

Centre for  
Public Health  
Research



## **Health Needs Assessment**

### **Whanganui District Health Board**

**For the Ministry of Health**

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## **Whanganui District Health Board**

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# CONTENTS

EXECUTIVE SUMMARY .....	5
INTRODUCTION.....	7
METHODS AND DATA SOURCES.....	8
1 THE POPULATION.....	13
1.1 Ethnicity .....	13
1.2 Population Distribution by Age and Gender.....	13
1.3 Population Distribution by Ethnicity .....	15
2 SOCIAL DETERMINANTS OF HEALTH.....	18
2.1 The New Zealand Index of Deprivation (NZDep06) .....	18
2.2 Education .....	19
2.3 Income .....	20
2.4 Employment.....	20
2.5 Housing Tenure .....	20
2.6 Communications and Transport .....	20
3 HEALTH STATUS .....	21
3.1 Avoidable Mortality .....	23
3.2 Leading Causes of Avoidable Mortality.....	23
3.3 Avoidable Hospitalisations.....	24
3.4 Leading Causes of Avoidable Hospitalisations .....	24
3.5 Unintentional Injury Mortality .....	26
3.6 Unintentional Injury Hospitalisations .....	26
3.7 Child Health (0-14 years).....	27
3.7.1 Leading causes of hospitalisations for children 0-4 years by ethnicity.....	27
3.7.2 Leading causes of hospitalisations for children 0-4 years by gender .....	28
3.7.3 Leading causes of hospitalisations for children 5-14 years by ethnicity.....	29
3.7.4 Leading causes of hospitalisations for children 5-14 years by gender .....	30
3.8 Older People's Health (65+ years) .....	31
3.8.1 Older people, leading causes of mortality, 65+ years by ethnicity.....	31
3.8.2 Older people, leading causes of mortality, 65+ years by gender .....	31
3.8.3 Older people, leading causes hospitalisation, 65+ years by ethnicity .....	32
3.8.4 Older people, leading causes of hospitalisation, 65+ years by gender.....	33
3.9 Other Health Conditions .....	34
3.9.1 Chronic conditions .....	34

3.9.2	Cancer .....	34
3.9.3	Other conditions .....	34
4	HEALTH SERVICE UTILISATION .....	35
4.1	Immunisation Coverage at 2 Years .....	36
4.2	Influenza Vaccine Coverage at 65+ Years .....	36
4.3	Breast Cancer Screening .....	36
4.4	Cervical Cancer Screening .....	36
	REFERENCES .....	38
	APPENDICES .....	39
	Appendix 1: Demographic Tables.....	45
	Appendix 2: Mortality Tables.....	73
	Appendix 3: Hospitalisation Tables.....	82
	Appendix 4: Cancer Registration Tables.....	98
	Appendix 5: ICD-10 Codes.....	102

## LIST OF TABLES

<b>Table 1:</b>	Data sources for numerators .....	8
<b>Table 1.1:</b>	Percentage population, age and gender, 2006 Census, 2026.....	13
<b>Table 1.2:</b>	Population change, age and gender, 2006 Census, 2026 .....	13
<b>Table 1.3:</b>	Māori population change, age and gender, 2006 Census, 2026.....	16
<b>Table 1.4:</b>	Non-Māori population change, age and gender, 2006 Census, 2026.....	16
<b>Table 2.1:</b>	Proportion of DHB households, housing tenure, 2006 Census.....	20
<b>Table 3.1:</b>	Avoidable mortality, 0-74 years, age-standardised rates per 100,000 (and 95% confidence intervals), 2006-08.....	23
<b>Table 3.2:</b>	Leading causes of avoidable mortality, ethnicity, 0-74 years, 2006-08.....	23
<b>Table 3.3:</b>	Leading causes of avoidable mortality, gender, 0-74 years, 2006-08.....	24
<b>Table 3.4:</b>	Avoidable hospitalisations, 0-74 years, age-standardised rates per 100,000 (and 95% confidence intervals), 2007-09.....	24
<b>Table 3.5:</b>	Leading causes of avoidable hospitalisations, ethnicity, 0-74 years, 2007- 09.....	25
<b>Table 3.6:</b>	Leading causes of avoidable hospitalisations, gender, 0-74 years, 2007- 09.....	25
<b>Table 3.7:</b>	Unintentional injury mortality, all ages, age-standardised rates per 100,000 (and 95% confidence intervals), 2006-08.....	26
<b>Table 3.8:</b>	Unintentional injury hospitalisation, all ages, age-standardised rates per 100,000 (and 95% confidence intervals), 2007-09.....	26
<b>Table 3.9:</b>	Leading causes of hospitalisations, ethnicity, 0-4 years, 2007-09 .....	27
<b>Table 3.10:</b>	Leading causes of hospitalisations, gender, 0-4 years, 2007-09.....	28
<b>Table 3.11:</b>	Leading causes of hospitalisations, ethnicity, 5-14 years, 2007-09 .....	29
<b>Table 3.12:</b>	Leading causes of hospitalisations, gender, 5-14 years, 2007-09.....	30
<b>Table 3.13:</b>	Leading causes of mortality, ethnicity, 65+ years, 2006-08.....	31
<b>Table 3.14:</b>	Leading causes of mortality, gender, 65+ years, 2006-08 .....	31
<b>Table 3.15:</b>	Leading causes of hospitalisations, ethnicity, 65+ years, 2007-09 .....	32
<b>Table 3.16:</b>	Leading causes of hospitalisations, gender, 65+ years, 2007-09 .....	33
<b>Table 4.1:</b>	Full immunisation coverage at two years, percent, ethnicity, 2009-10.....	36
<b>Table 4.2:</b>	Influenza vaccinations in the last 12 months, 65+ years, percent, ethnicity, 2009-10 .....	36
<b>Table 4.3:</b>	Breast screening coverage, 50-64 years, percent, ethnicity, 2009-10.....	36
<b>Table 4.4:</b>	Had cervical smear in the last three years, 20-69 years, percent, ethnicity, 2009-10 .....	37

## LIST OF FIGURES

<b>Figure 1:</b>	Population, age and gender, 2006 Census .....	14
<b>Figure 2:</b>	Projected population, age and gender, 2026.....	14
<b>Figure 3:</b>	Māori population, age and gender, 2006 Census .....	15
<b>Figure 4:</b>	Non-Māori population, age and gender, 2006 Census .....	15
<b>Figure 5:</b>	Projected Māori population, age and gender, 2026 .....	17
<b>Figure 6:</b>	Projected DHB non-Māori population, age and gender, 2026.....	17
<b>Figure 7:</b>	Distribution of Whanganui DHB Area Units across NZDep06 Decile Groups, 2006 Census.....	18
<b>Figure 8:</b>	Whanganui DHB population, ethnicity and NZDep06 Decile .....	19
<b>Figure 9:</b>	New Zealand population, ethnicity and NZDep06 Decile .....	19

## **EXECUTIVE SUMMARY**

The report identifies the unmet health and healthcare needs of the Whanganui 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 Whanganui DHB in determining priorities for its planning and decision-making to achieve health gain in its population.

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

In the 2006 census, Whanganui DHB had a population of 63,980 which is predicted to fall to 59,530 by 2026. The proportion of people identifying themselves as Māori in Whanganui DHB is higher than that of New Zealand as a whole. The Māori population in Whanganui DHB is younger than the non-Māori population and is dominated by young people. This trend is expected to continue over the period to 2026, whilst the non-Māori population is predicted to age over the same period.

In Whanganui DHB, the distribution of communities across the NZDep06 deprivation scale is dominated by the higher deprivation deciles. Whilst the proportion of both Māori and non-Māori increases with level of deprivation, this trend is much stronger for the Māori population.

### **Health status**

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

Ischaemic heart disease, lung cancer and suicide were leading causes of avoidable mortality for both Māori and non-Māori. Diabetes and chronic obstructive pulmonary disease (COPD) were other major causes for Māori, compared to colorectal cancer and breast cancer (females only) for non-Māori.

The overall rate of avoidable hospitalisations for Māori in the DHB was statistically significantly higher than the comparable non-Māori rate.

Four of the five leading causes of avoidable hospitalisations (i.e., respiratory conditions, dental conditions, angina, and gastroenteritis) were the same for Māori and non-Māori. Asthma was also a major cause of avoidable hospitalisation for Māori only, whereas kidney/urinary infections was the major cause of non-Māori avoidable hospitalisations.

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

The leading causes of hospitalisations for children aged 0-4 years, which included respiratory infections, dental conditions, gastro-oesophageal reflux disease, and disorders related to length of gestation and fetal growth, were similar for Māori and non-Māori.

Both Māori and non-Māori children aged 5-14 years experienced the same four leading causes of hospitalisation: <sup>1</sup>persons encountering health services for specific procedures and health care, dental conditions, ENT infections, and respiratory conditions.

### **Older people**

Ischaemic heart disease, lung cancer, stroke, colorectal cancer, and COPD were the top five leading causes of death for both Māori and non-Māori aged 65+ years.

Respiratory infections, COPD, ischaemic heart disease were the three leading causes of hospitalisation for both Māori and non-Māori 65+ years of age.

### **Other conditions**

The COPD hospitalisation rate for Māori was statistically significantly higher than the non-Māori rate as well as between the local and the national rate.

The overall melanoma hospitalisation rate for Māori and Māori women were statistically significantly higher than their non-Māori counterparts.

The rate of hospital admissions for unintentional injury was statistically significantly higher for Māori youth in the Whanganui DHB compared to the rate for youth in New Zealand.

Māori children (excluding females) 15-24 years admitted to hospital for asthma had a statistically significantly higher rate than their non-Māori counterparts.

## **Health service utilisation**

In the Whanganui DHB, 72.5 percent of Māori children had received all specified immunisation vaccines by the age of two, compared to 74.9 percent of non-Māori children.

In the Whanganui DHB, 64.0 percent of Māori people aged 65 years and over either received an influenza vaccine, or had an agreement made by a primary health provider to receive an influenza vaccine in the past 12 months, which is higher than the national Māori rate of 54.4 percent. In comparison, the non-Māori rate was 64.9 percent, also higher than the comparable New Zealand average (60.5%).

In the Whanganui DHB, the Māori breast cancer screening coverage was substantially lower than the non-Māori rate, but higher than the New Zealand Māori rate.

The Māori cervical cancer screening rate was slightly higher than the national average for Māori, but both were considerably lower than the comparable non-Māori rates.

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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 Whanganui 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

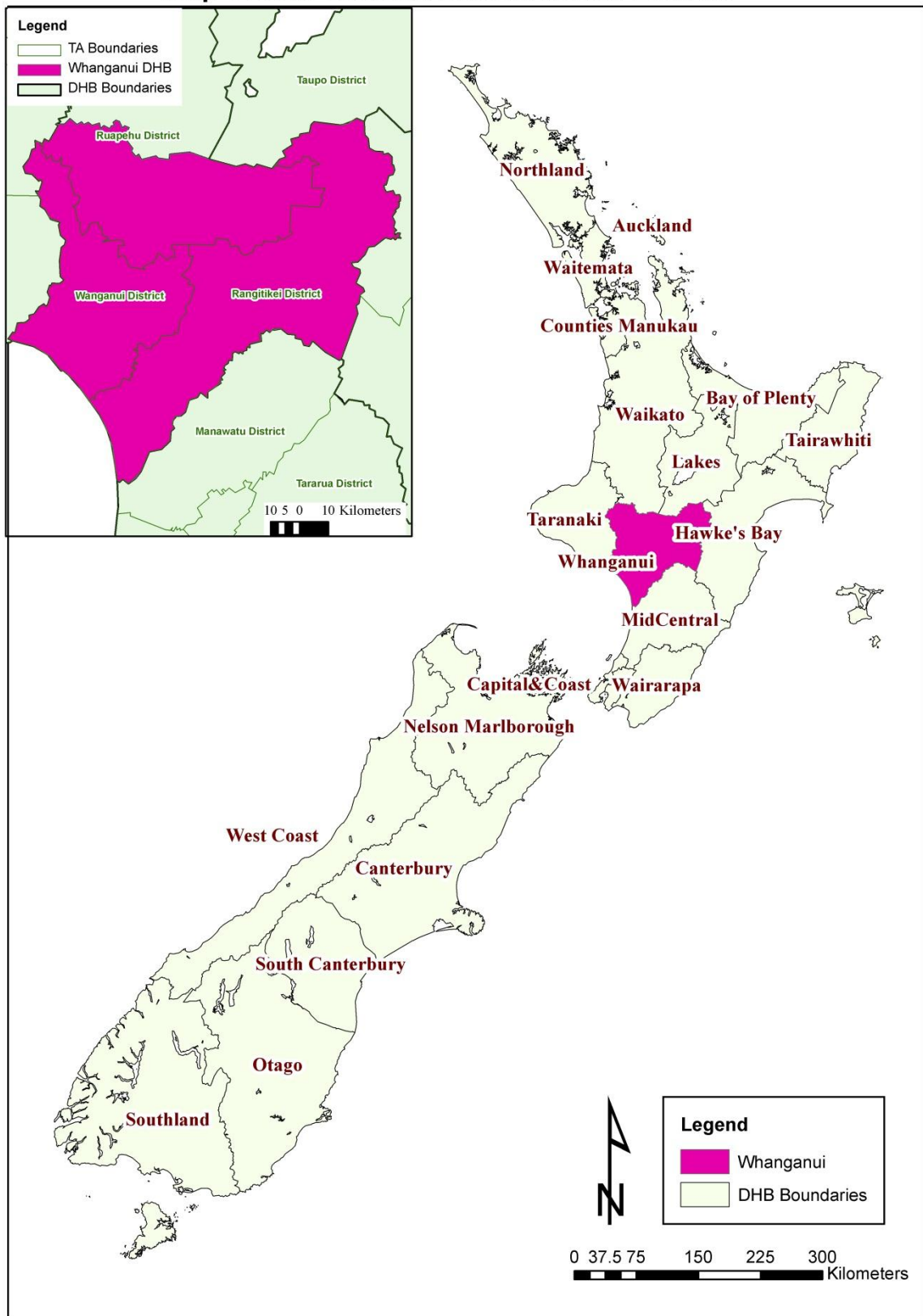
The dark blue shows that the ASR for the total Māori population in the DHB (919.1 per 100,000) is statistically significantly higher than the ASR for the total non-Māori population in the DHB (622.3 per 100,000)

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

Whanganui DHB had a population of 63,980 at the last (2006) census, making up approximately 1.5 percent of the total New Zealand population (4,184,580 at the last census). This population is projected to fall to 59,530 by 2026, a decrease of 7.0 percent. The New Zealand population is predicted to increase by 19.2 percent over the same period.

## 1.1 Ethnicity

The proportion of people identifying themselves as Māori in Whanganui DHB is much higher than that of New Zealand as a whole, (24.4% compared to 14.6%). This represents 2.5 percent of the New Zealand Māori population (2006 Census).

## 1.2 Population Distribution by Age and Gender

The majority of the Whanganui DHB population (62.4%) are of working age (15-64 years), this makes up a lower proportion of the population compared to New Zealand as a whole (66.5%), (Table 1.1). There is a similar proportion of young people (aged 0-14 years) and more elderly (aged 65+ years) in the Whanganui DHB when compared to the New Zealand population. The Whanganui DHB population has two distinctive peaks at 10-14 years and 40-49 years, (Figure 1).

**Table 1.1:** Percentage population, age and gender, 2006 Census, 2026

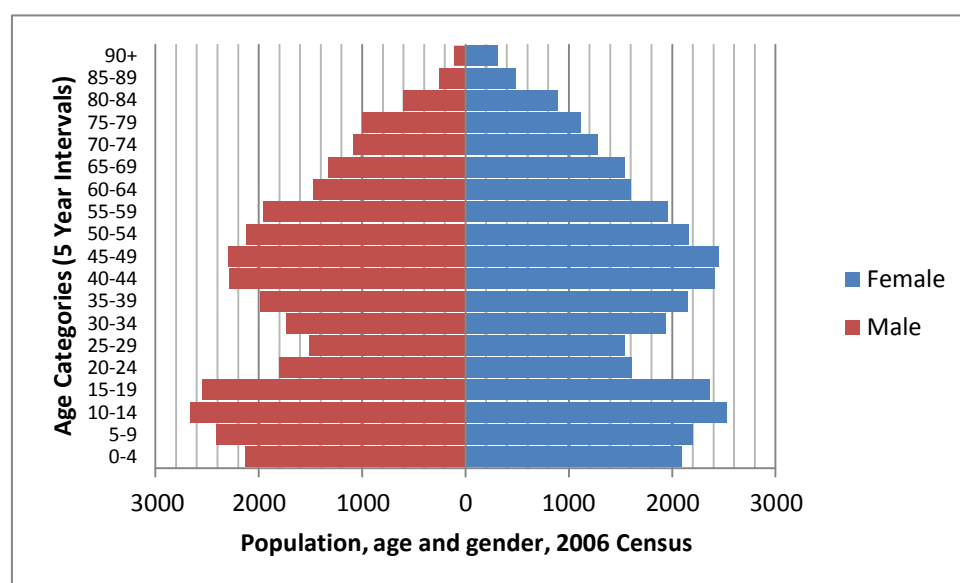
Location	Age Group	2006(Base Population)			2026 (Projected Population)		
		Male	Female	Total	Male	Female	Total
Whanganui	0-14	23.0	20.9	21.9	19.4	17.7	18.5
	15-64	63.0	61.8	62.4	56.6	54.8	55.7
	65+	14.0	17.3	15.7	24.0	27.5	25.8
New Zealand	0-14	22.2	20.3	21.2	19.4	17.9	18.6
	15-64	66.6	66.5	66.5	62.7	62.2	62.5
	65+	11.2	13.2	12.2	17.9	19.9	18.9

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

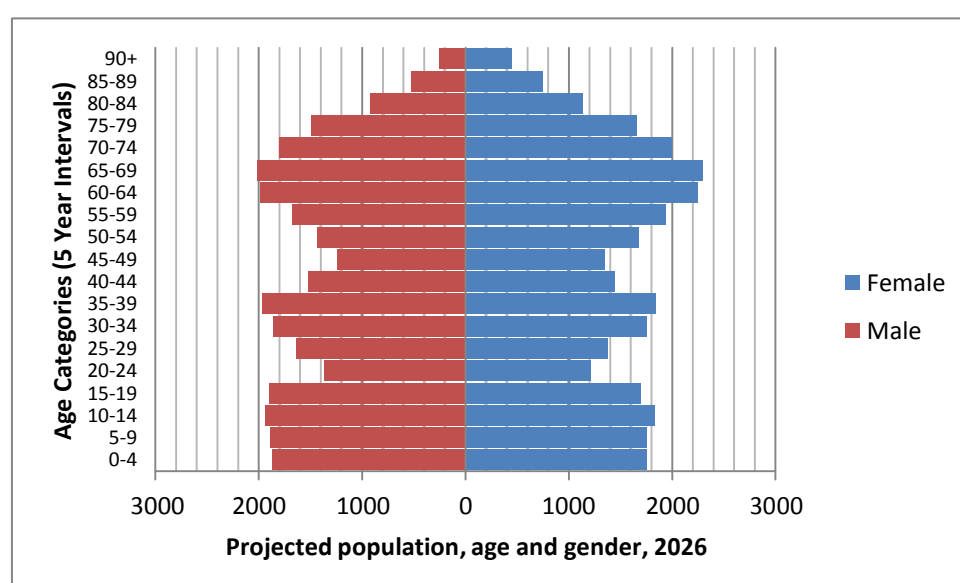
Location	Age Group	2006(Base)			2026			Percentage increase 2006-2026		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Whanganui	0-14	7200	6820	14030	5700	5350	11040	-20.8	-21.6	-21.3
	15-64	19740	20180	39930	16610	16560	33160	-15.9	-17.9	-17.0
	65+	4380	5630	10020	7030	8300	15330	60.5	47.4	53.0
	Total	31320	32630	63980	29340	30210	59530	-6.3	-7.4	-7.0
New Zealand	0-14	454960	433360	888310	477070	451780	928840	4.9	4.3	4.6
	15-64	1364450	1420210	2784650	1545220	1573770	3119010	13.2	10.8	12.0
	65+	228930	282690	511620	440280	503800	944080	92.3	78.2	84.5
	Total	2048340	2136260	4184580	2462570	2529350	4991930	20.2	18.4	19.3

It is projected that by 2026, the proportion of the population in the 65+ age group will have increased by 53.0 percent in Whanganui DHB much less than the 84.5 percent predicted nationally. Populations of both young people and those of working age are predicted to decrease, (by 21.3% and 17.0% respectively). Trends for the rest of New Zealand are for small increases in these two age groups (of 4.6% and 12.0% respectively). The population is predicted to age considerably over the period to 2026, with peak population increasing to 65-69 years. Two, secondary, population peaks occur at 10-14 years and 35-39 years.

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



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

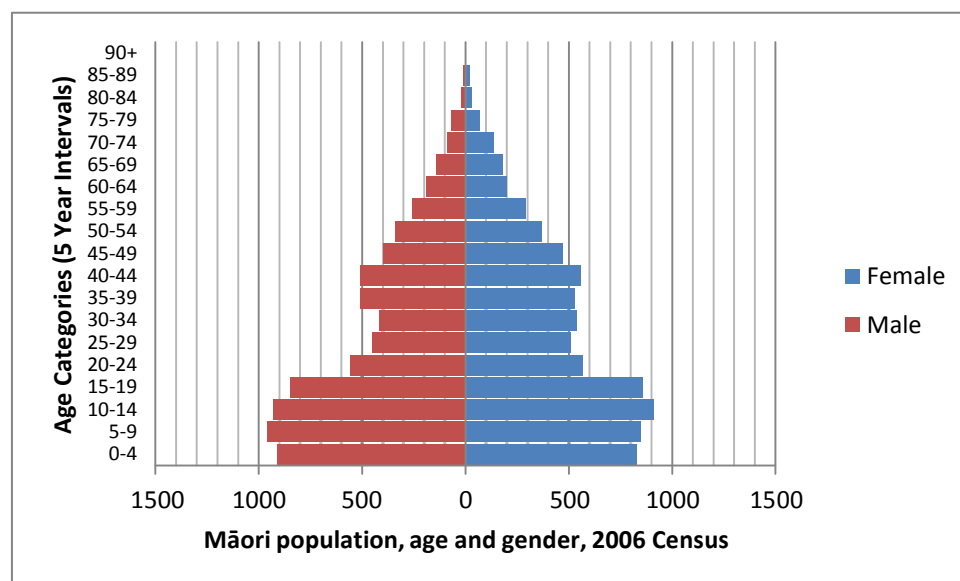




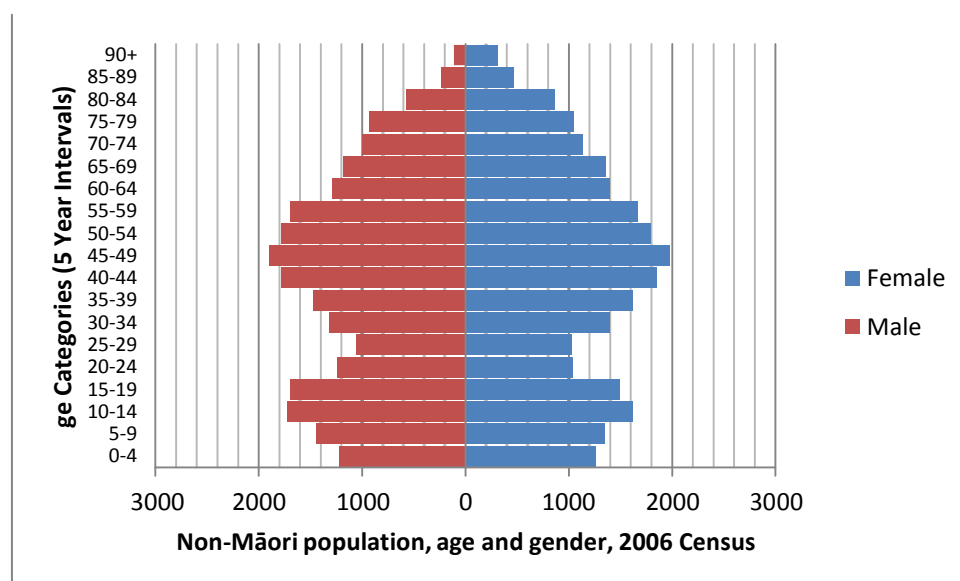
### 1.3 Population Distribution by Ethnicity

The Whanganui Māori population is younger than the non-Māori population. The Māori population is dominated by young people, with peak population occurring at 10-14 years, a secondary peak can be seen at 40-44 years. The non-Māori population is older in structure than the Māori population. Peak population occurs at 45-49 years, with a smaller, secondary, peak at 10-14 years.

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



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



Over the period 2006-2026, the young (aged 0-14 years) and working age (15-64 years) Māori populations are predicted to increase (by 0.2% and 11.9% respectively). By contrast the young and working age non-Māori populations are predicted to decline over the same period (by 34.7% and

25.9%). The greatest population increase occurs in the elderly population for Māori (128.2%), the non-Māori population also increases in this age category (by 46.6%). This is predicted to lead to an overall increase in the Māori population of 29.8 percent, and a decrease in the non-Māori population of 13.6 percent.

Whilst young people are predicted to continue to dominate the Māori population (peak age 0-4 years), two other distinctive peaks can be seen, (at 30-34 years and 60-64 years). The non-Māori population is predicted to age considerably over the period 2006-2026, with peak population increasing to 65-69 years.

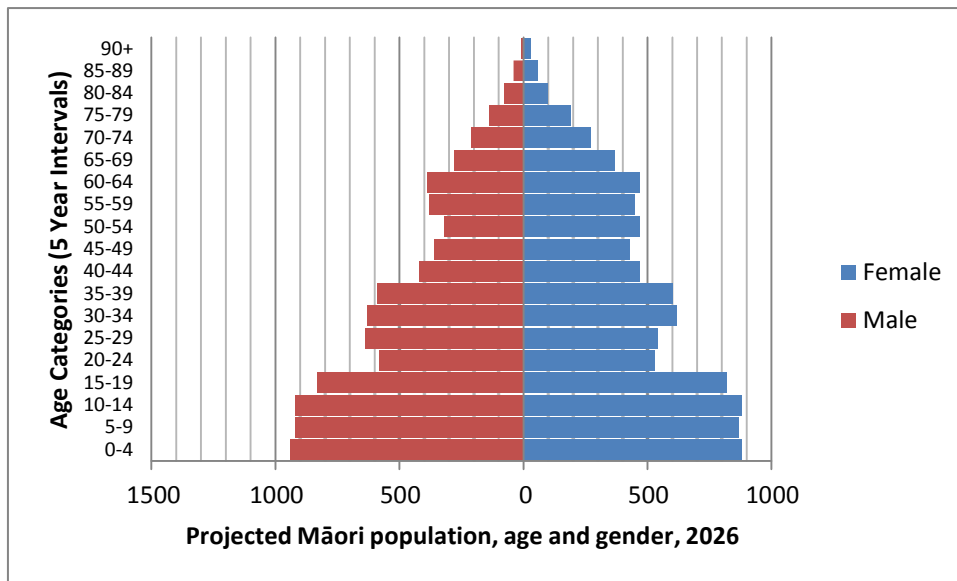
**Table 1.3:** Māori population change, age and gender, 2006 Census, 2026

Location	Age Group	2006(Base)			2026			Percentage increase 2006-2026		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Whanganui	0-14	2800	2590	5390	2780	2630	5400	-0.7	1.5	0.2
	15-64	4490	4900	9440	5140	5400	10560	14.5	10.2	11.9
	65+	330	440	780	760	1020	1780	130.3	131.8	128.2
	Total	7620	7930	15610	8680	9050	17740	13.9	14.1	13.6
New Zealand	0-14	110480	104810	215310	132290	125860	258150	19.7	20.1	19.9
	15-64	183640	199700	383320	236750	246600	483350	28.9	23.5	26.1
	65+	11680	14010	25710	30830	38330	69150	164.0	173.6	169.0
	Total	305800	318520	624340	399870	410790	810650	30.8	29.0	29.8

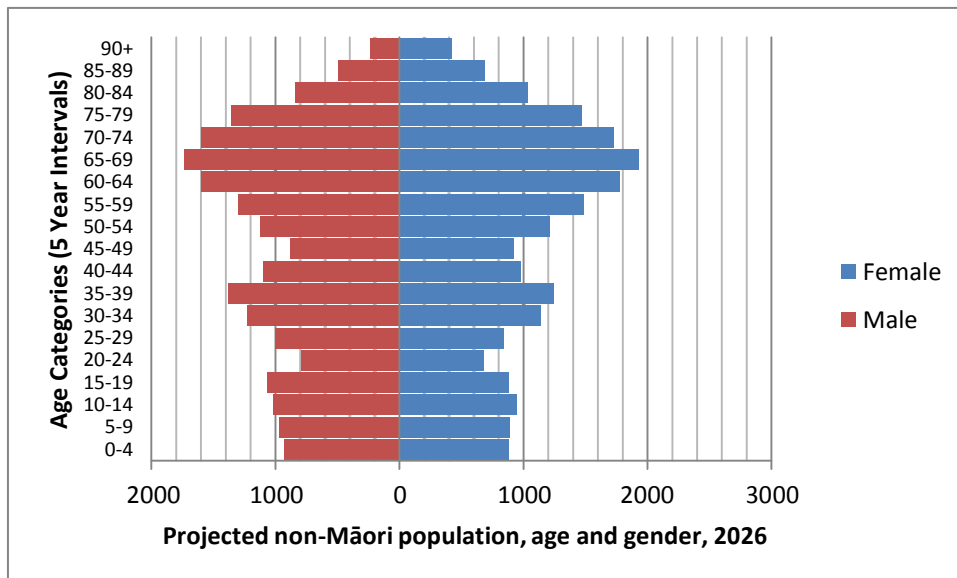
**Table 1.4:** Non-Māori population change, age and gender, 2006 Census, 2026

Location	Age Group	2006(Base)			2026			Percentage increase 2006-2026		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Whanganui	0-14	4400	4230	8640	2920	2720	5640	-33.6	-35.7	-34.7
	15-64	15250	15280	30490	11470	11160	22600	-24.8	-27.0	-25.9
	65+	4050	5190	9240	6270	7280	13550	54.8	40.3	46.6
	Total	23700	24700	48370	20660	21160	41790	-12.8	-14.3	-13.6
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 DHB non-Māori population, age and gender, 2026



## 2 SOCIAL DETERMINANTS OF HEALTH

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

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

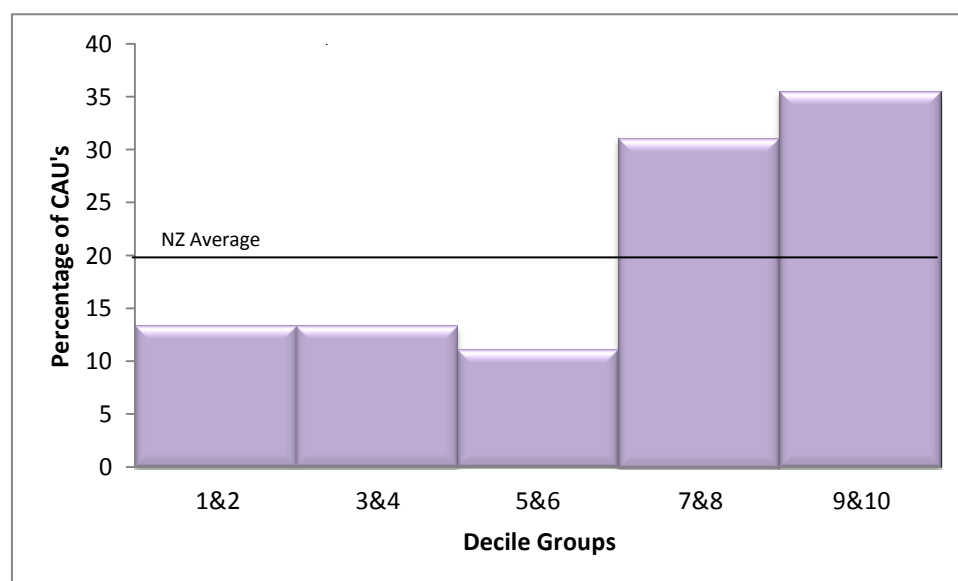
The following section examines social and economic determinants of health through the New Zealand Index of Deprivation and through some of the individual indicators used to determine ‘deprivation’ in New Zealand.

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

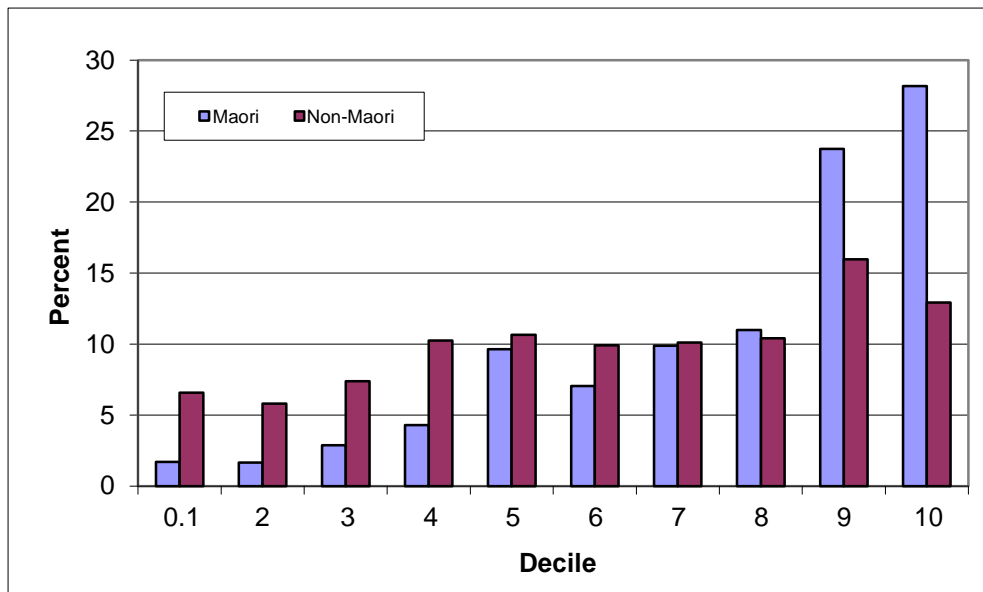
The New Zealand Index of Deprivation (NZDep06) provides a numerical rating of socio economic status by small area unit. This is based on nine indicators taken from the 2006 Census and across eight dimensions of deprivation. The numerical scale is divided into population deciles with 1 representing the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

In Whanganui DHB the distribution of communities across the NZDep06 deprivation scale is dominated by the higher deprivation deciles. Whilst this is true for both Māori and non-Māori, trends for Māori are much more pronounced. This distribution across the deprivation scale is very similar to national trends for Māori.

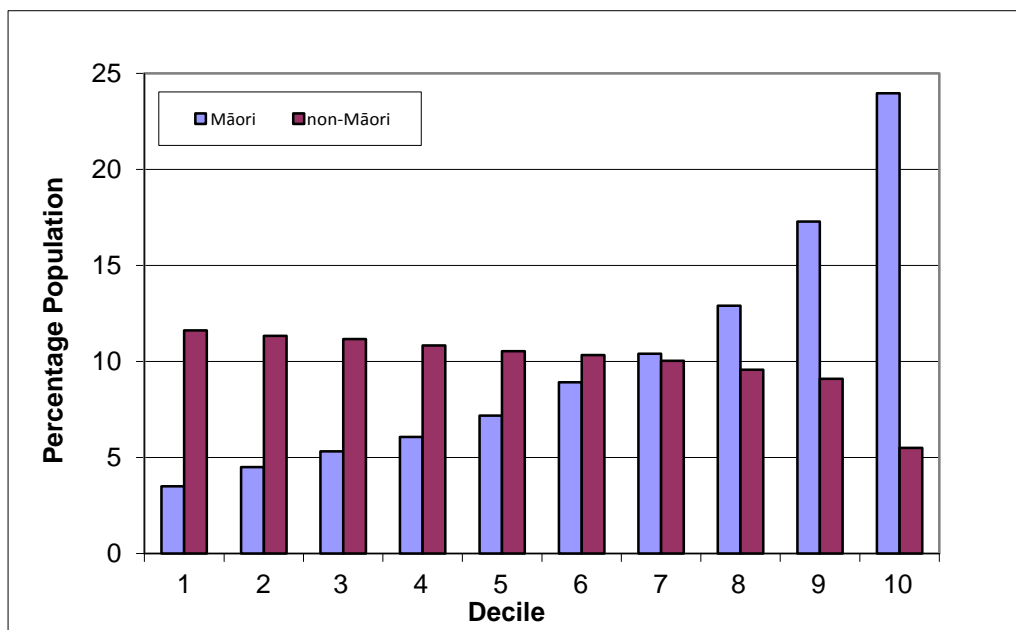
**Figure 7:** Distribution of Whanganui DHB Area Units across NZDep06 Decile Groups, 2006 Census



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



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



## 2.2 Education

The population of Whanganui DHB has a much smaller proportion of university graduates (degree level and above) (7.7%), compared to the New Zealand population (14.2%). It also has a higher rate of people with no qualifications (29.5% compared to 22.4% for New Zealand).

## 2.3 Income

The Whanganui DHB population has a lower proportion of the people earning over \$30,000 in personal income; 29.8 percent compared to 37.3 percent for New Zealand. This represents a lower proportion of people earning around or above the average annual personal income in New Zealand, which stood at \$33,189 in 2006/07 (Statistics New Zealand, 2012).

## 2.4 Employment

The employment rate for the Whanganui DHB population is very similar to that for New Zealand (94.3% compared to 94.9%). In terms of type of employment, there is a lower proportion of professionals and managers in the Whanganui DHB (30.3% compared to 36.0% nationally) and a higher proportion of machine operators and labourers (21.3% compared to 16.8% nationally).

## 2.5 Housing Tenure

Housing tenure in Whanganui DHB is similar to that of New Zealand.

**Table 2.1:** Proportion of DHB households, housing tenure, 2006 Census

	Unit	Total, dwelling owned or partly owned by usual resident(s)	Total, dwelling not owned or partly owned by usual resident(s)	Total, dwelling held in a family trust by usual resident(s)	Not elsewhere included	Total
Whanganui	Number	12219	7608	2664	1608	24099
	Percentage	50.7	31.6	11.1	6.7	100.0
New Zealand	Number	743955	451965	167925	90333	1454178
	Percentage	51.2	31.1	11.6	6.2	100.0

## 2.6 Communications and Transport

Access to telecommunication overall in Whanganui (2.9%) is slightly lower than national levels (2.0%). Access to the following types of telecommunications is considerably lower: cell phone (65.8% compared to 71.1% nationally) and internet (48.4% compared to 58.0% nationally).

Fewer people have access to a motor vehicle in Whanganui DHB (9.6% have no access to a motor vehicle) compared to New Zealand (7.8% have no access to a motor vehicle).

### 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 Whanganui DHB district, in comparison to all New Zealanders.

#### Key points

- Ischaemic heart disease, lung cancer and suicide were leading causes of avoidable mortality for both Māori and non-Māori. Diabetes and chronic obstructive pulmonary disease (COPD) were other major causes for Māori, compared to colorectal cancer and breast cancer (females only) for non-Māori.
- Ischaemic heart disease and lung cancer were two of the major causes of avoidable mortality for both females and males. However, the other leading causes were different between the genders.
- The overall rate of avoidable hospitalisations for Māori in the DHB was statistically significantly higher than the comparable non-Māori rate. The Whanganui DHB also had a statistically significantly higher avoidable hospitalisation rate compared to the national rate.
- Four of the five leading causes of avoidable hospitalisations (i.e., respiratory conditions, dental conditions, angina, gastroenteritis) were the same for Māori and non-Māori. Asthma was also a major cause of avoidable hospitalisation for Māori only, whereas kidney/urinary infections was the major cause of non-Māori avoidable hospitalisations.
- The leading causes of avoidable hospitalisations were broadly similar for both genders, with the exceptions of cellulitis and kidney/urinary infections for females, and asthma and angina for males.
- The leading causes of hospitalisations for children aged 0-4 years, which included respiratory infections, dental conditions, gastro-oesophageal reflux disease, and disorders related to length of gestation and fetal growth, were similar for Māori and non-Māori.
- Males and females aged 0-4 years, experienced similar leading causes of hospitalisations. These included respiratory infections, gastro-oesophageal reflux disease, dental conditions, and disorders related to length of gestation and fetal growth.
- Both Māori and non-Māori children aged 5-14 years experienced the same four leading causes of hospitalisation: persons encountering health services for specific procedures and health care, dental conditions, ENT infections, and respiratory conditions.
- Both males and females aged 5-14 years experienced the same four leading causes of hospitalisation: persons encountering health services for specific procedures and health care, dental conditions, respiratory conditions, and injuries to the elbow and forearm.
- Ischaemic heart disease, lung cancer, stroke, colorectal cancer, and COPD were the top five leading causes of death for both Māori and non-Māori aged 65+ years.
- Ischaemic heart disease, stroke, lung and colorectal cancers were leading causes of mortality for both genders aged 65+ years.
- Respiratory infections, COPD, ischaemic heart disease were the three leading causes of hospitalisation for both Māori and non-Māori 65+ years of age.
- Both females and males aged 65+ years experienced similar leading causes of hospitalisations: angina, skin cancers, ischaemic heart disease, and COPD.

- The hospital admission rate for ischaemic heart disease in the Whanganui DHB was statistically significantly higher than the national rate.
- The COPD hospitalisation rate for Māori was statistically significantly higher than the non-Māori rate. The DHB rate was statistically significantly higher than the national rate.
- In the Whanganui DHB, the hospitalisation rates of all cancer and melanoma were statistically significantly higher than the national rates. The overall melanoma hospitalisation rate for Māori and Māori women were statistically significantly higher than their non-Māori counterparts.
- The rate of hospital admissions for unintentional injury was statistically significantly higher for Māori youth (15-24 years) in the Whanganui DHB compared to the rate for youth in New Zealand.
- Māori children (excluding females) under 15 years admitted to hospital for asthma had a statistically significantly higher rate than their non-Māori counterparts. Children in the Whanganui DHB (excluding females) also had a statistically significantly higher rate of asthma hospitalisation compared to the national rate.



### 3.1 Avoidable Mortality

The avoidable mortality rates for Māori in the Whanganui DHB were not statistically significantly different from the non-Māori rates (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	
Whanganui	Female	258.3	-48.1	- 564.7	81.8	-15.7	- 179.4	111.7	13.2	- 210.2
	Male	364.8	-29.7	- 759.3	149.5	16.0	- 282.9	184.0	56.4	- 311.6
	Total	304.7	61.6	- 547.8	115.3	32.1	- 198.4	146.8	66.4	- 227.2
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

Ischaemic heart disease, lung cancer and suicide were leading causes of avoidable mortality for both Māori and non-Māori (Table 3.2). Diabetes and COPD were other major causes for Māori, compared to colorectal cancer and breast cancer (females only) for non-Māori.

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

	Whanganui DHB		New Zealand	
	Condition	Rank	Condition	Rank
Māori	Ischaemic heart disease	1	Ischaemic heart disease	1
	Lung cancer	2	Lung cancer	2
	Suicide and self-inflicted injuries	3	Diabetes	3
	Diabetes	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
	Breast cancer (female only)	5	Colorectal cancer	5

Note: COPD=chronic obstructive pulmonary disease

Ischaemic heart disease and lung cancer were two of the major causes of avoidable mortality for both females and males (Table 3.3). However, the other leading causes were different between the genders.

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

	Whanganui DHB		New Zealand	
	Condition	Rank	Condition	Rank
Female	Breast cancer (female only)	1	Breast cancer (female only)	1
	Lung cancer	2	Lung cancer	2
	Diabetes	3	Ischaemic heart disease	3
	Ischaemic heart disease	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
	Motor vehicle accidents	4	Lung cancer	4
	Colorectal cancer	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
	Diabetes	4	Motor vehicle accidents	4
	Motor vehicle accidents	5	Diabetes	5

Note: COPD=chronic obstructive pulmonary disease

### 3.3 Avoidable Hospitalisations

The overall rate of avoidable hospitalisations for Māori in the DHB was statistically significantly higher than the comparable non-Māori rate (Table 3.4). Whanganui DHB also had a statistically significantly higher avoidable hospitalisation rate compared to the national rate.

**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	
Whanganui	Female	6623.2	4879.4	- 8367.0	4021.9	3044.0	- 4999.9	4765.6	3907.3	- 5623.8
	Male	6240.6	4536.5	- 7944.8	4651.7	3616.4	- 5687.0	5143.4	4268.8	- 6018.0
	Total	6417.3	5203.0	- 7631.7	4321.4	3611.7	- 5031.1	4942.8	4331.2	- 5554.4
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

Four of the five leading causes of avoidable hospitalisations (i.e., respiratory conditions, dental conditions, angina, and gastroenteritis) were the same for both Māori and non-Māori (Table 3.5). Asthma was also a major cause of avoidable hospitalisation for Māori only, whereas kidney/urinary infections was the major cause of non-Māori avoidable hospitalisations.

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

	Whanganui DHB		New Zealand	
	Condition	Rank	Condition	Rank
Māori	Respiratory infections	1	Respiratory infections	1
	Dental conditions	2	Dental conditions	2
	Asthma	3	Asthma	3
	Gastroenteritis	4	ENT infections	4
	Angina	5	Angina	5
non-Māori	Respiratory infections	1	Respiratory infections	1
	Gastroenteritis	2	Gastroenteritis	2
	Dental conditions	3	ENT infections	3
	Angina	4	Dental conditions	4
	Kidney/urinary infection	5	Angina	5

Note: ENT infections= ear, nose and throat infections

The leading causes of avoidable hospitalisations were broadly similar for both genders, with the exceptions of cellulitis and kidney/urinary infections for females, and asthma and angina for males (Table 3.6).

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

	Whanganui DHB		New Zealand	
	Condition	Rank	Condition	Rank
Female	Respiratory infections	1	Respiratory infections	1
	Dental conditions	2	Gastroenteritis	2
	Gastroenteritis	3	Dental conditions	3
	Kidney/urinary infection	4	ENT infections	4
	Cellulitis	5	Cellulitis	5
Male	Respiratory infections	1	Respiratory infections	1
	Dental conditions	2	Gastroenteritis	2
	Gastroenteritis	3	ENT infections	3
	Asthma	4	Dental conditions	4
	Angina	5	Angina	5
Total	Respiratory infections	1	Respiratory infections	1
	Dental conditions	2	Gastroenteritis	2
	Gastroenteritis	3	Dental conditions	3
	Asthma	4	ENT infections	4
	Angina	5	Angina	5

Note: ENT infections= ear, nose and throat infections

### 3.5 Unintentional Injury Mortality

In the Whanganui DHB, the Māori mortality rates from unintentional injury were substantially higher, but not statistically significantly different, from the comparable non-Māori rates (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	
Whanganui	Female	21.1	-77.3	- 119.4	5.9	-23.1	- 34.9	11.2	-27.1	- 49.4
	Male	57.3	-112.2	- 226.9	27.1	-45.6	- 99.7	34.6	-35.8	- 105.0
	Total	37.7	-56.2	- 131.6	16.5	-22.6	- 55.6	22.7	-17.1	- 62.6
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

The Māori and non-Māori age-standardised rates of unintentional injury hospitalisations were not statistically significantly different (Table 3.8).

**Table 3.8:** Unintentional injury hospitalisation, all ages, age-standardised rates per 100,000 (and 95% confidence intervals), 2007-09

		Māori			non-Māori			Total		
		ASR	95% confidence		ASR	95% confidence		ASR	95% confidence	
Whanganui	Female	1361.8	567.2	- 2156.5	1152.8	647.4	- 1658.2	1225.2	802.3	- 1648.1
	Male	2691.8	1552.4	- 3831.3	2514.9	1776.4	- 3253.4	2566.7	1957.3	- 3176.2
	Total	2007.3	1321.4	- 2693.1	1850.3	1398.7	- 2302.0	1903.0	1530.6	- 2275.3
New Zealand	Female	1344.0	1220.6	- 1467.5	1133.4	1077.2	- 1189.6	1174.8	1124.1	- 1225.5
	Male	2485.9	2315.3	- 2656.6	2015.8	1942.3	- 2089.3	2095.7	2028.9	- 2162.6
	Total	1900.9	1796.5	- 2005.3	1575.3	1529.0	- 1621.6	1634.3	1592.4	- 1676.3

## 3.7 Child Health (0-14 years)

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

The leading causes of hospitalisations for children aged 0-4 years, which included respiratory infections, dental conditions, gastro-oesophageal reflux disease, and disorders related to length of gestation and fetal growth, were similar for Māori and non-Māori (Table 3.9).

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

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

Males and females aged 0-4 years, experienced similar leading causes of hospitalisations (Table 3.10). These included respiratory infections, gastro-oesophageal reflux disease, dental conditions, and disorders related to length of gestation and fetal growth.

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

	Whanganui DHB		New Zealand	
	Condition	Rank	Condition	Rank
Female	Respiratory infections	1	**Persons encountering health services in other circumstances	1
	Gastro-oesophageal reflux disease	2	Respiratory infections	2
	Dental conditions	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
	*Persons encountering health services for specific procedures and health care	5	ENT infections	5
Male	Respiratory infections	1	Respiratory infections	1
	Gastro-oesophageal reflux disease	2	Persons encountering health services in other circumstances	2
	Disorders related to length of gestation and fetal growth	3	Disorders related to length of gestation and fetal growth	3
	Dental conditions	4	Gastro-oesophageal reflux disease	4
	Asthma	5	ENT infections	5
Total	Respiratory infections	1	Respiratory infections	1
	Gastro-oesophageal reflux disease	2	Persons encountering health services in other circumstances	2
	Dental conditions	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
	Asthma	5	ENT infections	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. \*\*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

Both Māori and non-Māori children aged 5-14 years experienced the same four leading causes of hospitalisation: persons encountering health services for specific procedures and health care, dental conditions, ENT infections, and respiratory conditions (Table 3.11).

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

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

Note: ENT infections= ear, nose and throat infections

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

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

Both males and females aged 5-14 years experienced the same four leading causes of hospitalisation: persons encountering health services for specific procedures and health care, dental conditions, respiratory conditions, and injuries to the elbow and forearm (Table 3.12).

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

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

Note: ENT infections= ear, nose and throat infections

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



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

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

Ischaemic heart disease, lung cancer, stroke, colorectal cancer, and COPD were the five leading causes of death for both Māori and non-Māori aged 65+ years (Table 3.13).

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

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

Note: COPD=chronic obstructive pulmonary disease

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

Ischaemic heart disease, stroke, lung and colorectal cancers were leading causes of mortality for both genders aged 65+ years (Table 3.14). Breast cancer for females, and COPD for males, were additional major causes of death.

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

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

Respiratory infections, COPD, ischaemic heart disease were the three leading causes of hospitalisation for both Māori and non-Māori 65+ years of age (Table 3.15).

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

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

Both females and males aged 65+ years experienced similar leading causes of hospitalisations: angina, skin cancers, ischaemic heart disease, and COPD (Table 3.16).

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

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

#### **3.9.1 Chronic conditions**

The hospital admission rate for ischaemic heart disease in the Whanganui DHB was statistically significantly higher than the national rate (Appendix 3: Table 3.1.3).

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

#### **3.9.2 Cancer**

In the Whanganui DHB, the hospitalisation rates for all cancer and specifically melanoma were statistically significantly higher than the comparable national rates (Appendix 3: Table 3.1.5 and Table 3.1.11). The overall melanoma hospitalisation rates for Māori and Māori women were statistically significantly higher than their non-Māori counterparts.

#### **3.9.3 Other conditions**

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

Māori children (excluding females) under 15 years admitted to hospital for asthma had a statistically significantly higher rate than their non-Māori counterparts (Appendix 3: Table 3.1.28). Children in the Whanganui DHB (excluding females) also had a statistically significantly higher rate of asthma hospitalisation compared to the national rate.

## 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 Whanganui 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 Whanganui DHB, 72.5 percent of Māori children had received all specified immunisation vaccines by the age of two, compared to 74.9 percent of non-Māori children.
- In the Whanganui DHB, 64.0 percent of Māori people aged 65 years and over either received an influenza vaccine, or had an agreement made by a primary health provider to receive an influenza vaccine in the past 12 months, which is higher than the national Māori rate of 54.4 percent. In comparison, the non-Māori rate was 64.9 percent, also higher than the comparable New Zealand average (60.5%).
- In the Whanganui DHB, the Māori breast cancer screening coverage was substantially lower than the non-Māori rate, but higher than the New Zealand Māori rate.
- The local Māori cervical cancer screening rate was slightly higher than the national average for Māori, but both were considerably lower than the comparable non-Māori rates.

## 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.

In the Whanganui DHB, 72.5 percent of Māori children had received all specified immunisation vaccines by the age of two, compared to 74.9 percent of non-Māori children (Table 4.1).

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

DHB	Māori	non-Māori	Total
Whanganui DHB	72.5%	74.9%	74.1%
New Zealand	72.0%	79.4%	77.7%

## 4.2 Influenza Vaccine Coverage at 65+ Years

In Whanganui DHB, 64.0 percent of Māori people aged 65 years and over either received an influenza vaccine, or had an agreement made by a primary health provider to receive an influenza vaccine in the past 12 months, which is higher than the national Māori rate of 54.4 percent (Table 4.2). In comparison, the non-Māori rate was 64.9 percent, also higher than the comparable New Zealand average (60.9%).

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

DHB	Māori	non-Māori	Total
Whanganui DHB	64.0%	64.9%	65.6%
New Zealand	54.4%	60.9%	60.5%

## 4.3 Breast Cancer Screening

In the Whanganui DHB, the Māori breast cancer screening coverage (59.0%) was higher than the New Zealand Māori rate (51.5%), but substantially lower than the non-Māori rate in the DHB (71.7%) (Table 4.3)

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

DHB	Māori	non-Māori	Total
Whanganui DHB	59.0%	71.7%	68.6%
New Zealand	51.5%	65.0%	63.7%

## 4.4 Cervical Cancer Screening

The Māori cervical cancer screening rate (58.2%) was slightly higher than the national average for Māori (54.4%), but both were considerably lower than the comparable non-Māori rates (Table 4.4).

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

<b>DHB</b>	<b>Māori</b>	<b>non-Māori</b>	<b>Total</b>
Whanganui DHB	58.2%	70.0%	83.9%
New Zealand	54.4%	75.5%	72.6%

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## **APPENDICES**

# List of Tables in Appendices

<b>Appendix 1</b>	<b>Demographic Tables</b>	<b>45</b>
Table 1.1.1	Projected Total Population by Age and Sex at 30 June 2007 (2006-Base)	46
Table 1.1.2	Projected Total Population Aged 0 Years by Sex at 30 June2007-26 (2006-Base)	46
Table 1.1.3	Projected Total Population Aged 1-4 Years by Sex at 30 June2007-26 (2006-Base)	46
Table 1.1.4	Projected Total Population Aged 5-9 Years by Sex at 30 June2007-26 (2006-Base)	46
Table 1.1.5	Projected Total Population Aged 10-14 Years by Sex at 30 June2007-26 (2006-Base)	46
Table 1.1.6	Projected Total Population Aged 15-19 Years by Sex at 30 June2007-26 (2006-Base)	47
Table 1.1.7	Projected Total Population Aged 20-24 Years by Sex at 30 June2007-26 (2006-Base)	47
Table 1.1.8	Projected Total Population Aged 25-29 Years by Sex at 30 June2007-26 (2006-Base)	47
Table 1.1.9	Projected Total Population Aged 30-34 Years by Sex at 30 June2007-26 (2006-Base)	47
Table 1.1.10	Projected Total Population Aged 35-39 Years by Sex at 30 June2007-26 (2006-Base)	47
Table 1.1.11	Projected Total Population Aged 40-44 Years by Sex at 30 June2007-26 (2006-Base)	47
Table 1.1.12	Projected Total Population Aged 45-49 Years by Sex at 30 June2007-26 (2006-Base)	48
Table 1.1.13	Projected Total Population Aged 50-54 Years by Sex at 30 June2007-26 (2006-Base)	48
Table 1.1.14	Projected Total Population Aged 55-59 Years by Sex at 30 June2007-26 (2006-Base)	48
Table 1.1.15	Projected Total Population Aged 60-64 Years by Sex at 30 June2007-26 (2006-Base)	48
Table 1.1.16	Projected Total Population Aged 65-69 Years by Sex at 30 June2007-26 (2006-Base)	48
Table 1.1.17	Projected Total Population Aged 70-74 Years by Sex at 30 June2007-26 (2006-Base)	48
Table 1.1.18	Projected Total Population Aged 75-79 Years by Sex at 30 June2007-26 (2006-Base)	49
Table 1.1.19	Projected Total Population Aged 80-84 Years by Sex at 30 June2007-26 (2006-Base)	49
Table 1.1.20	Projected Total Population Aged 85-89 Years by Sex at 30 June2007-26 (2006-Base)	49
Table 1.1.21	Projected Total Population Aged 90+ Years by Sex at 30 June2007-26 (2006-Base)	49
Table 1.1.22	Projected Total Population by Sex at 30 June2007-26 (2006-Base)	49
Table 1.2.1	Projected Māori Population by Age and Sex at 30 June 2007 (2006-Base)	50
Table 1.2.2	Projected Māori Population Aged 0 Years by Sex at 30 June 2007 (2006-Base)	50
Table 1.2.3	Projected Māori Population Aged 1-4 Years by Sex at 30 June 2007 (2006-Base)	50
Table 1.2.4	Projected Māori Population Aged 5-9 Years by Sex at 30 June 2007 (2006-Base)	50
Table 1.2.5	Projected Māori Population Aged 10-14 Years by Sex at 30 June 2007 (2006-Base)	50
Table 1.2.6	Projected Māori Population Aged 15-19 Years by Sex at 30 June 2007 (2006-Base)	51
Table 1.2.7	Projected Māori Population Aged 20-24 Years by Sex at 30 June 2007 (2006-Base)	51
Table 1.2.8	Projected Māori Population Aged 25-29 Years by Sex at 30 June 2007 (2006-Base)	51
Table 1.2.9	Projected Māori Population Aged 30-34 Years by Sex at 30 June 2007 (2006-Base)	51
Table 1.2.10	Projected Māori Population Aged 35-39 Years by Sex at 30 June 2007 (2006-Base)	51
Table 1.2.11	Projected Māori Population Aged 40-44 Years by Sex at 30 June 2007 (2006-Base)	51
Table 1.2.12	Projected Māori Population Aged 45-49 Years by Sex at 30 June 2007 (2006-Base)	52
Table 1.2.13	Projected Māori Population Aged 50-54 Years by Sex at 30 June 2007 (2006-Base)	52
Table 1.2.14	Projected Māori Population Aged 55-59 Years by Sex at 30 June 2007 (2006-Base)	52
Table 1.2.15	Projected Māori Population Aged 60-64 Years by Sex at 30 June 2007 (2006-Base)	52
Table 1.2.16	Projected Māori Population Aged 65-69 Years by Sex at 30 June 2007 (2006-Base)	52
Table 1.2.17	Projected Māori Population Aged 70-74 Years by Sex at 30 June 2007 (2006-Base)	52
Table 1.2.18	Projected Māori Population Aged 75-79 Years by Sex at 30 June 2007 (2006-Base)	53
Table 1.2.19	Projected Māori Population Aged 80-84 Years by Sex at 30 June 2007 (2006-Base)	53
Table 1.2.20	Projected Māori Population Aged 85-89 Years by Sex at 30 June 2007 (2006-Base)	53
Table 1.2.21	Projected Māori Population Aged 90+ Years by Sex at 30 June 2007 (2006-Base)	53
Table 1.2.22	Projected Māori Population by Sex at 30 June 2007 (2006-Base)	53
Table 1.3.1	Projected Non- Māori Population by Age and Sex at 30 June 2007 (2006-Base)	54
Table 1.3.2	Projected Non- Māori Population Aged 0 Years by Sex at 30 June 2007 (2006-Base)	54
Table 1.3.3	Projected Non- Māori Population Aged 1-4 Years by Sex at 30 June 2007 (2006-Base)	54
Table 1.3.4	Projected Non- Māori Population Aged 5-9 Years by Sex at 30 June 2007 (2006-Base)	54
Table 1.3.5	Projected Non- Māori Population Aged 10-14 Years by Sex at 30 June 2007 (2006-Base)	54

Table 1.3.6	Projected Non- Māori Population Aged 15-19 Years by Sex at 30 June 2007 (2006-Base)	55
Table 1.3.7	Projected Non- Māori Population Aged 20-24 Years by Sex at 30 June 2007 (2006-Base)	55
Table 1.3.8	Projected Non- Māori Population Aged 25-29 Years by Sex at 30 June 2007 (2006-Base)	55
Table 1.3.9	Projected Non- Māori Population Aged 30-34 Years by Sex at 30 June 2007 (2006-Base)	55
Table 1.3.10	Projected Non- Māori Population Aged 35-39 Years by Sex at 30 June 2007 (2006-Base)	55
Table 1.3.11	Projected Non- Māori Population Aged 40-44 Years by Sex at 30 June 2007 (2006-Base)	55
Table 1.3.12	Projected Non- Māori Population Aged 45-49 Years by Sex at 30 June 2007 (2006-Base)	56
Table 1.3.13	Projected Non- Māori Population Aged 50-54 Years by Sex at 30 June 2007 (2006-Base)	56
Table 1.3.14	Projected Non- Māori Population Aged 55-59 Years by Sex at 30 June 2007 (2006-Base)	56
Table 1.3.15	Projected Non- Māori Population Aged 60-64 Years by Sex at 30 June 2007 (2006-Base)	56
Table 1.3.16	Projected Non- Māori Population Aged 65-69 Years by Sex at 30 June 2007 (2006-Base)	56
Table 1.3.17	Projected Non- Māori Population Aged 70-74 Years by Sex at 30 June 2007 (2006-Base)	56
Table 1.3.18	Projected Non- Māori Population Aged 75-79 Years by Sex at 30 June 2007 (2006-Base)	57
Table 1.3.19	Projected Non- Māori Population Aged 80-84 Years by Sex at 30 June 2007 (2006-Base)	57
Table 1.3.20	Projected Non- Māori Population Aged 85-89 Years by Sex at 30 June 2007 (2006-Base)	57
Table 1.3.21	Projected Non- Māori Population Aged 90+ Years by Sex at 30 June 2007 (2006-Base)	57
Table 1.3.22	Projected Non- Māori Population by Sex at 30 June 2007 (2006-Base)	57
Table 1.4.1	Population Distribution by Age: Males (2006 Census)	58
Table 1.4.2	Population Distribution by Age: Females (2006 Census)	58
Table 1.4.3	Population Distribution by Age: Total (2006 Census)	58
Table 1.4.4	Female Population by Ethnicity (2006 Census)	59
Table 1.4.5	Male Population by Ethnicity (2006 Census)	60
Table 1.4.6	Total Population by Ethnicity (2006 Census)	61
Table 1.4.7	Population Distribution by Birthplace (2006 Census)	61
Table 1.5.1	Legal Marital Status (2006 Census)	62
Table 1.5.2	Social Marital Status (2006 Census)	62
Table 1.5.3	Family Type (2006 Census)	62
Table 1.5.4	Household Composition (2006 Census)	63
Table 1.5.5	Number of Languages Spoken (2006 Census)	63
Table 1.5.6	Number of children born by age group of mother (2006 Census)	64
Table 1.5.7	Individuals engaged in unpaid activities: Male (2006 Census)	67
Table 1.5.8	Individuals engaged in unpaid activities: Female (2006 Census)	67
Table 1.5.9	Individuals engaged in unpaid activities: Total (2006 Census)	68
Table 1.6.1	Highest Qualification Gained (2006 Census)	69
Table 1.6.2	Total Personal Income (2006 Census)	69
Table 1.6.3	Sources of Personal Income (2006 Census)	70
Table 1.6.4	Work and Labour Force Status (2006 Census)	70
Table 1.6.5	Occupation – ANZSCO V1.0 Major Group (2006 Census)	71
Table 1.6.6	Access to Telecommunications (2006 Census)	71
Table 1.6.7	Number of Motor Vehicles per Household (2006 Census)	71
Table 1.6.8	Housing Tenure (2006 Census)	72
<b>Appendix 2</b>	<b>Mortality Tables (2006-2008)</b>	<b>73</b>
Table 2.1.1	Avoidable mortality, 0-74 years, age-standardised rates per 100,000 (and 95% confidence intervals), 2006-08	74
Table 2.1.2	All cardiovascular disease mortality, all ages, age-standardised rates per 100,000 (and 95% confidence intervals), 2006-08	74
Table 2.1.3	Ischaemic heart disease mortality, 25+ years, age-standardised rates per 100,000 (and 95% confidence intervals), 2006-08	74
Table 2.1.4	Stroke mortality, 25+ years, age-standardised rates per 100,000 (and 95% confidence intervals), 2006-08	74

Table 2.1.5	All cancer mortality, all ages, age-standardised rates per 100,000 (and 95% confidence intervals), 2006-08	75
Table 2.1.6	Lung cancer mortality, 25+ years, age-standardised rates per 100,000 (and 95% confidence intervals), 2006-08	75
Table 2.1.7	Female breast cancer mortality, 25+ years, age-standardised rates per 100,000 (and 95% confidence intervals), 2006-08	75
Table 2.1.8	Prostate cancer mortality, 25+ years, age-standardised rates per 100,000 (and 95% confidence intervals), 2006-08	75
Table 2.1.9	Cervical cancer mortality, 25+ years, age-standardised rates per 100,000 (and 95% confidence intervals), 2006-08	75
Table 2.1.10	Colorectal cancer mortality, 25+ years, age-standardised rates per 100,000 (and 95% confidence intervals), 2006-08	76
Table 2.1.11	Melanoma mortality, 25+ years, age-standardised rates per 100,000 (and 95% confidence intervals), 2006-08	76
Table 2.1.12	Unintentional injury mortality, all ages, age-standardised rates per 100,000 (and 95% confidence intervals), 2006-08	76
Table 2.1.13	Suicide, 5+ years, age-standardised rates per 100,000 (and 95% confidence intervals), 2006-08	76
Table 2.1.14	Drowning, 0-14 years, age-standardised rates per 100,000 (and 95% confidence intervals), 2006-08	77
Table 2.1.15	Unintentional injury mortality, 15-24 years, age-standardised rate per 100,000 (and 95% confidence intervals), 2006-08	77
Table 2.1.16	Suicide mortality, 15-24 years, age-standardised rate per 100,000 (and 95% confidence intervals), 2006-08	77
Table 2.1.17	Ischaemic heart disease mortality, 65+ years, age-standardised rate per 100,000 (and 95% confidence intervals), 2006-08	77
Table 2.1.18	Stroke mortality, 65+ years, age-standardised rate per 100,000 (and 95% confidence intervals), 2006-08	78
Table 2.1.19	Lung cancer mortality, 65+ years, age-standardised rate per 100,000 (and 95% confidence intervals), 2006-08	78
Table 2.1.20	Female breast cancer mortality, 65+ years, age-standardised rate per 100,000 (and 95% confidence intervals), 2006-08	78
Table 2.1.21	Prostate cancer mortality, all ages, age-standardised rate per 100,000 (and 95% confidence intervals), 2006-08	78
Table 2.1.22	Cervical cancer mortality, 65+ years, age-standardised rate per 100,000 (and 95% confidence intervals), 2006-08	78
Table 2.1.23	Colorectal cancer mortality, 65+ years, age-standardised rate per 100,000 (and 95% confidence intervals), 2006-08	79
Table 2.1.24	Melanoma mortality, 65+ years, age-standardised rate per 100,000 (and 95% confidence intervals), 2006-08	79
Table 2.1.25	COPD mortality, 65+ years, age-standardised rate per 100,000 (and 95% confidence intervals), 2006-08	79
Table 2.2.1	Leading causes of avoidable mortality, males and females, 0-74 years, 2006-08	80
Table 2.2.2	Leading causes of avoidable mortality, by ethnicity, 0-74 years, 2006-08	80
Table 2.2.3	Leading causes of mortality, males and females, 65+ years, 2006-08	81
Table 2.2.4	Leading causes of mortality, by ethnicity, 65+ years, 2006-08	81
<b>Appendix 3</b>	<b>Hospitalisation Tables (2007-2009)</b>	<b>82</b>
Table 3.1.1	Avoidable hospitalisations, 0-74 years, age-standardised rates per 100,000 (and 95% confidence intervals), 2007-09	83
Table 3.1.2	All cardiovascular disease hospitalisations, all ages, age-standardised rates per 100,000 (and 95% confidence intervals), 2007-09	83

Table 3.1.3	Ischaemic heart disease hospitalisation, 25+ years, age-standardised rates per 100,000 (and 95% confidence intervals), 2007-09	83
Table 3.1.4	Stroke hospitalisation, 25+ years, age-standardised rates per 100,000 (and 95% confidence intervals), 2007-09	83
Table 3.1.5	All cancer hospitalisations, all ages, age-standardised rates per 100,000 (and 95% confidence intervals), 2007-09	84
Table 3.1.6	Lung cancer hospitalisation, 25+ years, age-standardised rates per 100,000 (and 95% confidence intervals), 2007-09	84
Table 3.1.7	Female breast cancer hospitalisation, 25+ years, age-standardised rates per 100,000 (and 95% confidence intervals), 2007-09	84
Table 3.1.8	Prostate cancer hospitalisation, 25+ years, age-standardised rates per 100,000 (and 95% confidence intervals), 2007-09	84
Table 3.1.9	Cervical cancer hospitalisation, 25+ years, age-standardised rates per 100,000 (and 95% confidence intervals), 2007-09	84
Table 3.1.10	Colorectal cancer hospitalisation, 25+ years, age-standardised rates per 100,000 (and 95% confidence intervals), 2007-09	85
Table 3.1.11	Melanoma hospitalisations, 25+ years, age-standardised rates per 100,000 (and 95% confidence intervals), 2007-09	85
Table 3.1.12	Unintentional injury hospitalisation, all ages, age-standardised rates per 100,000 (and 95% confidence intervals), 2007-09	85
Table 3.1.13	Self-harm hospitalisation, 5+ years, age-standardised rates per 100,000 (and 95% confidence intervals), 2007-09	85
Table 3.1.14	Unintentional injury hospitalisation, 15-24 years, age-standardised rate per 100,000 (and 95% confidence intervals), 2007-09	86
Table 3.1.15	Ischaemic heart disease hospitalisation, 65+ years, age-standardised rate per 100,000 (and 95% confidence intervals), 2007-09	86
Table 3.1.16	Stroke hospitalisation, 65+ years, age-standardised rate per 100,000 (and 95% confidence intervals), 2007-09	86
Table 3.1.17	Lung cancer hospitalisations, 65+ years, age-standardised rate per 100,000 (and 95% confidence intervals), 2007-09	86
Table 3.1.18	Female breast cancer hospitalisation, 65+ years, age-standardised rate per 100,000 (and 95% confidence intervals), 2007-09	87
Table 3.1.19	Prostate cancer hospitalisation, 65+ years, age-standardised rate per 100,000 (and 95% confidence intervals), 2007-09	87
Table 3.1.20	Cervical cancer hospitalisation, 65+ years, age-standardised rate per 100,000 (and 95% confidence intervals), 2007-09	87
Table 3.1.21	Colorectal cancer hospitalisation, 65+ years, age-standardised rate per 100,000 (and 95% confidence intervals), 2007-09	87
Table 3.1.22	Melanoma hospitalisation, 65+ years, age-standardised rate per 100,000 (and 95% confidence intervals), 2007-09	87
Table 3.1.23	COPD hospitalisation, 65+ years, age-standardised rate per 100,000 (and 95% confidence intervals), 2007-09	88
Table 3.1.24	Diabetes hospitalisations, 15+ years, age-standardised rate per 100,000 (and 95% confidence intervals), 2007-09	88
Table 3.1.25	Diabetes complications - renal failure hospitalisations, 15+ years, age-standardised rate per 100,000 (and 95% confidence intervals), 2007-09	88
Table 3.1.26	Asthma hospitalisations, 15+ years, age-standardised rates per 100,000 (and 95% confidence intervals), 2007-09	88
Table 3.1.27	COPD hospitalisation, 45+ years, age-standardised rates per 100,000 (and 95% confidence intervals), 2007-09	89
Table 3.1.28	Asthma hospitalisation, 0-14 years, age-standardised rates per 100,000 (and 95% confidence intervals), 2007-09	89

Table 3.1.29	Poisoning hospitalisation, 0-14 years, age-standardised rates per 100,000 (and 95% confidence intervals), 2007-09	89
Table 3.1.30	Burns hospitalisation, 0-14 years, age-standardised rates per 100,000 (and 95% confidence intervals), 2007-09	89
Table 3.1.31	Falls hospitalisation, 0-14 years, age-standardised rates per 100,000 (and 95% confidence intervals), 2007-09	90
Table 3.1.32	Falls hospitalisation, 65+ years, age-standardised rates per 100,000 (and 95% confidence intervals), 2007-09	90
Table 3.1.33	Musculoskeletal disease hospitalisation, 65+ years, age-standardised rates per 100,000 (and 95% confidence intervals), 2007-09	90
Table 3.2.1	Leading causes of avoidable hospitalisation, males and females, 0-74 years, 2007-09	91
Table 3.2.2	Leading causes of avoidable hospitalisation, by ethnicity, 0-74 years, 2007-09	91
Table 3.2.3	Leading causes of hospitalisation, males and females, 65+ years, 2007-09	92
Table 3.2.4	Leading causes of hospitalisation, by ethnicity, 65+ years, 2007-09	93
Table 3.2.5	Leading causes of hospitalisation, males and females, 5-14 years, 2007-09	94
Table 3.2.6	Leading causes of hospitalisation, by ethnicity, 5-14 years, 2007-09	95
Table 3.2.7	Leading causes of hospitalisation, males and females, 0-4 years, 2007-09	96
Table 3.2.8	Leading causes of hospitalisation, by ethnicity, 0-4 years, 2007-09	97
<b>Appendix 4</b>	<b>Cancer Registration Tables (2005-2007)</b>	<b>98</b>
Table 4.1.1	Lung cancer registrations, 25+ years, age-standardised rates per 100,000 (and 95% confidence intervals), 2005-07	99
Table 4.1.2	Female breast cancer registrations, 25+ years, age-standardised rates per 100,000 (and 95% confidence intervals), 2005-07	99
Table 4.1.3	Prostate cancer registrations, 25+ years, age-standardised rates per 100,000 (and 95% confidence intervals), 2005-07	99
Table 4.1.4	Cervical cancer registrations, 25+ years, age-standardised rates per 100,000 (and 95% confidence intervals), 2005-07	99
Table 4.1.5	Colorectal cancer registrations, 25+ years, age-standardised rates per 100,000 (and 95% confidence intervals), 2005-07	99
Table 4.1.6	Melanoma registrations, 25+ years, age-standardised rates per 100,000 (and 95% confidence intervals), 2005-07	100
Table 4.1.7	Lung cancer registrations, 65+ years, age-standardised rate per 100,000 (and 95% confidence intervals), 2005-07	100
Table 4.1.8	Female breast cancer registrations, 65+ years, age-standardised rate per 100,000 (and 95% confidence intervals), 2005-07	100
Table 4.1.9	Prostate cancer registrations, 65+ years, age-standardised rate per 100,000 (and 95% confidence intervals), 2005-07	100
Table 4.1.10	Cervical cancer registrations, 65+ years, age-standardised rate per 100,000 (and 95% confidence intervals), 2005-07	100
Table 4.1.11	Colorectal cancer registrations, 65+ years, age-standardised rate per 100,000 (and 95% confidence intervals), 2005-07	101
Table 4.1.12	Melanoma registrations, 65+ years, age-standardised rate per 100,000 (and 95% confidence intervals), 2005-07	101
<b>Appendix 5</b>	<b>ICD-10 Codes</b>	<b>102</b>

# 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			
Whanganui	0-14	7,200	6,820	14,030	6,600	6,220	12,820	6,280	5,980	12,270	6,120	5,750	11,850	5,700	5,350	11,040	-	20.8	-	21.6	-	21.3
	15-64	19,740	20,180	39,930	19,580	19,870	39,420	18,910	19,170	38,070	17,710	17,930	35,640	16,610	16,560	33,160	-	15.9	-	17.9	-	17.0
	65+	4,380	5,630	10,020	4,950	6,130	11,110	5,530	6,620	12,170	6,290	7,410	13,690	7,030	8,300	15,330		60.5		47.4		53.0
	Total	31,320	32,630	63,980	31,130	32,220	63,350	30,720	31,770	62,510	30,120	31,090	61,180	29,340	30,210	59,530	-	6.3	-	7.4	-	7.0
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		13.3		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			
Whanganui	460	420	880	430	410	840	410	380	790	390	370	750	360	340	710	-	21.7	-	19.0	-	19.3
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 1.1.3: 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			
Whanganui	1,670	1,670	3,350	1,820	1,710	3,530	1,680	1,580	3,260	1,580	1,490	3,070	1,510	1,420	2,920	-	9.6	-	15.0	-	12.8
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			
Whanganui	2,410	2,200	4,610	2,090	2,010	4,100	2,210	2,060	4,270	2,000	1,870	3,870	1,890	1,760	3,640	-	21.6	-	20.0	-	21.0
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			
Whanganui	2,660	2,530	5,190	2,260	2,090	4,350	1,980	1,960	3,950	2,150	2,020	4,160	1,940	1,830	3,770	-	27.1	-	27.7	-	27.4
New Zealand	159,520	150,920	310,430	149,830	142,960	292,790	149,610	142,400	292,010	164,550	155,140	319,690	160,920	152,270	313,190		0.9		0.9		0.9

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

	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			
Whanganui	2,550	2,360	4,910	2,330	2,190	4,520	2,100	1,840	3,940	1,740	1,640	3,380	1,900	1,700	3,600	-	25.5	-	28.0	-	26.7
New Zealand	159,400	154,160	313,560	160,800	153,760	314,560	154,110	148,300	302,410	152,660	146,680	299,340	167,590	159,430	327,020		5.1		3.4		4.3



Table 1.1.7: 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
Whanganui	1,800	1,610	3,410	2,220	1,940	4,160	2,030	1,790	3,820	1,730	1,410	3,140	1,370	1,210	2,580	- 23.9	- 24.8	- 24.3
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
Whanganui	1,510	1,540	3,050	1,750	1,610	3,360	2,070	1,900	3,970	1,940	1,760	3,700	1,640	1,380	3,020	8.6	- 10.4	- 1.0
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
Whanganui	1,740	1,940	3,670	1,460	1,520	2,970	1,630	1,580	3,200	2,000	1,900	3,900	1,860	1,760	3,620	6.9	- 9.3	- 1.4
New Zealand	136,320	149,700	286,010	137,460	145,930	283,390	152,120	156,340	308,450	169,600	165,430	335,030	172,310	167,630	339,940	26.4	12.0	18.9

Table 1.1.10: 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
Whanganui	1,990	2,150	4,150	1,610	1,750	3,350	1,410	1,480	2,880	1,600	1,510	3,110	1,970	1,840	3,810	- 1.0	- 14.4	- 8.2
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
Whanganui	2,290	2,410	4,700	1,880	2,050	3,940	1,620	1,800	3,420	1,320	1,410	2,730	1,520	1,450	2,960	- 33.6	- 39.8	- 37.0
New Zealand	155,940	166,540	322,490	151,430	166,140	317,570	141,000	155,280	296,280	137,690	147,630	285,320	155,770	160,510	316,290	- 0.1	- 3.6	- 1.9

Table 1.1.12: 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
Whanganui	2,300	2,450	4,760	2,100	2,270	4,370	1,810	2,020	3,830	1,530	1,740	3,270	1,240	1,350	2,590	- 46.1	- 44.9	- 45.6
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
Whanganui	2,120	2,160	4,280	2,200	2,420	4,610	2,090	2,270	4,360	1,720	1,950	3,670	1,440	1,680	3,120	- 32.1	- 22.2	- 27.1
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
Whanganui	1,960	1,960	3,920	2,160	2,190	4,340	2,140	2,360	4,510	2,040	2,260	4,300	1,680	1,940	3,620	- 14.3	- 1.0	- 7.7
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
Whanganui	1,480	1,600	3,080	1,870	1,930	3,800	2,010	2,130	4,140	2,090	2,350	4,440	1,990	2,250	4,240	34.5	40.6	37.7
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	105,940	112,450	218,390	15.3	18.7	17.0

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
Whanganui	1,330	1,540	2,870	1,500	1,660	3,160	1,820	1,900	3,730	1,930	2,090	4,020	2,020	2,300	4,320	51.9	49.4	50.5
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
Whanganui	1,090	1,280	2,380	1,270	1,470	2,740	1,320	1,500	2,820	1,700	1,820	3,520	1,810	2,000	3,810	66.1	56.3	60.1
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
Whanganui	1,000	1,120	2,120	940	1,180	2,130	1,070	1,320	2,390	1,160	1,360	2,520	1,500	1,660	3,160	50.0	48.2	49.1
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
Whanganui	600	890	1,490	770	910	1,680	710	940	1,650	830	1,100	1,930	920	1,140	2,060	53.3	28.1	38.3
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
Whanganui	250	490	740	340	580	930	430	590	1,020	440	620	1,050	530	750	1,280	112.0	53.1	73.0
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
Whanganui	110	310	420	130	330	470	180	370	560	230	420	650	250	450	700	127.3	45.2	66.7
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			
Whanganui	31,300	32,600	64,000	31,100	32,200	63,300	30,700	31,800	62,500	30,100	31,100	61,200	29,300	30,200	59,500	-	6.4	-	7.4	-	7.0
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
Whanganui	0-14	2,800	2,590	5,390	2,790	2,560	5,350	2,800	2,630	5,440	2,880	2,710	5,590	2,780	2,630	5,400	- 0.7	1.5	0.2
	15-64	4,490	4,900	9,440	4,750	5,250	9,990	4,910	5,300	10,210	4,980	5,300	10,270	5,140	5,400	10,560	14.5	10.2	11.9
	65+	330	440	780	420	550	980	510	670	1,180	630	840	1,460	760	1,020	1,780	130.3	131.8	128.2
	Total	7,620	7,930	15,610	7,960	8,360	16,320	8,220	8,600	16,830	8,490	8,850	17,320	8,680	9,050	17,740	13.9	14.1	13.6
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
Whanganui	200	170	370	210	200	400	200	190	390	200	180	380	190	180	370	- 5.0	5.9	-
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
Whanganui	710	660	1,370	820	770	1,600	800	750	1,550	770	720	1,490	750	700	1,450	5.6	6.1	5.8
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
Whanganui	960	850	1,810	880	800	1,680	990	930	1,930	960	900	1,860	920	870	1,790	- 4.2	2.4	- 1.1
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
Whanganui	930	910	1,840	880	790	1,670	810	760	1,570	950	910	1,860	920	880	1,790	- 1.1	- 3.3	- 2.7
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
Whanganui	850	860	1,710	840	830	1,670	810	740	1,550	690	670	1,360	830	820	1,650	- 2.4	- 4.7	- 3.5
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
Whanganui	560	570	1,140	740	700	1,450	720	680	1,400	700	590	1,290	580	530	1,110	3.6	-	7.0
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
Whanganui	450	510	960	490	520	1,010	640	640	1,280	660	630	1,290	640	540	1,190	42.2	5.9	24.0
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
Whanganui	420	540	970	420	500	910	460	500	960	610	620	1,230	630	620	1,250	50.0	14.8	28.9
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
Whanganui	510	530	1,050	380	500	880	400	470	870	440	490	930	590	600	1,200	15.7	13.2	14.3
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
Whanganui	510	560	1,080	460	510	970	370	500	870	380	450	830	420	470	890	-	17.6	-
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	-

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
Whanganui	400	470	880	430	520	950	430	490	920	350	490	830	360	430	790	-	10.0	-
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
Whanganui	340	370	710	410	480	890	450	520	970	410	470	870	320	470	790	-	5.9	27.0
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
Whanganui	260	290	550	330	380	700	350	430	780	420	490	920	380	450	830	46.2	55.2	50.9
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
Whanganui	190	200	390	250	310	560	280	330	610	320	400	720	390	470	860	105.3	135.0	120.5
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
Whanganui	140	180	320	160	180	350	200	260	460	250	310	550	280	370	660	100.0	105.6	106.3
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
Whanganui	90	140	230	120	160	290	140	160	300	170	230	400	210	270	480	133.3	92.9	108.7
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
Whanganui	70	70	140	70	110	180	90	130	210	110	130	240	140	190	320	100.0	171.4	128.6
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
Whanganui	20	30	60	60	70	120	50	80	130	60	100	160	80	100	180	300.0	233.3	200.0
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
Whanganui	10	20	30	10	20	30	20	30	60	30	50	80	40	60	100	300.0	200.0	233.3
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
Whanganui	-	-	-	-	10	10	10	10	20	10	20	30	10	30	40	/	/	/
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
Whanganui	7,650	7,950	15,600	7,950	8,350	16,350	8,250	8,600	16,850	8,500	8,850	17,350	8,700	9,050	17,750	13.7	13.8	13.8
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			
Whanganui	0-14	4,400	4,230	8,640	3,810	3,660	7,470	3,480	3,350	6,830	3,240	3,040	6,260	2,920	2,720	5,640	-	33.6	-	35.7	-	34.7
	15-64	15,250	15,280	30,490	14,830	14,620	29,430	14,000	13,870	27,860	12,730	12,630	25,370	11,470	11,160	22,600	-	24.8	-	27.0	-	25.9
	65+	4,050	5,190	9,240	4,530	5,580	10,130	5,020	5,950	10,990	5,660	6,570	12,230	6,270	7,280	13,550	-	54.8	-	40.3	-	46.6
	Total	23,700	24,700	48,370	23,170	23,860	47,030	22,500	23,170	45,680	21,630	22,240	43,860	20,660	21,160	41,790	-	12.8	-	14.3	-	13.6
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 2007–26 (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			
Whanganui	260	250	510	220	210	440	210	190	400	190	190	370	170	160	340	-	34.6	-	36.0	-	33.3
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	-	0.2	

Table 1.3.3: Projected Non Māori 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			
Whanganui	960	1,010	1,980	1,000	940	1,930	880	830	1,710	810	770	1,580	760	720	1,470	-	20.8	-	28.7	-	25.8
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	-	3.2

Table 1.3.4: Projected Non Māori 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			
Whanganui	1,450	1,350	2,800	1,210	1,210	2,420	1,220	1,130	2,340	1,040	970	2,010	970	890	1,850	-	33.1	-	34.1	-	33.9
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	-	1.2

Table 1.3.5: Projected Non Māori 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			
Whanganui	1,730	1,620	3,350	1,380	1,300	2,680	1,170	1,200	2,380	1,200	1,110	2,300	1,020	950	1,980	-	41.0	-	41.4	-	40.9
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 2007–26 (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			
Whanganui	1,700	1,500	3,200	1,490	1,360	2,850	1,290	1,100	2,390	1,050	970	2,020	1,070	880	1,950	-	37.1	-	41.3	-	39.1
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 2007–26 (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
Whanganui	1,240	1,040	2,270	1,480	1,240	2,710	1,310	1,110	2,420	1,030	820	1,850	790	680	1,470	- 36.3	- 34.6	- 35.2
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 2007–26 (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
Whanganui	1,060	1,030	2,090	1,260	1,090	2,350	1,430	1,260	2,690	1,280	1,130	2,410	1,000	840	1,830	- 5.7	- 18.4	- 12.4
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 2007–26 (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
Whanganui	1,320	1,400	2,700	1,040	1,020	2,060	1,170	1,080	2,240	1,390	1,280	2,670	1,230	1,140	2,370	- 6.8	- 18.6	- 12.2
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 2007–26 (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
Whanganui	1,480	1,620	3,100	1,230	1,250	2,470	1,010	1,010	2,010	1,160	1,020	2,180	1,380	1,240	2,610	- 6.8	- 23.5	- 15.8
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 2007–26 (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
Whanganui	1,780	1,850	3,620	1,420	1,540	2,970	1,250	1,300	2,550	940	960	1,900	1,100	980	2,070	- 38.2	- 47.0	- 42.8
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 2007–26 (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
Whanganui	1,900	1,980	3,880	1,670	1,750	3,420	1,380	1,530	2,910	1,180	1,250	2,440	880	920	1,800	- 53.7	- 53.5	- 53.6
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 2007–26 (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
Whanganui	1,780	1,790	3,570	1,790	1,940	3,720	1,640	1,750	3,390	1,310	1,480	2,800	1,120	1,210	2,330	- 37.1	- 32.4	- 34.7
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 2007–26 (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
Whanganui	1,700	1,670	3,370	1,830	1,810	3,640	1,790	1,930	3,730	1,620	1,770	3,380	1,300	1,490	2,790	- 23.5	- 10.8	- 17.2
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 2007–26 (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
Whanganui	1,290	1,400	2,690	1,620	1,620	3,240	1,730	1,800	3,530	1,770	1,950	3,720	1,600	1,780	3,380	24.0	27.1	25.7
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 2007–26 (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
Whanganui	1,190	1,360	2,550	1,340	1,480	2,810	1,620	1,640	3,270	1,680	1,780	3,470	1,740	1,930	3,660	46.2	41.9	43.5
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 2007–26 (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
Whanganui	1,000	1,140	2,150	1,150	1,310	2,450	1,180	1,340	2,520	1,530	1,590	3,120	1,600	1,730	3,330	60.0	51.8	54.9
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 2007–26 (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
Whanganui	930	1,050	1,980	870	1,070	1,950	980	1,190	2,180	1,050	1,230	2,280	1,360	1,470	2,840	46.2	40.0	43.4
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 2007–26 (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
Whanganui	580	860	1,430	710	840	1,560	660	860	1,520	770	1,000	1,770	840	1,040	1,880	- 5.0	5.9	-
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	15.4	12.6	13.9

Table 1.3.20: Projected Non Māori 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
Whanganui	240	470	710	330	560	900	410	560	960	410	570	970	490	690	1,180	104.2	46.8	66.2
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 2007–26 (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
Whanganui	110	310	420	130	320	460	170	360	540	220	400	620	240	420	660	118.2	35.5	57.1
New Zealand	100	230	330	140	340	470	190	380	560	230	430	670	280	450	740	180.0	95.7	124.2

Table 1.3.22: Projected Non Māori 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
Whanganui	23,700	24,700	48,370	23,170	23,860	47,030	22,500	23,170	45,680	21,630	22,240	43,860	20,660	21,160	41,790	- 12.8	- 14.3	- 13.6
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
Whanganui	Number	5,340	5,700	6,174	6,381	5,649	4,299	4,602	4,995	5,541
	Percentage	7.0	7.0	8.0	8.0	7.0	6.0	6.0	6.0	7.0
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
Whanganui	Number	5,514	4,695	4,464	3,636	3,186	2,565	2,142	1,356	765	77,004
	Percentage	7.0	6.0	6.0	5.0	4.0	3.0	3.0	2.0	1.0	
New Zealand	Number	143,055	124,311	115,224	88,338	72,114	55,878	46,356	29,124	17,667	1,965,618
	Percentage	7.3	6.3	5.9	4.5	3.7	2.8	2.4	1.5	0.9	

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

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

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

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

		0–4	5–9	10–14	15–19	20–24	25–29	30–34	35–39	40–44
Whanganui	Number	2,010	2,196	2,517	2,253	1,497	1,503	1,863	2,127	2,415
	Percentage	6.0	7.0	8.0	7.0	5.0	5.0	6.0	7.0	8.0
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
Whanganui	Number	2,379	2,088	1,905	1,560	1,497	1,272	1,089	861	780	31,806
	Percentage	7.0	7.0	6.0	5.0	5.0	4.0	3.0	3.0	2.0	
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
Whanganui	Number	4,056	4,596	5,148	4,674	3,177	2,922	3,561	4,047	4,689
	Percentage	7.0	7.0	8.0	8.0	5.0	5.0	6.0	7.0	8.0
New Zealand	Number	275,076	286,488	306,009	300,198	270,978	242,439	276,561	301,554	313,698
	Percentage	6.8	7.1	7.6	7.5	6.7	6.0	6.9	7.5	7.8

		45–49	50–54	55–59	60–64	65–69	70–74	75–79	80–84	85+	Total
Whanganui	Number	4,596	4,158	3,792	3,012	2,793	2,358	2,076	1,431	1,134	62,208
	Percentage	7.0	7.0	6.0	5.0	4.0	4.0	3.0	2.0	2.0	
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	
	Whanganui		New Zealand		Whanganui		New Zealand		Whanganui		New Zealand		Whanganui		New Zealand		Whanganui	New Zealand
	Number	Percentage*	Number	Percentage*	Number	Percentage*	Number	Percentage*	Number	Percentage*	Number	Percentage*	Number	Percentage*	Number	Percentage*	Number	Number
0–4	753	39.0	32,355	25.1	1,176	61.0	96,579	74.9	1,929	96.1	128,934	2,513.3	78	3.9	5,760	112.3	2,007	5,130
5–9	825	39.5	32,544	24.2	1,263	60.5	101,832	75.8	2,088	95.1	134,376	2,387.6	111	5.1	5,577	99.1	2,196	5,628
10–14	882	36.4	32,379	22.6	1,542	63.6	110,901	77.4	2,424	96.4	143,280	2,404.8	93	3.7	5,613	94.2	2,514	5,958
15–19	768	35.3	29,502	20.8	1,407	64.7	112,365	79.2	2,175	96.5	141,867	2,212.9	78	3.5	5,895	92.0	2,253	6,411
20–24	504	35.0	22,434	17.4	936	65.0	106,608	82.6	1,440	96.2	129,042	2,284.3	57	3.8	6,849	121.2	1,497	5,649
25–29	468	32.4	20,529	17.2	978	67.6	98,604	82.8	1,446	96.4	119,133	2,629.9	57	3.8	6,090	134.4	1,500	4,530
30–34	510	28.5	21,384	15.3	1,278	71.5	118,290	84.7	1,788	96.0	139,674	2,708.4	72	3.9	6,000	116.3	1,863	5,157
35–39	498	24.4	20,790	13.6	1,539	75.6	131,550	86.4	2,037	95.8	152,340	2,719.9	87	4.1	6,210	110.9	2,127	5,601
40–44	534	22.9	19,905	12.7	1,794	77.1	136,773	87.3	2,328	96.4	156,678	2,537.7	90	3.7	6,120	99.1	2,415	6,174
45–49	441	19.3	16,926	11.7	1,848	80.7	127,536	88.3	2,289	96.2	144,462	2,564.1	90	3.8	5,907	104.8	2,379	5,634
50–54	348	17.1	12,597	10.2	1,683	82.9	110,826	89.8	2,031	97.3	123,423	2,447.4	57	2.7	4,998	99.1	2,088	5,043
55–59	267	14.5	9,762	8.6	1,569	85.5	104,037	91.4	1,836	96.4	113,799	2,414.6	69	3.6	4,548	96.5	1,905	4,713
60–64	192	12.7	6,717	7.6	1,323	87.3	81,159	92.4	1,515	97.1	87,876	2,267.2	45	2.9	3,405	87.8	1,560	3,876
65–69	162	11.1	5,310	7.2	1,293	88.9	68,244	92.8	1,455	97.2	73,554	2,197.0	45	3.0	2,880	86.0	1,497	3,348
70–74	129	10.5	3,471	5.9	1,101	89.5	55,368	94.1	1,230	96.7	58,839	2,066.7	39	3.1	2,217	77.9	1,272	2,847
75–79	69	6.5	2,190	4.1	987	93.5	50,607	95.9	1,056	97.0	52,797	2,154.1	30	2.8	2,058	84.0	1,089	2,451
80–84	27	3.2	1,074	2.6	816	96.8	40,437	97.4	843	97.9	41,511	2,151.9	18	2.1	1,605	83.2	861	1,929
85 and over	21	2.7	609	1.6	744	97.3	37,002	98.4	765	97.7	37,611	2,143.1	15	1.9	1,389	79.1	783	1,755
Total	7,401	24.1	290,469	14.7	23,280	75.9	1,688,736	85.3	30,681	96.5	1,979,205	2,418.4	1,125	3.5	83,124	101.6	31,806	81,840

All figures are for the census usually resident population.

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

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

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

Table 1.4.5: Male Population by Ethnicity (2006 Census)

Age Group (years)	Māori				Non Māori				Total people stated**				Total people, not elsewhere included***				Total people	
	Whanganui		New Zealand		Whanganui		New Zealand		Whanganui		New Zealand		Whanganui		New Zealand		Whanganui	New Zealand
	Number	Percentage*	Number	Percentage*	Number	Percentage*	Number	Percentage*	Number	Percentage*	Number	Percentage*	Number	Percentage*	Number	Percentage*	Number	Number
0–4	831	42.0	34,071	25.3	1,149	58.0	100,671	74.7	1,980	96.6	134,742	2,626.5	69	3.4	5,640	109.9	2,049	5,130
5–9	933	40.3	34,230	24.2	1,383	59.7	106,974	75.8	2,316	96.6	141,204	2,509.0	81	3.4	5,331	94.7	2,397	5,628
10–14	888	34.7	34,347	22.7	1,668	65.3	117,129	77.3	2,556	97.1	151,476	2,542.4	75	2.9	5,637	94.6	2,631	5,958
15–19	759	32.5	29,031	19.9	1,575	67.5	117,156	80.1	2,334	96.4	146,187	2,280.3	87	3.6	6,252	97.5	2,421	6,411
20–24	480	29.9	20,337	16.0	1,125	70.1	107,127	84.0	1,605	95.5	127,464	2,256.4	72	4.3	7,623	134.9	1,680	5,649
25–29	405	29.6	17,577	15.9	963	70.4	92,970	84.1	1,368	96.4	110,547	2,440.3	54	3.8	6,669	147.2	1,419	4,530
30–34	390	24.1	18,075	14.5	1,230	75.9	106,272	85.5	1,620	95.2	124,347	2,411.2	78	4.6	6,540	126.8	1,701	5,157
35–39	474	25.8	17,808	13.1	1,365	74.2	118,554	86.9	1,839	95.8	136,362	2,434.6	84	4.4	6,639	118.5	1,920	5,601
40–44	456	21.0	17,367	12.0	1,716	79.0	126,945	88.0	2,172	95.6	144,312	2,337.4	102	4.5	6,588	106.7	2,271	6,174
45–49	375	17.6	14,979	10.9	1,755	82.4	122,079	89.1	2,130	96.1	137,058	2,432.7	87	3.9	5,994	106.4	2,217	5,634
50–54	300	15.2	11,595	9.7	1,680	84.8	107,670	90.3	1,980	95.7	119,265	2,365.0	87	4.2	5,046	100.1	2,070	5,043
55–59	240	13.3	8,868	8.0	1,566	86.7	101,742	92.0	1,806	95.7	110,610	2,346.9	84	4.5	4,614	97.9	1,887	4,713
60–64	177	12.6	6,096	7.2	1,227	87.4	78,822	92.8	1,404	96.7	84,918	2,190.9	51	3.5	3,420	88.2	1,452	3,876
65–69	132	10.5	4,848	7.0	1,128	89.5	64,494	93.0	1,260	97.4	69,342	2,071.1	36	2.8	2,769	82.7	1,293	3,348
70–74	90	8.6	3,039	5.7	954	91.4	50,718	94.3	1,044	96.1	53,757	1,888.2	39	3.6	2,121	74.5	1,086	2,847
75–79	60	6.3	1,620	3.6	900	93.8	42,957	96.4	960	97.3	44,577	1,818.7	27	2.7	1,782	72.7	987	2,451
80–84	18	3.3	693	2.5	534	96.7	27,219	97.5	552	96.8	27,912	1,447.0	18	3.2	1,212	62.8	570	1,929
85 and over	6	1.8	279	1.7	333	98.2	16,599	98.3	339	95.8	16,878	961.7	15	4.2	789	45.0	354	1,755
Total	7,023	24.0	274,860	14.6	22,242	76.0	1,606,098	85.4	29,265	96.3	1,880,958	2,298.3	1,137	3.7	84,660	103.4	30,405	81,840

All figures are for the census usually resident population.

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

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

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

Table 1.4.6: Total Population by Ethnicity (2006 Census)

Age Group (years)	Māori				Non Māori				Total people stated**				Total people, not elsewhere included***				Total people	
	Whanganui		New Zealand		Whanganui		New Zealand		Whanganui		New Zealand		Whanganui		New Zealand		Whanganui	New Zealand
	Number	Percentage*	Number	Percentage*	Number	Percentage*	Number	Percentage*	Number	Percentage*	Number	Percentage*	Number	Percentage*	Number	Percentage*	Number	Number
0–4	1,584	40.5	66,426	25.2	2,328	59.5	197,250	74.8	3,912	96.4	263,676	95.9	144	3.5	11,400	4.1	4,059	275,079
5–9	1,758	39.9	66,774	24.2	2,646	60.1	208,806	75.8	4,404	95.9	275,580	96.2	189	4.1	10,908	3.8	4,593	286,488
10–14	1,770	35.5	66,726	22.6	3,210	64.5	228,030	77.4	4,980	96.8	294,756	96.3	165	3.2	11,253	3.7	5,145	306,009
15–19	1,527	33.9	58,533	20.3	2,982	66.1	229,521	79.7	4,509	96.5	288,054	96.0	165	3.5	12,144	4.0	4,674	300,198
20–24	987	32.4	42,771	16.7	2,061	67.6	213,735	83.3	3,048	95.9	256,506	94.7	129	4.1	14,472	5.3	3,177	270,978
25–29	870	30.9	38,106	16.6	1,944	69.1	191,577	83.4	2,814	96.3	229,683	94.7	108	3.7	12,759	5.3	2,922	242,442
30–34	900	26.4	39,459	14.9	2,508	73.6	224,562	85.1	3,408	95.7	264,021	95.5	150	4.2	12,540	4.5	3,561	276,561
35–39	972	25.1	38,598	13.4	2,904	74.9	250,104	86.6	3,876	95.8	288,702	95.7	171	4.2	12,852	4.3	4,047	301,554
40–44	990	22.0	37,272	12.4	3,510	78.0	263,718	87.6	4,500	96.0	300,990	95.9	189	4.0	12,708	4.1	4,689	313,698
45–49	816	18.5	31,908	11.3	3,603	81.5	249,612	88.7	4,419	96.2	281,520	95.9	174	3.8	11,901	4.1	4,593	293,421
50–54	648	16.2	24,192	10.0	3,363	83.8	218,496	90.0	4,011	96.5	242,688	96.0	144	3.5	10,044	4.0	4,158	252,732
55–59	507	13.9	18,630	8.3	3,135	86.1	205,779	91.7	3,642	96.0	224,409	96.1	150	4.0	9,162	3.9	3,792	233,574
60–64	372	12.7	12,816	7.4	2,547	87.3	159,975	92.6	2,919	96.9	172,791	96.2	93	3.1	6,825	3.8	3,012	179,616
65–69	294	10.8	10,158	7.1	2,421	89.2	132,741	92.9	2,715	97.2	142,899	96.2	78	2.8	5,646	3.8	2,793	148,548
70–74	219	9.6	6,510	5.8	2,058	90.4	106,086	94.2	2,277	96.6	112,596	96.3	84	3.6	4,338	3.7	2,358	116,934
75–79	129	6.4	3,807	3.9	1,887	93.6	93,567	96.1	2,016	97.3	97,374	96.2	60	2.9	3,840	3.8	2,073	101,214
80–84	48	3.4	1,764	2.5	1,347	96.6	67,659	97.5	1,395	97.5	69,423	96.1	36	2.5	2,814	3.9	1,431	72,240
85 and over	30	2.7	888	1.6	1,074	97.3	53,604	98.4	1,104	97.4	54,492	96.2	30	2.6	2,178	3.8	1,134	56,670
Total	14,424	24.1	565,326	14.6	45,522	75.9	3,294,837	85.4	59,946	96.4	3,860,163	95.8	2,265	3.6	167,784	4.2	62,211	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
Whanganui	Number	53,106	777	477	2,889	543	291	723	477	6,177	2,928	62,208
	Percentage	85.0	1.0	1.0	5.0	1.0	-	1.0	1.0	10.0	5.0	
New Zealand	Number	2,960,217	62,742	135,852	251,688	68,067	26,940	251,130	83,121	879,546	188,187	4,027,947
	Percentage	73.5	1.6	3.4	6.2	1.7	0.7	6.2	2.1	21.8	4.7	

All figures are for the census usually resident population.

(1) Includes Australian Territories.

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

includes Inadequately Described and Not Stated.

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

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

Table 1.5.1: Legal Marital Status (2006 Census)

		Legal Marital Status						
Location	Unit	Never married and never joined in a civil union	Married (not separated)	Separated(2)	Divorced	Widowed or bereaved civil union partner	Not elsewhere included(3)	Total
Whanganui	Number	7,860	14,850	1,164	2,400	2,295	1,890	30,459
	Percentage	25.8	48.8	3.8	7.9	7.5	6.2	
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)

Table 1.5.2: Social Marital Status (2006 Census)													
		Social Marital Status											
		Partnered				Non-partnered							
Location	Unit	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	Not stated	Total
Whanganui	Number	837	20,268	5,805	26,907	1,254	9,717	1,476	2,355	2,952	17,754	3,750	48,411
	Percentage	3.1	75.3	21.6	60.3	7.1	54.7	8.3	13.3	16.6	39.8		
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
Whanganui	Number	6,765	6,150	3,552	16,467
	Percentage	41.1	37.4	21.6	
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
Whanganui	Number	15,615	402	18	957	6,690	420	24,099
	Percentage	64.8	1.7	0.1	4.0	27.8	1.7	
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
Whanganui	Number	930	51,075	6,063	570	177	45	12	3,342	62,211
	Percentage	1.5	82.1	9.8	0.9	0.3	0.1	0.0	5.4	
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
Whanganui	No children	1,902	35.4	858	16.0	519	9.7	387	7.2	294	5.5
	One child	120	4.8	285	11.4	306	12.2	336	13.4	270	10.8
	Two children	6	0.1	150	2.7	294	5.3	483	8.7	624	11.2
	Three children	-	-	42	0.9	156	3.4	315	6.9	408	8.9
	Four children	-	-	12	0.5	54	2.2	102	4.1	192	7.7
	Five children	-	-	3	0.3	21	2.0	45	4.2	93	8.7
	Six or more children	-	-	-	-	6	0.6	24	2.5	48	4.9
	Object to answering	33	4.1	36	4.5	36	4.5	54	6.7	57	7.1
	Not elsewhere included(2)	189	11.0	111	6.4	117	6.8	120	7.0	144	8.3
	Total	2,253	9.0	1,497	6.0	1,500	6.0	1,860	7.4	2,127	8.5
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
Whanganui	No children	240	4.5	219	4.1	201	3.7	144	2.7	141	2.6
	One child	273	10.9	222	8.8	186	7.4	123	4.9	84	3.3
	Two children	732	13.1	690	12.4	645	11.6	552	9.9	399	7.2
	Three children	498	10.9	543	11.8	516	11.3	498	10.9	408	8.9
	Four children	267	10.8	291	11.7	231	9.3	231	9.3	210	8.5
	Five children	105	9.8	99	9.3	72	6.7	81	7.6	84	7.9
	Six or more children	66	6.7	78	8.0	51	5.2	63	6.4	84	8.6
	Object to answering	84	10.4	90	11.2	69	8.6	99	12.3	60	7.5
	Not elsewhere included(2)	150	8.7	144	8.3	117	6.8	111	6.4	84	4.9
	Total	2,415	9.6	2,379	9.5	2,088	8.3	1,902	7.6	1,557	6.2
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
Whanganui	No children	105	2.0	87	1.6	96	1.8	81	1.5	90	1.7	5,370
	One child	66	2.6	66	2.6	51	2.0	57	2.3	69	2.7	2,511
	Two children	321	5.8	204	3.7	180	3.2	147	2.6	141	2.5	5,574
	Three children	390	8.5	273	6.0	210	4.6	186	4.1	135	2.9	4,584
	Four children	249	10.0	219	8.8	177	7.1	135	5.4	105	4.2	2,478
	Five children	117	11.0	114	10.7	123	11.5	69	6.5	48	4.5	1,068
	Six or more children	123	12.6	147	15.0	132	13.5	90	9.2	60	6.1	978
	Object to answering	51	6.3	60	7.5	33	4.1	27	3.4	15	1.9	804
	Not elsewhere included(2)	75	4.3	102	5.9	81	4.7	69	4.0	114	6.6	1,725
	Total	1,497	6.0	1,272	5.1	1,089	4.3	861	3.4	783	3.1	25,086
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
Whanganui	Number	3,204	16,659	5,490	1,500	2,598	1,581	3,492	20,559	2,769	23,328
	Percentage	13.7	71.4	23.5	6.4	11.1	6.8	15.0			
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
Whanganui	Number	1,929	19,953	8,022	2,391	5,205	3,237	4,491	22,413	2,673	25,086
	Percentage	7.7	79.5	32.0	9.5	20.8	12.9	17.9			
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
Whanganui	Number	5,130	36,612	13,512	3,888	7,800	4,818	7,980	42,969	5,442	48,411
	Percentage	10.6	75.6	27.9	8.0	16.1	10.0	16.5			
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
Whanganui	Number	14,283	6,642	4,107	1,737	1,185	2,154	4,752
	Percentage	29.5	13.7	8.5	3.6	2.5	4.5	9.8
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
Whanganui	Number	1,575	2,355	2,730	549	366	78	5,901	48,411
	Percentage	3.3	4.9	5.6	1.1	0.8	0.2	12.2	
New Zealand	Number	110,496	157,869	315,846	55,458	59,703	16,770	328,014	3,160,371
	Percentage	3.5	5.0	10.0	1.8	1.9	0.5	10.4	

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

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

(3) Includes Highest Qualification Unidentifiable and Not Stated.

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

Table 1.6.2: Total Personal Income (2006 Census)

Location	Unit	Total personal income							
		Loss	Zero income	\$1–\$5,000	\$5,001– \$10,000	\$10,001– \$15,000	\$15,001– \$20,000	\$20,001– \$25,000	\$25,001– \$30,000
Whanganui	Number	213	1,800	3,060	3,852	7,149	5,013	3,888	3,675
	Percentage	0.4	3.7	6.3	8.0	14.8	10.4	8.0	7.6
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
Whanganui	Number	3,063	2,949	3,447	3,177	1,017	780	5,331	48,411
	Percentage	6.3	6.1	7.1	6.6	2.1	1.6	11.0	
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
Whanganui	Number	2,208	25,590	6,609	9,714	819	9,027	1,542
	Percentage	4.6	52.9	13.7	20.1	1.7	18.7	3.2
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
Whanganui	Number	2,208	1,233	1,950	1,680	675	1,560	864	3,186	48,411
	Percentage	4.6	2.6	4.0	3.5	1.4	3.2	1.8	6.6	
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
Whanganui	Number	21,894	7,233	29,127	1,770	30,894	16,122	1,395	48,411
	Percentage	75.2	24.8	94.3	5.7	63.8	33.3	2.9	
New Zealand	Number	1,531,020	454,758	1,985,775	106,497	2,092,275	961,788	106,311	3,160,371
	Percentage	77.1	22.9	94.9	5.1	66.2	30.4	3.4	

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

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

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



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

Location	Unit	Occupation (ANZSCO)									Total
		Managers	Professionals	Technicians and trades workers	Community and personal service workers	Clerical and administrative workers	Sales workers	Machinery operators and drivers	Labourers	Not elsewhere included(3)	
Whanganui	Number	4,569	4,245	3,561	3,141	2,808	2,322	1,773	4,440	2,268	29,124
	Percentage	15.7	14.6	12.2	10.8	9.6	8.0	6.1	15.3	7.8	
New Zealand	Number	340,530	374,328	241,857	156,468	240,813	186,057	114,324	218,991	112,404	1,985,775
	Percentage	17.1	18.9	12.2	7.9	12.1	9.4	5.8	11.0	5.7	

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

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

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

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

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

Table 1.6.6: Access to Telecommunications (2006 Census)

Location	Unit	Type of Telecommunication							
		Access to a cellphone / mobile phone	Access to a telephone	Access to a fax machine	Access to the Internet	No access to telecommunication systems	Total households stated	Total households, not elsewhere included(3)	Total households
Whanganui	Number	15,855	20,397	4,851	11,661	696	23,055	1,044	24,099
	Percentage	65.8	84.6	20.1	48.4	2.9	95.7	4.3	
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					
		No motor vehicle	One motor vehicle	Two motor vehicles	Three or more motor vehicles	Not elsewhere included(2)	Total
Whanganui	Number	2,322	9,888	7,974	2,889	1,023	24,099
	Percentage	9.6	41.0	33.1	12.0	4.2	
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)
Whanganui	Number	528	6,156	5,538	12,219
	Percentage	4.3	50.4	45.3	
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)
Whanganui	Number	147	6,276	1,185	7,608
	Percentage	1.9	82.5	15.6	
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)		
Whanganui	Number	282	951	1,437	2,664	1,608	24,099
	Percentage	10.6	35.7	53.9			
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
Whanganui	Female	258.3	-48.1 - 564.7	81.8	-15.7 - 179.4	111.7	13.2 - 210.2
	Male	364.8	-29.7 - 759.3	149.5	16.0 - 282.9	184.0	56.4 - 311.6
	Total	304.7	61.6 - 547.8	115.3	32.1 - 198.4	146.8	66.4 - 227.2
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
Whanganui	Female	111.0	-70.3 - 292.4	40.8	5.5 - 76.1	48.4	11.0 - 85.8
	Male	183.5	-85.4 - 452.4	71.1	12.7 - 129.5	83.3	23.0 - 143.6
	Total	142.6	-12.6 - 297.8	55.7	21.8 - 89.7	65.4	30.3 - 100.4
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
Whanganui	Female	114.7	-9.5 - 238.9	43.1	23.0 - 63.2	50.8	28.4 - 73.3
	Male	301.7	73.7 - 529.8	104.8	59.0 - 150.5	122.6	76.8 - 168.5
	Total	195.4	74.7 - 316.1	72.9	48.6 - 97.3	85.2	60.3 - 110.0
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
Whanganui	Female	66.4	-28.2 - 161.1	22.3	7.9 - 36.8	27.0	9.0 - 45.1
	Male	51.5	-49.7 - 152.7	18.1	3.5 - 32.6	23.4	0.6 - 46.2
	Total	59.4	-9.2 - 128.0	20.8	10.5 - 31.2	25.8	11.3 - 40.4
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
Whanganui	Female	129.1	-74.5 - 332.8	58.3	-6.8 - 123.4	65.1	7.2 - 123.1
	Male	140.7	-96.0 - 377.5	78.2	2.6 - 153.8	86.6	16.8 - 156.4
	Total	135.9	-19.6 - 291.5	67.3	18.0 - 116.6	75.0	30.1 - 119.9
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
Whanganui	Female	106.7	-19.7 - 233.2	21.2	-1.1 - 43.5	31.3	6.8 - 55.8
	Male	124.1	-21.2 - 269.5	27.4	4.3 - 50.5	39.4	12.4 - 66.5
	Total	115.1	19.6 - 210.7	24.0	8.0 - 39.9	35.1	16.9 - 53.2
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
Whanganui	Female	42.0	-38.1 - 122.2	28.6	-5.2 - 62.3	30.6	0.8 - 60.4
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
Whanganui	Male	0.0	0.0 - 0.0	13.9	0.6 - 27.1	14.2	1.1 - 27.4
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
Whanganui	Female	0.0	0.0 - 0.0	0.0	0.0 - 0.0	0.0	0.0 - 0.0
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
Whanganui	Female	59.7	-29.9 - 149.3	16.6	-5.4 - 38.6	18.9	-0.8 - 38.5
	Male	38.3	-42.5 - 119.1	27.2	1.7 - 52.8	28.8	4.6 - 53.0
	Total	52.1	-11.3 - 115.4	21.6	4.8 - 38.3	23.5	8.1 - 39.0
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
Whanganui	Female	0.0	0.0 - 0.0	2.0	-2.6 - 6.7	2.4	-2.5 - 7.3
	Male	0.0	0.0 - 0.0	14.1	-5.4 - 33.6	12.3	-4.4 - 29.1
	Total	0.0	0.0 - 0.0	7.8	-2.0 - 17.5	7.1	-1.4 - 15.5
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
Whanganui	Female	21.1	-77.3 - 119.4	5.9	-23.1 - 34.9	11.2	-27.1 - 49.4
	Male	57.3	-112.2 - 226.9	27.1	-45.6 - 99.7	34.6	-35.8 - 105.0
	Total	37.7	-56.2 - 131.6	16.5	-22.6 - 55.6	22.7	-17.1 - 62.6
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
Whanganui	Female	0.0	0.0 - 0.0	0.0	0.0 - 0.0	5.8	-19.1 - 30.7
	Male	57.4	-100.5 - 215.4	20.6	-38.8 - 79.9	29.0	-29.1 - 87.2
	Total	33.5	-47.9 - 114.8	12.8	-20.9 - 46.5	17.3	-14.2 - 48.7
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
Whanganui	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
Whanganui	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	38.2	7.3 - 69.1
	Total	0.0	0.0 - 0.0	0.0	0.0 - 0.0	27.3	8.7 - 46.0
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
Whanganui	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	48.2	12.7 - 83.8
	Total	0.0	0.0 - 0.0	30.4	5.8 - 54.9	36.4	14.4 - 58.3
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
Whanganui	Female	1046.8	949.0 - 1144.6	500.5	484.4 - 516.6	544.2	527.6 - 560.9
	Male	2838.8	2648.9 - 3028.6	931.7	902.3 - 961.2	1075.7	1044.9 - 1106.4
	Total	1781.6	1685.4 - 1877.8	705.9	689.7 - 722.0	793.8	777.0 - 810.6
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
Whanganui	Female	<b>590.5</b>	517.6 - 663.4	253.6	242.5 - 264.7	<b>264.1</b>	253.4 - 274.8
	Male	<b>522.4</b>	439.8 - 605.0	210.2	197.9 - 222.4	<b>236.0</b>	223.0 - 249.0
	Total	<b>558.1</b>	504.0 - 612.3	239.6	231.4 - 247.9	257.4	249.1 - 265.8
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
Whanganui	Female	<b>599.9</b>	525.7 - 674.2	135.2	124.1 - 146.4	<b>184.8</b>	172.1 - 197.6
	Male	<b>714.5</b>	619.8 - 809.2	272.4	254.7 - 290.1	<b>317.3</b>	298.8 - 335.8
	Total	<b>660.4</b>	600.8 - 719.9	198.4	188.2 - 208.6	<b>245.6</b>	234.6 - 256.5
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
Whanganui	Female	0.0	0.0 - 0.0	96.7	87.1 - 106.3	<b>88.0</b>	79.3 - 96.6
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
Whanganui	Male	0.0	0.0 - 0.0	6.3	-7.0 - 19.5	6.4	-6.7 - 19.6
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
Whanganui	Female	0.0	0.0 - 0.0	0.0	0.0 - 0.0	0.0	0.0 - 0.0
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
Whanganui	Female	<b>585.5</b>	513.1 - 657.8	122.8	112.0 - 133.6	<b>146.6</b>	135.7 - 157.5
	Male	0.0	0.0 - 0.0	232.6	216.2 - 249.0	<b>230.0</b>	214.5 - 245.6
	Total	<b>426.6</b>	379.3 - 473.8	173.0	163.5 - 182.6	<b>184.9</b>	175.6 - 194.1
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
Whanganui	Female	0.0	0.0 - 0.0	27.1	22.4 - 31.7	<b>32.2</b>	27.2 - 37.1
	Male	0.0	0.0 - 0.0	71.1	61.8 - 80.3	65.2	56.8 - 73.6
	Total	0.0	0.0 - 0.0	45.9	41.0 - 50.9	45.8	41.2 - 50.5
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
Whanganui	Female	<b>662.9</b>	585.7 - 740.0	195.3	182.8 - 207.9	<b>231.2</b>	218.2 - 244.3
	Male	<b>1071.7</b>	951.8 - 1191.6	376.9	358.6 - 395.2	<b>419.6</b>	400.8 - 438.4
	Total	<b>811.4</b>	746.2 - 876.6	273.8	263.1 - 284.5	<b>311.2</b>	300.2 - 322.2
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

	Whanganui DHB		New Zealand	
	Condition	ASR	Condition	ASR
Female	Breast cancer (female only)	12.8	Breast cancer (female only)	10.7
	Lung cancer	12.6	Lung cancer	9.3
	Diabetes	10.0	Ischaemic heart disease	8.1
	Ischaemic heart disease	9.4	Colorectal cancer	5.9
	COPD	7.2	Diabetes	5.8
Male	Ischaemic heart disease	39.4	Ischaemic heart disease	27.3
	Suicide and self-inflicted injuries	25.4	Suicide and self-inflicted injuries	15.7
	Lung cancer	15.4	Motor vehicle accidents	12.3
	Motor vehicle accidents	12.6	Lung cancer	10.8
	Colorectal cancer	11.3	Diabetes	8.3
Total	Ischaemic heart disease	23.8	Ischaemic heart disease	17.4
	Suicide and self-inflicted injuries	15.1	Suicide and self-inflicted injuries	10.4
	Lung cancer	13.9	Lung cancer	10.0
	Diabetes	10.1	Motor vehicle accidents	8.6
	Motor vehicle accidents	9.6	Diabetes	7.0

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

	Whanganui DHB		New Zealand	
	Condition	ASR	Condition	ASR
Māori	Ischaemic heart disease	59.5	Ischaemic heart disease	51.4
	Lung cancer	49.7	Lung cancer	31.6
	Suicide and self-inflicted injuries	29.4	Diabetes	26.8
	Diabetes	28.4	Motor vehicle accidents	17.8
	COPD	18.8	Suicide and self-inflicted injuries	15.4
non-Māori	Ischaemic heart disease	19.3	Ischaemic heart disease	14.3
	Suicide and self-inflicted injuries	11.1	Suicide and self-inflicted injuries	9.3
	Lung cancer	8.9	Lung cancer	8.1
	Colorectal cancer	8.4	Motor vehicle accidents	6.7
	Breast cancer (female only)	6.1	Colorectal cancer	6.7

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

	Whanganui DHB		New Zealand	
	Condition	ASR	Condition	ASR
Female	Ischaemic heart disease	538.9	Ischaemic heart disease	418.5
	Stroke	216.0	Stroke	206.0
	Lung cancer	184.8	CORD	172.8
	Colorectal cancer	146.6	Lung cancer	153.4
	Breast cancer (female only)	88.0	Colorectal cancer	131.3
Male	Ischaemic heart disease	1050.2	Ischaemic heart disease	757.4
	CORD	424.8	Lung cancer	245.3
	Lung cancer	317.3	CORD	238.4
	Colorectal cancer	230.0	Stroke	207.5
	Stroke	193.0	Colorectal cancer	178.9
Total	Ischaemic heart disease	778.9	Ischaemic heart disease	571.4
	CORD	317.6	Stroke	210.0
	Lung cancer	245.6	CORD	197.9
	Stroke	211.9	Lung cancer	194.3
	Colorectal cancer	184.9	Colorectal cancer	152.9

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

	Whanganui DHB		New Zealand	
	Condition	ASR	Condition	ASR
Māori	Ischaemic heart disease	1734.7	Ischaemic heart disease	1109.6
	CORD	848.1	Lung cancer	497.3
	Lung cancer	660.4	CORD	465.0
	Colorectal cancer	426.6	Diabetes	389.4
	Stroke	423.6	Stroke	247.1
non-Māori	Ischaemic heart disease	691.4	Ischaemic heart disease	540.1
	CORD	278.2	Stroke	207.2
	Stroke	199.1	CORD	182.8
	Lung cancer	198.4	Lung cancer	175.1
	Colorectal cancer	173.0	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
Whanganui	Female	6623.2	4879.4 - 8367.0	4021.9	3044.0 - 4999.9	4765.6	3907.3 - 5623.8
	Male	6240.6	4536.5 - 7944.8	4651.7	3616.4 - 5687.0	5143.4	4268.8 - 6018.0
	Total	6417.3	5203.0 - 7631.7	4321.4	3611.7 - 5031.1	4942.8	4331.2 - 5554.4
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
Whanganui	Female	961.0	374.7 - 1547.4	463.8	248.3 - 679.3	544.4	346.6 - 742.2
	Male	942.4	323.0 - 1561.9	830.0	552.1 - 1107.9	844.6	599.6 - 1089.6
	Total	951.2	527.0 - 1375.5	641.7	466.1 - 817.4	688.2	531.6 - 844.7
New Zealand	Female	725.3	642.2 - 808.5	376.4	354.5 - 398.2	409.5	388.5 - 430.5
	Male	968.2	865.8 - 1070.6	638.8	610.7 - 666.9	673.8	646.7 - 700.8
	Total	842.1	776.8 - 907.4	503.2	485.5 - 520.9	536.9	519.9 - 553.9

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

		Māori		non-Māori		Total	
		ASR	95% confidence	ASR	95% confidence	ASR	95% confidence
Whanganui	Female	638.4	326.2 - 950.6	296.4	216.9 - 375.9	352.1	268.6 - 435.7
	Male	829.0	444.0 - 1213.9	861.8	696.9 - 1026.6	862.2	712.2 - 1012.3
	Total	732.0	485.9 - 978.0	569.7	479.7 - 659.8	597.3	512.8 - 681.7
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
Whanganui	Female	261.8	70.9 - 452.8	119.5	55.9 - 183.1	132.3	75.2 - 189.4
	Male	165.2	-6.2 - 336.5	100.0	49.7 - 150.3	109.4	59.1 - 159.7
	Total	218.2	88.1 - 348.2	110.1	69.2 - 151.0	121.4	83.1 - 159.6
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
Whanganui	Female	572.9	120.9 - 1024.8	494.8	264.8 - 724.8	497.2	308.4 - 686.0
	Male	378.9	-17.8 - 775.5	611.2	354.2 - 868.2	573.3	363.4 - 783.2
	Total	479.1	176.9 - 781.3	551.4	377.4 - 725.3	533.1	391.3 - 674.9
New Zealand	Female	456.5	389.7 - 523.3	348.8	326.7 - 370.9	359.1	338.6 - 379.5
	Male	428.9	360.8 - 497.0	391.1	368.7 - 413.5	396.9	375.9 - 417.8
	Total	442.7	395.1 - 490.3	367.4	351.7 - 383.1	375.5	360.9 - 390.1

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

		Māori		non-Māori		Total	
		ASR	95% confidence	ASR	95% confidence	ASR	95% confidence
Whanganui	Female	207.3	26.5 - 388.1	40.6	12.2 - 69.1	65.4	29.3 - 101.4
	Male	134.8	-17.9 - 287.4	65.9	27.0 - 104.8	72.8	34.9 - 110.7
	Total	168.1	51.9 - 284.3	52.9	28.9 - 76.8	68.7	42.7 - 94.8
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
Whanganui	Female	271.5	67.3 - 475.8	120.6	57.9 - 183.3	143.2	81.8 - 204.6
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
Whanganui	Male	75.6	-37.9 - 189.1	71.9	36.9 - 107.0	70.2	37.8 - 102.5
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
Whanganui	Female	0.0	0.0 - 0.0	54.5	-8.1 - 117.1	40.6	-5.5 - 86.7
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
Whanganui	Female	81.8	-34.3 - 197.9	71.0	24.3 - 117.8	71.1	30.0 - 112.3
	Male	40.4	-45.5 - 126.3	65.9	27.1 - 104.6	65.3	28.2 - 102.3
	Total	61.6	-11.2 - 134.4	68.1	37.8 - 98.5	67.9	40.3 - 95.6
New Zealand	Female	40.1	27.1 - 53.0	52.5	48.0 - 56.9	51.8	47.6 - 56.0
	Male	50.7	35.2 - 66.2	63.3	58.4 - 68.2	62.7	58.0 - 67.3
	Total	45.3	35.2 - 55.3	57.5	54.2 - 60.8	56.9	53.8 - 60.0

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

		Māori		non-Māori		Total	
		ASR	95% confidence	ASR	95% confidence	ASR	95% confidence
Whanganui	Female	36.3	-33.1 - 105.7	243.3	159.9 - 326.7	212.3	144.0 - 280.7
	Male	0.0	0.0 - 0.0	315.0	224.4 - 405.7	280.6	203.4 - 357.8
	Total	30.5	-17.3 - 78.4	276.1	214.9 - 337.3	243.4	192.2 - 294.6
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
Whanganui	Female	1361.8	567.2 - 2156.5	1152.8	647.4 - 1658.2	1225.2	802.3 - 1648.1
	Male	2691.8	1552.4 - 3831.3	2514.9	1776.4 - 3253.4	2566.7	1957.3 - 3176.2
	Total	2007.3	1321.4 - 2693.1	1850.3	1398.7 - 2302.0	1903.0	1530.6 - 2275.3
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
Whanganui	Female	187.5	-87.7 - 462.6	180.2	2.0 - 358.5	181.4	35.3 - 327.5
	Male	104.1	-112.7 - 320.8	89.0	-35.9 - 213.9	92.0	-13.8 - 197.9
	Total	146.4	-29.2 - 322.1	132.7	26.1 - 239.3	136.1	46.6 - 225.5
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
Whanganui	Female	1091.2	802.8 - 1379.6	1450.6	1201.6 - 1699.6	1320.9	1130.8 - 1511.1
	Male	4234.5	3659.2 - 4809.9	3792.2	3417.4 - 4167.1	3935.2	3620.7 - 4249.6
	Total	2651.3	2331.0 - 2971.7	2711.6	2479.2 - 2944.0	2691.1	2503.0 - 2879.2
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
Whanganui	Female	2433.5	2282.9 - 2584.0	1875.8	1835.5 - 1916.1	1935.7	1896.6 - 1974.9
	Male	2392.2	2222.9 - 2561.5	3676.8	3612.9 - 3740.8	3578.5	3518.4 - 3638.6
	Total	2452.1	2338.3 - 2565.8	2707.1	2670.4 - 2743.8	2687.7	2652.9 - 2722.5
New Zealand	Female	2028.0	2003.9 - 2052.1	1374.4	1369.6 - 1379.2	1414.2	1409.5 - 1419.0
	Male	2276.0	2247.8 - 2304.3	2600.5	2593.3 - 2607.7	2586.3	2579.3 - 2593.2
	Total	2152.3	2133.9 - 2170.7	1946.8	1942.6 - 1951.0	1960.3	1956.2 - 1964.4

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

		Māori		non-Māori		Total	
		ASR	95% confidence	ASR	95% confidence	ASR	95% confidence
Whanganui	Female	1929.5	1797.4 - 2061.7	641.7	619.8 - 663.7	730.4	708.1 - 752.8
	Male	1259.4	1136.1 - 1382.7	663.5	639.1 - 687.8	720.4	695.7 - 745.1
	Total	1630.9	1539.4 - 1722.3	651.4	635.2 - 667.7	726.4	709.9 - 743.0
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
Whanganui	Female	559.9	485.9 - 633.8	276.0	260.2 - 291.7	313.4	297.0 - 329.7
	Male	1390.2	1255.8 - 1524.5	415.7	393.8 - 437.6	517.1	493.1 - 541.0
	Total	902.2	831.8 - 972.7	341.7	328.4 - 354.9	408.0	393.9 - 422.2
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
Whanganui	Female	622.8	545.9 - 699.6	290.7	273.0 - 308.5	313.4	296.2 - 330.6
New Zealand	Female	354.3	344.1 - 364.5	300.5	298.0 - 302.9	303.8	301.5 - 306.2

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

		Māori		non-Māori		Total	
		ASR	95% confidence	ASR	95% confidence	ASR	95% confidence
Whanganui	Male	27.2	-74.3 - 128.8	23.5	-2.5 - 49.5	23.0	-1.2 - 47.1
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
Whanganui	Female	0.0	0.0 - 0.0	11.8	9.7 - 13.9	11.3	9.3 - 13.3
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
Whanganui	Female	0.0	0.0 - 0.0	335.0	318.1 - 352.0	316.3	300.9 - 331.7
	Male	0.0	0.0 - 0.0	574.9	549.6 - 600.3	532.9	509.8 - 556.1
	Total	0.0	0.0 - 0.0	448.8	433.9 - 463.7	417.7	404.1 - 431.2
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
Whanganui	Female	0.0	0.0 - 0.0	1377.1	1342.6 - 1411.5	1282.7	1251.4 - 1314.0
	Male	0.0	0.0 - 0.0	2126.7	2079.7 - 2173.6	1975.6	1932.5 - 2018.7
	Total	214.5	180.8 - 248.1	1715.2	1686.7 - 1743.7	1592.3	1566.4 - 1618.3
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
Whanganui	Female	2085.5	1947.6 - 2223.3	1213.3	1180.4 - 1246.2	1286.9	1254.7 - 1319.2
	Male	4778.5	4528.5 - 5028.5	1932.4	1888.1 - 1976.7	2147.9	2102.5 - 2193.2
	Total	3205.8	3074.6 - 3337.0	1538.0	1511.0 - 1565.0	1673.7	1646.6 - 1700.8
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
Whanganui	Female	230.5	10.2 - 450.7	85.8	7.8 - 163.8	101.4	33.9 - 169.0
	Male	293.3	19.6 - 567.0	131.3	34.2 - 228.3	148.5	61.2 - 235.7
	Total	254.1	84.2 - 424.1	108.2	45.5 - 171.0	124.2	69.0 - 179.5
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
Whanganui	Female	53.0	-51.7 - 157.7	9.3	-8.7 - 27.4	15.1	-6.4 - 36.6
	Male	63.5	-60.4 - 187.5	10.8	-6.3 - 27.9	17.1	-4.0 - 38.3
	Total	57.4	-22.3 - 137.1	9.9	-2.4 - 22.2	16.0	1.0 - 30.9
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
Whanganui	Female	341.4	42.4 - 640.3	116.4	0.6 - 232.2	174.1	58.2 - 289.9
	Male	191.9	-46.1 - 429.9	92.1	-10.0 - 194.2	115.7	19.5 - 211.9
	Total	270.3	76.8 - 463.9	104.6	27.3 - 182.0	145.5	70.0 - 221.1
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
Whanganui	Female	<b>1136.7</b>	890.6 - 1382.9	464.2	405.7 - 522.7	<b>551.6</b>	491.4 - 611.9
	Male	<b>1368.1</b>	1071.3 - 1665.0	500.3	445.2 - 555.4	<b>585.6</b>	527.5 - 643.7
	Total	<b>1212.9</b>	1027.5 - 1398.3	477.0	437.0 - 517.1	<b>561.6</b>	520.1 - 603.2
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
Whanganui	Female	756.3	366.8 - 1145.8	234.5	60.4 - 408.6	439.8	253.6 - 626.1
	Male	<b>1355.0</b>	857.3 - 1852.6	547.0	279.8 - 814.1	<b>886.3</b>	626.1 - 1146.4
	Total	<b>1071.4</b>	751.1 - 1391.7	390.0	231.0 - 549.0	<b>667.3</b>	506.3 - 828.2
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
Whanganui	Female	187.1	-5.7 - 379.9	90.3	-19.7 - 200.3	127.5	27.1 - 228.0
	Male	112.0	-31.8 - 255.8	101.5	-16.5 - 219.5	105.3	14.5 - 196.2
	Total	147.8	29.0 - 266.5	95.8	15.3 - 176.4	116.0	48.5 - 183.5
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
Whanganui	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	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
Whanganui	Female	618.8	274.4 - 963.2	488.1	244.0 - 732.2	536.1	336.7 - 735.5
	Male	939.7	532.4 - 1347.1	918.6	596.3 - 1240.9	930.3	677.1 - 1183.5
	Total	783.5	515.5 - 1051.4	707.1	504.2 - 909.9	736.7	575.0 - 898.5
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
Whanganui	Female	1699.8	1575.6 - 1823.9	2046.1	2006.5 - 2085.6	2024.5	1987.1 - 2062.0
	Male	1227.8	1097.7 - 1358.0	1298.1	1265.3 - 1331.0	1282.7	1251.3 - 1314.0
	Total	1479.4	1390.7 - 1568.1	1709.3	1683.2 - 1735.3	1691.7	1667.0 - 1716.5
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
Whanganui	Female	3254.8	3081.2 - 3428.3	3432.2	3373.1 - 3491.2	3392.7	3337.4 - 3448.0
	Male	3648.7	3432.5 - 3864.9	3194.1	3133.1 - 3255.1	3258.2	3199.1 - 3317.2
	Total	3405.1	3270.2 - 3540.1	3325.9	3283.5 - 3368.4	3336.3	3295.9 - 3376.6
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

	Whanganui DHB		New Zealand	
	Condition	ASR	Condition	ASR
Female	Respiratory infections	783.9	Respiratory infections	510.3
	Dental conditions	618.6	Gastroenteritis	371.2
	Gastroenteritis	496.2	Dental conditions	301.5
	Kidney/urinary infection	402.1	ENT infections	265.7
	Cellulitis	307.2	Cellulitis	243.5
Male	Respiratory infections	858.7	Respiratory infections	570.2
	Dental conditions	622.7	Gastroenteritis	355.3
	Gastroenteritis	490.2	ENT infections	331.7
	Asthma	406.9	Dental conditions	319.0
	Angina	397.5	Angina	300.1
Total	Respiratory infections	819.7	Respiratory infections	541.0
	Dental conditions	620.0	Gastroenteritis	363.7
	Gastroenteritis	493.8	Dental conditions	310.3
	Asthma	342.9	ENT infections	299.6
	Angina	319.7	Angina	258.9

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

	Whanganui DHB		New Zealand	
	Condition	ASR	Condition	ASR
Māori	Respiratory infections	1083.9	Respiratory infections	742.2
	Dental conditions	928.0	Dental conditions	441.6
	Asthma	572.0	Asthma	356.4
	Gastroenteritis	452.1	ENT infections	355.9
	Angina	346.8	Angina	329.4
non-Māori	Respiratory infections	696.5	Respiratory infections	500.0
	Gastroenteritis	523.9	Gastroenteritis	379.7
	Dental conditions	420.6	ENT infections	283.8
	Angina	317.4	Dental conditions	271.8
	Kidney/urinary infection	230.7	Angina	250.3

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

	Whanganui DHB		New Zealand	
	Condition	ASR	Condition	ASR
Female	Angina	1527.1	Persons encountering health services for specific procedures and health care	1802.8
	CORD	1323.3	Angina	1499.8
	Skin cancers	1285.3	Respiratory infections	1132.4
	Other forms of heart disease	1267.1	CORD	968.0
	Ischaemic heart disease	1185.7	Other forms of heart disease	955.6
Male	Angina	2569.8	Persons encountering health services for specific procedures and health care	2367.0
	CORD	2169.4	Angina	1956.7
	Ischaemic heart disease	2117.9	Respiratory infections	1721.7
	Skin cancers	2036.9	Ischaemic heart disease	1550.1
	Respiratory infections	2005.6	Other forms of heart disease	1232.4
Total	Angina	2009.4	Persons encountering health services for specific procedures and health care	2059.9
	CORD	1703.2	Angina	1712.2
	Skin cancers	1621.7	Respiratory infections	1388.0
	Ischaemic heart disease	1609.9	Ischaemic heart disease	1148.7
	Respiratory infections	1500.1	Other forms of heart disease	1084.0

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

	Whanganui DHB		New Zealand	
	Condition	ASR	Condition	ASR
Māori	CORD	3205.8	Persons encountering health services for specific procedures and health care	7454.5
	Respiratory infections	2561.6	CORD	2912.0
	Diabetes	2111.2	Respiratory infections	2597.3
	Ischaemic heart disease	1642.8	Diabetes	2074.3
	Congestive heart failure	1601.2	Angina	1943.8
non-Māori	Angina	2065.8	Persons encountering health services for specific procedures and health care	1705.0
	Skin cancers	1747.7	Angina	1698.8
	Ischaemic heart disease	1612.3	Respiratory infections	1319.4
	CORD	1570.6	Ischaemic heart disease	1133.2
	Respiratory infections	1397.7	Other forms of heart disease	1069.6

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

	Whanganui DHB		New Zealand	
	Condition	ASR	Condition	ASR
Female	Persons encountering health services for specific procedures and health care	1600.5	Dental conditions	660.6
	Dental conditions	1264.3	Respiratory infections	622.0
	Respiratory infections	804.4	ENT infections	380.4
	Kidney/urinary infection	450.4	Injuries to the elbow and forearm	337.0
	Injuries to the elbow and forearm	407.6	Persons encountering health services for specific procedures and health care	311.2
Male	Dental conditions	1078.2	Dental conditions	687.9
	Injuries to the elbow and forearm	741.0	Respiratory infections	671.2
	Persons encountering health services for specific procedures and health care	615.5	Injuries to the elbow and forearm	520.1
	Respiratory infections	574.9	ENT infections	457.9
	Injuries to the head	432.2	Injuries to the head	360.8
Total	Dental conditions	1168.4	Dental conditions	674.6
	Persons encountering health services for specific procedures and health care	1084.7	Respiratory infections	647.1
	Respiratory infections	684.6	Injuries to the elbow and forearm	430.9
	Injuries to the elbow and forearm	578.6	ENT infections	420.1
	Injuries to the head	332.2	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

	Whanganui DHB		New Zealand	
	Condition	ASR	Condition	ASR
Māori	Persons encountering health services for specific procedures and health care	2043.1	Dental conditions	843.1
	Dental conditions	1732.1	Respiratory infections	644.5
	Respiratory infections	614.9	ENT infections	555.6
	Injuries to the elbow and forearm	572.6	Injuries to the elbow and forearm	425.4
	Asthma	420.1	Persons encountering health services for specific procedures and health care	399.2
non-Māori	Dental conditions	807.2	Respiratory infections	648.9
	Respiratory infections	732.6	Dental conditions	619.8
	Injuries to the elbow and forearm	577.4	Injuries to the elbow and forearm	432.1
	Persons encountering health services for specific procedures and health care	459.6	ENT infections	377.3
	Injuries to the head	375.5	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

	Whanganui DHB		New Zealand	
	Condition	ASR	Condition	ASR
Female	Respiratory infections	5195.8	Persons encountering health services in other circumstances	4296.1
	Gastro-oesophageal reflux disease	2142.3	Respiratory infections	3688.1
	Dental conditions	1870.5	Disorders related to length of gestation and fetal growth	1895.8
	Disorders related to length of gestation and fetal growth	1614.7	Gastro-oesophageal reflux disease	1561.8
	Persons encountering health services for specific procedures and health care	1263.0	ENT infections	1005.2
Male	Respiratory infections	6901.4	Respiratory infections	4875.7
	Gastro-oesophageal reflux disease	2159.6	Persons encountering health services in other circumstances	4131.4
	Disorders related to length of gestation and fetal growth	1940.5	Disorders related to length of gestation and fetal growth	2016.8
	Dental conditions	1893.6	Gastro-oesophageal reflux disease	1663.2
	Asthma	1877.9	ENT infections	1415.5
Total	Respiratory infections	6057.7	Respiratory infections	4295.1
	Gastro-oesophageal reflux disease	2151.0	Persons encountering health services in other circumstances	4212.0
	Dental conditions	1882.2	Disorders related to length of gestation and fetal growth	1957.6
	Disorders related to length of gestation and fetal growth	1779.4	Gastro-oesophageal reflux disease	1613.6
	Asthma	1399.8	ENT infections	1214.9

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

	Whanganui DHB		New Zealand	
	Condition	ASR	Condition	ASR
Māori	Respiratory infections	8410.0	Respiratory infections	5965.2
	Dental conditions	3084.3	Persons encountering health services in other circumstances	2422.4
	Asthma	2318.0	Disorders related to length of gestation and fetal growth	1684.5
	Gastro-oesophageal reflux disease	1973.2	Gastro-oesophageal reflux disease	1311.2
	Disorders related to length of gestation and fetal growth	1513.4	ENT infections	1270.5
non-Māori	Respiratory infections	4404.0	Persons encountering health services in other circumstances	4825.9
	Gastro-oesophageal reflux disease	2276.1	Respiratory infections	3722.1
	Disorders related to length of gestation and fetal growth	1966.3	Disorders related to length of gestation and fetal growth	2051.4
	Haemorrhagic and haematological disorders of fetus and newborn	1144.8	Gastro-oesophageal reflux disease	1717.4
	Respiratory and cardiovascular disorders specific to the perinatal period	1131.3	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
Whanganui	Female	85.1	-27.4 - 197.7	22.9	-0.3 - 46.2	32.5	5.2 - 59.7
	Male	159.2	-4.1 - 322.5	31.8	4.2 - 59.4	46.4	15.6 - 77.1
	Total	119.3	22.7 - 215.9	27.2	9.2 - 45.1	39.0	18.6 - 59.5
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
Whanganui	Female	234.9	39.0 - 430.7	114.4	46.5 - 182.2	137.0	71.3 - 202.7
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
Whanganui	Male	81.2	-39.9 - 202.4	116.9	65.3 - 168.6	109.8	63.4 - 156.1
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
Whanganui	Female	0.0	0.0 - 0.0	19.9	-24.7 - 64.4	15.3	-15.8 - 46.4
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
Whanganui	Female	51.1	-36.1 - 138.4	45.2	6.4 - 84.1	44.3	11.1 - 77.5
	Male	50.1	-39.2 - 139.3	64.3	25.0 - 103.5	61.9	26.8 - 97.1
	Total	50.5	-11.4 - 112.5	53.9	26.7 - 81.2	52.4	28.4 - 76.4
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
Whanganui	Female	0.0	0.0 - 0.0	79.3	24.5 - 134.1	65.8	22.1 - 109.5
	Male	0.0	0.0 - 0.0	63.4	11.0 - 115.9	53.9	12.1 - 95.7
	Total	0.0	0.0 - 0.0	71.6	33.4 - 109.7	60.0	29.6 - 90.3
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
Whanganui	Female	443.7	380.3 - 507.1	153.5	141.5 - 165.5	186.0	173.3 - 198.8
	Male	1074.0	959.9 - 1188.1	235.0	218.3 - 251.7	312.9	294.3 - 331.4
	Total	723.4	662.0 - 784.8	190.8	180.7 - 200.9	244.1	233.1 - 255.0
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
Whanganui	Female	0.0	0.0 - 0.0	268.6	252.8 - 284.4	271.0	256.1 - 286.0
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
Whanganui	Male	782.9	678.5 - 887.4	696.1	668.1 - 724.2	678.7	652.5 - 704.9
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
Whanganui	Female	0.0	0.0 - 0.0	0.0	0.0 - 0.0	0.0	0.0 - 0.0
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
Whanganui	Female	441.7	378.7 - 504.8	247.2	232.5 - 262.0	256.6	242.4 - 270.8
	Male	464.6	391.2 - 538.1	542.0	516.5 - 567.5	533.9	509.9 - 557.9
	Total	454.9	406.9 - 502.9	384.6	370.3 - 398.9	384.8	371.4 - 398.3
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
Whanganui	Female	0.0	0.0 - 0.0	210.4	195.6 - 225.2	191.3	178.1 - 204.5
	Male	0.0	0.0 - 0.0	204.9	189.7 - 220.0	188.1	174.3 - 201.9
	Total	0.0	0.0 - 0.0	206.7	196.2 - 217.3	189.1	179.6 - 198.6
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 of biliary tract	C23–C24
☛ 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