0 percent.
- The Māori cervical cancer screening rate (43.7%) was lower than the national average for Māori (54.4%), but both were considerably lower than the comparable non-Māori rates (77.5% and 75.5% respectively).

## 4.1 Immunisation Coverage at 2 Years

Fully immunised at age two years means that a child has received the vaccinations scheduled for ages 6 weeks, 3 months, 5 months and 15 months.

The rates of children being fully immunised in the Southern DHB are higher, especially for Māori, than the comparable national rates (Table 4.1). Among Māori children, 84.4 percent had received all specified immunisation vaccines by the age of two, compared to 72.0 percent nationally and 85.1 percent for non-Māori children.

**Table 4:1:** Full immunisation coverage at two years, percent, ethnicity, 2009-10

DHB	Māori	non-Māori	Total
Southern DHB	84.4%	85.1%	85.0%
New Zealand	72.0%	79.4%	77.7%

## 4.2 Influenza Vaccine Coverage at 65+ Years

In Southern DHB, the rates for both Māori and non-Māori people aged 65 years and over who either received an influenza vaccine, or had an agreement made by a primary health provider to receive an influenza vaccine in the past 12 months, were higher than the comparable national rates (Table 4.2). Among Māori, the coverage was 57.5 percent, compared to 54.4 percent nationally. The DHB rate for non-Māori was 62.9 percent, compared to the New Zealand average of 60.9 percent.

**Table 4:2:** Influenza vaccinations in the last 12 months, 65+ years, percent, ethnicity, 2009-10

DHB	Māori	non-Māori	Total
Southern DHB	57.5%	62.9%	62.5%
New Zealand	54.4%	60.9%	60.5%

## 4.3 Breast Cancer Screening

In the Southern DHB, the Māori breast cancer screening coverage (61.7%) was considerably higher than the New Zealand Māori rate (51.5%), (Table 4.3). The non-Māori rate in the DHB (73.1%) was also higher than the national average (65.0%).

**Table 4:3:** Breast screening coverage, 50-64 years, percent, ethnicity, 2009-10

DHB	Māori	non-Māori	Total
Southern DHB	61.7%	73.1%	72.5%
New Zealand	51.5%	65.0%	63.7%

## 4.4 Cervical Cancer Screening

The Māori cervical cancer screening rate (43.7%) was lower than the national average for Māori (54.4%), but both were considerably lower than the comparable non-Māori rates (77.5% and 75.5% respectively) (Table 4.4).

**Table 4:4:** Had cervical smear in the last three years, 20-69 years, percent, ethnicity, 2009-10

<b>DHB</b>	<b>Māori</b>	<b>non-Māori</b>	<b>Total</b>
Southern DHB	43.7%	77.5%	85.2%
New Zealand	54.4%	75.5%	72.6%

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# Appendix 1

## Demographic Tables

Table 1.1.1: Projected Total Population by Age and Sex at 30 June 2007 (2006-Base)

Location	Age Group	2006(Base)			2012			2016			2021			2026			% Population Change 2006-2026					
		Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total			
Southern	0-14	28,170	26,530	54,700	27,770	26,170	53,950	27,770	26,230	53,990	27,840	26,300	54,150	26,850	25,390	52,260	-	4.7	-	4.3	-	4.5
	15-64	98,780	100,370	199,150	102,040	103,110	205,140	101,360	102,260	203,640	99,350	100,290	199,660	97,690	97,910	195,600	-	1.1	-	2.5	-	1.8
	65+	18,080	22,650	40,740	21,470	24,990	46,460	24,420	27,600	52,030	28,100	30,990	59,090	31,820	35,210	67,040		76.0		55.5		64.6
	Total	145,030	149,550	294,590	151,280	154,270	305,550	153,550	156,090	309,660	155,290	157,580	312,900	156,360	158,510	314,900		7.8		6.0		6.9
New Zealand	0-14	454,960	433,360	888,310	463,530	439,930	903,460	471,020	446,390	917,400	481,280	455,240	936,520	477,070	451,780	928,840		4.9		4.3		4.6
	15-64	1,364,450	1,420,210	2,784,650	1,453,870	1,503,460	2,957,340	1,484,350	1,530,690	3,015,030	1,514,650	1,554,990	3,069,630	1,545,220	1,573,770	3,119,010		13.2		10.8		12.0
	65+	228,930	282,690	511,620	280,080	330,240	610,290	324,050	374,290	698,340	378,790	433,010	811,780	440,280	503,800	944,080		92.3		78.2		84.5
	Total	2,048,340	2,136,260	4,184,580	2,197,480	2,273,630	4,471,090	2,279,420	2,351,370	4,630,770	2,374,720	2,443,240	4,817,930	2,462,570	2,529,350	4,991,930		20.2		18.4		19.3

Table 1.1.2: Projected Total Population Aged 0 Years by Sex at 30 June 2007–26 (2006-Base)

Table 1.1.2. Projected Total Population Aged 0 years by Sex at 30 June 2007-26 (2006-base)																					
	2006(Base)			2012			2016			2021			2026			% Population Change 2006-2026					
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total			
Southern	1,770	1,640	3,420	1,890	1,790	3,680	1,830	1,740	3,570	1,770	1,690	3,460	1,710	1,630	3,340	-	3.4	-	0.6	-	2.3
New Zealand	30,150	28,910	59,060	31,830	30,190	62,020	31,380	29,760	61,140	31,380	29,750	61,130	31,500	29,870	61,360		4.5		3.3		3.9

Table 1.1.3: Projected Total Population Aged 1-4 Years by Sex at 30 June 2007–26 (2006-Base)

	2006(Base)			2012			2016			2021			2026			% Population Change 2006-2026					
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total			
Southern	7,080	6,790	13,870	7,820	7,380	15,200	7,540	7,160	14,690	7,290	6,920	14,220	7,040	6,680	13,720	-	0.6	-	1.6	-	1.1
New Zealand	116,060	110,880	226,940	130,230	122,710	252,940	126,860	120,240	247,090	125,820	119,240	245,060	126,140	119,520	245,660		8.7		7.8		8.2

Table 1.1.4: Projected Total Population Aged 5-9 Years by Sex at 30 June 2007–26 (2006-Base)

	2006(Base)			2012			2016			2021			2026			% Population Change 2006-2026					
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total			
Southern	9,190	8,720	17,900	9,040	8,630	17,670	9,680	9,130	18,810	9,290	8,810	18,110	9,000	8,530	17,530	-	2.1	-	2.2	-	2.1
New Zealand	149,230	142,650	291,880	151,640	144,070	295,710	163,170	153,990	317,160	159,530	151,110	310,640	158,510	150,120	308,630		6.2		5.2		5.7

Table 1.1.5: Projected Total Population Aged 10-14 Years by Sex at 30 June 2007–26 (2006-Base)

	2006(Base)			2012			2016			2021			2026			% Population Change 2006-2026					
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total			
Southern	10,130	9,380	19,510	9,020	8,370	17,400	8,720	8,200	16,920	9,490	8,880	18,360	9,100	8,550	17,670	-	10.2	-	8.8	-	9.4
New Zealand	159,520	150,920	310,430	149,830	142,960	292,790	149,610	142,400	292,010	164,550	155,140	319,690	160,920	152,270	313,190		0.9		0.9		0.9

Table 1.1.6: Projected Total Population Aged 15-19 Years by Sex at 30 June 2007–26 (2006-Base)

Table 1.1.6: Projected Total Population Aged 15-19 Years by Sex at 30 June 2007-26 (2006 Base)																					
	2006(Base)			2012			2016			2021			2026			% Population Change 2006-2026					
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total			
Southern	11,600	11,490	23,090	11,120	10,980	22,100	10,270	10,320	20,600	9,860	9,960	19,830	10,610	10,640	21,260	-	8.5	-	7.4	-	7.9
New Zealand	159,400	154,160	313,560	160,800	153,760	314,560	154,110	148,300	302,410	152,660	146,680	299,340	167,590	159,430	327,020		5.1		3.4		4.3



Table 1.1.7: Projected Total Population Aged 20-24 Years by Sex at 30 June 2007–26 (2006-Base)

Table 1.1.7: Projected Total Population Aged 20-24 Years by Sex at 30 June 2007-26 (2006-Base)																					
	2006(Base)			2012			2016			2021			2026			% Population Change 2006-2026					
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total			
Southern	11,910	12,290	24,200	13,100	12,540	25,640	12,640	12,170	24,820	11,390	11,250	22,640	10,980	10,890	21,880	-	7.8	-	11.4	-	9.6
New Zealand	145,850	145,330	291,180	169,800	160,880	330,690	168,800	159,910	328,710	159,270	152,430	311,690	157,870	150,830	308,700		8.2		3.8		6.0

Table 1.1.8: Projected Total Population Aged 25-29 Years by Sex at 30 June 2007–26 (2006-Base)

	2006(Base)			2012			2016			2021			2026			% Population Change 2006-2026		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
Southern	8,660	8,810	17,470	10,490	10,380	20,870	11,070	10,150	21,220	10,670	9,870	20,550	9,430	8,950	18,380	8.9	1.6	5.2
New Zealand	126,770	133,600	260,370	150,020	150,210	300,230	165,090	158,620	323,710	167,730	160,800	328,530	158,300	153,340	311,640	24.9	14.8	19.7

Table 1.1.9: Projected Total Population Aged 30-34 Years by Sex at 30 June 2007–26 (2006-Base)

	2006(Base)			2012			2016			2021			2026			% Population Change 2006-2026		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
Southern	9,350	9,660	19,010	9,240	9,400	18,640	10,400	10,490	20,890	11,140	10,210	21,340	10,750	9,930	20,680	15.0	2.8	8.8
New Zealand	136,320	149,700	286,010	137,460	145,930	283,390	152,120	156,340	308,450	169,600	165,430	335,030	172,310	167,630	339,940	26.4	12.0	18.9

Table 1.1.10: Projected Total Population Aged 35-39 Years by Sex at 30 June 2007–26 (2006-Base)

	2006(Base)			2012			2016			2021			2026			% Population Change 2006-2026			
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	
Southern	9,640	10,430	20,080	9,150	9,410	18,550	8,950	9,180	18,130	10,250	10,380	20,640	10,980	10,110	21,100	13.9	-	3.1	5.1
New Zealand	149,140	163,430	312,560	136,360	149,500	285,860	136,720	146,490	283,210	154,840	159,360	314,200	172,320	168,470	340,790	15.5		3.1	9.0

Table 1.1.11: Projected Total Population Aged 40-44 Years by Sex at 30 June 2007–26 (2006-Base)

	2006(Base)			2012			2016			2021			2026			% Population Change 2006-2026					
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total			
Southern	10,770	11,230	22,000	9,530	10,370	19,900	9,160	9,590	18,750	8,710	8,990	17,690	10,010	10,190	20,190	-	7.1	-	9.3	-	8.2
New Zealand	155,940	166,540	322,490	151,430	166,140	317,570	141,000	155,280	296,280	137,690	147,630	285,320	155,770	160,510	316,290	-	0.1	-	3.6	-	1.9

Table 1.1.12: Projected Total Population Aged 45-49 Years by Sex at 30 June 2007–26 (2006-Base)

	2006(Base)			2012			2016			2021			2026			% Population Change 2006-2026					
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total			
Southern	10,870	11,130	21,990	10,190	10,680	20,860	9,270	10,050	19,320	8,850	9,290	18,140	8,410	8,700	17,110	-	22.6	-	21.8	-	22.2
New Zealand	149,120	156,040	305,160	152,810	163,480	316,290	149,650	163,730	313,380	139,930	154,200	294,120	136,740	146,680	283,430	-	8.3	-	6.0	-	7.1

Table 1.1.13: Projected Total Population Aged 50-54 Years by Sex at 30 June 2007–26 (2006-Base)

	2006(Base)			2012			2016			2021			2026			% Population Change 2006-2026					
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total			
Southern	9,930	9,560	19,490	10,670	11,040	21,720	10,190	10,640	20,830	8,890	9,710	18,600	8,500	8,960	17,450	-	14.4	-	6.3	-	10.5
New Zealand	129,930	133,720	263,650	149,430	157,770	307,200	151,890	162,460	314,350	146,550	160,920	307,480	137,060	151,570	288,630		5.5		13.3		9.5

Table 1.1.14: Projected Total Population Aged 55-59 Years by Sex at 30 June 2007–26 (2006-Base)

	2006(Base)			2012			2016			2021			2026			% Population Change 2006-2026			
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	
Southern	9,110	9,000	18,110	9,780	9,490	19,270	10,180	10,560	20,730	9,810	10,360	20,170	8,560	9,450	18,010	-	6.0	5.0	- 0.6
New Zealand	120,080	122,930	243,010	129,440	134,870	264,310	142,290	150,520	292,810	148,060	159,630	307,690	143,050	158,280	301,330	19.1	28.8		24.0

Table 1.1.15: Projected Total Population Aged 60-64 Years by Sex at 30 June 2007–26 (2006-Base)

	2006(Base)			2012			2016			2021			2026			% Population Change 2006-2026			
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	
Southern	6,940	6,770	13,710	8,770	8,820	17,590	9,230	9,110	18,350	9,780	10,270	20,060	9,460	10,090	19,540	36.3	49.0		42.5
New Zealand	91,900	94,760	186,660	116,320	120,920	237,240	122,680	129,040	251,720	138,320	147,910	286,230	144,210	157,030	301,240	56.9	65.7		61.4

Table 1.1.16: Projected Total Population Aged 65-69 Years by Sex at 30 June 2007–26 (2006-Base)

	2006(Base)			2012			2016			2021			2026			% Population Change 2006-2026			
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	
Southern	5,910	6,050	11,960	6,950	6,970	13,930	8,290	8,520	16,810	8,760	8,830	17,590	9,320	9,970	19,300	57.7	64.8		61.4
New Zealand	75,620	79,910	155,530	93,080	97,750	190,820	111,140	117,390	228,530	117,740	125,610	243,350	133,120	144,170	277,290	76.0	80.4		78.3

Table 1.1.17: Projected Total Population Aged 70-74 Years by Sex at 30 June 2007–26 (2006-Base)

	2006(Base)			2012			2016			2021			2026			% Population Change 2006-2026			
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	
Southern	4,570	5,040	9,610	5,680	5,950	11,620	6,060	6,190	12,250	7,650	8,000	15,650	8,140	8,330	16,470	78.1	65.3		71.4
New Zealand	57,380	62,790	120,170	73,260	79,300	152,560	81,400	87,480	168,880	103,430	111,450	214,870	110,220	119,710	229,930	92.1	90.7		91.3

Table 1.1.18: Projected Total Population Aged 75-79 Years by Sex at 30 June 2007–26 (2006-Base)

	2006(Base)			2012			2016			2021			2026			% Population Change 2006-2026			
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	
Southern	3,880	4,530	8,420	3,930	4,480	8,420	4,680	5,090	9,760	5,270	5,600	10,870	6,740	7,280	14,020	73.7	60.7		66.5
New Zealand	47,570	56,030	103,600	50,280	57,860	108,140	60,630	68,560	129,190	71,550	79,900	151,460	91,620	102,350	193,970	92.6	82.7		87.2

Table 1.1.19: Projected Total Population Aged 80-84 Years by Sex at 30 June 2007–26 (2006-Base)

	2006(Base)			2012			2016			2021			2026			% Population Change 2006-2026			
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	
Southern	2,350	3,640	5,990	2,970	3,760	6,720	2,960	3,720	6,680	3,640	4,260	7,900	4,170	4,760	8,920	77.4	30.8		48.9
New Zealand	30,180	44,000	74,180	36,850	46,670	83,520	38,390	47,390	85,780	48,240	58,280	106,510	57,700	68,660	126,360	91.2	56.0		70.3

Table 1.1.20: Projected Total Population Aged 85-89 Years by Sex at 30 June 2007–26 (2006-Base)

	2006(Base)			2012			2016			2021			2026			% Population Change 2006-2026			
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	
Southern	990	2,240	3,230	1,400	2,440	3,840	1,700	2,510	4,230	1,820	2,550	4,370	2,330	3,050	5,390	135.4	36.2		66.9
New Zealand	13,160	25,920	39,080	19,190	30,990	50,170	22,720	32,900	55,620	24,810	34,280	59,090	32,180	43,160	75,340	144.5	66.5		92.8

Table 1.1.21: Projected Total Population Aged 90+ Years by Sex at 30 June 2007–26 (2006-Base)

	2006(Base)			2012			2016			2021			2026			% Population Change 2006-2026		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
Southern	380	1,150	1,530	540	1,390	1,930	730	1,570	2,300	960	1,750	2,710	1,120	1,820	2,940	194.7	58.3	92.2
New Zealand	5,020	14,040	19,060	7,420	17,670	25,080	9,770	20,570	30,340	13,020	23,490	36,500	15,440	25,750	41,190	207.6	83.4	116.1

Table 1.1.22: Projected Total Population by Sex at 30 June 2007–26 (2006-Base)

	2006(Base)			2012			2016			2021			2026			% Population Change 2006-2026		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
Southern	145,100	149,600	294,600	151,200	154,300	305,600	153,500	156,100	309,700	155,300	157,600	312,900	156,300	158,500	314,900	7.7	5.9	6.9
New Zealand	2,048,300	2,136,200	4,184,600	2,197,500	2,273,600	4,471,100	2,279,400	2,351,400	4,630,800	2,374,700	2,443,200	4,817,900	2,462,600	2,529,300	4,991,900	20.2	18.4	19.3

NOTE: Owing to rounding, individual figures do not always sum to the totals shown.

These projections are: Medium Projection : Assuming Medium Fertility, Medium Mortality, and Medium Migration

These projections were derived in September 2010.

**Source: Statistics New Zealand**

**Population Projections**

**Prepared for Ministry of Health**

**Ref No: ROM27819**

Table 1.2.1: Projected Māori Population by Age and Sex at 30 June 2007 (2006-Base)

Location	Age Group	2006(Base)			2012			2016			2021			2026			% Population Change 2006-2026		
		Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
Southern	0-14	4,250	3,900	8,150	4,770	4,550	9,310	5,120	4,810	9,910	5,330	5,080	10,410	5,280	5,020	10,300	24.2	28.7	26.4
	15-64	7,780	7,840	15,620	8,460	8,420	16,900	8,790	8,740	17,510	9,230	9,110	18,390	9,900	9,770	19,690	27.2	24.6	26.1
	65+	520	440	960	750	700	1,430	940	890	1,840	1,180	1,130	2,290	1,480	1,460	2,940	184.6	231.8	206.3
	Total	12,550	12,180	24,730	13,980	13,670	27,640	14,850	14,440	29,260	15,740	15,320	31,090	16,660	16,250	32,930	32.7	33.4	33.2
New Zealand	0-14	454,960	433,360	888,310	463,530	439,930	903,460	471,020	446,390	917,400	481,280	455,240	936,520	477,070	451,780	928,840	4.9	4.3	4.6
	15-64	1,364,450	1,420,210	2,784,650	1,453,870	1,503,460	2,957,340	1,484,350	1,530,690	3,015,030	1,514,650	1,554,990	3,069,630	1,545,220	1,573,770	3,119,010	13.2	10.8	12.0
	65+	228,930	282,690	511,620	280,080	330,240	610,290	324,050	374,290	698,340	378,790	433,010	811,780	440,280	503,800	944,080	92.3	78.2	84.5
	Total	2,048,340	2,136,260	4,184,580	2,197,480	2,273,630	4,471,090	2,279,420	2,351,370	4,630,770	2,374,720	2,443,240	4,817,930	2,462,570	2,529,350	4,991,930	20.2	18.4	19.3

Table 1.2.2: Projected Total Population Aged 0 Years by Sex at 30 June 2007–26 (2006-Base)

	2006(Base)			2012			2016			2021			2026			% Population Change 2006-2026		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
Southern	340	330	670	370	350	720	370	350	710	360	340	700	380	360	720	11.8	9.1	7.5
New Zealand	30,150	28,910	59,060	31,830	30,190	62,020	31,380	29,760	61,140	31,380	29,750	61,130	31,500	29,870	61,360	4.5	3.3	3.9

Table 1.2.3: Projected Total Population Aged 1-4 Years by Sex at 30 June 2007–26 (2006-Base)

	2006(Base)			2012			2016			2021			2026			% Population Change 2006-2026		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
Southern	1,190	1,070	2,260	1,490	1,420	2,910	1,450	1,370	2,820	1,420	1,350	2,760	1,440	1,360	2,810	21.0	27.1	24.3
New Zealand	116,060	110,880	226,940	130,230	122,710	252,940	126,860	120,240	247,090	125,820	119,240	245,060	126,140	119,520	245,660	8.7	7.8	8.2

Table 1.2.4: Projected Total Population Aged 5-9 Years by Sex at 30 June 2007–26 (2006-Base)

	2006(Base)			2012			2016			2021			2026			% Population Change 2006-2026		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
Southern	1,340	1,340	2,660	1,600	1,480	3,070	1,830	1,740	3,580	1,770	1,680	3,450	1,740	1,650	3,400	29.9	23.1	27.8
New Zealand	149,230	142,650	291,880	151,640	144,070	295,710	163,170	153,990	317,160	159,530	151,110	310,640	158,510	150,120	308,630	6.2	5.2	5.7

Table 1.2.5: Projected Total Population Aged 10-14 Years by Sex at 30 June 2007–26 (2006-Base)

	2006(Base)			2012			2016			2021			2026			% Population Change 2006-2026		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
Southern	1,380	1,160	2,560	1,310	1,300	2,610	1,470	1,350	2,800	1,780	1,710	3,500	1,720	1,650	3,370	24.6	42.2	31.6
New Zealand	159,520	150,920	310,430	149,830	142,960	292,790	149,610	142,400	292,010	164,550	155,140	319,690	160,920	152,270	313,190	0.9	0.9	0.9

Table 1.2.6: Projected Total Population Aged 15-19 Years by Sex at 30 June 2007–26 (2006-Base)

	2006(Base)			2012			2016			2021			2026			% Population Change 2006-2026		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
Southern	1,490	1,380	2,880	1,480	1,280	2,760	1,390	1,410	2,800	1,550	1,430	2,990	1,860	1,800	3,650	24.8	30.4	26.7
New Zealand	159,400	154,160	313,560	160,800	153,760	314,560	154,110	148,300	302,410	152,660	146,680	299,340	167,590	159,430	327,020	5.1	3.4	4.3

Table 1.2.7: Projected Total Population Aged 20-24 Years by Sex at 30 June 2007–26 (2006-Base)

	2006(Base)			2012			2016			2021			2026			% Population Change 2006-2026		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
Southern	1,250	1,340	2,590	1,390	1,320	2,710	1,400	1,190	2,590	1,300	1,330	2,650	1,480	1,360	2,840	18.4	1.5	9.7
New Zealand	145,850	145,330	291,180	169,800	160,880	330,690	168,800	159,910	328,710	159,270	152,430	311,690	157,870	150,830	308,700	8.2	3.8	6.0

Table 1.2.8: Projected Total Population Aged 25-29 Years by Sex at 30 June 2007–26 (2006-Base)

	2006(Base)			2012			2016			2021			2026			% Population Change 2006-2026		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
Southern	820	880	1,700	1,060	1,080	2,140	1,180	1,050	2,220	1,170	920	2,090	1,090	1,080	2,170	32.9	22.7	27.6
New Zealand	126,770	133,600	260,370	150,020	150,210	300,230	165,090	158,620	323,710	167,730	160,800	328,530	158,300	153,340	311,640	24.9	14.8	19.7

Table 1.2.9: Projected Total Population Aged 30-34 Years by Sex at 30 June 2007–26 (2006-Base)

	2006(Base)			2012			2016			2021			2026			% Population Change 2006-2026		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
Southern	760	860	1,610	780	840	1,620	950	1,030	1,980	1,100	980	2,080	1,090	880	1,970	43.4	2.3	22.4
New Zealand	136,320	149,700	286,010	137,460	145,930	283,390	152,120	156,340	308,450	169,600	165,430	335,030	172,310	167,630	339,940	26.4	12.0	18.9

Table 1.2.10: Projected Total Population Aged 35-39 Years by Sex at 30 June 2007–26 (2006-Base)

	2006(Base)			2012			2016			2021			2026			% Population Change 2006-2026		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
Southern	750	860	1,620	700	800	1,500	710	780	1,490	900	980	1,890	1,040	930	1,980	38.7	8.1	22.2
New Zealand	149,140	163,430	312,560	136,360	149,500	285,860	136,720	146,490	283,210	154,840	159,360	314,200	172,320	168,470	340,790	15.5	3.1	9.0

Table 1.2.11: Projected Total Population Aged 40-44 Years by Sex at 30 June 2007–26 (2006-Base)

	2006(Base)			2012			2016			2021			2026			% Population Change 2006-2026		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
Southern	800	790	1,590	740	830	1,580	690	780	1,460	670	740	1,410	870	950	1,820	8.8	20.3	14.5
New Zealand	155,940	166,540	322,490	151,430	166,140	317,570	141,000	155,280	296,280	137,690	147,630	285,320	155,770	160,510	316,290	-	0.1	-

Table 1.2.12: Projected Total Population Aged 45-49 Years by Sex at 30 June 2007–26 (2006-Base)

	2006(Base)			2012			2016			2021			2026			% Population Change 2006-2026		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
Southern	690	660	1,340	720	770	1,500	680	790	1,480	650	740	1,390	630	700	1,350	-	8.7	6.1
New Zealand	149,120	156,040	305,160	152,810	163,480	316,290	149,650	163,730	313,380	139,930	154,200	294,120	136,740	146,680	283,430	-	8.3	-

Table 1.2.13: Projected Total Population Aged 50-54 Years by Sex at 30 June 2007–26 (2006-Base)

	2006(Base)			2012			2016			2021			2026			% Population Change 2006-2026		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
Southern	530	450	980	660	670	1,330	720	720	1,440	650	750	1,400	610	700	1,310	15.1	55.6	33.7
New Zealand	129,930	133,720	263,650	149,430	157,770	307,200	151,890	162,460	314,350	146,550	160,920	307,480	137,060	151,570	288,630	5.5	13.3	9.5

Table 1.2.14: Projected Total Population Aged 55-59 Years by Sex at 30 June 2007–26 (2006-Base)

	2006(Base)			2012			2016			2021			2026			% Population Change 2006-2026		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
Southern	420	370	800	520	440	960	610	590	1,200	670	680	1,360	600	720	1,320	42.9	94.6	65.0
New Zealand	120,080	122,930	243,010	129,440	134,870	264,310	142,290	150,520	292,810	148,060	159,630	307,690	143,050	158,280	301,330	19.1	28.8	24.0

Table 1.2.15: Projected Total Population Aged 60-64 Years by Sex at 30 June 2007–26 (2006-Base)

	2006(Base)			2012			2016			2021			2026			% Population Change 2006-2026		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
Southern	270	250	510	410	390	800	460	400	850	570	560	1,130	630	650	1,280	133.3	160.0	151.0
New Zealand	91,900	94,760	186,660	116,320	120,920	237,240	122,680	129,040	251,720	138,320	147,910	286,230	144,210	157,030	301,240	56.9	65.7	61.4

Table 1.2.16: Projected Total Population Aged 65-69 Years by Sex at 30 June 2007–26 (2006-Base)

	2006(Base)			2012			2016			2021			2026			% Population Change 2006-2026		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
Southern	270	180	450	260	240	500	360	340	700	420	370	790	520	520	1,040	92.6	188.9	131.1
New Zealand	75,620	79,910	155,530	93,080	97,750	190,820	111,140	117,390	228,530	117,740	125,610	243,350	133,120	144,170	277,290	76.0	80.4	78.3

Table 1.2.17: Projected Total Population Aged 70-74 Years by Sex at 30 June 2007–26 (2006-Base)

	2006(Base)			2012			2016			2021			2026			% Population Change 2006-2026		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
Southern	150	120	270	260	190	440	210	210	430	320	310	620	370	340	710	146.7	183.3	163.0
New Zealand	57,380	62,790	120,170	73,260	79,300	152,560	81,400	87,480	168,880	103,430	111,450	214,870	110,220	119,710	229,930	92.1	90.7	91.3

Table 1.2.18: Projected Total Population Aged 75-79 Years by Sex at 30 June 2007–26 (2006-Base)

	2006(Base)			2012			2016			2021			2026			% Population Change 2006-2026		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
Southern	70	80	140	130	120	250	200	150	360	180	190	370	280	270	550	300.0	237.5	292.9
New Zealand	47,570	56,030	103,600	50,280	57,860	108,140	60,630	68,560	129,190	71,550	79,900	151,460	91,620	102,350	193,970	92.6	82.7	87.2

Table 1.2.19: Projected Total Population Aged 80-84 Years by Sex at 30 June 2007–26 (2006-Base)

	2006(Base)			2012			2016			2021			2026			% Population Change 2006-2026		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
Southern	30	40	70	70	80	140	100	100	200	160	130	280	140	160	300	366.7	300.0	328.6
New Zealand	30,180	44,000	74,180	36,850	46,670	83,520	38,390	47,390	85,780	48,240	58,280	106,510	57,700	68,660	126,360	91.2	56.0	70.3

Table 1.2.20: Projected Total Population Aged 85-89 Years by Sex at 30 June 2007–26 (2006-Base)

	2006(Base)			2012			2016			2021			2026			% Population Change 2006-2026		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
Southern	-	20	30	30	50	80	50	70	110	80	90	160	130	120	240	/	500.0	700.0
New Zealand	13,160	25,920	39,080	19,190	30,990	50,170	22,720	32,900	55,620	24,810	34,280	59,090	32,180	43,160	75,340	144.5	66.5	92.8

Table 1.2.21: Projected Total Population Aged 90+ Years by Sex at 30 June 2007–26 (2006-Base)

	2006(Base)			2012			2016			2021			2026			% Population Change 2006-2026		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
Southern	-	-	-	-	20	20	20	20	40	20	40	70	40	50	100	/	/	/
New Zealand	5,020	14,040	19,060	7,420	17,670	25,080	9,770	20,570	30,340	13,020	23,490	36,500	15,440	25,750	41,190	207.6	83.4	116.1

Table 1.2.22: Projected Total Population by Sex at 30 June 2007–26 (2006-Base)

	2006(Base)			2012			2016			2021			2026			% Population Change 2006-2026		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
Southern	12,550	12,180	24,750	14,050	13,650	27,650	14,850	14,400	29,250	15,750	15,350	31,100	16,660	16,250	32,930	32.7	33.4	33.1
New Zealand	2,048,300	2,136,200	4,184,600	2,197,500	2,273,600	4,471,100	2,279,400	2,351,400	4,630,800	2,374,700	2,443,200	4,817,900	2,462,600	2,529,300	4,991,900	20.2	18.4	19.3

NOTE: Owing to rounding, individual figures do not always sum to the totals shown.

These projections are: Medium Projection : Assuming Medium Fertility, Medium Mortality, and Medium Migration

These projections were derived in September 2010.

Source: Statistics New Zealand

Population Projections

Prepared for Ministry of Health

Ref No: ROM27819

Table 1.3.1: Projected Non Māori Population by Age and Sex at 30 June 2007 (2006-Base)

Location	Age Group	2006(Base)			2012			2016			2021			2026			% Population Change 2006-2026					
		Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total			
Southern	0-14	23,920	22,630	46,550	23,000	21,620	44,640	22,650	21,420	44,080	22,510	21,220	43,740	21,570	20,370	41,960	-	9.8	-	10.0	-	9.9
	15-64	91,000	92,530	183,530	93,580	94,690	188,240	92,570	93,520	186,130	90,120	91,180	181,270	87,790	88,140	175,910	-	3.5	-	4.7	-	4.2
	65+	17,560	22,210	39,780	20,720	24,290	45,030	23,480	26,710	50,190	26,920	29,860	56,800	30,340	33,750	64,100		72.8		52.0		61.1
	Total	132,480	137,370	269,860	137,300	140,600	277,910	138,700	141,650	280,400	139,550	142,260	281,810	139,700	142,260	281,970		5.4		3.6		4.5
New Zealand	0-14	454,960	433,360	888,310	463,530	439,930	903,460	471,020	446,390	917,400	481,280	455,240	936,520	477,070	451,780	928,840		4.9		4.3		4.6
	15-64	1,364,450	1,420,210	2,784,650	1,453,870	1,503,460	2,957,340	1,484,350	1,530,690	3,015,030	1,514,650	1,554,990	3,069,630	1,545,220	1,573,770	3,119,010		13.2		10.8		12.0
	65+	228,930	282,690	511,620	280,080	330,240	610,290	324,050	374,290	698,340	378,790	433,010	811,780	440,280	503,800	944,080		92.3		78.2		84.5
	Total	2,048,340	2,136,260	4,184,580	2,197,480	2,273,630	4,471,090	2,279,420	2,351,370	4,630,770	2,374,720	2,443,240	4,817,930	2,462,570	2,529,350	4,991,930		20.2		18.4		19.3

Table 1.3.2: Projected Total Population Aged 0 Years by Sex at 30 June 2007–26 (2006-Base)

	2006(Base)			2012			2016			2021			2026			% Population Change 2006-2026					
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total			
Southern	1,430	1,310	2,750	1,520	1,440	2,960	1,460	1,390	2,860	1,410	1,350	2,760	1,330	1,270	2,620	-	7.0	-	3.1	-	4.7
New Zealand	30,150	28,910	59,060	31,830	30,190	62,020	31,380	29,760	61,140	31,380	29,750	61,130	31,500	29,870	61,360		4.5		3.3		3.9

Table 1.3.3: Projected Total Population Aged 1-4 Years by Sex at 30 June 2007–26 (2006-Base)

	2006(Base)			2012			2016			2021			2026			% Population Change 2006-2026		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
Southern	5,890	5,720	11,610	6,330	5,960	12,290	6,090	5,790	11,870	5,870	5,570	11,460	5,600	5,320	10,910	- 4.9	- 7.0	- 6.0
New Zealand	116,060	110,880	226,940	130,230	122,710	252,940	126,860	120,240	247,090	125,820	119,240	245,060	126,140	119,520	245,660	8.7	7.8	8.2

Table 1.3.4: Projected Total Population Aged 5-9 Years by Sex at 30 June 2007–26 (2006-Base)

	2006(Base)			2012			2016			2021			2026			% Population Change 2006-2026		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
Southern	7,850	7,380	15,240	7,440	7,150	14,600	7,850	7,390	15,230	7,520	7,130	14,660	7,260	6,880	14,130	- 7.5	- 6.8	- 7.3
New Zealand	149,230	142,650	291,880	151,640	144,070	295,710	163,170	153,990	317,160	159,530	151,110	310,640	158,510	150,120	308,630	6.2	5.2	5.7

Table 1.3.5: Projected Total Population Aged 10-14 Years by Sex at 30 June 2007–26 (2006-Base)

Table 1.3.3: Projected Total Population Aged 10-14 Years by Sex at 30 June 2007-20 (2006-Base)																					
	2006(Base)			2012			2016			2021			2026			% Population Change 2006-2026					
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total			
Southern	8,750	8,220	16,950	7,710	7,070	14,790	7,250	6,850	14,120	7,710	7,170	14,860	7,380	6,900	14,300	-	15.7	-	16.1	-	15.6
New Zealand	159,520	150,920	310,430	149,830	142,960	292,790	149,610	142,400	292,010	164,550	155,140	319,690	160,920	152,270	313,190		0.9		0.9		0.9

Table 1.3.6: Projected Total Population Aged 15-19 Years by Sex at 30 June 2007–26 (2006-Base)

	2006(Base)			2012			2016			2021			2026			% Population Change 2006-2026					
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total			
Southern	10,110	10,110	20,210	9,640	9,700	19,340	8,880	8,910	17,800	8,310	8,530	16,840	8,750	8,840	17,610	-	13.5	-	12.6	-	12.9
New Zealand	159,400	154,160	313,560	160,800	153,760	314,560	154,110	148,300	302,410	152,660	146,680	299,340	167,590	159,430	327,020		5.1		3.4		4.3



Table 1.3.7: Projected Total Population Aged 20-24 Years by Sex at 30 June 2007–26 (2006-Base)

	2006(Base)			2012			2016			2021			2026			% Population Change 2006-2026		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
Southern	10,660	10,950	21,610	11,710	11,220	22,930	11,240	10,980	22,230	10,090	9,920	19,990	9,500	9,530	19,040	-	10.9	- 13.0 - 11.9
New Zealand	145,850	145,330	291,180	169,800	160,880	330,690	168,800	159,910	328,710	159,270	152,430	311,690	157,870	150,830	308,700	8.2	3.8	6.0

Table 1.3.8: Projected Total Population Aged 25-29 Years by Sex at 30 June 2007–26 (2006-Base)

	2006(Base)			2012			2016			2021			2026			% Population Change 2006-2026		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
Southern	7,840	7,930	15,770	9,430	9,300	18,730	9,890	9,100	19,000	9,500	8,950	18,460	8,340	7,870	16,210	6.4	- 0.8	2.8
New Zealand	126,770	133,600	260,370	150,020	150,210	300,230	165,090	158,620	323,710	167,730	160,800	328,530	158,300	153,340	311,640	24.9	14.8	19.7

Table 1.3.9: Projected Total Population Aged 30-34 Years by Sex at 30 June 2007–26 (2006-Base)

	2006(Base)			2012			2016			2021			2026			% Population Change 2006-2026		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
Southern	8,590	8,800	17,400	8,460	8,560	17,020	9,450	9,460	18,910	10,040	9,230	19,260	9,660	9,050	18,710	12.5	2.8	7.5
New Zealand	136,320	149,700	286,010	137,460	145,930	283,390	152,120	156,340	308,450	169,600	165,430	335,030	172,310	167,630	339,940	26.4	12.0	18.9

Table 1.3.10: Projected Total Population Aged 35-39 Years by Sex at 30 June 2007–26 (2006-Base)

	2006(Base)			2012			2016			2021			2026			% Population Change 2006-2026		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
Southern	8,890	9,570	18,460	8,450	8,610	17,050	8,240	8,400	16,640	9,350	9,400	18,750	9,940	9,180	19,120	11.8	- 4.1	3.6
New Zealand	149,140	163,430	312,560	136,360	149,500	285,860	136,720	146,490	283,210	154,840	159,360	314,200	172,320	168,470	340,790	15.5	3.1	9.0

Table 1.3.11: Projected Total Population Aged 40-44 Years by Sex at 30 June 2007–26 (2006-Base)

	2006(Base)			2012			2016			2021			2026			% Population Change 2006-2026		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
Southern	9,970	10,440	20,410	8,790	9,540	18,320	8,470	8,810	17,290	8,040	8,250	16,280	9,140	9,240	18,370	- 8.3	- 11.5	- 10.0
New Zealand	155,940	166,540	322,490	151,430	166,140	317,570	141,000	155,280	296,280	137,690	147,630	285,320	155,770	160,510	316,290	- 0.1	- 3.6	- 1.9

Table 1.3.12: Projected Total Population Aged 45-49 Years by Sex at 30 June 2007–26 (2006-Base)

	2006(Base)			2012			2016			2021			2026			% Population Change 2006-2026		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
Southern	10,180	10,470	20,650	9,470	9,910	19,360	8,590	9,260	17,840	8,200	8,550	16,750	7,780	8,000	15,760	- 23.6	- 23.6	- 23.7
New Zealand	149,120	156,040	305,160	152,810	163,480	316,290	149,650	163,730	313,380	139,930	154,200	294,120	136,740	146,680	283,430	- 8.3	- 6.0	- 7.1

Table 1.3.13: Projected Total Population Aged 50-54 Years by Sex at 30 June 2007–26 (2006-Base)

	2006(Base)			2012			2016			2021			2026			% Population Change 2006-2026		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
Southern	9,400	9,110	18,510	10,010	10,370	20,390	9,470	9,920	19,390	8,240	8,960	17,200	7,890	8,260	16,140	- 16.1	- 9.3	- 12.8
New Zealand	129,930	133,720	263,650	149,430	157,770	307,200	151,890	162,460	314,350	146,550	160,920	307,480	137,060	151,570	288,630	5.5	13.3	9.5

Table 1.3.14: Projected Total Population Aged 55-59 Years by Sex at 30 June 2007–26 (2006-Base)

	2006(Base)			2012			2016			2021			2026			% Population Change 2006-2026			
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	
Southern	8,690	8,630	17,310	9,260	9,050	18,310	9,570	9,970	19,530	9,140	9,680	18,810	7,960	8,730	16,690	-	8.4	1.2 - 3.6	
New Zealand	120,080	122,930	243,010	129,440	134,870	264,310	142,290	150,520	292,810	148,060	159,630	307,690	143,050	158,280	301,330	19.1	28.8	24.0	

Table 1.3.15: Projected Total Population Aged 60-64 Years by Sex at 30 June 2007–26 (2006-Base)

	2006(Base)			2012			2016			2021			2026			% Population Change 2006-2026		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
Southern	6,670	6,520	13,200	8,360	8,430	16,790	8,770	8,710	17,500	9,210	9,710	18,930	8,830	9,440	18,260	32.4	44.8	38.3
New Zealand	91,900	94,760	186,660	116,320	120,920	237,240	122,680	129,040	251,720	138,320	147,910	286,230	144,210	157,030	301,240	56.9	65.7	61.4

Table 1.3.16: Projected Total Population Aged 65-69 Years by Sex at 30 June 2007–26 (2006-Base)

	2006(Base)			2012			2016			2021			2026			% Population Change 2006-2026		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
Southern	5,640	5,870	11,510	6,690	6,730	13,430	7,930	8,180	16,110	8,340	8,460	16,800	8,800	9,450	18,260	56.0	61.0	58.6
New Zealand	75,620	79,910	155,530	93,080	97,750	190,820	111,140	117,390	228,530	117,740	125,610	243,350	133,120	144,170	277,290	76.0	80.4	78.3

Table 1.3.17: Projected Total Population Aged 70-74 Years by Sex at 30 June 2007–26 (2006-Base)

	2006(Base)			2012			2016			2021			2026			% Population Change 2006-2026		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
Southern	4,420	4,920	9,340	5,420	5,760	11,180	5,850	5,980	11,820	7,330	7,690	15,030	7,770	7,990	15,760	75.8	62.4	68.7
New Zealand	57,380	62,790	120,170	73,260	79,300	152,560	81,400	87,480	168,880	103,430	111,450	214,870	110,220	119,710	229,930	92.1	90.7	91.3

Table 1.3.18: Projected Total Population Aged 75-79 Years by Sex at 30 June 2007–26 (2006-Base)

	2006(Base)			2012			2016			2021			2026			% Population Change 2006-2026		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
Southern	3,810	4,450	8,280	3,800	4,360	8,170	4,480	4,940	9,400	5,090	5,410	10,500	6,460	7,010	13,470	69.6	57.5	62.7
New Zealand	47,570	56,030	103,600	50,280	57,860	108,140	60,630	68,560	129,190	71,550	79,900	151,460	91,620	102,350	193,970	92.6	82.7	87.2

Table 1.3.19: Projected Total Population Aged 80-84 Years by Sex at 30 June 2007–26 (2006-Base)

	2006(Base)			2012			2016			2021			2026			% Population Change 2006-2026		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
Southern	2,320	3,600	5,920	2,900	3,680	6,580	2,860	3,620	6,480	3,480	4,130	7,620	4,030	4,600	8,620	73.7	27.8	45.6
New Zealand	30,180	44,000	74,180	36,850	46,670	83,520	38,390	47,390	85,780	48,240	58,280	106,510	57,700	68,660	126,360	91.2	56.0	70.3

Table 1.3.20: Projected Total Population Aged 85-89 Years by Sex at 30 June 2007–26 (2006-Base)

	2006(Base)			2012			2016			2021			2026			% Population Change 2006-2026		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
Southern	990	2,220	3,200	1,370	2,390	3,760	1,650	2,440	4,120	1,740	2,460	4,210	2,200	2,930	5,150	122.2	32.0	60.9
New Zealand	13,160	25,920	39,080	19,190	30,990	50,170	22,720	32,900	55,620	24,810	34,280	59,090	32,180	43,160	75,340	144.5	66.5	92.8

Table 1.3.21: Projected Total Population Aged 90+ Years by Sex at 30 June 2007–26 (2006-Base)

	2006(Base)			2012			2016			2021			2026			% Population Change 2006-2026		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
Southern	380	1,150	1,530	540	1,370	1,910	710	1,550	2,260	940	1,710	2,640	1,080	1,770	2,840	184.2	53.9	85.6
New Zealand	5,020	14,040	19,060	7,420	17,670	25,080	9,770	20,570	30,340	13,020	23,490	36,500	15,440	25,750	41,190	207.6	83.4	116.1

Table 1.3.22: Projected Total Population by Sex at 30 June 2007–26 (2006-Base)

	2006(Base)			2012			2016			2021			2026			% Population Change 2006-2026		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
Southern	132,480	137,370	269,860	137,300	140,600	277,910	138,700	141,650	280,400	139,550	142,260	281,810	139,700	142,260	281,970	5.4	3.6	4.5
New Zealand	2,048,300	2,136,200	4,184,600	2,197,500	2,273,600	4,471,100	2,279,400	2,351,400	4,630,800	2,374,700	2,443,200	4,817,900	2,462,600	2,529,300	4,991,900	20.2	18.4	19.3

NOTE: Owing to rounding, individual figures do not always sum to the totals shown.

These projections are: Medium Projection : Assuming Medium Fertility, Medium Mortality, and Medium Migration

These projections were derived in September 2010.

Source: Statistics New Zealand

Population Projections

Prepared for Ministry of Health

Ref No: ROM27819

Table 1.4.1: Population Distribution by Age: Males (2006 Census)

		0–4	5–9	10–14	15–19	20–24	25–29	30–34	35–39	40–44
Southern	Number	7,455	8,049	9,039	8,169	6,567	6,567	7,719	8,268	9,231
	Percentage	6.3	6.9	7.7	7.0	5.6	5.6	6.6	7.0	7.9
New Zealand	Number	140,382	146,532	157,116	152,439	135,084	117,216	130,884	143,001	150,900
	Percentage	7.1	7.5	8.0	7.8	6.9	6.0	6.7	7.3	7.7

		45–49	50–54	55–59	60–64	65–69	70–74	75–79	80–84	85+	Total
Southern	Number	9,243	8,274	7,878	6,117	4,863	3,813	3,093	1,962	1,179	117,492
	Percentage	7.9	7.0	6.7	5.2	4.1	3.2	2.6	1.7	1.0	
New Zealand	Number	143,055	124,311	115,224	88,338	72,114	55,878	46,356	29,124	17,667	1,965,618
	Percentage	7.3	6.3	5.9	4.5	3.7	2.8	2.4	1.5	0.9	

(1) All figures are for the census usually resident population.

Note: This data has been randomly rounded to protect confidentiality.

Individual figures may not add up to totals, and values for the same data may vary in different tables

Table 1.4.2: Population Distribution by Age: Females (2006 Census)

		0–4	5–9	10–14	15–19	20–24	25–29	30–34	35–39	40–44
Southern	Number	7,260	7,575	8,199	7,512	6,183	6,678	8,016	8,976	9,759
	Percentage	6.1	6.3	6.9	6.3	5.2	5.6	6.7	7.5	8.2
New Zealand	Number	134,694	139,956	148,896	147,762	135,894	125,223	145,677	158,553	162,798
	Percentage	6.5	6.8	7.2	7.2	6.6	6.1	7.1	7.7	7.9

		45–49	50–54	55–59	60–64	65–69	70–74	75–79	80–84	85+	Total
Southern	Number	9,492	8,028	7,743	5,907	4,890	4,062	3,627	2,913	2,577	119,397
	Percentage	7.9	6.7	6.5	4.9	4.1	3.4	3.0	2.4	2.2	
New Zealand	Number	150,369	128,421	118,347	91,278	76,434	61,056	54,858	43,113	39,000	2,062,329
	Percentage	7.3	6.2	5.7	4.4	3.7	3.0	2.7	2.1	1.9	

(1) All figures are for the census usually resident population.

Note: This data has been randomly rounded to protect confidentiality.

Individual figures may not add up to totals, and values for the same data may vary in different tables

Table 1.4.3: Population Distribution by Age: Total (2006 Census)

		0–4	5–9	10–14	15–19	20–24	25–29	30–34	35–39	40–44
Southern	Number	14,718	15,624	17,244	15,678	12,753	13,245	15,735	17,244	18,990
	Percentage	6.2	6.6	7.3	6.6	5.4	5.6	6.6	7.3	8.0
New Zealand	Number	275,076	286,488	306,009	300,198	270,978	242,439	276,561	301,554	313,698
	Percentage	6.8	7.1	7.6	7.5	6.7	6.0	6.9	7.5	7.8

		45–49	50–54	55–59	60–64	65–69	70–74	75–79	80–84	85+	Total
Southern	Number	18,735	16,308	15,621	12,027	9,753	7,878	6,717	4,875	3,756	236,889
	Percentage	7.9	6.9	6.6	5.1	4.1	3.3	2.8	2.1	1.6	
New Zealand	Number	293,421	252,729	233,571	179,616	148,545	116,934	101,214	72,237	56,670	4,027,947
	Percentage	7.3	6.3	5.8	4.5	3.7	2.9	2.5	1.8	1.4	

(1) All figures are for the census usually resident population.

Note: This data has been randomly rounded to protect confidentiality.

Individual figures may not add up to totals, and values for the same data may vary in different tables

Table 1.4.4: Female Population by Ethnicity (2006 Census)

Age Group (years)	Māori				Non Māori				Total people stated**				Total people, not elsewhere included***				Total people	
	Southern		New Zealand		Southern		New Zealand		Southern		New Zealand		Southern		New Zealand		Southern	New Zealand
	Number	Percentage*	Number	Percentage*	Number	Percentage*	Number	Percentage*	Number	Percentage*	Number	Percentage*	Number	Percentage*	Number	Percentage*	Number	Number
0–4	1,281	16.1	32,355	25.1	6,687	83.9	96,579	74.9	7,968	97.4	128,934	95.7	210	2.6	5,760	4.3	8,178	134,694
5–9	1,254	14.9	32,544	24.2	7,137	85.1	101,832	75.8	8,391	97.7	134,376	96.0	198	2.3	5,577	4.0	8,592	139,953
10–14	1,143	12.6	32,379	22.6	7,938	87.4	110,901	77.4	9,081	97.7	143,280	96.2	219	2.4	5,613	3.8	9,294	148,893
15–19	1,278	11.5	29,502	20.8	9,864	88.5	112,365	79.2	11,142	97.4	141,867	96.0	297	2.6	5,895	4.0	11,442	147,762
20–24	1,179	10.7	22,434	17.4	9,849	89.3	106,608	82.6	11,028	96.1	129,042	95.0	453	3.9	6,849	5.0	11,478	135,891
25–29	801	10.1	20,529	17.2	7,167	89.9	98,604	82.8	7,968	95.8	119,133	95.1	342	4.1	6,090	4.9	8,313	125,223
30–34	798	8.7	21,384	15.3	8,370	91.3	118,290	84.7	9,168	96.7	139,674	95.9	309	3.3	6,000	4.1	9,477	145,674
35–39	792	8.0	20,790	13.6	9,117	92.0	131,550	86.4	9,909	97.3	152,340	96.1	270	2.7	6,210	3.9	10,182	158,550
40–44	768	7.1	19,905	12.7	10,071	92.9	136,773	87.3	10,839	97.5	156,678	96.2	279	2.5	6,120	3.8	11,118	162,798
45–49	594	5.7	16,926	11.7	9,894	94.3	127,536	88.3	10,488	97.2	144,462	96.1	294	2.7	5,907	3.9	10,785	150,369
50–54	417	4.7	12,597	10.2	8,520	95.3	110,826	89.8	8,937	96.8	123,423	96.1	294	3.2	4,998	3.9	9,231	128,421
55–59	348	4.1	9,762	8.6	8,100	95.9	104,037	91.4	8,448	97.0	113,799	96.2	270	3.1	4,548	3.8	8,712	118,347
60–64	216	3.4	6,717	7.6	6,150	96.6	81,159	92.4	6,366	96.6	87,876	96.3	225	3.4	3,405	3.7	6,591	91,281
65–69	168	3.0	5,310	7.2	5,496	97.0	68,244	92.8	5,664	97.0	73,554	96.2	174	3.0	2,880	3.8	5,838	76,434
70–74	111	2.3	3,471	5.9	4,650	97.7	55,368	94.1	4,761	96.5	58,839	96.4	171	3.5	2,217	3.6	4,932	61,056
75–79	72	1.7	2,190	4.1	4,236	98.3	50,607	95.9	4,308	97.0	52,797	96.2	135	3.0	2,058	3.8	4,440	54,855
80–84	36	1.0	1,074	2.6	3,450	99.0	40,437	97.4	3,486	96.3	41,511	96.3	135	3.7	1,605	3.7	3,621	43,116
85 and over	24	0.8	609	1.6	3,138	99.2	37,002	98.4	3,162	96.0	37,611	96.4	132	4.0	1,389	3.6	3,294	39,000
Total	11,274	8.0	290,469	14.7	129,837	92.0	1,688,736	85.3	141,111	97.0	1,979,205	96.0	4,404	3.0	83,124	4.0	145,515	2,062,329

All figures are for the census usually resident population.

\* Percentages are calculated using 'Total People Stated' as the denominator. These will add up to &gt;100 where individuals have identified as belonging to more than one ethnic group.

\*\*Percentage for 'Total People Stated' and 'Total People not Included Elsewhere' uses 'Total Population as the Denominator

\*\*\*Total People not included elsewhere refers to all those who did not state an ethnicity

Table 1.4.5: Male Population by Ethnicity (2006 Census)

Age Group (years)	Māori				Non Māori				Total people stated**				Total people, not elsewhere included***				Total people	
	Southern		New Zealand		Southern		New Zealand		Southern		New Zealand		Southern		New Zealand		Southern	New Zealand
	Number	Percentage*	Number	Percentage*	Number	Percentage*	Number	Percentage*	Number	Percentage*	Number	Percentage*	Number	Percentage*	Number	Percentage*	Number	Number
0–4	1,440	17.1	34,071	25.3	6,966	82.9	100,671	74.7	8,406	97.8	134,742	96.0	186	2.2	5,640	4.0	8,592	140,382
5–9	1,260	14.3	34,230	24.2	7,569	85.7	106,974	75.8	8,829	97.9	141,204	96.4	192	2.1	5,331	3.6	9,021	146,535
10–14	1,344	13.6	34,347	22.7	8,511	86.4	117,129	77.3	9,855	98.1	151,476	96.4	189	1.9	5,637	3.6	10,044	157,113
15–19	1,368	12.3	29,031	19.9	9,735	87.7	117,156	80.1	11,103	97.2	146,187	95.9	318	2.8	6,252	4.1	11,421	152,439
20–24	1,065	10.1	20,337	16.0	9,516	89.9	107,127	84.0	10,581	95.1	127,464	94.4	549	4.9	7,623	5.6	11,130	135,087
25–29	726	9.4	17,577	15.9	7,005	90.6	92,970	84.1	7,731	95.2	110,547	94.3	387	4.8	6,669	5.7	8,118	117,216
30–34	702	8.0	18,075	14.5	8,040	92.0	106,272	85.5	8,742	96.0	124,347	95.0	366	4.0	6,540	5.0	9,108	130,887
35–39	696	7.7	17,808	13.1	8,301	92.3	118,554	86.9	8,997	96.6	136,362	95.4	324	3.5	6,639	4.6	9,318	143,001
40–44	714	7.0	17,367	12.0	9,555	93.0	126,945	88.0	10,269	96.4	144,312	95.6	381	3.6	6,588	4.4	10,650	150,900
45–49	621	6.1	14,979	10.9	9,618	93.9	122,079	89.1	10,239	96.4	137,058	95.8	381	3.6	5,994	4.2	10,623	143,052
50–54	471	5.1	11,595	9.7	8,793	94.9	107,670	90.3	9,264	96.5	119,265	95.9	336	3.5	5,046	4.1	9,600	124,311
55–59	381	4.5	8,868	8.0	8,112	95.5	101,742	92.0	8,493	96.8	110,610	96.0	279	3.2	4,614	4.0	8,778	115,224
60–64	255	3.9	6,096	7.2	6,306	96.1	78,822	92.8	6,561	96.9	84,918	96.1	207	3.1	3,420	3.9	6,768	88,338
65–69	240	4.4	4,848	7.0	5,214	95.6	64,494	93.0	5,454	96.5	69,342	96.2	195	3.5	2,769	3.8	5,649	72,111
70–74	141	3.2	3,039	5.7	4,218	96.8	50,718	94.3	4,359	96.9	53,757	96.2	147	3.3	2,121	3.8	4,500	55,878
75–79	60	1.6	1,620	3.6	3,612	98.4	42,957	96.4	3,672	96.9	44,577	96.2	123	3.2	1,782	3.8	3,789	46,359
80–84	21	0.9	693	2.5	2,196	99.1	27,219	97.5	2,217	96.3	27,912	95.8	84	3.7	1,212	4.2	2,301	29,124
85 and over	12	1.0	279	1.7	1,224	99.0	16,599	98.3	1,236	95.4	16,878	95.5	60	4.6	789	4.5	1,296	17,667
Total	11,514	8.5	274,860	14.6	124,497	91.5	1,606,098	85.4	136,011	96.7	1,880,958	95.7	4,695	3.3	84,660	4.3	140,706	1,965,618

All figures are for the census usually resident population.

\* Percentages are calculated using 'Total People Stated' as the denominator. These will add up to &gt;100 where individuals have identified as belonging to more than one ethnic group.

\*\*Percentage for 'Total People Stated' and 'Total People not Included Elsewhere' uses 'Total Population as the Denominator

\*\*\*Total People not included elsewhere refers to all those who did not state an ethnicity

Table 1.4.6: Total Population by Ethnicity (2006 Census)

Age Group (years)	Māori				Non Māori				Total people stated**				Total people, not elsewhere included***				Total people	
	Southern		New Zealand		Southern		New Zealand		Southern		New Zealand		Southern		New Zealand		Southern	New Zealand
	Number	Percentage*	Number	Percentage*	Number	Percentage*	Number	Percentage*	Number	Percentage*	Number	Percentage*	Number	Percentage*	Number	Percentage*	Number	Number
0–4	1,440	17.1	66,426	25.2	6,966	82.9	197,250	74.8	8,406	97.8	263,676	95.9	186	2.2	11,400	4.1	8,592	275,076
5–9	1,260	14.3	66,774	24.2	7,569	85.7	208,806	75.8	8,829	97.9	275,580	96.2	192	2.1	10,908	3.8	9,021	286,488
10–14	1,344	13.6	66,726	22.6	8,511	86.4	228,030	77.4	9,855	98.1	294,756	96.3	189	1.9	11,253	3.7	10,044	306,009
15–19	1,368	12.3	58,533	20.3	9,735	87.7	229,521	79.7	11,103	97.2	288,054	96.0	318	2.8	12,144	4.0	11,421	300,198
20–24	1,065	10.1	42,771	16.7	9,516	89.9	213,735	83.3	10,581	95.1	256,506	94.7	549	4.9	14,472	5.3	11,130	270,978
25–29	726	9.4	38,106	16.6	7,005	90.6	191,577	83.4	7,731	95.2	229,683	94.7	387	4.8	12,759	5.3	8,118	242,442
30–34	702	8.0	39,459	14.9	8,040	92.0	224,562	85.1	8,742	96.0	264,021	95.5	366	4.0	12,540	4.5	9,108	276,561
35–39	696	7.7	38,598	13.4	8,301	92.3	250,104	86.6	8,997	96.6	288,702	95.7	324	3.5	12,852	4.3	9,318	301,554
40–44	714	7.0	37,272	12.4	9,555	93.0	263,718	87.6	10,269	96.4	300,990	95.9	381	3.6	12,708	4.1	10,650	313,698
45–49	621	6.1	31,908	11.3	9,618	93.9	249,612	88.7	10,239	96.4	281,520	95.9	381	3.6	11,901	4.1	10,623	293,421
50–54	471	5.1	24,192	10.0	8,793	94.9	218,496	90.0	9,264	96.5	242,688	96.0	336	3.5	10,044	4.0	9,600	252,732
55–59	381	4.5	18,630	8.3	8,112	95.5	205,779	91.7	8,493	96.8	224,409	96.1	279	3.2	9,162	3.9	8,778	233,571
60–64	255	3.9	12,816	7.4	6,306	96.1	159,975	92.6	6,561	96.9	172,791	96.2	207	3.1	6,825	3.8	6,768	179,616
65–69	240	4.4	10,158	7.1	5,214	95.6	132,741	92.9	5,454	96.5	142,899	96.2	195	3.5	5,646	3.8	5,649	148,545
70–74	141	3.2	6,510	5.8	4,218	96.8	106,086	94.2	4,359	96.9	112,596	96.3	147	3.3	4,338	3.7	4,500	116,934
75–79	60	1.6	3,807	3.9	3,612	98.4	93,567	96.1	3,672	96.9	97,374	96.2	123	3.2	3,840	3.8	3,789	101,214
80–84	21	0.9	1,764	2.5	2,196	99.1	67,659	97.5	2,217	96.3	69,423	96.1	84	3.7	2,814	3.9	2,301	72,237
85 and over	12	1.0	888	1.6	1,224	99.0	53,604	98.4	1,236	95.4	54,492	96.2	60	4.6	2,178	3.8	1,296	56,670
Total	11,514	8.5	565,326	14.6	124,497	91.5	3,294,837	85.4	136,011	96.7	3,860,163	95.8	4,695	3.3	167,784	4.2	140,706	4,027,947

All figures are for the census usually resident population.

\* Percentages are calculated using 'Total People Stated' as the denominator. These will add up to >100 where individuals have identified as belonging to more than one ethnic group.

\*\*Percentage for 'Total People Stated' and 'Total People not Included Elsewhere' uses 'Total Population as the Denominator

\*\*\*Total People not included elsewhere refers to all those who did not state an ethnicity

Table 1.4.7: Population Distribution by Birthplace (2006 Census)

		Birthplace										
Location	Unit	New Zealand	Australia(1)	Pacific Islands(2)	United Kingdom and Ireland	Europe (excluding UK and Ireland)	North America	Asia	Other	Total Overseas	Not elsewhere included(3)	Total
Southern	Number	239,883	4,740	1,794	14,034	3,828	2,067	6,684	2,841	35,997	10,341	286,221
	Percentage	83.8	1.7	0.6	4.9	1.3	0.7	2.3	1.0	12.6	3.6	
New Zealand	Number	2,960,217	62,742	135,852	251,688	68,067	26,940	251,130	83,121	879,546	188,187	4,027,947
	Percentage	73.5	1.6	3.4	6.2	1.7	0.7	6.2	2.1	21.8	4.7	

All figures are for the census usually resident population.

(1) Includes Australian Territories.

(2) Includes Melanesia, Micronesia and Polynesia. (3)

includes Inadequately Described and Not Stated.

Note: This data has been randomly rounded to protect confidentiality.

Individual figures may not add up to totals, and values for the same data may vary in different tables.

Table 1.5.1: Legal Marital Status (2006 Census)

		Legal Marital Status						
Location	Unit	Never married and never joined in a civil union	Married (not separated)	Separated(2)	Divorced	Widowed or bereaved civil union partner	Not elsewhere included(3)	Total
Southern	Number	76,119	105,132	7,218	14,997	14,109	14,919	232,494
	Percentage	32.7	45.2	3.1	6.5	6.1	6.4	
New Zealand	Number	991,323	1,414,533	108,225	222,138	174,813	249,336	3,160,371
	Percentage	31.4	44.8	3.4	7.0	5.5	7.9	

(1) All figures are for the census usually resident population aged 15 years and over.

(2) Includes people who are still legally married but permanently separated. This also applies to civil unions.

(3) Includes Joined in a Civil Union (Not Separated), Response Unidentifiable and Not Stated. For further

Note: This data has been randomly rounded to protect confidentiality. Individual figures may not add up to totals, and values for the same data may vary in different tables.

Table 1.5.2: Social Marital Status (2006 Census)

		Social Marital Status											
Location	Unit	Partnered				Non-partnered						Not stated	Total
		Partnered, not further defined <sup>(2)</sup>	Spouse <sup>(3)</sup>	Other partnership <sup>(4)</sup>	Total partnered	Non-partnered, not further defined	Non-partnered, never married and never joined in a civil union	Non-partnered, separated <sup>(5)</sup>	Non-partnered, divorced	Non-partnered, widowed or bereaved civil union partner	Total non-partnered		
Southern	Number	2,940	103,344	27,816	134,106	5,061	54,312	5,127	9,033	11,982	85,512	12,882	232,497
	Percentage	1.3	44.4	12.0	57.7	2.2	23.4	2.2	3.9	5.2	36.8	5.5	
New Zealand	Number	48,177	1,381,293	379,956	1,809,426	86,733	693,597	78,960	137,205	147,381	1,143,873	207,075	3,160,371
	Percentage	2.7	76.3	21.0	57.3*	7.6	60.6	6.9	12.0	12.9	36.2*	6.6	

\* % of total - 'not stated'

(1) All figures are for the census usually resident population aged 15 years and over.

(2) Includes Partnered, Not Further Defined and Civil Union Partner. For further information, refer to the social marital status variable on the 2006 Census Information About Data web page: <http://www.stats.govt.nz/census/>.

(3) Applies only to married people, not those in civil unions.

(4) Living as Married: ie in a consensual union, de facto relationship etc.

(5) Includes people who are still legally married but permanently separated. Includes civil unions.

Note: This data has been randomly rounded to protect confidentiality. Individual figures may not add up to totals, and values for the same data may vary in different tables.

Table 1.5.3: Family Type (2006 Census)

		Family Type			
Location	Unit	Couple without children	Couple with child(ren)	One parent with child(ren)	Total
Southern	Number	34,527	29,724	10,728	74,979
	Percentage	46.0	39.6	14.3	
New Zealand	Number	425,973	447,894	193,635	1,067,502
	Percentage	39.9	42.0	18.1	

(1) All figures are for families in private occupied dwellings.

Note: This data has been randomly rounded to protect confidentiality. Individual figures may not add up to totals, and values for the same data may vary in different tables.



Table 1.5.4: Household Composition (2006 Census)

		Household composition						
Location	Unit	One-family household (with or without other people)	Two-family household (with or without other people)	Three-or-more family household (with or without other people)	Other multiperson household	One-person household	Household composition unidentifiable	Total
Southern	Number	72,639	1,116	36	6,732	28,023	1,290	109,839
	Percentage	66.1	1.0	0.0	6.1	25.5	1.2	
New Zealand	Number	985,542	37,083	2,526	72,657	328,299	28,065	1,454,175
	Percentage	67.8	2.6	0.2	5.0	22.6	1.9	

(1) All figures are for households in private occupied dwellings.

Note: This data has been randomly rounded to protect confidentiality.

Individual figures may not add up to totals, and values for the same data may vary in different tables.

Table 1.5.5: Number of Languages Spoken (2006 Census)

		Number of Languages Spoken								
Location	Unit	None	One	Two	Three	Four	Five	Six	Not elsewhere included(2)	Total
Southern	Number	4,509	246,366	19,791	3,405	909	261	54	10,926	286,221
	Percentage	1.6	86.1	6.9	1.2	0.3	0.1	0.0	3.8	
New Zealand	Number	75,198	3,083,904	562,446	83,400	19,281	5,055	1,476	197,190	4,027,947
	Percentage	1.9	76.6	14.0	2.1	0.5	0.1	0.0	4.9	

(1) All figures are for the census usually resident population.

(2) Includes Response Unidentifiable, Response Outside Scope and Not Stated.

Note: This data has been randomly rounded to protect confidentiality.

Individual figures may not add up to totals, and values for the same data may vary in different tables.

Table 1.5.6: Number of children born by age group of mother (2006 Census)

Location	Unit	Age Group (Years) of Mother									
		15–19		20–24		25–29		30–34		35–39	
		Number	Percentage	Number	Percentage	Number	Percentage	Number	Percentage	Number	Percentage
Southern	No children	10,341	29.1	8,940	36.5	4,620	18.9	3,018	12.3	1,905	7.8
	One child	213	2.0	1,023	15.1	1,353	19.9	1,788	26.3	1,479	21.8
	Two children	24	0.1	348	2.1	1,086	6.4	2,496	14.8	3,426	20.3
	Three children	6	0.0	78	0.6	390	3.1	1,017	8.1	1,815	14.5
	Four children	3	0.0	21	0.4	90	1.5	297	5.1	552	9.5
	Five children	-	-	3	0.1	21	1.0	75	3.4	171	7.8
	Six or more children	-	-	9	0.6	15	1.0	33	2.2	87	5.9
	Object to answering	162	4.7	213	9.9	168	7.8	270	12.6	336	15.6
	Not elsewhere included(2)	687	10.0	837	19.8	567	13.4	483	11.4	414	9.8
	Total	11,442	9.6	11,478	15.0	8,313	10.9	9,477	12.4	10,179	13.3
New Zealand	No children	255,120	27.7	194,856	42.2	130,200	28.2	92,028	20.0	57,672	12.5
	One child	8,364	2.4	31,554	17.8	43,062	24.3	58,404	33.0	50,130	28.3
	Two children	1,218	0.2	12,792	3.4	32,460	8.7	68,430	18.3	100,926	27.0
	Three children	138	0.0	3,162	1.2	13,086	5.2	28,980	11.4	49,668	19.6
	Four children	48	0.0	720	0.6	4,404	3.6	10,890	9.0	18,516	15.3
	Five children	18	0.0	144	0.3	1,434	2.9	3,978	8.1	7,008	14.2
	Six or more children	72	0.1	144	0.3	696	1.6	2,532	5.9	5,226	12.3
	Object to answering	4,380	4.8	4,752	10.4	5,076	11.1	7,140	15.6	8,892	19.5
	Not elsewhere included(2)	26,166	11.4	23,664	20.7	20,034	17.5	18,972	16.6	19,068	16.7
	Total	295,524	9.0	271,782	16.6	250,452	15.3	291,348	17.8	317,100	19.3

Location	Unit	Age Group (Years) of Mother									
		40–44		45–49		50–54		55–59		60–64	
		Number	Percentage	Number	Percentage	Number	Percentage	Number	Percentage	Number	Percentage
Southern	No children	1,521	6.2	1,200	4.9	867	3.5	687	2.8	465	1.9
	One child	1,212	17.9	963	14.2	711	10.5	567	8.4	342	5.0
	Two children	3,771	22.3	3,693	21.9	3,105	18.4	2,715	16.1	1,767	10.5
	Three children	2,478	19.9	2,613	20.9	2,409	19.3	2,475	19.8	1,839	14.7
	Four children	888	15.2	990	17.0	951	16.3	1,071	18.4	1,041	17.9
	Five children	246	11.2	297	13.6	279	12.7	291	13.3	384	17.5
	Six or more children	138	9.3	153	10.3	129	8.7	147	9.9	201	13.5
	Object to answering	414	19.3	423	19.7	342	15.9	363	16.9	204	9.5
	Not elsewhere included(2)	447	10.6	459	10.8	441	10.4	411	9.7	351	8.3
	Total	11,118	14.5	10,788	14.1	9,231	12.1	8,712	11.4	6,591	8.6
New Zealand	No children	44,436	9.6	36,258	7.9	27,294	5.9	21,570	4.7	14,724	3.2
	One child	41,424	23.4	32,238	18.2	23,802	13.4	18,576	10.5	11,394	6.4
	Two children	107,382	28.7	96,738	25.9	83,958	22.4	77,142	20.6	52,680	14.1
	Three children	62,370	24.6	64,422	25.4	58,902	23.3	57,798	22.8	46,290	18.3
	Four children	24,768	20.4	27,024	22.3	24,522	20.2	24,282	20.0	23,208	19.1
	Five children	9,138	18.6	9,294	18.9	8,232	16.7	8,442	17.2	8,862	18.0
	Six or more children	6,762	15.9	6,720	15.8	5,742	13.5	5,820	13.7	7,476	17.6
	Object to answering	10,314	22.6	10,002	21.9	8,916	19.5	8,952	19.6	6,702	14.7
	Not elsewhere included(2)	18,990	16.6	18,042	15.8	15,468	13.5	14,112	12.3	11,226	9.8
	Total	325,596	19.9	300,738	18.4	256,842	15.7	236,694	14.4	182,556	11.1

		Age Group (Years) of Mother										
Location	Unit	65–69		70–74		75–79		80–84		85 and over		Total
		Number	Percentage	Number	Percentage	Number	Percentage	Number	Percentage	Number	Percentage	Number
Southern	No children	417	1.7	360	1.5	387	1.6	330	1.3	423	1.7	35,562
	One child	240	3.5	216	3.2	249	3.7	237	3.5	273	4.0	10,836
	Two children	1,248	7.4	858	5.1	669	4.0	729	4.3	591	3.5	26,526
	Three children	1,539	12.3	1,173	9.4	828	6.6	825	6.6	561	4.5	20,121
	Four children	1,038	17.8	951	16.3	630	10.8	576	9.9	426	7.3	9,615
	Five children	483	22.1	537	24.5	345	15.8	333	15.2	216	9.9	3,738
	Six or more children	360	24.2	417	28.1	375	25.3	387	26.1	243	16.4	2,721
	Object to answering	192	8.9	114	5.3	99	4.6	81	3.8	72	3.4	3,468
	Not elsewhere included(2)	318	7.5	294	6.9	354	8.4	336	7.9	483	11.4	6,864
	Total	5,841	7.6	4,932	6.4	3,933	5.1	3,828	5.0	3,294	4.3	119,448
New Zealand	No children	11,322	2.5	9,324	2.0	9,744	2.1	8,694	1.9	9,180	2.0	922,434
	One child	8,076	4.6	6,432	3.6	6,594	3.7	6,504	3.7	7,722	4.4	354,276
	Two children	35,766	9.6	23,856	6.4	20,748	5.5	17,574	4.7	16,338	4.4	747,996
	Three children	38,460	15.2	27,906	11.0	23,598	9.3	17,694	7.0	14,106	5.6	506,580
	Four children	24,096	19.9	20,670	17.0	17,766	14.7	12,144	10.0	9,414	7.8	242,472
	Five children	10,338	21.0	10,806	22.0	9,342	19.0	6,588	13.4	4,770	9.7	98,376
	Six or more children	9,828	23.1	11,160	26.2	10,728	25.2	7,230	17.0	5,058	11.9	85,188
	Object to answering	5,082	11.1	3,738	8.2	3,084	6.7	2,322	5.1	2,088	4.6	91,434
	Not elsewhere included(2)	9,894	8.6	8,232	7.2	8,112	7.1	7,488	6.5	9,336	8.2	228,798
	Total	152,868	9.3	122,112	7.5	109,716	6.7	86,226	5.3	78,000	4.8	3,277,566

(1) All figures are for the female census usually resident population aged 15 years and over.

(2) Includes Response Unidentifiable and Not Stated.

C= Confidential

Table 1.5.7: Individuals engaged in unpaid activities: Male (2006 Census)

		Unpaid Activity: Male									
Location	Unit	No activities	Household work, cooking, repairs, gardening, etc, for own household	Looking after a child who is a member of own household	Looking after a member of own household who is ill or has a disability	Looking after a child who does not live in own household	Helping someone who is ill or has a disability who does not live in own household	Other helping or voluntary work for or through any organisation, group or marae	Total people stated	Total people, not elsewhere included(3)	Total people
Southern	Number	14,262	85,074	25,998	6,186	11,565	6,738	16,308	102,717	10,332	113,046
	Percentage	13.9	82.8	25.3	6.0	11.3	6.6	15.9			
New Zealand	Number	321,252	2,446,833	897,915	221,226	460,143	258,705	437,241	2,843,052	317,319	3,160,374
	Percentage	10.2	77.4	28.4	7.0	14.6	8.2	13.8			

(1) All figures are for the census usually resident population aged 15 years and over

(2) Includes all of the people who stated each unpaid activity, whether as their only unpaid activity or as one of several unpaid activities. Where a person reported more than one unpaid activity, they have been counted in each applicable group.

(3) Includes Response Unidentifiable and Not Stated.

Note: This data has been randomly rounded to protect confidentiality.

Individual figures may not add up to totals, and values for the same data may vary in different tables.

Table 1.5.8: Individuals engaged in unpaid activities: Female (2006 Census)

		Unpaid Activity: Female									
Location	Unit	No activities	Household work, cooking, repairs, gardening, etc, for own household	Looking after a child who is a member of own household	Looking after a member of own household who is ill or has a disability	Looking after a child who does not live in own household	Helping someone who is ill or has a disability who does not live in own household	Other helping or voluntary work for or through any organisation, group or marae	Total people stated	Total people, not elsewhere included(3)	Total people
Southern	Number	8,616	98,463	35,067	9,411	23,487	12,957	20,400	109,182	10,266	119,451
	Percentage	7.9	90.2	32.1	8.6	21.5	11.9	18.7			
New Zealand	Number	321,252	2,446,833	897,915	221,226	460,143	258,705	437,241	2,843,052	317,319	3,160,374
	Percentage	10.2	77.4	28.4	7.0	14.6	8.2	13.8			

(1) All figures are for the census usually resident population aged 15 years and over

(2) Includes all of the people who stated each unpaid activity, whether as their only unpaid activity or as one of several unpaid activities. Where a person reported more than one unpaid activity, they have been counted in each applicable group.

(3) Includes Response Unidentifiable and Not Stated.

Note: This data has been randomly rounded to protect confidentiality.

Individual figures may not add up to totals, and values for the same data may vary in different tables.

Table 1.5.9: Individuals engaged in unpaid activities: Total (2006 Census)

		Unpaid Activity: Total									
Location	Unit	No activities	Household work, cooking, repairs, gardening, etc, for own household	Looking after a child who is a member of own household	Looking after a member of own household who is ill or has a disability	Looking after a child who does not live in own household	Helping someone who is ill or has a disability who does not live in own household	Other helping or voluntary work for or through any organisation, group or marae	Total people stated	Total people, not elsewhere included(3)	Total people
Southern	Number	22,881	183,537	61,071	15,597	35,049	19,698	36,708	211,902	20,598	232,497
	Percentage	10.8	86.6	28.8	7.4	16.5	9.3	17.3			
New Zealand	Number	321,252	2,446,833	897,915	221,226	460,143	258,705	437,241	2,843,052	317,319	3,160,374
	Percentage	10.2	77.4	28.4	7.0	14.6	8.2	13.8			

(1) All figures are for the census usually resident population aged 15 years and over

(2) Includes all of the people who stated each unpaid activity, whether as their only unpaid activity or as one of several unpaid activities. Where a person reported more than one unpaid activity, they have been counted in each applicable group.

(3) Includes Response Unidentifiable and Not Stated.

Note: This data has been randomly rounded to protect confidentiality.

Individual figures may not add up to totals, and values for the same data may vary in different tables.

Table 1.6.1: Highest Qualification Gained (2006 Census)

Location	Unit	Highest qualification						
		No qualification	Level 1 certificate gained at school	Level 2 certificate gained at school	Level 3 or 4 certificate gained at school	Overseas secondary school qualification	Level 1, 2 or 3 certificate gained post- school	Level 4 certificate gained post-school
Southern	Number	57,657	30,240	19,104	16,998	6,999	9,501	22,980
	Percentage	24.8	13.0	8.2	7.3	3.0	4.1	9.9
New Zealand	Number	708,432	386,073	263,850	170,055	172,590	128,619	286,599
	Percentage	22.4	12.2	8.3	5.4	5.5	4.1	9.1

Location	Unit	Highest qualification							
		Level 5 diploma	Level 6 diploma	Bachelor degree and level 7 qualifications	Post-graduate and honours degree	Masters degree	Doctorate degree	Not elsewhere included(3)	Total
Southern	Number	7,428	10,668	19,764	4,062	3,201	1,659	22,230	232,497
	Percentage	3.2	4.6	8.5	1.7	1.4	0.7	9.6	
New Zealand	Number	110,496	157,869	315,846	55,458	59,703	16,770	328,014	3,160,371
	Percentage	3.5	5.0	10.0	1.8	1.9	0.5	10.4	

(1) All figures are for the census usually resident population aged 15 years and over.

(2) In 2006, Highest Qualification data has been output in two different ways. The categories in this table show Highest Qualification in a way that can be compared with data from previous census.

(3) Includes Highest Qualification Unidentifiable and Not Stated.

Note: This data has been randomly rounded to protect confidentiality. Individual figures may not add up to totals, and values for the same data may vary in different tables.

Table 1.6.2: Total Personal Income (2006 Census)

Location	Unit	Total personal income							
		Loss	Zero income	\$1–\$5,000	\$5,001– \$10,000	\$10,001– \$15,000	\$15,001– \$20,000	\$20,001– \$25,000	\$25,001– \$30,000
Southern	Number	1,335	7,530	18,918	19,626	30,132	21,459	17,577	17,079
	Percentage	0.6	3.2	8.1	8.4	13.0	9.2	7.6	7.3
New Zealand	Number	17,355	145,053	221,166	226,797	355,899	260,082	219,657	215,301
	Percentage	0.5	4.6	7.0	7.2	11.3	8.2	7.0	6.8

Location	Unit	Total personal income							
		\$30,001– \$35,000	\$35,001– \$40,000	\$40,001– \$50,000	\$50,001– \$70,000	\$70,001– \$100,000	\$100,001 or more	Not stated	Total
Southern	Number	16,023	15,246	18,387	18,177	6,636	5,094	19,269	232,497
	Percentage	6.9	6.6	7.9	7.8	2.9	2.2	8.3	
New Zealand	Number	201,300	202,770	262,299	281,157	125,118	105,525	320,892	3,160,371
	Percentage	6.4	6.4	8.3	8.9	4.0	3.3	10.2	

(1) All figures are for the census usually resident population aged 15 years and over.

(2) Total personal income relates to the 12 months ending 31 March 2006.

Note: This data has been randomly rounded to protect confidentiality. Individual figures may not add up to totals, and values for the same data may vary in different tables.

Table 1.6.3: Sources of Personal Income (2006 Census)

Sources of Personal Income								
Location	Unit	No source of income during that time	Wages, salary, commissions, bonuses etc	Self-employment or business	Interest, dividends, rent, other investments	Payments from a work accident insurer	NZ Superannuation or veterans pension	Other Superannuation, pensions, annuities
Southern	Number	9,099	138,132	38,781	56,739	4,440	36,573	5,778
	Percentage	3.9	59.4	16.7	24.4	1.9	15.7	2.5
New Zealand	Number	175,680	1,775,343	492,024	714,732	45,114	439,686	83,265
	Percentage	5.6	56.2	15.6	22.6	1.4	13.9	2.6

Sources of Personal Income										
Location	Unit	Unemployment benefit	Sickness benefit	Domestic purposes benefit	Invalids benefit	Student allowance	Other government benefits, payments or pension	Other sources of income	Not stated	Total
Southern	Number	7,278	4,392	4,950	6,147	6,696	6,777	5,949	11,388	232,497
	Percentage	3.1	1.9	2.1	2.6	2.9	2.9	2.6	4.9	
New Zealand	Number	92,169	70,554	93,090	75,357	64,284	96,357	66,411	198,135	3,160,371
	Percentage	2.9	2.2	2.9	2.4	2.0	3.0	2.1	6.3	

(1) All figures are for the census usually resident population aged 15 years and over.

(2) Sources of personal income relates to the 12 months ending 7 March 2006.

(3) Includes all of the people who stated each source of personal income, whether as their only source of personal income or as one of several sources of personal income.

Where a person reported more than one source of personal income, they have been counted in each applicable group.

Note: This data has been randomly rounded to protect confidentiality.

Individual figures may not add up to totals, and values for the same data may vary in different tables.

Table 1.6.4: Work and Labour Force Status (2006 Census)

Work and Labour Force Status (2006 Census)									
Location	Unit	Employed full time	Employed part time	Total employed	Unemployed	Total labour force	Not in the labour force	Work and labour force status unidentifiable	Total
Southern	Number	113,154	36,144	149,301	6,636	155,931	71,295	5,271	232,497
	Percentage	75.8	24.2	95.7	4.3	67.1	30.7	2.3	
New Zealand	Number	1,531,020	454,758	1,985,775	106,497	2,092,275	961,788	106,311	3,160,371
	Percentage	77.1	22.9	94.9	5.1	66.2	30.4	3.4	

(1) All figures are for the census usually resident population aged 15 years and over.

Note: This data has been randomly rounded to protect confidentiality.

Individual figures may not add up to totals, and values for the same data may vary in different tables.



Table 1.6.5: Occupation - ANZSCO V1.0 Major Group (2006 Census)

Location	Unit	Occupation (ANZSCO)									Total
		Managers	Professionals	Technicians and trades workers	Community and personal service workers	Clerical and administrative workers	Sales workers	Machinery operators and drivers	Labourers	Not elsewhere included(3)	
Southern	Number	25,746	23,424	19,257	12,888	15,489	13,191	8,664	22,935	7,710	149,298
	Percentage	17.2	15.7	12.9	8.6	10.4	8.8	5.8	15.4	5.2	
New Zealand	Number	340,530	374,328	241,857	156,468	240,813	186,057	114,324	218,991	112,404	1,985,775
	Percentage	17.1	18.9	12.2	7.9	12.1	9.4	5.8	11.0	5.7	

(1) All figures are for the employed census usually resident population aged 15 years and over.

(2) Australian and New Zealand Standard Classification of Occupations (ANZSCO V1.0).

(3) Includes Response Unidentifiable, Response Outside Scope and Not Stated.

Note: This data has been randomly rounded to protect confidentiality.

Individual figures may not add up to totals, and values for the same data may vary in different tables.

Table 1.6.6: Access to Telecommunications (2006 Census)

Location	Unit	Type of Telecommunication							
		Access to a cellphone / mobile phone	Access to a telephone	Access to a fax machine	Access to the Internet	No access to telecommunication systems	Total households stated	Total households, not elsewhere included(3)	Total households
Southern	Number	78,531	98,340	25,995	61,476	1,722	106,560	3,273	109,833
	Percentage	71.5	89.5	23.7	56.0	1.6	97.0	3.0	
New Zealand	Number	1,034,529	1,277,325	362,040	843,738	28,407	1,393,707	60,468	1,454,175
	Percentage	71.1	87.8	24.9	58.0	2.0	95.8	4.2	

(1) All figures are for households in private occupied dwellings.

(2) Households reporting more than one means of access to telecommunication systems have been counted in each stated category. Therefore the total number of responses in the table will be greater than the total number of households.

(3) Includes Response Unidentifiable and Not Stated.

Note: This data has been randomly rounded to protect confidentiality.

Individual figures may not add up to totals, and values for the same data may vary in different tables.

Table 1.6.7: Number of Motor Vehicles per Household (2006 Census)

Location	Unit	Number of Motor Vehicles					Total
		No motor vehicle	One motor vehicle	Two motor vehicles	Three or more motor vehicles	Not elsewhere included(2)	
Southern	Number	9,249	39,534	39,741	18,015	3,297	109,836
	Percentage	8.4	36.0	36.2	16.4	3.0	
New Zealand	Number	112,758	527,844	531,627	222,204	59,745	1,454,175
	Percentage	7.8	36.3	36.6	15.3	4.1	

(1) All figures are for households in private occupied dwellings.

(2) Includes Response Unidentifiable and Not Stated.

Individual figures may not add up to totals, and values for the same data may vary in different tables.

Table 1.6.8: Housing Tenure (2006 Census)

		Housing Tenure			
		Dwelling owned or partly owned by usual resident(s)			
Location	Unit	Mortgage arrangements not further defined	Mortgage payments made by owner/ usual resident(s)	Mortgage payments not made by owner/ usual resident(s)	Total, dwelling owned or partly owned by usual resident(s)
Southern	Number	2,166	30,234	25,674	58,077
	Percentage	3.7	52.1	44.2	
New Zealand	Number	26,529	405,267	312,162	743,955
	Percentage	3.6	54.5	42.0	

		Housing Tenure			
		Dwelling not owned by usual resident(s)			
Location	Unit	Rental arrangements not further defined	Rent payments made by usual residents	Rent payments not made by usual residents	Total, dwelling not owned or partly owned by usual resident(s)
Southern	Number	480	25,323	4,890	30,696
	Percentage	1.6	82.5	15.9	
New Zealand	Number	6,315	388,275	57,378	451,965
	Percentage	1.4	85.9	12.7	

		Housing Tenure					
		Dwelling held in a family trust by usual resident(s) <sup>(2)</sup>				Not elsewhere included <sup>(3)</sup>	Total
Location	Unit	Mortgage arrangements not further defined	Mortgage payments made by usual residents	Mortgage payments not made by usual residents	Total, dwelling held in a family trust by usual resident(s)		
Southern	Number	1,335	5,220	8,571	15,126	5,937	109,836
	Percentage	8.8	34.5	56.7		5.4	
New Zealand	Number	13,386	72,828	81,711	167,925	90,333	2,818,029
	Percentage	8.0	43.4	48.7		3.2	

(1) 'Tenure of household' refers to the nature of the occupancy of a household in a private dwelling, at the time of the survey. It does not refer to the tenure of the land on which the dwelling is situated.

(2) Information on family trusts was first collected in 2006.

(3) Includes Response Unidentifiable and Not Stated

Note: This data has been randomly rounded to protect confidentiality.

Individual figures may not add up to totals, and values for the same data may vary in different tables.

# Appendix 2

## Mortality Tables (2006-2008)

**NOTE A:** Counts less than 5 have ASR's presented as "0.0" or "#N/A"

**NOTE B:** There are two comparisons being made in the following tables

1. Māori Age-Standardised Rate against non-Māori Age-Standardised Rate  
within the District Health Board:

**Māori ASR statistically significantly higher than non-Māori ASR within DHB**

Māori ASR statistically significantly lower than non-Māori ASR within DHB

2. District Health Board Age-Standardised Rate  
against New Zealand Age-Standardised Rate:

**DHB ASR statistically significantly higher than national ASR**

DHB ASR statistically significantly lower than national ASR

Key:

*DHB = District Health Board*

*ASR = Age-Standardised Rate*

Table 2.1.1: Avoidable mortality, 0-74 years, age-standardised rates per 100,000 (and 95% confidence intervals), 2006-08

		Māori		non-Māori		Total	
		ASR	95% confidence	ASR	95% confidence	ASR	95% confidence
Southern	Female	168.5	-52.9 - 389.9	81.8	40.7 - 122.9	88.2	46.6 - 129.7
	Male	224.8	-15.7 - 465.3	133.9	81.9 - 185.9	138.8	88.5 - 189.1
	Total	196.4	34.0 - 358.8	107.5	74.4 - 140.5	113.1	80.6 - 145.6
New Zealand	Female	214.6	168.7 - 260.5	74.2	63.5 - 84.8	88.9	78.2 - 99.6
	Male	308.9	251.4 - 366.5	122.9	109.1 - 136.7	142.4	128.6 - 156.1
	Total	259.8	223.3 - 296.3	98.1	89.4 - 106.8	115.1	106.4 - 123.8

Table 2.1.2: All cardiovascular disease mortality, all ages, age-standardised rates per 100,000 (and 95% confidence intervals), 2006-08

		Māori		non-Māori		Total	
		ASR	95% confidence	ASR	95% confidence	ASR	95% confidence
Southern	Female	79.3	-64.4 - 222.9	38.0	22.2 - 53.7	39.2	23.5 - 54.9
	Male	119.1	-54.3 - 292.6	68.1	41.9 - 94.3	70.9	44.9 - 96.8
	Total	113.6	-15.8 - 243.0	52.5	37.4 - 67.6	54.5	39.5 - 69.5
New Zealand	Female	91.0	62.8 - 119.2	35.5	31.1 - 39.9	39.9	35.3 - 44.5
	Male	154.4	113.5 - 195.3	61.8	55.2 - 68.5	69.5	62.5 - 76.4
	Total	120.9	96.7 - 145.1	48.0	44.1 - 51.9	54.0	49.9 - 58.1

Table 2.1.3: Ischaemic heart disease mortality, 25+ years, age-standardised rates per 100,000 (and 95% confidence intervals), 2006-08

		Māori		non-Māori		Total	
		ASR	95% confidence	ASR	95% confidence	ASR	95% confidence
Southern	Female	71.8	-18.4 - 162.0	39.8	30.0 - 49.6	40.6	30.8 - 50.5
	Male	160.5	24.9 - 296.1	86.6	67.6 - 105.5	90.8	71.5 - 110.0
	Total	133.0	40.0 - 226.0	62.3	51.8 - 72.8	64.8	54.2 - 75.5
New Zealand	Female	100.9	81.1 - 120.8	35.4	32.8 - 38.1	40.3	37.4 - 43.1
	Male	215.7	183.2 - 248.1	83.4	78.2 - 88.5	93.7	88.4 - 99.1
	Total	154.3	136.0 - 172.6	58.0	55.2 - 60.8	65.5	62.5 - 68.4

Table 2.1.4: Stroke mortality, 25+ years, age-standardised rates per 100,000 (and 95% confidence intervals), 2006-08

		Māori		non-Māori		Total	
		ASR	95% confidence	ASR	95% confidence	ASR	95% confidence
Southern	Female	47.8	-27.1 - 122.7	24.8	16.6 - 33.0	25.5	17.1 - 33.8
	Male	31.5	-28.8 - 91.9	26.4	17.0 - 35.8	27.2	17.7 - 36.7
	Total	51.7	-11.3 - 114.8	25.8	19.6 - 32.0	26.6	20.3 - 32.8
New Zealand	Female	42.1	29.2 - 54.9	23.6	21.3 - 25.9	25.3	22.9 - 27.6
	Male	36.6	23.1 - 50.1	24.6	22.0 - 27.2	25.9	23.3 - 28.5
	Total	40.1	30.7 - 49.4	24.3	22.6 - 26.0	25.8	24.0 - 27.5

Table 2.1.5: All cancer mortality, all ages, age-standardised rates per 100,000 (and 95% confidence intervals), 2006-08

		Māori		non-Māori		Total	
		ASR	95% confidence	ASR	95% confidence	ASR	95% confidence
Southern	Female	81.7	-70.9 - 234.2	58.3	32.4 - 84.2	59.4	33.8 - 85.1
	Male	78.4	-59.9 - 216.8	77.0	47.5 - 106.5	77.4	48.8 - 105.9
	Total	85.9	-24.7 - 196.5	66.6	47.1 - 86.1	67.4	48.3 - 86.4
New Zealand	Female	110.5	78.4 - 142.6	55.1	47.9 - 62.3	59.9	52.8 - 67.0
	Male	113.3	78.5 - 148.0	67.9	60.2 - 75.5	71.6	64.1 - 79.1
	Total	111.3	87.9 - 134.7	60.7	55.4 - 65.9	65.0	59.8 - 70.1

Table 2.1.6: Lung cancer mortality, 25+ years, age-standardised rates per 100,000 (and 95% confidence intervals), 2006-08

		Māori		non-Māori		Total	
		ASR	95% confidence	ASR	95% confidence	ASR	95% confidence
Southern	Female	82.0	-20.9 - 184.8	19.8	10.2 - 29.3	21.9	12.0 - 31.9
	Male	56.3	-23.8 - 136.3	34.5	22.6 - 46.5	35.5	23.6 - 47.4
	Total	70.2	3.7 - 136.7	26.6	19.0 - 34.1	28.1	20.5 - 35.8
New Zealand	Female	83.7	65.1 - 102.4	18.9	16.3 - 21.4	24.0	21.2 - 26.8
	Male	75.5	56.6 - 94.4	27.0	24.0 - 30.0	30.6	27.5 - 33.7
	Total	79.7	66.5 - 93.0	22.6	20.6 - 24.5	26.9	24.9 - 29.0

Table 2.1.7: Female breast cancer mortality, 25+ years, age-standardised rates per 100,000 (and 95% confidence intervals), 2006-08

		Māori		non-Māori		Total	
		ASR	95% confidence	ASR	95% confidence	ASR	95% confidence
Southern	Female	0.0	0.0 - 0.0	23.9	12.3 - 35.5	24.1	12.6 - 35.6
New Zealand	Female	42.9	29.4 - 56.4	24.1	20.8 - 27.5	25.9	22.6 - 29.1

Table 2.1.8: Prostate cancer mortality, 25+ years, age-standardised rates per 100,000 (and 95% confidence intervals), 2006-08

		Māori		non-Māori		Total	
		ASR	95% confidence	ASR	95% confidence	ASR	95% confidence
Southern	Male	0.0	0.0 - 0.0	19.0	11.2 - 26.7	19.0	11.3 - 26.7
New Zealand	Male	24.6	13.5 - 35.8	15.5	13.6 - 17.5	16.0	14.1 - 18.0

Table 2.1.9: Cervical cancer mortality, 25+ years, age-standardised rates per 100,000 (and 95% confidence intervals), 2006-08

		Māori		non-Māori		Total	
		ASR	95% confidence	ASR	95% confidence	ASR	95% confidence
Southern	Female	0.0	0.0 - 0.0	2.9	-1.1 - 7.0	3.0	-1.0 - 6.9
New Zealand	Female	6.6	1.2 - 12.0	2.2	1.1 - 3.3	2.6	1.5 - 3.7

Table 2.1.10: Colorectal cancer mortality, 25+ years, age-standardised rates per 100,000 (and 95% confidence intervals), 2006-08

		Māori		non-Māori		Total	
		ASR	95% confidence	ASR	95% confidence	ASR	95% confidence
Southern	Female	0.0	0.0 - 0.0	23.2	13.0 - 33.4	22.8	12.9 - 32.7
	Male	23.9	-26.6 - 74.4	29.5	17.5 - 41.4	29.2	17.7 - 40.7
	Total	18.7	-14.4 - 51.9	26.0	18.2 - 33.8	25.7	18.2 - 33.2
New Zealand	Female	14.6	6.9 - 22.3	17.2	14.7 - 19.6	17.0	14.7 - 19.3
	Male	21.9	11.7 - 32.2	22.3	19.5 - 25.1	22.3	19.6 - 25.0
	Total	18.1	11.8 - 24.4	19.6	17.7 - 21.4	19.5	17.7 - 21.2

Table 2.1.11: Melanoma mortality, 25+ years, age-standardised rates per 100,000 (and 95% confidence intervals), 2006-08

		Māori		non-Māori		Total	
		ASR	95% confidence	ASR	95% confidence	ASR	95% confidence
Southern	Female	0.0	0.0 - 0.0	2.2	-0.7 - 5.2	2.2	-0.7 - 5.0
	Male	0.0	0.0 - 0.0	7.6	0.6 - 14.6	7.3	0.8 - 13.9
	Total	0.0	0.0 - 0.0	4.7	1.0 - 8.4	4.6	1.1 - 8.0
New Zealand	Female	2.0	-0.8 - 4.8	4.7	3.3 - 6.0	4.4	3.1 - 5.7
	Male	2.4	-1.0 - 5.7	10.2	8.1 - 12.3	9.7	7.7 - 11.6
	Total	2.2	0.0 - 4.4	7.3	6.0 - 8.5	6.8	5.7 - 8.0

Table 2.1.12: Unintentional injury mortality, all ages, age-standardised rates per 100,000 (and 95% confidence intervals), 2006-08

		Māori		non-Māori		Total	
		ASR	95% confidence	ASR	95% confidence	ASR	95% confidence
Southern	Female	13.0	-47.2 - 73.1	8.8	-5.5 - 23.1	9.2	-4.6 - 23.0
	Male	56.9	-70.3 - 184.0	24.4	-2.2 - 51.1	27.5	0.5 - 54.4
	Total	34.6	-34.9 - 104.1	16.5	1.4 - 31.6	18.2	3.1 - 33.4
New Zealand	Female	21.2	6.0 - 36.3	7.8	3.8 - 11.8	10.4	6.0 - 14.7
	Male	49.1	25.2 - 73.0	21.6	14.8 - 28.5	26.1	19.1 - 33.0
	Total	34.5	20.7 - 48.4	14.6	10.7 - 18.6	18.1	14.0 - 22.2

Table 2.1.13: Suicide, 5+ years, age-standardised rates per 100,000 (and 95% confidence intervals), 2006-08

		Māori		non-Māori		Total	
		ASR	95% confidence	ASR	95% confidence	ASR	95% confidence
Southern	Female	0.0	0.0 - 0.0	5.4	-5.7 - 16.4	6.1	-5.3 - 17.6
	Male	21.7	-53.4 - 96.7	21.2	-1.2 - 43.6	21.1	-0.1 - 42.3
	Total	16.4	-28.7 - 61.5	13.2	0.8 - 25.6	13.5	1.5 - 25.5
New Zealand	Female	10.0	0.2 - 19.8	5.0	2.1 - 7.9	6.0	3.0 - 9.0
	Male	25.9	9.5 - 42.3	16.5	11.2 - 21.8	18.0	12.9 - 23.2
	Total	17.5	8.2 - 26.8	10.7	7.7 - 13.7	11.9	8.9 - 14.8

Table 2.1.14: Drowning, 0-14 years, age-standardised rates per 100,000 (and 95% confidence intervals), 2006-08

		Māori		non-Māori		Total	
		ASR	95% confidence	ASR	95% confidence	ASR	95% confidence
Southern	Female	0.0	0.0 - 0.0	0.0	0.0 - 0.0	0.0	0.0 - 0.0
	Male	0.0	0.0 - 0.0	0.0	0.0 - 0.0	0.0	0.0 - 0.0
	Total	0.0	0.0 - 0.0	0.0	0.0 - 0.0	0.0	0.0 - 0.0
New Zealand	Female	0.0	0.0 - 0.0	0.7	-0.4 - 1.7	0.7	-0.2 - 1.5
	Male	2.1	-1.0 - 5.3	0.9	-0.3 - 2.1	1.2	0.0 - 2.4
	Total	1.4	-0.4 - 3.2	0.8	0.0 - 1.6	1.0	0.2 - 1.7

Table 2.1.15: Unintentional injury mortality, 15-24 years, age-standardised rate per 100,000 (and 95% confidence intervals), 2006-08

		Māori		non-Māori		Total	
		ASR	95% confidence	ASR	95% confidence	ASR	95% confidence
Southern	Female	0.0	0.0 - 0.0	16.7	7.1 - 26.2	17.9	8.6 - 27.2
	Male	85.4	27.4 - 143.5	40.4	25.8 - 55.0	45.1	30.7 - 59.5
	Total	54.7	21.9 - 87.5	28.5	19.8 - 37.2	31.4	22.8 - 39.9
New Zealand	Female	28.5	21.3 - 35.7	10.3	8.1 - 12.5	14.0	11.8 - 16.3
	Male	64.5	53.3 - 75.6	33.4	29.6 - 37.2	39.0	35.3 - 42.7
	Total	46.0	39.5 - 52.6	22.0	19.8 - 24.2	26.6	24.4 - 28.8

Table 2.1.16: Suicide mortality, 15-24 years, age-standardised rate per 100,000 (and 95% confidence intervals), 2006-08

		Māori		non-Māori		Total	
		ASR	95% confidence	ASR	95% confidence	ASR	95% confidence
Southern	Female	0.0	0.0 - 0.0	0.0	0.0 - 0.0	0.0	0.0 - 0.0
	Male	0.0	0.0 - 0.0	35.7	21.9 - 49.5	35.3	22.6 - 48.1
	Total	30.3	5.9 - 54.7	19.6	12.3 - 26.8	20.7	13.8 - 27.7
New Zealand	Female	19.8	13.8 - 25.8	6.6	4.8 - 8.3	9.2	7.3 - 11.0
	Male	40.1	31.4 - 48.9	23.6	20.4 - 26.8	26.7	23.6 - 29.8
	Total	29.7	24.5 - 35.0	15.2	13.4 - 17.0	18.0	16.2 - 19.8

Table 2.1.17: Ischaemic heart disease mortality, 65+ years, age-standardised rate per 100,000 (and 95% confidence intervals), 2006-08

		Māori		non-Māori		Total	
		ASR	95% confidence	ASR	95% confidence	ASR	95% confidence
Southern	Female	730.5	653.2 - 807.8	456.1	448.4 - 463.9	460.7	452.9 - 468.4
	Male	689.4	613.0 - 765.8	729.6	717.7 - 741.5	732.8	721.0 - 744.5
	Total	912.4	843.2 - 981.6	580.9	574.0 - 587.8	584.9	578.1 - 591.7
New Zealand	Female	893.9	878.3 - 909.5	394.7	392.6 - 396.7	422.3	420.2 - 424.4
	Male	1416.1	1393.1 - 1439.1	728.8	725.4 - 732.2	765.7	762.3 - 769.1
	Total	1123.8	1110.5 - 1137.0	545.4	543.5 - 547.3	577.2	575.2 - 579.1

Table 2.1.18: Stroke mortality, 65+ years, age-standardised rate per 100,000 (and 95% confidence intervals), 2006-08

		Māori		non-Māori		Total	
		ASR	95% confidence	ASR	95% confidence	ASR	95% confidence
Southern	Female	<b>482.1</b>	418.1 - 546.0	264.3	258.5 - 270.1	<b>267.8</b>	262.0 - 273.7
	Male	0.0	0.0 - 0.0	271.4	264.6 - 278.3	<b>271.2</b>	264.5 - 278.0
	Total	<b>467.7</b>	413.5 - 521.9	270.3	265.9 - 274.7	<b>272.1</b>	267.7 - 276.4
New Zealand	Female	339.9	330.4 - 349.4	245.7	244.2 - 247.3	251.4	249.9 - 253.0
	Male	255.5	245.6 - 265.3	257.9	256.0 - 259.8	259.1	257.2 - 261.0
	Total	307.1	300.2 - 314.0	254.5	253.3 - 255.8	258.1	256.9 - 259.4

Table 2.1.19: Lung cancer mortality, 65+ years, age-standardised rate per 100,000 (and 95% confidence intervals), 2006-08

		Māori		non-Māori		Total	
		ASR	95% confidence	ASR	95% confidence	ASR	95% confidence
Southern	Female	<b>627.0</b>	549.2 - 704.8	125.9	120.6 - 131.2	<b>139.0</b>	133.4 - 144.6
	Male	<b>356.8</b>	306.0 - 407.7	281.5	273.4 - 289.6	<b>287.2</b>	279.1 - 295.2
	Total	<b>505.9</b>	457.6 - 554.1	195.3	190.6 - 200.0	<b>205.1</b>	200.3 - 209.9
New Zealand	Female	494.7	482.8 - 506.7	131.6	130.0 - 133.1	153.4	151.8 - 155.0
	Male	501.9	488.6 - 515.1	228.8	226.8 - 230.9	245.3	243.2 - 247.4
	Total	497.3	488.5 - 506.2	175.1	173.8 - 176.4	194.3	193.0 - 195.6

Table 2.1.20: Female breast cancer mortality, 65+ years, age-standardised rate per 100,000 (and 95% confidence intervals), 2006-08

		Māori		non-Māori		Total	
		ASR	95% confidence	ASR	95% confidence	ASR	95% confidence
Southern	Female	0.0	0.0 - 0.0	98.5	94.0 - 103.1	98.2	93.7 - 102.7
New Zealand	Female	174.2	167.1 - 181.3	95.3	94.0 - 96.6	99.8	98.5 - 101.1

Table 2.1.21: Prostate cancer mortality, all ages, age-standardised rate per 100,000 (and 95% confidence intervals), 2006-08

		Māori		non-Māori		Total	
		ASR	95% confidence	ASR	95% confidence	ASR	95% confidence
Southern	Male	0.0	0.0 - 0.0	8.6	0.8 - 16.4	8.6	0.9 - 16.3
New Zealand	Male	11.1	0.0 - 22.3	7.0	5.1 - 9.0	7.3	5.3 - 9.2

Table 2.1.22: Cervical cancer mortality, 65+ years, age-standardised rate per 100,000 (and 95% confidence intervals), 2006-08

		Māori		non-Māori		Total	
		ASR	95% confidence	ASR	95% confidence	ASR	95% confidence
Southern	Female	0.0	0.0 - 0.0	12.8	11.0 - 14.7	<b>14.4</b>	12.5 - 16.3
New Zealand	Female	14.2	12.2 - 16.3	8.1	7.7 - 8.4	8.5	8.1 - 8.8



Table 2.1.23: Colorectal cancer mortality, 65+ years, age-standardised rate per 100,000 (and 95% confidence intervals), 2006-08

		Māori		non-Māori		Total	
		ASR	95% confidence	ASR	95% confidence	ASR	95% confidence
Southern	Female	0.0	0.0 - 0.0	165.4	159.5 - 171.3	164.3	158.4 - 170.1
	Male	0.0	0.0 - 0.0	228.9	221.6 - 236.2	231.5	224.3 - 238.7
	Total	168.3	142.1 - 194.5	193.4	188.8 - 198.0	194.2	189.6 - 198.8
New Zealand	Female	97.5	92.3 - 102.7	133.3	131.8 - 134.8	131.3	129.8 - 132.7
	Male	155.9	148.5 - 163.3	179.8	177.9 - 181.6	178.9	177.1 - 180.7
	Total	125.0	120.6 - 129.4	154.4	153.3 - 155.6	152.9	151.8 - 154.1

Table 2.1.24: Melanoma mortality, 65+ years, age-standardised rate per 100,000 (and 95% confidence intervals), 2006-08

		Māori		non-Māori		Total	
		ASR	95% confidence	ASR	95% confidence	ASR	95% confidence
Southern	Female	0.0	0.0 - 0.0	18.0	16.3 - 19.8	17.7	16.0 - 19.4
	Male	0.0	0.0 - 0.0	41.4	38.7 - 44.2	42.0	39.2 - 44.7
	Total	0.0	0.0 - 0.0	27.6	26.1 - 29.2	27.7	26.2 - 29.2
New Zealand	Female	15.5	13.4 - 17.6	25.8	25.1 - 26.4	25.3	24.7 - 25.9
	Male	14.0	11.8 - 16.2	66.3	65.2 - 67.4	64.1	63.0 - 65.1
	Total	15.4	13.9 - 17.0	43.8	43.2 - 44.4	42.4	41.9 - 43.0

Table 2.1.25: COPD mortality, 65+ years, age-standardised rate per 100,000 (and 95% confidence intervals), 2006-08

		Māori		non-Māori		Total	
		ASR	95% confidence	ASR	95% confidence	ASR	95% confidence
Southern	Female	0.0	0.0 - 0.0	209.3	203.0 - 215.7	209.1	202.8 - 215.3
	Male	349.1	294.4 - 403.7	257.5	250.4 - 264.5	260.9	253.9 - 267.9
	Total	369.1	324.1 - 414.2	224.1	219.5 - 228.8	225.4	220.8 - 230.0
New Zealand	Female	430.9	419.9 - 441.9	146.6	145.2 - 148.1	162.8	161.3 - 164.3
	Male	480.0	466.6 - 493.4	219.1	217.3 - 220.9	231.7	229.9 - 233.6
	Total	444.2	435.9 - 452.5	175.0	173.9 - 176.1	189.4	188.2 - 190.5

Table 2.2.1: Leading causes of avoidable mortality, males and females, 0-74 years, 2006-08

	Southern DHB		New Zealand	
	Condition	ASR	Condition	ASR
Female	Breast cancer (female only)	9.7	Breast cancer (female only)	10.7
	Lung cancer	8.4	Lung cancer	9.3
	Colorectal cancer	8.4	Ischaemic heart disease	8.1
	Ischaemic heart disease	7.3	Colorectal cancer	5.9
	Complications of perinatal period	6.6	Diabetes	5.8
Male	Ischaemic heart disease	25.9	Ischaemic heart disease	27.3
	Suicide and self-inflicted injuries	18.4	Suicide and self-inflicted injuries	15.7
	Motor vehicle accidents	12.9	Motor vehicle accidents	12.3
	Colorectal cancer	10.2	Lung cancer	10.8
	Cerebrovascular diseases	5.9	Diabetes	8.3
Total	Ischaemic heart disease	16.5	Ischaemic heart disease	17.4
	Suicide and self-inflicted injuries	11.8	Suicide and self-inflicted injuries	10.4
	Lung cancer	10.4	Lung cancer	10.0
	Colorectal cancer	9.2	Motor vehicle accidents	8.6
	Motor vehicle accidents	8.7	Diabetes	7.0

Table 2.2.2: Leading causes of avoidable mortality, by ethnicity, 0-74 years, 2006-08

	Southern DHB		New Zealand	
	Condition	ASR	Condition	ASR
Māori	Ischaemic heart disease	39.1	Ischaemic heart disease	51.4
	Lung cancer	28.7	Lung cancer	31.6
	Motor vehicle accidents	17.1	Diabetes	26.8
	Diabetes	14.9	Motor vehicle accidents	17.8
	Suicide and self-inflicted injuries	14.4	Suicide and self-inflicted injuries	15.4
non-Māori	Ischaemic heart disease	15.4	Ischaemic heart disease	14.3
	Suicide and self-inflicted injuries	11.5	Suicide and self-inflicted injuries	9.3
	Lung cancer	9.6	Lung cancer	8.1
	Colorectal cancer	9.4	Motor vehicle accidents	6.7
	Motor vehicle accidents	7.8	Colorectal cancer	6.7

Table 2.2.3: Leading causes of mortality, males and females, 65+ years, 2006-08

	Southern DHB		New Zealand	
	Condition	ASR	Condition	ASR
Female	Ischaemic heart disease	455.8	Ischaemic heart disease	418.5
	Stroke	221.7	Stroke	206.0
	Colorectal cancer	164.3	CORD	172.8
	Lung cancer	139.0	Lung cancer	153.4
	Breast cancer (female only)	98.2	Colorectal cancer	131.3
Male	Ischaemic heart disease	724.0	Ischaemic heart disease	757.4
	Lung cancer	287.2	Lung cancer	245.3
	CORD	265.9	CORD	238.4
	Colorectal cancer	231.5	Stroke	207.5
	Stroke	223.4	Colorectal cancer	178.9
Total	Ischaemic heart disease	578.4	Ischaemic heart disease	571.4
	CORD	233.2	Stroke	210.0
	Stroke	225.5	CORD	197.9
	Lung cancer	205.1	Lung cancer	194.3
	Colorectal cancer	194.2	Colorectal cancer	152.9

Table 2.2.4: Leading causes of mortality, by ethnicity, 65+ years, 2006-08

	Southern DHB		New Zealand	
	Condition	ASR	Condition	ASR
Māori	Ischaemic heart disease	846.9	Ischaemic heart disease	1109.6
	Lung cancer	505.9	Lung cancer	497.3
	CORD	369.1	CORD	465.0
	Stroke	333.6	Diabetes	389.4
	Diabetes	237.7	Stroke	247.1
non-Māori	Ischaemic heart disease	574.7	Ischaemic heart disease	540.1
	CORD	232.1	Stroke	207.2
	Stroke	224.6	CORD	182.8
	Lung cancer	195.3	Lung cancer	175.1
	Colorectal cancer	193.4	Colorectal cancer	154.4

# Appendix 3

## Hospitalisation Tables (2007-2009)

**NOTE A:** Counts less than 5 have ASR's presented as "0.0" or "#N/A"

**NOTE B:** There are two comparisons being made in the following tables

1. Māori Age-Standardised Rate against non-Māori Age-Standardised Rate  
within the District Health Board:

**Māori ASR statistically significantly higher than non-Māori ASR within DHB**

Māori ASR statistically significantly lower than non-Māori ASR within DHB

2. District Health Board Age-Standardised Rate  
against New Zealand Age-Standardised Rate:

**DHB ASR statistically significantly higher than national ASR**

DHB ASR statistically significantly lower than national ASR

Key:

*DHB = District Health Board*

*ASR = Age-Standardised Rate*

Table 3.1.1: Avoidable hospitalisations, 0-74 years, age-standardised rates per 100,000 (and 95% confidence intervals), 2007-09

		Māori		non-Māori		Total	
		ASR	95% confidence	ASR	95% confidence	ASR	95% confidence
Southern	Female	3373.9	2370.1 - 4377.7	2783.1	2444.1 - 3122.1	2818.1	2502.5 - 3133.7
	Male	3740.2	2710.2 - 4770.3	3306.3	2936.8 - 3675.9	3348.2	3004.2 - 3692.1
	Total	3564.3	2844.7 - 4283.8	3048.0	2796.9 - 3299.2	3087.9	2854.1 - 3321.8
New Zealand	Female	4904.4	4671.6 - 5137.1	3156.7	3061.1 - 3252.3	3408.8	3321.6 - 3496.1
	Male	4974.2	4736.0 - 5212.5	3535.8	3435.8 - 3635.9	3746.4	3655.7 - 3837.2
	Total	4946.3	4779.6 - 5112.9	3347.1	3277.8 - 3416.3	3578.9	3516.0 - 3641.9

Table 3.1.2: All cardiovascular disease hospitalisations, all ages, age-standardised rates per 100,000 (and 95% confidence intervals), 2007-09

		Māori		non-Māori		Total	
		ASR	95% confidence	ASR	95% confidence	ASR	95% confidence
Southern	Female	434.4	87.3 - 781.5	370.0	290.9 - 449.1	370.4	295.6 - 445.2
	Male	552.8	170.6 - 935.0	581.5	488.0 - 675.1	581.0	491.3 - 670.8
	Total	505.8	242.2 - 769.4	472.3	411.3 - 533.3	472.5	414.3 - 530.7
New Zealand	Female	725.3	642.2 - 808.5	376.4	354.5 - 398.2	409.5	388.5 - 430.5
	Male	968.2	865.8 - 1070.6	638.8	610.7 - 666.9	673.8	646.7 - 700.8
	Total	842.1	776.8 - 907.4	503.2	485.5 - 520.9	536.9	519.9 - 553.9

Table 3.1.3: Ischaemic heart disease hospitalisation, 25+ years, age-standardised rates per 100,000 (and 95% confidence intervals), 2007-09

		Māori		non-Māori		Total	
		ASR	95% confidence	ASR	95% confidence	ASR	95% confidence
Southern	Female	297.7	103.8 - 491.6	226.4	193.7 - 259.0	229.8	197.5 - 262.0
	Male	343.0	144.5 - 541.5	492.5	441.2 - 543.9	487.3	437.6 - 537.0
	Total	329.2	187.1 - 471.3	356.6	326.3 - 386.8	356.1	326.6 - 385.6
New Zealand	Female	395.2	354.7 - 435.7	199.3	190.9 - 207.6	216.9	208.4 - 225.3
	Male	601.9	548.3 - 655.5	509.5	494.8 - 524.1	521.1	506.9 - 535.3
	Total	494.0	460.9 - 527.2	349.5	341.1 - 357.8	363.8	355.6 - 372.0

Table 3.1.4: Stroke hospitalisation, 25+ years, age-standardised rates per 100,000 (and 95% confidence intervals), 2007-09

		Māori		non-Māori		Total	
		ASR	95% confidence	ASR	95% confidence	ASR	95% confidence
Southern	Female	136.3	5.7 - 266.9	86.1	65.5 - 106.7	89.1	68.5 - 109.7
	Male	95.7	-7.8 - 199.2	121.0	96.8 - 145.2	120.3	96.8 - 143.7
	Total	122.4	35.4 - 209.4	102.5	86.7 - 118.3	103.7	88.2 - 119.2
New Zealand	Female	215.4	185.6 - 245.2	92.6	86.7 - 98.4	103.2	97.3 - 109.2
	Male	171.3	142.5 - 200.0	128.3	121.3 - 135.4	132.8	125.9 - 139.7
	Total	196.1	175.2 - 217.0	109.7	105.1 - 114.2	117.3	112.8 - 121.8

Table 3.1.5: All cancer hospitalisations, all ages, age-standardised rates per 100,000 (and 95% confidence intervals), 2007-09

		Māori		non-Māori		Total	
		ASR	95% confidence	ASR	95% confidence	ASR	95% confidence
Southern	Female	389.7	53.6 - 725.8	347.5	267.7 - 427.2	348.6	272.9 - 424.3
	Male	337.6	47.4 - 627.8	379.0	304.7 - 453.4	376.9	306.5 - 447.3
	Total	366.1	143.2 - 589.0	359.9	305.6 - 414.2	359.5	308.0 - 410.9
New Zealand	Female	456.5	389.7 - 523.3	348.8	326.7 - 370.9	359.1	338.6 - 379.5
	Male	428.9	360.8 - 497.0	391.1	368.7 - 413.5	396.9	375.9 - 417.8
	Total	442.7	395.1 - 490.3	367.4	351.7 - 383.1	375.5	360.9 - 390.1

Table 3.1.6: Lung cancer hospitalisation, 25+ years, age-standardised rates per 100,000 (and 95% confidence intervals), 2007-09

		Māori		non-Māori		Total	
		ASR	95% confidence	ASR	95% confidence	ASR	95% confidence
Southern	Female	184.9	31.8 - 338.0	41.8	26.9 - 56.8	47.2	31.8 - 62.7
	Male	100.6	-4.8 - 206.0	55.4	39.9 - 71.0	57.7	42.0 - 73.4
	Total	140.2	48.6 - 231.8	48.2	37.4 - 59.0	52.0	41.0 - 63.0
New Zealand	Female	136.6	112.7 - 160.5	38.6	34.8 - 42.4	46.7	42.7 - 50.7
	Male	121.7	97.7 - 145.8	46.7	42.7 - 50.7	52.5	48.4 - 56.6
	Total	128.9	112.0 - 145.7	42.2	39.4 - 44.9	49.1	46.3 - 52.0

Table 3.1.7: Female breast cancer hospitalisation, 25+ years, age-standardised rates per 100,000 (and 95% confidence intervals), 2007-09

		Māori		non-Māori		Total	
		ASR	95% confidence	ASR	95% confidence	ASR	95% confidence
Southern	Female	125.9	0.3 - 251.5	118.9	90.9 - 146.8	119.0	92.0 - 146.0
New Zealand	Female	168.3	141.3 - 195.3	103.1	96.0 - 110.2	109.6	102.7 - 116.6

Table 3.1.8: Prostate cancer hospitalisation, 25+ years, age-standardised rates per 100,000 (and 95% confidence intervals), 2007-09

		Māori		non-Māori		Total	
		ASR	95% confidence	ASR	95% confidence	ASR	95% confidence
Southern	Male	103.7	-5.6 - 213.1	95.3	75.8 - 114.8	95.8	76.6 - 115.0
New Zealand	Male	76.5	57.6 - 95.4	60.9	56.4 - 65.3	61.9	57.6 - 66.2

Table 3.1.9: Cervical cancer hospitalisation, 25+ years, age-standardised rates per 100,000 (and 95% confidence intervals), 2007-09

		Māori		non-Māori		Total	
		ASR	95% confidence	ASR	95% confidence	ASR	95% confidence
Southern	Female	0.0	0.0 - 0.0	12.3	2.7 - 21.9	11.6	2.6 - 20.6
New Zealand	Female	44.6	30.2 - 59.0	17.6	14.2 - 21.1	20.9	17.4 - 24.3

Table 3.1.10: Colorectal cancer hospitalisation, 25+ years, age-standardised rates per 100,000 (and 95% confidence intervals), 2007-09

		Māori		non-Māori		Total	
		ASR	95% confidence	ASR	95% confidence	ASR	95% confidence
Southern	Female	27.7	-30.7 - 86.1	62.8	46.6 - 79.0	61.5	45.9 - 77.1
	Male	43.0	-24.4 - 110.5	78.5	59.2 - 97.9	77.4	58.7 - 96.1
	Total	37.4	-9.4 - 84.1	70.6	58.0 - 83.2	69.5	57.3 - 81.6
New Zealand	Female	40.1	27.1 - 53.0	52.5	48.0 - 56.9	51.8	47.6 - 56.0
	Male	50.7	35.2 - 66.2	63.3	58.4 - 68.2	62.7	58.0 - 67.3
	Total	45.3	35.2 - 55.3	57.5	54.2 - 60.8	56.9	53.8 - 60.0

Table 3.1.11: Melanoma hospitalisations, 25+ years, age-standardised rates per 100,000 (and 95% confidence intervals), 2007-09

		Māori		non-Māori		Total	
		ASR	95% confidence	ASR	95% confidence	ASR	95% confidence
Southern	Female	0.0	0.0 - 0.0	76.5	55.7 - 97.2	74.2	54.4 - 94.0
	Male	25.4	-28.6 - 79.4	128.2	102.7 - 153.6	124.4	100.0 - 148.7
	Total	27.2	-16.4 - 70.8	100.1	83.8 - 116.4	97.2	81.6 - 112.7
New Zealand	Female	21.2	11.6 - 30.8	107.6	100.9 - 114.3	100.4	94.3 - 106.5
	Male	22.4	12.0 - 32.8	167.6	159.4 - 175.8	156.9	149.4 - 164.4
	Total	21.5	14.6 - 28.5	135.4	130.1 - 140.6	126.5	121.7 - 131.2

Table 3.1.12: Unintentional injury hospitalisation, all ages, age-standardised rates per 100,000 (and 95% confidence intervals), 2007-09

		Māori		non-Māori		Total	
		ASR	95% confidence	ASR	95% confidence	ASR	95% confidence
Southern	Female	793.0	307.0 - 1278.9	900.9	718.9 - 1082.9	890.2	722.2 - 1058.3
	Male	1760.0	1050.7 - 2469.3	1785.3	1535.6 - 2035.1	1779.2	1546.2 - 2012.3
	Total	1280.7	850.0 - 1711.3	1343.7	1189.1 - 1498.3	1335.3	1191.6 - 1479.0
New Zealand	Female	1344.0	1220.6 - 1467.5	1133.4	1077.2 - 1189.6	1174.8	1124.1 - 1225.5
	Male	2485.9	2315.3 - 2656.6	2015.8	1942.3 - 2089.3	2095.7	2028.9 - 2162.6
	Total	1900.9	1796.5 - 2005.3	1575.3	1529.0 - 1621.6	1634.3	1592.4 - 1676.3

Table 3.1.13: Self-harm hospitalisation, 5+ years, age-standardised rates per 100,000 (and 95% confidence intervals), 2007-09

		Māori		non-Māori		Total	
		ASR	95% confidence	ASR	95% confidence	ASR	95% confidence
Southern	Female	180.6	-29.3 - 390.6	133.0	73.2 - 192.7	137.5	80.1 - 194.9
	Male	92.9	-55.0 - 240.8	75.8	32.5 - 119.1	78.0	36.1 - 119.9
	Total	136.8	8.3 - 265.3	104.3	67.5 - 141.1	107.7	72.2 - 143.1
New Zealand	Female	153.2	115.2 - 191.3	146.7	129.7 - 163.6	147.8	132.4 - 163.3
	Male	103.2	70.5 - 136.0	78.7	66.6 - 90.9	82.7	71.3 - 94.2
	Total	128.6	103.5 - 153.8	112.6	102.2 - 123.0	115.4	105.8 - 124.9

Table 3.1.14: Unintentional injury hospitalisation, 15-24 years, age-standardised rate per 100,000 (and 95% confidence intervals), 2007-09

		Māori		non-Māori		Total	
		ASR	95% confidence	ASR	95% confidence	ASR	95% confidence
Southern	Female	794.9	615.9 - 974.0	859.2	792.1 - 926.4	852.3	789.4 - 915.3
	Male	2604.1	2284.0 - 2924.2	2608.2	2491.2 - 2725.2	2606.1	2496.4 - 2715.9
	Total	1699.0	1515.7 - 1882.3	1729.1	1661.8 - 1796.4	1725.7	1662.5 - 1788.8
New Zealand	Female	1222.0	1174.8 - 1269.3	1013.0	991.5 - 1034.4	1053.4	1033.9 - 1073.0
	Male	3471.2	3389.9 - 3552.4	2673.9	2639.7 - 2708.0	2819.5	2788.0 - 2851.1
	Total	2326.1	2279.6 - 2372.7	1856.8	1836.5 - 1877.1	1945.2	1926.5 - 1963.8

Table 3.1.15: Ischaemic heart disease hospitalisation, 65+ years, age-standardised rate per 100,000 (and 95% confidence intervals), 2007-09

		Māori		non-Māori		Total	
		ASR	95% confidence	ASR	95% confidence	ASR	95% confidence
Southern	Female	1631.2	1508.8 - 1753.6	1404.9	1388.0 - 1421.9	1413.0	1396.2 - 1429.8
	Male	597.7	531.6 - 663.9	2597.6	2572.2 - 2623.0	2539.6	2515.0 - 2564.2
	Total	1182.7	1109.4 - 1256.0	1962.7	1947.7 - 1977.7	1941.9	1927.2 - 1956.5
New Zealand	Female	2028.0	2003.9 - 2052.1	1374.4	1369.6 - 1379.2	1414.2	1409.5 - 1419.0
	Male	2276.0	2247.8 - 2304.3	2600.5	2593.3 - 2607.7	2586.3	2579.3 - 2593.2
	Total	2152.3	2133.9 - 2170.7	1946.8	1942.6 - 1951.0	1960.3	1956.2 - 1964.4

Table 3.1.16: Stroke hospitalisation, 65+ years, age-standardised rate per 100,000 (and 95% confidence intervals), 2007-09

		Māori		non-Māori		Total	
		ASR	95% confidence	ASR	95% confidence	ASR	95% confidence
Southern	Female	467.4	405.4 - 529.4	613.8	603.3 - 624.3	610.5	600.1 - 620.8
	Male	821.9	742.0 - 901.7	909.1	895.0 - 923.1	913.3	899.4 - 927.1
	Total	752.2	694.1 - 810.4	747.5	738.9 - 756.1	748.3	739.8 - 756.7
New Zealand	Female	1210.9	1192.6 - 1229.2	649.9	646.8 - 652.9	680.0	676.9 - 683.0
	Male	1008.7	989.8 - 1027.6	913.7	909.7 - 917.7	923.4	919.5 - 927.3
	Total	1137.9	1124.6 - 1151.2	772.5	770.0 - 774.9	793.1	790.7 - 795.6

Table 3.1.17: Lung cancer hospitalisations, 65+ years, age-standardised rate per 100,000 (and 95% confidence intervals), 2007-09

		Māori		non-Māori		Total	
		ASR	95% confidence	ASR	95% confidence	ASR	95% confidence
Southern	Female	716.1	632.8 - 799.5	253.5	246.2 - 260.9	265.8	258.2 - 273.3
	Male	537.9	471.2 - 604.6	418.9	409.0 - 428.8	420.7	411.0 - 430.5
	Total	614.7	561.7 - 667.8	328.9	322.9 - 335.0	336.2	330.1 - 342.3
New Zealand	Female	673.0	658.9 - 687.0	235.7	233.6 - 237.8	263.0	260.8 - 265.1
	Male	727.2	711.2 - 743.2	364.2	361.5 - 366.8	384.6	381.9 - 387.3
	Total	691.3	680.9 - 701.7	293.2	291.5 - 294.9	317.0	315.3 - 318.7



Table 3.1.18: Female breast cancer hospitalisation, 65+ years, age-standardised rate per 100,000 (and 95% confidence intervals), 2007-09

		Māori		non-Māori		Total	
		ASR	95% confidence	ASR	95% confidence	ASR	95% confidence
Southern	Female	0.0	0.0 - 0.0	326.7	318.1 - 335.3	329.0	320.5 - 337.6
New Zealand	Female	354.3	344.1 - 364.5	300.5	298.0 - 302.9	303.8	301.5 - 306.2

Table 3.1.19: Prostate cancer hospitalisation, 65+ years, age-standardised rate per 100,000 (and 95% confidence intervals), 2007-09

		Māori		non-Māori		Total	
		ASR	95% confidence	ASR	95% confidence	ASR	95% confidence
Southern	Male	21.1	-48.4 - 90.6	28.8	14.2 - 43.4	28.6	14.3 - 42.9
New Zealand	Male	21.8	6.9 - 36.8	17.3	14.2 - 20.5	17.6	14.5 - 20.7

Table 3.1.20: Cervical cancer hospitalisation, 65+ years, age-standardised rate per 100,000 (and 95% confidence intervals), 2007-09

		Māori		non-Māori		Total	
		ASR	95% confidence	ASR	95% confidence	ASR	95% confidence
Southern	Female	0.0	0.0 - 0.0	29.6	26.8 - 32.4	28.9	26.2 - 31.6
New Zealand	Female	28.7	25.8 - 31.5	20.8	20.2 - 21.4	21.2	20.6 - 21.8

Table 3.1.21: Colorectal cancer hospitalisation, 65+ years, age-standardised rate per 100,000 (and 95% confidence intervals), 2007-09

		Māori		non-Māori		Total	
		ASR	95% confidence	ASR	95% confidence	ASR	95% confidence
Southern	Female	0.0	0.0 - 0.0	543.3	532.2 - 554.3	536.9	526.0 - 547.7
	Male	0.0	0.0 - 0.0	568.2	556.4 - 580.1	560.4	548.8 - 572.0
	Total	270.4	237.1 - 303.7	554.6	546.5 - 562.6	547.6	539.7 - 555.5
New Zealand	Female	190.3	182.9 - 197.6	370.6	368.1 - 373.2	360.3	357.9 - 362.7
	Male	315.7	305.3 - 326.1	471.8	468.8 - 474.8	465.2	462.3 - 468.1
	Total	251.0	244.8 - 257.3	416.6	414.7 - 418.6	408.1	406.3 - 410.0

Table 3.1.22: Melanoma hospitalisation, 65+ years, age-standardised rate per 100,000 (and 95% confidence intervals), 2007-09

		Māori		non-Māori		Total	
		ASR	95% confidence	ASR	95% confidence	ASR	95% confidence
Southern	Female	0.0	0.0 - 0.0	433.7	424.4 - 443.0	424.7	415.7 - 433.8
	Male	248.1	204.6 - 291.6	936.7	922.4 - 951.0	921.7	907.8 - 935.6
	Total	201.8	168.9 - 234.8	655.1	646.9 - 663.4	643.9	635.9 - 651.9
New Zealand	Female	100.0	94.6 - 105.3	619.6	616.4 - 622.7	592.8	589.8 - 595.8
	Male	139.6	132.4 - 146.7	1161.9	1157.3 - 1166.4	1111.3	1107.0 - 1115.7
	Total	115.1	110.9 - 119.4	862.9	860.1 - 865.6	824.6	822.1 - 827.2

Table 3.1.23: COPD hospitalisation, 65+ years, age-standardised rate per 100,000 (and 95% confidence intervals), 2007-09

		Māori		non-Māori		Total	
		ASR	95% confidence	ASR	95% confidence	ASR	95% confidence
Southern	Female	<b>2265.5</b>	2120.4 - 2410.6	992.9	978.3 - 1007.5	<b>1024.1</b>	1009.4 - 1038.8
	Male	<b>2093.0</b>	1961.1 - 2224.9	1142.3	1126.3 - 1158.3	1166.3	1150.4 - 1182.2
	Total	<b>2154.1</b>	2058.1 - 2250.0	1043.8	1033.1 - 1054.5	<b>1070.8</b>	1060.1 - 1081.5
New Zealand	Female	2867.8	2839.2 - 2896.5	775.7	772.0 - 779.3	895.6	891.7 - 899.4
	Male	2751.7	2720.6 - 2782.7	1062.7	1058.3 - 1067.1	1151.7	1147.3 - 1156.2
	Total	2801.2	2780.3 - 2822.1	897.7	894.8 - 900.5	1002.7	999.7 - 1005.6

Table 3.1.24: Diabetes hospitalisations, 15+ years, age-standardised rate per 100,000 (and 95% confidence intervals), 2007-09

		Māori		non-Māori		Total	
		ASR	95% confidence	ASR	95% confidence	ASR	95% confidence
Southern	Female	166.4	-3.0 - 335.8	85.7	55.1 - 116.2	88.0	58.5 - 117.6
	Male	191.1	14.8 - 367.5	117.7	81.6 - 153.8	121.4	86.4 - 156.5
	Total	180.6	57.1 - 304.0	101.0	77.5 - 124.6	104.1	81.3 - 127.0
New Zealand	Female	283.9	242.9 - 324.9	99.7	90.4 - 109.0	115.1	106.0 - 124.1
	Male	336.2	288.8 - 383.7	120.6	110.6 - 130.5	137.8	128.0 - 147.7
	Total	308.1	277.1 - 339.1	109.5	102.7 - 116.3	125.8	119.1 - 132.4

Table 3.1.25: Diabetes complications - renal failure hospitalisations, 15+ years, age-standardised rate per 100,000 (and 95% confidence intervals), 2007-09

		Māori		non-Māori		Total	
		ASR	95% confidence	ASR	95% confidence	ASR	95% confidence
Southern	Female	58.4	-43.2 - 159.9	7.8	0.9 - 14.7	10.1	1.4 - 18.8
	Male	41.3	-39.7 - 122.4	11.3	1.8 - 20.8	12.9	3.0 - 22.8
	Total	49.5	-14.9 - 113.9	9.5	3.7 - 15.4	11.5	4.9 - 18.0
New Zealand	Female	43.7	27.8 - 59.6	7.4	5.2 - 9.6	10.3	7.9 - 12.7
	Male	73.0	51.1 - 95.0	9.0	6.7 - 11.3	14.3	11.4 - 17.1
	Total	57.4	44.1 - 70.7	8.1	6.5 - 9.7	12.2	10.3 - 14.0

Table 3.1.26: Asthma hospitalisations, 15+ years, age-standardised rates per 100,000 (and 95% confidence intervals), 2007-09

		Māori		non-Māori		Total	
		ASR	95% confidence	ASR	95% confidence	ASR	95% confidence
Southern	Female	112.8	-25.8 - 251.3	59.4	28.7 - 90.2	<b>63.7</b>	33.2 - 94.1
	Male	46.7	-41.5 - 134.9	24.8	4.6 - 44.9	<b>26.1</b>	6.6 - 45.6
	Total	79.4	-2.6 - 161.5	42.3	23.9 - 60.8	<b>45.2</b>	27.0 - 63.3
New Zealand	Female	257.0	216.0 - 298.0	96.1	85.2 - 106.9	119.1	108.1 - 130.1
	Male	130.2	99.5 - 161.0	52.3	44.1 - 60.5	62.9	54.7 - 71.2
	Total	196.4	170.4 - 222.4	74.6	67.8 - 81.4	91.6	84.7 - 98.5

Table 3.1.27: COPD hospitalisation, 45+ years, age-standardised rates per 100,000 (and 95% confidence intervals), 2007-09

		Māori		non-Māori		Total	
		ASR	95% confidence	ASR	95% confidence	ASR	95% confidence
Southern	Female	844.0	646.2 - 1041.8	314.6	293.5 - 335.7	332.1	310.6 - 353.5
	Male	767.5	587.4 - 947.7	328.5	307.4 - 349.6	344.1	322.7 - 365.4
	Total	797.9	666.1 - 929.6	316.7	301.9 - 331.6	333.1	318.1 - 348.1
New Zealand	Female	1174.3	1132.4 - 1216.2	271.9	266.3 - 277.5	340.6	334.4 - 346.7
	Male	934.7	894.6 - 974.8	314.2	308.3 - 320.1	356.1	350.0 - 362.3
	Total	1057.1	1028.2 - 1086.0	288.8	284.7 - 292.8	344.4	340.0 - 348.7

Table 3.1.28: Asthma hospitalisation, 0-14 years, age-standardised rates per 100,000 (and 95% confidence intervals), 2007-09

		Māori		non-Māori		Total	
		ASR	95% confidence	ASR	95% confidence	ASR	95% confidence
Southern	Female	370.0	157.6 - 582.3	195.0	128.0 - 262.0	224.6	158.4 - 290.9
	Male	818.8	513.7 - 1123.9	346.4	258.5 - 434.4	426.1	336.8 - 515.5
	Total	602.0	413.9 - 790.1	272.2	216.6 - 327.8	327.7	271.7 - 383.7
New Zealand	Female	505.8	456.8 - 554.9	302.4	280.6 - 324.3	353.4	332.9 - 373.8
	Male	727.8	670.4 - 785.1	454.9	428.6 - 481.1	523.7	499.3 - 548.1
	Total	619.5	581.7 - 657.4	380.3	363.2 - 397.4	440.4	424.5 - 456.4

Table 3.1.29: Poisoning hospitalisation, 0-14 years, age-standardised rates per 100,000 (and 95% confidence intervals), 2007-09

		Māori		non-Māori		Total	
		ASR	95% confidence	ASR	95% confidence	ASR	95% confidence
Southern	Female	66.4	-24.1 - 156.8	115.1	62.8 - 167.4	107.0	60.9 - 153.0
	Male	106.5	-3.2 - 216.1	96.4	49.6 - 143.3	98.2	55.1 - 141.3
	Total	86.8	15.5 - 158.0	105.7	70.6 - 140.7	102.5	71.0 - 134.0
New Zealand	Female	89.3	68.7 - 109.8	83.5	72.0 - 95.1	84.8	74.8 - 94.9
	Male	98.1	77.1 - 119.2	99.7	87.4 - 112.1	99.3	88.7 - 110.0
	Total	93.8	79.0 - 108.5	91.8	83.3 - 100.3	92.2	84.9 - 99.6

Table 3.1.30: Burns hospitalisation, 0-14 years, age-standardised rates per 100,000 (and 95% confidence intervals), 2007-09

		Māori		non-Māori		Total	
		ASR	95% confidence	ASR	95% confidence	ASR	95% confidence
Southern	Female	0.0	0.0 - 0.0	8.1	-5.9 - 22.1	6.8	-4.9 - 18.4
	Male	0.0	0.0 - 0.0	16.7	-2.0 - 35.4	17.6	0.0 - 35.2
	Total	0.0	0.0 - 0.0	12.6	0.8 - 24.4	12.4	1.7 - 23.1
New Zealand	Female	8.0	1.8 - 14.2	5.5	2.6 - 8.4	6.1	3.4 - 8.8
	Male	21.6	11.8 - 31.4	8.1	4.7 - 11.6	11.4	7.9 - 14.9
	Total	15.0	9.1 - 20.9	6.9	4.6 - 9.1	8.8	6.6 - 11.1

Table 3.1.31: Falls hospitalisation, 0-14 years, age-standardised rates per 100,000 (and 95% confidence intervals), 2007-09

		Māori		non-Māori		Total	
		ASR	95% confidence	ASR	95% confidence	ASR	95% confidence
Southern	Female	377.4	158.1 - 596.7	362.0	272.1 - 451.9	362.8	280.0 - 445.5
	Male	513.9	268.2 - 759.5	569.3	460.6 - 677.9	560.8	461.5 - 660.1
	Total	447.9	282.6 - 613.1	468.5	397.6 - 539.4	464.9	399.9 - 529.9
New Zealand	Female	662.4	606.4 - 718.4	619.9	589.1 - 650.8	630.7	603.6 - 657.7
	Male	882.6	819.7 - 945.5	869.6	834.2 - 905.0	872.9	842.0 - 903.8
	Total	775.6	733.3 - 817.8	747.8	724.3 - 771.4	754.9	734.3 - 775.5

Table 3.1.32: Falls hospitalisation, 65+ years, age-standardised rates per 100,000 (and 95% confidence intervals), 2007-09

		Māori		non-Māori		Total	
		ASR	95% confidence	ASR	95% confidence	ASR	95% confidence
Southern	Female	1025.1	932.0 - 1118.2	2458.4	2438.5 - 2478.3	2431.2	2411.6 - 2450.7
	Male	759.0	681.9 - 836.2	1577.9	1560.3 - 1595.4	1569.9	1552.6 - 1587.2
	Total	1139.8	1061.0 - 1218.6	2079.5	2066.1 - 2092.8	2060.1	2047.0 - 2073.2
New Zealand	Female	1688.1	1666.7 - 1709.5	2432.8	2427.1 - 2438.6	2402.9	2397.4 - 2408.4
	Male	1417.4	1394.4 - 1440.3	1746.9	1741.7 - 1752.2	1739.8	1734.6 - 1744.9
	Total	1583.8	1568.1 - 1599.5	2134.6	2130.7 - 2138.5	2115.7	2111.9 - 2119.5

Table 3.1.33: Musculoskeletal disease hospitalisation, 65+ years, age-standardised rates per 100,000 (and 95% confidence intervals), 2007-09

		Māori		non-Māori		Total	
		ASR	95% confidence	ASR	95% confidence	ASR	95% confidence
Southern	Female	1631.8	1507.1 - 1756.4	2088.9	2067.4 - 2110.4	2083.2	2062.0 - 2104.4
	Male	1991.6	1870.3 - 2112.8	1851.1	1829.3 - 1872.8	1866.5	1845.1 - 1887.9
	Total	1977.3	1884.0 - 2070.6	1984.9	1969.6 - 2000.2	1988.6	1973.5 - 2003.7
New Zealand	Female	2354.3	2328.2 - 2380.5	2318.4	2311.8 - 2324.9	2322.0	2315.7 - 2328.4
	Male	2746.4	2715.3 - 2777.4	2135.1	2128.5 - 2141.7	2166.6	2160.1 - 2173.1
	Total	2523.3	2503.4 - 2543.3	2233.7	2229.0 - 2238.3	2250.5	2245.9 - 2255.0

Table 3.2.1: Leading causes of avoidable hospitalisation, males and females, 0-74 years, 2007-09

	Southern DHB		New Zealand	
	Condition	ASR	Condition	ASR
Female	Respiratory infections	394.7	Respiratory infections	510.3
	ENT infections	348.7	Gastroenteritis	371.2
	Dental conditions	312.2	Dental conditions	301.5
	Gastroenteritis	311.3	ENT infections	265.7
	Angina	206.7	Cellulitis	243.5
Male	Respiratory infections	496.0	Respiratory infections	570.2
	ENT infections	448.6	Gastroenteritis	355.3
	Dental conditions	358.0	ENT infections	331.7
	Gastroenteritis	298.6	Dental conditions	319.0
	Angina	269.7	Angina	300.1
Total	Respiratory infections	446.6	Respiratory infections	541.0
	ENT infections	399.8	Gastroenteritis	363.7
	Dental conditions	335.4	Dental conditions	310.3
	Gastroenteritis	305.3	ENT infections	299.6
	Angina	238.0	Angina	258.9

Table 3.2.2: Leading causes of avoidable hospitalisation, by ethnicity, 0-74 years, 2007-09

	Southern DHB		New Zealand	
	Condition	ASR	Condition	ASR
Māori	Respiratory infections	512.9	Respiratory infections	742.2
	ENT infections	437.8	Dental conditions	441.6
	Dental conditions	405.5	Asthma	356.4
	Asthma	275.8	ENT infections	355.9
	Angina	249.1	Angina	329.4
non-Māori	Respiratory infections	440.4	Respiratory infections	500.0
	ENT infections	393.7	Gastroenteritis	379.7
	Dental conditions	325.3	ENT infections	283.8
	Gastroenteritis	321.1	Dental conditions	271.8
	Angina	237.5	Angina	250.3

Table 3.2.3: Leading causes of hospitalisation, males and females, 65+ years, 2007-09

	Southern DHB		New Zealand	
	Condition	ASR	Condition	ASR
Female	Angina	1628.6	Persons encountering health services for specific procedures and health care	1802.8
	Persons encountering health services for specific procedures and health care	1313.7	Angina	1499.8
	CORD	1076.8	Respiratory infections	1132.4
	Respiratory infections	918.0	CORD	968.0
	Other forms of heart disease	914.7	Other forms of heart disease	955.6
Male	Angina	1976.2	Persons encountering health services for specific procedures and health care	2367.0
	Respiratory infections	1566.5	Angina	1956.7
	Persons encountering health services for specific procedures and health care	1428.7	Respiratory infections	1721.7
	Ischaemic heart disease	1362.4	Ischaemic heart disease	1550.1
	CORD	1191.0	Other forms of heart disease	1232.4
Total	Angina	1790.0	Persons encountering health services for specific procedures and health care	2059.9
	Persons encountering health services for specific procedures and health care	1359.6	Angina	1712.2
	Respiratory infections	1204.7	Respiratory infections	1388.0
	CORD	1109.6	Ischaemic heart disease	1148.7
	Other forms of heart disease	1013.8	Other forms of heart disease	1084.0

Table 3.2.4: Leading causes of hospitalisation, by ethnicity, 65+ years, 2007-09

	Southern DHB		New Zealand	
	Condition	ASR	Condition	ASR
Māori	CORD	2187.6	Persons encountering health services for specific procedures and health care	7454.5
	Respiratory infections	1694.8	CORD	2912.0
	Angina	1600.7	Respiratory infections	2597.3
	Diabetes	1257.1	Diabetes	2074.3
	Congestive heart failure	1082.2	Angina	1943.8
non-Māori	Angina	1797.3	Persons encountering health services for specific procedures and health care	1705.0
	Persons encountering health services for specific procedures and health care	1381.5	Angina	1698.8
	Respiratory infections	1188.2	Respiratory infections	1319.4
	CORD	1082.4	Ischaemic heart disease	1133.2
	Other forms of heart disease	1012.7	Other forms of heart disease	1069.6

Table 3.2.5: Leading causes of hospitalisation, males and females, 5-14 years, 2007-09

	Southern DHB		New Zealand	
	Condition	ASR	Condition	ASR
Female	Dental conditions	765.1	Dental conditions	660.6
	Respiratory infections	638.2	Respiratory infections	622.0
	ENT infections	489.6	ENT infections	380.4
	Injuries to the elbow and forearm	194.5	Injuries to the elbow and forearm	337.0
	Symptoms and signs involving the digestive system and abdomen	185.3	Persons encountering health services for specific procedures and health care	311.2
Male	Dental conditions	824.6	Dental conditions	687.9
	Respiratory infections	657.4	Respiratory infections	671.2
	ENT infections	559.6	Injuries to the elbow and forearm	520.1
	Injuries to the elbow and forearm	312.1	ENT infections	457.9
	Injuries to the head	258.1	Injuries to the head	360.8
Total	Dental conditions	795.4	Dental conditions	674.6
	Respiratory infections	647.8	Respiratory infections	647.1
	ENT infections	525.6	Injuries to the elbow and forearm	430.9
	Injuries to the elbow and forearm	255.4	ENT infections	420.1
	Injuries to the head	191.3	Persons encountering health services for specific procedures and health care	330.2



Table 3.2.6: Leading causes of hospitalisation, by ethnicity, 5-14 years, 2007-09

	Southern DHB		New Zealand	
	Condition	ASR	Condition	ASR
Māori	Dental conditions	816.9	Dental conditions	843.1
	ENT infections	721.2	Respiratory infections	644.5
	Respiratory infections	612.9	ENT infections	555.6
	Injuries to the elbow and forearm	242.6	Injuries to the elbow and forearm	425.4
	Asthma	191.5	Persons encountering health services for specific procedures and health care	399.2
non-Māori	Dental conditions	790.8	Respiratory infections	648.9
	Respiratory infections	653.6	Dental conditions	619.8
	ENT infections	492.2	Injuries to the elbow and forearm	432.1
	Injuries to the elbow and forearm	257.5	ENT infections	377.3
	Injuries to the head	201.4	Persons encountering health services for specific procedures and health care	308.2

Table 3.2.7: Leading causes of hospitalisation, males and females, 0-4 years, 2007-09

	Southern DHB		New Zealand	
	Condition	ASR	Condition	ASR
Female	Persons encountering health services in other circumstances	3353.1	Persons encountering health services in other circumstances	4296.1
	Respiratory infections	2789.0	Respiratory infections	3688.1
	Disorders related to length of gestation and fetal growth	1506.9	Disorders related to length of gestation and fetal growth	1895.8
	ENT infections	1432.0	Gastro-oesophageal reflux disease	1561.8
	Gastro-oesophageal reflux disease	1345.2	ENT infections	1005.2
Male	Respiratory infections	4012.8	Respiratory infections	4875.7
	Persons encountering health services in other circumstances	3223.9	Persons encountering health services in other circumstances	4131.4
	ENT infections	2091.4	Disorders related to length of gestation and fetal growth	2016.8
	Disorders related to length of gestation and fetal growth	1611.9	Gastro-oesophageal reflux disease	1663.2
	Gastro-oesophageal reflux disease	1370.3	ENT infections	1415.5
Total	Respiratory infections	3414.4	Respiratory infections	4295.1
	Persons encountering health services in other circumstances	3287.0	Persons encountering health services in other circumstances	4212.0
	ENT infections	1768.9	Disorders related to length of gestation and fetal growth	1957.6
	Disorders related to length of gestation and fetal growth	1560.6	Gastro-oesophageal reflux disease	1613.6
	Gastro-oesophageal reflux disease	1358.0	ENT infections	1214.9

Table 3.2.8: Leading causes of hospitalisation, by ethnicity, 0-4 years, 2007-09

	Southern DHB		New Zealand	
	Condition	ASR	Condition	ASR
Māori	Respiratory infections	3947.7	Respiratory infections	5965.2
	Persons encountering health services in other circumstances	1706.5	Persons encountering health services in other circumstances	2422.4
	ENT infections	1672.4	Disorders related to length of gestation and fetal growth	1684.5
	Asthma	1387.9	Gastro-oesophageal reflux disease	1311.2
	Disorders related to length of gestation and fetal growth	1114.9	ENT infections	1270.5
non-Māori	Persons encountering health services in other circumstances	3609.8	Persons encountering health services in other circumstances	4825.9
	Respiratory infections	3305.5	Respiratory infections	3722.1
	ENT infections	1788.6	Disorders related to length of gestation and fetal growth	2051.4
	Disorders related to length of gestation and fetal growth	1651.6	Gastro-oesophageal reflux disease	1717.4
	Gastro-oesophageal reflux disease	1454.1	ENT infections	1195.9

# Appendix 4

## Cancer Registration Tables (2005-2007)

**NOTE A:** Counts less than 5 have ASR's presented as "0.0" or "#N/A"

**NOTE B:** There are two comparisons being made in the following tables

1. Māori Age-Standardised Rate against non-Māori Age-Standardised Rate  
within the District Health Board:

**Māori ASR statistically significantly higher than non-Māori ASR within DHB**

Māori ASR statistically significantly lower than non-Māori ASR within DHB

2. District Health Board Age-Standardised Rate  
against New Zealand Age-Standardised Rate:

**DHB ASR statistically significantly higher than national ASR**

DHB ASR statistically significantly lower than national ASR

Key:

*DHB = District Health Board*

*ASR = Age-Standardised Rate*

Table 4.1.1: Lung cancer registrations, 25+ years, age-standardised rates per 100,000 (and 95% confidence intervals), 2005-07

		Māori		non-Māori		Total	
		ASR	95% confidence	ASR	95% confidence	ASR	95% confidence
Southern	Female	69.0	-24.6 - 162.5	22.9	12.2 - 33.6	24.4	13.6 - 35.1
	Male	111.2	-0.7 - 223.0	38.6	25.8 - 51.4	41.9	28.6 - 55.2
	Total	93.3	17.6 - 168.9	30.2	21.9 - 38.5	32.6	24.1 - 41.1
New Zealand	Female	91.7	72.1 - 111.2	22.7	19.8 - 25.5	28.1	25.1 - 31.2
	Male	91.7	71.0 - 112.5	32.1	28.8 - 35.4	36.5	33.1 - 40.0
	Total	91.6	77.4 - 105.9	27.0	24.8 - 29.2	31.9	29.6 - 34.2

Table 4.1.2: Female breast cancer registrations, 25+ years, age-standardised rates per 100,000 (and 95% confidence intervals), 2005-07

		Māori		non-Māori		Total	
		ASR	95% confidence	ASR	95% confidence	ASR	95% confidence
Southern	Female	97.1	-13.2 - 207.4	125.5	95.9 - 155.1	123.8	95.4 - 152.2
New Zealand	Female	167.8	140.8 - 194.7	126.7	118.6 - 134.7	130.4	122.7 - 138.1

Table 4.1.3: Prostate cancer registrations, 25+ years, age-standardised rates per 100,000 (and 95% confidence intervals), 2005-07

		Māori		non-Māori		Total	
		ASR	95% confidence	ASR	95% confidence	ASR	95% confidence
Southern	Male	80.7	-14.4 - 175.7	87.8	68.7 - 106.8	87.6	69.0 - 106.3
New Zealand	Male	89.8	69.1 - 110.5	106.5	100.4 - 112.5	104.9	99.1 - 110.7

Table 4.1.4: Cervical cancer registrations, 25+ years, age-standardised rates per 100,000 (and 95% confidence intervals), 2005-07

		Māori		non-Māori		Total	
		ASR	95% confidence	ASR	95% confidence	ASR	95% confidence
Southern	Female	0.0	0.0 - 0.0	7.1	-1.3 - 15.5	7.0	-1.0 - 15.0
New Zealand	Female	17.1	8.2 - 26.0	9.5	6.9 - 12.1	10.3	7.8 - 12.7

Table 4.1.5: Colorectal cancer registrations, 25+ years, age-standardised rates per 100,000 (and 95% confidence intervals), 2005-07

		Māori		non-Māori		Total	
		ASR	95% confidence	ASR	95% confidence	ASR	95% confidence
Southern	Female	27.2	-29.9 - 84.2	67.7	49.2 - 86.1	65.9	48.2 - 83.5
	Male	66.5	-20.6 - 153.6	66.8	48.9 - 84.6	66.6	49.3 - 83.9
	Total	51.3	-6.2 - 108.9	67.1	54.3 - 79.9	66.1	53.8 - 78.5
New Zealand	Female	35.4	23.2 - 47.5	45.9	41.7 - 50.0	45.2	41.2 - 49.1
	Male	44.3	29.9 - 58.8	56.2	51.6 - 60.9	55.4	51.0 - 59.8
	Total	39.7	30.3 - 49.1	50.8	47.7 - 53.9	50.0	47.1 - 53.0

Table 4.1.6: Melanoma registrations, 25+ years, age-standardised rates per 100,000 (and 95% confidence intervals), 2005-07

		Māori		non-Māori		Total	
		ASR	95% confidence	ASR	95% confidence	ASR	95% confidence
Southern	Female	0.0	0.0 - 0.0	48.7	28.7 - 68.6	47.1	28.2 - 66.0
	Male	0.0	0.0 - 0.0	42.5	25.0 - 59.9	40.3	24.0 - 56.7
	Total	0.0	0.0 - 0.0	45.5	32.2 - 58.7	43.6	31.1 - 56.1
New Zealand	Female	10.0	3.4 - 16.6	55.1	49.5 - 60.7	50.2	45.2 - 55.1
	Male	8.5	1.9 - 15.2	61.4	55.7 - 67.0	56.5	51.4 - 61.5
	Total	9.3	4.6 - 13.9	58.0	54.0 - 61.9	53.1	49.5 - 56.6

Table 4.1.7: Lung cancer registrations, 65+ years, age-standardised rate per 100,000 (and 95% confidence intervals), 2005-07

		Māori		non-Māori		Total	
		ASR	95% confidence	ASR	95% confidence	ASR	95% confidence
Southern	Female	454.4	389.2 - 519.6	132.9	127.4 - 138.3	140.2	134.6 - 145.7
	Male	625.4	556.0 - 694.8	316.7	307.9 - 325.5	327.7	318.9 - 336.5
	Total	575.0	523.8 - 626.2	217.0	212.0 - 222.0	226.6	221.5 - 231.7
New Zealand	Female	507.3	495.1 - 519.4	145.2	143.6 - 146.9	166.5	164.8 - 168.2
	Male	605.3	590.8 - 619.8	255.1	252.9 - 257.3	276.2	274.0 - 278.4
	Total	553.2	543.9 - 562.6	194.6	193.3 - 196.0	215.9	214.5 - 217.2

Table 4.1.8: Female breast cancer registrations, 65+ years, age-standardised rate per 100,000 (and 95% confidence intervals), 2005-07

		Māori		non-Māori		Total	
		ASR	95% confidence	ASR	95% confidence	ASR	95% confidence
Southern	Female	0.0	0.0 - 0.0	321.1	312.4 - 329.8	320.4	311.8 - 328.9
New Zealand	Female	435.6	424.3 - 446.9	310.9	308.5 - 313.4	318.5	316.1 - 320.9

Table 4.1.9: Prostate cancer registrations, 65+ years, age-standardised rate per 100,000 (and 95% confidence intervals), 2005-07

		Māori		non-Māori		Total	
		ASR	95% confidence	ASR	95% confidence	ASR	95% confidence
Southern	Male	554.0	489.3 - 618.7	730.1	716.5 - 743.6	726.1	712.8 - 739.3
New Zealand	Male	756.4	740.0 - 772.8	762.6	758.7 - 766.6	760.3	756.5 - 764.2

Table 4.1.10: Cervical cancer registrations, 65+ years, age-standardised rate per 100,000 (and 95% confidence intervals), 2005-07

		Māori		non-Māori		Total	
		ASR	95% confidence	ASR	95% confidence	ASR	95% confidence
Southern	Female	0.0	0.0 - 0.0	12.2	10.3 - 14.0	11.9	10.1 - 13.6
New Zealand	Female	23.7	21.1 - 26.3	11.3	10.8 - 11.7	12.0	11.5 - 12.5

Table 4.1.11: Colorectal cancer registrations, 65+ years, age-standardised rate per 100,000 (and 95% confidence intervals), 2005-07

		Māori		non-Māori		Total	
		ASR	95% confidence	ASR	95% confidence	ASR	95% confidence
Southern	Female	0.0	0.0 - 0.0	454.0	443.9 - 464.0	446.9	437.1 - 456.8
	Male	425.9	369.4 - 482.5	521.4	509.9 - 532.8	519.9	508.7 - 531.2
	Total	370.8	328.6 - 413.0	485.3	477.7 - 492.9	481.3	473.9 - 488.7
New Zealand	Female	210.0	202.3 - 217.7	309.7	307.4 - 312.0	304.0	301.8 - 306.3
	Male	344.7	333.8 - 355.5	404.6	401.8 - 407.4	402.6	399.9 - 405.4
	Total	274.5	267.9 - 281.1	353.8	352.0 - 355.6	349.9	348.2 - 351.7

Table 4.1.12: Melanoma registrations, 65+ years, age-standardised rate per 100,000 (and 95% confidence intervals), 2005-07

		Māori		non-Māori		Total	
		ASR	95% confidence	ASR	95% confidence	ASR	95% confidence
Southern	Female	0.0	0.0 - 0.0	120.5	115.3 - 125.8	117.7	112.6 - 122.9
	Male	0.0	0.0 - 0.0	162.8	156.6 - 169.0	160.6	154.5 - 166.6
	Total	0.0	0.0 - 0.0	139.0	135.0 - 143.0	136.5	132.6 - 140.4
New Zealand	Female	35.6	32.5 - 38.8	144.7	143.1 - 146.3	138.2	136.7 - 139.7
	Male	48.2	44.0 - 52.5	247.5	245.3 - 249.7	236.7	234.7 - 238.8
	Total	41.0	38.4 - 43.5	191.8	190.4 - 193.1	183.2	181.9 - 184.5

# Appendix 5

## ICD-10 Codes



Description	ICD-10-AM codes used
<b>I: Certain infectious and parasitic diseases</b>	<b>A00–B99</b>
Intestinal infectious diseases	A00–A09
Tuberculosis (including late effects)	A15–A19, B90
Meningococcal infection	A39
Infections, sexual transmission	A50–A64
Viral hepatitis	B15–B19
HIV	B20–B24
Viral infection, unspecified, of unspecified site	B34.9
<b>II: Neoplasms (cancer)</b>	<b>C00–D48</b>
Malignant neoplasms	C00–C97
Lip, oral cavity and pharynx	C00–C14
Digestive organs	C15–C26
☛ Oesophagus	C15
☛ Cancer of stomach	C16
☛ Colorectal	C18–C21
☛ Cancer of colon	C18
☛ Rectum, rectosigmoid junction and anus	C19–C21
☛ Liver and intrahepatic bile ducts	C22
☛ Gallbladder, other and unspecified parts	C23–C24
☛ of biliary tract	
☛ Pancreas	C25
☛ Other digestive organs	C17, C26
Respiratory and intrathoracic organs	C30–C39
☛ Larynx	C32
☛ Trachea, bronchus and lung	C33–C34
☛ Other respiratory and intrathoracic organs	C30–C31, C37–C39
Bone and articular cartilage	C40–C41
Skin	C43–C44
☛ Melanoma of skin	C43
☛ Other malignant neoplasms of skin	C44
☛ Mesothelial and soft tissue	C45–C49
Breast: female	C50 & female
Breast: male	C50 & male
Female genital organs	C51–C58
☛ Cervix uteri	C53
☛ Uterus	C54–C55
☛ Ovary	C56
☛ Other female genital organs	C51–C52, C57–C58
Male genital organs	C60–C63
☛ Prostate	C61
☛ Testis	C62
☛ Other male genital organs	C60, C63
Urinary tract	C64–C68
☛ Kidney, except renal pelvis	C64
☛ Bladder	C67
☛ Other urinary tract	C65–C66, C68
Eye and other central nervous system	C69–C72
☛ Brain	C71

Description	ICD-10-AM codes used
<ul style="list-style-type: none"> <li>☛ Other central nervous system</li> </ul>	C69–C70, C72
Thyroid and other endocrine glands	C73–C75
<ul style="list-style-type: none"> <li>☛ Thyroid gland</li> </ul>	C73
<ul style="list-style-type: none"> <li>☛ Other endocrine glands</li> </ul>	C74–C75
Malignant neoplasm of ill-defined, secondary and unspecified sites	C76–C80
Lymphoma	C81–C85
<ul style="list-style-type: none"> <li>☛ Hodgkin's disease</li> </ul>	C81
<ul style="list-style-type: none"> <li>☛ Non-Hodgkin's lymphoma</li> </ul>	C82–C85
Multiple myeloma and other malignant immunoproliferative diseases and malignant plasma cell neoplasms	C88, C90
Leukaemias	C91–C95
<ul style="list-style-type: none"> <li>☛ Lymphoid leukaemia</li> </ul>	C91
<ul style="list-style-type: none"> <li>☛ Myeloid leukaemia</li> </ul>	C92
<ul style="list-style-type: none"> <li>☛ Acute myeloid leukaemia</li> </ul>	C92.0, C92.4, C92.5
<ul style="list-style-type: none"> <li>☛ Other myeloid leukaemia</li> </ul>	C92.1–C92.3, C92.8–C92.9
<ul style="list-style-type: none"> <li>☛ Other leukaemias</li> </ul>	C93–C95
Other and unspecified malignant neoplasms of lymphoid, hematopoietic, and related tissue	C96
Malignant neoplasm of independent (primary) multiple sites	C97
In situ neoplasms	D00–D09
<ul style="list-style-type: none"> <li>☛ Melanoma in situ</li> </ul>	D03
<ul style="list-style-type: none"> <li>☛ Carcinoma in situ of breast</li> </ul>	D05
<ul style="list-style-type: none"> <li>☛ Carcinoma in situ of cervix uteri</li> </ul>	D06
<ul style="list-style-type: none"> <li>☛ Other in situ neoplasms</li> </ul>	D00–D02, D04, D07–D09
Benign neoplasms	D10–D36
Neoplasms of uncertain or unknown behaviour	D37–D48
<b>III: Diseases of the blood and blood-forming organs and</b>	<b>D50–D89</b>
<b>IV: Endocrine, nutritional and metabolic diseases</b>	<b>E00–E90</b>
Disorders of thyroid gland	E00–E07
Diabetes mellitus	E10–E14
<ul style="list-style-type: none"> <li>☛ IDDM (type 1)</li> </ul>	E10
<ul style="list-style-type: none"> <li>☛ NIDDM (type 2)</li> </ul>	E11–E14
Obesity	E66
<b>V: Mental and behavioural disorders</b>	<b>F00–F99</b>
Organic, including symptomatic, mental disorder	F00–F09
<ul style="list-style-type: none"> <li>☛ Dementia, vascular and unspecified</li> </ul>	F01, F03
<ul style="list-style-type: none"> <li>☛ Personality and behavioural disorders due to brain disease, damage, and dysfunction</li> </ul>	F07
<ul style="list-style-type: none"> <li>☛ Mental and behavioural disorders due to psychoactive substance use</li> </ul>	F10–F19
<ul style="list-style-type: none"> <li>☛ Alcohol</li> </ul>	F10
<ul style="list-style-type: none"> <li>☛ Opioids</li> </ul>	F11
<ul style="list-style-type: none"> <li>☛ Cannabinoids</li> </ul>	F12

Description	ICD-10-AM codes used
Schizophrenia, schizotypal and delusional disorders	F20–F29
☛ Schizophrenia	F20
☛ Schizoaffective disorders	F25
Mood (affective) disorders	F30–F39
☛ Manic episode and bipolar affective disorder	F30–F31
☛ Manic episode	F30
☛ Bipolar affective disorder	F31
☛ Depressive episode and recurrent, and persistent mood [affective] disorders	F32–F34
☛ Depressive episode	F32
☛ Recurrent depressive disorder	F33
☛ Persistent mood [affective] disorders	F34
Neurotic, stress-related and somatoform disorders	F40–F48
Eating disorders	F50
Disorders of adult personality and behaviour	F60–F69
Mental retardation	F70–F79
<b>VI: Diseases of the nervous system</b>	<b>G00–G99</b>
Bacterial meningitis, not elsewhere classified	G00
Parkinson's disease, secondary Parkinsonism	G20–G21
Alzheimer's disease	G30
Epilepsy, status epilepticus	G40–G41
Migraine	G43
Transient cerebral ischemic attacks and related syndromes	G45
Mononeuropathies of upper limb	G56
Infantile cerebral palsy	G80
<b>VII: Diseases of the eye and adnexa</b>	<b>H00–H59</b>
Disorders of lens	H25–H28
Glaucoma	H40–H42
<b>VIII: Diseases of the ear and mastoid process</b>	<b>H60–H95</b>
Diseases of middle ear and mastoid	H65–H75
☛ Non-suppurative otitis media	H65
☛ Suppurative and unspecified otitis media	H66
☛ Perforation of tympanic membrane	H72
Hearing loss	H90–H91

Description	ICD-10-AM codes used
<b>IX: Diseases of the circulatory system</b>	<b>I00–I99</b>
Acute rheumatic fever	I00–I02
☛ Acute rheumatic heart disease	I01, I02.0
Chronic rheumatic heart disease	I05–I09
Hypertensive diseases	I10–I15
Ischemic heart disease	I20–I25
☛ Angina pectoris	I20
☛ Acute myocardial infarction	I21
☛ Chronic ischemic heart disease	I25
Pulmonary circulation	I26–I28
Other forms of heart disease	I30–I52
☛ Atrial fibrillation and flutter	I48
☛ Heart failure	I50
Cerebrovascular diseases	I60–I69
☛ Subarachnoid haemorrhage	I60
☛ Intracerebral haemorrhage, other nontraumatic intracranial haemorrhage	I61–I62
☛ Cerebral infarction, stroke, not specified as haemorrhage or infarction	I63–I64
Other diseases of the circulatory system	I70–I99
☛ Atherosclerosis	I70
☛ Varicose veins of lower extremities	I83
<b>X: Diseases of the respiratory system</b>	<b>J00–J99</b>
Acute upper respiratory infections	J00–J06
Pneumonia	J12–J18
Acute bronchitis and bronchiolitis	J20–J22
Chronic diseases of tonsils and adenoids	J35
Chronic obstructive respiratory disease	J40–J44
Asthma	J45–J46
Bronchiectasis	J47
<b>XI: Diseases of the digestive system</b>	<b>K00–K93</b>
Teeth and gums	K00–K08
☛ Disorders of tooth development and eruption, embedded and impacted teeth	K00–K01
☛ Dental caries	K02
☛ Diseases of pulp and periapical tissues	K04
☛ Periodontal diseases	K05–K06
Diseases of oesophagus, stomach and duodenum	K20–K31
☛ Diseases of oesophagus	K20–K22
☛ Gastric, duodenal, peptic gastrojejunal ulcers, gastritis duodenitis	K25–K29
Diseases of appendix	K35–K38
Hernia	K40–K46
☛ Inguinal hernia	K40
Non-infective gastroenteritis and colitis	K50–K52
Other diseases of intestines and diseases of peritoneum	K55–K67
Diseases of liver	K70–K77
☛ Alcoholic liver disease	K70

Description	ICD-10-AM codes used
Diseases of gallbladder, biliary tract and pancreas	K80–K87
Cholelithiasis	K80
Acute pancreatitis	K85
Other diseases of pancreas	K86
Haematemesis, melaena and gastrointestinal haemorrhage, unspecified	K92.0–K92.2
<b>XII: Diseases of the skin and subcutaneous tissue</b>	<b>L00–L99</b>
Infections of skin and subcutaneous tissue	L00–L08
<b>XIII: Diseases of the musculoskeletal system and connective tissue</b>	<b>M00–M99</b>
Gout	M10
Arthrosis (osteoarthritis)	M15–M19
Other dorsopathies	M50–M54
<b>XIV: Diseases of the genitourinary system</b>	<b>N00–N99</b>
Glomerular diseases	N00–N08
Tubulo-interstitial nephritis	N10–N12
Renal failure	N17–N19
Urolithiasis	N20–N23
Urinary tract infection, site not specified	N39.0
Stress incontinence and other specified urinary incontinence	N39.3, N39.4
☐ Stress incontinence	N39.3
Disorders of male genital organs	N40–N51
☐ Hyperplasia of prostate	N40
Inflammatory disorders of breast	N61
Inflammatory diseases of female pelvic organs	N70–N77
Non-inflammatory disorders of female genital tract	N80–N98
☐ Endometriosis	N80
☐ Female genital prolapse	N81
☐ Dysplasia of cervix uteri	N87
☐ Excessive and frequent menstruation	N92.0, N92.1
☐ Menopausal and other perimenopausal disorders	N95
<b>XV: Pregnancy, childbirth and the puerperium</b>	<b>O00–O99</b>
Abscess of breast associated with childbirth	O91.1
<b>XVI: Certain conditions originating in the perinatal period</b>	<b>P00–P96</b>
Slow fetal growth and fetal malnutrition and premature	P05–P07
☐ Slow fetal growth and fetal malnutrition	P05
☐ Premature	P07.2–P07.3
Birth trauma	P10–P15
Respiratory and cardiovascular disorders specific to the perinatal period	P20–P29

Description	ICD-10-AM codes used
☛ Birth asphyxia	P21
☛ Respiratory distress of newborn	P22
Infection specific to the perinatal period	P35–P39
<b>XVII: Congenital malformations, deformations, and chromosomal abnormalities</b>	<b>Q00–Q99</b>
<b>XVIII: Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified</b>	<b>R00–R99</b>
Symptoms and signs involving the circulatory and respiratory systems	R00–R09
Symptoms and signs involving the digestive system and abdomen	R10–R19
Symptoms and signs involving the urinary system	R30–R39
General symptoms and signs	R50–R69
Ill-defined and unknown causes of mortality	R95–R99
☛ Sudden infant death syndrome	R95
<b>XIX: Injury, poisoning and certain other consequences of external causes</b>	<b>S00–T98</b>
Injuries to the head	S00–S09
Other injuries	S10–T14
Burns	T20–T31
Poisoning by drugs, medicaments and biological substances	T36–T50
Complications of surgical and medical care, not elsewhere classified	T80–T88
<b>XX: External causes of morbidity and mortality</b>	<b>V01–Y98</b>
Accidents	V01–V99, W00–X59, Y85,
Transport accidents	V01–V99, Y85
☛ Pedestrian	V01–V09
☛ Pedal cyclist	V10–V19
☛ Other land transport (occupant of motorcycle, three-wheeled motor vehicle, car, pickup truck or van)	V20–V59, Y85.0
☛ Other transport	V90–V99, Y85.1
Other external causes of accidental injury	W00–X59, Y86
☛ Falls	W00–W19
☛ Exposure to mechanical forces	W20–W64
☛ Exposure to inanimate mechanical forces	W20–W49
☛ Exposure to animate mechanical forces	W50–W64
☛ Drowning and submersion (non transport)	W65–W74
☛ Fires	X00–X09
☛ Accidental poisoning by and exposure to noxious substances	X40–X49
☛ Accidental threats to breathing	W75–84
☛ Accidental suffocation or strangulation in bed	W75
Intentional self-harm (suicide)	X60–X84, Y87.0
Assault (homicide)	X85–Y09, Y87.1
Event of undetermined intent	Y10–Y34, Y87.2
Legal intervention	Y35, Y89.0

Description	ICD-10-AM codes used
Complications of medical and surgical care	Y40–Y84, Y88
☛ Drugs, medicaments and biological substances causing adverse effects in therapeutic use	Y40–Y59, Y88.0
☛ Misadventure to patients during surgical and medical care	Y60–Y69, Y88.1
Medical devices associated with adverse incidents,	
☛ abnormal reaction, without mention of misadventure at the time of the procedure	Y70–Y84, Y88.2, Y88.3
<b>XXI: Factors influencing health status and contact with health services</b>	<b>Z00–Z99</b>
Persons encountering health services for examination and investigation	Z00–Z13
Persons with potential health hazards related to communicable diseases	Z20–Z29
Persons encountering health services in circumstances related to reproduction	Z30–Z39
☛ Outcome of delivery	Z37
☛ Liveborn infants	Z38
Persons encountering health services for specific procedures and health care	Z40–Z54
☛ Care involving dialysis	Z49
☛ Care involving rehabilitation	Z50
Persons with potential health hazards related to socioeconomic and psychosocial circumstances	Z55–Z65
Persons encountering health services in other circumstances	Z70–Z76
Persons with potential health hazards related to family and personal history and certain conditions influencing health status	Z80–Z99