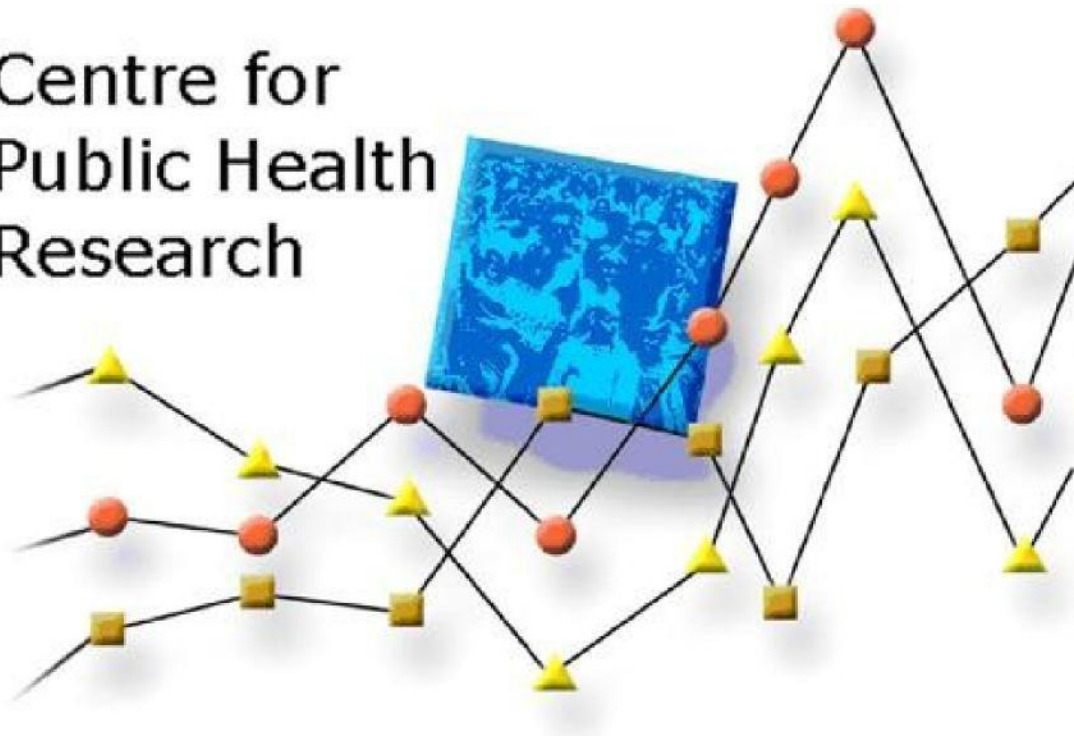


Centre for  
Public Health  
Research



## **Health Needs Assessment**

### **Canterbury 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**

## **Canterbury 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 Canterbury 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 Canterbury DHB in determining priorities for its planning and decision-making to achieve health gain in its population.

### **Demographics and social determinants of health**

Canterbury DHB had a population of 483,360 at the 2006 census, and was projected to increase to 578,040 by 2026 however this (and other projected data) does not allow for the 2010 and 2011 earthquakes. Just over three quarters of the Canterbury DHB population identifies themselves as of European ethnicity; this is above the proportion for New Zealand as a whole. The proportion of Māori is substantially lower than that of New Zealand as a whole. The 2006 age structure of the Canterbury DHB population is similar to the total New Zealand population, and was projected to age by 2026 in a similar pattern to that of New Zealand as a whole.

The Canterbury DHB population has fewer people living in the most deprived (NZDep06) areas. The Canterbury population has a similar proportion to the whole of New Zealand for the following measures: no educational qualification, those earning above the average annual income and full time employment.

### **Health status**

#### **Avoidable mortality and hospitalisations**

Two of the top five leading causes of avoidable mortality were the same for Māori and non-Māori. These were ischaemic heart disease and lung cancer. These were also featured in the total leading causes for Canterbury DHB along with suicide, colorectal cancer, and motor vehicle accidents.

Four of the leading causes of avoidable mortality in the Canterbury DHB were the same as those nationally; these were ischaemic heart disease, lung cancer, motor vehicle accidents, and suicide

The rates for unintentional injury and avoidable hospitalisation for Canterbury DHB was statistically significantly lower than the national rate.

#### **Child and youth health**

Four of the top five leading causes of hospitalisations for Māori and non-Māori children 0-4 years old were similar. ENT infections featured in the top five causes for Māori while gastro-oesophageal reflux disease was a leading cause for non-Māori children. For Māori children 5-14 years old, asthma was one of the top five leading causes of hospitalisations but it was not for non-Māori children.

The leading causes of hospitalisations for children 5-14 years of age were the same as those nationally: dental conditions, respiratory infections, ENT infections, injuries to the elbow and forearm, and <sup>1</sup>persons encountering health services for specific procedures and health care.

The asthma hospitalisation rate for both the 0-14 year olds and the 15+ age group in the Canterbury DHB was significantly lower than the national rate

## **Older people**

The Canterbury DHB had the same leading causes of mortality for older people as those nationally: ischaemic heart disease, lung cancer, chronic obstructive pulmonary disease, colorectal cancer, and stroke. Hypertensive disease was a leading cause for Māori while colorectal cancer was a leading cause for non-Māori.

Disorders of the lens was a leading cause of hospitalisation for older Māori people while ischaemic heart disease was one of the top five causes for non-Māori people. Persons encountering health services for specific procedures and health care, respiratory infections, angina, and ischaemic heart disease were four of the top five leading causes of hospitalisations for older people in Canterbury DHB which were the same in New Zealand. In Canterbury DHB, chronic obstructive pulmonary disease was also one of the leading causes of hospitalisations for older people.

## **Health service utilisation**

In 2009-2010, three in four Māori children in 2009-2010 were up to date with their immunisations by the age of two, which was lower than the non-Māori rate but higher than the total New Zealand Māori rate.

Over two-thirds of people aged 65 years and over in the Canterbury DHB received an influenza vaccine in the past 12 months which is higher than the national rate.

Of eligible women in Canterbury DHB, over 80 percent had a mammogram in the past two years, which was much greater than the national percentage. The screening coverage was however; considerably lower for Māori women than for non-Māori women.

Of women aged 20 to 69 years in the Canterbury DHB who had a primary health care provider, 85.2 percent had a cervical smear in the past three years. Again the screening coverage was considerable lower for Māori women (48.1%) than for non-Māori women (76.4%).

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<sup>1</sup> Persons encountering health services for specific procedures and health care (Z40-Z54) - These 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 care. For example, follow-up care involving plastic surgery or other surgical follow-up care.



## 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 Canterbury 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

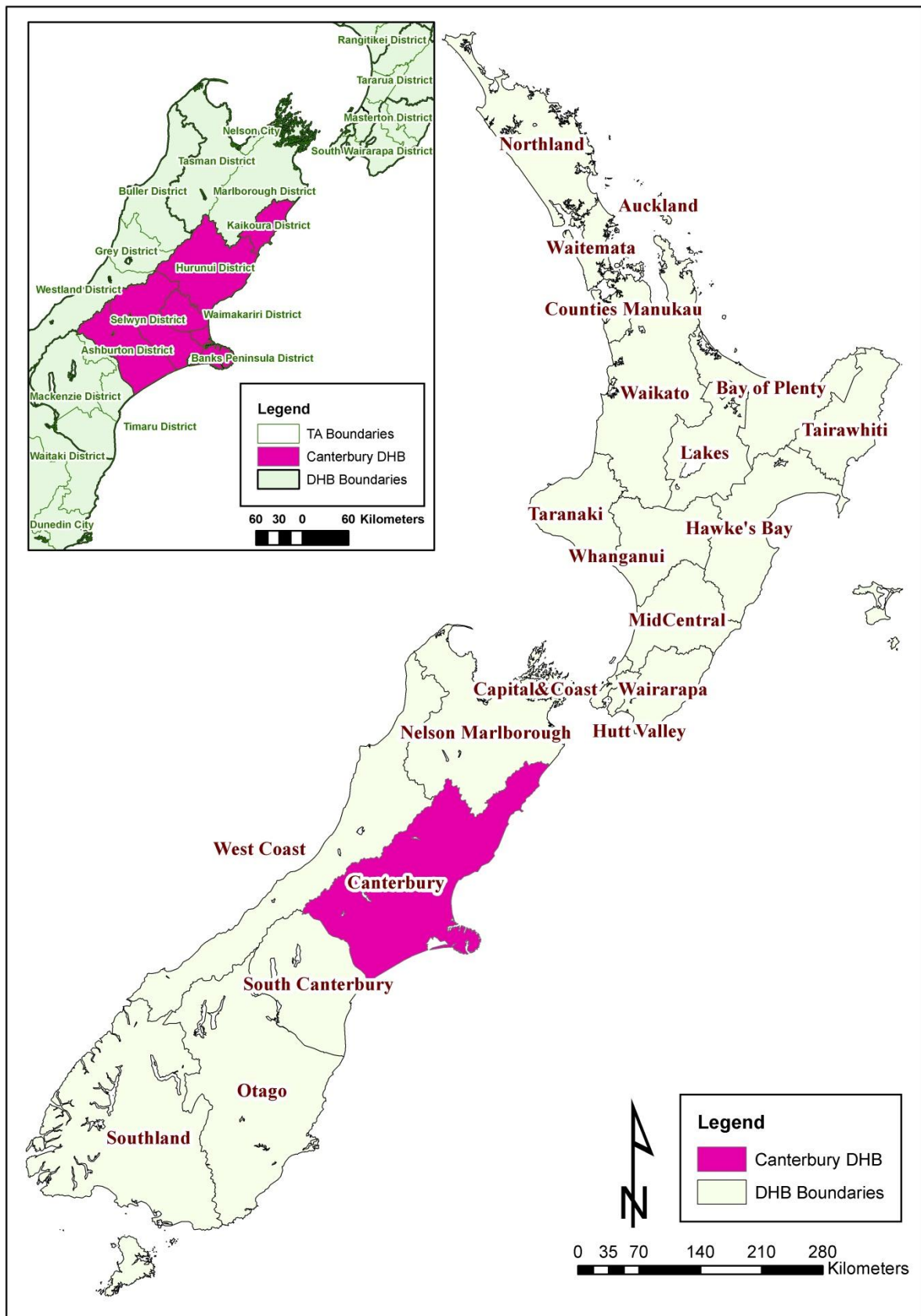
The dark blue shows that the ASR for the total Māori population in the DHB (919.1 per 100,000) is statistically significantly higher than the ASR for the total non-Māori population in the DHB (622.3 per 100,000)

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

Canterbury District Health Board had a population of 483,360 at the last (2006) census, making up approximately 12 percent of the New Zealand population (4,184,580 at the last census), (Statistics New Zealand, 2008). This population was projected to rise to 578,040 by 2026, an increase of 19.6 percent, similar to 19.2 percent for New Zealand as a whole, (personal communication, Ministry of Health). Since the last census count in 2006, on which the population projections are based, there has been considerable seismic activity in the Christchurch area, most notably two major earthquakes (on September 4<sup>th</sup> 2010 and February 22<sup>nd</sup> 2011). This may have led to changes in the population structure of Canterbury DHB. However until further data is collected these changes cannot be calculated.

## 1.1 Ethnicity

The proportion of the Canterbury DHB population who identifying themselves as Māori is 7.4 percent, substantially below that of New Zealand as a whole, (14.6%), (Statistics New Zealand, 2008).

## 1.2 Population Distribution by Age and Gender

The majority of the Canterbury DHB population (67.2%) are of working age (15-64 years), in line with the New Zealand as a whole (66.5%). The proportion of elderly (aged 65+ years) and young people (aged 0-14 years) are also similar to the New Zealand population. The population peaks in slightly older age bands in Canterbury when compared to New Zealand, at 20-25 years and 40-44 years compared to 15-19 years and 40-44 years.

In common with the New Zealand population, the proportion of the population who are of working age is similar for males and females. Amongst the young the proportion of males is slightly higher than that of females whilst for the elderly the opposite is true. This is also in line with the New Zealand population.

By 2026 the projected population for Canterbury DHB will have aged, increasing the proportion in the 65+ age group (13.4% to 20.3%) at the expense of both young people (19.4% to 17.00%) and those of working age (67.2% to 62.7%). This is in line with trends for the rest of New Zealand. It should be noted however, that there is predicted to be an overall increase in the Canterbury population in all three age brackets.

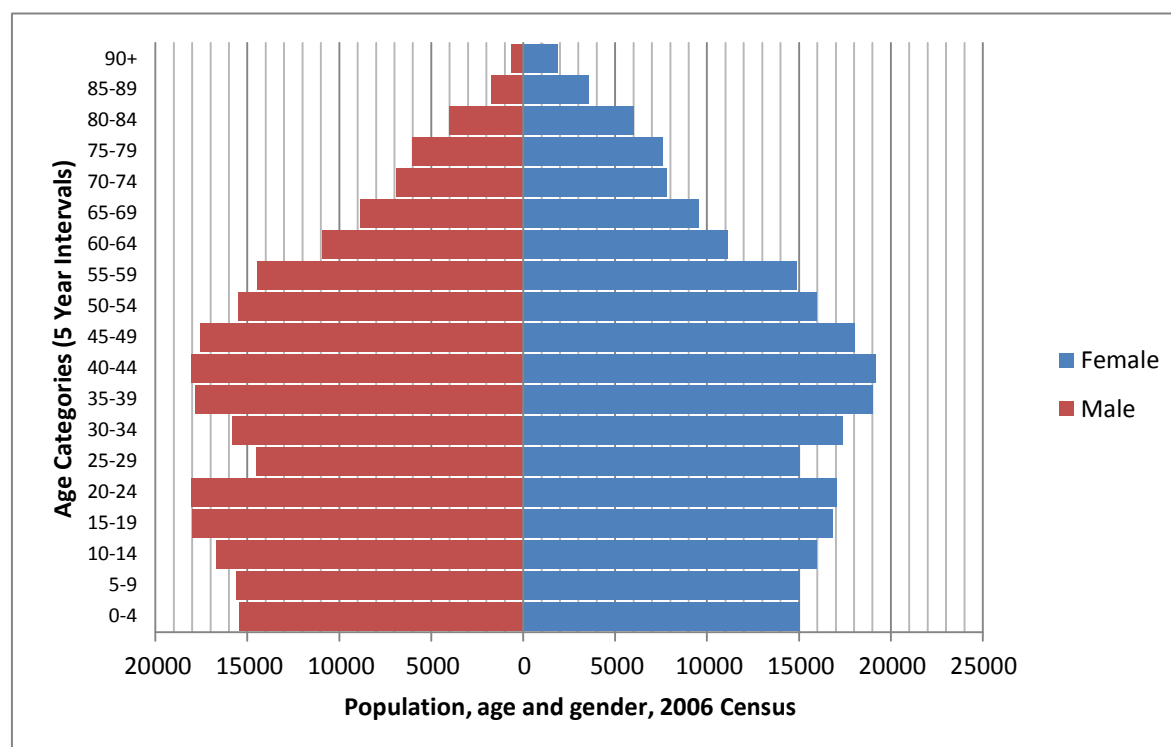
The projected 2026 peak population for Canterbury remains slightly older than the projected 2026 peak for New Zealand (20-24 years compared to 15-19years). Otherwise the projected population structure for Canterbury is similar to that of New Zealand.

**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
Canterbury	0-14	20.2	18.6	19.4	17.6	16.4	17.0
	15-64	67.9	66.6	67.2	63.4	62.0	62.7
	65+	11.9	14.7	13.4	19.1	21.6	20.3
New Zealand	0-14	22.2	20.3	21.2	19.4	17.9	18.6
	15-64	66.6	66.5	66.6	62.8	62.2	62.5
	65+	11.2	13.2	12.2	17.9	19.9	18.9

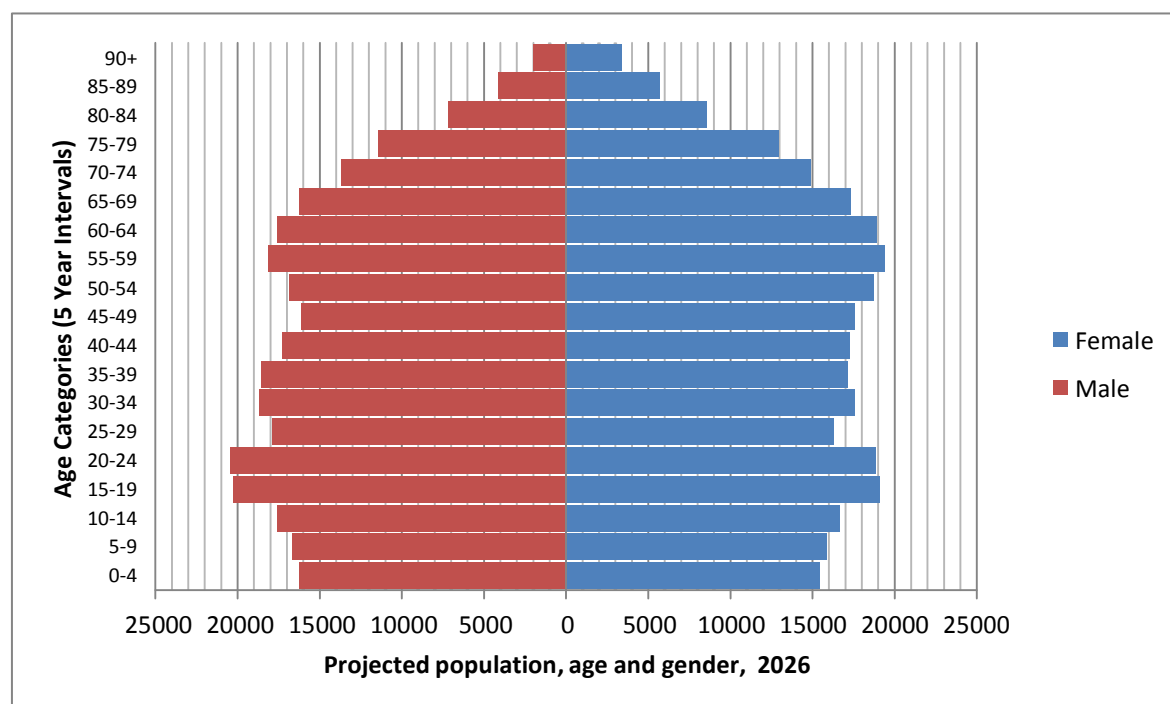
**Table 1.2:** Population change, age and gender, 2006 Census, 2026

Location	Age	2006(Base)			2026			% increase 2006-2026		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Canterbury	0-14	47810	46010	93800	50420	47860	98270	5.5	4.0	4.8
	15-64	160560	164460	325030	181680	180700	362380	13.2	9.9	11.5
	65+	28150	36370	64530	54620	62770	117390	94.0	72.6	81.9
	Total	236520	246840	483360	286720	291330	578040	21.2	18.0	19.6
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

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



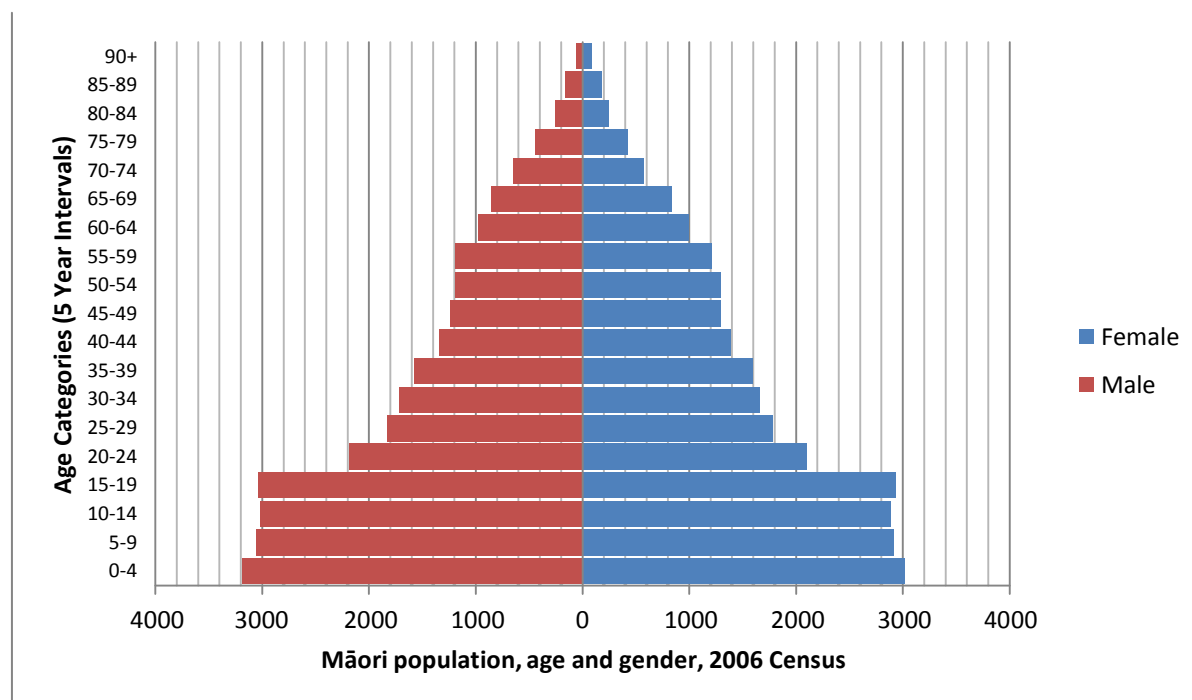
**Figure 2:** Projected population, age and gender, 2026



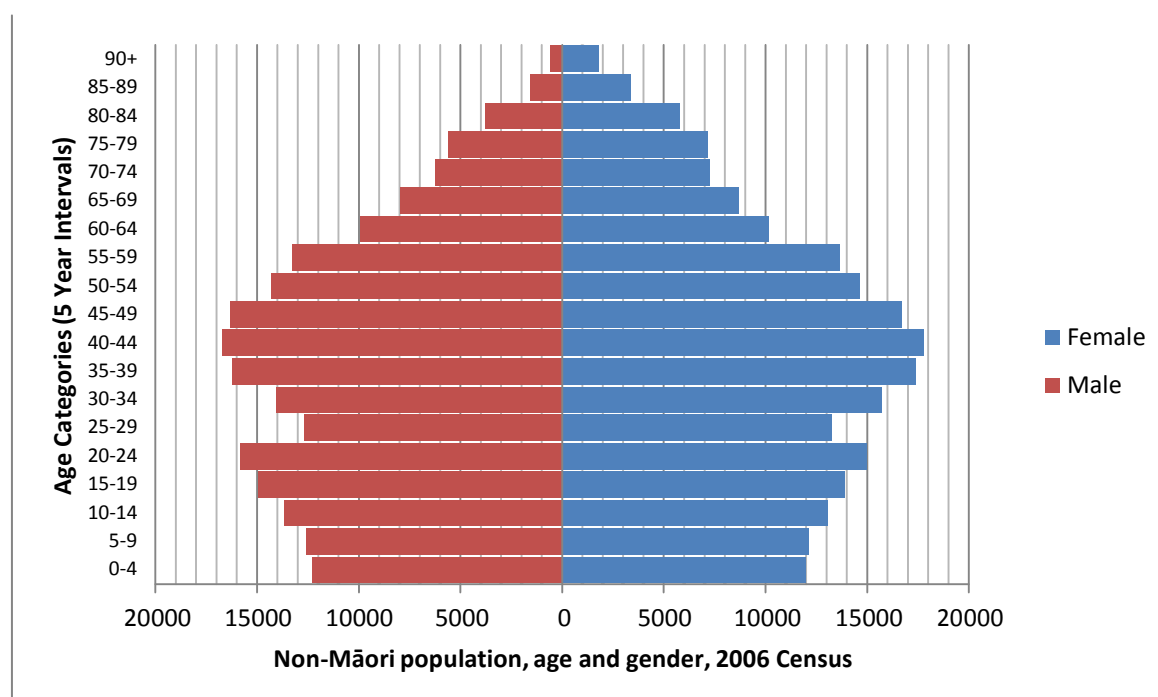
### 1.3 Population distribution by Ethnicity

The Māori population in Canterbury is younger than the non-Māori population with a distinctive peak occurring at age 0-4 years as oppose to 40-44 years.

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



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



The rate of increase of young people in Canterbury, over the period 2006-2026, is much higher than for the Māori population in New Zealand as a whole, (increasing by 44.5% compared to 19.9%). Whilst there is a large increase in the number of elderly Māori in Canterbury (294.2% by 2026 compared to 169% for New Zealand) the Māori population remains dominated by young people.

In comparison with the non-Māori population, the Māori population is predicted to experience higher rates of growth across all ages. The most notable difference is in the young population (aged 0-14 years) where Māori are expected to grow in number by 44.5 percent whilst non-Māori are predicted to decline by 1.4 percent. The change in structure of the two populations is also very different, whilst the Māori population is expected to remain dominated by young people, with peak population remaining at 0-4 years, the non-Māori population is predicted to age further, with peak population rising from 40-44 years in 2006 to 55-59 years in 2026. However a second peak at 20-24 years remains.

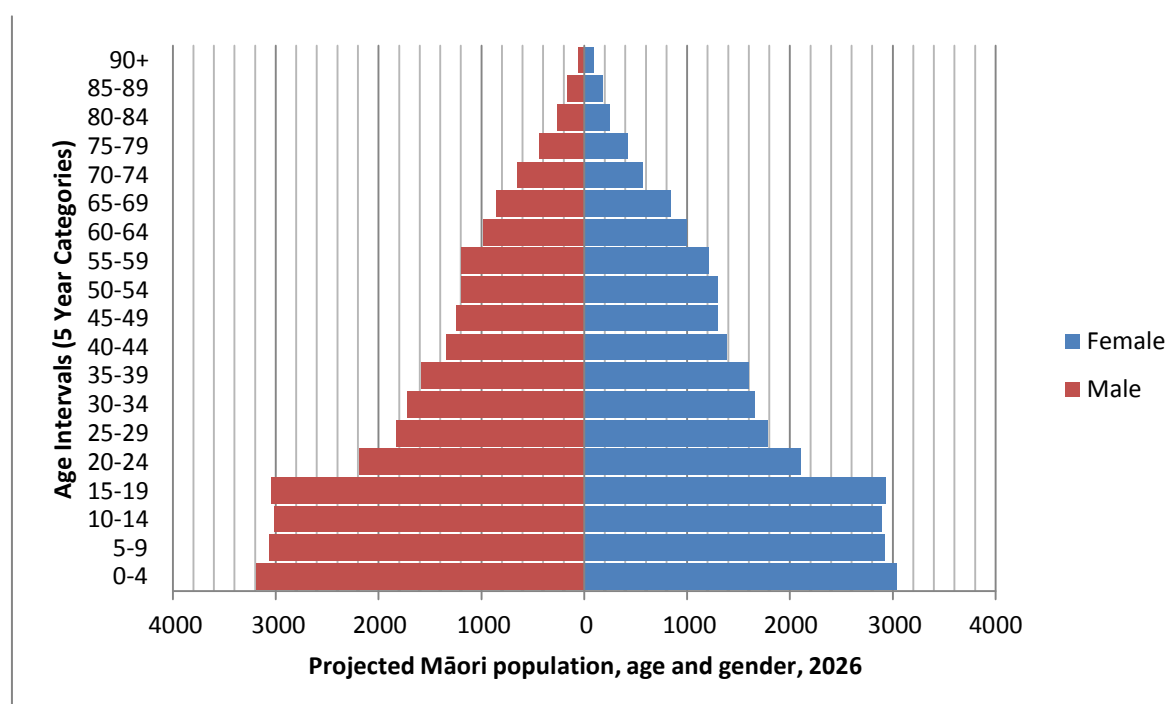
**Table 1.3:** Māori population change, age and gender, 2006 Census, 2026

Location	Age Group	2006(Base)			2026			% increase 2006-2026		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Canterbury	0-14	6390	6150	12550	9270	8850	18140	45.1	43.9	44.5
	15-64	11560	11260	22810	16300	16270	32580	41.0	44.5	42.8
	65+	600	610	1210	2430	2350	4770	305	285.2	294.2
	Total	18550	18020	36570	28000	27470	55490	50.9	52.4	51.7
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

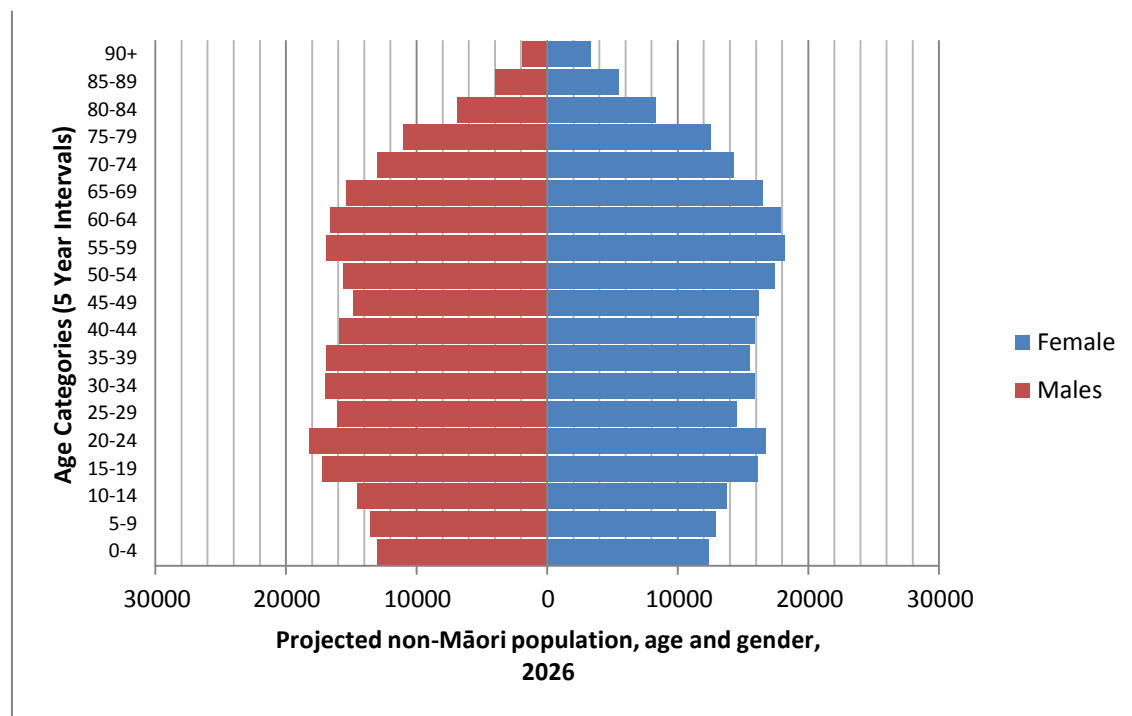
**Table 1.4:** Non-Māori population change, age and gender, 2006 Census, 2026

Location	Age Group	2006(Base)			2026			% increase 2006-2026		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Canterbury	0-14	41420	39860	81250	41150	39010	80130	-0.7	-2.1	-1.4
	15-64	149000	153200	302220	165380	164430	329800	11.0	7.3	9.1
	65+	27550	35760	63320	52190	60420	112620	89.4	69.0	77.9
	Total	217970	228820	446790	258720	263860	522550	18.7	15.3	17.0
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:

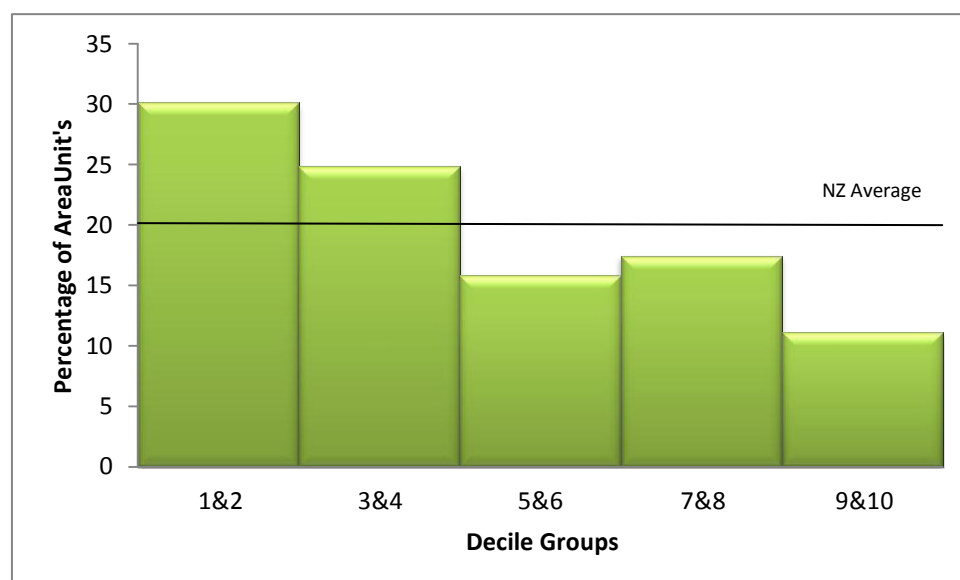
*“..The circumstances, in which people are born, grow up, live, work and age, and the systems put in place to deal with illness. These circumstances are in turn shaped by a wider set of forces: economics, social policies, and politics”, (World Health Organisation, 2008).*

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).

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

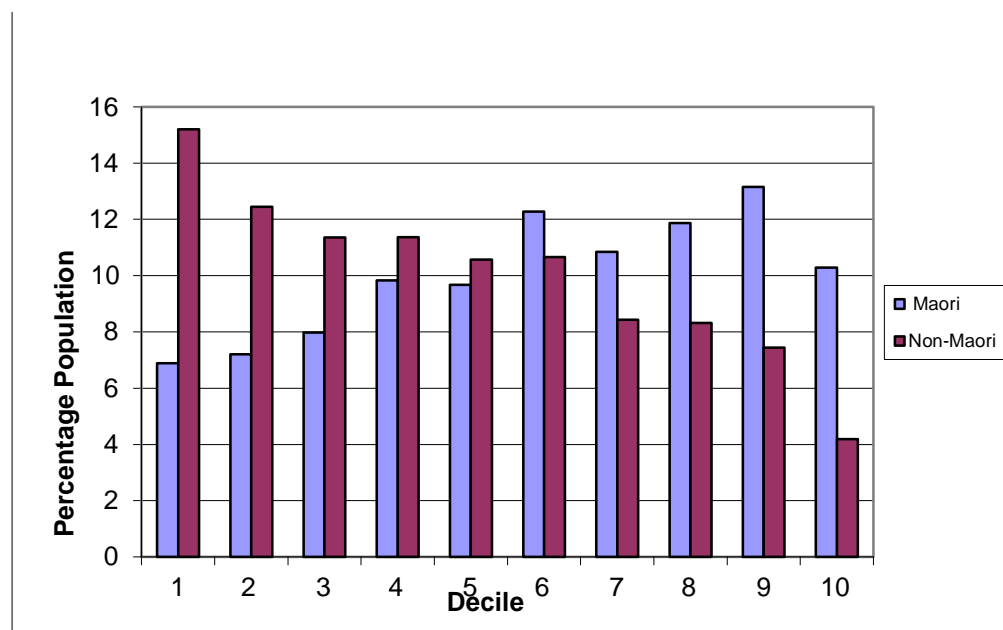


The Canterbury DHB has a higher proportion of Area Units in the lower deprivation deciles, (indicating a larger than average number of less deprived areas). For example 30.1 percent of area units are included in deciles 1 and 2 compared to 11.11 percent in deciles 9 and 10.

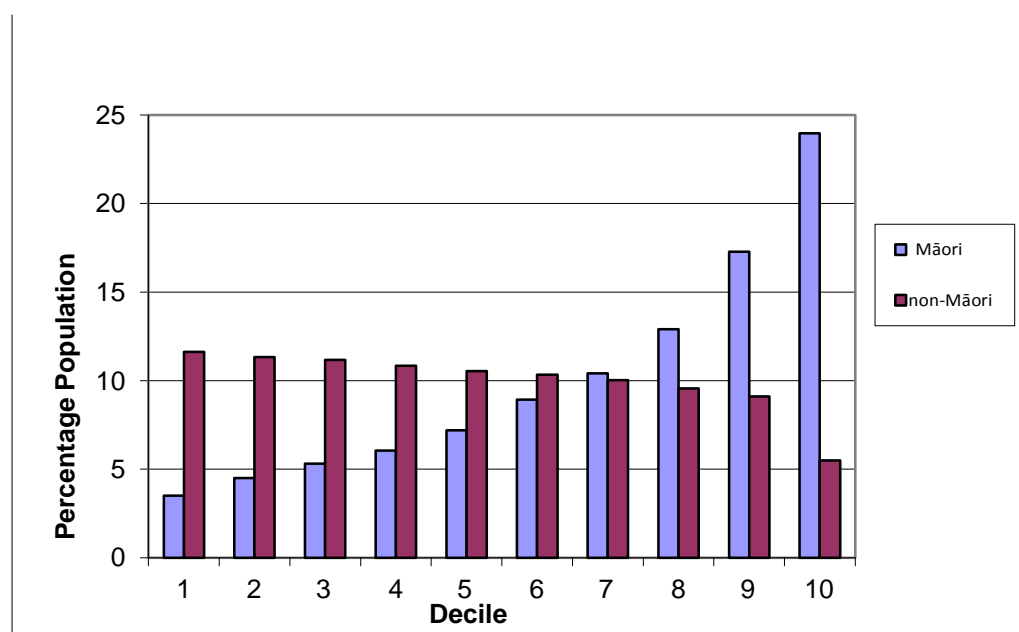
Compared to the New Zealand Māori population, the Māori population in Canterbury is much more evenly spread across the deprivation deciles. 6.7 percent of Māori are in decile 1 (least deprived) compared to 3.5 percent nationally, whilst 10.3 percent are in decile 10 (most deprived) compared to 24.0 percent nationally.

The difference in levels of deprivation between Māori and non-Māori is much less pronounced in Canterbury compared to New Zealand overall. Whilst a higher proportion of Māori are in deciles 5-10 compared to deciles 1-4, there is no clear pattern to the distribution. Compared to Māori, non-Māori have greater representation in deciles 1-4 and lower representation in deciles 5-10. In addition there is a downward gradient in the number of non-Māori in each decile from 1 (least deprived) to 10 (most deprived).

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



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



## 2.2 Education

The population of Canterbury DHB has a slightly lower proportion of university graduates (degree level and above) (13.5%) when compared to the New Zealand population (14.2%). The rate of people with no qualifications (22.6%) is very similar to the rate for New Zealand as a whole (22.4%).

## 2.3 Income

Canterbury DHB has an almost identical proportion of the population earning over \$30,000 in personal income to that of New Zealand (37.0% compared to 37.3%). This represents the 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

Both employment rate and type of employment in Canterbury are very similar to that of New Zealand.

## 2.5 Housing Tenure

Those living in Canterbury DHB are more likely to own or part own their home compared to the New Zealand population (56.6% compared to 51.2%). There are also a slightly lower proportion of homes held in family trust in Canterbury compared to the rest of the country, (9.9% compared to 11.6%).

**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
Canterbury DHB	Number	100,482	50,904	17,562	8,484	177,432
	Percentage	56.6	28.7	9.9	4.8	100.0
New Zealand	Number	743955	451965	167925	90333	1454178
	Percentage	51.2	31.1	11.6	6.1	100.0

## 2.6 Communications and Transport

The Canterbury population have a higher rate of access to a telephone and internet compared to the rest of New Zealand (91.9% and 60.6% respectively compared to 87.8% and 58.0%). For all other forms of telecommunication the access rates are similar to national rates. The rate of access to motor vehicles in Canterbury is also similar to that for the country 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 Canterbury DHB district, in comparison to all New Zealanders.

#### Key points

- Two of the top five leading causes of avoidable mortality were the same for Māori and non-Māori. These were ischaemic heart disease and lung cancer. These were also featured in the total leading causes for Canterbury DHB along with suicide, colorectal cancer, and motor vehicle accidents.
- The avoidable hospitalisation rate for Canterbury DHB was statistically significantly lower than the national rate.
- Respiratory infections, angina, dental conditions, and ENT infections were leading causes of avoidable hospitalisation for both Māori and non-Māori in the Canterbury DHB
- The unintentional injury hospitalisation rate for Canterbury DHB was statistically significantly lower than the national rate.
- Four of the top five leading causes of hospitalisations for Māori and non-Māori children 0-4 years old were similar. ENT infections featured in the top five causes for Māori while gastro-oesophageal reflux disease was a leading cause for non-Māori children. For Māori children 5-14 years old, asthma was one of the top five leading causes of hospitalisations but it wasn't for non-Māori children.
- Leading causes of mortality for older people in Canterbury DHB were the same as those nationally. Again ethnic difference were present with hypertensive disease being in the top five causes for over 65 year old Maori, and colorectal cancer for non- Māori.
- Hospitalisation for COPD in the 45+ age group was statistically significantly higher for Māori than non-Māori.
- The rate of lung cancer registrations was statistically significantly higher for Māori people in Canterbury than non- Māori people. However, the rate of melanoma registrations was lower for Māori than non- Māori.



### 3.1 Avoidable Mortality

Overall, there was no statistically significant difference in the avoidable mortality rate for Māori and non-Māori in the Canterbury DHB (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	
Canterbury	Female	177.6	-11.3	- 366.4	71.5	42.3	- 100.6	76.0	47.1	- 104.8
	Male	227.0	22.3	- 431.7	121.8	82.9	- 160.8	126.6	88.8	- 164.5
	Total	203.5	63.6	- 343.4	96.1	71.8	- 120.3	100.8	77.0	- 124.5
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 varied by ethnic group (Table 3.2). Only two of the top five leading causes of avoidable mortality in the Canterbury DHB were the same for Māori and non-Māori. These were ischaemic heart disease and lung cancer.

**Table 3.2:** Leading causes of avoidable mortality, ethnicity, 0-74 years, 2006-08

Canterbury DHB			New Zealand		
	Condition	Rank	Condition	Rank	
Māori	Ischaemic heart disease	1	Ischaemic heart disease	1	
	Lung cancer	2	Lung cancer	2	
	Cerebrovascular diseases	3	Diabetes	3	
	Motor vehicle accidents	4	Motor vehicle accidents	4	
	COPD	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	
	Complications of perinatal period	5	Colorectal cancer	5	

Note: COPD=chronic obstructive pulmonary disease

Four of the leading causes of avoidable mortality in the Canterbury DHB were the same as those nationally; these were ischaemic heart disease, lung cancer, motor vehicle accidents, and suicide (Table 3.3). Colorectal cancer featured for Canterbury DHB, while diabetes was one of the top five leading causes for New Zealand.

**Table 3.3:** Leading causes of avoidable mortality, gender, 0-74 years, 2006-08

	Canterbury DHB		New Zealand	
	Condition	Rank	Condition	Rank
Female	Breast cancer (female only)	1	Breast cancer (female only)	1
	Lung cancer	2	Lung cancer	2
	Ischaemic heart disease	3	Ischaemic heart disease	3
	Colorectal cancer	4	Colorectal cancer	4
	COPD	5	Diabetes	5
Male	Ischaemic heart disease	1	Ischaemic heart disease	1
	Suicide and self-inflicted injuries	2	Suicide and self-inflicted injuries	2
	Lung cancer	3	Motor vehicle accidents	3
	Colorectal cancer	4	Lung cancer	4
	Motor vehicle accidents	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

Note: COPD=chronic obstructive pulmonary disease

### 3.3 Avoidable Hospitalisations

Overall, the avoidable hospitalisation rate for Canterbury DHB was significantly lower than the national rate (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	
Canterbury	Female	3372.7	2552.7	- 4192.7	2801.1	2540.7	- 3061.5	2811.8	2568.9	- 3054.7
	Male	3380.3	2572.5	- 4188.2	3077.2	2805.9	- 3348.5	3091.0	2837.0	- 3344.9
	Total	3380.3	2804.4	- 3956.2	2938.7	2750.6	- 3126.8	2951.7	2775.9	- 3127.5
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

Respiratory infections, angina, dental conditions, and ENT infections were leading causes for both Māori and non-Māori in the Canterbury DHB (Table 3.5).

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

	Canterbury 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
	Gastroenteritis	2	Gastroenteritis	2
	ENT infections	3	ENT infections	3
	Dental conditions	4	Dental conditions	4
	Angina	5	Angina	5

Note: ENT infections= ear, nose and throat infections

The leading causes of avoidable hospitalisations for Canterbury DHB were the same as those for New Zealand as a whole (Table 3.6). The leading causes for both men and women in the Canterbury DHB were similar to the national leading causes.

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

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

Note: ENT infections= ear, nose and throat infections

### 3.5 Unintentional Injury Mortality

There was no statistically significant difference in the unintentional injury mortality rates for Canterbury DHB compared to the national rate (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	
Canterbury	Female	16.3	-39.9	- 72.5	8.3	-3.9	- 20.4	9.1	-3.1	- 21.4
	Male	37.8	-45.8	- 121.4	21.0	2.2	- 39.7	22.3	3.8	- 40.8
	Total	27.4	-23.6	- 78.4	14.5	3.4	- 25.7	15.6	4.5	- 26.7
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

Table 3.8 shows that the unintentional hospitalisation rate for the Canterbury DHB was statistically significantly lower than the national rate. There was no difference between the Māori and non-Māori rates.

**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	
Canterbury	Female	776.6	382.2	- 1171.0	920.4	777.5	- 1063.3	908.2	775.1	- 1041.2
	Male	1478.8	947.2	- 2010.3	1568.6	1385.2	- 1752.0	1559.8	1387.7	- 1731.9
	Total	1131.7	799.8	- 1463.5	1247.0	1130.5	- 1363.4	1236.5	1127.6	- 1345.5
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

Four of the leading causes of hospitalisations for Māori and non-Māori children 0-4 years were similar (Table 3.9). In the Canterbury DHB, ENT infections featured as one of the top five leading causes for Māori children while respiratory and cardiovascular disorders specific to the perinatal period featured one of the top five causes among non-Māori children in the Canterbury DHB.

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

	Canterbury DHB		New Zealand	
	Condition	Rank	Condition	Rank
Māori	*Persons encountering health services in other circumstances	1	Respiratory infections	1
	Respiratory infections	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
non-Māori	Persons encountering health services in other circumstances	1	Persons encountering health services in other circumstances	1
	Respiratory infections	2	Respiratory infections	2
	Gastro-oesophageal reflux disease	3	Disorders related to length of gestation and fetal growth	3
	Respiratory and cardiovascular disorders specific to the perinatal period	4	Gastro-oesophageal reflux disease	4
	Disorders related to length of gestation and fetal growth	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

Four of the leading causes of hospitalisations for children 0-4 years of age in the Canterbury DHB were the same as those for New Zealand in total (Table 3.10). These were persons encountering health services in other circumstances, respiratory infections, gastro-oesophageal reflux disease, and disorders related to length of gestations and fetal growth. There were no difference in leading causes of hospitalisations between boys and girls.

**Table 3.10:** Leading causes of hospitalisations, gender, 0-4 years, 2007-09

	Canterbury 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
	Gastro-oesophageal reflux disease	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
	Respiratory and cardiovascular disorders specific to the perinatal period	5	ENT infections	5
Male	Persons encountering health services in other circumstances	1	Respiratory infections	1
	Respiratory infections	2	Persons encountering health services in other circumstances	2
	Respiratory and cardiovascular disorders specific to the perinatal period	3	Disorders related to length of gestation and fetal growth	3
	Gastro-oesophageal reflux disease	4	Gastro-oesophageal reflux disease	4
	Disorders related to length of gestation and fetal growth	5	ENT infections	5
Total	Persons encountering health services in other circumstances	1	Respiratory infections	1
	Respiratory infections	2	Persons encountering health services in other circumstances	2
	Gastro-oesophageal reflux disease	3	Disorders related to length of gestation and fetal growth	3
	Respiratory and cardiovascular disorders specific to the perinatal period	4	Gastro-oesophageal reflux disease	4
	Disorders related to length of gestation and fetal growth	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

Four of the leading causes of hospitalisations for children 5-14 years of age were similar for Māori and non-Māori: dental conditions, respiratory infections, ENT infections, persons encountering health services for specific procedures and health care (Table 3.11).

**Table 3.11:** Leading causes of hospitalisations, ethnicity, 5-14 years, 2007-09

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

Table 3.12 shows that the leading causes of hospitalisations for children 5-14 years of age were the same as those nationally: dental conditions, respiratory infections, ENT infections, injuries to the elbow and forearm, and persons encountering health services for specific procedures and health care.

**Table 3.12:** Leading causes of hospitalisations, gender, 5-14 years, 2007-09

	Canterbury DHB		New Zealand	
	Condition	Rank	Condition	Rank
Female	Dental conditions	1	Dental conditions	1
	Respiratory infections	2	Respiratory infections	2
	*Persons encountering health services for specific procedures and health care	3	ENT infections	3
	ENT infections	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
	Persons encountering health services for specific procedures and health care	3	Injuries to the elbow and forearm	3
	ENT infections	4	ENT infections	4
	Injuries to the elbow and forearm	5	Injuries to the head	5
Total	Dental conditions	1	Dental conditions	1
	Respiratory infections	2	Respiratory infections	2
	Persons encountering health services for specific procedures and health care	3	Injuries to the elbow and forearm	3
	ENT infections	4	ENT infections	4
	Injuries to the elbow and forearm	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)

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

Four of the leading causes of mortality for older people in the Canterbury DHB were similar between Māori and non-Māori (Table 3.13). These were ischaemic heart disease, lung cancer, COPD, and stroke. Hypertensive disease was a leading cause for Māori while colorectal cancer was a leading cause for non-Māori.

**Table 3.13:** Leading causes of mortality, ethnicity, 65+ years, 2006-08

	Canterbury 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
	Hypertensive disease	5	Stroke	5
non-Māori	Ischaemic heart disease	1	Ischaemic heart disease	1
	Stroke	2	Stroke	2
	COPD	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 of mortality, 65+ years by gender

The top five leading causes of mortality for older people in Canterbury DHB were the same as those nationally: ischaemic heart disease, stroke, COPD, lung cancer, and colorectal cancer (Table 3.14). Similar patterns were also found between men and women.

**Table 3.14:** Leading causes of mortality, gender, 65+ years, 2006-08

	Canterbury DHB		New Zealand	
	Condition	Rank	Condition	Rank
Female	Ischaemic heart disease	1	Ischaemic heart disease	1
	Stroke	2	Stroke	2
	COPD	3	COPD	3
	Lung cancer	4	Lung cancer	4
	Colorectal cancer	5	Colorectal cancer	5
Male	Ischaemic heart disease	1	Ischaemic heart disease	1
	Lung cancer	2	Lung cancer	2
	Stroke	3	COPD	3
	COPD	4	Stroke	4
	Colorectal cancer	5	Colorectal cancer	5
Total	Ischaemic heart disease	1	Ischaemic heart disease	1
	Stroke	2	Stroke	2
	COPD	3	COPD	3
	Lung cancer	4	Lung cancer	4
	Colorectal cancer	5	Colorectal cancer	5

Note: COPD=chronic obstructive pulmonary disease

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

Four of the leading causes of hospitalisations for older Māori and non-Māori people in the Canterbury DHB were similar (Table 3.15). These were persons encountering health services for specific procedures and health care, COPD, respiratory infections, and angina.

**Table 3.15:** Leading causes of hospitalisations, ethnicity, 65+ years, 2007-09

	Canterbury DHB		New Zealand	
	Condition	Rank	Condition	Rank
Māori	*Persons encountering health services for specific procedures and health care	1	Persons encountering health services for specific procedures and health care	1
	COPD	2	COPD	2
	Respiratory infections	3	Respiratory infections	3
	Disorders of lens	4	Diabetes	4
	Angina	5	Angina	5
non-Māori	Persons encountering health services for specific procedures and health care	1	Persons encountering health services for specific procedures and health care	1
	Angina	2	Angina	2
	Respiratory infections	3	Respiratory infections	3
	COPD	4	Ischaemic heart disease	4
	Ischaemic 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.

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

Table 3.16 shows that four of the top five leading causes of hospitalisations for older people in Canterbury DHB were similar to the New Zealand top five leading causes. Disorders of the lens was one of the top five leading causes for females while it was not for males.

**Table 3.16:** Leading causes of hospitalisations, gender, 65+ years, 2007-09

	Canterbury DHB		New Zealand	
	Condition	Rank	Condition	Rank
Female	*Persons encountering health services for specific procedures and health care	1	Persons encountering health services for specific procedures and health care	1
	Angina	2	Angina	2
	Disorders of lens	3	Respiratory infections	3
	Respiratory infections	4	COPD	4
	COPD	5	Other forms of heart disease	5
Male	Persons encountering health services for specific procedures and health care	1	Persons encountering health services for specific procedures and health care	1
	Angina	2	Angina	2
	Respiratory infections	3	Respiratory infections	3
	Ischaemic heart disease	4	Ischaemic heart disease	4
	COPD	5	Other forms of heart disease	5
Total	Persons encountering health services for specific procedures and health care	1	Persons encountering health services for specific procedures and health care	1
	Angina	2	Angina	2
	Respiratory infections	3	Respiratory infections	3
	COPD	4	Ischaemic heart disease	4
	Ischaemic 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 Canterbury DHB are available in the appendices 2-4. Key points are listed here.

### **3.9.1 Chronic conditions**

The rate of hospitalisation for cardiovascular disease and melanoma in Canterbury DHB was statistically significantly lower than the national rate (Appendix 3: Table 3.1.2 and Table 3.1.11). The rate of chronic obstructive pulmonary disease hospitalisations in Canterbury DHB was statistically significantly higher for Māori people than non-Māori people (Appendix 3: Table 3.1.27).

The asthma hospitalisation rate for both the 0-14 year olds and the 15+ age group in the Canterbury DHB was statistically significantly lower than the national rate (Appendix 3: Table 3.1.28 and Table 3.1.26).

### **3.9.2 Cancer**

The cancer mortality and hospitalisation rate in Canterbury did not differ statistically significantly to the national rate. However the rate of lung cancer mortality (Appendix 2: Table 2.1.19) and hospitalisations (Appendix 3: Table 3.1.17) were three times higher for Māori compared to non-Māori in the 65+ age group. The rate of lung cancer registrations was statistically significantly higher for Māori people in Canterbury than non-Māori people (Appendix 4: Table 4.1.1). However, the rate of melanoma registrations was lower for Māori than non-Māori (Appendix 4: Table 4.1.6).

## 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 Canterbury 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

- In the Canterbury DHB, three in four Māori children in 2009-2010 were up to date with their immunisations by the age of two, which was lower than the non-Māori rate but higher than the total New Zealand Māori rate.
- Over two-thirds of people aged 65 years and over in the Canterbury DHB received an influenza vaccine in the past 12 months which is higher than the national rate.
- Of eligible women in Canterbury DHB, over 80 percent had a mammogram in the past two years, which was much greater than the national percentage (63.7%). The screening coverage was considerably lower for Māori women than for non-Māori women in the Canterbury DHB.
- Of women aged 20 to 69 years in the Canterbury DHB who had a primary health care provider, 85.2 percent had a cervical smear in the past three years. Again the screening coverage was considerable lower for Māori women (48.1%) than for non-Māori women (76.4%).

## 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 coverage rate was higher for non-Māori than Māori in Canterbury DHB; however both were higher than the ethnic specific rates for New Zealand as a whole. Four in five children in 2009-2010 had received all specified immunisation vaccines by the age of two which, which was higher than the national coverage of 77.7 percent (Table 4.1).

**Table 4.1:** Full immunisation coverage at two years, percent, ethnicity, 2009-10

DHB	Māori	non- Māori	Total
Canterbury DHB	77.3%	81.2%	80.7%
New Zealand	72.0%	79.4%	77.7%

## 4.2 Influenza Vaccine Coverage at 65+ Years

In the Canterbury DHB, 58.9 percent of Māori people aged 65 years either received an influenza vaccine, or had agreements made by a primary health provider to receive an influenza vaccine in the past 12 months (Table 4.2). This is lower than the coverage rate for non-Māori. However, both were higher than the ethnic specific rates for New Zealand as a whole.

**Table 4.2:** Influenza vaccinations in the last 12 months, 65+ years, percent, ethnicity, 2009-10

DHB	Māori	non-Māori	Total
Canterbury DHB	58.9%	65.0%	68.7%
New Zealand	54.4%	60.9%	60.5%

## 4.3 Breast Cancer Screening

Of women in the Canterbury DHB aged 50-64 years who have a primary care provider, the screening coverage was lower for Māori women (69.3%) than for non-Māori women (80.8%) in the Canterbury DHB (Table 4.3). However the coverage rate was still higher for both Māori and non-Māori in the Canterbury compared to national rates. Over 80 percent had a mammogram to check for early signs of breast cancer in the past two years, which was considerably higher than the national percentage (63.7%).

**Table 4.3:** Breast cancer screening coverage, 50-64 years, percent, ethnicity, 2009-10

DHB	Māori	non-Māori	Total
Canterbury DHB	69.3%	80.8%	80.2%
New Zealand	51.5%	65.0%	63.7%

#### 4.4 Cervical Cancer Screening

Of women aged 20 to 69 years in the Canterbury DHB who had a primary health care provider, 85.2 percent had a cervical smear in the past three years, of which 48.1 percent were Māori and 76.4 percent were non-Māori (Table 4.4).

**Table 4.4:** Had cervical smear in the last three years, 20-69 years, percent, ethnicity, 2009-10

DHB	Māori	non-Māori	Total
Canterbury DHB	48.1%	76.4%	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
Canterbury	0-14	47,810	46,010	93,800	49,950	47,690	97,640	50,980	48,550	99,530	51,590	48,870	100,460	50,420	47,860	98,270	5.5	4.0	4.8
	15-64	160,560	164,460	325,030	171,420	174,080	345,500	174,910	176,570	351,470	178,280	178,910	357,190	181,680	180,700	362,380	13.2	9.9	11.5
	65+	28,150	36,370	64,530	34,350	41,750	76,100	39,840	47,090	86,960	46,820	54,300	101,120	54,620	62,770	117,390	94.0	72.6	81.9
	Total	236,520	246,840	483,360	255,720	263,520	519,240	265,730	272,210	537,960	276,690	282,080	558,770	286,720	291,330	578,040	21.2	18.0	19.6
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)

	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
Canterbury	3,260	3,110	6,360	3,330	3,160	6,500	3,240	3,070	6,310	3,190	3,020	6,210	3,210	3,050	6,260	-	1.5	- 1.9 - 1.6
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
Canterbury	12,210	11,910	24,120	13,980	13,220	27,200	13,410	12,750	26,160	13,030	12,390	25,420	13,000	12,360	25,360	6.5	3.8	5.1
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
Canterbury	15,620	15,050	30,660	16,500	15,830	32,320	17,770	16,860	34,630	17,040	16,240	33,280	16,620	15,840	32,450	6.4	5.2	5.8
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 1.1.5: 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
Canterbury	16,720	15,940	32,660	16,140	15,480	31,620	16,560	15,870	32,430	18,330	17,220	35,550	17,590	16,610	34,200	5.2	4.2	4.7
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)

	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
Canterbury	17,970	16,810	34,780	18,670	17,810	36,480	18,260	17,330	35,580	18,510	17,730	36,240	20,280	19,070	39,350	12.9	13.4	13.1
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)

	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
Canterbury	18,030	17,050	35,090	20,720	18,370	39,080	20,870	19,000	39,870	20,140	18,460	38,600	20,400	18,860	39,260	13.1	10.6	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 1.1.8: 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
Canterbury	14,510	15,060	29,570	16,530	15,290	31,820	18,080	15,840	33,920	18,620	16,830	35,450	17,900	16,290	34,190	23.4	8.2	15.6
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 1.1.9: 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
Canterbury	15,800	17,380	33,180	15,300	16,480	31,780	16,490	16,380	32,870	18,130	16,560	34,690	18,680	17,550	36,220	18.2	1.0	9.2
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		
Canterbury	17,820	19,010	36,830	15,970	17,660	33,630	15,550	17,010	32,560	16,890	16,930	33,820	18,530	17,110	35,640	4.0	-	10.0	-	3.2
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 1.1.11: 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			
Canterbury	18,050	19,160	37,210	18,430	19,690	38,130	16,840	18,590	35,430	15,930	17,350	33,290	17,270	17,280	34,550	-	4.3	-	9.8	-	7.1
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
Canterbury	17,540	18,020	35,560	18,150	19,150	37,300	18,560	19,590	38,150	17,010	18,760	35,760	16,120	17,530	33,650	-	8.1	- 2.7 - 5.4
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
Canterbury	15,490	15,950	31,440	17,920	18,560	36,480	18,120	19,250	37,370	18,360	19,520	37,890	16,840	18,700	35,550	8.7	17.2	13.1
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
Canterbury	14,440	14,880	29,330	15,580	16,310	31,880	17,160	17,850	35,010	17,870	19,110	36,970	18,120	19,400	37,520	25.5	30.4	27.9
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
Canterbury	10,910	11,140	22,040	14,150	14,760	28,920	14,980	15,730	30,710	16,820	17,660	34,480	17,540	18,910	36,450	60.8	69.7	65.4
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
Canterbury	8,840	9,550	18,400	11,150	11,810	22,950	13,570	14,480	28,060	14,430	15,440	29,870	16,250	17,340	33,590	83.8	81.6	82.6
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 1.1.17: 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
Canterbury	6,880	7,810	14,690	8,750	9,520	18,280	9,870	10,560	20,430	12,770	13,900	26,670	13,650	14,860	28,510	98.4	90.3	94.1
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
Canterbury	6,030	7,570	13,600	6,160	7,320	13,490	7,330	8,470	15,800	8,800	9,800	18,600	11,440	12,930	24,370	89.7	70.8	79.2
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
Canterbury	4,020	6,020	10,050	4,670	6,360	11,020	4,750	6,130	10,890	5,910	7,340	13,250	7,180	8,570	15,750	78.6	42.4	56.7
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
Canterbury	1,720	3,550	5,270	2,610	4,290	6,900	3,020	4,580	7,610	3,220	4,640	7,860	4,120	5,680	9,800	139.5	60.0	86.0
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 1.1.21: 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
Canterbury	660	1,870	2,520	1,010	2,450	3,460	1,300	2,870	4,170	1,690	3,180	4,870	1,980	3,390	5,370	200.0	81.3	113.1
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
Canterbury	236,500	246,800	483,400	255,700	263,500	519,200	265,700	272,200	538,000	276,700	282,100	558,800	286,700	291,300	578,100	21.2	18.0	19.6
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
Canterbury	0-14	6,390	6,150	12,550	7,590	7,300	14,890	8,340	7,990	16,350	9,160	8,730	17,880	9,270	8,850	18,140	45.1	43.9	44.5
	15-64	11,560	11,260	22,810	12,880	12,670	25,560	13,710	13,550	27,270	14,690	14,690	29,400	16,300	16,270	32,580	41.0	44.5	42.8
	65+	600	610	1,210	1,020	970	1,970	1,340	1,290	2,620	1,840	1,740	3,590	2,430	2,350	4,770	305.0	285.2	294.2
	Total	18,550	18,020	36,570	21,490	20,940	42,420	23,390	22,830	46,240	25,690	25,160	50,870	28,000	27,470	55,490	50.9	52.4	51.7
New Zealand	0-14	110,480	104,810	215,310	119,900	114,160	234,070	126,030	119,990	246,030	133,180	126,750	259,920	132,290	125,860	258,150	19.7	20.1	19.9
	15-64	183,640	199,700	383,320	200,480	215,580	416,040	210,230	224,440	434,680	220,480	233,230	453,710	236,750	246,600	483,350	28.9	23.5	26.1
	65+	11,680	14,010	25,710	15,340	18,520	33,860	18,920	22,970	41,880	24,150	29,520	53,660	30,830	38,330	69,150	164.0	173.6	169.0
	Total	305,800	318,520	624,340	335,720	348,260	683,970	355,180	367,400	722,590	377,810	389,500	767,290	399,870	410,790	810,650	30.8	29.0	29.8

Table 1.2.2: Projected Māori Population Aged 0 Years by Sex at 30 June 2007(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
Canterbury	520	470	990	600	570	1,180	600	570	1,180	620	580	1,200	650	620	1,270	25.0	31.9	28.3
New Zealand	8,070	7,840	15,920	9,220	8,750	17,980	9,080	8,620	17,700	9,050	8,590	17,640	9,310	8,830	18,140	15.4	12.6	13.9

Table 1.2.3: Projected Māori Population Aged 1-4 Years by Sex at 30 June 2007 (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
Canterbury	1,720	1,680	3,400	2,460	2,340	4,790	2,430	2,310	4,750	2,440	2,320	4,750	2,540	2,420	4,960	47.7	44.0	45.9
New Zealand	29,390	27,740	57,130	37,050	35,200	72,250	36,240	34,420	70,660	35,660	33,860	69,510	36,160	34,320	70,480	23.0	23.7	23.4

Table 1.2.4: Projected Māori Population Aged 5-9 Years by Sex at 30 June 2007(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
Canterbury	2,100	2,050	4,160	2,460	2,360	4,830	3,070	2,930	6,000	3,050	2,910	5,960	3,060	2,920	5,990	45.7	42.4	44.0
New Zealand	36,500	34,900	71,410	38,540	36,750	75,290	45,430	43,250	88,690	44,370	42,230	86,600	43,760	41,640	85,410	19.9	19.3	19.6

Table 1.2.5: Projected Māori Population Aged 10-14 Years by Sex at 30 June 2007 (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
Canterbury	2,050	1,950	4,000	2,070	2,030	4,090	2,240	2,180	4,420	3,050	2,920	5,970	3,020	2,890	5,920	47.3	48.2	48.0
New Zealand	36,520	34,330	70,850	35,090	33,460	68,550	35,280	33,700	68,980	44,100	42,070	86,170	43,060	41,070	84,120	17.9	19.6	18.7

Table 1.2.6: Projected Māori Population Aged 15-19 Years by Sex at 30 June 2007 (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
Canterbury	1,970	1,960	3,930	2,050	2,030	4,080	2,110	2,080	4,190	2,250	2,210	4,460	3,040	2,930	5,970	54.3	49.5	51.9
New Zealand	32,900	33,090	65,980	34,100	32,300	66,390	33,530	32,150	65,680	33,610	32,080	65,690	42,170	40,200	82,370	28.2	21.5	24.8

Table 1.2.7: Projected Māori Population Aged 20-24 Years by Sex at 30 June 2007(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
Canterbury	1,680	1,650	3,330	1,960	1,830	3,790	2,000	1,880	3,880	2,060	1,980	4,030	2,190	2,100	4,290	30.4	27.3	28.8
New Zealand	24,200	25,900	50,090	31,190	30,640	61,830	32,070	29,740	61,810	30,950	29,310	60,250	31,030	29,250	60,280	28.2	12.9	20.3

Table 1.2.8: Projected Māori Population Aged 25-29 Years by Sex at 30 June 2007 (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
Canterbury	1,370	1,380	2,750	1,490	1,510	3,000	1,670	1,650	3,320	1,770	1,680	3,460	1,830	1,780	3,610	33.6	29.0	31.3
New Zealand	20,620	22,960	43,580	21,930	23,830	45,750	27,180	27,580	54,760	29,110	27,190	56,310	28,040	26,780	54,820	36.0	16.6	25.8

Table 1.2.9: Projected Māori Population Aged 30-34 Years by Sex at 30 June 2007 (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
Canterbury	1,300	1,380	2,670	1,310	1,340	2,660	1,390	1,420	2,810	1,610	1,620	3,240	1,720	1,660	3,380	32.3	20.3	26.6
New Zealand	20,280	23,040	43,320	19,270	21,750	41,020	19,920	22,330	42,250	25,890	26,720	52,610	27,800	26,340	54,150	37.1	14.3	25.0

Table 1.2.10: Projected Māori Population Aged 35-39 Years by Sex at 30 June 2007 (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
Canterbury	1,300	1,300	2,600	1,240	1,340	2,580	1,290	1,330	2,620	1,370	1,400	2,770	1,580	1,600	3,190	21.5	23.1	22.7
New Zealand	19,940	22,610	42,550	18,780	21,830	40,610	18,390	21,360	39,750	19,130	21,750	40,880	24,990	26,070	51,060	25.3	15.3	20.0

Table 1.2.11: Projected Māori Population Aged 40-44 Years by Sex at 30 June 2007 (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
Canterbury	1,110	1,100	2,210	1,290	1,310	2,600	1,240	1,340	2,580	1,270	1,320	2,590	1,340	1,390	2,730	20.7	26.4	23.5
New Zealand	19,170	21,360	40,530	19,120	22,160	41,280	18,490	21,590	40,070	17,590	20,680	38,270	18,330	21,080	39,410	-	4.4	- 1.3 - 2.8

Table 1.2.12: Projected Māori Population Aged 45-49 Years by Sex at 30 June 2007 (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
Canterbury	1,010	950	1,960	1,110	1,090	2,200	1,250	1,260	2,510	1,210	1,320	2,540	1,240	1,300	2,540	22.8	36.8	29.6
New Zealand	16,760	18,590	35,350	18,010	20,280	38,290	18,040	20,990	39,040	17,620	20,820	38,440	16,770	19,950	36,720	0.1	7.3	3.9

Table 1.2.13: Projected Māori Population Aged 50-54 Years by Sex at 30 June 2007 (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
Canterbury	820	670	1,490	1,010	990	2,000	1,050	1,060	2,110	1,220	1,240	2,460	1,190	1,300	2,490	45.1	94.0	67.1
New Zealand	12,930	13,930	26,860	16,240	18,560	34,800	17,130	19,620	36,750	17,090	20,150	37,240	16,720	20,010	36,720	29.3	43.6	36.7

Table 1.2.14: Projected Māori Population Aged 55-59 Years by Sex at 30 June 2007 (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
Canterbury	600	530	1,130	790	670	1,460	960	900	1,860	1,020	1,040	2,060	1,190	1,210	2,400	98.3	128.3	112.4
New Zealand	10,070	10,860	20,930	12,390	13,760	26,140	14,630	16,810	31,440	16,040	18,710	34,750	16,070	19,260	35,330	59.6	77.3	68.8

Table 1.2.15: Projected Māori Population Aged 60-64 Years by Sex at 30 June 2007 (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
Canterbury	400	340	740	630	560	1,190	750	630	1,390	910	880	1,790	980	1,000	1,980	145.0	194.1	167.6
New Zealand	6,770	7,360	14,130	9,450	10,470	19,930	10,850	12,270	23,130	13,450	15,820	29,270	14,830	17,660	32,490	119.1	139.9	129.9

Table 1.2.16: Projected Māori Population Aged 65-69 Years by Sex at 30 June 2007 (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
Canterbury	280	260	550	410	360	770	540	490	1,030	710	610	1,320	860	840	1,700	207.1	223.1	209.1
New Zealand	5,410	5,930	11,350	6,200	7,030	13,240	8,000	9,180	17,180	9,690	11,250	20,930	12,110	14,580	26,690	123.8	145.9	135.2

Table 1.2.17: Projected Māori Population Aged 70-74 Years by Sex at 30 June 2007 (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
Canterbury	160	160	320	300	250	540	350	310	660	500	460	950	650	570	1,220	306.3	256.3	281.3
New Zealand	3,350	3,780	7,140	4,700	5,300	10,000	4,940	5,790	10,730	6,820	8,070	14,890	8,370	9,980	18,350	149.9	164.0	157.0

Table 1.2.18: Projected Māori Population Aged 75-79 Years by Sex at 30 June 2007 (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
Canterbury	100	110	210	150	180	330	230	230	460	310	290	600	440	420	860	340.0	281.8	309.5
New Zealand	1,810	2,380	4,200	2,590	3,230	5,820	3,470	4,200	7,670	3,930	4,830	8,760	5,540	6,830	12,360	206.1	187.0	194.3

Table 1.2.19: Projected Māori Population Aged 80-84 Years by Sex at 30 June 2007 (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
Canterbury	40	50	90	110	110	210	130	140	260	190	200	400	260	250	510	550.0	400.0	466.7
New Zealand	780	1,230	2,010	1,360	1,910	3,270	1,710	2,280	3,990	2,430	3,210	5,640	2,830	3,770	6,600	262.8	206.5	228.4

Table 1.2.20: Projected Māori Population Aged 85-89 Years by Sex at 30 June 2007 (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
Canterbury	20	20	30	40	50	90	70	90	160	100	120	230	160	180	340	700.0	800.0	1,033.3
New Zealand	280	530	810	390	780	1,170	630	1,090	1,710	970	1,480	2,450	1,450	2,160	3,610	417.9	307.5	345.7

Table 1.2.21: Projected Māori Population Aged 90+ Years by Sex at 30 June 2007 (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
Canterbury	-	10	10	10	20	30	20	30	50	30	60	90	60	90	140	/	800.0	1,300.0
New Zealand	50	160	200	100	270	360	170	430	600	310	680	990	530	1,010	1,540	960.0	531.3	670.0

Table 1.2.22: Projected Māori Population by Sex at 30 June 2007 (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
Canterbury	18,600	18,000	36,600	21,500	20,900	42,400	23,400	22,900	46,200	25,700	25,200	50,900	28,000	27,500	55,500	50.5	52.8	51.6
New Zealand	305,800	318,500	624,300	335,700	348,300	684,000	355,200	367,400	722,600	377,800	389,500	767,300	399,900	410,800	810,700	30.8	29.0	29.9

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			
Canterbury	0-14	41,420	39,860	81,250	42,360	40,390	82,750	42,640	40,560	83,180	42,430	40,140	82,580	41,150	39,010	80,130	-	0.7	-	2.1	-	1.4
	15-64	149,000	153,200	302,220	149,000	153,200	302,220	158,540	161,410	319,940	161,200	163,020	324,200	165,380	164,430	329,800		11.0		7.3		9.1
	65+	27,550	35,760	63,320	27,550	35,760	63,320	33,330	40,780	74,130	38,500	45,800	84,340	52,190	60,420	112,620		89.4		69.0		77.9
	Total	217,970	228,820	446,790	234,200	242,600	476,800	242,300	249,300	491,800	251,000	256,900	507,900	258,720	263,860	522,550		18.7		15.3		17.0
New Zealand	0-14	344,480	328,550	673,000	343,630	325,770	669,390	344,990	326,400	671,370	348,100	328,490	676,600	344,780	325,920	670,690		0.1	-	0.8	-	0.3
	15-64	1,180,810	1,220,510	2,401,330	1,253,390	1,287,880	2,541,300	1,274,120	1,306,250	2,580,350	1,294,170	1,321,760	2,615,920	1,308,470	1,327,170	2,635,660		10.8		8.7		9.8
	65+	217,250	268,680	485,910	264,740	311,720	576,430	305,130	351,320	656,460	354,640	403,490	758,120	409,450	465,470	874,930		88.5		73.2		80.1
	Total	1,742,540	1,817,740	3,560,240	1,861,760	1,925,370	3,787,120	1,924,240	1,983,970	3,908,180	1,996,910	2,053,740	4,050,640	2,062,700	2,118,560	4,181,280		18.4		16.5		17.4

Table 1.3.2: Projected Non Māori Population Aged 0 Years by Sex at 30 June 2007(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			
Canterbury	2,740	2,640	5,370	2,730	2,590	5,320	2,640	2,500	5,130	2,570	2,440	5,010	2,560	2,430	4,990	-	6.6	-	8.0	-	7.3
New Zealand	22,080	21,070	43,140	22,610	21,440	44,040	22,300	21,140	43,440	22,330	21,160	43,490	22,190	21,040	43,220		0.5	-	0.1		0.3

Table 1.3.3: Projected Non Māori Population Aged 1-4 Years by Sex at 30 June 2007 (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			
Canterbury	10,490	10,230	20,720	11,520	10,880	22,410	10,980	10,440	21,410	10,590	10,070	20,670	10,460	9,940	20,400	-	0.3	-	2.8	-	1.5
New Zealand	86,670	83,140	169,810	93,180	87,510	180,690	90,620	85,820	176,430	90,160	85,380	175,550	89,980	85,200	175,180		3.8		2.5		3.0

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

Table 2.5.4: Projected Non-Māori Population Aged 5-9 Years by Sex at 30 June 2007 (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
Canterbury	13,520	13,000	26,500	14,040	13,470	27,490	14,700	13,930	28,630	13,990	13,330	27,320	13,560	12,920	26,460	0.3	-	0.6
New Zealand	112,730	107,750	220,470	113,100	107,320	220,420	117,740	110,740	228,470	115,160	108,880	224,040	114,750	108,480	223,220	1.8	0.7	1.3

Table 1.3.5: Projected Non Māori Population Aged 10-14 Years by Sex at 30 June 2007 (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			
Canterbury	14,670	13,990	28,660	14,070	13,450	27,530	14,320	13,690	28,010	15,280	14,300	29,580	14,570	13,720	28,280	-	0.7	-	1.9	-	1.3
New Zealand	123,000	116,590	239,580	114,740	109,500	224,240	114,330	108,700	223,030	120,450	113,070	233,520	117,860	111,200	229,070	-	4.2	-	4.6	-	4.4



Table 1.3.6: Projected Non Māori Population Aged 15-19 Years by Sex at 30 June 2007 (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
Canterbury	16,000	14,850	30,850	16,620	15,780	32,400	16,150	15,250	31,390	16,260	15,520	31,780	17,240	16,140	33,380	7.8	8.7	8.2
New Zealand	126,500	121,070	247,580	126,700	121,460	248,170	120,580	116,150	236,730	119,050	114,600	233,650	125,420	119,230	244,650	-	0.9	- 1.5 - 1.2

Table 1.3.7: Projected Non Māori Population Aged 20-24 Years by Sex at 30 June 2007(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
Canterbury	16,350	15,400	31,760	18,760	16,540	35,290	18,870	17,120	35,990	18,080	16,480	34,570	18,210	16,760	34,970	11.4	8.8	10.1
New Zealand	121,650	119,430	241,090	138,610	130,240	268,860	136,730	130,170	266,900	128,320	123,120	251,440	126,840	121,580	248,420	4.3	1.8	3.0

Table 1.3.8: Projected Non Māori Population Aged 25-29 Years by Sex at 30 June 2007 (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
Canterbury	13,140	13,680	26,820	15,040	13,780	28,820	16,410	14,190	30,600	16,850	15,150	31,990	16,070	14,510	30,580	22.3	6.1	14.0
New Zealand	106,150	110,640	216,790	128,090	126,380	254,480	137,910	131,040	268,950	138,620	133,610	272,220	130,260	126,560	256,820	22.7	14.4	18.5

Table 1.3.9: Projected Non Māori Population Aged 30-34 Years by Sex at 30 June 2007 (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
Canterbury	14,500	16,000	30,510	13,990	15,140	29,120	15,100	14,960	30,060	16,520	14,940	31,450	16,960	15,890	32,840	17.0	-	0.7 7.6
New Zealand	116,040	126,660	242,690	118,190	124,180	242,370	132,200	134,010	266,200	143,710	138,710	282,420	144,510	141,290	285,790	24.5	11.6	17.8

Table 1.3.10: Projected Non Māori Population Aged 35-39 Years by Sex at 30 June 2007 (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
Canterbury	16,520	17,710	34,230	14,730	16,320	31,050	14,260	15,680	29,940	15,520	15,530	31,050	16,950	15,510	32,450	2.6	-	12.4 - 5.2
New Zealand	129,200	140,820	270,010	117,580	127,670	245,250	118,330	125,130	243,460	135,710	137,610	273,320	147,330	142,400	289,730	14.0	1.1	7.3

Table 1.3.11: Projected Non Māori Population Aged 40-44 Years by Sex at 30 June 2007 (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
Canterbury	16,940	18,060	35,000	17,140	18,380	35,530	15,600	17,250	32,850	14,660	16,030	30,700	15,930	15,890	31,820	-	6.0	- 12.0 - 9.1
New Zealand	136,770	145,180	281,960	132,310	143,980	276,290	122,510	133,690	256,210	120,100	126,950	247,050	137,440	139,430	276,880	0.5	-	4.0 - 1.8

Table 1.3.12: Projected Non Māori Population Aged 45-49 Years by Sex at 30 June 2007 (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
Canterbury	16,530	17,070	33,600	17,040	18,060	35,100	17,310	18,330	35,640	15,800	17,440	33,220	14,880	16,230	31,110	-	10.0	- 4.9 - 7.4
New Zealand	132,360	137,450	269,810	134,800	143,200	278,000	131,610	142,740	274,340	122,310	133,380	255,680	119,970	126,730	246,710	-	9.4	- 7.8 - 8.6

Table 1.3.13: Projected Non Māori Population Aged 50-54 Years by Sex at 30 June 2007 (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
Canterbury	14,670	15,280	29,950	16,910	17,570	34,480	17,070	18,190	35,260	17,140	18,280	35,430	15,650	17,400	33,060	6.7	13.9	10.4
New Zealand	117,000	119,790	236,790	133,190	139,210	272,400	134,760	142,840	277,600	129,460	140,770	270,240	120,340	131,560	251,910	2.9	9.8	6.4

Table 1.3.14: Projected Non Māori Population Aged 55-59 Years by Sex at 30 June 2007 (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
Canterbury	13,840	14,350	28,200	14,790	15,640	30,420	16,200	16,950	33,150	16,850	18,070	34,910	16,930	18,190	35,120	22.3	26.8	24.5
New Zealand	110,010	112,070	222,080	117,050	121,110	238,170	127,660	133,710	261,370	132,020	140,920	272,940	126,980	139,020	266,000	15.4	24.0	19.8

Table 1.3.15: Projected Non Māori Population Aged 60-64 Years by Sex at 30 June 2007 (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
Canterbury	10,510	10,800	21,300	13,520	14,200	27,730	14,230	15,100	29,320	15,910	16,780	32,690	16,560	17,910	34,470	57.6	65.8	61.8
New Zealand	85,130	87,400	172,530	106,870	110,450	217,310	111,830	116,770	228,590	124,870	132,090	256,960	129,380	139,370	268,750	52.0	59.5	55.8

Table 1.3.16: Projected Non Māori Population Aged 65-69 Years by Sex at 30 June 2007 (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
Canterbury	8,560	9,290	17,850	10,740	11,450	22,180	13,030	13,990	27,030	13,720	14,830	28,550	15,390	16,500	31,890	79.8	77.6	78.7
New Zealand	70,210	73,980	144,180	86,880	90,720	177,580	103,140	108,210	211,350	108,050	114,360	222,420	121,010	129,590	250,600	72.4	75.2	73.8

Table 1.3.17: Projected Non Māori Population Aged 70-74 Years by Sex at 30 June 2007 (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
Canterbury	6,720	7,650	14,370	8,450	9,270	17,740	9,520	10,250	19,770	12,270	13,440	25,720	13,000	14,290	27,290	93.5	86.8	89.9
New Zealand	54,030	59,010	113,030	68,560	74,000	142,560	76,460	81,690	158,150	96,610	103,380	199,980	101,850	109,730	211,580	88.5	86.0	87.2

Table 1.3.18: Projected Non Māori Population Aged 75-79 Years by Sex at 30 June 2007 (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
Canterbury	5,930	7,460	13,390	6,010	7,140	13,160	7,100	8,240	15,340	8,490	9,510	18,000	11,000	12,510	23,510	85.5	67.7	75.6
New Zealand	45,760	53,650	99,400	47,690	54,630	102,320	57,160	64,360	121,520	67,620	75,070	142,700	86,080	95,520	181,610	88.1	78.0	82.7

Table 1.3.19: Projected Non Māori Population Aged 80-84 Years by Sex at 30 June 2007 (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
Canterbury	3,980	5,970	9,960	4,560	6,250	10,810	4,620	5,990	10,630	5,720	7,140	12,850	6,920	8,320	15,240	73.9	39.4	53.0
New Zealand	29,400	42,770	72,170	35,490	44,760	80,250	36,680	45,110	81,790	45,810	55,070	100,870	54,870	64,890	119,760	86.6	51.7	65.9

Table 1.3.20: Projected Non Māori Population Aged 85-89 Years by Sex at 30 June 2007 (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
Canterbury	1,700	3,530	5,240	2,570	4,240	6,810	2,950	4,490	7,450	3,120	4,520	7,630	3,960	5,500	9,460	132.9	55.8	80.5
New Zealand	12,880	25,390	38,270	18,800	30,210	49,000	22,090	31,810	53,910	23,840	32,800	56,640	30,730	41,000	71,730	138.6	61.5	87.4

Table 1.3.21: Projected Non Māori Population Aged 90+ Years by Sex at 30 June 2007 (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
Canterbury	660	1,860	2,510	1,000	2,430	3,430	1,280	2,840	4,120	1,660	3,120	4,780	1,920	3,300	5,230	190.9	77.4	108.4
New Zealand	4,970	13,880	18,860	7,320	17,400	24,720	9,600	20,140	29,740	12,710	22,810	35,510	14,910	24,740	39,650	200.0	78.2	110.2

Table 1.3.22: Projected Non Māori Population by Sex at 30 June 2007 (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
Canterbury	217,900	228,800	446,800	234,200	242,600	476,800	242,300	249,300	491,800	251,000	256,900	507,900	258,700	263,800	522,600	18.7	15.3	17.0
New Zealand	1,742,500	1,817,700	3,560,300	1,861,800	1,925,300	3,787,100	1,924,200	1,984,000	3,908,200	1,996,900	2,053,700	4,050,600	2,062,700	2,118,500	4,181,200	18.4	16.5	17.4

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
Canterbury	Number	13,368	12,588	13,239	14,118	18,861	17,172	16,920	15,942	15,801
	Percentage	6.8	6.4	6.7	7.2	9.6	8.7	8.6	8.1	8.0
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
Canterbury	Number	13,779	11,505	9,987	7,140	5,562	3,951	3,318	2,277	1,662	197,199
	Percentage	7.0	5.8	5.1	3.6	2.8	2.0	1.5	1.2	0.8	
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
Canterbury	Number	14,583	14,742	15,714	16,413	15,939	14,088	16,995	18,486	18,645
	Percentage	6.1	6.2	6.6	6.9	6.7	5.9	7.1	7.7	7.8
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
Canterbury	Number	17,484	15,318	14,421	10,680	9,168	7,635	7,395	5,940	5,313	238,956
	Percentage	7.3	6.4	6.0	4.5	3.8	3.2	3.1	2.5	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
Canterbury	Number	14,820	15,333	16,497	17,502	16,653	13,539	15,258	17,154	17,499
	Percentage	6.5	6.7	7.3	7.7	7.3	6.0	6.7	7.5	7.7
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
Canterbury	Number	16,863	14,763	13,887	10,437	8,430	6,723	5,880	3,897	2,316	227,451
	Percentage	7.4	6.5	6.1	4.6	3.7	3.0	2.6	1.7	1.0	
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	
	Canterbury		New Zealand		Canterbury		New Zealand		Canterbury		New Zealand		Canterbury		New Zealand		Canterbury	New Zealand
	Number	Percentage*	Number	Percentage*	Number	Percentage*	Number	Percentage*	Number	Percentage*	Number	Percentage*	Number	Percentage*	Number	Percentage*	Number	Number
0–4	2,001	14.0	32,355	25.1	12,258	86.0	96,579	74.9	14,259	97.8	128,934	95.7	327	2.2	5,760	4.3	14,583	134,697
5–9	1,959	13.6	32,544	24.2	12,438	86.4	101,832	75.8	14,397	97.7	134,376	96.0	342	2.3	5,577	4.0	14,742	139,956
10–14	1,842	12.0	32,379	22.6	13,494	88.0	110,901	77.4	15,336	97.6	143,280	96.2	381	2.4	5,613	3.8	15,714	148,896
15–19	1,794	11.2	29,502	20.8	14,190	88.8	112,365	79.2	15,984	97.4	141,867	96.0	429	2.6	5,895	4.0	16,413	147,759
20–24	1,416	9.2	22,434	17.4	13,986	90.8	106,608	82.6	15,402	96.6	129,042	95.0	537	3.4	6,849	5.0	15,939	135,891
25–29	1,233	9.0	20,529	17.2	12,405	91.0	98,604	82.8	13,638	96.8	119,133	95.1	450	3.2	6,090	4.9	14,088	125,226
30–34	1,281	7.7	21,384	15.3	15,279	92.3	118,290	84.7	16,560	97.4	139,674	95.9	435	2.6	6,000	4.1	16,995	145,677
35–39	1,203	6.7	20,790	13.6	16,827	93.3	131,550	86.4	18,030	97.5	152,340	96.1	456	2.5	6,210	3.9	18,489	158,553
40–44	1,044	5.7	19,905	12.7	17,172	94.3	136,773	87.3	18,216	97.7	156,678	96.2	432	2.3	6,120	3.8	18,645	162,798
45–49	861	5.1	16,926	11.7	16,182	94.9	127,536	88.3	17,043	97.5	144,462	96.1	444	2.5	5,907	3.9	17,484	150,369
50–54	600	4.0	12,597	10.2	14,322	96.0	110,826	89.8	14,922	97.4	123,423	96.1	396	2.6	4,998	3.9	15,315	128,421
55–59	474	3.4	9,762	8.6	13,596	96.6	104,037	91.4	14,070	97.6	113,799	96.2	348	2.4	4,548	3.8	14,418	118,347
60–64	315	3.0	6,717	7.6	10,098	97.0	81,159	92.4	10,413	97.5	87,876	96.3	270	2.5	3,405	3.7	10,680	91,278
65–69	234	2.6	5,310	7.2	8,715	97.4	68,244	92.8	8,949	97.6	73,554	96.2	222	2.4	2,880	3.8	9,168	76,434
70–74	141	1.9	3,471	5.9	7,296	98.1	55,368	94.1	7,437	97.4	58,839	96.4	195	2.6	2,217	3.6	7,632	61,059
75–79	96	1.3	2,190	4.1	7,110	98.7	50,607	95.9	7,206	97.5	52,797	96.2	183	2.5	2,058	3.8	7,392	54,855
80–84	42	0.7	1,074	2.6	5,745	99.3	40,437	97.4	5,787	97.5	41,511	96.3	153	2.6	1,605	3.7	5,937	43,116
85 and over	24	0.5	609	1.6	5,160	99.5	37,002	98.4	5,184	97.6	37,611	96.4	132	2.5	1,389	3.6	5,313	39,000
Total	16,563	7.1	290,469	14.7	216,267	92.9	1,688,736	85.3	232,830	97.4	1,979,205	96.0	6,126	2.6	83,124	4.0	238,956	2,062,326

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	
	Canterbury		New Zealand		Canterbury		New Zealand		Canterbury		New Zealand		Canterbury		New Zealand		Canterbury	New Zealand
	Number	Percentage*	Number	Percentage*	Number	Percentage*	Number	Percentage*	Number	Percentage*	Number	Percentage*	Number	Percentage*	Number	Percentage*	Number	Number
0–4	2,049	14.2	34,071	25.3	12,426	85.8	100,671	74.7	14,475	97.7	134,742	96.0	345	2.3	5,640	4.0	14,817	140,382
5–9	2,022	13.4	34,230	24.2	13,014	86.6	106,974	75.8	15,036	98.1	141,204	96.4	300	2.0	5,331	3.6	15,333	146,535
10–14	1,947	12.1	34,347	22.7	14,196	87.9	117,129	77.3	16,143	97.9	151,476	96.4	354	2.1	5,637	3.6	16,497	157,113
15–19	1,782	10.5	29,031	19.9	15,243	89.5	117,156	80.1	17,025	97.3	146,187	95.9	477	2.7	6,252	4.1	17,502	152,436
20–24	1,416	8.8	20,337	16.0	14,610	91.2	107,127	84.0	16,026	96.2	127,464	94.4	624	3.7	7,623	5.6	16,653	135,087
25–29	1,164	9.0	17,577	15.9	11,811	91.0	92,970	84.1	12,975	95.8	110,547	94.3	567	4.2	6,669	5.7	13,539	117,216
30–34	1,176	8.0	18,075	14.5	13,575	92.0	106,272	85.5	14,751	96.7	124,347	95.0	510	3.3	6,540	5.0	15,258	130,884
35–39	1,179	7.1	17,808	13.1	15,447	92.9	118,554	86.9	16,626	96.9	136,362	95.4	531	3.1	6,639	4.6	17,157	143,001
40–44	1,014	6.0	17,367	12.0	15,999	94.0	126,945	88.0	17,013	97.2	144,312	95.6	489	2.8	6,588	4.4	17,502	150,900
45–49	921	5.6	14,979	10.9	15,489	94.4	122,079	89.1	16,410	97.3	137,058	95.8	453	2.7	5,994	4.2	16,863	143,055
50–54	741	5.2	11,595	9.7	13,632	94.8	107,670	90.3	14,373	97.4	119,265	95.9	393	2.7	5,046	4.1	14,763	124,308
55–59	534	3.9	8,868	8.0	13,005	96.1	101,742	92.0	13,539	97.5	110,610	96.0	345	2.5	4,614	4.0	13,887	115,224
60–64	369	3.6	6,096	7.2	9,795	96.4	78,822	92.8	10,164	97.4	84,918	96.1	273	2.6	3,420	3.9	10,437	88,335
65–69	252	3.1	4,848	7.0	7,983	96.9	64,494	93.0	8,235	97.7	69,342	96.2	192	2.3	2,769	3.8	8,427	72,114
70–74	147	2.2	3,039	5.7	6,399	97.8	50,718	94.3	6,546	97.4	53,757	96.2	177	2.6	2,121	3.8	6,723	55,878
75–79	90	1.6	1,620	3.6	5,658	98.4	42,957	96.4	5,748	97.8	44,577	96.2	135	2.3	1,782	3.8	5,880	46,359
80–84	39	1.0	693	2.5	3,741	99.0	27,219	97.5	3,780	97.1	27,912	95.8	111	2.9	1,212	4.2	3,894	29,124
85 and over	9	0.4	279	1.7	2,244	99.6	16,599	98.3	2,253	97.3	16,878	95.5	63	2.7	789	4.5	2,316	17,667
Total	16,854	7.6	274,860	14.6	204,258	92.4	1,606,098	85.4	221,112	97.2	1,880,958	95.7	6,339	2.8	84,660	4.3	227,451	1,965,621

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	
	Canterbury		New Zealand		Canterbury		New Zealand		Canterbury		New Zealand		Canterbury		New Zealand		Canterbury	New Zealand
	Number	Percentage*	Number	Percentage*	Number	Percentage*	Number	Percentage*	Number	Percentage*	Number	Percentage*	Number	Percentage*	Number	Percentage*	Number	Number
0–4	4,050	14.1	66,426	25.2	24,684	85.9	197,250	74.8	28,734	97.7	263,676	95.9	672	2.3	11,400	4.1	29,403	275,079
5–9	3,978	13.5	66,774	24.2	25,455	86.5	208,806	75.8	29,433	97.9	275,580	96.2	642	2.1	10,908	3.8	30,075	286,488
10–14	3,789	12.0	66,726	22.6	27,690	88.0	228,030	77.4	31,479	97.7	294,756	96.3	732	2.3	11,253	3.7	32,211	306,009
15–19	3,576	10.8	58,533	20.3	29,433	89.2	229,521	79.7	33,009	97.3	288,054	96.0	906	2.7	12,144	4.0	33,918	300,198
20–24	2,835	9.0	42,771	16.7	28,593	91.0	213,735	83.3	31,428	96.4	256,506	94.7	1,161	3.6	14,472	5.3	32,592	270,978
25–29	2,400	9.0	38,106	16.6	24,210	91.0	191,577	83.4	26,610	96.3	229,683	94.7	1,017	3.7	12,759	5.3	27,630	242,442
30–34	2,454	7.8	39,459	14.9	28,857	92.2	224,562	85.1	31,311	97.1	264,021	95.5	945	2.9	12,540	4.5	32,253	276,561
35–39	2,382	6.9	38,598	13.4	32,274	93.1	250,104	86.6	34,656	97.2	288,702	95.7	990	2.8	12,852	4.3	35,643	301,554
40–44	2,055	5.8	37,272	12.4	33,174	94.2	263,718	87.6	35,229	97.5	300,990	95.9	918	2.5	12,708	4.1	36,147	313,698
45–49	1,782	5.3	31,908	11.3	31,671	94.7	249,612	88.7	33,453	97.4	281,520	95.9	897	2.6	11,901	4.1	34,347	293,421
50–54	1,341	4.6	24,192	10.0	27,954	95.4	218,496	90.0	29,295	97.4	242,688	96.0	786	2.6	10,044	4.0	30,081	252,732
55–59	1,008	3.7	18,630	8.3	26,601	96.3	205,779	91.7	27,609	97.5	224,409	96.1	696	2.5	9,162	3.9	28,305	233,574
60–64	687	3.3	12,816	7.4	19,887	96.7	159,975	92.6	20,574	97.4	172,791	96.2	540	2.6	6,825	3.8	21,117	179,616
65–69	483	2.8	10,158	7.1	16,701	97.2	132,741	92.9	17,184	97.7	142,899	96.2	414	2.4	5,646	3.8	17,595	148,548
70–74	291	2.1	6,510	5.8	13,689	97.9	106,086	94.2	13,980	97.4	112,596	96.3	375	2.6	4,338	3.7	14,355	116,934
75–79	186	1.4	3,807	3.9	12,768	98.6	93,567	96.1	12,954	97.6	97,374	96.2	318	2.4	3,840	3.8	13,275	101,214
80–84	78	0.8	1,764	2.5	9,489	99.2	67,659	97.5	9,567	97.3	69,423	96.1	264	2.7	2,814	3.9	9,834	72,240
85 and over	33	0.4	888	1.6	7,401	99.6	53,604	98.4	7,434	97.4	54,492	96.2	195	2.6	2,178	3.8	7,629	56,670
Total	33,417	7.4	565,326	14.6	420,522	92.6	3,294,837	85.4	453,939	97.3	3,860,163	95.8	12,465	2.7	167,784	4.2	466,407	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
Canterbury	Number	366,033	7,773	4,941	30,792	8,577	3,435	23,256	6,426	85,200	15,174	466,404
	Percentage	78.5	1.5	1.1	6.6	1.8	0.7	5.0	1.4	18.3	3.3	
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	1.5	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
Canterbury	Number	118,329	172,173	13,116	27,960	21,762	21,372	374,715
	Percentage	31.6	45.9	3.5	7.5	5.8	5.7	
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		
Canterbury	Number	4,332	168,516	45,027	217,875	8,706	84,009	9,627	17,283	18,102	137,727	19,113	374,715
	Percentage	2.0	77.3	20.7	61.3	6.3	61.0	7.0	12.5	13.1	38.7		
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	61*	7.6	60.6	6.9	12.0	12.9	39*		

\* % 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
Canterbury	Number	54,060	51,909	20,355	126,327
	Percentage	42.8	41.1	16.1	
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
Canterbury	Number	120,486	2,817	69	10,098	42,174	1,791	177,435
	Percentage	67.9	1.6	0.0	5.7	23.8	1.0	
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
Canterbury	Number	8,580	389,223	43,920	6,693	1,797	528	147	15,516	466,407
	Percentage	1.8	83.5	9.4	1.4	0.4	0.1	0.0	3.3	
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
Canterbury	No children	14,640	25.4	12,375	21.5	8,286	14.4	5,943	10.3	3,660	6.4
	One child	411	2.0	1,536	7.4	2,343	11.3	3,657	17.6	3,021	14.6
	Two children	42	0.1	516	1.1	1,557	3.3	4,077	8.6	6,414	13.5
	Three children	3	0.0	102	0.3	552	1.8	1,482	4.8	2,802	9.1
	Four children	3	0.0	18	0.1	144	1.1	402	3.0	849	6.4
	Five children	-	-	-	-	30	0.6	105	2.2	255	5.3
	Six or more children	3	0.1	3	0.1	18	0.5	66	1.9	156	4.5
	Object to answering	264	4.7	285	5.1	345	6.2	423	7.6	570	10.3
	Not elsewhere included(2)	1,047	10.3	1,107	10.9	819	8.1	837	8.2	768	7.6
	Total	16,416	8.5	15,942	8.2	14,088	7.3	16,992	8.8	18,489	9.5
New Zealand	No children	127,560	27.7	97,428	21.1	65,100	14.1	46,014	10.0	28,836	6.3
	One child	4,182	2.4	15,777	8.9	21,531	12.2	29,202	16.5	25,065	14.1
	Two children	609	0.2	6,396	1.7	16,230	4.3	34,215	9.1	50,463	13.5
	Three children	69	0.0	1,581	0.6	6,543	2.6	14,490	5.7	24,834	9.8
	Four children	24	0.0	360	0.3	2,202	1.8	5,445	4.5	9,258	7.6
	Five children	9	0.0	72	0.1	717	1.5	1,989	4.0	3,504	7.1
	Six or more children	36	0.1	72	0.2	348	0.8	1,266	3.0	2,613	6.1
	Object to answering	2,190	4.8	2,376	5.2	2,538	5.6	3,570	7.8	4,446	9.7
	Not elsewhere included(2)	13,083	11.4	11,832	10.3	10,017	8.8	9,486	8.3	9,534	8.3
	Total	147,762	9.0	135,891	8.3	125,226	7.6	145,674	8.9	158,550	9.7

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
Canterbury	No children	3,159	5.5	2,352	4.1	1,791	3.1	1,374	2.4	903	1.6
	One child	2,883	13.9	1,878	9.0	1,389	6.7	1,131	5.4	651	3.1
	Two children	5,349	11.3	6,183	13.0	5,526	11.6	5,148	10.9	3,381	7.1
	Three children	2,274	7.4	3,795	12.3	3,570	11.6	3,675	11.9	2,877	9.3
	Four children	762	5.7	1,338	10.0	1,311	9.8	1,347	10.1	1,296	9.7
	Five children	294	6.1	384	7.9	342	7.1	384	7.9	402	8.3
	Six or more children	240	6.9	219	6.3	204	5.9	177	5.1	288	8.3
	Object to answering	435	7.8	597	10.7	519	9.3	582	10.5	390	7.0
	Not elsewhere included(2)	1,176	11.6	738	7.3	669	6.6	603	5.9	489	4.8
	Total	16,572	8.5	17,487	9.0	15,315	7.9	14,418	7.4	10,680	5.5
New Zealand	No children	22,218	4.8	18,129	3.9	13,647	3.0	10,785	2.3	7,362	1.6
	One child	20,712	11.7	16,119	9.1	11,901	6.7	9,288	5.2	5,697	3.2
	Two children	53,691	14.4	48,369	12.9	41,979	11.2	38,571	10.3	26,340	7.0
	Three children	31,185	12.3	32,211	12.7	29,451	11.6	28,899	11.4	23,145	9.1
	Four children	12,384	10.2	13,512	11.1	12,261	10.1	12,141	10.0	11,604	9.6
	Five children	4,569	9.3	4,647	9.4	4,116	8.4	4,221	8.6	4,431	9.0
	Six or more children	3,381	7.9	3,360	7.9	2,871	6.7	2,910	6.8	3,738	8.8
	Object to answering	5,157	11.3	5,001	10.9	4,458	9.8	4,476	9.8	3,351	7.3
	Not elsewhere included(2)	9,495	8.3	9,021	7.9	7,734	6.8	7,056	6.2	5,613	4.9
	Total	162,798	9.9	150,369	9.2	128,421	7.8	118,347	7.2	91,278	5.6

		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
Canterbury	No children	702	1.2	603	1.0	723	1.3	675	1.2	666	1.2	57,555
	One child	489	2.4	417	2.0	435	2.1	492	2.4	546	2.6	20,757
	Two children	2,298	4.8	1,623	3.4	1,506	3.2	1,284	2.7	1,152	2.4	47,442
	Three children	2,577	8.4	1,917	6.2	1,686	5.5	1,257	4.1	960	3.1	30,798
	Four children	1,455	10.9	1,254	9.4	1,224	9.2	849	6.4	699	5.2	13,335
	Five children	582	12.0	657	13.6	588	12.1	441	9.1	312	6.4	4,845
	Six or more children	369	10.6	513	14.8	579	16.7	348	10.0	303	8.7	3,468
	Object to answering	267	4.8	225	4.0	198	3.6	132	2.4	135	2.4	5,559
	Not elsewhere included(2)	429	4.2	420	4.1	459	4.5	462	4.5	537	5.3	10,158
	Total	9,168	4.7	7,632	3.9	7,392	3.8	5,937	3.1	5,316	2.7	193,914
New Zealand	No children	5,661	1.2	4,662	1.0	4,872	1.1	4,347	0.9	4,590	1.0	461,217
	One child	4,038	2.3	3,216	1.8	3,297	1.9	3,252	1.8	3,861	2.2	177,138
	Two children	17,883	4.8	11,928	3.2	10,374	2.8	8,787	2.3	8,169	2.2	373,998
	Three children	19,230	7.6	13,953	5.5	11,799	4.7	8,847	3.5	7,053	2.8	253,290
	Four children	12,048	9.9	10,335	8.5	8,883	7.3	6,072	5.0	4,707	3.9	121,236
	Five children	5,169	10.5	5,403	11.0	4,671	9.5	3,294	6.7	2,385	4.8	49,188
	Six or more children	4,914	11.5	5,580	13.1	5,364	12.6	3,615	8.5	2,529	5.9	42,594
	Object to answering	2,541	5.6	1,869	4.1	1,542	3.4	1,161	2.5	1,044	2.3	45,717
	Not elsewhere included(2)	4,947	4.3	4,116	3.6	4,056	3.5	3,744	3.3	4,668	4.1	114,399
	Total	76,434	4.7	61,056	3.7	54,858	3.3	43,113	2.6	39,000	2.4	1,638,783

(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
Canterbury	Number	23,169	137,667	43,614	9,753	19,263	10,536	22,032	165,660	15,141	180,801
	Percentage	12.8	76.1	24.1	5.4	10.7	5.8	12.2			
New Zealand	Number	196,767	1,122,597	372,858	86,427	155,106	88,233	188,835	1,362,123	159,465	1,521,591
	Percentage	12.9	73.8	24.5	5.7	10.2	5.8	12.4			

(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
Canterbury	Number	15,279	160,005	59,712	14,835	37,509	20,841	28,329	178,722	15,192	193,914
	Percentage	7.9	82.5	30.8	7.7	19.3	10.7	14.6			
New Zealand	Number	124,485	1,324,236	525,054	134,799	305,037	170,472	248,406	1,480,929	157,854	1,638,783
	Percentage	7.6	80.8	32.0	8.2	18.6	10.4	15.2			

(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
Canterbury	Number	38,451	297,669	103,326	24,588	56,772	31,377	50,361	344,382	30,333	374,715
	Percentage	10.3	79.4	27.6	6.6	15.2	8.4	13.4			
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
Canterbury	Number	84,684	48,096	34,671	23,499	17,397	13,101	35,334
	Percentage	22.6	12.8	9.3	6.3	4.6	3.5	9.4
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
Canterbury	Number	13,899	20,436	35,817	7,206	6,339	2,412	31,818	374,715
	Percentage	3.7	5.5	9.6	1.9	1.7	0.6	8.5	
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	1.7	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
Canterbury	Number	1,797	15,204	27,378	27,744	45,894	33,162	28,281	27,591
	Percentage	0.5	4.1	7.3	7.4	12.2	8.8	7.5	7.4
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
Canterbury	Number	25,743	24,663	32,145	32,499	13,200	10,383	29,028	374,718
	Percentage	6.9	6.6	8.6	8.7	3.5	2.8	7.7	
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
Canterbury	Number	18,057	222,318	56,787	91,545	6,099	57,411	10,911
	Percentage	4.8	59.3	15.2	24.4	1.6	15.3	2.9
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
Canterbury	Number	7,224	8,202	9,174	10,479	8,481	11,400	8,856	16,524	374,718
	Percentage	1.9	2.2	2.4	2.8	2.3	3.0	2.4	4.4	
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
Canterbury	Number	182,757	59,196	241,953	10,119	252,072	114,882	7,764	374,715
	Percentage	75.5	24.5	96.0	4.0	67.3	30.7	2.1	
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)								
		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)
Canterbury	Number	38,514	43,446	31,068	20,937	28,371	24,003	15,240	27,486	12,888
	Percentage	15.9	18.0	12.8	8.7	11.7	9.9	6.3	11.4	5.3
New Zealand	Number	340,530	374,328	241,857	156,468	240,813	186,057	114,324	218,991	112,404
	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
Canterbury	Number	127,146	163,050	43,398	107,481	2,316	172,656	4,776	177,435
	Percentage	71.7	91.7	24.5	60.6	1.3	97.3	2.7	
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)	
Canterbury	Number	13,077	63,123	66,921	29,559	4,749	177,432
	Percentage	7.4	35.6	37.7	16.7	2.7	
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)
Canterbury	Number	3,393	54,639	42,447	100,482
	Percentage	3.4	54.4	42.2	
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)
Canterbury	Number	732	44,175	6,000	50,904
	Percentage	1.4	86.8	11.8	
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)		
Canterbury	Number	1,425	7,029	9,111	17,562	8,484	177,432
	Percentage	8.1	40.0	51.7			
New Zealand	Number	13,386	72,828	81,711	167,925	90,333	
	Percentage	8.0	43.4	48.7			

(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
Canterbury	Female	177.6	-11.3 - 366.4	71.5	42.3 - 100.6	76.0	47.1 - 104.8
	Male	227.0	22.3 - 431.7	121.8	82.9 - 160.8	126.6	88.8 - 164.5
	Total	203.5	63.6 - 343.4	96.1	71.8 - 120.3	100.8	77.0 - 124.5
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
Canterbury	Female	86.2	-43.1 - 215.5	35.7	24.1 - 47.3	37.4	25.2 - 49.6
	Male	114.8	-32.0 - 261.7	59.3	42.0 - 76.7	61.9	44.3 - 79.6
	Total	102.6	3.1 - 202.1	46.6	36.4 - 56.8	48.8	38.3 - 59.3
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
Canterbury	Female	62.8	-11.1 - 136.7	36.9	29.1 - 44.6	37.7	29.9 - 45.5
	Male	163.8	46.4 - 281.1	80.2	66.3 - 94.0	84.2	70.1 - 98.4
	Total	116.7	45.5 - 187.8	56.8	49.1 - 64.6	59.3	51.4 - 67.2
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
Canterbury	Female	60.6	-12.8 - 134.0	24.7	18.0 - 31.3	26.1	19.2 - 33.1
	Male	36.3	-20.6 - 93.3	25.6	18.7 - 32.5	26.2	19.2 - 33.2
	Total	48.3	2.2 - 94.5	25.3	20.5 - 30.0	26.3	21.4 - 31.2
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
Canterbury	Female	82.6	-45.1 - 210.3	55.1	34.4 - 75.8	56.4	35.9 - 76.9
	Male	97.6	-37.6 - 232.8	70.4	48.0 - 92.8	71.7	49.7 - 93.8
	Total	89.9	-2.8 - 182.7	61.8	46.6 - 77.0	63.1	48.1 - 78.0
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
Canterbury	Female	96.3	2.1 - 190.5	17.5	10.7 - 24.3	19.8	12.6 - 27.0
	Male	66.6	-9.0 - 142.3	26.8	18.6 - 35.0	28.2	19.9 - 36.5
	Total	80.9	21.0 - 140.7	21.6	16.3 - 26.9	23.5	18.0 - 28.9
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
Canterbury	Female	32.0	-21.0 - 85.0	23.9	14.6 - 33.2	24.5	15.2 - 33.8
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
Canterbury	Male	0.0	0.0 - 0.0	14.8	9.2 - 20.4	14.8	9.2 - 20.3
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
Canterbury	Female	0.0	0.0 - 0.0	1.2	-0.7 - 3.2	1.4	-0.7 - 3.5
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
Canterbury	Female	0.0	0.0 - 0.0	16.1	9.3 - 23.0	15.8	9.2 - 22.5
	Male	0.0	0.0 - 0.0	23.0	14.7 - 31.3	22.4	14.5 - 30.4
	Total	0.0	0.0 - 0.0	19.4	14.0 - 24.7	18.9	13.8 - 24.1
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
Canterbury	Female	0.0	0.0 - 0.0	4.1	0.3 - 7.9	3.9	0.3 - 7.5
	Male	0.0	0.0 - 0.0	13.1	6.1 - 20.0	12.9	6.2 - 19.5
	Total	0.0	0.0 - 0.0	8.2	4.3 - 12.1	8.1	4.3 - 11.8
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
Canterbury	Female	16.3	-39.9 - 72.5	8.3	-3.9 - 20.4	9.1	-3.1 - 21.4
	Male	37.8	-45.8 - 121.4	21.0	2.2 - 39.7	22.3	3.8 - 40.8
	Total	27.4	-23.6 - 78.4	14.5	3.4 - 25.7	15.6	4.5 - 26.7
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
Canterbury	Female	0.0	0.0 - 0.0	5.4	-2.9 - 13.8	5.7	-2.8 - 14.2
	Male	17.5	-35.3 - 70.3	17.3	2.0 - 32.5	17.1	2.7 - 31.6
	Total	11.9	-19.1 - 42.9	11.3	2.6 - 19.9	11.3	3.0 - 19.7
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
Canterbury	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
Canterbury	Female	0.0	0.0 - 0.0	9.3	3.4 - 15.2	10.2	4.4 - 16.0
	Male	0.0	0.0 - 0.0	28.9	19.0 - 38.7	28.6	19.3 - 37.9
	Total	23.0	4.5 - 41.4	19.4	13.6 - 25.2	19.7	14.1 - 25.2
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
Canterbury	Female	0.0	0.0 - 0.0	7.6	2.4 - 12.8	8.8	3.5 - 14.1
	Male	0.0	0.0 - 0.0	26.2	16.9 - 35.5	25.3	16.7 - 33.9
	Total	0.0	0.0 - 0.0	17.2	11.8 - 22.7	17.3	12.2 - 22.4
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
Canterbury	Female	561.8	502.2 - 621.4	392.7	387.4 - 398.0	397.0	391.7 - 402.4
	Male	791.4	717.5 - 865.2	720.3	711.0 - 729.7	725.5	716.3 - 734.8
	Total	685.1	637.3 - 732.9	535.9	530.8 - 541.0	541.1	536.0 - 546.2
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
Canterbury	Female	416.4	364.7 - 468.1	266.0	261.4 - 270.5	269.5	264.9 - 274.1
	Male	0.0	0.0 - 0.0	290.5	284.8 - 296.2	289.2	283.6 - 294.9
	Total	325.9	293.0 - 358.7	279.7	276.1 - 283.3	281.0	277.4 - 284.5
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
Canterbury	Female	665.7	598.5 - 732.9	130.9	126.6 - 135.2	143.1	138.6 - 147.6
	Male	538.8	479.4 - 598.2	242.7	236.6 - 248.8	252.3	246.1 - 258.5
	Total	605.2	560.2 - 650.2	179.6	175.9 - 183.2	190.7	187.0 - 194.5
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
Canterbury	Female	0.0	0.0 - 0.0	87.3	83.9 - 90.7	85.6	82.3 - 89.0
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
Canterbury	Male	0.0	0.0 - 0.0	6.7	1.1 - 12.3	6.7	1.2 - 12.2
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
Canterbury	Female	0.0	0.0 - 0.0	5.5	4.7 - 6.3	5.4	4.6 - 6.2
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
Canterbury	Female	0.0	0.0 - 0.0	109.4	105.7 - 113.1	108.6	105.0 - 112.2
	Male	0.0	0.0 - 0.0	172.0	166.8 - 177.1	169.0	164.0 - 174.0
	Total	0.0	0.0 - 0.0	138.0	135.0 - 141.1	136.3	133.3 - 139.3
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
Canterbury	Female	0.0	0.0 - 0.0	20.1	18.4 - 21.7	19.7	18.1 - 21.3
	Male	0.0	0.0 - 0.0	72.9	69.8 - 76.0	71.5	68.4 - 74.5
	Total	0.0	0.0 - 0.0	42.4	40.8 - 44.1	41.6	40.0 - 43.3
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
Canterbury	Female	384.1	333.2 - 435.0	176.5	172.0 - 181.1	180.9	176.3 - 185.5
	Male	271.7	229.3 - 314.1	204.0	199.1 - 208.9	205.1	200.2 - 209.9
	Total	325.8	292.9 - 358.7	183.7	180.4 - 187.0	186.6	183.3 - 189.8
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

	Canterbury DHB		New Zealand	
	Condition	ASR	Condition	ASR
Female	Breast cancer (female only)	10.1	Breast cancer (female only)	10.7
	Lung cancer	7.5	Lung cancer	9.3
	Ischaemic heart disease	6.5	Ischaemic heart disease	8.1
	Colorectal cancer	5.6	Colorectal cancer	5.9
	COPD	5.2	Diabetes	5.8
Male	Ischaemic heart disease	22.9	Ischaemic heart disease	27.3
	Suicide and self-inflicted injuries	14.9	Suicide and self-inflicted injuries	15.7
	Lung cancer	9.8	Motor vehicle accidents	12.3
	Colorectal cancer	7.8	Lung cancer	10.8
	Motor vehicle accidents	7.3	Diabetes	8.3
Total	Ischaemic heart disease	14.4	Ischaemic heart disease	17.4
	Suicide and self-inflicted injuries	9.9	Suicide and self-inflicted injuries	10.4
	Lung cancer	8.6	Lung cancer	10.0
	Colorectal cancer	6.7	Motor vehicle accidents	8.6
	Motor vehicle accidents	5.5	Diabetes	7.0

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

	Canterbury DHB		New Zealand	
	Condition	ASR	Condition	ASR
Māori	Ischaemic heart disease	43.6	Ischaemic heart disease	51.4
	Lung cancer	32.7	Lung cancer	31.6
	Cerebrovascular diseases	15.9	Diabetes	26.8
	Motor vehicle accidents	12.4	Motor vehicle accidents	17.8
	COPD	11.5	Suicide and self-inflicted injuries	15.4
non-Māori	Ischaemic heart disease	13.3	Ischaemic heart disease	14.3
	Suicide and self-inflicted injuries	9.9	Suicide and self-inflicted injuries	9.3
	Lung cancer	7.8	Lung cancer	8.1
	Colorectal cancer	6.9	Motor vehicle accidents	6.7
	Complications of perinatal period	5.1	Colorectal cancer	6.7

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

	Canterbury DHB		New Zealand	
	Condition	ASR	Condition	ASR
Female	Ischaemic heart disease	392.5	Ischaemic heart disease	418.5
	Stroke	223.8	Stroke	206.0
	CORD	189.2	CORD	172.8
	Lung cancer	143.1	Lung cancer	153.4
	Colorectal cancer	108.6	Colorectal cancer	131.3
Male	Ischaemic heart disease	718.6	Ischaemic heart disease	757.4
	Lung cancer	252.3	Lung cancer	245.3
	Stroke	238.7	CORD	238.4
	CORD	209.9	Stroke	207.5
	Colorectal cancer	169.0	Colorectal cancer	178.9
Total	Ischaemic heart disease	535.7	Ischaemic heart disease	571.4
	Stroke	233.8	Stroke	210.0
	CORD	193.4	CORD	197.9
	Lung cancer	190.7	Lung cancer	194.3
	Colorectal cancer	136.3	Colorectal cancer	152.9

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

	Canterbury DHB		New Zealand	
	Condition	ASR	Condition	ASR
Māori	Ischaemic heart disease	685.1	Ischaemic heart disease	1109.6
	Lung cancer	605.2	Lung cancer	497.3
	CORD	325.8	CORD	465.0
	Stroke	299.8	Diabetes	389.4
	Hypertensive disease	161.9	Stroke	247.1
non-Māori	Ischaemic heart disease	530.4	Ischaemic heart disease	540.1
	Stroke	232.2	Stroke	207.2
	CORD	190.7	CORD	182.8
	Lung cancer	179.6	Lung cancer	175.1
	Colorectal cancer	138.0	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
Canterbury	Female	3372.7	2552.7 - 4192.7	2801.1	2540.7 - 3061.5	2811.8	2568.9 - 3054.7
	Male	3380.3	2572.5 - 4188.2	3077.2	2805.9 - 3348.5	3091.0	2837.0 - 3344.9
	Total	3380.3	2804.4 - 3956.2	2938.7	2750.6 - 3126.8	2951.7	2775.9 - 3127.5
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
Canterbury	Female	410.1	127.2 - 693.0	320.8	264.5 - 377.0	322.8	269.0 - 376.5
	Male	613.2	275.2 - 951.2	527.5	454.9 - 600.0	534.9	464.1 - 605.7
	Total	518.0	295.4 - 740.6	419.9	374.2 - 465.5	424.9	380.7 - 469.2
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
Canterbury	Female	233.3	89.6 - 377.0	152.4	132.6 - 172.2	156.0	136.2 - 175.8
	Male	400.6	219.4 - 581.8	406.1	369.8 - 442.3	407.7	372.2 - 443.3
	Total	320.5	203.9 - 437.1	273.9	253.6 - 294.2	276.9	256.9 - 297.0
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
Canterbury	Female	98.5	6.1 - 190.8	99.7	83.5 - 115.8	100.2	84.2 - 116.1
	Male	108.5	12.2 - 204.9	129.6	110.2 - 149.0	129.4	110.5 - 148.4
	Total	104.8	37.3 - 172.2	113.9	101.4 - 126.5	114.2	101.9 - 126.5
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
Canterbury	Female	548.9	216.7 - 881.1	357.0	290.1 - 423.9	370.5	304.6 - 436.4
	Male	336.9	83.0 - 590.9	422.6	350.4 - 494.7	418.2	350.0 - 486.4
	Total	439.9	232.4 - 647.4	386.6	337.5 - 435.8	391.3	343.9 - 438.6
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
Canterbury	Female	160.6	40.0 - 281.3	44.0	32.9 - 55.1	47.8	36.3 - 59.2
	Male	85.6	0.3 - 170.8	50.0	38.5 - 61.5	51.4	39.9 - 62.9
	Total	122.5	49.0 - 195.9	46.4	38.5 - 54.4	49.1	41.0 - 57.1
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
Canterbury	Female	182.8	55.3 - 310.4	101.8	81.5 - 122.1	105.8	85.5 - 126.0
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
Canterbury	Male	60.8	-12.7 - 134.3	58.3	46.1 - 70.6	58.5	46.4 - 70.6
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
Canterbury	Female	93.7	2.3 - 185.1	17.9	7.9 - 27.9	22.5	11.5 - 33.5
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
Canterbury	Female	26.3	-20.4 - 73.0	57.7	44.3 - 71.0	56.3	43.5 - 69.1
	Male	29.1	-22.3 - 80.6	74.5	59.3 - 89.6	72.6	58.1 - 87.1
	Total	28.4	-7.1 - 63.9	65.4	55.4 - 75.5	63.8	54.2 - 73.5
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
Canterbury	Female	41.7	-20.1 - 103.4	64.3	49.8 - 78.9	63.6	49.5 - 77.7
	Male	0.0	0.0 - 0.0	102.9	84.7 - 121.1	99.2	81.8 - 116.5
	Total	20.3	-9.7 - 50.2	81.9	70.3 - 93.4	79.7	68.7 - 90.8
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
Canterbury	Female	776.6	382.2 - 1171.0	920.4	777.5 - 1063.3	908.2	775.1 - 1041.2
	Male	1478.8	947.2 - 2010.3	1568.6	1385.2 - 1752.0	1559.8	1387.7 - 1731.9
	Total	1131.7	799.8 - 1463.5	1247.0	1130.5 - 1363.4	1236.5	1127.6 - 1345.5
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
Canterbury	Female	150.7	-5.3 - 306.7	200.5	143.4 - 257.7	195.4	141.9 - 248.8
	Male	107.6	-24.6 - 239.7	85.6	50.0 - 121.1	87.0	52.9 - 121.1
	Total	129.2	27.0 - 231.4	142.5	109.1 - 175.9	140.7	109.2 - 172.2
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
Canterbury	Female	646.8	507.8 - 785.8	906.2	848.9 - 963.4	876.8	823.6 - 929.9
	Male	2018.2	1774.1 - 2262.3	1999.5	1917.5 - 2081.6	2000.5	1922.8 - 2078.2
	Total	1336.2	1195.4 - 1477.1	1471.5	1420.8 - 1522.1	1456.1	1408.4 - 1503.7
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
Canterbury	Female	1197.2	1107.7 - 1286.6	1137.4	1125.7 - 1149.1	1140.6	1129.0 - 1152.2
	Male	1621.9	1516.7 - 1727.1	2282.9	2264.2 - 2301.7	2269.2	2250.7 - 2287.7
	Total	1401.1	1332.6 - 1469.7	1660.4	1649.7 - 1671.2	1656.7	1646.1 - 1667.3
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
Canterbury	Female	673.5	607.9 - 739.1	791.8	782.4 - 801.1	790.5	781.3 - 799.7
	Male	571.0	507.9 - 634.0	1015.6	1003.6 - 1027.5	1008.9	997.1 - 1020.7
	Total	631.0	585.1 - 677.0	895.9	888.5 - 903.4	892.4	885.1 - 899.8
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
Canterbury	Female	961.6	880.0 - 1043.2	335.6	328.4 - 342.8	348.0	340.8 - 355.2
	Male	584.9	523.4 - 646.3	430.2	421.9 - 438.4	436.5	428.3 - 444.8
	Total	780.9	729.4 - 832.4	374.8	369.4 - 380.2	384.6	379.1 - 390.0
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
Canterbury	Female	315.4	270.2 - 360.5	272.7	266.2 - 279.1	272.8	266.4 - 279.2
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
Canterbury	Male	17.2	-42.1 - 76.6	16.7	7.9 - 25.6	16.8	8.0 - 25.5
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
Canterbury	Female	0.0	0.0 - 0.0	24.4	22.4 - 26.4	25.4	23.4 - 27.5
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
Canterbury	Female	297.8	255.1 - 340.5	356.7	349.9 - 363.5	354.6	347.9 - 361.3
	Male	390.3	338.9 - 441.8	555.8	546.4 - 565.1	553.2	544.0 - 562.4
	Total	355.7	321.3 - 390.2	447.6	441.9 - 453.2	445.6	440.0 - 451.2
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
Canterbury	Female	0.0	0.0 - 0.0	364.2	357.6 - 370.8	362.9	356.4 - 369.4
	Male	0.0	0.0 - 0.0	693.8	683.9 - 703.7	679.7	670.1 - 689.4
	Total	0.0	0.0 - 0.0	507.1	501.4 - 512.9	500.2	494.5 - 505.8
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
Canterbury	Female	2821.0	2685.1 - 2956.8	795.9	785.5 - 806.4	836.0	825.4 - 846.6
	Male	2788.6	2652.3 - 2924.8	1140.2	1127.0 - 1153.4	1182.0	1168.7 - 1195.4
	Total	2819.2	2722.6 - 2915.8	944.0	935.8 - 952.3	985.5	977.1 - 993.8
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
Canterbury	Female	297.1	109.8 - 484.3	95.7	69.1 - 122.3	104.7	78.3 - 131.1
	Male	141.1	12.6 - 269.7	116.0	88.4 - 143.5	116.3	89.8 - 142.8
	Total	217.4	104.8 - 330.0	105.1	86.1 - 124.1	109.9	91.3 - 128.5
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
Canterbury	Female	0.0	0.0 - 0.0	5.7	-0.9 - 12.2	5.7	-0.5 - 12.0
	Male	25.1	-29.4 - 79.5	6.5	1.3 - 11.7	7.0	1.8 - 12.2
	Total	18.4	-14.8 - 51.5	6.0	1.8 - 10.2	6.3	2.2 - 10.4
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
Canterbury	Female	150.6	16.6 - 284.7	70.1	44.2 - 96.0	76.5	50.5 - 102.6
	Male	82.6	-13.7 - 178.9	49.7	26.7 - 72.6	51.5	29.4 - 73.7
	Total	117.1	34.3 - 199.9	60.4	42.9 - 77.8	64.5	47.3 - 81.8
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
Canterbury	Female	1143.0	950.0 - 1335.9	289.6	273.2 - 306.0	315.6	298.6 - 332.7
	Male	746.4	592.9 - 899.9	351.8	333.6 - 370.0	363.0	344.8 - 381.2
	Total	930.6	809.3 - 1051.8	315.9	303.7 - 328.0	334.6	322.3 - 347.0
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
Canterbury	Female	359.6	190.4 - 528.7	268.1	209.7 - 326.5	281.7	226.0 - 337.4
	Male	595.5	381.7 - 809.4	428.5	355.4 - 501.7	451.5	381.9 - 521.1
	Total	479.8	342.9 - 616.8	349.5	302.5 - 396.4	367.9	323.2 - 412.6
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
Canterbury	Female	80.0	0.5 - 159.4	117.4	78.5 - 156.4	112.4	77.0 - 147.7
	Male	97.7	11.4 - 184.0	135.2	93.6 - 176.7	129.5	91.9 - 167.1
	Total	89.0	30.2 - 147.8	126.4	97.9 - 154.8	121.0	95.2 - 146.9
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
Canterbury	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	6.3	-2.3 - 15.0	6.9	-1.5 - 15.3
	Total	0.0	0.0 - 0.0	4.9	-0.6 - 10.4	4.9	-0.2 - 10.0
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
Canterbury	Female	363.0	192.3 - 533.8	459.1	382.7 - 535.5	446.0	376.1 - 515.9
	Male	507.0	308.8 - 705.3	664.2	574.9 - 753.5	643.5	561.7 - 725.3
	Total	436.6	305.3 - 567.8	563.9	504.9 - 622.8	546.9	492.9 - 600.9
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
Canterbury	Female	1297.8	1206.7 - 1388.8	2323.9	2308.5 - 2339.2	2310.8	2295.7 - 2325.9
	Male	902.2	823.2 - 981.1	1620.0	1605.6 - 1634.5	1606.7	1592.5 - 1620.9
	Total	1096.2	1036.4 - 1156.0	2032.3	2021.7 - 2042.9	2018.5	2008.0 - 2028.9
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
Canterbury	Female	1639.3	1532.9 - 1745.7	2226.2	2208.2 - 2244.1	2216.7	2198.9 - 2234.4
	Male	1680.6	1575.3 - 1785.9	2074.4	2055.8 - 2092.9	2067.7	2049.4 - 2086.0
	Total	1658.0	1583.3 - 1732.8	2158.9	2146.0 - 2171.8	2150.6	2137.9 - 2163.3
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

	Canterbury DHB		New Zealand	
	Condition	ASR	Condition	ASR
Female	Respiratory infections	450.2	Respiratory infections	510.3
	Gastroenteritis	315.1	Gastroenteritis	371.2
	Dental conditions	243.9	Dental conditions	301.5
	ENT infections	231.3	ENT infections	265.7
	Angina	161.0	Cellulitis	243.5
Male	Respiratory infections	519.7	Respiratory infections	570.2
	Gastroenteritis	325.1	Gastroenteritis	355.3
	ENT infections	299.3	ENT infections	331.7
	Dental conditions	253.8	Dental conditions	319.0
	Angina	228.3	Angina	300.1
Total	Respiratory infections	485.4	Respiratory infections	541.0
	Gastroenteritis	320.5	Gastroenteritis	363.7
	ENT infections	265.9	Dental conditions	310.3
	Dental conditions	248.7	ENT infections	299.6
	Angina	193.8	Angina	258.9

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

	Canterbury DHB		New Zealand	
	Condition	ASR	Condition	ASR
Māori	Respiratory infections	536.6	Respiratory infections	742.2
	ENT infections	315.5	Dental conditions	441.6
	Dental conditions	299.5	Asthma	356.4
	Asthma	254.7	ENT infections	355.9
	Angina	238.1	Angina	329.4
non-Māori	Respiratory infections	485.1	Respiratory infections	500.0
	Gastroenteritis	336.7	Gastroenteritis	379.7
	ENT infections	258.1	ENT infections	283.8
	Dental conditions	240.5	Dental conditions	271.8
	Angina	191.3	Angina	250.3

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

	Canterbury DHB		New Zealand	
	Condition	ASR	Condition	ASR
Female	Persons encountering health services for specific procedures and health care	1858.4	Persons encountering health services for specific procedures and health care	1802.8
	Angina	1228.6	Angina	1499.8
	Disorders of lens	1022.5	Respiratory infections	1132.4
	Respiratory infections	1013.5	CORD	968.0
	CORD	927.1	Other forms of heart disease	955.6
Male	Persons encountering health services for specific procedures and health care	2557.8	Persons encountering health services for specific procedures and health care	2367.0
	Angina	1690.8	Angina	1956.7
	Respiratory infections	1637.5	Respiratory infections	1721.7
	Ischaemic heart disease	1325.2	Ischaemic heart disease	1550.1
	CORD	1221.7	Other forms of heart disease	1232.4
Total	Persons encountering health services for specific procedures and health care	2164.3	Persons encountering health services for specific procedures and health care	2059.9
	Angina	1442.0	Angina	1712.2
	Respiratory infections	1283.6	Respiratory infections	1388.0
	CORD	1052.0	Ischaemic heart disease	1148.7
	Ischaemic heart disease	950.3	Other forms of heart disease	1084.0

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

	Canterbury DHB		New Zealand	
	Condition	ASR	Condition	ASR
Māori	Persons encountering health services for specific procedures and health care	4002.5	Persons encountering health services for specific procedures and health care	7454.5
	CORD	2902.8	CORD	2912.0
	Respiratory infections	1852.0	Respiratory infections	2597.3
	Disorders of lens	1472.4	Diabetes	2074.3
	Angina	1275.4	Angina	1943.8
non-Māori	Persons encountering health services for specific procedures and health care	2114.0	Persons encountering health services for specific procedures and health care	1705.0
	Angina	1445.9	Angina	1698.8
	Respiratory infections	1268.6	Respiratory infections	1319.4
	CORD	1010.3	Ischaemic heart disease	1133.2
	Ischaemic heart disease	953.8	Other forms of heart disease	1069.6

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

	Canterbury DHB		New Zealand	
	Condition	ASR	Condition	ASR
Female	Dental conditions	655.5	Dental conditions	660.6
	Respiratory infections	569.8	Respiratory infections	622.0
	Persons encountering health services for specific procedures and health care	307.7	ENT infections	380.4
	ENT infections	291.7	Injuries to the elbow and forearm	337.0
	Symptoms and signs involving the digestive system and abdomen	242.4	Persons encountering health services for specific procedures and health care	311.2
Male	Dental conditions	651.9	Dental conditions	687.9
	Respiratory infections	570.7	Respiratory infections	671.2
	Persons encountering health services for specific procedures and health care	469.4	Injuries to the elbow and forearm	520.1
	ENT infections	358.2	ENT infections	457.9
	Injuries to the elbow and forearm	342.2	Injuries to the head	360.8
Total	Dental conditions	653.7	Dental conditions	674.6
	Respiratory infections	570.3	Respiratory infections	647.1
	Persons encountering health services for specific procedures and health care	390.4	Injuries to the elbow and forearm	430.9
	ENT infections	325.5	ENT infections	420.1
	Injuries to the elbow and forearm	274.1	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

	Canterbury DHB		New Zealand	
	Condition	ASR	Condition	ASR
Māori	Dental conditions	678.5	Dental conditions	843.1
	Respiratory infections	500.3	Respiratory infections	644.5
	ENT infections	472.5	ENT infections	555.6
	Persons encountering health services for specific procedures and health care	286.0	Injuries to the elbow and forearm	425.4
	Asthma	262.4	Persons encountering health services for specific procedures and health care	399.2
non-Māori	Dental conditions	649.1	Respiratory infections	648.9
	Respiratory infections	581.1	Dental conditions	619.8
	Persons encountering health services for specific procedures and health care	405.6	Injuries to the elbow and forearm	432.1
	ENT infections	303.1	ENT infections	377.3
	Injuries to the elbow and forearm	278.4	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

	Canterbury DHB		New Zealand	
	Condition	ASR	Condition	ASR
Female	Persons encountering health services in other circumstances	8754.2	Persons encountering health services in other circumstances	4296.1
	Respiratory infections	3073.5	Respiratory infections	3688.1
	Gastro-oesophageal reflux disease	1510.1	Disorders related to length of gestation and fetal growth	1895.8
	Disorders related to length of gestation and fetal growth	1394.6	Gastro-oesophageal reflux disease	1561.8
	Respiratory and cardiovascular disorders specific to the perinatal period	1383.5	ENT infections	1005.2
Male	Persons encountering health services in other circumstances	8120.8	Respiratory infections	4875.7
	Respiratory infections	3984.9	Persons encountering health services in other circumstances	4131.4
	Respiratory and cardiovascular disorders specific to the perinatal period	1808.0	Disorders related to length of gestation and fetal growth	2016.8
	Gastro-oesophageal reflux disease	1762.7	Gastro-oesophageal reflux disease	1663.2
	Disorders related to length of gestation and fetal growth	1505.9	ENT infections	1415.5
Total	Persons encountering health services in other circumstances	8432.9	Respiratory infections	4295.1
	Respiratory infections	3535.8	Persons encountering health services in other circumstances	4212.0
	Gastro-oesophageal reflux disease	1638.2	Disorders related to length of gestation and fetal growth	1957.6
	Respiratory and cardiovascular disorders specific to the perinatal period	1598.8	Gastro-oesophageal reflux disease	1613.6
	Disorders related to length of gestation and fetal growth	1451.1	ENT infections	1214.9

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

	Canterbury DHB		New Zealand	
	Condition	ASR	Condition	ASR
Māori	Persons encountering health services in other circumstances	4646.9	Respiratory infections	5965.2
	Respiratory infections	4039.5	Persons encountering health services in other circumstances	2422.4
	ENT infections	1328.8	Disorders related to length of gestation and fetal growth	1684.5
	Disorders related to length of gestation and fetal growth	1070.6	Gastro-oesophageal reflux disease	1311.2
	Gastro-oesophageal reflux disease	1017.5	ENT infections	1270.5
non-Māori	Persons encountering health services in other circumstances	9070.5	Persons encountering health services in other circumstances	4825.9
	Respiratory infections	3451.0	Respiratory infections	3722.1
	Gastro-oesophageal reflux disease	1742.7	Disorders related to length of gestation and fetal growth	2051.4
	Respiratory and cardiovascular disorders specific to the perinatal period	1706.9	Gastro-oesophageal reflux disease	1717.4
	Disorders related to length of gestation and fetal growth	1515.2	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
Canterbury	Female	115.8	13.1 - 218.5	22.0	14.3 - 29.8	24.9	16.7 - 33.0
	Male	82.7	-1.8 - 167.2	30.4	21.6 - 39.3	32.2	23.2 - 41.2
	Total	99.1	32.8 - 165.3	25.7	19.9 - 31.5	28.0	22.0 - 34.0
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
Canterbury	Female	157.9	39.4 - 276.4	137.1	113.4 - 160.8	137.9	114.7 - 161.0
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
Canterbury	Male	96.1	4.4 - 187.7	115.5	97.7 - 133.4	114.8	97.3 - 132.3
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
Canterbury	Female	0.0	0.0 - 0.0	10.0	2.1 - 17.9	10.4	2.6 - 18.2
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
Canterbury	Female	40.5	-19.6 - 100.6	47.3	35.3 - 59.3	47.0	35.3 - 58.6
	Male	58.9	-12.4 - 130.3	58.0	44.6 - 71.3	58.2	45.0 - 71.3
	Total	50.1	3.2 - 96.9	52.4	43.4 - 61.3	52.3	43.6 - 61.1
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
Canterbury	Female	19.6	-21.5 - 60.7	58.9	41.9 - 75.8	56.4	40.4 - 72.4
	Male	0.0	0.0 - 0.0	59.4	43.8 - 75.0	57.3	42.5 - 72.1
	Total	15.6	-10.2 - 41.3	58.9	47.4 - 70.5	56.6	45.7 - 67.6
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
Canterbury	Female	655.1	588.8 - 721.3	151.7	147.0 - 156.5	160.7	155.9 - 165.5
	Male	548.9	488.3 - 609.4	254.3	248.1 - 260.4	262.3	256.1 - 268.6
	Total	609.8	564.4 - 655.2	195.4	191.6 - 199.2	204.2	200.3 - 208.0
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
Canterbury	Female	362.0	314.0 - 410.0	346.6	339.2 - 354.0	345.7	338.4 - 353.0
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
Canterbury	Male	759.7	688.9 - 830.6	861.7	849.6 - 873.9	859.9	847.9 - 871.8
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
Canterbury	Female	0.0	0.0 - 0.0	9.3	8.1 - 10.6	9.1	7.9 - 10.3
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
Canterbury	Female	266.6	224.8 - 308.5	311.4	304.8 - 318.0	310.1	303.6 - 316.6
	Male	441.6	387.2 - 496.1	405.0	396.9 - 413.1	406.5	398.5 - 414.5
	Total	359.1	324.3 - 393.9	354.8	349.6 - 359.9	354.9	349.9 - 360.0
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
Canterbury	Female	0.0	0.0 - 0.0	123.4	119.2 - 127.6	123.2	119.1 - 127.3
	Male	0.0	0.0 - 0.0	236.1	229.9 - 242.3	230.6	224.6 - 236.6
	Total	0.0	0.0 - 0.0	174.6	170.9 - 178.2	172.0	168.5 - 175.6
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