

# **Health Profile for Taranaki District Health Board**



MANATU HAUORA

**Data prepared by Public Health Intelligence,  
Ministry of Health  
(January 2007)**

## **Authors**

The report was prepared by Jane Wang (Advisor, Epidemiology), Li-Chia Yeh (Advisor, Statistics), Miranda Devlin (Advisor, Statistics) and Ken Huang (Advisor, Statistics) of Public health Intelligence, Ministry of Health.

The report was peer reviewed by Dr. Barry Borman and Dr. John Wren of Public Health Intelligence, Ministry of Health.

# Contents

Executive Summary.....	4
Data Sources and Methodology.....	8
Demographics.....	11
Health Indicators.....	16
1. Children and Young People .....	16
2. Older People .....	25
3. Cardiovascular disease.....	30
4. Cancer.....	34
5. Respiratory Disease.....	40
6. Diabetes .....	42
7. Mental Health and Addiction .....	44
8. Risk and protective factors.....	47
References .....	50

# Executive Summary

## Demographics

There are slightly more than 100,000 people living in the Taranaki District Health Board (DHB) region. A large majority of the population are European/Other people, followed by Māori. People aged 45-64 years are the highest proportion of the population. The distribution of deprivation in the population is more toward the middle range of the scores of the NZDep2001 (deciles 5-7).

## Children and young people

- Non-Māori males in Taranaki had a significantly higher rate of infant mortality than their counterparts in New Zealand.
- At ages 0-4 years, respiratory system diseases was the leading cause of hospitalisation for Māori, while perinatal conditions was the leading cause for non-Māori in Taranaki.
- At ages 5-14 years in Taranaki, digestive and respiratory system diseases were the two leading causes of hospitalisation for Māori. Digestive system diseases was the lead cause for non-Māori females, while both transport accidents and respiratory diseases were the leading causes for non-Māori males.
- The asthma hospitalisation rate among non-Māori males aged 0-14 years was significantly higher than non-Māori females in Taranaki. The rate for Māori females was non-significantly higher than non-Māori females in 2003-2004 in Taranaki. The rate for non-Māori males in Taranaki was significantly higher than their counterparts in New Zealand.
- Māori aged 14-15 years had a significantly higher rate of current smokers than their non-Māori counterparts in Taranaki.

## Older people

- Māori of both sexes aged 65-74 years had significantly higher rates of ambulatory sensitive hospitalisation than their non-Māori counterparts in Taranaki. The rates among Māori females and non-Māori males in Taranaki were significantly higher than among their counterparts in New Zealand.

- Māori females aged 65-74 years had an over 3 times higher rate of avoidable mortality than non-Māori females, and the rate for Māori males was 2 times higher than for non-Māori males in Taranaki.
- All cardiovascular disease mortality rates for Māori aged 65+ years were significantly higher than their non-Māori counterparts in Taranaki. The rate of hospitalisation among Māori females was significantly higher than non-Māori females. Non-Māori females in Taranaki had a significantly higher rate of all cardiovascular disease mortality than their counterpart in New Zealand. Except for Māori males, the hospitalisation rates in Taranaki were significantly higher than in New Zealand.
- The ischaemic heart disease mortality rate among Māori aged 65+ years was significantly higher than among non-Māori in Taranaki. Māori males had a significantly lower rate of hospitalisation than non-Māori males in Taranaki in 2003-2004. The mortality rate among non-Māori females and hospitalisation rates among non-Māori of both sexes were significantly higher in Taranaki than in New Zealand.
- Non-Māori males aged 65+ years in Taranaki had a significantly lower rate of stroke hospitalisation than those in New Zealand.
- Both all cancer mortality and registration rates among non-Māori males aged 65+ years were significantly higher than non-Māori females in Taranaki.

### **Cardiovascular disease**

- Māori had significantly higher rates of all cardiovascular disease hospitalisation and mortality than their non-Māori counterparts in Taranaki. Except for Māori males, the hospitalisation rates in Taranaki were significantly higher than in New Zealand.
- Māori had a significantly higher rate of ischaemic heart disease mortality than non-Māori in Taranaki. Both mortality and hospitalisation rates for non-Māori males were significantly higher than non-Māori females in Taranaki. The mortality rate among non-Māori of both sexes and the Māori total in Taranaki were significantly higher than their counterparts in New Zealand. The hospitalisation rates were also significantly higher in Taranaki than in New Zealand, except for Māori males.
- Māori had a significantly higher rate of stroke hospitalisation than non-Māori in Taranaki. The rate for non-Māori males in Taranaki was significantly lower than those in New Zealand. The rate of stroke mortality was also significantly lower among non-Māori in Taranaki than those in New Zealand.

## **Cancer**

- Maori had a significantly higher rate of all cancer mortality than non-Māori in Taranaki. Non-Māori males had significantly higher rates of all cancer mortality and registration than non-Māori females in Taranaki.
- Both lung cancer registration and mortality rates were significantly higher among Māori than non-Māori in Taranaki.
- Non-Māori females in Taranaki had a significantly higher rate of melanoma registration than those in New Zealand.

## **Respiratory diseases**

- Māori had significantly higher rates of both chronic obstructive pulmonary disease (COPD) hospitalisation and mortality than non-Māori in Taranaki. The hospitalisation rate among non-Māori in Taranaki was significantly higher than among those in New Zealand.

## **Diabetes**

- Maori of both sexes had about 3 times higher diabetes hospitalisation rates than their non-Māori counterparts in Taranaki. The rates for both Māori and non-Māori females in Taranaki were significantly higher than their counterparts in New Zealand.
- The rate of renal failure with concurrent diabetes for Māori females was 11 times higher and for Māori males 15 times higher than their non-Māori counterparts in Taranaki. The rates for both Māori and non-Māori females in Taranaki were significantly higher than for their counterparts in New Zealand.

## **Mental health and addiction**

- The mean score of self-reported mental health status for non-Māori in Taranaki was significantly higher than those in New Zealand.
- The self-reported potential hazard drinking prevalence was significantly higher among both Māori and non-Māori males aged 15+ years than their female counterparts in Taranaki.
- The rates of self-reported marijuana use in the past year and ever use were significantly higher among Māori aged 15+ years than non-Māori in Taranaki.
- Non-Māori females aged 5+ years had a significantly higher rate of self-harm hospitalisation than non-Māori males in Taranaki.

- Māori males had a higher rate of suicide mortality than non-Māori males in 2002-2003 in Taranaki, but this difference was not statistically significant.

### **Risk and protective factors**

- The rates of self-reported current smokers among Māori adults of both sexes were significantly higher than their non-Māori counterparts in Taranaki.
- Māori females had a significantly higher rate of being overweight or obese than non-Māori females in Taranaki.
- Non-Māori in Taranaki were more likely to consume 3+ servings of vegetables per day than those in New Zealand.

# Data Sources and Methodology

This report presents indicators that reflect the priority areas in Taranaki DHB's District Strategic Plan (2005-2015) and District Annual Plan (2006/07). The indicators present information on the health outcomes, demographic characteristics, risk and protective factors and cancer screening service use of the population in the Taranaki DHB region.

## Data sources

### Statistics New Zealand

Demographic and socio-economic data are based on the 2001 Census population sourced from Statistics New Zealand. In the health indicators section, the denominators used are the interpolated Census population (line drawn from Census populations to achieve population estimates for the same year as the numerator year).

### New Zealand Health Information Service (NZHIS)

Mortality and hospitalisation data were extracted from the relevant NZHIS datasets. Cancer registration data are sourced from the New Zealand Cancer Registry.

### 2002/03 New Zealand Health Survey (2002/03 NZHS)

Prevalence of some diseases, and risk and protective factors were extracted from the 2002/03 NZHS. Data from the survey were collected over a 12 months period during 2002 and 2003.

### Royal New Zealand Plunket Society

Exclusive and full breastfeeding rates are provided at 3 months and 6 months for 2004. Exclusive breastfeeding is defined as the infant has only had milk from the breast or expressed breast milk and prescribed medicines given from birth. Full breastfeeding is defined as the infant has taken breast milk only, and no other liquids or solids, except for a minimal amount of water or prescribed medicines in the past 48 hours.



## **National Screening Unit**

### *Breast Screen Aotearoa:*

Due to the limited age range for which breast screening is conducted, the breast screening coverage rate is age-specific rather than age-standardized rate. The rate is presented for women aged 50-64 years.

### *National Cervical Screening Programme:*

The screening round is three years, and the time period for which data are presented is three years period. The rate is presented for women aged between 20 to 69 years.

## **School Dental Services**

Data presented from the School Dental Service for oral health indicators are for children at age five, for both fluoridated and non-fluoridated areas in 2003 and 2004. Data extracted from this source are thus denoted with 2003 and 2004 in this report.

## **Action on Smoking and Health (ASH)**

Data on smoking prevalence for youth were obtained from the Action on Smoking and Health National Year 10 Smoking Survey 2005. The ASH survey is a sample of year 10 students aged 14-15 years.

## **Ethnicity**

In the demographic section, ethnicity data are stratified by Maori, Pacific, Asian, and European/Other. The "European/Other" category includes European and other ethnicities not counted in the Maori, Pacific and Asian categories. In the health indicators section, data are stratified by Maori and non-Maori due to the small numbers in other ethnic groups, consequently the non-Maori category includes Europeans, Pacific people, Asian people and other ethnicities.

## **NZDep2001**

NZDep2001 is small area deprivation index. NZDep2001 score is calculated from a collection of socio-economic indicators (ie. income, transport, living space, home ownership, employment, qualifications, support and access to a telephone), which measure the level of deprivation in the area in which a person lives. NZDep2001 scores are usually expressed as deciles (deciles 1 represents the least deprived, deciles 10 the most deprived).

## **Time period for data presented**

For health indicators, data in both the most recent two-year period and the two-year period prior to that are presented for Taranaki DHB, to enable changes to be monitored. The most recent two-year period is also presented for the New Zealand data to enable comparison to the national average. The periods presented in each table depend on the availability of the data. Data sourced from the 2002/03 NZHS are presented as 2002/03, as the survey data were collected during 2002 and 2003. A few indicators, such as oral health, are presented for one year only.

## **Rates and confidence intervals**

To allow comparison between different population groups that include a range of age groups, age-standardised rates are presented. Age-standardised rates were calculated using the direct method, with the World Health Organisation (WHO) as the standard population. For children and young people section, however, age-specific rates are presented for particular age groups (eg. 0-4 years and 14-15 years).

Ninety five percent confidence intervals for each rate are presented within the tables (under each rate), where possible. For counts less than five for data sourced from NZHIS and counts less than ten for data sourced from the NZHS, the rate and accompanying confidence interval are not presented. This is because any rates produced are likely to be unstable, and is indicated by a “-“ in the tables.

Throughout the report the word “significant” or “statistically significant” are used to denote that: 1) the confidence intervals do not overlap; 2) the rates are statistically significantly different from each other.

# Demographics

**Table 1: Gender and ethnic distribution in Taranaki DHB and New Zealand, 2001**

Ethnicity	Gender	Taranaki		New Zealand	
		Count	Percent	Count	Percent
Māori	Female	7275	7.1	268701	7.2
	Male	7350	7.1	257535	6.9
	Total	14625	14.2	526236	14.1
Pacific	Female	315	0.3	102003	2.7
	Male	360	0.3	98256	2.6
	Total	675	0.7	200259	5.4
Asian	Female	750	0.7	119064	3.2
	Male	621	0.6	107304	2.9
	Total	1371	1.3	226368	6.1
European/Other	Female	44226	42.9	1424310	38.1
	Male	42147	40.9	1359096	36.4
	Total	86373	83.8	2783406	74.5
Total		103044	100	3736269	100

Source: Statistics New Zealand

There are 103,044 people living in the Taranaki DHB region (2001 Census). A large majority of the region's population are European/Other people, followed by Māori. A very small proportion of the population are Pacific (0.7%) and Asian people (1.3%).

Compared to the New Zealand average, the Taranaki population has a much smaller proportion of Pacific and Asian people and a higher proportion of European/Other. For Asian and European/Other, there are a greater number of females than males in Taranaki region, similar to New Zealand as a whole. However, for Māori and Pacific people, the numbers of females and males are similar.

**Table 2: Life-cycle age distribution in Taranaki DHB and New Zealand, 2001**

Life-cycle age group	Taranaki		New Zealand	
	Count	Percent	Count	Percent
00-04	7224	7.0	270474	7.2
05-14	17118	16.6	576903	15.4
15-24	12453	12.1	505176	13.5
25-34	12690	12.3	526056	14.1
35-44	15696	15.2	582807	15.6
45-64	23214	22.5	824226	22.1
65-74	7872	7.6	246210	6.6
75+	6777	6.6	204417	5.5
Total	103044	100	3736269	100

Source: Statistics New Zealand

As shown in Table 2, the highest proportion of the Taranaki population is in the 45-64 age group, followed by 5-14 and 35-44 age groups. There are relatively lower proportions of people in 15-24 and 25-34 age groups compared to New Zealand average, but the proportions in 65-74 and 75+ age groups are relatively higher.

**Table 3: Deprivation distribution in Taranaki DHB and New Zealand, 2001**

NZDep2001 deciles	Taranaki		New Zealand	
	Count	Percent	Count	Percent
1	5736	5.6	355329	9.5
2	6351	6.2	350979	9.4
3	9762	9.5	373893	10.0
4	4509	4.4	355059	9.5
5	13134	12.7	367608	9.8
6	19644	19.1	366432	9.8
7	19044	18.5	359667	9.6
8	7752	7.5	360657	9.7
9	7836	7.6	354123	9.5
10	9276	9.0	346635	9.3
Unspecified	0	0	145887	3.9
Total	103044	100	3736269	100

Source: Statistics New Zealand

The distribution of NZDep 2001 in the Taranaki population is more toward the middle range of the scores. There are higher percentages of people living in deciles 5 to 7 and lower in the deciles 4, compared to New Zealand average.

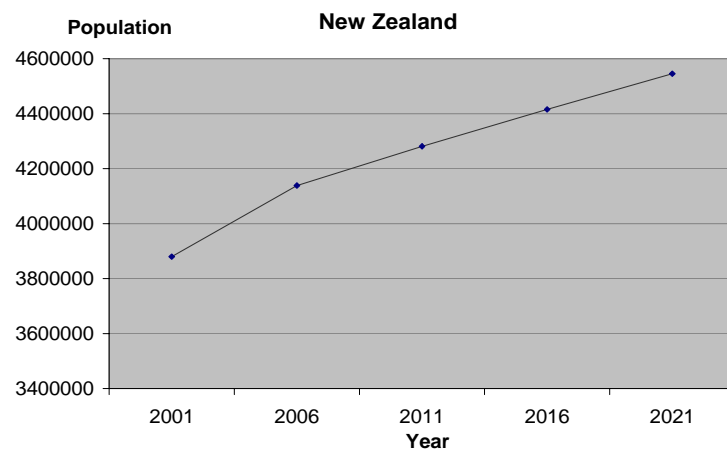
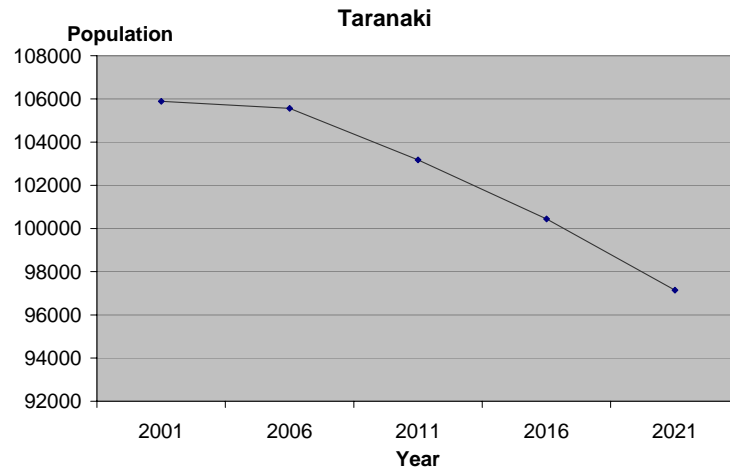
**Table 4: Older people aged 65+ years in Taranaki DHB and New Zealand, 2001**

Ethnicity and gender	Taranaki		New Zealand	
	Count	Percent	Count	Percent
<b>Maori</b>				
Females	324	54.3	9717	54.7
Males	273	45.7	8058	45.3
Total	597	100	17775	100
<b>Non-Maori</b>				
Females	7953	56.6	244158	56.4
Males	6099	43.4	188694	43.6
Total	14052	100	432852	100

Source: Statistics New Zealand

There are a total of 597 Māori and 14,052 non-Māori aged 65+ years in the Taranaki region (2001 Census). Similar to the New Zealand average, there are more females than males for both Māori and non-Māori.

**Figure 1: Population change in Taranaki DHB and New Zealand, 2001-2021**

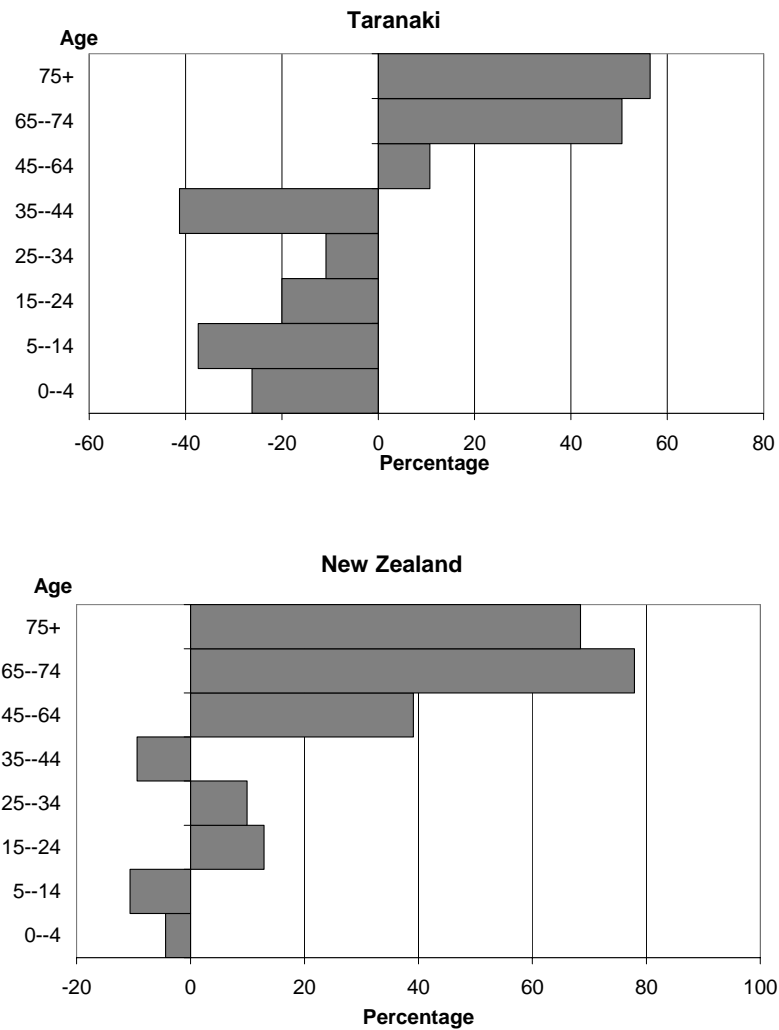


Source: Health Needs Assessment version 7.0 – DBF, Ministry of Health

The population in Taranaki is predicted to decrease slowly over next five years and then more rapidly until 2021. By 2021, the Taranaki population is predicted to reduce 8.4%. However, the population in New Zealand would continue to grow and is predicted to increase 17.2% by 2021.

However, the number of people aged 45+ years is predicted to increase in Taranaki from 2001 to 2021, particularly those aged 65+ years (Figure 2). The number of people aged younger than 45 years is predicted to decrease with the largest decrease in the 35-44 age group in Taranaki. In contrast, the numbers of people aged 15-24 and 25-34 years are expected to increase in New Zealand as a whole.

**Figure 2: Percentage change in population in Taranaki DHB and New Zealand, by age group, 2001-2021**



Source: Health Needs Assessment version 7.0 – DBF, Ministry of Health

# Health Indicators

## 1. Children and Young People

**Table 5: Infant mortality**

Indicator 1: Infant mortality, rate per 1,000 live births						
	Taranaki DHB				New Zealand	
	2000-2001		2002-2003		2002-2003	
	Māori	Non-Māori	Māori	Non-Māori	Māori	Non-Māori
Female	-	5.2 (1.7-12.1)	12.5 (4.0-29.1)	-	6.5 (5.2-7.9)	4.4 (3.8-5.1)
Male	14.0 (5.1-30.4)	7.0 (2.8-14.5)	12.6 (4.1-29.3)	11.7 (6.1-20.5)	9.1 (7.7-10.8)	4.9 (4.2-5.6)
Total	10.8 (4.9-20.4)	6.1 (3.2-10.7)	12.5 (6.0-23.0)	8.5 (4.8-13.8)	7.8 (6.9-8.9)	4.7 (4.2-5.2)

Source: New Zealand Health Information Service

Note: "-" indicate that the count is less than 5 and therefore the rate is not calculated.

The infant mortality rate among the Māori total was higher than the non-Māori total in Taranaki, but not statistically significant.

Non-Māori males in Taranaki had a significantly higher rate of infant mortality than their counterpart in New Zealand.

**Table 6: Perinatal mortality**

Indicator 2: Perinatal mortality, rate per 1,000 total births						
	Taranaki DHB				New Zealand	
	1998-1999		2000-2001		2000-2001	
	Māori	Non-Māori	Māori	Non-Māori	Māori	Non-Māori
Female	20.1 (7.4-43.7)	13.7 (6.8-24.5)	12.2 (4.0-28.5)	5.2 (1.7-12.1)	9.6 (8.1-11.3)	9.1 (8.2-10.1)
Male	-	11.6 (5.5-21.3)	11.6 (3.8-27.0)	12.0 (6.2-21.0)	9.5 (8.0-11.1)	10.0 (9.1-11.1)
Total	16.1 (7.7-29.5)	12.6 (7.8-19.3)	11.9 (5.7-21.8)	8.6 (5.0-13.8)	9.5 (8.5-10.7)	9.6 (8.9-10.3)

Source: New Zealand Health Information Service

Note: "-" indicate that the count is less than 5 and therefore the rate is not calculated.

Māori females had a higher rate of perinatal mortality than non-Māori females in Taranaki, but the difference was not statistically significant.



**Table 7: Breastfeeding (exclusive and full) at three months**

Indicator 3: Breastfeeding (exclusive and full), rate per 100				
	Taranaki DHB 2004		New Zealand 2004	
	Māori	Non-Māori non-Pacific	Māori	Non-Māori non-Pacific
Total	45	59	46	59

Source: Royal New Zealand Plunket Society

**Table 8: Breastfeeding (exclusive and full) at six months**

Indicator 3: Breastfeeding (exclusive and full), rate per 100				
	Taranaki DHB 2004		New Zealand 2004	
	Māori	Non-Māori non-Pacific	Māori	Non-Māori non-Pacific
Total	15	26	18	27

Source: Royal New Zealand Plunket Society

Note: 1. Data are for the 2004 calendar year, and confidence intervals were not available.

2. Note that data are for Māori and non-Māori non-Pacific.

3. Exclusive - The infant has never, to the mother's knowledge, had any water, formula or other liquid or solid food.

Only breastmilk from the breast or expressed breastmilk and prescribed medicine have been given from birth.

Full - The infant has taken breastmilk only. No other liquids or solids except a minimal amount of water or prescribed medicines in the past 48 hours.

Breastfeeding rates for Māori babies (exclusive and full) at both three and six months were lower than for non-Māori non-Pacific babies in Taranaki.

### Drowning mortality, 0-4 years

Indicator 4: Drowning mortality, 0-4 years

Rates have not been presented for this indicator due to small number of deaths from drowning in Taranaki. During 2000-2001, no death from drowning for children aged 0-4 years was recorded in the Taranaki region, and two deaths recorded during 2002-2003. The drowning mortality rates for Māori and non-Māori in New Zealand during 2002-2003 were 6.0 (2.7-11.3) and 2.9 (1.5-5.0) per 100,000 respectively. (Source: New Zealand Health Information Service)

**Table 9: Burns hospitalisations, 0-4 years**

Indicator 5: Burns hospitalisations, 0-4 years, age specific rate per 100,000						
	2001-2002		2003-2004		2003-2004	
	Māori	Non-Māori	Māori	Non-Māori	Māori	Non-Māori
Female	-	-	-	120.0 (44.0- 261.2)	124.7 (100.5- 152.9)	91.9 (79.2- 106.1)
Male	237.0 (76.9- 553.0)	378.7 (234.4- 578.9)	-	206.6 (103.1- 369.6)	181.5 (152.9-214)	115.8 (101.8- 131.2)
Total	219.5 (100.4- 416.7)	233.4 (151.1- 344.6)	-	164.6 (95.9- 263.6)	153.9 (134.9- 175.0)	104.1 (94.6- 114.4)

Source: New Zealand Health Information Service

Note: "-" indicate that the count is less than 5 and therefore the rate is not calculated.

Based on available data, there was no significant difference in the burns hospitalisation rates within Taranaki or between Taranaki and New Zealand.

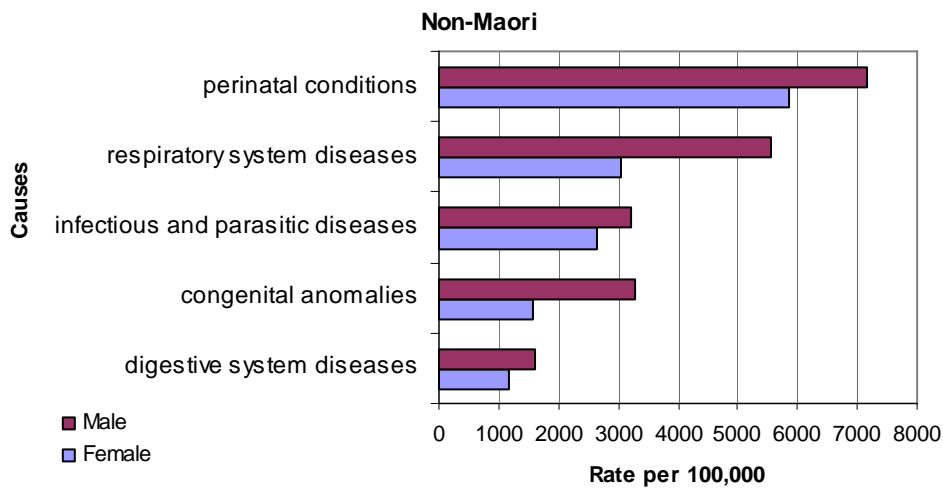
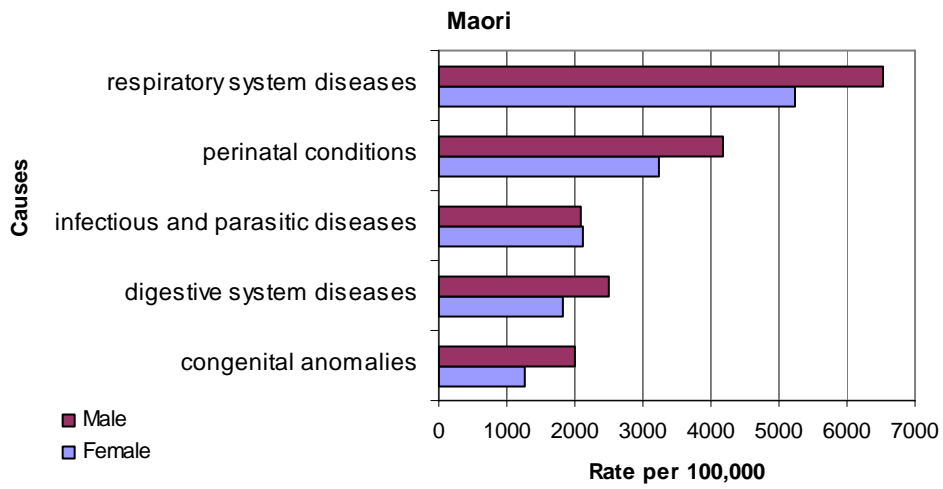
**Table 10: Falls and poisonings hospitalisations, 0-4 years**

Indicator 6: Falls and poisoning hospitalisations, 0-4 years, age specific rate per 100,000						
	Taranaki DHB				New Zealand	
	2001-2002		2003-2004		2003-2004	
	Māori	Non-Māori	Māori	Non-Māori	Māori	Non-Māori
Female	603.0 (311.6- 1053.3)	910.0 (668.6- 1210.1)	710.7 (388.5- 1192.4)	800.0 (571.5- 1089.4)	649.2 (592.4- 710.1)	699.1 (663.2- 736.4)
Male	331.8 (133.4- 683.5)	1064.0 (810.0- 1372.5)	616.1 (328.1- 1053.6)	976.5 (729.3- 1280.6)	755.6 (695.9- 819.0)	815.2 (777.4- 854.5)
Total	463.4 (279.0- 723.7)	989.7 (810.3- 1197)	661.8 (436.1- 962.8)	891.0 (718.3- 1092.8)	703.9 (662.4- 747.4)	758.6 (732.3- 785.5)

Source: New Zealand Health Information Service

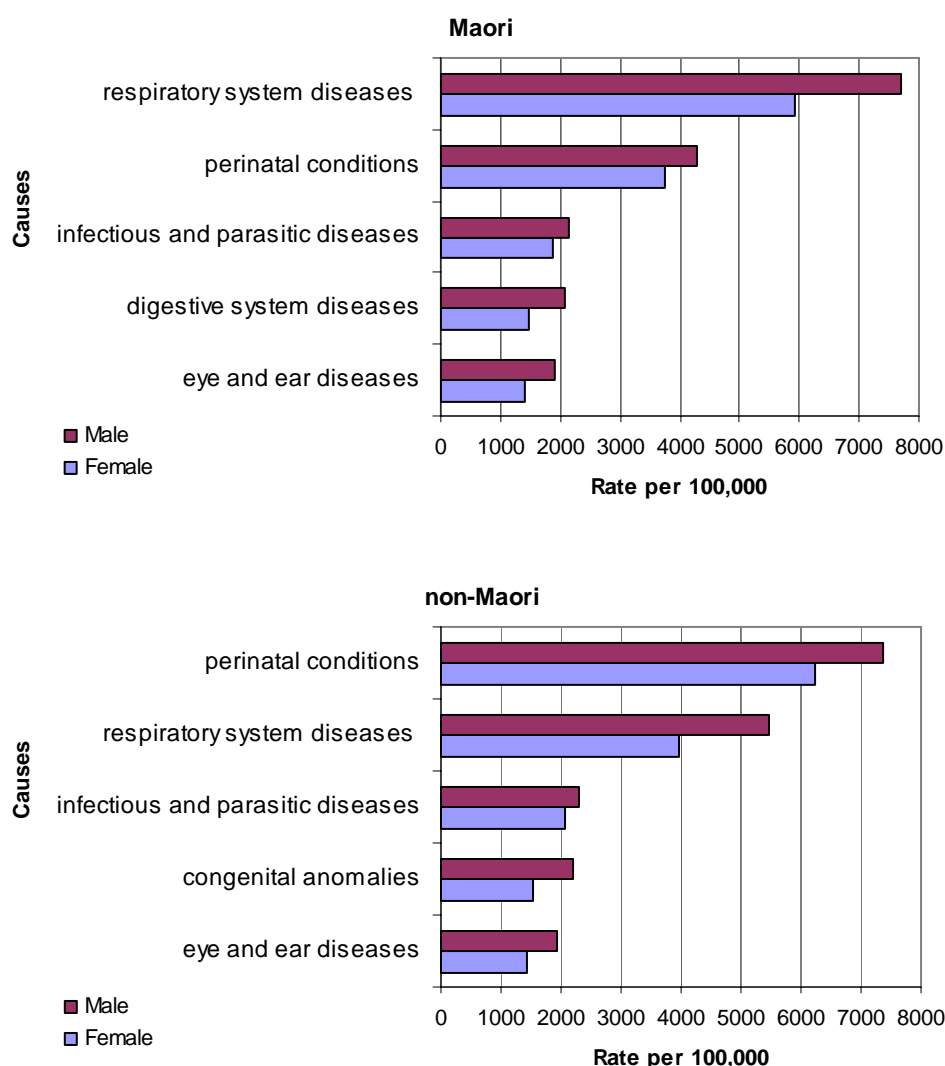
Non-Māori aged 0-4 years had a higher falls and poisoning hospitalisation rate than their Māori counterpart, but this difference was not statistically significant in 2003-2004 in Taranaki.

**Figure 3: Major causes of hospitalisation (including injury), 0-4 years, 2003-2004, Taranaki DHB**



Source: New Zealand Health Information Service

**Figure 4: Major causes of hospitalisation (including injury), 0-4 years, 2003-2004, New Zealand**



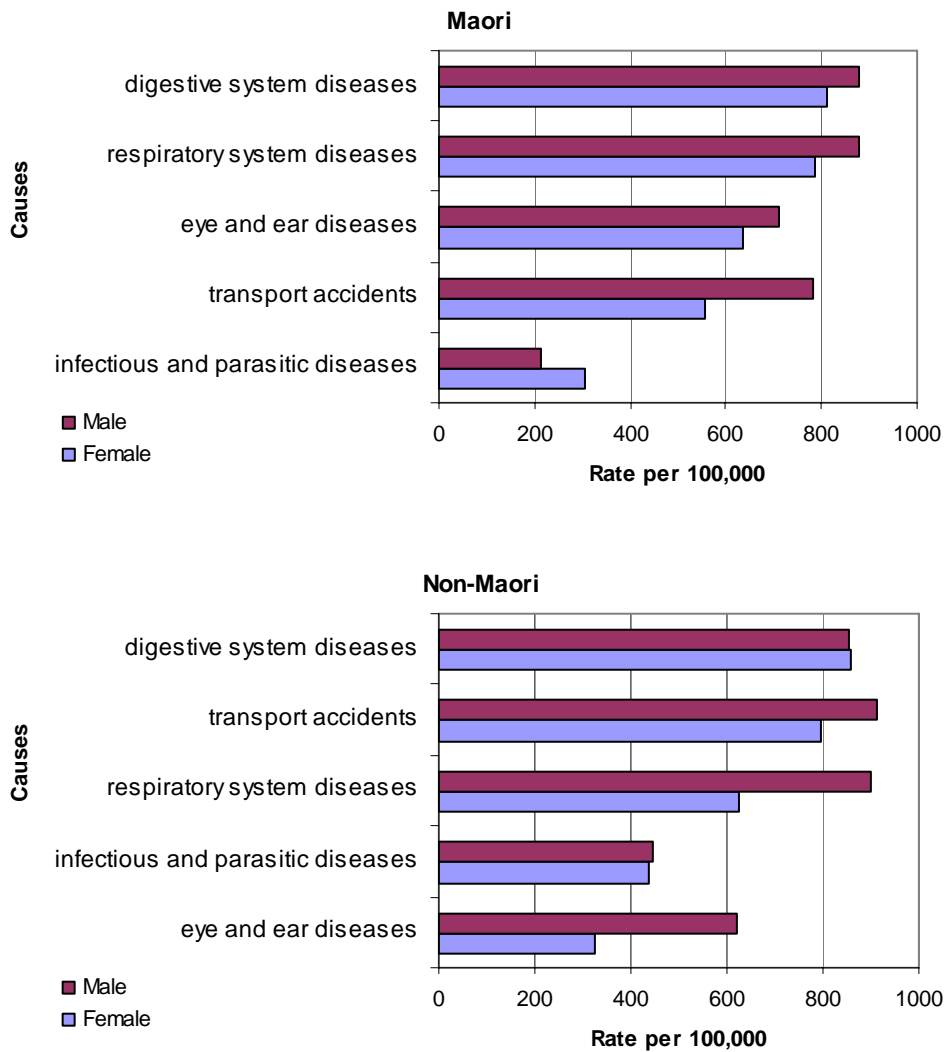
Source: New Zealand Health Information Service

For Maori aged 0-4 years in Taranaki (Figure 3), respiratory system diseases were the leading causes of hospitalisation, followed by perinatal conditions. Except for infectious and parasite diseases, the rates of all four major causes of hospitalisation among Māori males were higher than Māori females.

For non-Māori aged 0-4 years in Taranaki (Figure 3), perinatal conditions was the leading, and respiratory system diseases was the second leading cause of hospitalisation. The rates of all causes of hospitalisation for non-Māori males were higher than females.

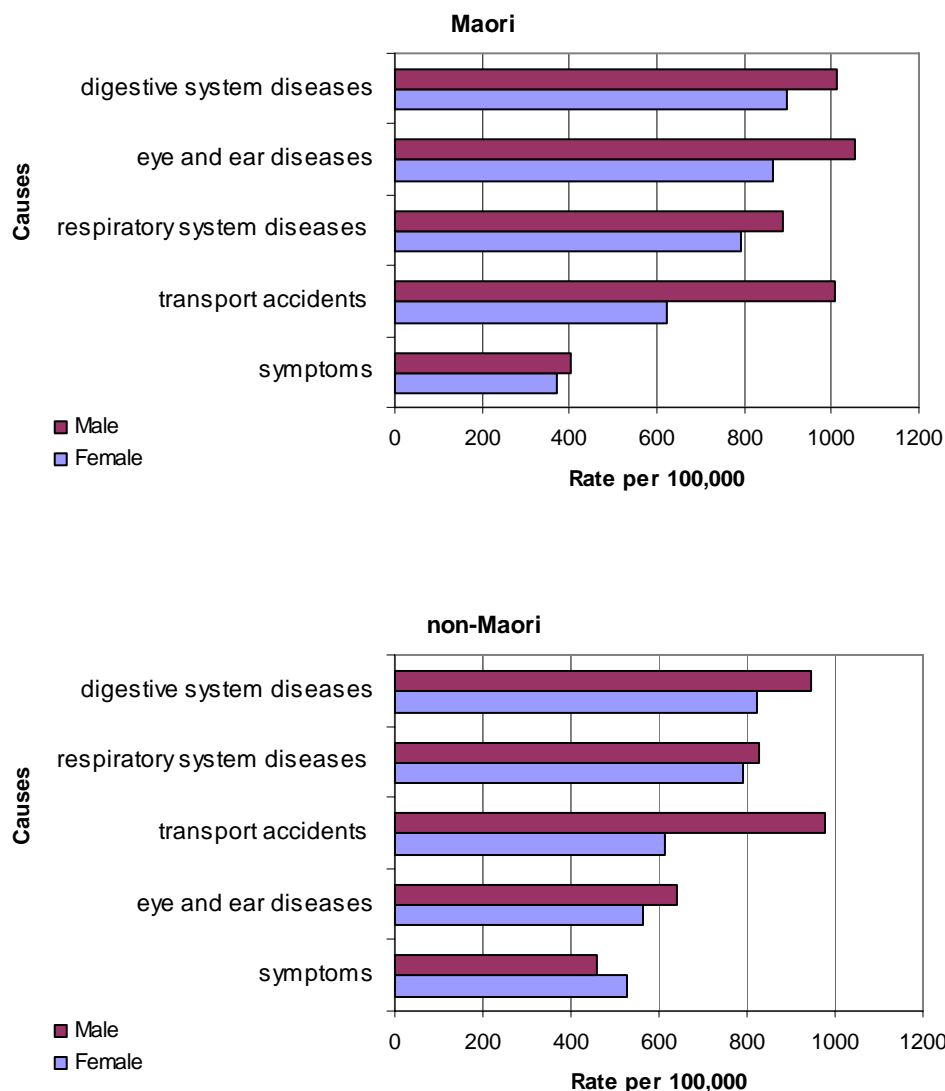
For Māori and non-Māori aged 0-4 years in New Zealand (Figure 4), eye and ear diseases became the fifth leading cause in stead of congenital anomalies or digestive system disease.

**Figure 5: Major causes of hospitalisation (including injury), 5-14 years, 2003-2004, Taranaki DHB**



Source: New Zealand Health Information Service

**Figure 6: Major causes of hospitalisation (including injury), 5-14 years, 2003-2004, New Zealand**



Source: New Zealand Health Information Service

For Māori aged 5-14 years in Taranaki (Figure 5), both digestive system diseases and respiratory system diseases were the leading causes of hospitalisation. Māori males had a markedly higher rate of hospitalisation from transport accidents than Māori females.

For non-Māori males aged 5-14 years in Taranaki (Figure 5), transport accidents and respiratory diseases were the two leading causes of hospitalisation, closely followed by digestive system diseases. For non-Māori females aged 5-14 years in Taranaki, the leading cause was from digestive system diseases, closely followed by transport accidents. The rates of respiratory system disease and eye and ear disease hospitalisations were markedly higher among non-Māori males than females.

For both Māori and non-Māori aged 5-14 years in New Zealand (Figure 6), Infectious and parasitic diseases was not included in the top five causes of hospitalisation.

**Table 11: Mean number of decay, missing or filled teeth at age 5 years, fluoridated supply**

Indicator 7: Mean number of decay, missing or filled teeth at age 5 years			
	Taranaki DHB		New Zealand
	2003	2004	2004
Maori	3.6	3.4	2.9
Non-Māori Non-Pacific	1.7	1.7	1.2

Source: School Dental Service

**Table 12: Mean number of decay, missing or filled teeth at age 5 years, non-fluoridated supply**

Indicator 7: Mean number of decay, missing or filled teeth at age 5 years			
	Taranaki DHB		New Zealand
	2003	2004	2004
Maori	4.2	3.9	4.4
Non-Māori Non-Pacific	2.4	2.5	2.0

Source: School Dental Service

In both fluoridated and non-fluoridated areas, Māori at age five years had higher mean numbers of decay, missing or filled teeth than their non-Māori non-Pacific counterparts in Taranaki.

**Table 13: Asthma hospitalisations, 0-14 years**

Indicator 8: Asthma hospitalisations, 0-14 years, age-standardised rate per 100,000						
	Taranaki DHB				New Zealand	
	2001-2002		2003-2004		2003-2004	
	Māori	Non-Māori	Māori	Non-Māori	Māori	Non-Māori
Female	422.1 (273.2- 623.1)	404.9 (316.8- 509.9)	509.6 (343.8- 727.5)	260.8 (188.0- 352.5)	524.6 (494.5- 556.0)	323.6 (309.6- 338.0)
Male	794.2 (589.5- 1047.1)	720.0 (600.2- 856.6)	769.9 (567.7- 1020.8)	664.4 (547.0- 799.4)	695.4 (661.7- 730.4)	454.2 (438.0- 470.8)
Total	613.0 (482.2- 768.4)	568.1 (491.9- 652.8)	641.5 (507.1- 800.6)	468.7 (397.6- 548.8)	612.5 (589.8- 635.9)	390.5 (379.7- 401.5)

Source: New Zealand Health Information Service

The asthma hospitalisation rate in Māori females was higher than in non-Māori females in Taranaki during 2003-2004, although the difference was not statistically significant. Both Māori and non-Māori males had higher rates than females, although the difference was only statistically significant for non-Māori in Taranaki.

Non-Māori males in Taranaki had a significantly higher rate of asthma hospitalisation than their counterpart in New Zealand.

**Table 14: Prevalence of current smoker**

Indicator 9: Tobacco smoking, 14-15 years, age specific rate per 100				
	Taranaki DHB 2005		New Zealand 2005	
	Māori	Non-Māori	Māori	Non-Māori
Female	35.9 (23.6, 48.3)	11.8 (6.7, 17.0)	34.4 (32.4, 36.4)	11.2 (10.3, 12.0)
Male	20.9 (12.0, 29.8)	8.6 (4.5, 12.8)	17.6 (15.9, 19.3)	8.3 (7.5, 9.1)
Total	28.2 (19.9, 36.4)	10.2 (6.5, 13.9)	26.4 (25.0, 27.8)	9.8 (9.1, 10.4)

Source: Action on Smoking and Health National Year 10 Survey

Māori aged 14-15 years had a significantly higher rate of current smokers than their non-Māori counterparts. More than one quarter of Māori aged 14-15 years were current smokers compared to one in ten for non-Māori in Taranaki.



## 2. Older People

**Table 15: Ambulatory sensitive hospitalisation**

Indicator 10: Ambulatory sensitive hospitalisation, 65-74 yrs, age-standardised rate per 100,000						
	Taranaki DHB				New Zealand	
	2001-2002		2003-2004		2003-2004	
	Māori	Non-Māori	Māori	Non-Māori	Māori	Non-Māori
Female	13735.3 (10525.9- 17615.0)	7925.2 (7319.7- 8567.5)	15989.3 (12603.8- 20004.5)	6496.2 (5953.0- 7075.7)	11921.4 (11411.8- 12448.0)	5922.1 (5828.2- 6017.2)
Male	17891.9 (14110.1- 22375.7)	11300.7 (10549.1- 12091.8)	16179.9 (12678.2- 20349.8)	9393.6 (8705.6- 10121.5)	13800.2 (13212.8- 14406.9)	8424.9 (8308.4- 8542.5)
Total	15759.3 (13242.9- 18614.6)	9571.4 (9088.7- 10073.1)	16056.9 (13583.1- 18851.0)	7896.2 (7458.6- 8352.8)	12793.3 (12406.2- 13189.4)	7127.2 (7052.8- 7202.1)

Source: New Zealand Health Information Service

Māori aged 65-74 years had significantly higher rates of ambulatory sensitive hospitalisation than their non-Māori counterparts in Taranaki. The rate for Māori females was more than double of that for non-Māori females during 2003-2004.

Both Māori and non-Māori in Taranaki had higher rates of ambulatory sensitive hospitalisation than their counterparts in New Zealand. However these differences were only statistically significant for Māori females and non-Māori males.

**Table 16: Avoidable mortality, 65-74 years**

Indicator 11: Avoidable mortality, 65-74 yrs, age-standardised rate per 100,000						
	Taranaki DHB				New Zealand	
	2000-2001		2002-2003		2002-2003	
	Māori	Non-Māori	Māori	Non-Māori	Māori	Non-Māori
Female	3084.1 (1686.1- 5174.6)	910.8 (715.2- 1143.4)	3427.7 (1959.2- 5566.4)	1007.5 (802.5- 1249)	2935.9 (2679.4- 3210.4)	954.3 (917.0- 992.8)
Male	3487.1 (1951.7- 5751.5)	1512.0 (1251.5- 1810.7)	3890.5 (2266.4- 6229.1)	1701.3 (1418.3- 2024.2)	3722.2 (3412.6- 4052.3)	1605.0 (1554.4- 1656.7)
Total	3265.9 (2187.2- 4690.4)	1200.7 (1036.9- 1383.1)	3624.3 (2494.8- 5089.8)	1344.4 (1168.7- 1539.1)	3301.5 (3101.3- 3511.3)	1267.7 (1236.6- 1299.5)

Source: New Zealand Health Information Service

Avoidable mortality rates among Māori aged 65-74 years were significantly higher than their non-Māori counterparts in Taranaki. Māori females had over three times the rate of non-Māori females and Māori males had over twice the rate of non-Māori males.

**Table 17: All cardiovascular disease hospitalisation, 65+ years**

Indicator 12: All cardiovascular disease hospitalisation, 65+ yrs, age-standardised rate per 100,000						
	Taranaki DHB				New Zealand	
	2001-2002		2003-2004		2003-2004	
	Māori	Non-Māori	Māori	Non-Māori	Māori	Non-Māori
Female	13809.4 (11045.7- 17054.5)	8588.7 (8162.7- 9031.1)	12081.6 (9608.8- 14996.4)	6523.9 (6161.7- 6901.8)	8651.3 (8281.5- 9033.3)	5865.7 (5804.2- 5927.6)
Male	15114.6 (12021.1- 18761.2)	13363.2 (12735.6- 14013.7)	11043.5 (8541.0- 14050.0)	9544.4 (9027.4- 10083.2)	10307.5 (9855.3- 10775.2)	8935.1 (8845- 9025.9)
Total	14196.6 (12131.0- 16513.1)	10737.6 (10370.1- 11114.8)	11662.4 (9859.2- 13700)	7859.0 (7553.1- 8174.2)	9364.0 (9076.4- 9658.4)	7240.5 (7187.9- 7293.5)

Source: New Zealand Health Information Service

At ages 65+ years, the rates of all cardiovascular disease hospitalisation for Māori females were significantly higher than for non-Māori females in Taranaki. During 2003-2004, the rate among Māori females was almost twice the rate of their non-Māori counterpart. The rates for non-Māori males were significantly higher than non-Māori females.

Compared to their counterparts in New Zealand, Māori females and non-Māori of both sexes in Taranaki had significantly higher rates of all cardiovascular disease hospitalisation.

**Table 18: All cardiovascular disease mortality, 65+ years**

Indicator 13: All cardiovascular disease mortality, 65+ yrs, age-standardised rate per 100,000						
	Taranaki DHB				New Zealand	
	2000-2001		2002-2003		2002-2003	
	Māori	Non-Māori	Māori	Non-Māori	Māori	Non-Māori
Female	2320.3 (1235.5- 3967.8)	1636.6 (1476.8- 1809.0)	3860.0 (2357.8- 5961.5)	1581.7 (1428.0- 1747.4)	2280.8 (2077.7- 2498.3)	1363.7 (1337.5- 1390.3)
Male	3916.8 (2281.7- 6271.2)	2109.7 (1871.1- 2370.4)	3768.6 (2302.0- 5820.3)	1905.6 (1682.6- 2149.9)	3044.1 (2774.8- 3332.5)	1894.5 (1853.3- 1936.4)
Total	2991.5 (2018.3- 4270.5)	1849.5 (1711.7- 1995.5)	3756.0 (2683.3- 5114.6)	1727.1 (1597.0- 1865.0)	2606.0 (2441.4- 2778.9)	1597.8 (1574.7- 1621.1)

Source: New Zealand Health Information Service

Both Māori females and males aged 65+ years had significantly higher rates of all cardiovascular disease mortality than their non-Māori counterparts in 2002-2003 in Taranaki.

The all cardiovascular disease mortality rates were higher among Māori and non-Māori females in Taranaki than among their counterparts in New Zealand, however this difference was only statistically significant for non-Māori females.

**Table 19: Ischaemic heart disease hospitalisation, 65+ years**

Indicator 14: Ischaemic heart disease hospitalisation, 65+ yrs, age-standardised rate per 100,000						
	Taranaki DHB				New Zealand	
	2001-2002		2003-2004		2003-2004	
	Māori	Non-Māori	Māori	Non-Māori	Māori	Non-Māori
Female	3683.6 (2360.1- 5480.9)	3022.6 (2771.9- 3289.9)	3470.3 (2266.9- 5084.8)	2678.3 (2445.9- 2926.8)	2482.6 (2287.8- 2689.7)	2195.4 (2157.4- 2234.0)
Male	5938.2 (4006.5- 8477.1)	5979.6 (5561.1- 6421.1)	2659.9 (1576.4- 4203.8)	4745.4 (4378.0- 5135.4)	3038.2 (2797.3- 3294.2)	3894.6 (3834.8- 3955.1)
Total	4620.1 (3470.7- 6028.2)	4372.3 (4137.2- 4617.4)	3066.1 (2227.8- 4116.1)	3622.4 (3411.8- 3842.5)	2718.6 (2566.1- 2877.9)	2964.5 (2930.4- 2998.9)

Source: New Zealand Health Information Service

Māori males aged 65+ years had a significantly lower rate of ischaemic heart disease hospitalisation than non-Māori males in 2003-2004 in Taranaki. The reverse was true for Māori females, but this difference was not significant. Non-Māori males had significantly higher rates than non-Māori females.

With the exception of Māori males, the rates of ischaemic heart disease hospitalisation in Taranaki were higher than in New Zealand. However these differences were only statistically significant for non-Māori.

**Table 20: Ischaemic heart disease mortality, 65+ years**

Indicator 15: Ischaemic heart disease mortality, 65+ yrs, age-standardised rate per 100,000						
	Taranaki DHB				New Zealand	
	2000-2001		2002-2003		2002-2003	
	Māori	Non-Māori	Māori	Non-Māori	Māori	Non-Māori
Female	1236.0 (496.9- 2546.7)	872.0 (757.2- 999.2)	2122.3 (1059.4- 3797.4)	933.2 (813.4- 1065.6)	1246.6 (1098.0- 1409.7)	698.5 (679.7- 717.8)
Male	2205.6 (1057.7- 4056.1)	1335.7 (1147.2- 1546.4)	3362.1 (1992.6- 5313.6)	1357.5 (1170.8- 1565.4)	1829.5 (1624.0- 2053.9)	1145.1 (1113.1- 1177.9)
Total	1629.4 (949.2- 2608.9)	1079.7 (974.7- 1193.0)	2663.0 (1783.5- 3824.6)	1101.5 (997- 1213.9)	1493.4 (1370.2- 1624.7)	889.9 (872.6- 907.5)

Source: New Zealand Health Information Service

Ischaemic heart disease mortality rates were significantly higher for Maori males, and marginally significantly higher for Māori females, than their non-Māori counterparts in 2002-2003 in Taranaki. Males had higher rates than females, although these differences were only significant for non-Māori in Taranaki.

Overall, the mortality rates of ischaemic heart disease in Taranaki were higher than in New Zealand, although the difference was only statistically significant for non-Māori females.

**Table 21: Stroke hospitalisation, 65+ years**

Indicator 16: Stroke hospitalisation, 65+ yrs, age-standardised rate per 100,000						
	Taranaki DHB				New Zealand	
	2001-2002		2003-2004		2003-2004	
	Māori	Non-Māori	Māori	Non-Māori	Māori	Non-Māori
Female	-	921.3 (785.7- 1073.6)	822.2 (301.7- 1789.6)	734.4 (617.4- 867.1)	1147.5 (1013.7- 1294.0)	799.7 (777.6- 822.3)
Male	-	998.7 (833.8- 1186.7)	1692.6 (845.0- 3028.6)	846.0 (700.2- 1013.1)	1249.4 (1089.8- 1425.9)	1055.0 (1024.5- 1086.3)
Total	642.8 (258.5- 1324.5)	953.5 (847.5- 1069.2)	1234.7 (719.3- 1976.9)	776.8 (684.8- 877.8)	1185.6 (1082.5- 1295.9)	913.7 (895.4- 932.3)

Source: New Zealand Health Information Service

Note: "-" indicates that the count was less than 5 and therefore the rate was not calculated.

Stroke hospitalisation rate was higher among Māori aged 65+ years than non-Māori in 2003-2004 in Taranaki. However, this difference was not statistically significant.

Compared to their counterpart in New Zealand, non-Māori males in Taranaki had a significantly lower rate of stroke hospitalisation.

**Table 22: Stroke mortality, 65+ years**

Indicator 17: Stroke mortality, 65+ yrs, age-standardised rate per 100,000						
	Taranaki DHB				New Zealand	
	2000-2001		2002-2003		2002-2003	
	Māori	Non-Māori	Māori	Non-Māori	Māori	Non-Māori
Female	-	466.6 (382.4- 563.8)	-	366.3 (294.9- 449.7)	441.3 (354.8- 542.4)	405.6 (391.4- 420.2)
Male	-	378.5 (281.8- 497.7)	-	330.9 (242.3- 441.4)	482.0 (372.8- 613.2)	402.8 (384.0- 422.4)
Total	567.1 (184.1- 1323.4)	433.2 (368.3- 506.3)	-	354.0 (297.2- 418.5)	451.6 (383.5- 528.3)	409.4 (397.9- 421.1)

Source: New Zealand Health Information Service

Note: "-" indicates that the count was less than 5 and therefore the rate was not calculated.

There was no noticeable difference in stroke mortality rates within Taranaki or between Taranaki and New Zealand based on available data.

**Table 23: All cancer registrations, 65+ years**

Indicator 18: All cancer registrations, 65+ yrs, age-standardised rate per 100,000						
	Taranaki DHB				New Zealand	
	2001-2002		2003-2004		2003-2004	
	Māori	Non-Māori	Māori	Non-Māori	Māori	Non-Māori
Female	1268.9 (580.2- 2408.7)	1692.2 (1499.4- 1902.8)	1049.5 (421.9- 2162.3)	1691.4 (1502.9- 1896.9)	1794.5 (1630.0- 1971.1)	1541.3 (1508.6- 1574.6)
Male	3721.5 (2332.3- 5634.4)	3313.5 (3005.9- 3644.0)	2401.0 (1312.6- 4028.4)	2836.4 (2556.6- 3138.6)	2588.2 (2365.8- 2825.8)	2749.0 (2698.8- 2799.8)
Total	2411.1 (1638.3- 3422.4)	2397.4 (2223.6- 2581.2)	1654.8 (1024.3- 2529.5)	2196.0 (2032.5- 2369.2)	2134.4 (1999.7- 2275.8)	2077.7 (2048.9- 2106.8)

Source: New Zealand Health Information Service

Māori aged 65+ years had lower rates of all cancer registrations than non-Māori in Taranaki, but not significantly different. Males had markedly higher rates of all cancer registrations than females, although the difference was not statistically significant for Māori in Taranaki.

**Table 24: All cancer mortality, 65+ years**

Indicator 19: All cancer mortality, 65+ yrs, age-standardised rate per 100,000						
	Taranaki DHB				New Zealand	
	2000-2001		2002-2003		2002-2003	
	Māori	Non-Māori	Māori	Non-Māori	Māori	Non-Māori
Female	941.2 (345.4- 2048.5)	777.3 (656.7- 913.6)	959.1 (385.6- 1976.1)	844.3 (717.8- 986.7)	1246.8 (1106.7- 1399.7)	813.6 (790.6- 837.1)
Male	2979.0 (1735.4- 4769.7)	1370.8 (1177.9- 1586.4)	1939.8 (968.3- 3470.8)	1519.5 (1318.6- 1742.3)	1987.4 (1781.1- 2210.9)	1356.1 (1320.9- 1392.0)
Total	1887.5 (1196.5- 2832.1)	1020.7 (913.1- 1137.6)	1365.0 (809.0- 2157.2)	1126.6 (1013.7- 1248.7)	1544.6 (1425.8- 1670.5)	1037.6 (1017.7- 1057.8)

Source: New Zealand Health Information Service

In contrast to all cancer registrations, the rates of all cancer mortality among Māori were higher than among their non-Māori counterparts in Taranaki. However, these differences were not statistically significant. The rates for males were about two times higher than females, although not statistically significantly for Māori in Taranaki.

### 3. Cardiovascular disease

**Table 25: Heart disease prevalence, 15+ years**

Indicator 20: Heart disease prevalence (self-reported), 15+ yrs, age-standardised rate per 100				
	Taranaki DHB 2002/03		New Zealand 2002/03	
	Māori	Non-Māori	Māori	Non-Māori
Female	11.2 (6.6, 15.8)	9.9 (8.2, 11.6)	10.6 (8.5, 12.6)	8.2 (7.2, 9.1)
Male	7.3 (2.3, 12.3)	10.3 (8.2, 12.4)	13.6 (9.6, 17.7)	9.2 (8.1, 10.3)
Total	9.3 (5.8, 12.9)	10.1 (8.7, 11.5)	12.0 (10.1, 13.9)	8.6 (7.9, 9.3)

Source: 2002/03 New Zealand Health Survey

There was no significant difference in the self-reported heart disease prevalence between Māori and non-Māori in Taranaki and between Taranaki and New Zealand.

**Table 26: All cardiovascular disease hospitalisation**

Indicator 21:: All cardiovascular disease hospitalisation, age-standardised rate per 100,000						
	Taranaki DHB				New Zealand	
	2001-2002		2003-2004		2003-2004	
	Māori	Non-Māori	Māori	Non-Māori	Māori	Non-Māori
Female	2078.1 (1798.7- 2388.6)	1343.5 (1287.8- 1401.1)	1911.1 (1656.0- 2194.3)	993.8 (947.2- 1042.0)	1508.8 (1470.5- 1547.9)	816.2 (808.9- 823.5)
Male	2757.8 (2431.5- 3115.6)	2150.8 (2071.8- 2232.1)	1814.4 (1559.0- 2099.7)	1487.2 (1423.2- 1553.4)	1872.8 (1827.7- 1918.7)	1347.6 (1337.0- 1358.2)
Total	2395.8 (2181.0- 2626.2)	1725.8 (1678.2- 1774.4)	1873.0 (1689.6- 2070.8)	1225.5 (1186.5- 1265.4)	1678.1 (1648.7- 1707.9)	1067.3 (1060.9- 1073.6)

Source: New Zealand Health Information Service

Māori of both sexes had significantly higher rates of all cardiovascular disease hospitalisation than their non-Māori counterparts in Taranaki.

The hospitalisation rates among Māori females and non-Māori of both sexes in Taranaki were significantly higher than among their counterparts in New Zealand.

**Table 27: All cardiovascular disease mortality**

Indicator 22: All cardiovascular disease mortality, age-standardised rate per 100,000						
	Taranaki DHB				New Zealand	
	2000-2001		2002-2003		2002-2003	
	Māori	Non-Māori	Māori	Non-Māori	Māori	Non-Māori
Female	248.6 (151.9-384.0)	146.2 (132.1-161.3)	374.1 (246.5-544.3)	138.2 (124.9-152.5)	248.9 (231.1-267.7)	125.2 (122.8-127.6)
Male	432.8 (296.0-611.0)	212.9 (190.4-237.3)	407.6 (280.6-572.5)	199.6 (178.1-223.0)	373.2 (350.1-397.3)	190.4 (186.6-194.3)
Total	330.4 (246.7-433.2)	177.3 (164.6-190.7)	386.0 (294.6-496.9)	167.3 (155.2-180.1)	305.4 (291.1-320.3)	155.1 (153.0-157.2)

Source: New Zealand Health Information Service

All cardiovascular disease mortality rates for Māori were 2 times significantly higher than their non-Māori counterparts in 2002-2003 in Taranaki.

Māori and non-Māori females in Taranaki had non-significantly higher rates of all cardiovascular disease mortality than their counterparts in New Zealand.

**Table 28: Ischaemic heart disease hospitalisation**

Indicator 23: Ischaemic heart disease hospitalisation, age-standardised rate per 100,000						
	Taranaki DHB				New Zealand	
	2001-2002		2003-2004		2003-2004	
	Māori	Non-Māori	Māori	Non-Māori	Māori	Non-Māori
Female	628.2 (480.6-807.0)	469.7 (437.4-503.8)	726.7 (575.3-905.7)	389.8 (361.2-420.1)	445.7 (424.6-467.6)	277.6 (273.4-281.8)
Male	1168.7 (957.7-1412.2)	944.7 (893.0-998.6)	571.1 (437.8-732.1)	755.0 (709.7-802.4)	605.3 (579.7-631.8)	597.3 (590.3-604.4)
Total	883.3 (754.7-1027.4)	695.1 (665.2-726.0)	651.1 (548.1-767.9)	563.8 (537.4-591.0)	520.0 (503.6-536.9)	429.9 (425.9-433.9)

Source: New Zealand Health Information Service

In Taranaki, the rate of ischaemic heart disease hospitalisation for Māori females was significantly higher than non-Māori females in 2003-2004. However, the rate for Māori males was non-significantly lower than for non-Māori males.

With the exception of Māori males, the ischaemic heart disease hospitalisation rates in Taranaki were significantly higher than in New Zealand.

**Table 29: Ischaemic heart disease mortality**

Indicator 24: Ischaemic heart disease mortality, age-standardised rate per 100,000						
	Taranaki DHB				New Zealand	
	2000-2001		2002-2003		2002-2003	
	Māori	Non-Māori	Māori	Non-Māori	Māori	Non-Māori
Female	124.9 (59.9-229.7)	78.1 (68.0-89.3)	201.1 (109.9-337.4)	81.6 (71.2-93.0)	127.8 (115.0-141.7)	62.7 (61.1-64.4)
Male	257.1 (157.0-397.1)	133.4 (115.7-152.9)	341.9 (223.3-501.0)	145.8 (127.5-166.1)	229.0 (211.1-248.0)	117.7 (114.7-120.8)
Total	183.9 (124.1-262.5)	103.5 (93.8-113.9)	264.5 (189.0-360.2)	109.8 (99.9-120.5)	173.9 (163.1-185.2)	87.5 (85.9-89.1)

Source: New Zealand Health Information Service

The rates of ischaemic heart disease mortality were significantly higher among Māori than non-Māori in 2002-2003 in Taranaki. The rates for males were higher than females, although these differences were not statistically significant for Māori in Taranaki.

Non-Māori of both sexes and the Māori total in Taranaki had significantly higher rates of ischaemic heart disease mortality than their counterparts in New Zealand.

**Table 30: Stroke hospitalisation**

Indicator 25: Stroke hospitalisation, age-standardised rate per 100,000						
	Taranaki DHB				New Zealand	
	2001-2002		2003-2004		2003-2004	
	Māori	Non-Māori	Māori	Non-Māori	Māori	Non-Māori
Female	105.1 (54.3-183.6)	125.1 (108.9-142.9)	194.3 (124.5-289.1)	110.1 (95.1-126.8)	191.0 (177.3-205.4)	100.5 (98.1-103.0)
Male	207.0 (124.6-323.2)	142.9 (123.4-164.6)	234.3 (146.9-354.8)	100.6 (85.3-118.0)	173.2 (158.7-188.6)	130.6 (127.4-133.9)
Total	154.2 (104.8-218.9)	133.6 (120.9-147.2)	212.3 (155.5-283.2)	104.5 (93.8-116.2)	181.6 (171.6-191.9)	114.4 (112.4-116.4)

Source: New Zealand Health Information Service

The stroke hospitalisation rate was significantly higher for Māori males and marginally significantly higher for Māori females than their non-Māori counterparts in 2003-2004 in Taranaki.

There was a significantly lower rate of stroke hospitalisation among non-Māori males in Taranaki than those in New Zealand.



**Table 31: Stroke mortality**

Indicator 26: Stroke mortality, age-standardised rate per 100,000						
	Taranaki DHB				New Zealand	
	2000-2001		2002-2003		2002-2003	
	Māori	Non-Māori	Māori	Non-Māori	Māori	Non-Māori
Female	-	40.0 (32.9-48.3)	-	31.7 (25.6-38.9)	50.0 (42.3-58.6)	37.3 (36.0-38.6)
Male	83.6 (27.1-195.1)	39.7 (30.3-51.1)	-	28.9 (21.3-38.3)	51.6 (42.7-61.8)	37.2 (35.5-38.9)
Total	59.9 (27.4-113.8)	40.7 (34.8-47.3)	32.8 (12.0-71.4)	30.8 (25.9-36.3)	50.0 (44.2-56.4)	37.7 (36.6-38.7)

Source: New Zealand Health Information Service

Note: "-" indicates that the count was less than 5 and therefore the rate was not calculated.

The rate of stroke mortality among Māori was similar to non-Māori in 2002-2003 in Taranaki.

The stroke mortality rate among the non-Māori total in Taranaki was significantly lower than their counterparts in New Zealand.

## 4. Cancer

**Table 32: Cancer prevalence, 15+ years**

Indicator 27: Cancer prevalence (self-reported), 15+ yrs, age-standardised rate per 100				
	Taranaki DHB 2002/03		New Zealand 2002/03	
	Māori	Non-Māori	Māori	Non-Māori
Female	7.3 (2.3, 12.2)	6.2 (4.6, 7.8)	8.1 (5.7, 10.5)	6.5 (5.7, 7.3)
Male	-	5.0 (3.6, 6.3)	3.1 (1.3, 5.0)	5.1 (4.4, 5.8)
Total	5.0 (2.0, 8.0)	5.6 (4.5, 6.7)	5.8 (4.3, 7.3)	5.8 (5.3, 6.3)

Source: 2002/03 New Zealand Health Survey

Note: "-" indicates that the count was less than 10 and therefore the rate was not calculated.

There was no difference in the self-reported cancer prevalence between Māori and non-Māori in Taranaki and between Taranaki and New Zealand.

**Table 33: All cancer registrations**

Indicator 28: All cancer registrations, age-standardised rate per 100,000						
	Taranaki DHB				New Zealand	
	2001-2002		2003-2004		2003-2004	
	Māori	Non-Māori	Māori	Non-Māori	Māori	Non-Māori
Female	281.9 (188.8- 404.8)	365.1 (334.4- 397.9)	292.5 (202.6- 408.8)	338.9 (309.9- 369.9)	352.2 (334.1- 371.0)	309.0 (304.2- 313.9)
Male	460.8 (327.7- 629.9)	452.0 (416.9- 489.3)	434.2 (311.6- 589.0)	407.8 (374.7- 442.9)	368.5 (347.8- 390.2)	390.3 (384.7- 396.1)
Total	363.2 (282.0- 460.4)	400.2 (377.2- 424.2)	358.0 (281.6- 448.7)	367.9 (346.1- 390.7)	356.7 (343.1- 370.7)	344.4 (340.8- 348.1)

Source: New Zealand Health Information Service

Both non-Māori and Māori males had higher rates of all cancer registration than their female counterparts in Taranaki. However, the difference was only statistically significant for non-Māori.

**Table 34: All cancer mortality**

Indicator 29: All cancer mortality, age-standardised rate per 100,000						
	Taranaki DHB				New Zealand	
	2000-2001		2002-2003		2002-2003	
	Māori	Non-Māori	Māori	Non-Māori	Māori	Non-Māori
Female	163.8 (93.7-266.1)	109.2 (94.5-125.6)	190.5 (117.9-291.1)	119.1 (103.7-136.2)	193.1 (178.9-208.0)	110.8 (108.2-113.6)
Male	329.5 (217.1-479.3)	173.2 (152.1-196.4)	279.9 (181.1-413.2)	164.9 (145.1-186.7)	252.2 (233.9-271.6)	157.2 (153.6-160.8)
Total	239.5 (173.4-322.7)	136.7 (124.3-150.1)	227.5 (166.5-303.4)	137.5 (125.3-150.6)	216.8 (205.5-228.5)	130.1 (128.0-132.3)

Source: New Zealand Health Information Service

Māori had a significantly higher rate of all cancer mortality than non-Māori in 2002-2003 in Taranaki. Again, the mortality rates for both non-Māori and Māori males were higher than their female counterparts in Taranaki, but the difference was only statistically significant for non-Māori.

**Table 35: Lung cancer registration**

Indicator 30: Lung cancer registration, age-standardised rate per 100,000						
	Taranaki DHB				New Zealand	
	2001-2002		2003-2004		2003-2004	
	Māori	Non-Māori	Māori	Non-Māori	Māori	Non-Māori
Female	43.2 (14.0-100.9)	23.9 (17.1-32.4)	98.7 (45.1-187.4)	20.3 (14.1-28.2)	82.9 (73.8-92.9)	22.5 (21.2-23.8)
Male	91.4 (39.5-180.1)	36.4 (27.1-47.9)	115.5 (52.8-219.2)	36.7 (27.7-47.8)	81.0 (71.2-91.7)	37.7 (36-39.4)
Total	66.2 (35.3-113.2)	29.4 (23.7-36.1)	105.5 (62.5-166.8)	27.8 (22.3-34.1)	81.5 (74.8-88.7)	29.1 (28.1-30.2)

Source: New Zealand Health Information Service

Māori had significantly higher rates of lung cancer registration than non-Māori in 2003-2004 in Taranaki.

**Table 36: Lung cancer mortality**

Indicator 31: Lung cancer mortality, age-standardised rate per 100,000						
	Taranaki DHB				New Zealand	
	2000-2001		2002-2003		2002-2003	
	Māori	Non-Māori	Māori	Non-Māori	Māori	Non-Māori
Female	70.4 (28.3-145.1)	10.9 (6.3-17.4)	67.0 (27.0-138.1)	19.8 (13.9-27.2)	63.1 (55.0-72.1)	17.4 (16.3-18.5)
Male	110.9 (50.7-210.5)	27.9 (19.8-38.1)	91.3 (39.4-179.9)	32.6 (24.0-43.2)	77.2 (67.0-88.4)	30.7 (29.2-32.3)
Total	87.7 (50.1-142.4)	18.3 (13.8-23.8)	77.2 (43.2-127.3)	25.8 (20.6-31.9)	68.4 (62.0-75.2)	23.1 (22.2-24.1)

Source: New Zealand Health Information Service

As for lung cancer registration, Māori males and females had higher rates of lung cancer mortality than non-Māori in Taranaki, although these differences were marginally statistically significant. The rates for Māori were around 3 times higher than for their non-Māori counterparts in 2002-2003.

**Table 37: Breast screening coverage rate, 50-64 years**

Indicator 32:: Breast screening coverage, age-specific rate per 100		
	Taranaki DHB 2000-2001	New Zealand 2000-2001
Female	66.1	60.4

Source: National Screening Unit

The breast screening coverage rates for women aged 50-64 years were similar between Taranaki and New Zealand.

**Table 38: Breast cancer registration**

Indicator 33: Breast cancer registration, age-standardised rate per 100,000						
	Taranaki DHB				New Zealand	
	2001-2002		2003-2004		2003-2004	
	Māori	Non-Māori	Māori	Non-Māori	Māori	Non-Māori
Female	90.4 (41.3-171.6)	97.5 (81.4-115.7)	62.1 (28.4-117.9)	85.4 (70.6-102.3)	93.5 (84.7-103.0)	87.6 (85.0-90.3)

Source: New Zealand Health Information Service

The breast cancer registration rate among non-Māori females was higher than Māori females in 2003-2004 in Taranaki, but this difference was not statistically significant.

**Table 39: Breast cancer mortality**

Indicator 34: Breast cancer mortality, age-standardised rate per 100,000						
	Taranaki DHB				New Zealand	
	2000-2001		2002-2003		2002-2003	
	Māori	Non-Māori	Māori	Non-Māori	Māori	Non-Māori
Female	-	23.7 (16.6-32.8)	45.0 (14.6-105.0)	21.7 (15.4-29.8)	35.7 (30.0-42.2)	20.9 (19.7-22.2)

Source: New Zealand Health Information Service

Note: "-" indicates that the count was less than 5 and therefore the rate was not calculated.

Māori women had a higher rate of breast cancer mortality than non-Māori in 2002-2003, but this difference was not statistically significant in Taranaki.

**Table 40: Cervical screening coverage rate, 20-69 years**

Indicator 35: Cervical screening coverage, age-standardised rate per 100		
	Taranaki DHB 2001-2003	New Zealand 2001-2003
Female	79.3	72.1

Source: National Screening Unit

The rates of cervical screening coverage for women aged 20-69 years were similar between Taranaki and New Zealand.

### Cervical cancer registration

Indicator 36: Cervical cancer registration

As the number of cervical cancer registration was very low in Taranaki, rates have not been presented. Three women in 2001-2002 and eight in 2003-2004 were registered with cervical cancer in Taranaki. The rates for Māori and non-Māori females in New Zealand during 2003-2004 were 11.8 (8.9-15.3) and 6.6 (5.8-7.4) per 100,000 respectively. (Source: New Zealand Health Information Service).

### Cervical cancer mortality

Indicator 37: Cervical cancer mortality

Again, rates have not been presented for this indicator due to the small number of cervical cancer mortality in Taranaki. Two deaths from cervical cancer were recorded during each of two periods in 2000-2001 and 2002-2003 in the Taranaki region. The rates among Māori and non-Māori females in New Zealand during 2002-2003 were 4.7 (2.9-7.3) and 1.9 (1.6-2.3) per 100,000 respectively. (Source: New Zealand Health Information Service).

**Table 41: Prostate cancer registration**

Indicator 38: Prostate cancer registration, age-standardised rate per 100,000						
	Taranaki DHB				New Zealand	
	2001-2002		2003-2004		2003-2004	
	Māori	Non-Māori	Māori	Non-Māori	Māori	Non-Māori
Male	119.7 (51.7-235.9)	121.9 (104.4-141.4)	115.7 (52.9-219.7)	95.8 (80.7-112.9)	86.6 (75.6-98.7)	109.0 (106.0-112.0)

Source: New Zealand Health Information Service

There was no significant difference in the rate of prostate cancer registration between Māori and non-Māori in Taranaki; neither was there any significance between Taranaki and New Zealand.

**Table 42: Prostate cancer mortality**

Indicator 39: Prostate cancer mortality, age-standardised rate per 100,000						
	Taranaki DHB				New Zealand	
	2000-2001		2002-2003		2002-2003	
	Māori	Non-Māori	Māori	Non-Māori	Māori	Non-Māori
Male	-	25.1 (17.9-34.2)	-	24.6 (17.7-33.4)	27.9 (21.0-36.3)	20.9 (19.7-22.2)

Source: New Zealand Health Information Service

Note: "-" indicates that the count was less than 5 and therefore the rate was not calculated.

Based on the available data, there was no difference in the prostate cancer mortality rate within Taranaki or between Taranaki and New Zealand.

**Table 43: Colorectal cancer registration**

Indicator 40: Colorectal cancer registration, age-standardised rate per 100,000						
	Taranaki DHB				New Zealand	
	2001-2002		2003-2004		2003-2004	
	Māori	Non-Māori	Māori	Non-Māori	Māori	Non-Māori
Female	-	52.4 (41.8-64.9)	-	50.9 (40.8-62.7)	22.8 (18.2-28.2)	45.1 (43.4-46.9)
Male	-	68.5 (55.5-83.5)	42.2 (13.7-98.4)	65.8 (53.2-80.4)	29.6 (24.0-36.1)	55.0 (53.0-57.2)
Total	41.0 (17.7-80.7)	59.6 (51.3-69.0)	35.4 (15.3-69.8)	57.3 (49.3-66.2)	26.1 (22.4-30.2)	49.7 (48.3-51.0)

Source: New Zealand Health Information Service

Note: "-" indicates that the count was less than 5 and therefore the rate was not calculated.

The rates of colorectal cancer registration were higher among non-Māori than Māori. Non-Māori males had higher rates than non-Māori females. However, none of these differences were statistically significant in Taranaki.

**Table 44: Colorectal cancer mortality**

Indicator 41: Colorectal cancer mortality, age-standardised rate per 100,000						
	Taranaki DHB				New Zealand	
	2000-2001		2002-2003		2002-2003	
	Māori	Non-Māori	Māori	Non-Māori	Māori	Non-Māori
Female	-	14.9 (10.2-21.0)	-	15.6 (10.4-22.4)	10.9 (7.6-15.2)	16.7 (15.7-17.8)
Male	-	27.4 (19.5-37.4)	-	23.2 (16.2-32.1)	23.7 (18.4-30.1)	22.4 (21.0-23.8)
Total	33.4 (12.2-72.6)	20.7 (16.2-26.1)	-	18.8 (14.5-23.9)	16.7 (13.7-20.3)	19.3 (18.4-20.1)

Source: New Zealand Health Information Service

Note: "-" indicates that the count was less than 5 and therefore the rate was not calculated.

Non-Māori males had higher rates of colorectal cancer mortality than non-Māori females. These differences were nevertheless not statistically significant in Taranaki.

**Table 45: Melanoma registration**

Indicator 42: Melanoma registration, age-standardised rate per 100,000						
	Taranaki DHB				New Zealand	
	2001-2002		2003-2004		2003-2004	
	Māori	Non-Māori	Māori	Non-Māori	Māori	Non-Māori
Female	-	70.4 (56.5-86.7)	-	66.2 (52.9-81.7)	4.8 (2.9-7.4)	39.0 (37.2-40.8)
Male	-	71.1 (56.8-87.9)	-	50.3 (38.7-64.2)	2.9 (1.5-5)	42.6 (40.7-44.5)
Total	-	70.1 (60.1-81.4)	-	58.4 (49.4-68.5)	4.0 (2.7-5.6)	40.4 (39.1-41.7)

Source: New Zealand Health Information Service

Note: "-" indicates that the count was less than 5 and therefore the rate was not calculated.

In both time periods, fewer than five Māori were registered with melanoma in Taranaki.

There were higher rates of melanoma registration among non-Māori in Taranaki than those in New Zealand, although this difference was only statistically significant for non-Māori females.

**Table 46: Melanoma mortality**

Indicator 43: Melanoma mortality, age-standardised rate per 100,000						
	Taranaki DHB				New Zealand	
	2000-2001		2002-2003		2002-2003	
	Māori	Non-Māori	Māori	Non-Māori	Māori	Non-Māori
Female	-	4.0 (1.5-8.7)	-	5.0 (2.1-9.8)	-	3.5 (3.0-4.0)
Male	-	8.1 (4.0-14.5)	-	8.9 (4.6-15.6)	4.1 (1.8-8.0)	6.6 (5.9-7.4)
Total	-	5.9 (3.4-9.5)	-	6.7 (4.1-10.3)	1.9 (0.9-3.4)	4.9 (4.4-5.3)

Source: New Zealand Health Information Service

Note: "-" indicates that the count was less than 5 and therefore the rate was not calculated.

As for melanoma registration, fewer than five Māori died from melanoma in both periods in Taranaki.

## 5. Respiratory Disease

**Table 47: Asthma prevalence, 15-45 years**

Indicator 44: Asthma prevalence (self-reported), 15-45 yrs, age-standardised rate per 100				
	Taranaki DHB 2002/03		New Zealand 2002/03	
	Māori	Non-Māori	Māori	Non-Māori
Female	23.6 (14.9, 32.3)	27.5 (22.2, 32.8)	27.2 (22.7, 31.6)	23.9 (21.5, 26.3)
Male	20.1 (8.8, 31.4)	19.9 (14.3, 25.5)	21.6 (15.9, 27.3)	19.3 (15.7, 23.0)
Total	21.9 (14.7, 29.2)	23.8 (19.9, 27.7)	24.6 (21.1, 28.1)	21.7 (19.6, 23.8)

Source: 2002/03 New Zealand Health Survey

The self-reported asthma prevalence was similar between Māori and non-Māori in Taranaki and between Taranaki and New Zealand.

**Table 48: Chronic obstructive pulmonary disease (COPD) prevalence, 45+ years**

Indicator 45: COPD prevalence (self-reported), 45+ yrs, age-standardised rate per 100				
	Taranaki DHB 2002/03		New Zealand 2002/03	
	Māori	Non-Māori	Māori	Non-Māori
Female	4.7 (1.1, 8.3)	4.8 (3.0, 6.6)	6.3 (3.4, 9.1)	6.0 (4.6, 7.3)
Male	-	4.3 (1.5, 7.1)	6.0 (1.3, 10.8)	4.6 (3.3, 6.0)
Total	3.5 (1.2, 5.8)	4.6 (3.0, 6.2)	6.2 (3.4, 8.9)	5.3 (4.3, 6.4)

Source: 2002/03 New Zealand Health Survey

Note: “-“ indicates that the count was less than 10 and therefore the rate was not calculated.

The self-reported prevalences of chronic obstructive pulmonary disease (COPD) were similar between Māori and non-Māori in Taranaki. There was no significant difference in the rates between Taranaki and New Zealand.

**Table 49: Chronic obstructive pulmonary disease (COPD) hospitalisation**

Indicator 46:: COPD hospitalisation, age-standardised rate per 100,000						
	Taranaki DHB				New Zealand	
	2001-2002		2003-2004		2003-2004	
	Māori	Non-Māori	Māori	Non-Māori	Māori	Non-Māori
Female	706.4 (542.8- 903.8)	162.6 (143.2- 183.9)	558.8 (413.4- 738.8)	154.9 (136.8- 174.7)	510.3 (487.1- 534.3)	135.1 (132.1- 138.1)
Male	441.0 (308.9- 610.6)	182.1 (161.2- 204.9)	491.9 (349.8- 672.5)	226.2 (203.3- 251.0)	417.7 (394.6- 441.9)	168.1 (164.5- 171.7)
Total	578.1 (469.8- 703.8)	167.9 (153.9- 182.9)	529.0 (424.2- 651.7)	184.3 (170.1- 199.4)	466.3 (449.9- 483.2)	148.0 (145.7- 150.3)

Source: New Zealand Health Information Service



Māori had significantly higher rates of COPD hospitalisation than their non-Māori counterparts in Taranaki. In 2003-2004, the rate for Māori females was 3.5 times higher and for Māori males 2 times higher than their non-Māori counterparts.

The COPD hospitalisation rate was significantly higher for non-Māori males, and marginally significantly higher for non-Māori females, in Taranaki than in New Zealand.

**Table 50: Chronic obstructive pulmonary disease (COPD) mortality**

Indicator 47: COPD mortality, age-standardised rate per 100,000						
	Taranaki DHB				New Zealand	
	2000-2001		2002-2003		2002-2003	
	Māori	Non-Māori	Māori	Non-Māori	Māori	Non-Māori
Female	-	19.2 (13.9-25.8)	72.0 (23.4-168.0)	16.0 (11.5-21.7)	54.4 (46.4-63.4)	17.7 (16.8-18.7)
Male	66.7 (21.6-155.6)	32.2 (24.0-42.2)	86.2 (28.0-201.2)	30.8 (23.0-40.4)	67.3 (56.8-79.2)	31.9 (30.4-33.5)
Total	47.0 (20.3-92.7)	23.3 (18.9-28.5)	79.7 (38.2-146.6)	21.8 (17.6-26.8)	58.7 (52.3-65.6)	23.1 (22.3-23.9)

Source: New Zealand Health Information Service

Note: "-" indicates that the count was less than 10 and therefore the rate was not calculated.

Māori in 2002-2003 had higher rates of COPD mortality than their non-Māori counterparts in Taranaki, although this difference was not statistically significant for Māori males. The rate for Māori females was more than 4 times higher than non-Māori females in Taranaki.

## 6. Diabetes

**Table 51: Diabetes prevalence, 15+ years**

Indicator 48: Diabetes prevalence (self-reported), 15+ yrs, age-standardised rate per 100				
	Taranaki DHB 2002/03		New Zealand 2002/03	
	Māori	Non-Māori	Māori	Non-Māori
Female	4.4 (1.1, 7.6)	2.6 (1.7, 3.4)	6.7 (4.7, 8.6)	3.3 (2.7, 4.0)
Male	11.1 (3.9, 18.3)	3.4 (2.0, 4.7)	9.5 (6.4, 12.6)	4.0 (3.2, 4.7)
Total	7.6 (3.8, 11.4)	3.0 (2.2, 3.8)	8.0 (6.3, 9.7)	3.6 (3.1, 4.1)

Source: 2002/03 New Zealand Health Survey

Māori had higher self-reported prevalences of diabetes than their non-Māori counterparts in Taranaki, although these differences were not statistically significant. The rate for Māori males was higher than Māori females. Again this difference was not significant.

**Table 52: Diabetes hospitalisation**

Indicator 49: Diabetes hospitalisation, age-standardised rate per 100,000						
	Taranaki DHB				New Zealand	
	2001-2002		2003-2004		2003-2004	
	Māori	Non-Māori	Māori	Non-Māori	Māori	Non-Māori
Female	384.2 (270.5- 529.6)	118.4 (101.1- 137.9)	507.8 (383.6- 659.4)	157.1 (137.1- 179.2)	302.1 (285.6- 319.4)	115.4 (112.3- 118.6)
Male	228.2 (144.6- 342.4)	135.6 (115.4- 158.2)	348.0 (248.7- 473.9)	127.1 (108.6- 147.9)	382.8 (362.8- 403.6)	137.9 (134.4- 141.5)
Total	306.4 (233.8- 394.4)	126.0 (112.7- 140.4)	429.9 (348.2- 525.0)	141.5 (127.8- 156.3)	339.1 (326.3- 352.4)	125.4 (123.1- 127.8)

Source: New Zealand Health Information Service

Māori diabetes hospitalisation rates were 3 times significantly higher than their non-Māori counterparts in 2003-2004 in Taranaki.

Both Māori and non-Māori females in Taranaki had significantly higher rates of diabetes hospitalisation than their counterparts in New Zealand.

**Table 53: Diabetes complications- renal failure with concurrent diabetes**

Indicator 50: Diabetes complications –renal failure with concurrent diabetes, age-standardised rate per 100,000						
	Taranaki DHB				New Zealand	
	2001-2002		2003-2004		2003-2004	
	Māori	Non-Māori	Māori	Non-Māori	Māori	Non-Māori
Female	40.6 (13.2-94.8)	7.9 (4.2-13.5)	169.3 (98.6-271.0)	14.8 (9.6-21.8)	57.0 (49.7-65.0)	7.5 (6.7-8.3)
Male	-	12.3 (7.2-19.8)	156.5 (89.4-254.1)	10.2 (5.8-16.6)	85.7 (76.3-95.9)	10.6 (9.7-11.6)
Total	39.0 (16.8-76.8)	9.8 (6.6-14.0)	163.0 (112.2-228.9)	12.5 (9.0-16.9)	70.2 (64.3-76.4)	8.9 (8.3-9.5)

Source: New Zealand Health Information Service

Note: "-" indicates that the count was less than 5 and therefore the rate was not calculated.

Among Māori females, the rate of renal failure with concurrent diabetes was 11 times higher and among Māori males, the rate was 15 times higher than among their non-Māori counterparts in Taranaki.

Except for non-Māori males, the rates of renal failure complication in Taranaki were higher than in New Zealand, although these differences were only statistically significant for Māori and non-Māori females.

**Table 54: Diabetes complications- lower limb amputation with concurrent diabetes**

Indicator 51: Diabetes complications –lower limb amputation with concurrent diabetes, age-standardised rate per 100,000						
	Taranaki DHB				New Zealand	
	2001-2002		2003-2004		2003-2004	
	Māori	Non-Māori	Māori	Non-Māori	Māori	Non-Māori
Female	-	5.7 (2.6-10.9)	-	4.7 (2.4-8.5)	23.0 (18.4-28.4)	4.1 (3.6-4.6)
Male	-	15.9 (9.7-24.6)	-	11.0 (6.2-18.2)	40.0 (33.4-47.5)	10.8 (9.9-11.8)
Total	-	10.7 (7.1-15.3)	-	7.9 (5.2-11.6)	30.8 (26.8-35.2)	7.2 (6.7-7.7)

Source: New Zealand Health Information Service

Note: "-" indicates that the count was less than 5 and therefore the rate was not calculated.

Fewer than five Māori had lower limb amputation with concurrent diabetes in both periods in Taranaki.

## 7. Mental Health and Addiction

**Table 55: Self-reported mental health status, 15+ years**

Indicator 52: Self-reported mental health status, mean SF-36 score, 15+ yrs, age-standardised				
	Taranaki DHB 2002/03		New Zealand 2002/03	
	Māori	Non-Māori	Māori	Non-Māori
Female	80.0 (77.2, 82.7)	83.0 (81.7, 84.2)	80.1 (78.7, 81.5)	81.8 (81.1, 82.5)
Male	85.4 (82.7, 88.1)	85.5 (84.6, 86.5)	84.1 (82.5, 85.6)	84.4 (83.8, 85.1)
Total	82.6 (80.8, 84.4)	84.2 (83.5, 84.9)	81.9 (80.9, 83.0)	83.1 (82.6, 83.5)

Source: 2002/03 New Zealand Health Survey

Note: SF-36 is a standardised questionnaire included in the 2002/03 New Zealand Health Survey for measuring self-reported physical and mental health status.

There was no difference in the mean score of self-reported mental health status between Māori and non-Māori aged 15+ years in Taranaki. However, both Māori and non-Māori males had significantly higher mean scores than their female counterparts.

The mean score of mental health status in the non-Māori total in Taranaki was significantly higher than those in New Zealand.

**Table 56: Serious mental disorder prevalence, 15+ years**

Indicator 53: Serious mental disorder prevalence (self-reported), 15+ yrs, age-standardised rate per 100				
	Taranaki DHB 2002/03		New Zealand 2002/03	
	Māori	Non-Māori	Māori	Non-Māori
Female	2.6 (0.7, 4.4)	2.5 (1.6, 3.5)	1.8 (1.0, 2.7)	3.3 (2.6, 4.1)
Male	-	1.8 (0.7, 3.0)	2.2 (0.6, 3.7)	2.1 (1.3, 2.8)
Total	1.5 (0.5, 2.5)	2.2 (1.4, 3.0)	2.0 (1.2, 2.8)	2.7 (2.2, 3.2)

Source: 2002/03 New Zealand Health Survey

Note: "-" indicates that the count was less than 10 and therefore the rate was not calculated.

There was no difference in the self-reported serious mental disorders prevalence between Māori and non-Māori in Taranaki and between Taranaki and New Zealand.

**Table 57: Prevalence of potential hazardous drinking, 15+ years**

Indicator 54: Prevalence of potential hazard drinking (self-reported), 15+ yrs, age-standardised rate per 100				
	Taranaki DHB 2002/03		New Zealand 2002/03	
	Māori	Non-Māori	Māori	Non-Māori
Female	21.6 (15.0, 28.3)	12.5 (9.6, 15.3)	18.4 (14.6, 22.2)	10.5 (9.2, 11.9)
Male	37.6 (28.7, 46.4)	30.9 (26.2, 35.6)	34.5 (29.8, 39.2)	26.2 (23.7, 28.7)
Total	29.3 (23.7, 34.9)	21.4 (18.4, 24.3)	25.9 (22.7, 29.1)	18.1 (16.7, 19.5)

Source: 2002/03 New Zealand Health Survey

The rates of self-reported hazard drinking were higher among Māori than their non-Māori counterparts in Taranaki, although not statistically significant. Both Māori and non-Māori males had significantly higher rates than their female counterparts.

**Table 58: Prevalence of marijuana used in last 12 months, 15+ years**

Indicator 55: Prevalence of marijuana used in last 12 months (self-reported), 15+ yrs, age-standardised rate per 100				
	Taranaki DHB 2002/03		New Zealand 2002/03	
	Māori	Non-Māori	Māori	Non-Māori
Female	22.6 (15.9, 29.3)	11.0 (8.4, 13.7)	22.5 (18.8, 26.2)	11.2 (9.7, 12.8)
Male	29.2 (21.4, 37.1)	20.9 (16.7, 25.2)	32.9 (28.5, 37.3)	18.9 (17.0, 20.8)
Total	25.8 (20.2, 31.4)	15.8 (13.4, 18.2)	27.3 (24.3, 30.4)	14.9 (13.7, 16.2)

Source: 2002/03 New Zealand Health Survey

Both Māori females and males aged 15+ years had higher rates of self-reported marijuana use in the past year than their non-Māori counterparts in Taranaki. This difference was significant for Māori females. The rate among non-Māori males was significantly higher than non-Māori females.

**Table 59: Prevalence of marijuana used ever, 15+ years**

Indicator 56: Prevalence of marijuana used ever (self-reported), 15+ yrs, age-standardised rate per 100				
	Taranaki DHB 2002/03		New Zealand 2002/03	
	Māori	Non-Māori	Māori	Non-Māori
Female	48.5 (39.1, 57.9)	36.1 (32.8, 39.3)	53.4 (49.1, 57.7)	34.8 (33.0, 36.7)
Male	60.9 (52.9, 68.9)	44.9 (40.3, 49.6)	62.1 (58.0, 66.2)	44.7 (42.2, 47.1)
Total	54.5 (47.9, 61.1)	40.4 (37.6, 43.2)	57.4 (54.5, 60.4)	39.6 (38.0, 41.2)

Source: 2002/03 New Zealand Health Survey

The prevalences of self-reported ever using marijuana were significantly higher among Māori both sexes (though marginally for Māori females) than their non-Māori counterparts in Taranaki. The rate for both Māori and non-Māori males were higher than their female counterparts, although the difference was statistically significant for non-Māori in Taranaki.

**Table 60: Self-harm hospitalisation, 5+ years**

Indicator 57: Self-harm hospitalisation, 5+ yrs, age-standardised rate per 100,000						
	Taranaki DHB				New Zealand	
	2001-2002		2003-2004		2003-2004	
	Māori	Non-Māori	Māori	Non-Māori	Māori	Non-Māori
Female	184.1 (118.0-273.9)	130.2 (106.2-157.9)	130.0 (75.7-208.1)	173.9 (145.1-206.8)	158.1 (147.9-168.8)	196.4 (191.4-201.5)
Male	106.9 (58.5-179.4)	75.0 (56.0-98.3)	149.6 (92.6-228.7)	91.3 (69.9-117.3)	98.3 (90.0-107.1)	84.1 (80.9-87.5)
Total	144.0 (101.9-197.6)	103.2 (87.6-120.8)	140.3 (99.3-192.5)	132.9 (114.6-153.3)	128.8 (122.1-135.7)	140.2 (137.2-143.2)

Source: New Zealand Health Information Service

Māori males aged 5+ years had a higher rate of self-harm hospitalisation than non-Māori males in Taranaki, although not significantly. The rate among non-Māori females was significantly higher than non-Māori males.

**Table 61: Suicide mortality, 5+ years**

Indicator 58: Suicide mortality, 5+ yrs, age-standardised rate per 100,000						
	Taranaki DHB				New Zealand	
	2000-2001		2002-2003		2002-2003	
	Māori	Non-Māori	Māori	Non-Māori	Māori	Non-Māori
Female	-	8.9 (3.6-18.3)	-	-	6.8 (4.8-9.3)	6.3 (5.5-7.2)
Male	-	15.6 (8.3-26.7)	41.4 (13.4-96.6)	14.1 (6.8-25.9)	24.0 (19.9-28.6)	18.2 (16.7-19.7)
Total	-	12.2 (7.4-18.8)	20.4 (6.6-47.5)	7.7 (4.0-13.4)	15.1 (12.8-17.6)	12.1 (11.3-13.0)

Source: New Zealand Health Information Service

Māori males and the Māori total had higher rates of suicide mortality than their non-Māori counterparts in Taranaki in 2002-2003. However, these differences were not statistically significant.

## 8. Risk and protective factors

**Table 62: Current smoker, 15+ years**

Indicator 59: Tobacco smoking (self-reported), 15+ yrs, age-standardised rate per 100				
	Taranaki DHB 2002/03		New Zealand 2002/03	
	Māori	Non-Māori	Māori	Non-Māori
Female	46.7 (36.5, 56.8)	18.5 (15.5, 21.5)	50.9 (46.7, 55.2)	19.2 (17.7, 20.8)
Male	41.8 (31.5, 52.2)	24.7 (20.0, 29.4)	42.9 (37.8, 47.9)	21.6 (19.6, 23.7)
Total	44.3 (36.8, 51.8)	21.5 (18.8, 24.3)	47.2 (43.8, 50.5)	20.4 (19.0, 21.7)

Source: 2002/03 New Zealand Health Survey

The rates of current smokers (self-reported) among Māori both sexes were significantly higher than their non-Māori counterparts in Taranaki. At ages 15+ years, more than two in five Māori were current smokers compared to one in five of non-Māori.

**Table 63: Overweight or obesity, 15+ years**

Indicator 60: Overweight or obesity (self-reported), 15+ yrs, age-standardised rate per 100				
	Taranaki DHB 2002/03		New Zealand 2002/03	
	Māori	Non-Māori	Māori	Non-Māori
Female	63.2 (55.2, 71.2)	48.7 (44.7, 52.6)	61.2 (56.9, 65.5)	47.0 (44.7, 49.2)
Male	63.3 (52.7, 73.8)	62.0 (57.8, 66.2)	67.0 (62.3, 71.7)	58.8 (56.5, 61.2)
Total	63.2 (56.4, 70.0)	55.3 (52.4, 58.1)	64.1 (60.9, 67.2)	52.9 (51.2, 54.5)

Source: 2002/03 New Zealand Health Survey

While the self-reported rate of overweight or obese was similar between Māori and non-Māori males, Māori females had a significant higher rate than non-Māori females in Taranaki. About three fifths of Māori females aged 15+ years were overweight or obese, compared to less than half of non-Māori females.

**Table 64: Physically active, 15+ years**

Indicator 61: Physically active (self-reported), 15+ yrs, age-standardised rate per 100				
	Taranaki DHB 2002/03		New Zealand 2002/03	
	Māori	Non-Māori	Māori	Non-Māori
Female	65.5 (58.4, 72.5)	74.7 (71.2, 78.1)	70.7 (65.7, 75.7)	69.8 (67.6, 72.0)
Male	85.1 (78.0, 92.2)	76.4 (72.6, 80.2)	79.7 (75.4, 84.0)	78.2 (76.3, 80.2)
Total	74.9 (69.2, 80.7)	75.5 (72.7, 78.3)	74.9 (71.1, 78.7)	73.9 (72.3, 75.5)

Source: 2002/03 New Zealand Health Survey

Note: Physically active is defined as at least 2.5 hours of physical activity in the last week.

Maori males were more likely to report taking part in at least 2.5 hours physical activity during the last week than non-Maori males, while Maori females were less likely to report partaking in the physical exercise than non-Maori females in Taranaki. However, these differences were not statistically significant.

**Table 65: Regularly physically active, 15+ years**

Indicator 62: Regularly physically active (self-reported), 15+ yrs, age-standardised rate per 100				
	Taranaki DHB 2002/03		New Zealand 2002/03	
	Māori	Non-Māori	Māori	Non-Māori
Female	43.9 (35.4, 52.5)	52.8 (47.9, 57.7)	51.2 (46.9, 55.6)	48.2 (46.0, 50.4)
Male	66.1 (56.7, 75.5)	56.0 (50.8, 61.2)	59.7 (54.7, 64.8)	56.3 (53.9, 58.7)
Total	54.6 (47.9, 61.4)	54.3 (50.5, 58.2)	55.2 (51.5, 58.8)	52.1 (50.5, 53.8)

Source: 2002/03 New Zealand Health Survey

Note: Regularly physically active is defined as at least 2.5 hours of physical activity in the last week, with exercise accumulated on one or more days of the week.

As for the physically active, Māori males were more likely to report being regularly physically active than their non-Māori counterpart, the reverse was true for Māori females in Taranaki. Again, these differences were not statistically significant.

**Table 66: 3+ servings of vegetables per day, 15+ years**

Indicator 63: 3+ servings of vegetables per day (self-reported), 15+ yrs, age-standardised rate per 100				
	Taranaki DHB 2002/03		New Zealand 2002/03	
	Māori	Non-Māori	Māori	Non-Māori
Female	71.7 (65.8, 77.6)	78.8 (75.1, 82.5)	67.6 (63.0, 72.2)	71.5 (69.4, 73.7)
Male	72.5 (65.1, 79.8)	69.0 (63.8, 74.1)	63.4 (58.3, 68.5)	63.3 (60.6, 66.0)
Total	72.1 (67.2, 77.0)	74.0 (70.9, 77.1)	65.6 (62.0, 69.2)	67.6 (65.6, 69.5)

Source: 2002/03 New Zealand Health Survey

A similar proportion of Māori and non-Māori aged 15+ years reported consuming the recommended 3+ servings of vegetables per day in Taranaki.

There were higher prevalences of self-reported eating 3+ servings of vegetables daily among non-Māori and Māori in Taranaki than in New Zealand. However, this difference was statistically significant for non-Māori.



**Table 67: 2+ servings of fruit per day, 15+ years**

Indicator 64: 2+ servings of fruit per day (self-reported), 15+ yrs, age-standardised rate per 100				
	Taranaki DHB 2002/03		New Zealand 2002/03	
	Māori	Non-Māori	Māori	Non-Māori
Female	51.7 (42.9, 60.5)	61.3 (57.4, 65.2)	54.6 (50.3, 58.8)	64.8 (62.7, 66.8)
Male	38.0 (28.1, 48.0)	39.7 (34.7, 44.6)	36.8 (31.2, 42.5)	44.1 (41.6, 46.6)
Total	45.1 (38.3, 51.9)	50.8 (47.6, 54.0)	46.3 (42.9, 49.7)	54.8 (53.2, 56.4)

Source: 2002/03 New Zealand Health Survey

Again, there was no noticeable difference in the rate of reported consuming 2+ servings of fruit daily among Māori and non-Māori in Taranaki. Only about half of both Māori and non-Māori reported consuming the recommended servings of fruit.

**Table 68: Ever been told having high blood pressure, 15+ years**

Indicator 65: Ever been told having high blood pressure (self-reported), 15+ yrs, age-standardised rate per 100				
	Taranaki DHB 2002/03		New Zealand 2002/03	
	Māori	Non-Māori	Māori	Non-Māori
Female	20.6 (14.8, 26.5)	20.6 (17.7, 23.5)	23.9 (20.6, 27.3)	18.7 (17.3, 20.0)
Male	21.4 (13.3, 29.5)	18.2 (15.5, 20.8)	23.7 (19.6, 27.8)	17.3 (16.1, 18.6)
Total	21.0 (16.0, 26.0)	19.4 (17.6, 21.2)	23.8 (21.2, 26.5)	18.0 (17.2, 18.9)

Source: 2002/03 New Zealand Health Survey

There was no difference in the rate of having self-reported high blood pressure between Māori and non-Māori in Taranaki and between Taranaki and New Zealand.

**Table 69: Ever been told having high blood cholesterol, 15+ years**

Indicator 66: Ever been told having high blood cholesterol (self-reported), 15+ yrs, age-standardised rate per 100				
	Taranaki DHB 2002/03		New Zealand 2002/03	
	Māori	Non-Māori	Māori	Non-Māori
Female	13.3 (8.1, 18.6)	13.6 (11.5, 15.7)	12.0 (9.7, 14.3)	13.0 (12.0, 14.0)
Male	15.2 (8.2, 22.2)	15.0 (12.7, 17.4)	15.9 (12.0, 19.7)	14.3 (13.2, 15.4)
Total	14.2 (9.9, 18.5)	14.3 (12.8, 15.8)	13.8 (11.7, 15.9)	13.6 (12.9, 14.4)

Source: 2002/03 New Zealand Health Survey

Māori of both sexes had similar rates of having self-reported high blood cholesterol to their non-Māori counterparts in Taranaki. The rates in Taranaki were also similar to in New Zealand.

## References

Taranaki District Health Board. 2005. *Taranaki District Health Board District Strategy Plan 2005-2015*. New Plymouth. Taranaki DHB

Ministry of Health. 2005. *A Portrait of Health: Key Results of the 2002/03 New Zealand Health Survey*. Wellington. Ministry of Health

Ministry of Health 2006. *An Indication of New Zealander's Health*. Wellington. Ministry of Health