# Counties Manukau DHB Health Needs Assessment

September 2008

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Prepared by the Health & Disability Intelligence Unit, Health & Disability Systems Strategy Directorate, Ministry of Health. Chapter 1 has been modified by CMDHB to change the usually resident population (UR) figures originally used to estimated resident (ER) to maintain consistency with other CMDHB documents, and to the rate calculations elsewhere in the document which all use ER populations.



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# Executive Summary

This health needs assessment identifies the unmet health and healthcare needs of the Counties Manukau DHB population.

It is anticipated that the information in this document will be used to assist in determining priorities (within the context of national health priorities and Health Targets) in the Counties Manukau DHB planning process, and ultimately achieve health gain for the Counties Manukau DHB population.

## Demography and social determinants of health

The demographic structure and socioeconomic conditions of a population are major determinants of the health of the population.

At the last census there were 454,900 people living in the Counties Manukau DHB area, accounting for approximately 10.9% of the national population. Approximately half of the Counties Manukau DHB population was aged between 25 and 64. The proportion of the population aged 65 years or over was slightly lower than the national total. The Counties Manukau DHB population had a higher proportion of Pacific or Asian people compared with national figures and a lower proportion of European/Other.

The population in Counties Manukau DHB was projected to increase by a greater percentage than the national population by 2026 with the highest percentage increase occurring in the 65+ age group which is projected to increase by 131%. With regards ethnicity, the highest percentage increase was projected to occur within Pacific peoples and to a lesser extent, Māori.

A third of the population of Counties Manukau DHB live in areas with high NZDep2006 scores which are associated with poorer health outcomes.

## Health status and service utilisation

### Nutrition, physical activity and obesity

About half of the population in Counties Manukau DHB ate the recommended three or more servings of vegetables on average each day, a rate significantly lower than the national prevalence.

The proportion of people who were obese in Counties Manukau DHB was significantly higher than the proportion nationally. The proportions of Pacific people and Māori who were obese were significantly higher than the total proportion of obese people in Counties Manukau DHB.

Counties Manukau DHB rates were similar to total New Zealand rates for fruit consumption, physical activity, and in terms of the proportion of people who were overweight.

### Diabetes

Self-reported diabetes prevalence was nearly 8% of adults in Counties Manukau DHB; this was significantly higher than the national rate.

The diabetes hospitalisation rate in Counties Manukau DHB was also significantly higher than the national rate. Pacific people had the highest rate of diabetes hospitalisations, followed by Māori, then Asian people with European/Other people having the lowest rate. The ethnic group differences were all significant. In addition, the rate of hospitalisations of people with renal failure due to diabetes for Counties Manukau DHB was significantly higher than the national rate.

In Counties Manukau DHB, a significantly higher proportion of adults had a diabetes check in the past 12 months than the proportion for all adults in New Zealand.

### Tobacco

The prevalence of current daily smokers in Counties Manukau DHB was similar to the national prevalence. Smoking rates among Māori (both male and female) and for Pacific males were significantly higher than the rates for the total Counties Manukau DHB population.

### Cancer

Both the cancer hospitalisation and mortality rates in Counties Manukau DHB did not differ significantly from the national rates. Males had significantly higher cancer hospitalisation and mortality rates than females. Mortality rates for Māori and Pacific people were significantly higher than the rate for European/Other people, which was significantly higher than the rate for Asian people.

Information about registrations, mortality and hospitalisations for selected types of cancer is presented in Chapter 4. Information about breast and cervical cancer screening is presented in Chapter 5.

### Chronic conditions

The hospitalisation rate for cardiovascular disease in Counties Manukau DHB was significantly higher than the national rate.

The hospitalisation rate for stroke in Counties Manukau DHB was significantly higher than the national rate. Māori and Pacific people had significantly higher rates than European/Other and Asian people.

In terms of respiratory disease, both the chronic obstructive pulmonary disease and the asthma hospitalisation rates for Counties Manukau DHB were significantly higher than the national rate. Māori and Pacific people had significantly higher rates than Asian and European/Other people. The Counties Manukau DHB child asthma hospitalisation rate was also significantly higher than the national rate.

### Avoidable mortality and hospitalisations

The avoidable mortality and hospitalisation rates for Counties Manukau DHB were significantly higher than the national rates. Males had significantly higher rates than females in Counties Manukau DHB.

Three of the leading causes of avoidable mortality in Counties Manukau DHB were the same as those for New Zealand: ischaemic heart disease, lung cancer and suicide and self-inflicted injuries. Diabetes and stroke were also among the top five leading causes in Counties Manukau DHB..

The leading causes of avoidable hospitalisation in Counties Manukau DHB were comparable to those nationally; respiratory infections, cellulitis, angina and dental conditions were in the top five. Asthma was also in the top five causes for Counties Manukau DHB.

### Secondary health care and elective services

Just under 5% of adults in Counties Manukau DHB presented at an emergency department in a public hospital in the past 12 months, which was significantly lower than the national total.

Counties Manukau DHB had a significantly lower rate of elective surgery discharges than the national rate. For publicly funded elective services for Counties Manukau DHB, 93% of patients assured of treatment within six months received their treatment within five months, of all patients receiving treatment in 2007/08 across all specialities, which was similar to the national percentage (92%).

### Infectious diseases and immunisation

While Counties Manukau DHB had significantly lower campylobacteriosis, cryptosporidiosis, giardiasis, and salmonellosis notification rates than all of New Zealand, rates for hepatitis B, rheumatic fever, and tuberculosis notifications were significantly higher than rates than all of New Zealand.

In the Counties Manukau district, more than two thirds of children in 2007 had received all specified immunisation vaccines by the age of two, which was similar to the national rate.

### Oral health

Māori, Pacific and Asian people were significantly less likely than the total Counties Manukau DHB population to have seen an oral health care worker (dentist etc) in the past 12 months.

In the Counties Manukau district, just over half of young people aged 13–18 years accessed free oral health services. Dental conditions were a leading cause of hospitalisation for children aged 5–14 years, for Counties Manukau DHB and for New Zealand as a whole.

### Mental health and addiction

Just over 11% of people aged 15 years and older reported a chronic mental health condition in Counties Manukau DHB, which was similar to the rate for New Zealand. The rate of access to mental health and addiction services for people living in the Counties Manukau district in 2007 was significantly lower than the rate for New Zealand as a whole, for people less than 65 years old.

Rates for suicide (all ages and for youth) and intentional self-harm did not differ significantly from New Zealand rates.

### Disability

Disability data were available at the regional level, not DHB level. The Northern region (Northland, Waitemata, Auckland, and Counties Manukau DHBs) had lower proportions of people with experience of disability than New Zealand as a whole.

### Child and youth health

Three of the leading causes of hospitalisations for children aged under five years in Counties Manukau DHB were the same as those for New Zealand. These were respiratory infections, gastroenteritis, and disorders related to length of gestation and fetal growth. In Counties Manukau DHB, asthma and dental conditions were also among the leading causes of hospitalisation for children aged under five years.

Counties Manukau DHB had three out of five of the same leading causes of hospitalisations for children aged 5–14 years as New Zealand as a whole. These included dental conditions, ear, nose and throat infections, and falls. The other leading causes for Counties Manukau DHB were cellulitis and exposure to inanimate mechanical forces.

Information about the health of children and youth for selected topics is presented in Chapter 4.

### Older people

Counties Manukau DHB had the same leading causes of mortality for older people as those nationally: ischaemic heart disease, stroke, lung cancer, chronic obstructive pulmonary disease and diabetes.

The leading causes of hospitalisations for older people in Counties Manukau DHB were the same as for New Zealand as a whole: ischaemic heart disease, chronic obstructive pulmonary disease, skin cancer, falls, and respiratory infections.

Information about the health of older people for selected topics is presented in Chapter 4.

**Primary care**

About 95% of adults in Counties Manukau were enrolled with a Primary Health Organisation, which was similar to the national rate. The coverage rate for Asian people was significantly lower than the other ethnic groups.

More than 80% of adults in Counties Manukau DHB saw a general practitioner (GP) in the past 12 months, which is similar to the New Zealand rate. In Counties Manukau DHB, about 5% of adults experienced unmet need for a GP service in the past 12 months. Unmet need for a general practitioner among Māori females was significantly higher than among all females in Counties Manukau DHB.

Overall, Counties Manukau DHB has a significantly lower prevalence rate of primary health care nurse visits in the past 12 months than the rate for all New Zealand.

# Introduction

## What is a health needs assessment?

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

A health needs assessment provides the foundation for the District Strategic Plans (DSP) that DHBs are required to write, or update, every three years.

## Why are DHBs responsible for conducting health needs assessments?

The New Zealand Public Health and Disability Act 2000, identifies that one of the functions of DHBs is:

> To regularly investigate, assess, and monitor the health status of its resident population, any factors that the DHB believes may adversely affect the health status of the population, and the needs of that population for services (Clause 23(1)(g)).

Health needs assessments are a way for DHBs to carry out this function, and provide them with evidence to underpin funding decisions, to achieve health gains for their population.

## Where do health needs assessments fit into the DHB planning cycle?

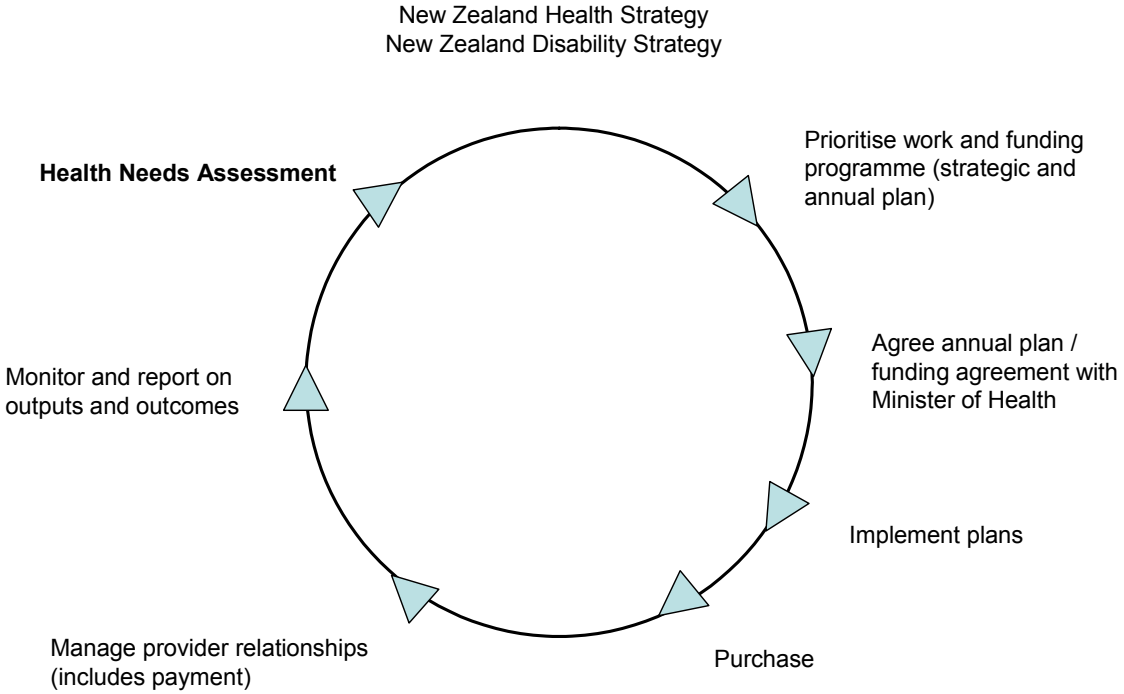
At a national level, priority areas for health and disability services, such as those described in the Minister's letter of expectations to DHBs, reflect the directions established by the two overarching strategies of the New Zealand health and disability sector: the New Zealand Health Strategy (NZHS) and the New Zealand Disability Strategy (NZDS). These strategies are supported by other more targeted strategies that provide guidance and advice in specific areas.

At a DHB level, priorities for the population of the DHB area are determined by the DHB, within the context of the national priorities. Health needs assessments provide DHBs with evidence to make decisions about the priorities for health and disability services for people living in their district.

DHBs compile DSPs using the evidence supplied in the health needs assessment. The District Annual Plans (DAP) are based on the DSP and outline how the DHB plans to provide health and disability services for people in their district over the relevant year.

The following diagram summarises how health needs assessments fit into the DHB planning cycle.

**Figure 1:** The DHB planning cycle (from Ministry of Health 2000)




## Purpose of this health needs assessment

Specifically, the purpose of this health needs assessment is to:

1. identify the unmet health and healthcare needs of the Counties Manukau DHB population
2. identify those unmet needs with potential to benefit from intervention
3. assist in determining priorities for DHB service planning, in the context of national health priorities and the Health Targets.

In this health needs assessment, information is presented in for the following chapters:

1. Demographic information about the Counties Manukau DHB population.
2. Socioeconomic characteristics of the Counties Manukau DHB population.
3. Behavioural and biological risk and protective factors, such as smoking and nutrition.
4. Information about the health status of the Counties Manukau DHB population, such as rates of cancer, and diabetes.
5. Information about health service utilisation.
6. Workforce information about staff within health service providers.

The findings of this health needs assessment are summarised in the executive summary, together with key points at the beginning of each chapter. It is anticipated that the information in this document will be used to assist in the Counties Manukau DHB's planning process, and ultimately achieve health gain for the Counties Manukau DHB population.

## Data notes

Data presented in this report are collated from various sources and the most recently available data are presented. Appendix 1 lists the data sources used in this report.

Most data from Sector Services, Information Directorate, Ministry of Health (formerly New Zealand Health Information Services) and from the Institute of Environmental Science and Research Limited (ESR) are presented as a total of the most recent three years to provide more stable rate estimates. Where this is the case the relevant time span is given in the title of the table.

### Identifying the years of data collection

In this report '2005–07' denotes three full calendar years of data. '2006/07' denotes New Zealand Health Survey data collected from October 2006 to November 2007 and 2002/03' denotes New Zealand Health Survey data collected from September 2002 to January 2004. '2006' denotes one full calendar year. 'April 2008' denotes the time point when data were collected.

### Codes for disease classification

The International Classification of Diseases Australian Modification, 10th revision (ICD-10–AM) has been used to identify diseases/conditions for reporting mortality, hospitalisations and cancer registrations.

### 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.

The table headings show which method is used for a particular indicator. For some indicators, data were only available at higher aggregations such as Māori and non-Māori.

For further information see *Ethnicity Data Protocols for the Health and Disability Sector* (Ministry of Health 2004) and *Presenting Ethnicity: Comparing prioritised and total response ethnicity in descriptive analyses of New Zealand Health Monitor surveys* (Public Health Intelligence Occasional Bulletin 48, Ministry of Health 2008).

### Denominators

In general the denominators used for calculating the rates in this report were derived from Census population data matching the year of the numerator. If the numerator data were not collected in a Census year the 'interpolated census population' was used. The interpolated census population is a linear estimate between Census years. For the perinatal indicators such as type of birth and pregnancy complications, the rates were calculated using numbers of births or numbers of live births as the denominators. This is clearly stated in the relevant sections of the report.

### 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.

In this report rates have not been given for counts less than 5, or in the case of the New Zealand health Survey data when the unweighted denominator is less than 30.

### Age-standardised rates

Where appropriate, rates in this report are standardised for age to enable a valid comparison between populations where age structure differs. Rates are age-standardised using the World Health Organization standard population. Age-specific rates are presented for indicators relating to a defined age group. However, several indicators are presented with *crude rates* (that is, no adjustment has been made). Please note that crude rates cannot be compared between population groups with different age distributions eg, Māori compared with non-Māori. The titles of the tables state which rates have been used.

### Rate ratios

To quantify the difference between the rates for the DHB district population compared with the total New Zealand population, rate ratios are provided, where possible. A *rate ratio* (RR) in this report is the ratio of the rate for the population of the DHB compared with the rate for New Zealand as a whole. Rate ratios are presented as either age-standardised rate ratios or age-specific rate ratios.

A rate ratio greater than one means that the DHB's rate exceeds the New Zealand average, whereas a rate ratio of less than one means that the DHB's rate is below the national average.

### Confidence intervals

In this report 95% confidence intervals are presented, where appropriate, for both rates and rate ratios. The confidence intervals give an indication of the margin of error associated with the survey 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. If the two confidence intervals do overlap, the difference could be due to chance, and may not be statistically significant.

With rate ratios, if the 95% confidence interval does not include 1, the two rates are said to be significantly different from each other. For example, a rate ratio of 1.5 with 95% confidence intervals of 1.2–1.8 means that the rate is 1.5 times higher in the particular DHB than the New Zealand average 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.

### Use of synthetic estimates for small numbers

The New Zealand Health Survey 2006/07 used a statistical method known as 'synthetic estimates', to produce DHB district population estimates by ethnicity and gender. These estimates are given in this report to help DHBs with planning and should not be used to evaluate targeted health programmes.

For indicators with very small numbers (eg, influenza vaccine in the over 65 year olds) the synthetic estimates method was not applicable. In this instance the New Zealand Health Survey used direct survey estimates for a group of DHBs to allow sufficiently accurate estimates. Smaller DHBs were grouped according to population age and socio-demographic structure or shared service provision.

### New Zealand Health Survey 2002/03

Rates in this report from the 2002/03 New Zealand Health Survey may differ slightly from previously released rates as they have been re-analysed using the same methodology used for the 2006/07 survey.

For further details on the methodology and its limitations, refer to the Methodology Report for the 2006/07 New Zealand Health Survey, which can be accessed from http://www.moh.govt.nz/moh.nsf/indexmh/methodology-report-2006-07-nz-health-survey.

If you need more detail about the codes or methods used in this report please email phi@moh.govt.nz.

# 1 The Population

This chapter presents a brief profile of the Counties Manukau district and information about the population such as ethnicity and age compared with the New Zealand population as a whole. Population projections are provided to indicate how the Counties Manukau DHB population is expected to change by 2026.

## 1.1 Geography

The land area of the Counties Manukau DHB district is 2,830 square kilometres. The DHB serves a diverse physical environment with foothills, flat agricultural plains, the forest park of the Hunua Ranges and coastlines to the East (Waitemata Harbour) and West (Manukau Harbour). There are three territorial authorities (ie, district councils or city councils) that make up the Counties Manukau DHB District: Manukau City, Papakura District and Franklin District.

Manukau is New Zealand's third largest city and the fastest growing; between 2001 and 2006 the population increased by 15.3%. It is home to more than 165 different ethnic groups and 30% of residents speak two or more languages; Samoan is the most widely spoken after English. Manukau City is surrounded by a number of large suburbs such as Middlemore and Otahuhu to the North, Otara and East Tamaki to the East, Manurewa and Papakura to the South and Mangere and Papatoetoe to the West.

The Manukau City and Papakura Districts are the most densely populated of the three territorial authorities that make up Counties Manukau DHB District. Franklin, to the South, is the least populated but has the largest land area and is home to the population holiday destination of Port Waikato, which is also the final destination of the Waikato River. Pukekohe is also an important township as it serves the large agricultural industry present in the Franklin District.

## 1.2 Transport

Transportation in this region is very important to New Zealand, with major highways such as State Highway 1, the North Island main trunk railway and the international airport. The airport handles 70.0% of international visitors to New Zealand and the bulk of the country's air-freighted exports.

Manukau City Council suggests that residents prefer private cars to public transport. However, road infrastructure is an issue in the region, with significant and growing congestion, particularly at peak travel times.

There are ferries that go from Manukau harbour to downtown Auckland and Waiheke Island. The two inland ports, at East Tamaki and Wiri, provide container drop-off and pick-up points for importers and exporters.

## 1.3 Economy

The Food Price Index is calculated for 15 urban areas. The Auckland area is measured rather than the specific Counties Manukau district and Auckland has the highest Food Price Index in New Zealand. The Food Price Index compares costs of a basket of goods representative of food commodities purchased by private households. The results are the same for the wider Consumer Price Index which takes into consideration food items, recreational activities and services such as communication and travel.

The Manukau economy has been under pressure due to these high prices and this has been further influenced by high interest rates, recent drought and a slumping housing market.

Socioeconomic factors are discussed more widely in Chapter 2.

## 1.4 Industry

The fastest growing industries in the area over the past decade have been finance, real estate and business services, followed by construction and utilities, wholesale and retail trade, and hospitality. The manufacturing and building sector, in general, is declining due to the decline in housing construction.

The Franklin District supports horticultural, dairy farming and equine industries. In addition to these industries, employment within the education sector is projected to continue to grow at a faster rate than the national average as a result of continued population growth.

## 1.5 Population distribution

At the last census count there were 454,900 people living in the Counties Manukau DHB area, accounting for approximately 10.9% of the national population (Table 1.1). Both the age and gender composition of Counties Manukau was similar to the New Zealand population, with approximately half aged between 25 and 64. However, a slightly lower proportion of Counties Manukau DHB was aged 65 years or over (Table 1.2). When compared with the national population, in Counties Manukau DHB a higher proportion of the population identified with either Pacific or Asian ethnic groups and a lower proportion identified themselves as European/Other (Table 1.4). The percentage of European/Other (46%), Pacific (21%) and Asian (16%) ethnic groups were slightly lower when 'prioritised' ethnicity was used (Table 1.6).

Over 76% of the population of Counties Manukau DHB were located in Manukau City, with another 23.7% distributed evenly between Papakura and Franklin Districts (Table 1.8). The proportion of the population in this DHB residing in urban versus rural areas was slightly higher than that observed at the national level.

### 1.5.1 Population distribution, by age group and gender

**Table 1.1:** Population distribution by age group and gender, 2006 census estimated resident population

| Age group | Counties Manukau DHB | | | New Zealand | | |
|---|---|---|---|---|---|---|
| | Female | Male | Total | Female | Male | Total |
| 0–14 | 56,490 | 59,030 | 115,530 | 433,360 | 454,960 | 888,310 |
| 15–24 | 34,980 | 35,230 | 70,230 | 299,490 | 305,250 | 604,740 |
| 25–44 | 68,800 | 61,870 | 130,690 | 613,270 | 568,170 | 1,181,430 |
| 45–64 | 50,170 | 48,380 | 98,530 | 507,450 | 491,030 | 998,480 |
| 65–74 | 12,140 | 11,100 | 23,240 | 142,700 | 133,000 | 275,700 |
| 75+ | 9,760 | 6,830 | 16,600 | 139,990 | 95,930 | 235,920 |
| Total | 232,340 | 222,440 | 454,900 | 2,136,260 | 2,048,340 | 4,184,600 |

Note: Counts may not sum to total due to rounding.

**Table 1.2:** Percentage of the population in Counties Manukau DHB and New Zealand by age, 2006 census estimated resident population

| Age group | Counties Manukau DHB | New Zealand |
|---|---|---|
| 0–14 | 25.4 | 21.2 |
| 15–24 | 15.4 | 14.5 |
| 25–44 | 28.7 | 28.2 |
| 45–64 | 21.7 | 23.9 |
| 65–74 | 5.1 | 6.6 |
| 75+ | 3.6 | 5.6 |

Note: Percentages may not sum to 100 due to rounding.

### 1.5.2 Population distribution, by ethnicity and gender

Ethnicity data can be 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 that 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). These tables use 'total response' ethnicity data. For further information see *Ethnicity Data Protocols for the Health and Disability Sector* (Ministry of Health 2004*) and Presenting Ethnicity: Comparing prioritised and total response ethnicity in descriptive analyses of New Zealand Health Monitor surveys* (Public Health Intelligence Occasional Bulletin 48, Ministry of Health 2008).

**Table 1.3:** Population distribution by total response ethnicity and gender, 2006 census estimated resident population

| Ethnic group | Counties Manukau DHB | | | New Zealand | | |
|---|---|---|---|---|---|---|
| | Female | Male | Total | Female | Male | Total |
| Māori | 39,510 | 35,550 | 76,060 | 318,500 | 305,800 | 624,300 |
| Pacific | 54,720 | 52,280 | 106,960 | 152,100 | 149,500 | 301,600 |
| Asian | 42,330 | 40,540 | 82,830 | 209,200 | 195,100 | 404,400 |
| European/Other | 125,990 | 120,790 | 246,780 | 1,644,900 | 1,568,500 | 3,213,300 |

Note: Counts may not sum to total due to rounding.

**Table 1.4:** Percentage of the population in Counties Manukau DHB by total response ethnicity, 2006 census estimated resident population

| Ethnic group | Counties Manukau DHB | New Zealand |
|---|---|---|
| Māori | 16.7 | 14.9 |
| Pacific | 23.5 | 7.2 |
| Asian | 18.2 | 9.7 |
| European/Other | 54.3 | 76.8 |

Note: Percentages may not sum to 100 due to rounding.

**Table 1.5:** Population distribution by prioritised ethnicity and gender, 2006 census estimated resident population

| Ethnic group | Counties Manukau DHB | | | New Zealand | | |
|---|---|---|---|---|---|---|
| | Female | Male | Total | Female | Male | Total |
| Māori | 39,510 | 35,550 | 76,060 | 318,500 | 305,800 | 624,300 |
| Pacific | 48,850 | 46,570 | 95,420 | 119,522 | 115,517 | 235,030 |
| Asian | 37,690 | 35,510 | 73,200 | 185,055 | 168,990 | 354,060 |
| European/Other | 106,300 | 103,810 | 210,110 | 1,513,123 | 1,457,993 | 2,971,210 |

Note: Counts may not sum to total due to rounding.

**Table 1.6:** Percentage of the population in Counties Manukau DHB and New Zealand by prioritised ethnic group, 2006 census estimated resident population

| Ethnic group | Counties Manukau DHB | New Zealand |
|---|---|---|
| Māori | 16.7 | 14.9 |
| Pacific | 21.0 | 5.6 |
| Asian | 16.1 | 8.5 |
| European/Other | 46.2 | 71.0 |

Note: Percentages may not sum to 100 due to rounding.

### 1.5.3 Population distribution, by territorial authority

**Table 1.7:** Population distribution by territorial authority and gender, 2006 census estimated resident population

| Territorial authority | Counties Manukau DHB | | |
|---|---|---|---|
| | Female | Male | Total |
| Manukau City | 177700 | 169400 | 347100 |
| Papakura District | 24100 | 22700 | 46900 |
| Franklin District | 30500 | 30300 | 60900 |

Note: Counts may not sum to total due to rounding.

**Table 1.8:** Percentage of the population in Counties Manukau DHB by territorial authority, census 2006 estimated resident population

| Territorial authority | Counties Manukau DHB |
|---|---|
| Manukau City | 76.3 |
| Papakura District | 10.3 |
| Franklin District | 13.4 |

Note: Percentages may not sum to 100 due to rounding.

### 1.5.4 Population distribution, by urban and rural areas

Urban and rural areas are determined by Statistics New Zealand. Urban areas are centred on a major city and include neighbouring areas which are regarded as suburban and belonging to that city. Rural areas are those areas not specifically designated as 'urban' - they include towns of fewer than 1000 population. Rural areas include offshore islands.

**Table 1.9:** Population distribution by urban–rural area and gender, 2006 census estimated resident population

| Area | Counties Manukau DHB | | | New Zealand | | |
|---|---|---|---|---|---|---|
| | Female | Male | Total | Female | Male | Total |
| Urban | 217,080 | 205,070 | 422,150 | 1,857,390 | 1,741,220 | 3,598,620 |
| Rural | 16,190 | 16,560 | 32,750 | 285,280 | 300,710 | 585,980 |

Note: Counts may not sum to total due to rounding.

**Table 1.10:** Percentage of the population in Counties Manukau DHB and New Zealand by urban–rural area, 2006 census estimated resident population

| Area | Counties Manukau DHB | New Zealand |
|---|---|---|
| Urban | 93 | 86 |
| Rural | 7 | 14 |

Note: Percentages may not sum to 100 due to rounding.

## 1.6 Projected population to 2026

Between 2006–26 the population in Counties Manukau DHB is projected to increase by a greater percentage than the national population (Table 1.11). Like the national population, the population is aging, with the highest percentage increase for 2006–26 occurring in the 65+ age group which is projected to increase by 131% (Table 1.11). The highest percentage increase between 2006–26 is projected to occur within the Pacific (58%), and to a lesser extent, Māori (37%) ethnic groups (Table 1.12). Compared with the national trend, the projected increases in Counties Manukau are spread more evenly across all ethnic groups but is still primarily concentrated among the Pacific population. Manukau City is projected to have the highest percentage increase in their population, followed closely by Franklin and Papakura Districts (Table 1.13).

### 1.6.1 Projected population to 2026, by age

**Table 1.11:** Projected population in the next 20 years by age group, 2006 base

| | Age | 2006 | 2011 | 2016 | 2021 | 2026 | % increase 2006–26 |
|---|---|---|---|---|---|---|---|
| Counties Manukau DHB | 0–14 | 115,500 | 122,200 | 128,900 | 135,400 | 139,900 | 21% |
| | 15–64 | 299,400 | 327,500 | 352,400 | 376,500 | 399,400 | 33% |
| | 65+ | 39,800 | 48,800 | 61,500 | 75,200 | 92,100 | 131% |
| | Total | 454,900 | 498,500 | 542,800 | 587,000 | 631,400 | 39% |
| New Zealand | 0–14 | 888,300 | 894,600 | 906,600 | 917,600 | 906,400 | 2% |
| | 15–64 | 2,784,700 | 2,913,100 | 2,982,400 | 3,036,200 | 3,077,700 | 10% |
| | 65+ | 511,600 | 585,500 | 699,700 | 817,000 | 955,200 | 87% |
| | Total | 4,184,600 | 4,393,200 | 4,588,700 | 4,770,800 | 4,939,400 | 18% |

Note: Counts may not sum to total due to rounding.

### 1.6.2 Projected population to 2026, by ethnicity

**Table 1.12:** Projected population in the next 20 years by prioritised ethnicity, 2006 base

| | Ethnicity | 2006 | 2011 | 2016 | 2021 | 2026 | % increase 2006–26 |
|---|---|---|---|---|---|---|---|
| Counties Manukau DHB | Māori | 76,060 | 83,200 | 90,000 | 97,030 | 104,530 | 37% |
| | Pacific | 95,420 | 108,930 | 122,230 | 135,980 | 150,430 | 58% |
| | Other | 283,310 | 307,460 | 329,080 | 350,500 | 370,970 | 31% |
| New Zealand | Māori | 624,280 | 672,220 | 717,800 | 763,780 | 810,730 | 30% |
| | Pacific | 256,865 | 284,310 | 311,165 | 338,525 | 367,100 | 43% |
| | Other | 3,302,950 | 3,444,930 | 3,562,070 | 3,669,090 | 3,762,020 | 14% |

Note: Counts may not sum to total due to rounding.

### 1.6.3 Projected population to 2026, by territorial authority

**Table 1.13:** Projected population in the next 20 years by territorial authority, 2006 base

| Territorial authority | | 2006 | 2011 | 2016 | 2021 | 2026 | % increase 2006–26 |
|---|---|---|---|---|---|---|---|
| Counties Manukau DHB | Manukau City | 347,100 | 382,000 | 417,600 | 453,700 | 490,200 | 41% |
| | Papakura District | 46,900 | 50,400 | 53,500 | 56,700 | 59,900 | 28% |
| | Franklin District | 60,900 | 66,200 | 71,400 | 76,500 | 81,400 | 34% |

Note: Counts may not sum to total due to rounding.

# 2 Social Determinants of Health Factors

The 2008 final report from the World Health Organization Commission on Social Determinants of Health highlighted that "the poor health of the poor [and] the social gradient in health within countries ... are caused by an unequal distribution of power, income, goods and services". Thus "structural determinants and conditions of daily life constitute the social determinants of health and are responsible for a major part of heath inequities" (page 1). The New Zealand Index of Deprivation 2006 (NZDep2006) takes information about conditions of daily life for New Zealanders and creates a score of one to ten. New Zealand research has shown that the NZDep2006 scores are strongly associated with health outcomes, the higher the scores the worse the outcomes.

This chapter provides NZDep2006 scores for the Counties Manukau DHB district. In addition there is further detail about seven of the nine census question responses that are used to calculate the NZDep2006.

## Key points

- Approximately one-third of residents in Counties Manukau DHB lived in the highest two deprivation deciles.
- The percentage of the population to gain NCEA Level 2 certificate, or higher, at school was highest among the Asian, followed by European/Other ethnic group.
- In Counties Manukau DHB the proportion of Pacific people in the lower income bracket was significantly higher than their New Zealand counterparts.
- Māori and Pacific people were less likely to own a home, and to be able to access a phone or a motor vehicle, than European/Other and Asian people in Counties Manukau DHB.
- The unemployment rates for both males and females were significantly higher in Counties Manukau DHB than in New Zealand.
- Almost half of the Pacific population in Counties Manukau DHB lived in overcrowded housing conditions.

## 2.1 The New Zealand Index of Deprivation 2006 (NZDep2006)

NZDep2006 provides a numerical rating of socioeconomic status of a neighbourhood using nine variables from the 2006 Census, these are: receiving a means-tested benefit, low household income, not owning the home you live in, single-parent family, unemployment, no school qualifications, household overcrowding, no access to a telephone and no access to a car. Seven of these variables are reported on individually in the rest of this chapter.

NZDep06 scores are grouped into deciles, where a score of 1 is allocated to the 10% of areas with a low score and 10 is allocated to the 10% of areas with a high score. For the country as a whole the distribution across the 10 scores is fairly even.

A third of the population of Counties Manukau DHB live in areas with high NZDep2006 scores which are associated with poorer health outcomes.

**Table 2.1:** The New Zealand Index of Deprivation 2006 (NZ Dep2006) distribution in Counties Manukau DHB and New Zealand (all ages)

| NZDep2006 deciles | Counties Manukau DHB | | New Zealand | |
|---|---|---|---|---|
| | Count | Percent | Count | Percent |
| 1 | 38,196 | 8.8 | 415,155 | 10.3 |
| 2 | 43,761 | 10.1 | 410,361 | 10.2 |
| 3 | 39,210 | 9.1 | 409,266 | 10.2 |
| 4 | 31,623 | 7.3 | 401,736 | 10.0 |
| 5 | 31,233 | 7.2 | 397,242 | 9.9 |
| 6 | 27,582 | 6.4 | 399,828 | 9.9 |
| 7 | 25,926 | 6.0 | 397,074 | 9.9 |
| 8 | 46,353 | 10.7 | 394,425 | 9.8 |
| 9 | 60,711 | 14.0 | 401,916 | 10.0 |
| 10 | 88,344 | 20.4 | 396,219 | 9.8 |
| Unspecified | 114 | 0.0 | 4,923 | 0.1 |
| Total | 433,053 | 100 | 4,028,145 | 100 |

## 2.2 National Certificate of Educational Achievement (NCEA) Level 2 or higher

Education is associated with health. A person who has achieved NCEA Level 2 or higher is more likely to have better health than a person without educational qualifications.

The percentage of Counties Manukau DHB to gain NCEA Level 2 certificate, or higher at school was highest among the Asian ethnic group, followed by European/Other. The rates of educational achievement among both genders and all ethnic groups in Counties Manukau were lower than their New Zealand counterparts.

**Table 2.2:** NCEA Level 2 or higher in adults over 15, age-standardised rate (ASR) and rate ratio (SRR), (with 95% confidence intervals) 2006

| | | Counties Manukau DHB ASR, percent | New Zealand ASR, percent | SRR |
|---|---|---|---|---|
| Gender | Female | 58.3 (57.9–58.7) | 61.9 (61.6–62.1) | 0.9 (0.9–0.9) |
| | Male | 59.8 (59.4–60.2) | 62.4 (62.0–62.5) | 1.0 (1.0–1.0) |
| | Total | 59.0 (58.7–59.3) | 62.1 (61.8–62.2) | 0.9 (0.9–1.0) |
| Ethnicity (total response) | Māori | 35.5 (34.9–36.1) | 42.1 (41.8–42.3) | 0.8 (0.8–0.9) |
| | Pacific | 44.4 (43.8–45.0) | 47.2 (46.8–47.5) | 0.9 (0.9–1.0) |
| | Asian | 75.4 (74.7–76.2) | 79.6 (79.1–79.9) | 0.9 (0.9–1.0) |
| | European/Other | 61.6 (61.2–61.9) | 63.1 (62.8–63.2) | 1.0 (1.0–1.0) |

* NCEA: National Certificate of Educational Achievement.

## 2.3 Low income

Income is associated with health. People with lower incomes are more likely to have worse health status than those with higher incomes.

A significantly higher proportion of females than males in Counties Manukau DHB belonged to the lower income bracket. A higher percentage of Asian peoples reported lower incomes, followed by Pacific, then Māori and then European/Other ethnic groups. Overall, the proportion of Counties Manukau DHB reporting lower incomes was higher than that observed nationally, with the exception of the European/Other ethnic group which have fewer people earning low incomes than their national counterparts.

**Table 2.3:** Lower income in adults over 15, age-standardised rate (ASR) and rate ratio (SRR) (with 95% confidence intervals), 2006

| | | Counties Manukau DHB ASR, percent | New Zealand ASR, percent | SRR |
|---|---|---|---|---|
| Gender | Female | 30.6 (30.3–30.9) | 28.5 (28.3–28.6) | 1.1 (1.1–1.1) |
| | Male | 20.8 (20.6–21.1) | 18.7 (18.6–18.8) | 1.1 (1.1–1.1) |
| | Total | 25.8 (25.7–26.0) | 23.7 (23.6–23.8) | 1.1 (1.1–1.1) |
| Ethnicity (total response) | Māori | 23.4 (22.9–23.9) | 24.0 (23.8–24.2) | 1.0 (1.0–1.0) |
| | Pacific | 31.8 (31.3–32.4) | 29.7 (29.4–30.0) | 1.1 (1.1–1.1) |
| | Asian | 40.8 (40.2–41.3) | 42.2 (41.9–42.4) | 1.0 (1.0–1.0) |
| | European/Other | 20.5 (20.3–20.8) | 21.1 (21.0–21.2) | 1.0 (1.0–1.0) |

## 2.4 Home ownership

Housing is a basic human need and has a large impact on people's wellbeing and quality of life. Poor quality and inappropriate housing can expose people to health problems. Accommodation costs are commonly a major part of household expenditure and also often are a key determinant of the overall standard of living for older people. Generally home ownership is associated with a better health status.

The percentage of non-home ownership was highest among Pacific people, followed by Māori. Overall, the percentage of home ownership in Counties Manukau DHB was lower than the national average, with the exception of the Asian ethnic group which had a higher percentage of home ownership than their national counterparts.

**Table 2.4:** Adults over 15 years not owning their home, age-standardised rate (ASR) and rate ratios (SRR), (with 95% confidence intervals), 2006

| | | Counties Manukau DHB ASR, percent | New Zealand ASR, percent | SRR |
|---|---|---|---|---|
| Gender | Female | 55.4 (55.0–55.8) | 51.1 (50.8–51.2) | 1.1 (1.1–1.1) |
| | Male | 55.9 (55.5–56.3) | 52.6 (52.3–52.8) | 1.1 (1.1–1.1) |
| | Total | 55.6 (55.3–55.9) | 51.8 (51.5–51.9) | 1.1 (1.1–1.1) |

| | | | | |
|---|---|---|---|---|
| Ethnicity (total response) | Māori | 70.7 (69.9–71.5) | 66.3 (65.9–66.5) | 1.1 (1.1–1.1) |
| | Pacific | 75.2 (74.5–76.0) | 74.5 (74.1–74.9) | 1.0 (1.0–1.0) |
| | Asian | 58.3 (57.7–59.0) | 61.3 (61.0–61.6) | 1.0 (0.9–1.0) |
| | European/Other | 48.2 (47.9–48.6) | 48.4 (48.1–48.5) | 1.0 (1.0–1.0) |

## 2.5 Adult unemployment rates

Unemployment can exacerbate existing health problems, or lead to new ones. Evidence shows that there is a link between unemployment and increased mortality, lower levels of general health, more anxiety and depression, higher rates of smoking and higher suicide rates. Unemployment leads to a greater use of health services.

Māori had the highest rate of unemployment, followed by Pacific people in Counties Manukau DHB. Females had a higher rate of unemployment than males. Overall, employment rates were significantly higher in Counties Manukau DHB than in New Zealand as a whole.

**Table 2.5:** Unemployment rates in adults over 15 years, age-standardised rate (ASR) and rate ratios (SRR), (with 95% confidence intervals), 2006

| | | **Counties Manukau DHB ASR, percent** | **New Zealand ASR, percent** | **SRR** |
|---|---|---|---|---|
| Gender | Female | 5.1 (5.0–5.2) | 4.2 (4.2–4.3) | 1.2 (1.2–1.2) |
| | Male | 4.2 (4.1–4.3) | 3.7 (3.7–3.7) | 1.1 (1.1–1.2) |
| | Total | 4.6 (4.6–4.7) | 4.0 (4.0–4.0) | 1.2 (1.1–1.2) |
| Ethnicity (total response) | Māori | 7.4 (7.2–7.6) | 6.9 (6.8–6.9) | 1.1 (1.0–1.1) |
| | Pacific | 6.3 (6.1–6.5) | 6.1 (6.0–6.2) | 1.0 (1.0–1.1) |
| | Asian | 4.6 (4.5–4.8) | 4.8 (4.7–4.9) | 1.0 (0.9–1.0) |
| | European/Other | 3.3 (3.2–3.4) | 3.3 (3.2–3.3) | 1.0 (1.0–1.0) |

## 2.6 Adults living in households without access to telephone

Telephones provide a means of social connection to others and facilitate a range of activities of daily life. They are an important means of contact with health services. People with phones are able to access help such as Healthline and organise outpatient clinic appointments for times they can attend. In addition it is easier for health practitioners to contact people with telephones to give them reminders when such things as immunisations or screening tests are due.

Māori and Pacific people were five times less likely to have access to a telephone or cell phone than European/Other and Asian ethnic groups in Counties Manukau DHB. With the exception of Asian and European/Other ethnic groups, the percentage of Counties Manukau DHB reporting no access to a telephone was significantly higher than in New Zealand.

**Table 2.6:** Adults over 15 years of age living in households without access to a telephone age-standardised rate (ASR) and rate ratio (SRR) (with 95% confidence intervals), 2006

| | | Counties Manukau DHB ASR, percent | New Zealand ASR, percent | SRR |
|---|---|---|---|---|
| Gender | Female | 2.4 (2.4–2.5) | 1.6 (1.6–1.7) | 1.5 (1.4–1.5) |
| | Male | 2.4 (2.3–2.5) | 2.0 (2.0–2.0) | 1.2 (1.1–1.2) |
| | Total | 2.4 (2.4–2.5) | 1.8 (1.8–1.8) | 1.3 (1.3–1.4) |
| Ethnicity (total response) | Māori | 6.1 (5.9–6.4) | 5.3 (5.3–5.4) | 1.2 (1.1–1.2) |
| | Pacific | 5.0 (4.8–5.2) | 4.4 (4.3–4.5) | 1.1 (1.1–1.2) |
| | Asian | 1.1 (1.0–1.2) | 1.3 (1.2–1.3) | 0.9 (0.8–0.9) |
| | European/Other | 1.2 (1.2–1.3) | 1.2 (1.2–1.2) | 1.0 (0.9–1.0) |

## 2.7 No access to a motor vehicle at home

Having a car generally makes it easier to access health services. When people do not have a car attending services such as outpatient clinics, or primary care for immunisations, cervical screening, etc, or antenatal care can be more difficult.

There were markedly higher percentages of Māori and Pacific people who had no access to a motor vehicle at home than Asian and European/Other in Counties Manukau. Across all groups, the rates were significantly lower in Counties Manukau than in New Zealand.

**Table 2.7:** Adults over 15 years without access to a motor vehicle at home, age-standardised rate (ASR) and rate ratio (SRR), (with 95% confidence intervals), 2006

| | | Counties Manukau DHB ASR, percent | New Zealand ASR, percent | SRR |
|---|---|---|---|---|
| Gender | Female | 4.7 (4.6–4.8) | 5.5 (5.5–5.6) | 0.9 (0.8–0.9) |
| | Male | 3.1 (3.0–3.2) | 4.1 (4.1–4.1) | 0.8 (0.7–0.8) |
| | Total | 4.0 (3.9–4.0) | 4.9 (4.8–4.9) | 0.8 (0.8–0.8) |
| Ethnicity (total response) | Māori | 8.4 (8.1–8.7) | 9.4 (9.3–9.5) | 0.9 (0.9–0.9) |
| | Pacific | 6.9 (6.7–7.2) | 8.7 (8.6–8.9) | 0.8 (0.8–0.8) |
| | Asian | 2.6 (2.4–2.7) | 5.4 (5.3–5.5) | 0.5 (0.4–0.5) |
| | European/Other | 2.8 (2.7–2.8) | 4.0 (4.0–4.0) | 0.7 (0.7–0.7) |

## 2.8 Household overcrowding

Household overcrowding is measured by the Canada Mortgage and Housing Corporation classification which identifies a house as overcrowded if it does not have enough bedrooms for the people living in the house.

Household overcrowding can lead to a poorer health status and increased risk of transmission of infectious illnesses such as rheumatic fever and meningococcal disease.

In Counties Manukau DHB nearly half of the Pacific population reported living in crowded housing conditions; the highest rate among different ethnicities in Counties Manukau DHB, followed by Māori. The rates of household overcrowding were significantly higher across all groups in Counties Manukau than in New Zealand.

**Table 2.8:** People of all ages living in overcrowded households, age-standardised rate (ASR) and rate ratio (SRR), (with 95% confidence intervals), 2006

| | | **Counties Manukau DHB ASR, percent** | **New Zealand ASR, percent** | **SRR** |
|---|---|---|---|---|
| Gender | Female | 22.9 (22.6–23.1) | 11.6 (11.5–11.6) | 2.0 (2.0–2.0) |
| | Male | 21.8 (21.5–22.0) | 11.2 (11.2–11.3) | 1.9 (1.9–2.0) |
| | Total | 22.3 (22.2–22.5) | 11.4 (11.3–11.5) | 2.0 (1.9–2.0) |
| Ethnicity (total response) | Māori | 31.0 (30.6–31.4) | 21.2 (21.0–21.3) | 1.5 (1.4–1.5) |
| | Pacific | 49.1 (48.7–49.6) | 41.2 (40.9–41.4) | 1.2 (1.2–1.2) |
| | Asian | 21.9 (21.6–22.3) | 19.4 (19.3–19.6) | 1.1 (1.1–1.1) |
| | European/Other | 9.2 (9.1–9.4) | 5.8 ( 5.8–5.8) | 1.6 (1.6–1.6) |

# 3 Health Behaviours and Risk Factors

A risk factor is something that increases a person's chances of getting a disease. If the risk comes from something the person does it is said to be 'modifiable'. Smoking increases the risk of developing colon cancer, so it is a modifiable risk factor for colon cancer. Some risk factors cannot be changed (for example, more people over the age of 50 get colon cancer, therefore age is a non-modifiable risk factor for colon cancer). Some risk factors such as high blood cholesterol and high blood pressure are partly modifiable and partly non-modifiable.

A 'health behaviour' is an action taken by a person to maintain, attain, or regain good health and to prevent illness (for example, eating vegetables and fruit, and physical activity).

This chapter is about modifiable risk factors (or risk factors with a modifiable component) and health behaviours that are aligned to national health priorities. Risk factors and health behaviours are included in a health needs assessment because a DHB needs to support its population to reduce modifiable risk factors and take up health behaviours. DHBs also have to plan to treat the diseases that result from risk factors.

## Key points

- The prevalence of current daily smokers in Counties Manukau DHB was similar to the national prevalence. Smoking rates among Māori (both male and female) and for Pacific males were significantly higher than the rates for the total Counties Manukau DHB population.
- About half of people in Counties Manukau DHB ate three or more servings of vegetables on average each day, a rate significantly lower than the national prevalence.
- In Counties Manukau DHB, more than 50% of people ate two or more servings of fruit on average each day, which is similar to the national rate.
- More than half of people in Counties Manukau DHB did regular physical activity, which was similar to the national rate.
- The prevalence of hazardous drinking in Counties Manukau DHB was lower than the total New Zealand prevalence. The prevalence among Māori males was significantly higher than the prevalence for total males in Counties Manukau DHB.
- The prevalence of marijuana use over a twelve month period in Counties Manukau DHB was significantly lower than the national prevalence. The prevalence was higher for Māori than for the whole Counties Manukau DHB population.
- The proportion of people obese in Counties Manukau DHB was significantly higher than the proportion nationally. The proportions of Pacific people and Māori who were obese were significantly higher than the total proportion of obese people in Counties Manukau DHB.

## 3.1 Smoking – current daily smokers

The prevalence of current daily smokers in Counties Manukau DHB was similar to the national prevalence, adjusted for age. Smoking rates among Māori (both male and female) and for Pacific males were significantly higher than the rate for the total Counties Manukau DHB population.

**Table 3.1:** Age-standardised prevalence rates (percent, with 95% confidence intervals) of current daily smokers, 15+ years, by ethnicity, 2006/07 NZHS

| | | Māori | Pacific | Asian | European/Other | Total |
|---|---|---|---|---|---|---|
| Counties Manukau DHB | Female | 46.2 (41.7–50.8) | 21.5 (16.6–27.1) | 4.4 (1.7–9.4) | 17.9 (14.6–21.6) | 18.7 (15.5–22.3) |
| | Male | 40.0 (35.0–45.1) | 33.3 (27.4–39.7) | 16.5 (12.2–21.7) | 19.6 (16.3–23.3) | 21.3 (18.1–24.9) |
| | Total | 43.3 (39.5–47.3) | 27.1 (22.8–31.9) | 10.1 (6.8–14.3) | 18.7 (15.6–22.2) | 20.0 (16.9–23.1) |
| New Zealand | Female | 44.2 (40.8–47.6) | 20.6 (16.6–25.1) | 4.2 (2.6–6.5) | 17.1 (15.5–18.9) | 17.9 (16.4–19.5) |
| | Male | 38.3 (34.3–42.4) | 31.9 (26.7–37.4) | 15.8 (12.4–19.7) | 18.8 (17.1–20.6) | 20.4 (18.8–22.0) |
| | Total | 41.5 (39.0–44.0) | 26.0 (22.7–29.5) | 9.6 (7.7–11.9) | 17.9 (16.5–19.4) | 19.1 (18.1–20.1) |

## 3.2 Nutrition – 3+ vegetables and 2+ fruit a day

About half of people in Counties Manukau DHB ate three or more servings of vegetables on average each day, a rate significantly lower than the national prevalence, adjusted for age. The rate among females in Counties Manukau DHB was significantly higher than among males. Pacific and Asian people had a significantly lower rate than the total Counties Manukau DHB rate.

**Table 3.2:** Age-standardised prevalence rates (percent, with 95% confidence intervals) of having three or more servings of vegetables, 15+ years, by ethnicity, 2006/07 NZHS

| | | Māori | Pacific | Asian | European/Other | Total |
|---|---|---|---|---|---|---|
| Counties Manukau DHB | Female | 51.5 (45.9–57.0) | 37.1 (30.1–44.6) | 41.3 (34.7–48.1) | 58.5 (53.6–63.3) | 55.4 (50.6–60.3) |
| | Male | 43.1 (37.3–49.1) | 33.9 (26.4–42.0) | 32.6 (25.7–40.1) | 48.1 (43.2–52.9) | 45.6 (40.8–50.5) |
| | Total | 47.6 (42.5–52.7) | 35.6 (29.3–42.2) | 37.2 (31.2–43.6) | 53.5 (48.8–58.2) | 50.7 (46.3–55.2) |
| New Zealand | Female | 63.5 (60.1–66.9) | 45.8 (40.1–51.6) | 50.9 (45.8–56.0) | 72.3 (70.0–74.4) | 68.4 (66.2–70.6) |
| | Male | 53.2 (49.3–57.2) | 41.8 (35.5–48.3) | 40.2 (34.6–46.0) | 59.3 (57.1–61.5) | 56.3 (54.2–58.4) |
| | Total | 58.8 (56.1–61.4) | 43.9 (39.2–48.7) | 45.9 (41.6–50.3) | 66.0 (64.2–67.8) | 62.6 (61.3–63.9) |

In Counties Manukau DHB, more than half of people ate two or more servings of fruit on average each day, which is similar to the national rate, adjusted for age. The rate was significantly higher among females than males.

**Table 3.3:** Age-standardised prevalence rates (percent, with 95% confidence intervals) of having two or more servings of fruit, 15+ years, by ethnicity, 2006/07 NZHS

| | | Māori | Pacific | Asian | European/Other | Total |
|---|---|---|---|---|---|---|
| Counties Manukau DHB | Female | 59.7 (54.5–64.7) | 62.9 (56.3–69.2) | 59.2 (53.0–65.2) | 66.4 (61.7–70.9) | 65.2 (60.6–69.6) |
| | Male | 44.4 (38.6–50.2) | 48.0 (40.3–55.9) | 47.4 (41.4–53.4) | 48.2 (43.6–52.9) | 47.9 (43.3–52.4) |
| | Total | 52.6 (47.7–57.4) | 55.8 (50.1–61.5) | 53.7 (48.4–58.9) | 57.7 (53.2–62.1) | 56.9 (52.8–61.0) |
| New Zealand | Female | 62.1 (58.8–65.3) | 65.5 (60.3–70.4) | 61.6 (56.9–66.1) | 69.1 (66.7–71.5) | 67.9 (65.6–70.0) |
| | Male | 46.1 (42.0–50.4) | 50.0 (43.3–56.7) | 49.3 (44.8–53.8) | 50.2 (47.7–52.6) | 49.8 (47.5–52.1) |
| | Total | 54.7 (51.8–57.5) | 58.1 (53.9–62.2) | 55.9 (52.4–59.3) | 60.0 (58.0–62.0) | 59.2 (57.8–60.6) |

## 3.3 Physical activity

More than half of people in Counties Manukau DHB did regular physical activity, which was similar to the national rate, adjusted for age. The prevalence rate among Asian females was significantly lower than total females in Counties Manukau DHB.

**Table 3.4:** Age-standardised prevalence rates (percent, with 95% confidence intervals) of doing regular physical activity, 15+ years, by ethnicity, 2006/07 NZHS

| | | Māori | Pacific | Asian | European/Other | Total |
|---|---|---|---|---|---|---|
| Counties Manukau DHB | Female | 53.7 (48.5–58.8) | 45.7 (38.2–53.3) | 36.9 (31.3–42.7) | 52.3 (47.8–56.8) | 50.5 (46.1–54.9) |
| | Male | 63.7 (58.4–68.8) | 55.6 (48.4–62.7) | 48.9 (42.5–55.4) | 58.4 (53.8–62.8) | 57.7 (53.3–62.0) |
| | Total | 58.3 (53.7–62.9) | 50.4 (44.3–56.5) | 42.5 (37.3–47.9) | 55.2 (50.9–59.5) | 53.9 (50.0–57.8) |
| New Zealand | Female | 51.1 (47.7–54.6) | 43.5 (37.1–50.1) | 35.1 (31.0–39.5) | 49.8 (47.4–52.3) | 48.1 (45.8–50.4) |
| | Male | 60.7 (57.1–64.2) | 53.0 (46.9–59.0) | 46.6 (41.4–51.8) | 55.6 (53.1–58.0) | 54.9 (52.7–57.1) |
| | Total | 55.6 (52.9–58.2) | 48.0 (43.2–52.8) | 40.5 (36.8–44.2) | 52.6 (50.5–54.7) | 51.4 (49.9–52.8) |

## 3.4 Hazardous drinking

The prevalence of hazardous drinking in Counties Manukau DHB was lower than the total New Zealand prevalence, adjusted for age. The prevalence of hazardous drinking among Māori males was significantly higher than the prevalence among total males in Counties Manukau DHB, adjusted for age.

**Table 3.5:** Age-standardised prevalence rates (percent, with 95% confidence intervals) of hazardous drinking, 15+ years, by ethnicity, 2006/07 NZHS

| | | Māori | Pacific | Asian | European/Other | Total |
|---|---|---|---|---|---|---|
| Counties Manukau DHB | Female | 15.0 (9.6–21.8) | 8.0 (3.8–14.4) | 0.5 (0.0–3.1) | 10.0 (6.4–14.8) | 9.2 (6.4–11.9) |
| | Male | 42.6 (28.9–56.4) | 24.8 (17.0–32.6) | 5.6 (2.6–10.3) | 19.5 (12.9–26.1) | 20.5 (16.5–24.6) |
| | Total | 26.3 (19.9–32.7) | 15.7 (10.6–20.9) | 3.1 (1.5–5.5) | 14.5 (11.0–17.9) | 14.6 (12.3–16.8) |
| New Zealand | Female | 22.2 (20.1–24.3) | 12.0 (8.7–15.3) | 1.8 (0.8–3.5) | 12.7 (11.2–14.1) | 12.2 (11.1–13.3) |
| | Male | 40.9 (37.7–44.2) | 32.1 (26.6–37.7) | 9.0 (5.9–12.2) | 29.2 (27.0–31.3) | 27.6 (25.9–29.4) |
| | Total | 30.9 (29.0–32.8) | 21.6 (18.5–24.7) | 5.2 (3.6–6.7) | 20.6 (19.3–21.9) | 19.6 (18.6–20.6) |

**Notes:**

**In the 2006/07** New Zealand Health Survey, adult participants who had an alcoholic drink in the previous 12 months were asked ten questions about their alcohol use, covering the volume and frequency of alcohol consumed, alcohol related problems and abnormal drinking behaviour. These 10 questions were developed by the WHO and are known as the Alcohol Use Disorders Identification Test (AUDIT). The international definition of hazardous drinking is defined as an AUDIT score greater than or equal to 8, and is the definition used here. This represents an established pattern of drinking that carries a high risk of future damage to physical or mental health.

## 3.5 Regular marijuana use

The prevalence of marijuana use over a twelve month period in Counties Manukau DHB was significantly lower than the New Zealand prevalence rate, adjusted for age. In Counties Manukau DHB, the prevalence of marijuana use among Māori was significantly higher than among the whole population, adjusted for age.

**Table 3.6:** Age-standardised prevalence rates (percent, with 95% confidence intervals) of marijuana use in 12 months prior to interview for the 2002/03 NZHS, 15+ years, by ethnicity

| | | Māori | Pacific | Asian | European/Other | Total |
|---|---|---|---|---|---|---|
| Counties Manukau DHB | Female | 21.5 (11.5–31.5) | 8.5 (3.8–16.1) | 1.3 (0.0–7.3) | 8.5 (4.2–15.1) | 8.9 (5.0–12.8) |
| | Male | 16.2 (5.3–34.5) | 2.7 (0.7–7.2) | 2.4 (0.0–15.1) | 10.3 (5.0–18.2) | 8.9 (5.3–13.9) |
| | Total | 19.8 (12.8–26.8) | 6.0 (3.1–10.4) | 1.8 (0.2–7.1) | 9.3 (5.6–14.4) | 8.9 (6.0–11.8) |
| New Zealand | Female | 22.5 (18.8–26.2) | 10.2 (6.3–14.0) | 1.3 (0.4–3.2) | 12.9 (11.3–14.6) | 12.5 (11.1–13.9) |
| | Male | 32.9 (28.5–37.3) | 13.7 (8.3–19.0) | 4.3 (2.2–7.7) | 21.2 (19.2–23.1) | 20.4 (18.6–22.2) |
| | Total | 27.3 (24.3–30.4) | 11.8 (8.8–14.9) | 2.7 (1.5–4.5) | 16.9 (15.6–18.2) | 16.3 (15.1–17.4) |

## 3.6 Overweight

The proportion of people who were overweight in Counties Manukau DHB was not significantly different from the proportion nationally. The male rate was significantly higher than the female rate.

**Table 3.7:** Age-standardised prevalence rates (percent, with 95% confidence intervals) of overweight, 15+ years, by ethnicity 2006/07 NZHS

| | | Māori | Pacific | Asian | European/Other | Total |
|---|---|---|---|---|---|---|
| Counties Manukau DHB | Female | 27.6 (23.0–32.6) | 21.6 (15.7–28.5) | 22.6 (17.7–28.1) | 30.5 (26.5–34.7) | 29.1 (25.2–33.2) |
| | Male | 31.7 (26.7–37.1) | 25.5 (19.5–32.3) | 35.9 (29.7–42.5) | 41.3 (37.2–45.5) | 39.6 (35.6–43.8) |
| | Total | 29.6 (25.4–34.0) | 23.6 (18.7–29.0) | 29.0 (24.3–34.0) | 35.9 (32.1–39.9) | 34.3 (30.6–38.0) |
| New Zealand | Female | 28.1 (25.1–31.4) | 22.1 (17.2–27.6) | 23.0 (19.5–26.9) | 31.1 (29.3–33.0) | 29.7 (28.0–31.4) |
| | Male | 32.4 (28.8–36.1) | 26.0 (21.0–31.5) | 36.6 (31.5–42.0) | 42.2 (40.1–44.2) | 40.4 (38.6–42.3) |
| | Total | 30.2 (27.9–32.5) | 24.0 (20.6–27.8) | 29.6 (26.4–32.9) | 36.6 (35.2–38.1) | 35.0 (34.0–36.0) |

**Definitions**

Information about obesity and overweight is drawn from the 2006/07 New Zealand Health Survey. Participants in the survey aged two years and over were weighed and had their height measured. From these measurements, body mass index (BMI) was calculated (weight in kilograms divided by height in metres squared), and international cut-off points were used to classify participants as obese or overweight. For more information see *A Portrait of Health – Key Results from the 2006/07 New Zealand Health Survey* (Ministry of Health 2008).

## 3.7 Obesity

The proportion of people obese in Counties Manukau DHB was significantly higher than the proportion nationally. The proportions of Pacific people and Māori who were obese were significantly higher than the total proportion of obese people in Counties Manukau DHB. The proportion of Asian people who were obese was significantly lower than the total proportion of obese people in Counties Manukau DHB, adjusted for age.

**Table 3.8:** Age-standardised prevalence rates (percent, with 95% confidence intervals) of obesity, 15+ years, by ethnicity, 2006/07 NZHS

| | | Māori | Pacific | Asian | European/Other | Total |
|---|---|---|---|---|---|---|
| Counties Manukau DHB | Female | 51.5 (46.7–56.2) | 78.4 (71.3–84.4) | 15.2 (11.1–20.1) | 30.1 (26.1–34.4) | 33.0 (29.1–37.0) |
| | Male | 50.5 (45.4–55.6) | 77.4 (70.5–83.3) | 11.6 (7.4–17.1) | 29.2 (25.2–33.4) | 31.7 (27.8–35.8) |
| | Total | 51.0 (46.8–55.2) | 77.9 (72.1–82.9) | 13.5 (9.6–18.2) | 29.6 (25.9–33.6) | 32.3 (28.7–35.9) |
| New Zealand | Female | 40.5 (37.3–43.7) | 61.7 (56.2–66.9) | 12.0 (9.4–14.9) | 23.7 (21.7–25.8) | 25.9 (24.2–27.7) |
| | Male | 39.7 (36.1–43.4) | 60.9 (55.6–66.0) | 9.1 (6.3–12.6) | 22.9 (21.0–25.0) | 24.9 (23.2–26.8) |
| | Total | 40.1 (37.9–42.4) | 61.3 (57.2–65.2) | 10.6 (8.4–13.1) | 23.3 (21.8–24.9) | 25.4 (24.5–26.4) |

**Definitions** – as for the table on prevalence of overweight, above.

## 3.8 High blood cholesterol

The rate of people taking medication for high cholesterol in Counties Manukau DHB was not significantly different from the national prevalence, adjusted for age.

**Table 3.9:** Age-standardised prevalence rates (percent, with 95% confidence intervals) of medicated high cholesterol, 15+ years, by ethnicity, 2006/07 NZHS

| | | Māori | Pacific | Asian | European/Other | Total |
|---|---|---|---|---|---|---|
| Counties Manukau DHB | Female | 5.6 (3.5–8.4) | 9.1 (5.9–13.2) | 4.6 (2.5–7.7) | 9.2 (7.2–11.5) | 8.7 (6.8–11.0) |
| | Male | 7.9 (5.6–10.8) | 7.3 (4.6–10.8) | 11.7 (8.5–15.6) | 12.1 (10.0–14.4) | 11.7 (9.6–14.0) |
| | Total | 3.7 (2.4–5.4) | 4.6 (2.7–7.4) | 4.4 (2.8–6.7) | 5.9 (4.7–7.3) | 5.7 (4.7–6.8) |
| New Zealand | Female | 3.7 (2.5–5.3) | 6.1 (3.5–9.7) | 3.1 (1.7–5.1) | 6.1 (5.2–7.2) | 5.8 (5.0–6.7) |
| | Male | 5.3 (3.7–7.2) | 4.9 (2.8–7.7) | 7.8 (5.2–11.2) | 8.1 (7.0–9.3) | 7.8 (6.8–8.9) |
| | Total | 4.4 (3.4–5.7) | 5.5 (3.7–7.9) | 5.3 (3.8–7.1) | 7.1 (6.2–8.0) | 6.7 (6.2–7.3) |

## 3.9 High blood pressure

The proportion of people taking medication for high blood pressure was not significantly different between Counties Manukau DHB and all New Zealand, adjusted for age.

**Table 3.10:** Age-standardised prevalence rates (percent, with 95% confidence intervals) of medicated high blood pressure, 15+ years, by ethnicity, 2006/07 NZHS

| | | Māori | Pacific | Asian | European/Other | Total |
|---|---|---|---|---|---|---|
| Counties Manukau DHB | Female | 9.4 (7.0–12.3) | 9.8 (6.9–13.3) | 6.5 (3.9–10.1) | 13.8 (11.5–16.3) | 12.9 (10.7–15.4) |
| | Male | 9.5 (6.9–12.8) | 9.7 (6.5–13.8) | 10.2 (7.3–13.8) | 12.3 (10.0–15.0) | 12.1 (9.9–14.6) |
| | Total | 9.5 (7.2–12.2) | 9.7 (7.0–13.1) | 8.2 (5.8–11.2) | 13.1 (10.9–15.5) | 12.5 (10.4–14.6) |
| New Zealand | Female | 8.2 (6.7–9.9) | 8.5 (6.3–11.1) | 5.7 (3.8–8.1) | 12.0 (10.8–13.1) | 11.2 (10.2–12.2) |
| | Male | 8.3 (6.4–10.4) | 8.4 (5.8–11.7) | 8.8 (6.6–11.5) | 10.7 (9.5–12.0) | 10.5 (9.5–11.6) |
| | Total | 8.2 (7.0–9.6) | 8.4 (6.5–10.7) | 7.2 (5.7–8.9) | 11.4 (10.5–12.3) | 10.9 (10.3–11.4) |

# 4 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 Counties Manukau DHB district, in comparison to all New Zealanders.

## Key points

- The avoidable mortality and hospitalisation rates for Counties Manukau DHB were significantly higher than the national rates. Males had significantly higher rates than females in Counties Manukau DHB.
- Three of the leading causes of avoidable mortality in Counties Manukau DHB were the same as those for New Zealand: ischaemic heart disease, lung cancer and suicide and self-inflicted injuries. Diabetes and stroke were also among the top five leading causes in Counties Manukau DHB.
- The leading causes of avoidable hospitalisation in Counties Manukau DHB were comparable to those nationally; respiratory infections, cellulitis, angina and dental conditions being in the top five. Asthma was also in the top five causes for Counties Manukau DHB.
- Self-reported diabetes prevalence was nearly 8% of adults in Counties Manukau DHB; this was significantly higher than the national rate.
- The diabetes hospitalisation rate in Counties Manukau DHB was significantly higher than the national rate. Pacific people had the highest rate of diabetes hospitalisations, followed by Māori, then Asian people with European/Other people having the lowest rate. The ethnic group differences were all significant.
- The hospitalisation rate for cardiovascular disease in Counties Manukau DHB was significantly higher than the national rate.
- The hospitalisation rate for stroke in Counties Manukau DHB was significantly higher than the national rate. Māori and Pacific people had significantly higher rates than European/Other and Asian people.
- Both the cancer hospitalisation and mortality rates in Counties Manukau DHB did not differ significantly from the national rates. Males had significantly higher cancer hospitalisation and mortality rates than females.
- The cervical cancer registration rate for Counties Manukau DHB was significantly higher than the national rate.
- The asthma hospitalisation rate for Counties Manukau DHB was significantly higher than the national rate. Māori and Pacific people had significantly higher rates than Asian and European/Other people.
- The rate of chronic obstructive pulmonary disease hospitalisations in Counties Manukau DHB was significantly higher than the national rate. Māori and Pacific peoples had significantly higher rates than European/Other and Asian people.

- Counties Manukau DHB had a significantly higher unintentional injury hospitalisation rate than the national rate. Māori had the highest rate, followed by Pacific people, then European/Other people, with Asian people having the lowest rate.
- Counties Manukau DHB had significantly lower campylobacteriosis, cryptosporidiosis, giardiasis, and salmonellosis notifications rates than all of New Zealand.
- Counties Manukau DHB had significantly higher hepatitis B, rheumatic fever, and tuberculosis notifications rates than all of New Zealand.
- The northern region had lower proportions of people with experience of disability than New Zealand as a whole.
- Three of the leading causes of hospitalisations for children aged under five years in Counties Manukau DHB were the same as those for New Zealand: respiratory infections, gastroenteritis, and disorders related to length of gestation and fetal growth. In Counties Manukau DHB, asthma and dental conditions were also among the leading causes of hospitalisation for children aged under five years.
- Counties Manukau DHB had three out of five of the same leading causes of hospitalisations for children aged 5–14 years as New Zealand as a whole. These included dental conditions, ear, nose and throat infections, and falls. The other leading causes for Counties Manukau DHB were cellulitis and exposure to inanimate mechanical forces.
- The rates of infant and perinatal mortality in Counties Manukau DHB were significantly higher than the rates for all of New Zealand.
- The Counties Manukau DHB child asthma hospitalisation rate was significantly higher than the national rate. Pacific children had the highest rate, followed by Māori, then Asian children, with European/Other people having the lowest rate.
- The rate of child hospitalisations due to falls in Counties Manukau DHB was significantly higher than the national rate. Māori had the highest rate, followed by Pacific people, then European/Other people, with Asian people having the lowest rate.
- The unintentional injury youth hospitalisation rate in Counties Manukau DHB was significantly higher than the New Zealand rate.
- For mothers aged 15 to 19 years living in the Counties Manukau district, the rate of live and still births was higher than the national rate.
- Counties Manukau DHB had the same leading causes of mortality for older people as those nationally: ischaemic heart disease, stroke, lung cancer, chronic obstructive pulmonary disease and diabetes.
- The leading causes of hospitalisations for older people in Counties Manukau DHB were the same as for New Zealand as a whole: ischaemic heart disease, chronic obstructive pulmonary disease, skin cancer, falls, and respiratory infections.
- The stroke hospitalisation rate for older people in Counties Manukau DHB was significantly higher than the national rate.
- The hospitalisation rate for chronic obstructive pulmonary disease among older people in Counties Manukau DHB was significantly higher than the national rate.

- Overall, the hospitalisation rate for falls of older people in Counties Manukau was significantly higher than the national rate.
- For mothers of all ages living in the Counties Manukau district, the rate of live births was higher than the national rate of births registered in 2007.
- In Counties Manukau DHB, 73% of (publicly funded) birth events were normal vaginal deliveries, which is higher than the proportion for New Zealand (65%).
- For mothers living in the Counties Manukau DHB, the rate of admission to hospital for pregnancy complications was higher than the New Zealand rate.

## 4.1 Avoidable mortality

Overall, the avoidable mortality rate for Counties Manukau DHB was significantly higher than the national rate. Males had a significantly higher avoidable mortality rate than females in Counties Manukau DHB. Māori had a significantly higher avoidable mortality rate than Pacific people who had a significantly higher rate than Asian and European/ Other people in Counties Manukau DHB.

**Table 4.1:** Avoidable mortality, 0–74 years, age-standardised rates per 100,000 (and 95% confidence intervals), 2003–05

| | | Māori | Pacific | Asian | European/Other | Total |
|---|---|---|---|---|---|---|
| Counties Manukau DHB | Female | 396.0 (350.0–446.4) | 246.0 (214.7–280.7) | 100.8 (80.2–125.2) | 95.0 (85.8–104.8) | 146.5 (137.5–156.1) |
| | Male | 512.8 (457.9–572.4) | 445.4 (399.4–495.2) | 137.2 (112.2–166.1) | 172.7 (159.9–186.3) | 233.9 (221.9–246.3) |
| | Total | 450.0 (414.2–488.0) | 338.9 (311.5–368.1) | 117.6 (101.4–135.7) | 133.2 (125.3–141.5) | 188.8 (181.3–196.5) |
| New Zealand | Female | 348.0 (333.4–363.0) | 231.6 (213.4–251.0) | 87.8 (78.7–97.6) | 116.2 (113.5–119.0) | 138.9 (136.2–141.7) |
| | Male | 491.9 (474.0–510.2) | 399.5 (373.9–426.3) | 138.0 (126.1–150.7) | 185.9 (182.3–189.5) | 217.7 (214.2–221.3) |
| | Total | 416.3 (404.9–428.0) | 310.0 (294.6–326.1) | 111.7 (104.2–119.5) | 150.3 (148.1–152.6) | 177.3 (175.1–179.5) |

## 4.2 Leading causes of avoidable mortality

Three of the leading causes of avoidable mortality in Counties Manukau DHB were the same as those for New Zealand. These were ischaemic heart disease, lung cancer and suicide and self-inflicted injuries. In addition to these diabetes and stroke were also among the top five leading causes in Counties Manukau DHB.

**Table 4.2:** Leading causes of avoidable mortality, males and females, 0–74 years, 2003–05

| | New Zealand | | Counties Manukau DHB | |
|---|---|---|---|---|
| | **Causes** | **Rank** | **Causes** | **Rank** |
| Female | Neoplasms - Breast | 1 | Cardiovascular diseases - Ischaemic heart disease | 1 |
| | Cardiovascular diseases - Ischaemic heart disease | 2 | Neoplasms - Lung | 2 |
| | Neoplasms - Lung | 3 | Neoplasms - Breast | 3 |
| | Neoplasms - Colorectal | 4 | Nutritional, endocrine and metabolic - Diabetes | 4 |
| | Cardiovascular diseases - Cerebrovascular diseases | 5 | Respiratory diseases - COPD | 5 |
| Male | Cardiovascular diseases - Ischaemic heart disease | 1 | Cardiovascular diseases - Ischaemic heart disease | 1 |
| | Neoplasms - Lung | 2 | Neoplasms - Lung | 2 |
| | Intentional injuries - Suicide and self inflicted injuries | 3 | Intentional injuries - Suicide and self inflicted injuries | 3 |
| | Unintentional injuries - Road traffic injuries, other transport injuries | 4 | Unintentional injuries - Road traffic injuries, other transport injuries | 4 |
| | Neoplasms - Colorectal | 5 | Cardiovascular diseases - Cerebrovascular diseases | 5 |
| Total | Cardiovascular diseases - Ischaemic heart disease | 1 | Cardiovascular diseases - Ischaemic heart disease | 1 |
| | Neoplasms - Lung | 2 | Neoplasms - Lung | 2 |
| | Intentional injuries - Suicide and self inflicted injuries | 3 | Intentional injuries - Suicide and self inflicted injuries | 3 |
| | Neoplasms - Colorectal | 4 | Nutritional, endocrine and metabolic - Diabetes | 4 |
| | Unintentional injuries - Road traffic injuries, other transport injuries | 5 | Cardiovascular diseases - Cerebrovascular diseases | 5 |

Note: Neoplasms = cancer; COPD = chronic obstructive pulmonary disease.

There were similarities across the ethnic groups in leading causes of avoidable mortality for Counties Manukau DHB. Ischaemic heart disease and lung cancer were leading causes for all ethnic groups. Diabetes and stroke were leading causes for Māori, Pacific and Asian people, while colorectal cancer, was a leading cause for European/Other people.

**Table 4.3:** Leading causes of avoidable mortality, by ethnic group, 0–74 years, 2003–05

| | New Zealand | | Counties Manukau DHB | |
|---|---|---|---|---|
| | **Causes** | **Rank** | **Causes** | **Rank** |
| Māori | Cardiovascular diseases - Ischaemic heart disease | 1 | Cardiovascular diseases - Ischaemic heart disease | 1 |
| | Neoplasms - Lung | 2 | Neoplasms - Lung | 2 |
| | Nutritional, endocrine and metabolic - Diabetes | 3 | Nutritional, endocrine and metabolic - Diabetes | 3 |
| | Respiratory diseases - COPD | 4 | Respiratory diseases - COPD | 4 |
| | Unintentional injuries - Road traffic injuries, other transport injuries | 5 | Cardiovascular diseases - Cerebrovascular diseases | 5 |
| Pacific | Cardiovascular diseases - Ischaemic heart disease | 1 | Cardiovascular diseases - Ischaemic heart disease | 1 |
| | Nutritional, endocrine and metabolic - Diabetes | 2 | Nutritional, endocrine and metabolic - Diabetes | 2 |
| | Cardiovascular diseases - Cerebrovascular diseases | 3 | Neoplasms - Lung | 3 |
| | Neoplasms - Lung | 4 | Cardiovascular diseases - Cerebrovascular diseases | 4 |
| | Respiratory diseases - COPD | 5 | Respiratory diseases - COPD | 5 |
| Asian | Cardiovascular diseases - Ischaemic heart disease | 1 | Cardiovascular diseases - Ischaemic heart disease | 1 |
| | Nutritional, endocrine and metabolic - Diabetes | 2 | Nutritional, endocrine and metabolic - Diabetes | 2 |
| | Cardiovascular diseases - Cerebrovascular diseases | 3 | Neoplasms - Lung | 3 |
| | Neoplasms - Lung | 4 | Cardiovascular diseases - Cerebrovascular diseases | 4 |
| | Unintentional injuries - Road traffic injuries, other transport injuries | 5 | Intentional injuries - Suicide and self inflicted injuries | 5 |
| European/ Other | Cardiovascular diseases - Ischaemic heart disease | 1 | Cardiovascular diseases - Ischaemic heart disease | 1 |
| | Neoplasms - Lung | 2 | Neoplasms - Lung | 2 |
| | Neoplasms - Colorectal | 3 | Intentional injuries - Suicide and self inflicted injuries | 3 |
| | Intentional injuries - Suicide and self inflicted injuries | 4 | Neoplasms - Colorectal | 4 |
| | Unintentional injuries - Road traffic injuries, other transport injuries | 5 | Unintentional injuries - Road traffic injuries, other transport injuries | 5 |

Note: Neoplasms = cancer; COPD = chronic obstructive pulmonary disease.

## 4.3 Avoidable hospitalisations

The avoidable hospitalisation rate for Counties Manukau DHB was significantly higher than the national rate. Māori had the highest rate, followed by Pacific people, then European/Other people, with Asian people having the lowest rate. All of the ethnic group differences were significant. Males had a significantly higher rate of avoidable hospitalisations than females.

**Table 4.4:** Avoidable hospitalisations, 0–74 years, age-standardised rates per 100,000 (and 95% confidence intervals), 2005–07

| | | Māori | Pacific | Asian | European/Other | Total |
|---|---|---|---|---|---|---|
| Counties Manukau DHB | Female | 6711.3 (6547.7 - 6878.0) | 6036.2 (5899.9 - 6174.9) | 2232.2 (2140.2 - 2327.2) | 2935.7 (2876.9 - 2995.5) | 3934.6 (3886.5 - 3983.2) |
| | Male | 6608.0 (6439.2 - 6780.1) | 6805.7 (6655.8 - 6958.2) | 2792.3 (2686.5 - 2901.3) | 3556.3 (3491.8 - 3621.7) | 4402.4 (4350.8 - 4454.5) |
| | Total | 6667.1 (6549.3 - 6786.5) | 6404.7 (6303.6 - 6507.1) | 2501.0 (2431.1 - 2572.5) | 3242.7 (3199.0 - 3286.8) | 4163.4 (4128.2 - 4198.9) |
| New Zealand | Female | 5398.0 (5347.3 - 5449.0) | 5487.4 (5408.1 - 5567.6) | 1973.1 (1932.9 - 2014.0) | 2886.6 (2869.2 - 2902.6) | 3261.8 (3242.2 - 3276.3) |
| | Male | 5446.4 (5394.7 - 5498.5) | 6077.6 (5992.4 - 6163.7) | 2343.0 (2297.2 - 2389.4) | 3412.8 (3392.3 - 3430.2) | 3719.6 (3697.3 - 3735.2) |
| | Total | 5427.9 (5391.7 - 5464.3) | 5770.2 (5712.1 - 5828.8) | 2152.8 (2122.4 - 2183.5) | 3147.1 (3128.2 - 3159.0) | 3488.3 (3467.4 - 3498.9) |

## 4.4 Leading causes of avoidable hospitalisations

The leading causes of avoidable hospitalisation in Counties Manukau DHB were comparable to those nationally; respiratory infections, cellulitis, angina and dental conditions being in the top five. Asthma was also in the top five causes for Counties Manukau DHB. Kidney or urinary infection was a leading cause of avoidable hospitalisations for women in Counties Manukau DHB, while road traffic injury was a leading cause for men.

**Table 4.5:** Leading causes of avoidable hospitalisations, males and females, 0–74 years, 2005–07

| | New Zealand | | Counties Manukau DHB | |
|---|---|---|---|---|
| | **Causes** | **Rank** | **Causes** | **Rank** |
| Female | Respiratory infections | 1 | Respiratory infections | 1 |
| | Angina | 2 | Angina | 2 |
| | Cellulitis | 3 | Cellulitis | 3 |
| | Asthma | 4 | Kidney/urinary infection | 4 |
| | Dental conditions | 5 | Asthma | 5 |
| Male | Respiratory infections | 1 | Angina | 1 |
| | Angina | 2 | Respiratory infections | 2 |
| | Cellulitis | 3 | Cellulitis | 3 |
| | Road traffic injury | 4 | Road traffic injury | 4 |
| | ENT infections | 5 | Dental conditions | 5 |
| Total | Respiratory infections | 1 | Respiratory infections | 1 |
| | Angina | 2 | Angina | 2 |
| | Cellulitis | 3 | Cellulitis | 3 |
| | ENT infections | 4 | Dental conditions | 4 |
| | Dental conditions | 5 | Asthma | 5 |

Respiratory infections and angina were leading causes across all ethnic groups. Chronic obstructive pulmonary disease was a leading cause for Māori and Pacific people, while gastroenteritis was a leading cause for Asian and European/Other people.

**Table 4.6:** Leading causes of avoidable hospitalisations, by ethnic group, 0–74 years, 2005–07

| | New Zealand | | Counties Manukau DHB | |
|---|---|---|---|---|
| | **Causes** | **Rank** | **Causes** | **Rank** |
| Māori | Respiratory infections | 1 | Cellulitis | 1 |
| | Angina | 2 | Respiratory infections | 2 |
| | Cellulitis | 3 | Angina | 3 |
| | COPD | 4 | COPD | 4 |
| | Asthma | 5 | Asthma | 5 |
| Pacific | Respiratory infections | 1 | Respiratory infections | 1 |
| | Angina | 2 | Angina | 2 |
| | Cellulitis | 3 | Cellulitis | 3 |
| | Asthma | 4 | Asthma | 4 |
| | COPD | 5 | COPD | 5 |
| Asian | Angina | 1 | Angina | 1 |
| | Respiratory infections | 2 | Respiratory infections | 2 |
| | Dental conditions | 3 | Dental conditions | 3 |
| | Gastroenteritis | 4 | Gastroenteritis | 4 |
| | Asthma | 5 | Asthma | 5 |
| European/ Other | Angina | 1 | Angina | 1 |
| | Respiratory infections | 2 | Respiratory infections | 2 |
| | Cellulitis | 3 | Cellulitis | 3 |
| | Road traffic injury | 4 | Road traffic injury | 4 |
| | ENT infections | 5 | Gastroenteritis | 5 |

## 4.5 Self-reported general health status in adults (15+ years)

About 60% of adults in Counties Manukau DHB reported that their general health status was excellent or very good. The prevalence rates for Māori and Pacific females were significantly lower than the total female rate for Counties Manukau DHB, adjusted for age.

**Table 4.7:** Age-standardised prevalence (percent, and 95% confidence intervals) of self-reported excellent or very good health, adults 15+ years, 2006/07 NZHS

| | | Māori | Pacific | Asian | European/Other | Total |
|---|---|---|---|---|---|---|
| Counties Manukau DHB | Female | 51.0 (46.1–55.9) | 50.5 (44.4–56.6) | 56.7 (51.1–62.3) | 64.3 (60.0–68.5) | 62.0 (57.8–66.1) |
| | Male | 51.9 (46.1–57.8) | 52.5 (46.3–58.6) | 55.2 (48.4–61.8) | 60.2 (55.7–64.5) | 58.9 (54.5–63.1) |
| | Total | 51.5 (46.7–56.1) | 51.5 (46.0–56.9) | 56.0 (50.8–61.1) | 62.3 (58.1–66.4) | 60.5 (56.8–64.3) |
| New Zealand | Female | 51.6 (48.3–55.0) | 51.1 (46.1–56.0) | 57.4 (53.1–61.6) | 65.1 (62.7–67.3) | 62.8 (60.6–64.8) |
| | Male | 52.5 (48.0–57.1) | 53.1 (48.1–58.1) | 55.8 (50.1–61.4) | 60.9 (58.3–63.4) | 59.6 (57.2–61.9) |
| | Total | 52.0 (49.0–55.0) | 52.1 (48.0–56.1) | 56.6 (52.9–60.3) | 63.0 (60.9–65.1) | 61.2 (59.8–62.6) |

## 4.6 Diabetes prevalence in adults (15+ years)

Self-reported diabetes prevalence was nearly 8% of adults in Counties Manukau DHB; this was significantly higher than the national rate, adjusted for age. Asian males and Pacific people had significantly higher prevalence rates than the total male rate and total population rate respectively in Counties Manukau DHB, adjusted for age.

**Table 4.8:** Age-standardised prevalence (percent, and 95% confidence intervals) of self-reported diabetes, adults 15+ years, 2006/07 NZHS

| | | Māori | Pacific | Asian | European/Other | Total |
|---|---|---|---|---|---|---|
| Counties Manukau DHB | Female | 7.6 (5.8–9.7) | 13.9 (11.1–17.1) | 6.9 (4.9–9.3) | 6.0 (4.4–8.0) | 6.9 (5.3–8.8) |
| | Male | 10.5 (8.5–12.9) | 16.8 (13.2–20.9) | 13.6 (11.1–16.4) | 7.1 (5.5–9.1) | 8.6 (7.0–10.5) |
| | Total | 8.9 (7.2–11.0) | 15.3 (12.9–17.9) | 10.0 (8.1–12.2) | 6.6 (5.0–8.4) | 7.7 (6.1–9.3) |
| New Zealand | Female | 4.1 (3.0–5.4) | 7.5 (5.2–10.4) | 3.7 (2.4–5.4) | 3.3 (2.6–4.1) | 3.7 (3.1–4.4) |
| | Male | 5.7 (4.3–7.4) | 9.1 (6.0–13.1) | 7.4 (5.4–9.7) | 3.9 (3.1–4.7) | 4.7 (4.0–5.4) |
| | Total | 4.8 (3.9–5.9) | 8.3 (6.5–10.4) | 5.4 (4.3–6.8) | 3.6 (3.0–4.2) | 4.2 (3.8–4.5) |

## 4.7 Diabetes hospitalisations

The diabetes hospitalisation rate in Counties Manukau DHB was significantly higher than the national rate. Pacific people had the highest rate of diabetes hospitalisations, followed by Māori, then Asian people with European/Other people having the lowest rate. The ethnic group differences were all significant.

**Table 4.9:** Diabetes hospitalisations, 15+ years, age-standardised rates per 100,000 (and 95% confidence intervals), 2005–07

| | | Māori | Pacific | Asian | European/Other | Total |
|---|---|---|---|---|---|---|
| Counties Manukau DHB | Female | 666.5 (595.2 - 744.1) | 855.9 (786.6 - 929.8) | 220.2 (184.4 - 260.9) | 147.5 (135.3 - 160.5) | 281.9 (268.0 - 296.3) |
| | Male | 716.4 (639.5 - 799.9) | 852.2 (778.7 - 930.8) | 223.9 (186.7 - 266.5) | 187.7 (173.0 - 203.2) | 311.4 (296.1 - 327.4) |
| | Total | 689.5 (636.8 - 745.4) | 857.1 (806.1 - 910.4) | 223.0 (196.7 - 251.8) | 167.1 (157.5 - 177.0) | 296.6 (286.3 - 307.3) |
| New Zealand | Female | 479.4 (459.6 - 499.9) | 781.9 (742.8 - 822.5) | 222.7 (205.2 - 241.3) | 139.8 (136.6 - 143.1) | 184.6 (181.3 - 188.1) |
| | Male | 599.9 (576.1 - 624.5) | 761.3 (719.9 - 804.4) | 249.4 (229.9 - 270.1) | 175.3 (171.5 - 179.2) | 221.6 (217.7 - 225.6) |
| | Total | 534.9 (519.5 - 550.6) | 771.0 (742.5 - 800.2) | 233.1 (220.1 - 246.7) | 156.2 (153.8 - 158.8) | 201.7 (199.1 - 204.3) |

### 4.7.1 Adult hospitalisations due to renal failure as long term complication of diabetes

The rate of hospitalisations of people with renal failure due to diabetes for Counties Manukau DHB was significantly higher than the national rate. The rate for males was significantly higher than the rate for females. The rates for Māori and Pacific people were significantly higher than the Asian rate which was significantly higher than the European/Other rate.

**Table 4.10:** Diabetes complications – renal failure hospitalisations, 15+ years, age-standardised rate per 100,000 (and 95% confidence intervals), 2005–07

| | | Māori | Pacific | Asian | European/Other | Total |
|---|---|---|---|---|---|---|
| Counties Manukau DHB | Female | 81.7 (57.2 - 113.1) | 86.8 (65.5 - 112.7) | 19.9 (10.9 - 33.4) | 8.7 (5.8 - 12.5) | 25.2 (21.2 - 29.9) |
| | Male | 130.4 (99.0 - 168.6) | 127.2 (101.0 - 158.1) | 17.5 (8.4 - 32.2) | 9.7 (6.7 - 13.4) | 36.0 (31.0 - 41.6) |
| | Total | 103.7 (83.8 - 127.0) | 106.8 (89.6 - 126.2) | 18.7 (12.0 - 27.9) | 9.1 (7.0 - 11.6) | 30.5 (27.2 - 34.0) |
| New Zealand | Female | 72.4 (64.8 - 80.7) | 91.8 (78.9 - 106.2) | 15.0 (10.9 - 20.3) | 8.2 (7.5 - 9.0) | 16.4 (15.4 - 17.4) |
| | Male | 129.8 (118.8 - 141.4) | 103.1 (88.6 - 119.3) | 18.7 (13.9 - 24.5) | 11.3 (10.4 - 12.3) | 23.5 (22.2 - 24.7) |
| | Total | 99.0 (92.5 - 105.9) | 97.0 (87.2 - 107.5) | 16.9 (13.6 - 20.7) | 9.6 (9.0 - 10.2) | 19.7 (18.9 - 20.5) |

### 4.7.2 Adult hospitalisations due to leg/foot/toe amputation

The rate of hospitalisations due to leg/foot/toe amputation in Counties Manukau DHB did not differ significantly from the national rate. The male rate was more than double the female rate. Māori and Pacific people experienced significantly higher rates than European/Other people.

**Table 4.11:** Diabetes complications – leg/foot/toe amputation hospitalisation, 15+ years, age-standardised rates per 100,000 (and 95% confidence intervals), 2005–07

| | | Māori | Pacific | Asian | European/Other | Total |
|---|---|---|---|---|---|---|
| Counties Manukau DHB | Female | 29.1 (15.9 - 48.8) | 19.9 (10.9 - 33.4) | * | 3.6 (1.9 - 6.2) | 8.0 (5.8 - 10.7) |
| | Male | 57.5 (37.6 - 84.3) | 47.7 (31.7 - 69.0) | * | 13.7 (10.1 - 18.2) | 20.2 (16.5 - 24.5) |
| | Total | 42.0 (30.0 - 57.3) | 32.7 (23.5 - 44.1) | * | 8.4 (6.4 - 10.9) | 13.8 (11.6 - 16.2) |
| New Zealand | Female | 26.5 (21.9–31.8) | 21.2 (15.3–28.5) | 4.3 (2.3–7.4) | 4.8 (4.3–5.4) | 7.1 (6.5–7.8) |
| | Male | 58.6 (51.0–67.0) | 39.0 (29.9–50.0) | 5.4 (2.9–9.3) | 13.4 (12.4–14.4) | 16.8 (15.7–17.9) |
| | Total | 40.7 (36.4–45.3) | 28.7 (23.5–34.7) | 4.7 (3.1–6.9) | 8.8 (8.3–9.4) | 11.6 (11.0–12.2) |

* Rates not presented for groups with small numbers.

## 4.8 All cardiovascular disease mortality

The cardiovascular disease mortality rates in Counties Manukau DHB did not differ significantly from the national rates. Males experienced a significantly higher mortality from cardiovascular disease than their female counterparts. Māori and Pacific people had significantly higher rates than European/Other people who had a significantly higher rate than Asian people.

**Table 4.12:** All cardiovascular disease mortality, all ages, age-standardised rates per 100,000 (and 95% confidence intervals), 2003–05

| | | Māori | Pacific | Asian | European/Other | Total |
|---|---|---|---|---|---|---|
| Counties Manukau DHB | Female | 227.9 (186.8–275.4) | 202.5 (170.1–239.4) | 99.8 (74.8–130.6) | 98.9 (92.5–105.6) | 120.5 (113.8–127.6) |
| | Male | 296.4 (246.5–353.4) | 335.4 (289.9–386.1) | 88.6 (65.3–117.5) | 161.4 (150.5–172.8) | 186.1 (175.6–197.0) |
| | Total | 259.0 (226.7–294.7) | 266.6 (238.7–296.9) | 97.1 (79.1–118.0) | 128.3 (122.3–134.5) | 151.4 (145.3–157.6) |
| New Zealand | Female | 226.9 (213.6–240.8) | 192.9 (174.6–212.6) | 82.8 (72.4–94.3) | 114.5 (112.7–116.3) | 123.5 (121.6–125.3) |
| | Male | 336.7 (319.6–354.5) | 325.4 (299.2–353.3) | 102.8 (90.7–116.1) | 170.1 (167.2–173.0) | 184.8 (181.8–187.7) |
| | Total | 277.6 (266.9–288.6) | 253.7 (238.1–270.2) | 93.3 (85.2–101.9) | 140.5 (138.9–142.2) | 152.2 (150.6–153.9) |

## 4.9 All cardiovascular disease hospitalisations

The hospitalisation rate for cardiovascular disease in Counties Manukau DHB was significantly higher than the national rate. The rate was significantly higher for males than for females. Māori had the highest rate, followed by Pacific people, then European/Other people, while Asian people had the lowest rate. The ethnic group differences were all significant.

**Table 4.13:** All cardiovascular disease hospitalisations, all ages, age-standardised rates per 100,000 (and 95% confidence intervals), 2005–07

| | | Māori | Pacific | Asian | European/Other | Total |
|---|---|---|---|---|---|---|
| Counties Manukau DHB | Female | 1949.6 (1842.7 - 2061.1) | 1390.2 (1315.4 - 1468.0) | 600.8 (549.2 - 655.8) | 801.8 (778.9 - 825.3) | 966.4 (944.9 - 988.3) |
| | Male | 2281.7 (2162.1 - 2406.3) | 2262.7 (2159.6 - 2369.5) | 1046.9 (978.3 - 1119.0) | 1343.5 (1310.5 - 1377.1) | 1540.6 (1511.0 - 1570.5) |
| | Total | 2113.1 (2032.7 - 2195.9) | 1790.2 (1727.8 - 1854.4) | 815.1 (772.4 - 859.5) | 1061.4 (1041.6 - 1081.5) | 1238.4 (1220.4 - 1256.6) |
| New Zealand | Female | 1523.6 (1492.5 - 1555.1) | 1320.3 (1276.9 - 1364.7) | 567.3 (543.9 - 591.5) | 766.6 (760.8 - 772.4) | 837.0 (831.2 - 842.8) |
| | Male | 1976.4 (1939.6 - 2013.8) | 1988.8 (1931.5 - 2047.4) | 938.1 (907.0 - 970.1) | 1301.4 (1292.8 - 1310.0) | 1372.4 (1364.2 - 1380.6) |
| | Total | 1741.6 (1717.6 - 1765.8) | 1622.9 (1587.7 - 1658.7) | 740.6 (721.3 - 760.2) | 1020.7 (1014.5 - 1025.8) | 1090.4 (1083.8 - 1095.3) |

## 4.10 Ischaemic heart disease prevalence

In Counties Manukau DHB, 4.9% of males and 3.4% of females reported that they had ischaemic heart disease, adjusted for age.

**Table 4.14:** Age standardised prevalence (percent, and 95% confidence intervals) of self-reported ischaemic heart disease, adults 15+ years, 2006/07 NZHS

| | | Māori | Pacific | Asian | European/Other | Total |
|---|---|---|---|---|---|---|
| Counties Manukau DHB | Female | 4.0 (2.4–6.3) | 3.2 (1.4–6.2) | 1.0 (0.1–4.0) | 3.5 (2.1–5.4) | 3.4 (2.1–5.2) |
| | Male | 3.3 (1.8–5.6) | 1.3 (0.1–5.2) | 2.7 (0.9–6.4) | 5.3 (3.8–7.1) | 4.9 (3.5–6.6) |
| | Total | 3.7 (2.3–5.7) | 2.3 (0.9–4.7) | 1.8 (0.5–4.5) | 4.4 (3.0–6.1) | 4.1 (2.7–5.4) |
| New Zealand | Female | 3.9 (2.7–5.4) | 3.1 (1.6–5.4) | 1.0 (0.3–2.2) | 3.4 (2.6–4.3) | 3.3 (2.6–4.0) |
| | Male | 3.2 (2.2–4.7) | 1.3 (0.2–3.9) | 2.7 (1.0–5.6) | 5.1 (4.3–6.1) | 4.7 (3.9–5.6) |
| | Total | 3.6 (2.7–4.7) | 2.2 (1.2–3.7) | 1.7 (0.8–3.4) | 4.2 (3.6–4.9) | 4.0 (3.6–4.3) |

## 4.11 Ischaemic heart disease mortality

The rate of ischaemic heart disease mortality in Counties Manukau DHB did not differ significantly from the national rate. The rate for males was nearly twice that for females. The rates for Māori and Pacific people in Counties Manukau DHB were significantly higher than the rate for European/Other people, which was significantly higher than the rate for Asian people.

**Table 4.15:** Ischaemic heart disease mortality, 25+ years, age-standardised rates per 100,000 (and 95% confidence intervals), 2003–05

| | | Māori | Pacific | Asian | European/Other | Total |
|---|---|---|---|---|---|---|
| Counties Manukau DHB | Female | 176.2 (129.0–235.0) | 149.9 (113.5–194.2) | 63.1 (38.0–98.5) | 87.7 (79.9–96.2) | 100.9 (92.8–109.5) |
| | Male | 286.4 (222.4–363.1) | 320.5 (263.1–386.6) | 92.1 (61.7–132.3) | 167.8 (153.2–183.3) | 190.3 (176.4–204.9) |
| | Total | 226.3 (186.7–271.9) | 229.1 (195.6–266.8) | 76.4 (56.4–101.3) | 124.7 (116.9–132.9) | 142.2 (134.5–150.3) |
| New Zealand | Female | 191.8 (175.6–209.1) | 153.1 (131.8–176.9) | 56.0 (44.7–69.3) | 101.0 (98.8–103.3) | 107.5 (105.2–109.8) |
| | Male | 368.2 (344.8–392.8) | 325.1 (290.8–362.4) | 115.2 (98.7–133.8) | 186.1 (182.1–190.2) | 201.5 (197.5–205.6) |
| | Total | 272.5 (258.6–287.0) | 229.3 (209.8–250.1) | 83.6 (73.7–94.4) | 139.7 (137.6–141.9) | 150.4 (148.3–152.6) |

## 4.12 Hospitalisations due to ischaemic heart disease

The rate of hospitalisations due to ischaemic heart disease in Counties Manukau DHB did not differ significantly from the national rate. The male rate was double the female rate. Māori and Pacific people had significantly higher rates than Asian and European/ Other people.

**Table 4.16:** Ischaemic heart disease hospitalisation, 25+ years, age-standardised rates per 100,000 (and 95% confidence intervals), 2005–07

| | | Māori | Pacific | Asian | European/Other | Total |
|---|---|---|---|---|---|---|
| Counties Manukau DHB | Female | 864.2 (769.7 - 967.0) | 529.0 (466.1 - 598.1) | 384.8 (329.9 - 446.2) | 421.4 (400.1 - 443.4) | 477.3 (457.6 - 497.6) |
| | Male | 1035.1 (929.3 - 1149.6) | 1420.6 (1313.5 - 1534.2) | 900.9 (819.2 - 988.7) | 931.9 (896.0 - 968.8) | 1027.4 (995.7 - 1059.8) |
| | Total | 948.1 (876.8 - 1023.7) | 947.1 (886.4 - 1010.9) | 633.3 (584.4 - 685.2) | 667.5 (647.1 - 688.5) | 739.5 (721.2 - 758.1) |
| New Zealand | Female | 839.8 (808.8 - 871.6) | 614.3 (574.2 - 656.4) | 363.0 (337.8 - 389.7) | 452.1 (446.3 - 457.9) | 485.0 (479.3 - 490.7) |
| | Male | 1162.0 (1124.5 - 1200.4) | 1240.1 (1180.8 - 1301.5) | 799.1 (761.4 - 838.1) | 983.9 (974.2 - 993.8) | 1010.1 (1000.9 - 1019.4) |
| | Total | 995.3 (971.1 - 1020.0) | 909.4 (874.2 - 945.6) | 565.6 (543.4 - 588.4) | 706.2 (700.7 - 711.8) | 734.7 (729.4 - 740.0) |

## 4.13 Cerebrovascular disease (stroke) prevalence

In Counties Manukau DHB, 1.4% of adults reported that they had experienced a stroke, adjusted for age.

**Table 4.17:** Age standardised prevalence (percent, and 95% confidence intervals) of self-reported stroke, 15+ years, 2006/07 NZHS

| | | Māori | Pacific | Asian | European/Other | Total |
|---|---|---|---|---|---|---|
| Counties Manukau DHB | Female | 1.3 (0.6–2.6) | 1.7 (0.5–4.1) | 0.7 (0.1–2.4) | 1.4 (0.8–2.4) | 1.4 (0.8–2.3) |
| | Male | 1.4 (0.5–3.1) | 1.4 (0.2–4.9) | 0.8 (0.1–2.7) | 1.4 (0.8–2.4) | 1.4 (0.8–2.4) |
| | Total | 1.3 (0.6–2.5) | 1.6 (0.5–3.6) | 0.7 (0.1–2.1) | 1.4 (0.8–2.3) | 1.4 (0.8–2.2) |
| New Zealand | Female | 1.3 (0.7–2.2) | 1.8 (0.6–3.9) | 0.7 (0.2–1.8) | 1.5 (1.1–2.0) | 1.4 (1.0–1.8) |
| | Male | 1.4 (0.6–2.8) | 1.4 (0.2–4.6) | 0.8 (0.2–2.2) | 1.4 (1.0–2.0) | 1.4 (1.0–2.0) |
| | Total | 1.4 (0.8–2.2) | 1.6 (0.6–3.4) | 0.7 (0.3–1.6) | 1.5 (1.1–1.8) | 1.4 (1.2–1.6) |

## 4.14 Cerebrovascular disease (stroke) mortality

The mortality rate for stroke in Counties Manukau DHB did not differ significantly from the national rate. Pacific people had a significantly higher rate than European/Other and Asian people.

**Table 4.18:** Stroke mortality, 25+ years, age-standardised rates per 100,000 (and 95% confidence intervals), 2003–05

| | | Māori | Pacific | Asian | European/Other | Total |
|---|---|---|---|---|---|---|
| Counties Manukau DHB | Female | 92.7 (59.4–137.9) | 112.0 (80.7–151.4) | 65.5 (39.4–102.3) | 47.9 (42.2–54.2) | 58.7 (52.6–65.3) |
| | Male | 62.7 (35.9–101.9) | 123.7 (86.6–171.2) | 42.7 (21.3–76.5) | 53.4 (45.4–62.5) | 60.3 (52.6–68.8) |
| | Total | 79.6 (56.8–108.3) | 121.9 (96.3–152.1) | 58.0 (39.1–82.8) | 51.9 (47.0–57.2) | 60.9 (56.0–66.2) |
| New Zealand | Female | 91.5 (80.5–103.6) | 111.0 (92.7–131.8) | 61.4 (49.9–74.6) | 58.7 (57.0–60.4) | 62.6 (60.9–64.3) |
| | Male | 74.9 (63.8–87.4) | 113.7 (93.0–137.7) | 39.2 (29.3–51.4) | 56.9 (54.7–59.1) | 59.5 (57.4–61.7) |
| | Total | 84.8 (76.8–93.4) | 115.5 (101.2–131.2) | 52.8 (44.8–61.9) | 58.8 (57.4–60.1) | 62.1 (60.8–63.5) |

## 4.15 Hospitalisations due cerebrovascular disease (stroke)

The hospitalisation rate for stroke in Counties Manukau DHB was significantly higher than the national rate. Males had a significantly higher rate than females. Māori and Pacific people had significantly higher rates than European/Other and Asian people.

**Table 4.19:** Stroke hospitalisation, 25+ years, age-standardised rates per 100,000 (and 95% confidence intervals), 2005–07

| | | Māori | Pacific | Asian | European/Other | Total |
|---|---|---|---|---|---|---|
| Counties Manukau DHB | Female | 390.8 (326.3 - 464.3) | 332.6 (282.6 - 388.9) | 147.7 (113.2 - 189.4) | 123.4 (112.4 - 135.3) | 169.4 (157.9 - 181.5) |
| | Male | 339.8 (276.5 - 413.3) | 411.4 (350.5 - 479.9) | 226.4 (182.5 - 277.7) | 210.3 (193.6 - 228.1) | 245.0 (229.6 - 261.1) |
| | Total | 374.3 (327.4 - 426.1) | 370.9 (331.3 - 413.9) | 185.3 (157.2 - 216.9) | 165.3 (155.4 - 175.6) | 205.4 (195.9 - 215.3) |
| New Zealand | Female | 288.4 (270.5 - 307.3) | 310.4 (282.0 - 340.8) | 135.2 (119.8 - 152.1) | 135.0 (132.0 - 138.1) | 151.8 (148.8 - 155.0) |
| | Male | 263.4 (244.9 - 282.9) | 392.3 (356.6 - 430.4) | 187.9 (169.0 - 208.4) | 186.8 (182.7 - 191.0) | 199.2 (195.2 - 203.3) |
| | Total | 278.5 (265.5 - 292.0) | 345.5 (323.1 - 369.1) | 160.8 (148.5 - 173.7) | 159.6 (157.0 - 162.1) | 174.2 (171.7 - 176.8) |

## 4.16 All cancer mortality

The cancer mortality rate in Counties Manukau DHB did not differ significantly from the national rate. The rate among males was significantly higher than that for females. The rates for Māori and Pacific people were significantly higher than the rate for European/Other people, which was significantly higher than the rate for Asian people.

**Table 4.20:** All cancer mortality, all ages, age-standardised rates per 100,000 (and 95% confidence intervals), 2003–05

| | | Māori | Pacific | Asian | European/Other | Total |
|---|---|---|---|---|---|---|
| Counties Manukau DHB | Female | 207.2 (170.9–248.9) | 172.6 (144.8–204.2) | 52.3 (37.7–70.6) | 97.2 (89.4–105.6) | 110.1 (102.9–117.8) |
| | Male | 297.9 (247.2–356.0) | 242.8 (205.1–285.4) | 79.9 (59.3–105.3) | 142.7 (132.2–153.7) | 157.9 (148.3–168.0) |
| | Total | 246.6 (216.0–280.2) | 200.9 (178.1–225.7) | 64.2 (51.7–78.7) | 116.8 (110.5–123.5) | 130.7 (124.9–136.8) |
| New Zealand | Female | 201.0 (189.4–213.0) | 143.7 (128.8–159.8) | 61.6 (53.6–70.4) | 109.9 (107.7–112.1) | 115.7 (113.6–117.9) |
| | Male | 244.5 (230.2–259.3) | 198.0 (178.2–219.4) | 85.2 (74.6–97.0) | 149.7 (146.9–152.6) | 155.4 (152.7–158.2) |
| | Total | 218.6 (209.6–227.8) | 166.3 (154.3–179.1) | 71.8 (65.3–78.8) | 126.8 (125.0–128.5) | 132.5 (130.8–134.2) |

## 4.17 All hospitalisations due to cancer

The cancer hospitalisation rate in Counties Manukau DHB did not differ significantly from the national rate. Males had a significantly higher cancer hospitalisation rate than females. The Asian rate was half that of the other ethnic groups.

**Table 4.21:** All cancer hospitalisations, all ages, age-standardised rates per 100,000 (and 95% confidence intervals), 2005–07

| | | Māori | Pacific | Asian | European/Other | Total |
|---|---|---|---|---|---|---|
| Counties Manukau DHB | Female | 616.4 (560.1 - 676.8) | 630.4 (582.4 - 681.2) | 274.1 (242.0 - 309.2) | 544.5 (524.8 - 564.8) | 546.7 (530.3 - 563.5) |
| | Male | 693.8 (626.0 - 767.0) | 677.8 (622.9 - 736.1) | 321.5 (283.1 - 363.5) | 782.3 (757.1 - 808.1) | 727.5 (707.2 - 748.3) |
| | Total | 645.3 (601.9 - 690.9) | 644.8 (608.8 - 682.3) | 295.2 (270.3 - 321.7) | 652.3 (636.5 - 668.3) | 626.5 (613.7 - 639.6) |
| New Zealand | Female | 714.9 (694.6 - 735.5) | 638.6 (609.7 - 668.5) | 300.9 (285.1 - 317.2) | 584.5 (578.9 - 590.1) | 582.7 (577.6 - 587.8) |
| | Male | 680.4 (658.9 - 702.4) | 554.4 (525.2 - 584.9) | 291.8 (274.6 - 309.9) | 737.7 (731.2 - 744.2) | 711.4 (705.5 - 717.4) |
| | Total | 696.4 (681.7 - 711.3) | 595.3 (574.8 - 616.3) | 295.8 (284.2 - 307.8) | 651.8 (647.5 - 656.0) | 638.3 (634.5 - 642.2) |

## 4.18 Registrations of people with lung cancer

The lung cancer registration rate in Counties Manukau DHB was not significantly different from the national rate. The male rate was significantly higher than the female rate. The Māori rate was the highest, followed by that of Pacific people which was significantly higher than the Asian and European/Other rates.

**Table 4.22:** Lung cancer registration, 25+ year, age-standardised rates per 100,000 (and 95% confidence intervals), 2003–05

| | | Māori | Pacific | Asian | European/Other | Total |
|---|---|---|---|---|---|---|
| Counties Manukau DHB | Female | 155.3 (114.5–205.9) | 65.5 (43.5–94.7) | 22.4 (10.2–42.5) | 38.2 (31.7–45.8) | 48.1 (41.7–55.2) |
| | Male | 191.1 (140.9–253.4) | 167.8 (127.1–217.5) | 39.5 (21.1–67.6) | 55.0 (46.6–64.4) | 73.4 (64.9–82.7) |
| | Total | 171.4 (138.8–209.3) | 110.1 (87.9–136.1) | 30.2 (19.0–45.8) | 45.5 (40.2–51.2) | 59.4 (54.1–65.0) |
| New Zealand | Female | 139.6 (126.8–153.3) | 53.1 (41.6–66.8) | 27.2 (20.3–35.6) | 37.4 (35.7–39.3) | 44.4 (42.6–46.3) |
| | Male | 134.4 (121.0–149.0) | 126.4 (105.7–149.8) | 49.9 (39.1–62.8) | 60.8 (58.4–63.2) | 67.0 (64.7–69.4) |
| | Total | 137.1 (127.8–146.9) | 84.7 (73.5–97.2) | 36.8 (30.6–43.8) | 47.8 (46.3–49.2) | 54.4 (52.9–55.9) |

## 4.19 Lung cancer mortality

The overall rate for lung cancer mortality in Counties Manukau DHB did not differ significantly from the national rate. The rate for males was significantly higher than that for females. The lung cancer rate for Māori was significantly higher than that for Pacific people, which was significantly higher than the rates for European/Other and Asian people.

**Table 4.23:** Lung cancer mortality, 25+ years, age-standardised rates per 100,000 (and 95% confidence intervals), 2003–05

| | | Māori | Pacific | Asian | European/Other | Total |
|---|---|---|---|---|---|---|
| Counties Manukau DHB | Female | 120.5 (84.9–166.1) | 58.0 (37.6–85.7) | 12.1 (3.9–28.3) | 24.9 (19.7–31.1) | 34.4 (29.0–40.4) |
| | Male | 202.7 (147.8–271.2) | 134.8 (96.7–182.8) | 47.9 (26.8–79.1) | 47.4 (39.7–56.2) | 63.8 (55.9–72.5) |
| | Total | 156.5 (124.5–194.3) | 88.5 (68.4–112.6) | 27.6 (16.9–42.7) | 34.8 (30.3–39.9) | 47.4 (42.7–52.4) |
| New Zealand | Female | 122.8 (110.8–135.7) | 41.8 (31.5–54.4) | 15.2 (10.1–22.0) | 28.9 (27.4–30.5) | 35.1 (33.6–36.8) |
| | Male | 133.5 (119.8–148.3) | 101.6 (82.5–123.8) | 42.0 (32.0–54.2) | 51.5 (49.4–53.8) | 57.3 (55.2–59.6) |
| | Total | 126.6 (117.5–136.1) | 66.9 (56.7–78.3) | 26.8 (21.5–33.1) | 38.9 (37.7–40.3) | 44.9 (43.6–46.3) |

## 4.20 Hospitalisations due to lung cancer

The overall rate for lung cancer hospitalisations in Counties Manukau DHB did not differ significantly from the national rate. Males had a significantly higher rate than females. Māori had double the lung cancer hospitalisation rate of Pacific people, which was significantly higher than the European/Other rate. Asian people had the lowest rate.

**Table 4.24:** Lung cancer hospitalisation, 25+ years, age-standardised rates per 100,000 (and 95% confidence intervals), 2005–07

| | | Māori | Pacific | Asian | European/Other | Total |
|---|---|---|---|---|---|---|
| Counties Manukau DHB | Female | 138.7 (104.5 - 180.5) | 46.9 (30.1 - 69.8) | 13.4 (5.4 - 27.5) | 31.5 (25.5 - 38.4) | 42.4 (36.5 - 49.0) |
| | Male | 222.2 (168.7 - 287.2) | 141.8 (107.7 - 183.3) | 43.3 (25.2 - 69.3) | 50.1 (42.1 - 59.3) | 70.4 (62.3 - 79.4) |
| | Total | 173.6 (143.0 - 208.7) | 90.4 (71.9 - 112.2) | 27.0 (17.3 - 40.2) | 40.2 (35.2 - 45.7) | 55.4 (50.4 - 60.8) |
| New Zealand | Female | 151.9 (139.0 - 165.7) | 45.5 (35.3 - 57.6) | 25.1 (19.0 - 32.5) | 40.7 (38.8 - 42.7) | 48.4 (46.5 - 50.4) |
| | Male | 149.1 (135.4 - 163.8) | 113.6 (95.0 - 134.9) | 40.2 (31.6 - 50.3) | 55.6 (53.3 - 57.9) | 63.4 (61.1 - 65.7) |
| | Total | 151.1 (141.7 - 161.1) | 75.7 (65.6 - 87.0) | 32.0 (26.8 - 37.9) | 47.3 (45.9 - 48.8) | 55.1 (53.6 - 56.6) |

## 4.21 Registrations of women with breast cancer

The breast cancer registration rate in Counties Manukau DHB was significantly lower than the national rate.

**Table 4.25:** Female breast cancer registration, 25+ years, age-standardised rate per 100,000 (and 95% confidence intervals), 2003–05

| | | Māori | Pacific | Asian | European/ Other | Total |
|---|---|---|---|---|---|---|
| Counties Manukau DHB | Female | 128.3 (96.7–167.0) | 141.5 (110.5–178.4) | 75.2 (54.0–102.0) | 146.7 (132.8–161.7) | 136.4 (125.5–148.1) |
| New Zealand | Female | 170.4 (157.5–184.1) | 149.0 (130.3–169.6) | 96.3 (84.9–108.8) | 153.7 (149.8–157.7) | 152.3 (148.8–155.9) |

## 4.22 Mortality in women due to breast cancer

The breast cancer mortality rates in Counties Manukau DHB did not differ significantly from the national rates. Māori women had a significantly higher rate than European/ Other and Asian women.

**Table 4.26:** Female breast cancer mortality, 25+ years, age-standardised rates per 100,000 (and 95% confidence intervals), 2003–05

| | | Māori | Pacific | Asian | European/ Other | Total |
|---|---|---|---|---|---|---|
| Counties Manukau DHB | Female | 66.3 (41.0–101.3) | 41.8 (25.9–63.9) | 16.3 (7.5–31.0) | 30.0 (24.1–36.9) | 32.3 (27.2–38.1) |
| New Zealand | Female | 56.5 (49.0–64.9) | 46.7 (36.2–59.3) | 25.7 (19.4–33.4) | 36.4 (34.7–38.3) | 37.9 (36.2–39.6) |

## 4.23 Hospitalisations of women due to breast cancer

The breast cancer hospitalisation rate in Counties Manukau DHB was significantly lower than the national rate. Māori and Pacific women had significantly higher rates than European/Other women, who had a significantly higher rate than that of Asian women.

**Table 4.27:** Female breast cancer hospitalisation, 25+ years, age-standardised rates per 100,000 (and 95% confidence intervals), 2005–07

| | | Māori | Pacific | Asian | European/ Other | Total |
|---|---|---|---|---|---|---|
| Counties Manukau DHB | Female | 203.1 (161.5 - 252.0) | 159.0 (127.7 - 195.7) | 65.0 (47.2 - 87.2) | 110.4 (98.2 - 123.6) | 119.7 (109.6 - 130.6) |
| New Zealand | Female | 231.5 (216.6 - 247.1) | 175.4 (155.8 - 196.8) | 73.4 (63.9 - 84.0) | 132.6 (129.0 - 136.2) | 139.5 (136.1 - 142.9) |

## 4.24 Registrations of men with prostate cancer

The prostate cancer registration rates for Counties Manukau DHB did not differ significantly from the national rates.

**Table 4.28:** Prostate cancer registration, 25+ years, age-standardised rates per 100,000 (and 95% confidence intervals), 2003–05

| | | Māori | Pacific | Asian | European/ Other | Total |
|---|---|---|---|---|---|---|
| Counties Manukau DHB | Male | 115.4 (76.1–167.9) | 209.5 (160.6–268.6) | 60.1 (38.1–90.2) | 187.3 (171.3–204.3) | 168.2 (155.2–182.0) |
| New Zealand | Male | 141.8 (127.1–157.8) | 164.6 (140.0–192.1) | 61.6 (50.3–74.7) | 184.5 (180.3–188.8) | 175.3 (171.5–179.2) |

## 4.25 Mortality due to prostate cancer

The prostate cancer mortality rate for Counties Manukau did not differ significantly from the national rate.

**Table 4.29:** Prostate cancer mortality, 25+ years, age-standardised rates per 100,000 (and 95% confidence intervals), 2003–05

| | | Māori | Pacific | Asian | European/ Other | Total |
|---|---|---|---|---|---|---|
| Counties Manukau DHB | Male | 34.5 (11.2–80.4) | 53.8 (25.8–98.9) | * | 28.7 (22.9–35.5) | 27.9 (22.7–33.9) |
| New Zealand | Male | 50.4 (40.7–61.7) | 39.3 (26.3–56.5) | 13.2 (7.2–22.1) | 34.3 (32.6–36.0) | 34.4 (32.8–36.1) |

* Rates not presented for groups with small numbers.

## 4.26 Hospitalisations due to prostate cancer

The prostate cancer hospitalisation rate for Counties Manukau DHB was significantly lower than the national rate. The Māori rate was half the national rate for Māori men.

**Table 4.30:** Prostate cancer hospitalisation, 25+ years, age-standardised rates per 100,000 (and 95% confidence intervals), 2005–07

| | | Māori | Pacific | Asian | European/ Other | Total |
|---|---|---|---|---|---|---|
| Counties Manukau DHB | Male | 50.5 (28.3 - 83.3) | 87.7 (59.1 - 125.1) | 28.6 (14.8 - 49.9) | 61.3 (52.5 - 71.0) | 60.7 (53.1 - 69.0) |
| New Zealand | Male | 111.5 (98.8 - 125.4) | 75.1 (59.5 - 93.6) | 26.5 (19.5 - 35.1) | 84.4 (81.7 - 87.3) | 83.7 (81.2 - 86.4) |

## 4.27 Registrations of women with cancer of the cervix

The cervical cancer registration rate for Counties Manukau DHB was significantly higher than the national rate.

**Table 4.31:** Cervical cancer registration, 25+ years, age-standardised rate per 100,000 (and 95% confidence intervals), 2003–05

| | | Māori | Pacific | Asian | European/ Other | Total |
|---|---|---|---|---|---|---|
| Counties Manukau DHB | Female | 24.4 (12.6–42.7) | 30.2 (17.3–49.1) | 29.8 (16.7–49.2) | 9.8 (6.2–14.7) | 16.2 (12.6–20.7) |
| New Zealand | Female | 19.2 (15.2–24.0) | 21.6 (15.0–30.2) | 20.3 (15.2–26.6) | 9.7 (8.7–10.9) | 11.3 (10.3–12.4) |

## 4.28 Mortality due to cancer of the cervix

The cervical cancer mortality rate in Counties Manukau DHB did not differ significantly from the national rate. Pacific women had a significantly higher rate than European/ Other women.

**Table 4.32:** Cervical cancer mortality, 25+ years, age-standardised rates per 100,000 (and 95% confidence intervals), 2003–05

| | | Māori | Pacific | Asian | European/ Other | Total |
|---|---|---|---|---|---|---|
| Counties Manukau DHB | Female | 10.4 (3.4–24.2) | 12.8 (5.2–26.4) | * | 2.0 (0.7–4.7) | 5.2 (3.2–8.0) |
| New Zealand | Female | 9.5 (6.7–13.2) | 9.4 (5.1–15.7) | 3.6 (1.5–7.5) | 3.0 (2.5–3.5) | 3.7 (3.2–4.3) |

* Rates not presented for groups with small numbers.

## 4.29 Hospitalisations due to cancer of the cervix

The cervical cancer hospitalisation rate in Counties Manukau did not differ significantly from the national rate. Pacific women had a significantly higher rate than European/ Other and Asian women.

**Table 4.33:** Cervical cancer hospitalisation, 25+ years, age-standardised rates per 100,000 (and 95% confidence intervals), 2005–07

| | | Māori | Pacific | Asian | European/ Other | Total |
|---|---|---|---|---|---|---|
| Counties Manukau DHB | Female | 24.9 (12.9 - 43.5) | 43.7 (28.0 - 65.1) | 9.5 (3.8 - 19.6) | 16.2 (11.6 - 21.9) | 19.5 (15.5 - 24.1) |
| New Zealand | Female | 42.6 (36.4 - 49.5) | 33.5 (25.3 - 43.3) | 18.7 (14.1 - 24.4) | 14.5 (13.2 - 15.8) | 17.6 (16.4 - 18.9) |

## 4.30 Registrations of people with colorectal cancer

Overall, rates of colorectal cancer registrations in Counties Manukau DHB were significantly lower than those observed nationally. The rate for European/Other people was significantly higher than the rates for all other ethnic groups.

**Table 4.34:** Colorectal cancer registrations, 25+ years, age-standardised rates per 100,000 (and 95% confidence intervals), 2003–05

| | | Māori | Pacific | Asian | European/Other | Total |
|---|---|---|---|---|---|---|
| Counties Manukau DHB | Female | 24.3 (11.1–46.1) | 38.2 (22.2–61.1) | 34.9 (19.5–57.6) | 76.7 (67.6–86.8) | 66.0 (58.6–73.9) |
| | Male | 77.3 (45.8–122.2) | 29.5 (14.2–54.3) | 37.6 (21.0–62.0) | 86.1 (75.4–97.9) | 75.1 (66.5–84.5) |
| | Total | 48.0 (31.6–69.9) | 34.9 (23.0–50.8) | 36.1 (24.4–51.6) | 81.6 (74.5–89.2) | 70.6 (64.9–76.6) |
| New Zealand | Female | 40.1 (33.5–47.6) | 39.0 (29.4–50.8) | 38.1 (30.0–47.6) | 79.3 (76.8–81.9) | 74.4 (72.1–76.7) |
| | Male | 52.4 (44.3–61.6) | 36.3 (26.0–49.5) | 46.3 (36.8–57.5) | 94.6 (91.6–97.6) | 89.3 (86.5–92.1) |
| | Total | 46.2 (41.0–52.0) | 37.4 (30.3–45.7) | 42.0 (35.7–49.1) | 86.4 (84.5–88.4) | 81.3 (79.5–83.1) |

## 4.31 Colorectal cancer mortality

The rate of colorectal cancer mortality rate in Counties Manukau DHB did not differ significantly from the national rate.

**Table 4.35:** Colorectal cancer mortality, 25+ years, age-standardised rates per 100,000 (and 95% confidence intervals), 2003–05

| | | Māori | Pacific | Asian | European/Other | Total |
|---|---|---|---|---|---|---|
| Counties Manukau DHB | Female | 30.6 (14.0–58.1) | 22.5 (11.2–40.2) | * | 26.3 (21.5–31.9) | 25.7 (21.4–30.6) |
| | Male | 50.3 (21.7–99.0) | 34.1 (17.6–59.6) | 18.8 (8.1–37.1) | 34.4 (27.8–42.0) | 33.9 (28.2–40.4) |
| | Total | 38.7 (22.5–62.0) | 28.0 (17.8–42.0) | 10.9 (5.2–20.0) | 30.6 (26.5–35.1) | 29.9 (26.3–33.8) |
| New Zealand | Female | 21.4 (16.7–26.9) | 23.3 (16.0–32.9) | 11.8 (7.4–17.9) | 30.6 (29.1–32.1) | 29.5 (28.2–30.9) |
| | Male | 33.6 (27.0–41.4) | 20.2 (12.8–30.4) | 14.2 (9.0–21.3) | 38.5 (36.6–40.4) | 37.4 (35.6–39.2) |
| | Total | 26.7 (22.8–31.2) | 22.0 (16.6–28.6) | 13.3 (9.7–17.8) | 34.2 (33.0–35.4) | 33.1 (32.0–34.2) |

* Rates not presented for groups with small numbers.

## 4.32 Hospitalisations due to colorectal cancer

The rate of colorectal cancer hospitalisations in Counties Manukau DHB was significantly lower than the national rate. Males had a significantly higher rate than females. The rate for Asian people was half the rate for European/Other people.

**Table 4.36:** Colorectal cancer hospitalisation, 25+ years, age-standardised rates per 100,000 (and 95% confidence intervals), 2005–07

| | | Māori | Pacific | Asian | European/Other | Total |
|---|---|---|---|---|---|---|
| Counties Manukau DHB | Female | 45.6 (24.9 - 76.5) | 52.1 (34.6 - 75.2) | 30.5 (16.3 - 52.2) | 61.0 (53.0 - 69.9) | 56.6 (50.0 - 63.9) |
| | Male | 86.0 (51.8 - 134.4) | 78.8 (54.6 - 110.1) | 37.6 (21.9 - 60.2) | 86.6 (76.0 - 98.3) | 81.6 (72.7 - 91.2) |
| | Total | 62.3 (42.9 - 87.5) | 64.8 (49.7 - 83.1) | 34.5 (23.2 - 49.2) | 73.4 (66.7 - 80.5) | 68.4 (62.9 - 74.3) |
| New Zealand | Female | 58.5 (50.5 - 67.4) | 54.5 (43.2 - 68.0) | 34.7 (27.3 - 43.4) | 82.6 (80.1 - 85.2) | 78.3 (76.0 - 80.7) |
| | Male | 95.5 (84.3 - 107.8) | 56.0 (43.4 - 71.1) | 39.7 (31.4 - 49.4) | 103.6 (100.5 - 106.8) | 99.9 (97.0 - 102.8) |
| | Total | 76.0 (69.1 - 83.3) | 55.0 (46.5 - 64.7) | 37.1 (31.5 - 43.5) | 92.4 (90.4 - 94.4) | 88.4 (86.6 - 90.2) |

## 4.33 Registrations of patients with malignant melanoma

The rate of malignant melanoma registrations in Counties Manukau DHB was significantly lower than the national rate. Males had a significantly higher rate than females. European/Other people had a significantly higher rate than Māori and Pacific people.

**Table 4.37:** Melanoma registrations, 25+ years, age-standardised rates per 100,000 (and 95% confidence intervals), 2003–05

| | | Māori | Pacific | Asian | European/Other | Total |
|---|---|---|---|---|---|---|
| Counties Manukau DHB | Female | * | * | * | 65.4 (56.1–75.9) | 42.7 (36.7–49.4) |
| | Male | 15.7 (5.8–34.1) | * | * | 83.6 (72.8–95.5) | 59.7 (52.1–68.1) |
| | Total | 9.1 (3.9–17.9) | 5.7 (1.9–13.3) | * | 73.7 (66.6–81.4) | 50.4 (45.6–55.6) |
| New Zealand | Female | 8.3 (5.5–12.0) | 6.8 (3.3–12.5) | * | 70.8 (68.1–73.5) | 57.6 (55.4–59.8) |
| | Male | 7.1 (4.5–10.6) | * | 2.6 (0.8–6.0) | 81.1 (78.2–84.1) | 69.0 (66.5–71.5) |
| | Total | 7.9 (5.9–10.3) | 5.3 (2.9–9.0) | 1.5 (0.6–3.2) | 75.3 (73.3–77.3) | 62.7 (61.1–64.3) |

* Rates not presented for groups with small numbers.

## 4.34 Mortality due to malignant melanoma

The malignant melanoma mortality rate in Counties Manukau DHB did not differ significantly from the national rate. Males had a significantly higher rate than females.

**Table 4.38:** Melanoma mortality, 25+ years, age-standardised rates per 100,000 (and 95% confidence intervals), 2003–05

| | | Māori | Pacific | Asian | European/Other | Total |
|---|---|---|---|---|---|---|
| Counties Manukau DHB | Female | * | * | * | 7.6 (4.9–11.3) | 5.3 (3.5–7.9) |
| | Male | * | * | * | 15.8 (11.4–21.3) | 12.3 (9.0–16.5) |
| | Total | * | * | * | 11.5 (8.9–14.6) | 8.6 (6.7–10.8) |
| New Zealand | Female | 1.5 (0.5–3.5) | * | * | 6.6 (5.9–7.4) | 5.8 (5.1–6.4) |
| | Male | 3.9 (1.9–7.2) | * | * | 12.1 (11.0–13.3) | 10.7 (9.8–11.7) |
| | Total | 2.5 (1.4–4.2) | * | * | 9.2 (8.5–9.8) | 8.0 (7.5–8.6) |

* Rates not presented for groups with small numbers.

## 4.35 Hospitalisations due to malignant melanoma

The malignant melanoma hospitalisation rate in Counties Manukau DHB was not significantly different to that observed nationally. Males had a significantly higher rate than females. European/Other people had a rate over four times that of Māori and Pacific people.

**Table 4.39:** Melanoma hospitalisations, 25+ years, age-standardised rates per 100,000 (and 95% confidence intervals), 2005–07

| | | Māori | Pacific | Asian | European/Other | Total |
|---|---|---|---|---|---|---|
| Counties Manukau DHB | Female | * | * | * | 34.9 (28.5 - 42.2) | 24.5 (20.1 - 29.5) |
| | Male | 12.6 (4.1 - 29.3) | * | 17.7 (5.7 - 41.3) | 64.5 (55.3 - 74.9) | 48.2 (41.5 - 55.7) |
| | Total | 9.0 (3.6 - 18.6) | * | 9.7 (3.9 - 19.9) | 48.5 (42.9 - 54.5) | 35.1 (31.2 - 39.4) |
| New Zealand | Female | 7.0 (4.5 - 10.3) | 6.6 (3.0 - 12.6) | * | 38.4 (36.5 - 40.3) | 31.9 (30.4 - 33.5) |
| | Male | 5.6 (3.3 - 8.8) | 6.3 (2.3 - 13.7) | 5.0 (2.1–9.8) | 47.1 (45.0 - 49.4) | 40.6 (38.7 - 42.5) |
| | Total | 6.6 (4.8 - 8.8) | 6.5 (3.6 - 10.7) | 2.9 (1.4–5.2) | 42.2 (40.8 - 43.7) | 35.8 (34.6 - 37.0) |

* Rates not presented for groups with small numbers.

## 4.36 Adult asthma prevalence

Over 12.5% of adults reported taking medication for asthma in Counties Manukau DHB. Māori females had a significantly higher prevalence than the total female population, while Asian females had a significantly lower prevalence than total females in Counties Manukau DHB, adjusted for age.

**Table 4.40:** Age-standardised prevalence (percent, and 95% confidence intervals) of medicated asthma, adults 15+ years, 2006/07 NZHS

| | | Māori | Pacific | Asian | European/Other | Total |
|---|---|---|---|---|---|---|
| Counties Manukau DHB | Female | 21.3 (17.9–24.9) | 12.2 (8.4–16.8) | 5.9 (3.3–9.8) | 15.2 (12.5–18.3) | 14.6 (11.9–17.6) |
| | Male | 13.0 (9.6–17.0) | 7.6 (4.2–12.4) | 3.8 (1.4–8.2) | 11.3 (8.7–14.4) | 10.5 (7.9–13.5) |
| | Total | 17.4 (14.5–20.7) | 10.0 (6.9–13.8) | 5.0 (2.5–8.6) | 13.3 (10.8–16.2) | 12.6 (10.1–15.1) |
| New Zealand | Female | 19.3 (16.8–21.9) | 11.0 (8.0–14.7) | 5.4 (3.7–7.5) | 13.8 (12.3–15.3) | 13.2 (11.9–14.6) |
| | Male | 11.8 (9.3–14.7) | 6.9 (4.2–10.5) | 3.5 (1.9–5.8) | 10.2 (8.9–11.7) | 9.5 (8.3–10.8) |
| | Total | 15.8 (14.0–17.7) | 9.0 (6.9–11.6) | 4.5 (3.2–6.2) | 12.1 (10.9–13.3) | 11.4 (10.6–12.2) |

## 4.37 Hospitalisations due to asthma in adults

The asthma hospitalisation rate for Counties Manukau DHB was significantly higher than the national rate. Māori and Pacific people had significantly higher rates than Asian and European/Other people.

**Table 4.41:** Asthma hospitalisations, 15+ years, age-standardised rates per 100,000 (and 95% confidence intervals), 2005–07

| | | Māori | Pacific | Asian | European/Other | Total |
|---|---|---|---|---|---|---|
| Counties Manukau DHB | Female | 421.8 (385.0 - 461.2) | 438.4 (403.8 - 475.3) | 141.5 (118.2 - 168.2) | 132.0 (119.2 - 145.8) | 241.3 (229.6 - 253.5) |
| | Male | 328.0 (297.0 - 361.5) | 361.7 (332.4 - 393.0) | 148.7 (125.0 - 175.5) | 119.0 (106.0 - 133.2) | 217.2 (206.0 - 228.9) |
| | Total | 380.3 (355.7 - 406.1) | 404.3 (381.3 - 428.4) | 146.9 (129.8 - 165.6) | 126.1 (116.8 - 135.8) | 230.9 (222.8 - 239.4) |
| New Zealand | Female | 274.8 (261.5 - 288.6) | 335.8 (312.3 - 360.7) | 60.0 (52.3 - 68.6) | 90.6 (87.5 - 93.8) | 118.1 (115.1 - 121.2) |
| | Male | 140.2 (130.3 - 150.6) | 156.1 (140.1 - 173.5) | 33.1 (27.5 - 39.5) | 43.6 (41.3 - 45.9) | 59.4 (57.1 - 61.7) |
| | Total | 211.6 (203.2 - 220.3) | 251.4 (236.8 - 266.7) | 47.7 (42.8 - 53.1) | 67.6 (65.7 - 69.6) | 89.7 (87.8 - 91.7) |

## 4.38 Chronic obstructive pulmonary disease prevalence

In Counties Manukau DHB, 5.6% of males and 8.4% of females aged 45 years and over reported that they had chronic obstructive pulmonary disease.

**Table 4.42:** Age-standardised prevalence (percent, and 95% confidence intervals) of self-reported chronic obstructive pulmonary disease, 45+ years, 2006/07 NZHS

| | | Māori | Pacific | Asian | European/Other | Total |
|---|---|---|---|---|---|---|
| Counties Manukau DHB | Female | 19.1 (5.5–41.9) | 2.9 (0.0–17.0) | 2.3 (0.2–9.5) | 10.3 (5.7–16.8) | 8.4 (5.1–12.8) |
| | Male | 12.4 (3.1–30.3) | 3.8 (0.5–12.9) | 6.1 (0.9–19.4) | 5.3 (1.6–12.7) | 5.6 (2.5–10.7) |
| | Total | 16.4 (6.6–31.6) | 3.3 (0.6–9.7) | 4.2 (1.1–10.7) | 8.0 (4.8–12.3) | 7.1 (4.5–9.7) |
| New Zealand | Female | 12.9 (9.2–16.6) | 7.4 (3.0–14.8) | 2.9 (1.1–6.3) | 7.4 (6.3–8.5) | 7.4 (6.5–8.4) |
| | Male | 12.7 (6.7–18.7) | 4.8 (2.0–9.5) | 2.2 (0.4–6.2) | 5.6 (4.3–6.8) | 5.6 (4.4–6.7) |
| | Total | 12.8 (9.2–16.3) | 6.2 (3.3–10.4) | 2.6 (1.3–4.6) | 6.5 (5.7–7.3) | 6.5 (5.8–7.2) |

## 4.39 Chronic obstructive pulmonary disease hospitalisations

The rate of chronic obstructive pulmonary disease hospitalisations in Counties Manukau DHB was significantly higher than the national rate. Males had a significantly higher rate than females. Māori and Pacific peoples had significantly higher rates than European/Other and Asian people.

**Table 4.43:** COPD hospitalisation, 45+ years, age-standardised rates per 100,000 (and 95% confidence intervals), 2005–07

| | | Māori | Pacific | Asian | European/Other | Total |
|---|---|---|---|---|---|---|
| Counties Manukau DHB | Female | 1960.5 (1747.7 - 2192.2) | 983.3 (856.5 - 1123.5) | 68.6 (36.5 - 117.3) | 440.8 (409.2 - 474.3) | 573.4 (542.2 - 606.1) |
| | Male | 1850.5 (1611.4 - 2115.1) | 2153.4 (1936.0 - 2388.4) | 420.2 (326.3 - 532.8) | 547.7 (510.0 - 587.5) | 768.9 (729.5 - 809.9) |
| | Total | 1896.0 (1737.0 - 2065.7) | 1486.8 (1367.7 - 1613.6) | 218.6 (173.6 - 271.7) | 481.2 (457.2 - 506.2) | 655.0 (630.5 - 680.3) |
| New Zealand | Female | 1823.9 (1756.5 - 1893.2) | 848.3 (779.0 - 922.1) | 115.8 (94.3 - 140.7) | 427.8 (419.6 - 436.1) | 515.3 (506.7 - 524.0) |
| | Male | 1449.1 (1383.3 - 1517.3) | 1799.9 (1682.1 - 1923.7) | 321.7 (281.9 - 365.4) | 511.6 (502.0 - 521.3) | 588.7 (578.9 - 598.6) |
| | Total | 1647.2 (1599.9 - 1695.7) | 1246.6 (1182.6 - 1313.2) | 208.4 (186.7 - 231.9) | 460.1 (454.0 - 466.4) | 542.5 (536.1 - 548.9) |

## 4.40 Unintentional injury mortality

Overall, the unintentional injury mortality rate in Counties Manukau DHB did not differ significantly from the national rate. Males had a significantly higher rate than females. Māori had a significantly higher rate than all other ethnic groups.

**Table 4.44:** Unintentional injury mortality, all ages, age-standardised rates per 100,000 (and 95% confidence intervals), 2003–05

| | | Māori | Pacific | Asian | European/Other | Total |
|---|---|---|---|---|---|---|
| Counties Manukau DHB | Female | 21.9 (14.1–32.7) | 11.1 (5.8–19.5) | 9.6 (4.4–18.3) | 9.2 (6.7–12.2) | 12.3 (9.9–15.1) |
| | Male | 72.2 (54.4–94.0) | 26.4 (17.7–37.9) | 15.2 (8.1–26.0) | 27.8 (22.5–33.8) | 31.8 (27.5–36.6) |
| | Total | 44.5 (35.3–55.5) | 18.6 (13.4–25.3) | 12.1 (7.6–18.3) | 18.3 (15.4–21.5) | 21.6 (19.1–24.2) |
| New Zealand | Female | 24.2 (20.9–27.9) | 9.9 (6.6–14.2) | 8.9 (6.4–12.1) | 11.4 (10.7–12.2) | 13.3 (12.5–14.1) |
| | Male | 62.2 (56.6–68.3) | 32.6 (26.3–40.0) | 18.2 (14.4–22.8) | 28.3 (26.9–29.8) | 32.2 (30.9–33.7) |
| | Total | 42.0 (38.8–45.4) | 20.7 (17.2–24.7) | 13.1 (10.9–15.7) | 19.7 (18.9–20.5) | 22.4 (21.7–23.2) |

## 4.41 Unintentional injury hospitalisations

Counties Manukau DHB had a significantly higher unintentional injury hospitalisation rate than the national rate. Males had a significantly higher rate than females. Māori had the highest rate, followed by Pacific people, then European/Other people, with Asian people having the lowest rate. All the ethnic group differences were significant.

**Table 4.45:** Unintentional injury hospitalisation, all ages, age-standardised rates per 100,000 (and 95% confidence intervals), 2005

| | | Māori | Pacific | Asian | European/Other | Total |
|---|---|---|---|---|---|---|
| Counties Manukau DHB | Female | 1830.8 (1749.3 - 1915.1) | 1281.8 (1221.8 - 1344.0) | 609.4 (561.0 - 660.8) | 1170.9 (1136.9 - 1205.6) | 1233.9 (1208.1 - 1260.1) |
| | Male | 3230.9 (3117.2 - 3347.8) | 2819.3 (2726.9 - 2914.0) | 964.4 (904.9 - 1026.8) | 2056.1 (2006.5 - 2106.7) | 2211.0 (2174.5 - 2247.8) |
| | Total | 2471.2 (2402.8 - 2541.1) | 2013.8 (1959.6 - 2069.1) | 787.9 (749.3 - 827.9) | 1614.2 (1584.2 - 1644.7) | 1710.6 (1688.5 - 1733.0) |
| New Zealand | Female | 1184.5 (1161.6 - 1207.7) | 1160.6 (1125.5 - 1196.6) | 580.9 (559.0 - 603.4) | 908.2 (900.3 - 916.0) | 947.8 (940.7 - 954.9) |
| | Male | 2233.3 (2201.2 - 2265.7) | 2466.2 (2414.0 - 2519.3) | 800.3 (775.0 - 826.2) | 1633.3 (1621.2 - 1645.5) | 1696.0 (1685.5 - 1706.5) |
| | Total | 1686.3 (1666.9 - 1706.0) | 1796.0 (1764.8 - 1827.7) | 689.7 (673.0 - 706.8) | 1271.7 (1264.0 - 1278.8) | 1318.9 (1311.0 - 1325.2) |

## 4.42 Prevalence of chronic mental disorder

In Counties Manukau DHB 9.5% of males and 13.2% of females reported a chronic mental health condition. Asian people were significantly less likely to report a chronic mental health condition than the total population in Counties Manukau DHB, adjusted for age.

**Table 4.46:** Age-standardised prevalence (percent, and 95% confidence intervals) of any self-reported chronic mental health condition, adults 15+ years, 2006/07 NZHS

| | | Māori | Pacific | Asian | European/Other | Total |
|---|---|---|---|---|---|---|
| Counties Manukau DHB | Female | 14.6 (11.4–18.3) | 8.0 (5.0–11.9) | 4.4 (2.0–8.2) | 14.6 (12.1–17.3) | 13.2 (10.8–15.9) |
| | Male | 8.9 (6.1–12.4) | 6.6 (3.5–11.2) | 3.6 (1.4–7.3) | 10.4 (8.1–13.3) | 9.5 (7.2–12.3) |
| | Total | 11.9 (9.2–15.0) | 7.3 (4.6–10.8) | 4.0 (1.9–7.3) | 12.6 (10.3–15.2) | 11.4 (8.8–13.3) |
| New Zealand | Female | 17.3 (14.7–20.1) | 9.4 (7.1–12.3) | 5.2 (3.5–7.4) | 17.3 (15.8–18.8) | 15.7 (14.3–17.0) |
| | Male | 10.5 (8.4–12.9) | 7.8 (5.1–11.3) | 4.3 (2.8–6.2) | 12.4 (11.0–13.9) | 11.3 (10.0–12.6) |
| | Total | 14.1 (12.3–16.1) | 8.7 (6.7–11.0) | 4.8 (3.5–6.3) | 14.9 (13.7–16.2) | 13.5 (12.8–14.3) |

## 4.43 Probability of having an anxiety or depressive disorder

In Counties Manukau DHB, 7.8% of adults had a high or very high probability of having an anxiety or depressive disorder, adjusted for age. Māori and Pacific peoples had significantly higher prevalence rates than the total population of Counties Manukau DHB, adjusted for age.

**Table 4.47:** Age standardised prevalence (percent, and 95% confidence intervals) of having high or very high probability of having an anxiety or depressive disorder, adults 15+ years, 2006/07 NZHS

| | | Māori | Pacific | Asian | European/Other | Total |
|---|---|---|---|---|---|---|
| Counties Manukau DHB | Female | 15.1 (12.4–18.0) | 16.8 (13.1–20.9) | 10.6 (7.5–14.4) | 7.7 (5.7–10.2) | 8.8 (6.7–11.1) |
| | Male | 10.4 (7.9–13.4) | 14.0 (9.9–19.1) | 6.8 (4.1–10.5) | 6.0 (4.1–8.6) | 6.7 (4.7–9.1) |
| | Total | 12.9 (10.6–15.5) | 15.5 (12.3–19.0) | 8.8 (6.3–11.8) | 6.9 (5.0–9.3) | 7.8 (5.8–9.7) |
| New Zealand | Female | 13.2 (11.2–15.3) | 14.7 (11.5–18.3) | 9.2 (6.7–12.4) | 6.8 (5.7–8.0) | 7.7 (6.7–8.7) |
| | Male | 9.1 (7.3–11.2) | 12.3 (8.6–16.8) | 5.9 (3.8–8.8) | 5.3 (4.2–6.5) | 5.8 (4.9–6.9) |
| | Total | 11.3 (9.8–12.9) | 13.5 (11.0–16.4) | 7.7 (5.9–9.8) | 6.1 (5.2–7.0) | 6.8 (6.1–7.4) |

## 4.44 Suicide deaths

The suicide rate in Counties Manukau DHB did not differ significantly from the national rate. The suicide rate for males was double the rate for females. Māori had a significantly higher rate than all other ethnic groups.

**Table 4.48:** Suicide, 5+ years, age-standardised rates per 100,000 (and 95% confidence intervals), 2003–05

| | | Māori | Pacific | Asian | European/Other | Total |
|---|---|---|---|---|---|---|
| Counties Manukau DHB | Female | 19.8 (11.9–31.0) | * | 7.3 (2.7–15.9) | 7.3 (4.7–10.6) | 9.1 (6.9–11.8) |
| | Male | 26.8 (16.8–40.6) | 17.7 (10.3–28.3) | 9.5 (3.5–20.6) | 18.9 (14.2–24.6) | 18.3 (14.9–22.3) |
| | Total | 22.9 (16.4–31.1) | 10.3 (6.4–15.7) | 8.0 (4.1–14.0) | 13.1 (10.4–16.3) | 13.6 (11.5–15.9) |
| New Zealand | Female | 9.0 (7.1–11.4) | 3.8 (2.0–6.7) | 4.8 (3.0–7.3) | 6.1 (5.4–6.8) | 6.5 (5.8–7.1) |
| | Male | 32.3 (28.2–36.8) | 15.5 (11.3–20.8) | 7.9 (5.3–11.4) | 19.7 (18.4–21.1) | 20.6 (19.4–21.8) |
| | Total | 19.9 (17.7–22.3) | 9.5 (7.2–12.3) | 6.1 (4.6–8.1) | 12.7 (12.0–13.5) | 13.3 (12.6–14.0) |

* Rates not presented for groups with small numbers.

## 4.45 Self-harm hospitalisations (5+ years)

The intentional self-harm hospitalisation rate for Counties Manukau DHB did not differ significantly from the national rate. The rate for females in Counties Manukau DHB was significantly higher than the male rate. Māori and European/Other people had significantly higher rates than Pacific and Asian people.

**Table 4.49:** Self-harm hospitalisation, 5+ years, age-standardised rates per 100,000 (and 95% confidence intervals), 2005–07

| | | Māori | Pacific | Asian | European/Other | Total |
|---|---|---|---|---|---|---|
| Counties Manukau DHB | Female | 165.1 (140.6 - 192.7) | 58.7 (45.9 - 74.1) | 83.9 (67.5 - 103.0) | 158.8 (144.4 - 174.3) | 128.3 (119.4 - 137.7) |
| | Male | 104.1 (83.1 - 128.9) | 54.3 (41.2 - 70.2) | 19.0 (11.4 - 29.6) | 87.4 (76.6 - 99.2) | 72.1 (65.2 - 79.5) |
| | Total | 137.1 (120.4 - 155.3) | 56.5 (47.1 - 67.1) | 52.1 (42.8 - 62.8) | 123.1 (114.0 - 132.7) | 100.8 (95.1 - 106.7) |
| New Zealand | Female | 127.9 (120.3 - 136.0) | 63.3 (54.9 - 72.5) | 58.5 (52.5 - 65.1) | 148.6 (144.7 - 152.6) | 130.5 (127.5 - 133.6) |
| | Male | 78.5 (72.1 - 85.3) | 52.7 (44.9 - 61.5) | 17.9 (14.5 - 21.8) | 67.3 (64.7 - 70.0) | 63.4 (61.3 - 65.6) |
| | Total | 104.1 (99.1 - 109.4) | 58.1 (52.3 - 64.4) | 38.8 (35.2 - 42.6) | 108.2 (105.8 - 110.6) | 97.5 (95.6 - 99.3) |

## 4.46 Infectious disease mortality

The mortality rate from infectious disease in Counties Manukau DHB did not differ significantly from the national rate. Māori and Pacific people had a significantly higher rate than European/Other people.

**Table 4.50:** Infectious disease mortality, age-standardised rates per 100,000 (and 95% confidence intervals), 2003–05

| | | Māori | Pacific | Asian | European/Other | Total |
|---|---|---|---|---|---|---|
| Counties Manukau DHB | Female | 34.3 (20.0 - 54.9) | 25.4 (16.1 - 38.1) | * | 6.3 (4.7 - 8.1) | 11.3 (9.2 - 13.7) |
| | Male | 13.0 (6.5 - 23.2) | 22.6 (14.0 - 34.6) | 30.3 (15.6 - 52.8) | 9.9 (7.3 - 13.2) | 14.2 (11.4 - 17.4) |
| | Total | 25.3 (16.8 - 36.6) | 25.2 (18.3 - 33.8) | 14.8 (8.5 - 24.1) | 8.1 (6.6 - 9.8) | 12.6 (10.9 - 14.6) |
| New Zealand | Female | 19.8 (16.2 - 23.8) | 22.5 (17.0 - 29.1) | 8.0 (5.2 - 11.8) | 9.4 (8.8 - 9.9) | 10.8 (10.3 - 11.4) |
| | Male | 23.5 (19.5 - 28.1) | 21.2 (15.7 - 28.1) | 15.6 (11.1 - 21.3) | 10.7 (10.0 - 11.5) | 12.5 (11.8 - 13.3) |
| | Total | 21.6 (18.9 - 24.6) | 22.3 (18.3 - 27.0) | 11.2 (8.6 - 14.3) | 10.1 (9.7 - 10.6) | 11.7 (11.3 - 12.2) |

* Rates not presented for groups with small numbers.

## 4.47 Campylobacteriosis notifications

Counties Manukau DHB had a significantly lower campylobacteriosis notifications rate than all of New Zealand, adjusted for age. Males had a significantly higher rate than females. Non-Māori, non-Pacific people had a significantly higher rate of campylobacteriosis notifications than Māori and Pacific people in Counties Manukau DHB, adjusted for age.

**Table 4.51:** Age-standardised campylobacteriosis notifications rates per 100,000 (and 95% confidence intervals), 2004–06

| | | Māori | Pacific | Other | Total |
|---|---|---|---|---|---|
| Counties Manukau DHB | Female | 59.0 (44.7–76.4) | 25.3 (17.3–35.7) | 376.2 (357.9–395.3) | 250.5 (238.6–262.8) |
| | Male | 60.5 (45.9–78.4) | 52.8 (40.5–67.7) | 453.6 (433.2–474.7) | 312.3 (298.7–326.3) |
| | Total | 59.8 (49.4–71.9) | 38.7 (31.3–47.3) | 414.3 (400.6–428.5) | 280.5 (271.4–289.7) |
| New Zealand | Female | 104.2 (97.5–111.3) | 52.4 (45.0–60.6) | 373.6 (368.1–379.1) | 309.0 (304.7–313.5) |
| | Male | 140.9 (132.8–149.3) | 74.8 (66.0–84.5) | 451.2 (445.0–457.4) | 377.2 (372.2–382.2) |
| | Total | 121.7 (116.4–127.1) | 63.6 (57.8–69.8) | 412.1 (408.0–416.3) | 342.7 (339.4–346.1) |

* Rates not presented for groups with small numbers.

## 4.48 Cryptosporidiosis notifications

The notification of cryptosporidiosis rate in Counties Manukau DHB was a third of the national rate, adjusted for age. Māori and Pacific people had significantly lower rates than the non-Māori, non-Pacific population in Counties Manukau DHB, adjusted for age.

**Table 4.52:** Age-standardised cryptosporidiosis notifications rates per 100,000 (and 95% confidence intervals), 2004–06

| | | Māori | Pacific | Other | Total |
|---|---|---|---|---|---|
| Counties Manukau DHB | Female | * | 4.4 (1.6–9.5) | 10.2 (7.2–14.2) | 7.1 (5.1–9.4) |
| | Male | * | * | 7.6 (5.0–11.1) | 5.1 (3.5–7.2) |
| | Total | 2.9 (1.2–5.9) | 2.8 (1.2–5.6) | 9.0 (6.9–11.5) | 6.1 (4.9–7.7) |
| New Zealand | Female | 7.9 (6.2–9.8) | 4.3 (2.5–6.9) | 27.4 (25.8–29.1) | 21.6 (20.4–22.9) |
| | Male | 8.0 (6.4–9.9) | 2.9 (1.5–5.0) | 26.5 (24.9–28.2) | 20.5 (19.3–21.8) |
| | Total | 8.0 (6.8–9.3) | 3.6 (2.4–5.1) | 27.1 (25.9–28.3) | 21.2 (20.3–22.1) |

* Rates not presented for groups with small numbers.

## 4.49 Giardiasis notifications

Counties Manukau DHB had a significantly lower giardiasis notifications rate than all of New Zealand, adjusted for age. In Counties Manukau DHB, the notification rate for giardiasis among Māori and Pacific people was significantly lower than for non-Māori, non-Pacific, adjusted for age. The Māori rate was half the national Māori rate.

**Table 4.53:** Age-standardised giardiasis notifications rate per 100,000 (and 95% confidence intervals), 2004–06

| | | Māori | Pacific | Other | Total |
|---|---|---|---|---|---|
| Counties Manukau DHB | Female | 7.3 (2.9–15.0) | * | 31.1 (26.0–37.0) | 20.9 (17.6–24.7) |
| | Male | * | 5.2 (2.1–10.7) | 41.8 (35.6–48.7) | 27.6 (23.6–32.1) |
| | Total | 5.1 (2.4–9.4) | 3.4 (1.6–6.2) | 36.4 (32.3–40.8) | 24.2 (21.6–27.0) |
| New Zealand | Female | 10.6 (8.6–13.0) | 3.5 (1.9–5.8) | 37.7 (35.9–39.5) | 30.8 (29.4–32.2) |
| | Male | 11.3 (9.2–13.7) | 6.0 (3.7–9.0) | 43.8 (41.8–45.8) | 35.6 (34.1–37.2) |
| | Total | 11.0 (9.5–12.6) | 4.7 (3.3–6.5) | 40.8 (39.4–42.1) | 33.2 (32.1–34.2) |

## 4.50 Hepatitis B notifications

The hepatitis B notification rate in Counties Manukau DHB was significantly higher than the rate for all New Zealand, adjusted for age. Males had a significantly higher rate than females. Pacific people had a significantly higher notification rate of hepatitis B than non-Māori, non-Pacific population in Counties Manukau DHB, adjusted for age.

**Table 4.54:** Age-standardised hepatitis B notifications rate per 100,000 (and 95% confidence intervals), 2004–06

| | | Māori | Pacific | Other | Total |
|---|---|---|---|---|---|
| Counties Manukau DHB | Female | * | * | * | 1.0 (0.4–2.0) |
| | Male | * | 12.6 (6.9–21.1) | 2.5 (1.2–4.6) | 4.3 (2.8–6.4) |
| | Total | 2.6 (0.8–6.0) | 6.8 (3.9–11.0) | 1.3 (0.6–2.3) | 2.6 (1.8–3.7) |
| New Zealand | Female | 1.8 (1.0–3.0) | 2.4 (1.0–4.7) | 0.7 (0.5–1.0) | 0.9 (0.7–1.2) |
| | Male | 2.0 (1.1–3.2) | 6.7 (4.2–10.2) | 1.4 (1.1–1.8) | 1.8 (1.5–2.2) |
| | Total | 1.9 (1.3–2.7) | 4.5 (3.0–6.4) | 1.0 (0.8–1.3) | 1.4 (1.2–1.6) |

* Rates not presented for groups with small numbers.

## 4.51 Meningococcal notifications

In Counties Manukau DHB, Māori and Pacific people had significantly higher meningococcal disease notifications rates than non-Māori, non-Pacific people, adjusted for age.

**Table 4.55:** Age-standardised meningococcal disease notifications rates per 100,000 (and 95% confidence intervals), 2004–06

| | | Māori | Pacific | Other | Total |
|---|---|---|---|---|---|
| Counties Manukau DHB | Female | 8.8 (4.7–15.0) | 11.3 (6.5–18.3) | 3.4 (1.7–6.1) | 6.4 (4.6–8.7) |
| | Male | 14.8 (9.0–22.9) | 16.4 (10.7–24.0) | 4.7 (2.7–7.5) | 9.7 (7.5–12.5) |
| | Total | 11.7 (8.1–16.5) | 14.0 (10.1–18.9) | 4.1 (2.7–5.9) | 8.1 (6.6–9.9) |
| New Zealand | Female | 7.3 (5.8–9.1) | 12.4 (9.2–16.4) | 5.1 (4.4–5.8) | 6.3 (5.7–7.1) |
| | Male | 11.4 (9.5–13.5) | 15.7 (12.2–19.9) | 4.7 (4.1–5.4) | 7.3 (6.6–8.1) |
| | Total | 9.3 (8.1–10.7) | 14.2 (11.7–17.0) | 4.9 (4.4–5.4) | 6.8 (6.3–7.4) |

## 4.52 Rheumatic fever (initial attack) notifications

The rheumatic fever (initial attack) notification rate in Counties Manukau DHB was significantly higher than the rate for all of New Zealand, adjusted for age. Māori males had a significantly higher rate than non-Māori, non-Pacific males in Counties Manukau DHB, adjusted for age.

**Table 4.56:** Age-standardised rheumatic fever (initial attack) notifications rates per 100,000 (and 95% confidence intervals), 2004–06

| | | Māori | Pacific | Other | Total |
|---|---|---|---|---|---|
| Counties Manukau DHB | Female | 3.5 (1.1–8.2) | 4.7 (1.9–9.6) | 1.7 (0.6–3.8) | 2.9 (1.7–4.6) |
| | Male | 12.3 (6.9–20.4) | 3.4 (1.1–8.0) | 2.8 (1.4–5.2) | 4.8 (3.2–6.9) |
| | Total | 7.7 (4.7–11.9) | 4.0 (2.1–7.0) | 2.3 (1.3–3.7) | 3.8 (2.8–5.1) |
| New Zealand | Female | 3.8 (2.8–5.2) | 5.1 (3.2–7.9) | 0.4 (0.2–0.6) | 1.5 (1.2–1.9) |
| | Male | 7.5 (6.0–9.3) | 7.0 (4.7–10.0) | 0.5 (0.3–0.8) | 2.5 (2.1–3.0) |
| | Total | 5.7 (4.7–6.8) | 6.1 (4.5–8.0) | 0.4 (0.3–0.6) | 2.0 (1.7–2.3) |

## 4.53 Salmonellosis notifications

The rate of salmonellosis notifications in Counties Manukau DHB was significantly lower than the rate for all New Zealand. Māori and Pacific peoples had significantly lower notification rates than non-Māori, non-Pacific people in Counties Manukau DHB respectively, adjusted for age.

**Table 4.57:** Age-standardised salmonellosis notifications rates per 100,000 (and 95% confidence intervals), 2004–06

| | | Māori | Pacific | Other | Total |
|---|---|---|---|---|---|
| Counties Manukau DHB | Female | 18.4 (11.1–28.8) | 8.6 (4.6–14.7) | 26.4 (21.5–32.1) | 20.4 (17.1–24.2) |
| | Male | 11.0 (5.0–20.9) | 14.2 (7.9–23.4) | 34.3 (28.7–40.7) | 24.1 (20.5–28.3) |
| | Total | 14.9 (9.9–21.5) | 10.9 (7.3–15.8) | 30.4 (26.6–34.5) | 22.2 (19.7–25.0) |
| New Zealand | Female | 17.0 (14.4–19.9) | 12.8 (9.3–17.3) | 37.7 (35.9–39.6) | 31.5 (30.0–33.0) |
| | Male | 22.0 (19.0–25.5) | 16.6 (12.5–21.8) | 40.3 (38.4–42.2) | 34.4 (32.9–36.0) |
| | Total | 19.3 (17.3–21.5) | 14.5 (11.8–17.8) | 39.0 (37.6–40.3) | 32.9 (31.8–34.0) |

## 4.54 Tuberculosis notifications

Tuberculosis notification rate in Counties Manukau DHB was significantly higher than the national notification rate, adjusted for age. Pacific people had a significantly higher tuberculosis notification rate than non-Māori, non-Pacific people in Counties Manukau DHB, adjusted for age.

**Table 4.58:** Age-standardised tuberculosis notifications rates per 100,000 (and 95% confidence intervals), 2004–06

| | | Māori | Pacific | Other | Total |
|---|---|---|---|---|---|
| Counties Manukau DHB | Female | 17.1 (9.4–28.7) | 25.5 (17.0–36.9) | 12.7 (9.5–16.6) | 14.6 (11.8–17.8) |
| | Male | 10.7 (4.6–21.0) | 32.7 (22.2–46.4) | 13.1 (9.9–17.0) | 15.2 (12.3–18.6) |
| | Total | 14.0 (8.8–21.2) | 28.9 (22.0–37.3) | 12.8 (10.5–15.5) | 14.8 (12.8–17.1) |
| New Zealand | Female | 11.0 (8.6–13.7) | 25.3 (20.0–31.5) | 7.5 (6.7–8.3) | 8.4 (7.7–9.1) |
| | Male | 15.4 (12.6–18.6) | 25.8 (20.2–32.4) | 7.4 (6.7–8.2) | 9.0 (8.2–9.8) |
| | Total | 13.1 (11.2–15.1) | 25.6 (21.7–30.0) | 7.4 (6.9–8.0) | 8.6 (8.1–9.2) |

## 4.55 Disability

In this section, disability for adults includes people with disability in hearing, seeing, speaking, mobility, agility, or people having intellectual, psychiatric or psychological disability. Child disability includes children with disability in hearing, seeing, or speaking, or children who use specialised or technical equipment, or who receive special education, or who have intellectual, psychiatric or psychological disability, or who have a chronic condition.

The disability rates provided in the table below were calculated based on the estimated number of people with a disability divided by the estimated number of people with and without disability from the 2006 Household Disability Survey. Due to survey design and sample issues, data cannot be broken down to DHB level. Instead, estimates were provided by four combined DHB regions.

The rates are provided by age group breakdown, however caution should be exercised when comparing the rates between Māori and non-Māori, particularly for age groups with a wider age range, because the two ethnic groups have different age distributions. For the 65+ years age group, comparisons should not be made between different ethnic groups as Māori in this age group are much younger than non-Māori. Nor should comparisons be made between males and females in the 65+ age group, as there are more older women than men.

The Northern region had lower proportions of people with experience of disability than New Zealand as a whole. Over 12% of Māori children in this region experienced disability. Just over 14% of non-Māori in the 45–64 year age group experienced disability.

**Table 4.59:** Disability prevalence of residents living in private households, crude percent, 2006

| | Northern DHBs region* | | | | New Zealand | | | |
|---|---|---|---|---|---|---|---|---|
| | **0–14 years** | **15–44 years** | **45–64 years** | **65+ years** | **0–14 years** | **15–44 years** | **45–64 years** | **65+ years** |
| Female | 7.7 | 6.4 | 15.1 | 37.0 | 8.6 | 8.3 | 19.1 | 41.0 |
| Male | 10.7 | 6.7 | 14.5 | 36.6 | 12.1 | 9.5 | 20.8 | 41.2 |
| Total | 9.2 | 6.5 | 14.8 | 36.8 | 10.4 | 8.9 | 19.9 | 41.1 |
| Māori | 12.2 | 9.8 | 23.1 | 42.2 | 14.2 | 13.2 | 27.9 | 46.6 |
| Non-Māori | 8.5 | 6.0 | 14.2 | 36.5 | 9.3 | 8.1 | 19.2 | 40.8 |

* Northern region includes Northland, Waitemata, Auckland, and Counties Manukau DHBs.

## 4.56 Child health (0–14 years)

### 4.56.1 Leading causes of hospitalisations for children 0–4 years by gender

Three of the leading causes of hospitalisations for children aged under five years in Counties Manukau DHB were the same as those for New Zealand. These were respiratory infections, gastroenteritis, and disorders related to length of gestation and fetal growth. In Counties Manukau DHB, asthma and dental conditions were also among the leading causes of hospitalisation for children aged under five years.

**Table 4.60:** Leading causes of hospitalisations, males and females, 0–4 years, 2005–07

| | New Zealand | | Counties Manukau DHB | |
|---|---|---|---|---|
| | **Causes** | **Rank** | **Causes** | **Rank** |
| Female | Respiratory infections | 1 | Respiratory infections | 1 |
| | Health supervision and care of other healthy infant and child | 2 | Disorders related to length of gestation and fetal growth | 2 |
| | Disorders related to length of gestation and fetal growth | 3 | Gastroenteritis | 3 |
| | Gastroenteritis | 4 | Dental conditions | 4 |
| | ENT infections | 5 | Asthma | 5 |
| Male | Respiratory infections | 1 | Respiratory infections | 1 |
| | Disorders related to length of gestation and fetal growth | 2 | Disorders related to length of gestation and fetal growth | 2 |
| | Health supervision and care of other healthy infant and child | 3 | Gastroenteritis | 3 |
| | ENT infections | 4 | Asthma | 4 |
| | Gastroenteritis | 5 | ENT infections | 5 |
| Total | Respiratory infections | 1 | Respiratory infections | 1 |
| | Health supervision and care of other healthy infant and child | 2 | Disorders related to length of gestation and fetal growth | 2 |
| | Disorders related to length of gestation and fetal growth | 3 | Gastroenteritis | 3 |
| | ENT infections | 4 | Asthma | 4 |
| | Gastroenteritis | 5 | Dental conditions | 5 |

**Note:** ENT infections = ear, nose and throat infections. Health supervision and care of other healthy infant and child = (ICD10 code Z762) Medical or nursing care or supervision of healthy infant under circumstances such as: adverse socioeconomic conditions at home, awaiting foster or adoptive placement, maternal illness, number of children at home preventing or interfering with normal care.

### 4.56.2 Leading causes of hospitalisations for children 0–4 years by ethnicity

Leading causes of hospitalisations for children aged 0–4 years were similar across ethnic groups. Dental conditions were a leading cause for Māori, Pacific and Asian children, and ear, nose and throat infections were a leading cause for European/Other children aged 0–4 years.

**Table 4.61:** Leading causes of hospitalisations, by ethnic group, 0–4 years, 2005–07

| | New Zealand | | Counties Manukau DHB | |
|---|---|---|---|---|
| | **Causes** | **Rank** | **Causes** | **Rank** |
| Māori | Respiratory infections | 1 | Respiratory infections | 1 |
| | Disorders related to length of gestation and fetal growth | 2 | Disorders related to length of gestation and fetal growth | 2 |
| | Asthma | 3 | Asthma | 3 |
| | Health supervision and care of other healthy infant and child | 4 | Gastroenteritis | 4 |
| | Dental conditions | 5 | Dental conditions | 5 |
| Pacific | Respiratory infections | 1 | Respiratory infections | 1 |
| | Disorders related to length of gestation and fetal growth | 2 | Disorders related to length of gestation and fetal growth | 2 |
| | Asthma | 3 | Asthma | 3 |
| | Dental conditions | 4 | Dental conditions | 4 |
| | Health supervision and care of other healthy infant and child | 5 | Gastroenteritis | 5 |
| Asian | Disorders related to length of gestation and fetal growth | 1 | Disorders related to length of gestation and fetal growth | 1 |
| | Health supervision and care of other healthy infant and child | 2 | Respiratory infections | 2 |
| | Respiratory infections | 3 | Gastroenteritis | 3 |
| | Haemorrhagic and haematological disorders of fetus and newborns | 4 | Health supervision and care of other healthy infant and child | 4 |
| | Gastroenteritis | 5 | Dental conditions | 5 |
| European/ Other | Health supervision and care of other healthy infant and child | 1 | Disorders related to length of gestation and fetal growth | 1 |
| | Respiratory infections | 2 | Respiratory infections | 2 |
| | Disorders related to length of gestation and fetal growth | 3 | Health supervision and care of other healthy infant and child | 3 |
| | ENT infections | 4 | ENT infections | 4 |
| | Gastroenteritis | 5 | Gastroenteritis | 5 |

**Note:** ENT infections = ear, nose and throat infections. Health supervision and care of other healthy infant and child = (ICD10 code Z762) Medical or nursing care or supervision of healthy infant under circumstances such as: adverse socioeconomic conditions at home, awaiting foster or adoptive placement, maternal illness, number of children at home preventing or interfering with normal care.

### 4.56.3 Leading causes of hospitalisations for children 5–14 years by gender

Counties Manukau DHB had three out of five of the same leading causes of hospitalisations for children aged 5–14 years as New Zealand as a whole. These included dental conditions, ear, nose and throat infections, and falls. The other leading causes for Counties Manukau DHB were cellulitis and exposure to inanimate mechanical forces.

**Table 4.62:** Leading causes of hospitalisations, males and females, 5–14 years, 2005–07

| | New Zealand | | Counties Manukau DHB | |
|---|---|---|---|---|
| | **Causes** | **Rank** | **Causes** | **Rank** |
| Female | Dental conditions | 1 | Falls | 1 |
| | Falls | 2 | Dental conditions | 2 |
| | ENT infections | 3 | ENT infections | 3 |
| | Chronic diseases of tonsils and adenoids | 4 | Cellulitis | 4 |
| | Respiratory infections | 5 | Exposure to inanimate mechanical forces | 5 |
| Male | Falls | 1 | Falls | 1 |
| | Dental conditions | 2 | Dental conditions | 2 |
| | ENT infections | 3 | ENT infections | 3 |
| | Respiratory infections | 4 | Exposure to inanimate mechanical forces | 4 |
| | Exposure to inanimate mechanical forces | 5 | Cellulitis | 5 |
| Total | Dental conditions | 1 | Falls | 1 |
| | Falls | 2 | Dental conditions | 2 |
| | ENT infections | 3 | ENT infections | 3 |
| | Chronic diseases of tonsils and adenoids | 4 | Exposure to inanimate mechanical forces | 4 |
| | Respiratory infections | 5 | Cellulitis | 5 |

**Note:** ENT infections = ear, nose and throat infections.

### 4.56.4 Leading causes of hospitalisations for children 5–14 years by ethnicity

Leading causes of hospitalisations for children aged 5–14 years differed across ethnic groups. Exposure to inanimate mechanical forces was a leading cause for Māori, Pacific and European/Other children. Chronic diseases of tonsils and adenoids was a leading cause for Asian children aged 5–14 years.

**Table 4.63:** Leading causes of hospitalisations, by ethnic group, 5–14 years, 2005–07

| | New Zealand | | Counties Manukau DHB | |
|---|---|---|---|---|
| | **Causes** | **Rank** | **Causes** | **Rank** |
| Māori | Dental conditions | 1 | Falls | 1 |
| | Falls | 2 | Dental conditions | 2 |
| | ENT infections | 3 | ENT infections | 3 |
| | Respiratory infections | 4 | Cellulitis | 4 |
| | Cellulitis | 5 | Exposure to inanimate mechanical forces | 5 |
| Pacific | Dental conditions | 1 | Falls | 1 |
| | ENT infections | 2 | Dental conditions | 2 |
| | Falls | 3 | ENT infections | 3 |
| | Cellulitis | 4 | Cellulitis | 4 |
| | Respiratory infections | 5 | Exposure to inanimate mechanical forces | 5 |
| Asian | Dental conditions | 1 | Dental conditions | 1 |
| | Falls | 2 | Falls | 2 |
| | Chronic diseases of tonsils and adenoids | 3 | Chronic diseases of tonsils and adenoids | 3 |
| | Respiratory infections | 4 | Respiratory infections | 4 |
| | Asthma | 5 | Asthma | 5 |
| European/ Other | Falls | 1 | Falls | 1 |
| | Dental conditions | 2 | Dental conditions | 2 |
| | ENT infections | 3 | ENT infections | 3 |
| | Chronic diseases of tonsils and adenoids | 4 | Exposure to inanimate mechanical forces | 4 |
| | Respiratory infections | 5 | Cellulitis | 5 |

Note: ENT infections = ear, nose and throat infections.

### 4.56.5 Infant mortality (birth–1 year)

The rate of infant mortality in Counties Manukau DHB was significantly higher than the rate for all of New Zealand. Māori and Pacific infants had significantly higher mortality rate than Asian infants.

**Table 4.64:** Infant mortality, rate per 1000 live births (and 95% confidence intervals), 2003–05

| | | Māori | Pacific | Asian | European/Other | Total |
|---|---|---|---|---|---|---|
| Counties Manukau DHB | Female | 8.3 (5.5–12.1) | 9.1 (6.2–12.8) | 3.7 (1.4–8.1) | 3.8 (1.9–6.8) | 6.7 (5.3–8.4) |
| | Male | 12.1 (8.8–16.4) | 8.9 (6.1–12.5) | 3.4 (1.3–7.4) | 8.1 (5.3–11.9) | 8.9 (7.3–10.7) |
| | Total | 10.3 (8.0–13.0) | 9.0 (7.0–11.5) | 3.6 (1.8–6.2) | 6.1 (4.3–8.4) | 7.8 (6.7–9.1) |
| New Zealand | Female | 6.1 (5.2–7.2) | 7.3 (5.6–9.3) | 4.6 (3.2–6.4) | 3.7 (3.1–4.3) | 4.8 (4.4–5.3) |
| | Male | 8.3 (7.2–9.5) | 7.2 (5.6–9.1) | 3.7 (2.5–5.3) | 4.8 (4.2–5.5) | 6.0 (5.5–6.5) |
| | Total | 7.2 (6.5–8.0) | 7.2 (6.1–8.6) | 4.1 (3.2–5.3) | 4.3 (3.8–4.7) | 5.4 (5.1–5.8) |

* Rates not presented for groups with small numbers.

### 4.56.6 Perinatal mortality (20 weeks gestation–7 days)

The rate of perinatal mortality within Counties Manukau DHB was significantly higher than the national rate.

**Table 4.65:** Perinatal mortality, rate per 1000 total births (and 95% confidence intervals), 2003–05

| | | Māori | Pacific | Asian | European/Other | Total |
|---|---|---|---|---|---|---|
| Counties Manukau DHB | Female | 8.9 (5.9–12.7) | 13.3 (9.7–17.6) | 8.7 (4.7–14.6) | 9.2 (6.1–13.5) | 10.3 (8.5–12.4) |
| | Male | 15.7 (11.8–20.4) | 13.4 (10.0–17.7) | 10.7 (6.5–16.7) | 12.7 (9.1–17.2) | 13.5 (11.5–15.7) |
| | Total | 12.4 (9.9–15.4) | 13.3 (10.8–16.3) | 9.7 (6.7–13.7) | 11.1 (8.6–14.0) | 12.0 (10.6–13.4) |
| New Zealand | Female | 8.1 (7.0–9.3) | 12.4 (10.2–14.9) | 12.4 (10.1–15.2) | 9.4 (8.5–10.3) | 9.6 (9.0–10.3) |
| | Male | 11.3 (10.0–12.7) | 11.8 (9.7–14.2) | 11.4 (9.2–13.9) | 9.6 (8.7–10.5) | 10.5 (9.8–11.2) |
| | Total | 9.7 (8.9–10.6) | 12.1 (10.6–13.8) | 11.9 (10.3–13.7) | 9.5 (8.9–10.1) | 10.1 (9.6–10.5) |

### 4.56.7 Low birth weight prevalence

In Counties Manukau DHB, Māori and Asian babies had significantly higher rates of low birth weight than the all Counties Manukau babies in total.

**Table 4.66:** Low birth weight, rate per 1000 live births (and 95% confidence intervals), 2003–05

| | | Māori | Pacific | Asian | European/Other | Total |
|---|---|---|---|---|---|---|
| Counties Manukau DHB | Female | 76.7 (67.5–86.9) | 50.0 (42.9–57.9) | 96.0 (81.4–112.4) | 56.2 (47.9–65.5) | 65.9 (61.2–70.8) |
| | Male | 74.6 (65.9–84.1) | 42.7 (36.3–49.9) | 63.7 (52.5–76.7) | 59.9 (51.7–69.0) | 59.5 (55.3–64.0) |
| | Total | 75.6 (69.2–82.4) | 46.3 (41.4–51.5) | 79.1 (69.9–89.2) | 58.2 (52.3–64.5) | 62.6 (59.4–65.8) |
| New Zealand | Female | 74.2 (70.8–77.8) | 49.7 (45.2–54.6) | 85.1 (78.7–91.9) | 61.0 (58.7–63.3) | 65.7 (64.0–67.5) |
| | Male | 65.5 (62.4–68.8) | 43.2 (39.1–47.6) | 67.3 (61.8–73.1) | 53.5 (51.4–55.7) | 57.1 (55.5–58.7) |
| | Total | 69.8 (67.4–72.1) | 46.3 (43.3–49.6) | 75.8 (71.6–80.2) | 57.2 (55.6–58.8) | 61.3 (60.1–62.5) |

### 4.56.8 Breastfeeding rates

Breastfeeding is a part of laying the foundations for a healthy life from infancy and childhood. Exclusive breastfeeding means that an infant has only consumed breast milk from the breast or expressed breast milk and prescribed medicines from birth, but no water, formula or other liquid or solid food. Full breastfeeding is when an infant has consumed breast milk and only a minimal amount of water and prescribed medicines within the last 48 hours, but no other liquids or solids during that time period.

In Counties Manukau, less than half of all the babies had been exclusively or fully breastfed for 10–16 weeks from birth, and only around 17% had been exclusively or fully breastfed for 16 weeks–8 months. These rates are lower than the rates for New Zealand in total. European/Other babies had a higher percentage of breastfeeding than the other ethnic groups for 10–16 weeks. European/Other and Asian babies had a higher percentage of breastfeeding than Māori and Pacific babies for 16 weeks–8 months.

**Table 4.67:** Exclusive and full breastfeeding for 10–16 weeks, percent, by ethnicity, 2007

| Ethnic group | Counties Manukau DHB | New Zealand |
|---|---|---|
| Māori | 35.2 | 44.0 |
| Pacific | 37.6 | 43.0 |
| Asian | 38.5 | 51.8 |
| European/Other | 47.1 | 58.4 |
| Total | 40.8 | 53.7 |

**Table 4.68:** Exclusive and full breastfeeding for 16 weeks–8 months, percent, by ethnicity, 2007

| Ethnic group | Counties Manukau DHB | New Zealand |
|---|---|---|
| Māori | 11.7 | 17.8 |
| Pacific | 15.1 | 17.9 |
| Asian | 20.6 | 26.2 |
| European/Other | 20.2 | 28.9 |
| Total | 16.7 | 25.5 |

### 4.56.9 Hearing test failure

Hearing screening is conducted with new entry school children (five years old) to identify children with hearing loss.

About 6% of new entry school children had hearing loss in the Counties Manukau DHB district. The rates in Counties Manukau were similar to the New Zealand rates. Māori had a higher rate than non-Māori.

**Table 4.69:** Hearing failure at school entry, percent, 2005/2006*

| Ethnicity | Counties Manukau DHB | New Zealand |
|---|---|---|
| Māori | 9.4 | 8.4 |
| Non-Māori | 5.2 | 4.8 |
| Total | 6.1 | 6.6 |

* Hearing failure includes audiometry failure only. The period is July 2005–June 2006.

### 4.56.10 Child oral health

Oral health data for children at school Year 8 (Form 2) are provided for both fluoridated and non-fluoridated areas.

Children in school year 8 in Counties Manukau DHB in fluoridated areas had similar proportions of caries-free teeth and decayed, missing or filled teeth as in fluoridated areas of New Zealand as a whole. For non-fluoridated areas, Counties Manukau had higher rates of caries-free teeth and lower rates of decayed, missing or filled teeth, compared to New Zealand as a whole. Māori and Pacific children had lower rates of caries-free teeth, and higher rates of decayed, missing or filled teeth than non-Māori, non-Pacific children in Counties Manukau DHB.

**Table 4.70:** Caries-free teeth of school Year 8 children, percent, 2006

| Ethnicity | Counties Manukau DHB | | New Zealand | |
|---|---|---|---|---|
| | Fluoridated | Non-fluoridated | Fluoridated | Non-fluoridated |
| Māori | 40.6 | 36.2 | 36.9 | 28.4 |
| Pacific | 39.8 | 44.7 | 43.1 | 33.0 |
| Other* | 58.0 | 54.8 | 55.4 | 43.8 |
| Total | 49.9 | 50.9 | 50.8 | 40.2 |

* Data are not available.

'Other' includes Asian, European and other ethnicities not elsewhere included.

**Table 4.71:** Decayed, missing or filled teeth of school Year 8 children, mean number, 2006

| Ethnicity | Counties Manukau DHB | | New Zealand | |
|---|---|---|---|---|
| | Fluoridated | Non-fluoridated | Fluoridated | Non-fluoridated |
| Māori | 1.7 | 2.1 | 1.9 | 2.8 |
| Pacific | 1.9 | 2.1 | 1.7 | 2.3 |
| Other* | 1.1 | 1.1 | 1.1 | 1.6 |
| Total | 1.4 | 1.3 | 1.3 | 1.8 |

* Data are not available.

'Other' includes Asian, European and other ethnicities not elsewhere included.

### 4.56.11 Childhood asthma hospitalisations

The Counties Manukau DHB child asthma hospitalisation rate was significantly higher than the national rate. Males had a significantly higher rate than females. Pacific children had the highest rate, followed by Māori, then Asian children, with European/ Other children having the lowest rate. All ethnic group differences were significant.

**Table 4.72:** Asthma hospitalisation, 0–14 years, age-standardised rates per 100,000 (and 95% confidence intervals), 2005–07

| | | Māori | Pacific | Asian | European/Other | Total |
|---|---|---|---|---|---|---|
| Counties Manukau DHB | Female | 695.3 (613.4 - 785.2) | 713.6 (637.2 - 796.7) | 319.0 (248.7 - 403.1) | 206.0 (171.1 - 245.9) | 473.0 (440.2 - 507.7) |
| | Male | 711.4 (632.0 - 798.0) | 985.4 (896.8 - 1080.3) | 451.6 (369.8 - 546.2) | 341.2 (296.9 - 390.2) | 617.0 (580.5 - 655.2) |
| | Total | 704.4 (646.8 - 765.7) | 852.6 (793.4 - 914.9) | 387.2 (332.1 - 448.8) | 275.5 (246.8 - 306.6) | 547.4 (522.6 - 573.0) |
| New Zealand | Female | 620.6 (592.2 - 649.9) | 712.7 (664.4 - 763.7) | 253.6 (222.8 - 287.4) | 261.1 (249.7 - 273.0) | 386.0 (375.2 - 397.1) |
| | Male | 821.3 (789.6 - 854.1) | 982.9 (927.1 - 1041.2) | 422.7 (384.0 - 464.1) | 374.9 (361.3 - 388.8) | 540.7 (528.2 - 553.6) |
| | Total | 723.8 (702.3 - 745.7) | 851.0 (813.7 - 889.4) | 341.3 (316.2 - 367.8) | 319.0 (310.1 - 328.1) | 465.0 (456.7 - 473.5) |

### 4.56.12 Child hospitalisations due to poisoning

The Counties Manukau DHB child hospitalisation rate due to poisoning did not differ significantly from the national rate. Males had a significantly higher rate than females.

**Table 4.73:** Poisoning hospitalisation, 0–14 years, age-standardised rates per 100,000 (and 95% confidence intervals), 2005–07

| | | Māori | Pacific | Asian | European/Other | Total |
|---|---|---|---|---|---|---|
| Counties Manukau DHB | Female | 80.2 (54.1 - 114.4) | 38.5 (22.4 - 61.6) | 45.1 (21.6 - 82.9) | 67.3 (47.9 - 92.0) | 59.1 (47.9 - 72.2) |
| | Male | 85.6 (59.6 - 119.0) | 101.6 (74.6 - 135.1) | 64.4 (36.0 - 106.2) | 85.1 (63.5 - 111.6) | 86.8 (73.4 - 101.9) |
| | Total | 82.6 (63.7 - 105.3) | 70.4 (54.2 - 90.0) | 55.1 (35.7 - 81.4) | 76.5 (61.6 - 93.9) | 73.3 (64.4 - 83.1) |
| New Zealand | Female | 73.9 (64.4 - 84.5) | 42.4 (31.3 - 56.2) | 45.6 (33.1 - 61.2) | 70.4 (64.5 - 76.7) | 66.7 (62.2 - 71.4) |
| | Male | 82.6 (72.8 - 93.5) | 85.4 (69.6 - 103.8) | 51.1 (38.3 - 66.9) | 89.4 (82.8 - 96.4) | 84.4 (79.4 - 89.6) |
| | Total | 78.4 (71.4 - 85.8) | 64.4 (54.4 - 75.6) | 48.5 (39.3 - 59.1) | 80.1 (75.6 - 84.7) | 75.7 (72.4 - 79.2) |

### 4.56.13 Child hospitalisations due to burns

The child hospitalisation rate due to burns in Counties Manukau DHB did not differ significantly from the national rate.

**Table 4.74:** Burns hospitalisation, 0–14 years, age-standardised rates per 100,000 (and 95% confidence intervals), 2005–07

| | | Māori | Pacific | Asian | European/Other | Total |
|---|---|---|---|---|---|---|
| Counties Manukau DHB | Female | * | * | * | * | 3.0 (1.0 - 7.0) |
| | Male | 14.9 (5.5 - 32.5) | 13.1 (4.8 - 28.5) | * | 9.1 (3.3 - 19.9) | 10.2 (6.0 - 16.1) |
| | Total | 9.0 (3.6 - 18.5) | 10.0 (4.6 - 18.9) | * | 5.4 (2.2 - 11.1) | 6.7 (4.2 - 10.0) |
| New Zealand | Female | 10.2 (6.9 - 14.6) | 5.3 (2.0 - 11.6) | * | 4.9 (3.5 - 6.8) | 5.9 (4.6 - 7.4) |
| | Male | 15.8 (11.7 - 20.8) | 9.2 (4.6 - 16.5) | * | 9.6 (7.6 - 12.0) | 10.2 (8.6 - 12.1) |
| | Total | 13.1 (10.4 - 16.3) | 7.3 (4.3 - 11.7) | * | 7.3 (6.1 - 8.8) | 8.1 (7.1 - 9.3) |

* Rates not presented for groups with small numbers.

### 4.56.14 Child hospitalisations due to falls

The rate of child hospitalisations due to falls in Counties Manukau DHB was significantly higher than the national rate. Males in Counties Manukau DHB had a significantly higher rate than females. Māori had the highest rate, followed by Pacific children, then

European/Other children, with Asian children having the lowest rate. All ethnic group differences were significant.

**Table 4.75:** Falls hospitalisation, 0–14 years, age-standardised rate per 100,000 (and 95% confidence intervals), 2005–07

| | | Māori | Pacific | Asian | European/Other | Total |
|---|---|---|---|---|---|---|
| Counties Manukau DHB | Female | 851.2 (760.3 - 949.9) | 680.6 (606.7 - 761.0) | 283.6 (219.8 - 360.1) | 570.8 (512.2 - 634.4) | 623.2 (585.9 - 662.3) |
| | Male | 1059.9 (960.8 - 1166.4) | 972.3 (884.3 - 1066.6) | 534.3 (448.0 - 632.4) | 740.8 (676.0 - 810.0) | 844.4 (801.9 - 888.4) |
| | Total | 957.9 (890.1 - 1029.6) | 827.6 (769.7 - 888.8) | 412.5 (357.6 - 473.5) | 658.2 (614.1 - 704.7) | 736.4 (708.0 - 765.7) |
| New Zealand | Female | 565.8 (539.0 - 593.7) | 605.2 (560.9 - 651.9) | 263.7 (233.5 - 296.7) | 469.1 (453.9 - 484.8) | 487.7 (475.6 - 500.0) |
| | Male | 781.9 (751.2 - 813.6) | 847.7 (796.1 - 901.6) | 469.4 (430.1 - 511.5) | 645.9 (628.5 - 663.7) | 681.5 (667.6 - 695.5) |
| | Total | 677.0 (656.4 - 698.1) | 728.9 (694.7 - 764.4) | 369.7 (344.5 - 396.3) | 559.5 (547.9 - 571.3) | 586.9 (577.7 - 596.3) |

### 4.56.15 Child drowning rates

The rates of child drowning in Counties Manukau DHB did not differ significantly from the national rates.

**Table 4.76:** Drowning, 0–14 years, age-standardised rate per 100,000 (and 95% confidence intervals), 2003–05

| | | Māori | Pacific | Asian | European/Other | Total |
|---|---|---|---|---|---|---|
| Counties Manukau DHB | Female | * | * | * | * | * |
| | Male | * | * | * | * | 3.0 (1.0–6.9) |
| | Total | 6.5 (2.1–15.2) | * | * | * | 2.4 (1.0–4.8) |
| New Zealand | Female | 3.3 (1.6–6.1) | * | * | 0.8 (0.3–1.7) | 1.3 (0.7–2.1) |
| | Male | 3.2 (1.5–5.8) | * | * | 0.9 (0.4–1.8) | 1.6 (1.0–2.4) |
| | Total | 3.2 (2.0–5.0) | * | * | 0.8 (0.4–1.4) | 1.4 (1.0–2.0) |

* Rates not presented for groups with small numbers.

## 4.57 Youth health (15–24 years)

### 4.57.1 Youth smoking prevalence

Smoking data (cigarette smoking only) for children 14–15 years were collected from a school-based annual national survey, the Action on Smoking and Health Year 10 Smoking Survey (ASH). Data are based on self-reported record.

Daily and regular youth smoking rates in Counties Manukau were similar to those in New Zealand as a whole. In Counties Manukau DHB 12.6% of youth smoked cigarettes on a regular basis.

**Table 4.77:** Smoking prevalence (self-reported), 14–15 years, age-specific percent, 2007

| Frequency | Counties Manukau DHB | New Zealand |
|---|---|---|
| Smoking daily | 8.1 | 7.3 |
| Smoking regularly* | 12.6 | 12.8 |

* Smoking regularly: smoking on a daily, weekly, or monthly basis.

### 4.57.2 Youth unintentional injury mortality

Overall, the rate for youth unintentional injury in Counties Manukau DHB did not differ significantly from the national rate. The rate for males was over three times the female rate.

**Table 4.78:** Unintentional injury mortality, 15–24 years, age-standardised rate per 100,000 (and 95% confidence intervals), 2003–05

| | | Māori | Pacific | Asian | European/Other | Total |
|---|---|---|---|---|---|---|
| Counties Manukau DHB | Female | * | * | * | 18.4 (7.4–37.9) | 12.7 (6.5–22.1) |
| | Male | 86.3 (48.3–142.4) | 34.4 (13.8–70.8) | * | 40.7 (23.2–66.0) | 41.2 (29.3–56.3) |
| | Total | 46.3 (27.0–74.1) | 21.8 (10.0–41.4) | * | 29.8 (18.9–44.8) | 26.9 (20.0–35.4) |
| New Zealand | Female | 28.7 (21.0–38.2) | 14.8 (6.8–28.2) | 8.5 (3.9–16.2) | 14.0 (10.9–17.5) | 16.2 (13.6–19.2) |
| | Male | 82.2 (68.3–98.1) | 43.9 (28.7–64.4) | 28.3 (19.1–40.5) | 42.6 (37.3–48.5) | 48.0 (43.4–52.9) |
| | Total | 54.6 (46.7–63.5) | 29.2 (20.3–40.5) | 18.4 (13.1–25.2) | 28.5 (25.4–31.9) | 32.2 (29.5–35.0) |

* Rates not presented for groups with small numbers.

### 4.57.2 Youth hospitalisations due to unintentional injury

The unintentional injury youth hospitalisation rate in Counties Manukau DHB was significantly higher than that nationally. The rate of youth hospitalisation due to unintentional injury for males in Counties Manukau DHB was more than 2½ times the rate for females. Māori and Pacific people had significantly higher rates than European/Other people, who had a significantly higher rate than Asian people.

**Table 4.79:** Unintentional injury hospitalisation, 15–24 years, age-standardised rate per 100,000 (and 95% confidence intervals), 2005–07

| | | Māori | Pacific | Asian | European/Other | Total |
|---|---|---|---|---|---|---|
| Counties Manukau DHB | Female | 1715.6 (1535.2 - 1911.3) | 1222.8 (1085.2 - 1373.0) | 379.9 (297.8 - 477.7) | 995.1 (896.3 - 1101.9) | 1068.6 (1005.2 - 1135.0) |
| | Male | 3986.6 (3694.8 - 4295.2) | 4001.4 (3741.5 - 4274.6) | 792.3 (672.8 - 926.8) | 2704.9 (2544.7 - 2872.5) | 2829.7 (2725.7 - 2936.7) |
| | Total | 2790.7 (2622.1 - 2967.4) | 2567.9 (2422.7 - 2719.6) | 588.8 (515.0 - 670.2) | 1878.5 (1782.5 - 1978.3) | 1948.1 (1887.0 - 2010.6) |
| New Zealand | Female | 1069.2 (1018.7 - 1121.6) | 934.2 (860.1 - 1013.0) | 274.8 (245.5 - 306.6) | 769.9 (746.2 - 794.2) | 770.2 (751.7 - 789.1) |
| | Male | 3036.5 (2948.2 - 3126.7) | 3442.5 (3296.9 - 3592.8) | 647.8 (601.9 - 696.4) | 2239.5 (2199.5 - 2280.1) | 2237.2 (2205.8 - 2269.1) |
| | Total | 2022.4 (1972.2 - 2073.6) | 2172.6 (2091.3 - 2256.4) | 463.0 (435.5 - 491.8) | 1516.6 (1493.1 - 1540.4) | 1507.5 (1489.2 - 1526.0) |

### 4.57.3 Youth suicide

The youth suicide rate in Counties Manukau DHB did not differ significantly from the national rate. The rate for Māori was over three times the rate for European/Other youth.

**Table 4.80:** Suicide mortality, 15–24 years, age-standardised rate per 100,000 (and 95% confidence intervals), 2003–05

| | | Māori | Pacific | Asian | European/Other | Total |
|---|---|---|---|---|---|---|
| Counties Manukau DHB | Female | 48.0 (22.0–91.1) | * | * | * | 14.9 (8.2–25.0) |
| | Male | 53.4 (24.4–101.4) | 48.7 (23.4–89.6) | * | 25.7 (12.3–47.2) | 32.0 (21.6–45.6) |
| | Total | 50.5 (29.9–79.8) | 25.7 (12.8–45.9) | * | 16.0 (8.3–28.0) | 23.4 (17.0–31.4) |
| New Zealand | Female | 21.9 (15.2–30.7) | * | 4.5 (1.5–10.6) | 8.1 (5.8–10.9) | 10.0 (8.0–12.4) |
| | Male | 53.6 (42.3–67.0) | 32.6 (19.6–50.8) | 6.8 (2.7–14.0) | 24.1 (20.1–28.7) | 27.5 (24.1–31.3) |
| | Total | 37.2 (30.6–44.8) | 18.4 (11.5–27.9) | 5.7 (2.9–9.9) | 16.2 (13.9–18.8) | 18.8 (16.8–21.0) |

* Rates not presented for groups with small numbers.

### 4.57.4 Teenage mothers – birth rates (15–19 years)

For mothers aged 15 to 19 years living in the Counties Manukau district, the rate of births was higher than the national rate. Patterns across ethnic groups at the DHB level were similar to national patterns, with higher rates of live and still births for Māori and Pacific women aged 15 to 19 years.

**Table 4.81:** Live and still births registered in 2007 for mothers aged 15–19 years, by ethnic group

| | | Māori | Pacific | Asian | European/ Other | Total |
|---|---|---|---|---|---|---|
| Counties Manukau DHB | Live and still births | 423 | 262 | 42 | 119 | 846 |
| | Female population | 3,591 | 4,535 | 3,270 | 7,016 | 18,412 |
| | Rate (per 1000) | 117.8 | 57.8 | 12.8 | 17 | 45.9 |
| New Zealand | Live and still births | 2,675 | 583 | 116 | 1,662 | 5,036 |
| | Female population | 29,808 | 11,832 | 15,589 | 92,232 | 149,461 |
| | Rate (per 1000) | 89.7 | 49.3 | 7.4 | 18 | 33.7 |

**Definitions:**

Live and still births: The number of live and still births registered during 2007 where the mother was aged 15–19 years at the date of birth (by DHB and ethnic group).

Female population, 15–19 years: The number of people in the female population aged 15–19 years in 2007, for the specified DHB and ethnic group.

## 4.58 Older people's health (65+ years)

### 4.58.1 Older people, leading causes of mortality by gender

Counties Manukau DHB had the same leading causes of mortality for older people as those nationally: ischaemic heart disease, stroke, lung cancer, chronic obstructive pulmonary disease and diabetes.

**Table 4.82:** Leading causes of mortality, males and females, 65+ years, 2003–05

| | New Zealand | | Counties Manukau DHB | |
|---|---|---|---|---|
| | **Causes** | **Rank** | **Causes** | **Rank** |
| Female | Cardiovascular diseases - Ischaemic heart disease | 1 | Cardiovascular diseases - Ischaemic heart disease | 1 |
| | Cardiovascular diseases - Cerebrovascular diseases | 2 | Cardiovascular diseases - Cerebrovascular diseases | 2 |
| | Respiratory diseases - COPD | 3 | Nutritional, endocrine and metabolic - Diabetes | 3 |
| | Nutritional, endocrine and metabolic - Diabetes | 4 | Respiratory diseases - COPD | 4 |
| | Neoplasms - Lung | 5 | Neoplasms - Colorectal | 5 |
| Male | Cardiovascular diseases - Ischaemic heart disease | 1 | Cardiovascular diseases - Ischaemic heart disease | 1 |
| | Cardiovascular diseases - Cerebrovascular diseases | 2 | Cardiovascular diseases - Cerebrovascular diseases | 2 |
| | Respiratory diseases - COPD | 3 | Respiratory diseases - COPD | 3 |
| | Nutritional, endocrine and metabolic - Diabetes | 4 | Neoplasms - Lung | 4 |
| | Neoplasms - Lung | 5 | Nutritional, endocrine and metabolic - Diabetes | 5 |
| Total | Cardiovascular diseases - Ischaemic heart disease | 1 | Cardiovascular diseases - Ischaemic heart disease | 1 |
| | Cardiovascular diseases - Cerebrovascular diseases | 2 | Cardiovascular diseases - Cerebrovascular diseases | 2 |
| | Respiratory diseases - COPD | 3 | Nutritional, endocrine and metabolic - Diabetes | 3 |
| | Nutritional, endocrine and metabolic - Diabetes | 4 | Respiratory diseases - COPD | 4 |
| | Neoplasms - Lung | 5 | Neoplasms - Lung | 5 |

Note: Neoplasms = cancer; COPD = chronic obstructive pulmonary disease.

### 4.58.2 Older people, leading causes of mortality by ethnicity

There were similarities across the ethnic groups in leading causes of mortality for older people in Counties Manukau DHB; ischaemic heart disease, stroke, lung cancer and chronic obstructive pulmonary disease were leading causes across all ethnic groups. Diabetes was a leading cause for older Māori, Pacific and Asian people, while colorectal cancer was a leading cause among older European/Other people.

**Table 4.83:** Leading causes of mortality, by ethnic group, 65+ years, 2003–05

| | New Zealand | | Counties Manukau DHB | |
|---|---|---|---|---|
| | **Causes** | **Rank** | **Causes** | **Rank** |
| Māori | Cardiovascular diseases - Ischaemic heart disease | 1 | Cardiovascular diseases - Ischaemic heart disease | 1 |
| | Cardiovascular diseases - Cerebrovascular diseases | 2 | Nutritional, endocrine and metabolic - Diabetes | 2 |
| | Nutritional, endocrine and metabolic - Diabetes | 3 | Cardiovascular diseases - Cerebrovascular diseases | 3 |
| | Respiratory diseases - COPD | 4 | Respiratory diseases - COPD | 4 |
| | Neoplasms - Lung | 5 | Neoplasms - Lung | 5 |
| Pacific | Cardiovascular diseases - Ischaemic heart disease | 1 | Cardiovascular diseases - Ischaemic heart disease | 1 |
| | Cardiovascular diseases - Cerebrovascular diseases | 2 | Cardiovascular diseases - Cerebrovascular diseases | 2 |
| | Nutritional, endocrine and metabolic - Diabetes | 3 | Nutritional, endocrine and metabolic - Diabetes | 3 |
| | Respiratory diseases - COPD | 4 | Neoplasms - Lung | 4 |
| | Neoplasms - Lung | 5 | Respiratory diseases - COPD | 5 |
| Asian | Cardiovascular diseases - Ischaemic heart disease | 1 | Cardiovascular diseases - Ischaemic heart disease | 1 |
| | Cardiovascular diseases - Cerebrovascular diseases | 2 | Cardiovascular diseases - Cerebrovascular diseases | 2 |
| | Nutritional, endocrine and metabolic - Diabetes | 3 | Nutritional, endocrine and metabolic - Diabetes | 3 |
| | Neoplasms - Lung | 4 | Neoplasms - Lung | 4 |
| | Respiratory diseases - COPD | 5 | Respiratory diseases - COPD | 5 |
| European/ Other | Cardiovascular diseases - Ischaemic heart disease | 1 | Cardiovascular diseases - Ischaemic heart disease | 1 |
| | Cardiovascular diseases - Cerebrovascular diseases | 2 | Cardiovascular diseases - Cerebrovascular diseases | 2 |
| | Respiratory diseases - COPD | 3 | Respiratory diseases - COPD | 3 |
| | Neoplasms - Lung | 4 | Neoplasms - Lung | 4 |
| | Nutritional, endocrine and metabolic - Diabetes | 5 | Neoplasms - Colorectal | 5 |

Note: Neoplasms = cancer; COPD = chronic obstructive pulmonary disease.

### 4.58.3 Older people, leading causes of hospitalisations by gender

The leading causes of hospitalisations for older people in Counties Manukau DHB were the same as for New Zealand as a whole: ischaemic heart disease, chronic obstructive pulmonary disease, skin cancer, falls, and respiratory infections. Disorders of the eye and adnexa and was a leading cause for older women, while skin cancers were a leading cause for older men.

**Table 4.84:** Leading causes of hospitalisations, males and females, 65+ years, 2005–07

| | New Zealand | | Counties Manukau DHB | |
|---|---|---|---|---|
| | **Causes** | **Rank** | **Causes** | **Rank** |
| Female | Ischaemic heart disease | 1 | Ischaemic heart disease | 1 |
| | Falls | 2 | Falls | 2 |
| | COPD | 3 | Disorders of the eye and adnexa | 3 |
| | Disorders of the eye and adnexa | 4 | COPD | 4 |
| | Arthrosis | 5 | Respiratory infections | 5 |
| Male | Ischaemic heart disease | 1 | Ischaemic heart disease | 1 |
| | Skin cancers | 2 | Skin cancers | 2 |
| | COPD | 3 | COPD | 3 |
| | Respiratory infections | 4 | Respiratory infections | 4 |
| | Congestive heart failure | 5 | Angina | 5 |
| Total | Ischaemic heart disease | 1 | Ischaemic heart disease | 1 |
| | COPD | 2 | COPD | 2 |
| | Falls | 3 | Skin cancers | 3 |
| | Skin cancers | 4 | Respiratory infections | 4 |
| | Respiratory infections | 5 | Falls | 5 |

Note: COPD = Chronic obstructive pulmonary disease.

### 4.58.4 Older people, leading causes of hospitalisations by ethnicity

Diabetes was leading cause of hospitalisation for older Māori, Pacific and Asian people, while skin cancers were a leading cause for older European/Other people.

**Table 4.85:** Leading causes of hospitalisations, by ethnic group, 65+ years, 2005–07

| | New Zealand | | Counties Manukau DHB | |
|---|---|---|---|---|
| | **Causes** | **Rank** | **Causes** | **Rank** |
| Māori | COPD | 1 | COPD | 1 |
| | Ischaemic heart disease | 2 | Respiratory infections | 2 |
| | Respiratory infections | 3 | Congestive heart failure | 3 |
| | Congestive heart failure | 4 | Diabetes | 4 |
| | Diabetes | 5 | Ischaemic heart disease | 5 |
| Pacific | Respiratory infections | 1 | Respiratory infections | 1 |
| | COPD | 2 | COPD | 2 |
| | Diabetes | 3 | Diabetes | 3 |
| | Ischaemic heart disease | 4 | Ischaemic heart disease | 4 |
| | Congestive heart failure | 5 | Congestive heart failure | 5 |
| Asian | Ischaemic heart disease | 1 | Ischaemic heart disease | 1 |
| | Disorders of the eye and adnexa | 2 | Disorders of the eye and adnexa | 2 |
| | Diabetes | 3 | Diabetes | 3 |
| | Respiratory infections | 4 | Angina | 4 |
| | Angina | 5 | Respiratory infections | 5 |
| European/ Other | Ischaemic heart disease | 1 | Ischaemic heart disease | 1 |
| | Skin cancers | 2 | Skin cancers | 2 |
| | Falls | 3 | Falls | 3 |
| | COPD | 4 | COPD | 4 |
| | Arthrosis | 5 | Arthrosis | 5 |

Note: COPD = chronic obstructive pulmonary disease.

### 4.58.5 Older people, ischaemic heart disease mortality

The rate of ischaemic heart disease mortality amongst older people in Counties Manukau DHB was significantly lower than that observed nationally. Older males had significantly higher mortality rates from ischaemic heart disease than older females in Counties Manukau DHB. Older Pacific people had a significantly higher rate than older European/Other people, who had a significantly higher rate than older Asian people.

**Table 4.86:** Ischaemic heart disease mortality, 65+ years, age-standardised rate per 100,000 (and 95% confidence intervals), 2003–05

| | | Māori | Pacific | Asian | European/Other | Total |
|---|---|---|---|---|---|---|
| Counties Manukau DHB | Female | 838.4 (525.5–1269.4) | 844.9 (609.0–1142.1) | 428.0 (253.7–676.5) | 584.5 (531.5–641.4) | 617.5 (565.9–672.5) |
| | Male | 1221.9 (798.2–1790.3) | 1340.7 (981.5–1788.3) | 401.1 (200.2–717.7) | 956.5 (866.6–1053.2) | 966.0 (882.9–1054.8) |
| | Total | 1007.9 (743.1–1336.3) | 1062.9 (852.5–1309.6) | 411.5 (275.6–591.0) | 750.0 (700.6–801.8) | 771.4 (724.9–820.2) |
| New Zealand | Female | 1046.5 (940.8–1160.7) | 819.8 (685.4–972.8) | 372.8 (295.1–464.6) | 643.9 (629.5–658.6) | 663.9 (649.5–678.5) |
| | Male | 1636.9 (1487.7–1797.1) | 1519.3 (1298.9–1766.4) | 576.2 (468.8–700.8) | 1046.2 (1021.8–1071.0) | 1074.2 (1050.3–1098.5) |
| | Total | 1304.3 (1215.4–1397.9) | 1108.2 (986.3–1240.9) | 467.4 (401.5–541.2) | 819.6 (806.3–833.0) | 843.3 (830.2–856.5) |

### 4.58.6 Hospitalisations of older people due to ischaemic heart disease

The Counties Manukau DHB ischaemic heart disease hospitalisation rate of older people was significantly lower than the national rate. The hospitalisation rate for older males due to ischaemic heart disease was significantly higher than that of older females in Counties Manukau DHB.

**Table 4.87:** Ischaemic heart disease hospitalisation, 65+ years, age-standardised rate per 100,000 (and 95% confidence intervals), 2005–07

| | | Māori | Pacific | Asian | European/Other | Total |
|---|---|---|---|---|---|---|
| Counties Manukau DHB | Female | 2414.3 (1885.6 - 3045.3) | 2056.3 (1706.3 - 2457.1) | 1882.8 (1539.9 - 2279.2) | 2083.0 (1964.8 - 2206.4) | 2091.8 (1985.7 - 2202.0) |
| | Male | 2179.0 (1662.8 - 2804.8) | 3513.0 (2994.4 - 4095.6) | 2792.3 (2357.8 - 3283.8) | 3501.0 (3323.2 - 3685.7) | 3424.5 (3269.1 - 3585.5) |
| | Total | 2350.5 (1965.2 - 2789.2) | 2682.4 (2379.4 - 3013.2) | 2334.2 (2054.3 - 2641.5) | 2741.0 (2636.9 - 2848.2) | 2704.4 (2612.6 - 2798.6) |
| New Zealand | Female | 2991.9 (2821.3 - 3170.1) | 2257.6 (2043.9 - 2487.7) | 1628.1 (1476.4 - 1791.1) | 2098.0 (2067.4 - 2128.9) | 2144.9 (2115.3 - 2174.9) |
| | Male | 3241.5 (3050.5 - 3441.5) | 3191.1 (2898.6 - 3505.2) | 2597.5 (2394.8 - 2812.8) | 3696.0 (3648.5 - 3743.8) | 3641.7 (3597.0 - 3686.9) |
| | Total | 3133.4 (3004.4 - 3266.5) | 2656.0 (2479.8 - 2841.4) | 2082.2 (1956.8 - 2213.5) | 2832.4 (2805.1 - 2859.9) | 2830.7 (2804.7 - 2856.9) |

### 4.58.7 Older people, cerebrovascular disease (stroke) mortality

Overall, the stroke mortality rate of older people in Counties Manukau DHB did not differ significantly from the national rate.

**Table 4.88:** Stroke mortality, 65+ years, age-standardised rate per 100,000 (and 95% confidence intervals), 2003–05

| | | Māori | Pacific | Asian | European/Other | Total |
|---|---|---|---|---|---|---|
| Counties Manukau DHB | Female | 462.4 (239.0–807.8) | 663.4 (456.6–931.6) | 445.1 (263.8–703.4) | 320.4 (281.7–362.8) | 363.1 (323.9–405.8) |
| | Male | * | 712.7 (465.6–1044.3) | 255.4 (110.2–503.2) | 312.2 (262.1–369.0) | 338.3 (290.1–392.4) |
| | Total | 362.3 (207.1–588.3) | 716.0 (545.0–923.6) | 378.5 (247.3–554.6) | 325.5 (293.8–359.7) | 361.0 (329.7–394.6) |
| New Zealand | Female | 489.1 (416.9–570.2) | 650.5 (531.0–788.9) | 379.8 (301.6–472.1) | 374.6 (363.7–385.8) | 386.3 (375.5–397.4) |
| | Male | 403.7 (328.5–491.0) | 609.8 (473.5–773.0) | 237.5 (170.4–322.1) | 351.6 (337.7–366.0) | 358.5 (344.8–372.5) |
| | Total | 456.8 (403.3–515.5) | 653.2 (559.0–758.8) | 325.7 (270.5–388.9) | 369.9 (361.2–378.8) | 379.7 (371.1–388.4) |

* Rates not presented for groups with small numbers.

### 4.58.8 Hospitalisations of older people due cerebrovascular disease (stroke)

Overall, the stroke hospitalisation rate for older people in Counties Manukau DHB was significantly higher than the national rate. Older males had a significantly higher rate than older females. Older Māori and Pacific people had significantly higher stroke hospitalisation rates than older European/Other people.

**Table 4.89:** Stroke hospitalisation, 65+ years, age-standardised rate per 100,000 (and 95% confidence intervals), 2005–07

| | | Māori | Pacific | Asian | European/Other | Total |
|---|---|---|---|---|---|---|
| Counties Manukau DHB | Female | 1451.1 (1045.8 - 1961.4) | 1385.9 (1097.2 - 1727.2) | 791.5 (565.5 - 1077.8) | 605.4 (544.8 - 670.9) | 720.3 (660.0 - 784.6) |
| | Male | 1141.9 (764.7 - 1639.9) | 1640.9 (1279.2 - 2073.2) | 1057.3 (774.1 - 1410.3) | 932.8 (843.2 - 1029.3) | 1011.7 (928.3 - 1100.7) |
| | Total | 1357.7 (1060.4 - 1712.5) | 1512.9 (1279.7 - 1776.3) | 917.6 (734.0 - 1133.3) | 759.8 (706.8 - 815.8) | 856.8 (806.2 - 909.9) |
| New Zealand | Female | 1083.2 (980.4 - 1193.9) | 1225.7 (1068.0 - 1400.1) | 692.4 (593.0 - 803.6) | 626.9 (611.1 - 643.0) | 667.7 (651.9 - 683.8) |
| | Male | 994.2 (886.7 - 1111.0) | 1669.1 (1452.5 - 1908.9) | 877.7 (760.3 - 1008.2) | 855.3 (833.0 - 878.0) | 885.9 (864.2 - 908.0) |
| | Total | 1053.9 (978.2 - 1133.9) | 1410.0 (1279.8 - 1549.7) | 786.3 (708.5 - 870.3) | 732.7 (719.4 - 746.2) | 768.7 (755.6 - 782.0) |

### 4.58.9 Registrations of older people with lung cancer

Overall, the lung cancer registration rate for Counties Manukau DHB was not significantly different to that observed nationally. Older males had a significantly higher rate than older females. The lung cancer registration rate for older Māori was three times that for older European/Other people. Older Māori and Pacific people had significantly higher rates than those for Asian and European/Other people.

**Table 4.90:** Lung cancer registrations, 65+ years, age-standardised rates per 100,000 (and 95% confidence intervals), 2003–05

| | | Māori | Pacific | Asian | European/Other | Total |
|---|---|---|---|---|---|---|
| Counties Manukau DHB | Female | 541.6 (315.5–867.2) | 329.5 (195.3–520.7) | * | 140.1 (109.5–176.8) | 172.9 (142.1–208.4) |
| | Male | 706.1 (411.3–1130.6) | 766.0 (516.8–1093.5) | 207.7 (95.0–394.2) | 282.6 (233.5–339.0) | 333.2 (285.3–386.9) |
| | Total | 613.7 (425.0–857.5) | 506.0 (373.1–670.8) | 144.9 (77.1–247.7) | 203.5 (175.4–234.9) | 243.8 (216.2–274.0) |
| New Zealand | Female | 517.0 (447.7–594.0) | 188.6 (129.0–266.3) | 116.9 (77.0–170.1) | 143.6 (135.3–152.3) | 162.8 (154.3–171.6) |
| | Male | 526.4 (449.8–612.3) | 600.6 (473.2–751.8) | 268.0 (197.6–355.3) | 296.6 (283.3–310.4) | 313.4 (300.3–326.9) |
| | Total | 520.9 (468.9–577.0) | 361.8 (296.8–436.8) | 180.1 (141.7–225.8) | 210.8 (203.3–218.6) | 228.7 (221.2–236.4) |

* Rates not presented for groups with small numbers.

### 4.58.10 Lung cancer mortality in older people

The lung cancer mortality rate in Counties Manukau DHB for older people did not differ significantly from that observed nationally. The rate for males was significantly higher than the rate for females. The lung cancer mortality rates for older Māori and Pacific people were significantly higher than those for older European/Other and Asian people in Counties Manukau DHB.

**Table 4.91:** Lung cancer mortality, 65+ years, age-standardised rate per 100,000 (and 95% confidence intervals), 2003–05

| | | Māori | Pacific | Asian | European/Other | Total |
|---|---|---|---|---|---|---|
| Counties Manukau DHB | Female | 412.5 (219.7–705.5) | 276.9 (155.0–456.7) | * | 103.5 (77.3–135.8) | 129.7 (103.2–161.0) |
| | Male | 945.1 (592.3–1430.9) | 696.7 (450.8–1028.4) | 241.0 (110.2–457.4) | 245.5 (200.3–297.7) | 306.7 (260.9–358.3) |
| | Total | 644.0 (448.6–895.7) | 433.4 (309.6–590.1) | 125.9 (62.9–225.4) | 165.4 (140.4–193.6) | 206.4 (181.2–234.2) |
| New Zealand | Female | 481.3 (414.7–555.4) | 178.1 (120.2–254.3) | 73.6 (42.1–119.5) | 123.5 (115.8–131.5) | 142.0 (134.1–150.2) |
| | Male | 567.2 (485.6–658.6) | 515.2 (394.1–661.8) | 219.5 (154.5–302.5) | 263.2 (250.7–276.2) | 279.9 (267.6–292.6) |
| | Total | 512.7 (461.0–568.6) | 315.3 (253.8–387.1) | 134.9 (101.1–176.5) | 184.5 (177.5–191.6) | 201.7 (194.7–208.9) |

* Rates not presented for groups with small numbers.

### 4.58.11 Hospitalisations of older people due to lung cancer

The lung cancer hospitalisation rate for older people in Counties Manukau DHB did not differ significantly from that observed nationally. There was a significantly higher rate for males than females. Māori and Pacific people had significantly higher rates than those for older European/Other and Asian people.

**Table 4.92:** Lung cancer hospitalisations, 65+ years, age-standardised rate per 100,000 (and 95% confidence intervals), 2005–07

| | | Māori | Pacific | Asian | European/Other | Total |
|---|---|---|---|---|---|---|
| Counties Manukau DHB | Female | 298.3 (154.1 - 521.1) | 216.7 (115.4 - 370.5) | * | 123.8 (94.4 - 159.3) | 137.5 (110.0 - 169.8) |
| | Male | 755.3 (454.8 - 1179.6) | 565.5 (372.6 - 822.7) | 211.1 (96.5 - 400.7) | 220.2 (176.6 - 271.2) | 272.7 (229.8 - 321.2) |
| | Total | 480.8 (326.7 - 682.5) | 368.8 (263.5 - 502.2) | 105.9 (50.8 - 194.8) | 168.0 (142.0 - 197.4) | 198.8 (173.9 - 226.3) |
| New Zealand | Female | 461.1 (396.7 - 533.0) | 163.5 (110.3 - 233.4) | 101.0 (67.1 - 146.0) | 157.5 (148.4 - 167.0) | 171.8 (162.7 - 181.2) |
| | Male | 471.3 (401.9 - 549.2) | 522.1 (410.0 - 655.5) | 194.5 (141.9 - 260.3) | 257.9 (245.4 - 270.8) | 274.5 (262.2 - 287.1) |
| | Total | 469.1 (421.0 - 521.1) | 318.8 (260.5 - 386.3) | 143.6 (112.5 - 180.5) | 202.0 (194.4 - 209.7) | 217.4 (210.0 - 225.0) |

* Rates not presented for groups with small numbers.

### 4.58.12 Registrations of older women with breast cancer

The rate of breast cancer registrations of older women in Counties Manukau DHB did not differ significantly to that observed nationally.

**Table 4.93:** Female breast cancer registrations, 65+ years, age-standardised rates per 100,000 (and 95% confidence intervals), 2003–05

| | | Māori | Pacific | Asian | European/ Other | Total |
|---|---|---|---|---|---|---|
| Counties Manukau DHB | Female | 194.0 (78.0–399.7) | 275.7 (154.3–454.7) | 179.1 (81.9–340.0) | 305.8 (259.3–358.3) | 287.3 (247.3–331.9) |
| New Zealand | Female | 314.2 (261.5–374.3) | 286.2 (211.7–378.4) | 177.3 (128.3–238.8) | 294.8 (282.7–307.2) | 293.4 (282.0–305.2) |

### 4.58.13 Mortality in older women due to breast cancer

In Counties Manukau DHB the mortality rate of older women for breast cancer was significantly lower than that observed nationally.

**Table 4.94:** Female breast cancer mortality, 65+ years, age-standardised rate per 100,000 (and 95% confidence intervals), 2003–05

| | | Māori | Pacific | Asian | European/ Other | Total |
|---|---|---|---|---|---|---|
| Counties Manukau DHB | Female | * | * | * | 75.1 (54.4–101.2) | 74.8 (56.1–97.9) |
| New Zealand | Female | 133.5 (98.8–176.5) | 113.8 (68.5–177.7) | 94.5 (59.3–143.1) | 105.2 (98.4–112.3) | 106.2 (99.7–113.1) |

* Rates not presented for groups with small numbers.

### 4.58.14 Hospitalisations due to breast cancer in older women

The rate of breast cancer hospitalisations in older women did not differ significantly between Counties Manukau DHB and New Zealand.

**Table 4.95:** Female breast cancer hospitalisation, 65+ years, age-standardised rate per 100,000 (and 95% confidence intervals), 2005–07

| | | Māori | Pacific | Asian | European/ Other | Total |
|---|---|---|---|---|---|---|
| Counties Manukau DHB | Female | 420.6 (235.4 - 693.7) | 286.6 (167.0 - 458.9) | 76.1 (24.7 - 177.6) | 247.7 (204.7 - 297.1) | 244.8 (207.6 - 286.8) |
| New Zealand | Female | 373.6 (316.9 - 437.5) | 323.1 (246.6 - 415.9) | 141.3 (100.0 - 194.0) | 287.5 (275.3 - 300.2) | 288.8 (277.1 - 300.8) |

### 4.58.15 Registrations of older men with prostate cancer

In Counties Manukau DHB the prostate cancer registration rate for older men did not differ significantly from the national rate. Older Pacific men had a significantly higher rate than older European/Other men, who had a significantly higher rate than older Asian men.

**Table 4.96:** Prostate cancer registration, 65+ years, age-standardised rate per 100,000 (and 95% confidence intervals), 2003–05

| | | Māori | Pacific | Asian | European/ Other | Total |
|---|---|---|---|---|---|---|
| Counties Manukau DHB | Male | 602.6 (351.0–964.8) | 1204.6 (881.9–1606.8) | 214.3 (102.8–394.1) | 703.7 (624.4–790.4) | 695.0 (624.9–770.9) |
| New Zealand | Male | 719.5 (626.7–822.1) | 890.4 (733.8–1070.5) | 244.0 (182.2–319.9) | 789.2 (767.0–811.8) | 766.9 (746.2–788.1) |

### 4.58.16 Mortality in older men due to prostate cancer

In Counties Manukau DHB the prostate cancer mortality rate for older men did not differ significantly from the national rate.

**Table 4.97:** Prostate cancer mortality, all ages, age-standardised rate per 100,000 (and 95% confidence intervals), 2003–05

| | | Māori | Pacific | Asian | European/ Other | Total |
|---|---|---|---|---|---|---|
| Counties Manukau DHB | Male | 240.5 (78.1–561.1) | 375.1 (179.9–689.9) | * | 175.5 (138.1–220.0) | 178.0 (143.3–218.6) |
| New Zealand | Male | 322.4 (255.6–401.2) | 268.5 (178.4–388.0) | 92.0 (50.3–154.4) | 216.0 (205.0–227.4) | 217.9 (207.3–228.9) |

* Rates not presented for groups with small numbers.

### 4.58.17 Hospitalisations of older men due to prostate cancer

The rate of prostate cancer hospitalisation for older men in Counties Manukau DHB was significantly lower than the national rate. The rate for older Māori in Counties Manukau DHB was less than a third of the rate for older Māori nationally.

**Table 4.98:** Prostate cancer hospitalisation, 65+ years, age-standardised rate per 100,000 (and 95% confidence intervals), 2005–07

| | | Māori | Pacific | Asian | European/ Other | Total |
|---|---|---|---|---|---|---|
| Counties Manukau DHB | Male | 150.8 (49.0 - 351.8) | 427.0 (248.7 - 683.6) | 129.1 (51.9 - 266.0) | 316.6 (265.1 - 375.2) | 302.4 (257.6 - 352.7) |
| New Zealand | Male | 561.2 (482.6 - 648.9) | 375.7 (278.9 - 495.4) | 128.7 (87.4 - 182.7) | 437.9 (421.8 - 454.5) | 433.8 (418.5 - 449.5) |

### 4.58.18 Registrations of older women with cancer of the cervix

The rate of cervical cancer registrations for older women in Counties Manukau DHB did not differ significantly from the national rate.

**Table 4.99:** Cervical cancer registration, 65+ years, age-standardised rate per 100,000 (and 95% confidence intervals), 2003–05

| | | Māori | Pacific | Asian | European/ Other | Total |
|---|---|---|---|---|---|---|
| Counties Manukau DHB | Female | * | * | * | 15.8 (6.3–32.5) | 23.8 (13.0–40.0) |
| New Zealand | Female | 22.3 (9.6–44.0) | 40.8 (16.4–84.0) | 55.5 (29.5–94.8) | 9.5 (7.5–11.9) | 12.2 (9.9–14.7) |

* Rates not presented for groups with small numbers.

### 4.58.19 Mortality in older women due to cancer of the cervix

The cervical cancer mortality rates for older women in the Counties Manukau DHB were not available due to small numbers (counts less than 5).

**Table 4.100:** Cervical cancer mortality, 65+ years, age-standardised rate per 100,000 (and 95% confidence intervals), 2003–05

| | | Māori | Pacific | Asian | European/ Other | Total |
|---|---|---|---|---|---|---|
| Counties Manukau DHB | Female | * | * | * | * | * |
| New Zealand | Female | 21.0 (9.1–41.3) | * | * | 7.3 (5.7–9.3) | 8.4 (6.7–10.5) |

* Rates not presented for groups with small numbers.

### 4.58.20 Hospitalisations of older women due to cancer of the cervix

There was no significant difference between the cervical cancer hospitalisation rate in Counties Manukau and that observed nationally for older women. The rate for older Pacific women was six times the rate for older European/Other women.

**Table 4.101:** Cervical cancer hospitalisation, 65+ years, age-standardised rate per 100,000 (and 95% confidence intervals), 2005–07

| | | Māori | Pacific | Asian | European/ Other | Total |
|---|---|---|---|---|---|---|
| Counties Manukau DHB | Female | * | 135.7 (58.6–267.3) | * | 19.5 (9.3 - 35.8) | 28.2 (16.7 - 44.6) |
| New Zealand | Female | 65.2 (41.4 - 97.9) | 65.7 (33.9 - 114.8) | 36.4 (16.6 - 69.0) | 18.7 (15.7 - 22.0) | 21.9 (18.9 - 25.3) |

* Rates not presented for groups with small numbers.

### 4.58.21 Registrations of older people with colorectal cancer

There was no significant difference between the colorectal cancer registration rate in Counties Manukau DHB and that observed nationally for older people. Older European/Other people had a significantly higher rate than older Pacific and Asian people.

**Table 4.102:** Colorectal cancer registration, 65+ years, age-standardised rate per 100,000 (and 95% confidence intervals), 2003–05

| | | Māori | Pacific | Asian | European/Other | Total |
|---|---|---|---|---|---|---|
| Counties Manukau DHB | Female | * | 153.2 (66.1–301.8) | 160.7 (69.4–316.6) | 336.3 (289.2–388.9) | 296.5 (256.9–340.4) |
| | Male | 426.8 (220.5–745.5) | 168.0 (67.6–346.2) | 138.7 (50.9–302.0) | 378.3 (321.4–442.3) | 348.6 (299.8–403.1) |
| | Total | 238.5 (133.5–393.4) | 166.9 (93.4–275.2) | 150.1 (82.1–251.8) | 358.9 (321.7–399.2) | 323.4 (291.8–357.5) |
| New Zealand | Female | 132.9 (98.3–175.7) | 129.2 (81.0–195.7) | 152.8 (105.8–213.5) | 342.8 (330.2–355.7) | 321.9 (310.3–333.9) |
| | Male | 223.1 (176.1–278.9) | 157.3 (96.1–242.9) | 180.3 (126.3–249.6) | 426.5 (410.4–443.0) | 406.3 (391.4–421.7) |
| | Total | 178.0 (148.2–211.9) | 140.8 (101.5–190.4) | 166.8 (130.0–210.8) | 380.9 (370.9–391.2) | 360.5 (351.2–370.0) |

### 4.58.22 Mortality in older people due to colorectal cancer

Overall, the colorectal cancer mortality rate among older people in Counties Manukau DHB was not significantly different to that observed nationally.

**Table 4.103:** Colorectal cancer mortality, 65+ years, age-standardised rate per 100,000 (and 95% confidence intervals), 2003–05

| | | Māori | Pacific | Asian | European/Other | Total |
|---|---|---|---|---|---|---|
| Counties Manukau DHB | Female | 170.3 (62.5–370.7) | * | * | 135.9 (108.7–167.9) | 131.0 (106.2–159.8) |
| | Male | 308.3 (113.2–671.1) | 170.4 (68.5–351.1) | * | 179.2 (140.7–225.0) | 176.2 (141.8–216.3) |
| | Total | 227.0 (117.3–396.6) | 120.5 (60.2–215.7) | 46.8 (15.2–109.3) | 159.3 (135.6–186.0) | 154.1 (132.9–177.8) |
| New Zealand | Female | 69.9 (46.1–101.7) | 89.3 (50.0–147.3) | 61.0 (32.5–104.3) | 142.6 (135.0–150.6) | 136.6 (129.4–144.1) |
| | Male | 146.3 (106.7–195.7) | 91.3 (47.2–159.4) | 77.1 (43.1–127.2) | 191.7 (181.2–202.8) | 185.9 (175.9–196.3) |
| | Total | 103.1 (80.6–129.8) | 91.3 (60.2–132.9) | 70.8 (47.1–102.4) | 164.9 (158.5–171.4) | 159.0 (153.0–165.1) |

* Rates not presented for groups with small numbers.

### 4.58.23 Hospitalisations of older people due to colorectal cancer

In Counties Manukau DHB, the overall hospitalisation rate of older people due to colorectal cancer was significantly lower than that observed nationally. Older European/Other people had a significantly higher rate than older Pacific and Asian people.

**Table 4.104:** Colorectal cancer hospitalisation, 65+ years, age-standardised rate per 100,000 (and 95% confidence intervals), 2005–07

| | | Māori | Pacific | Asian | European/Other | Total |
|---|---|---|---|---|---|---|
| Counties Manukau DHB | Female | 217.3 (87.3 - 447.6) | 140.6 (60.7 - 277.0) | 197.3 (98.5 - 353.0) | 294.5 (250.3 - 344.1) | 267.8 (230.5 - 309.4) |
| | Male | 434.6 (208.4 - 799.2) | 211.6 (96.8 - 401.7) | 103.0 (33.4 - 240.4) | 399.4 (341.4 - 464.3) | 357.4 (308.7 - 411.5) |
| | Total | 306.1 (178.3 - 490.0) | 176.0 (102.5 - 281.8) | 156.5 (89.4 - 254.1) | 344.2 (307.9 - 383.6) | 309.5 (279.0 - 342.4) |
| New Zealand | Female | 215.7 (171.3 - 268.1) | 238.9 (172.9 - 321.8) | 150.5 (107.0 - 205.7) | 374.4 (361.1 - 388.1) | 355.1 (342.8 - 367.7) |
| | Male | 422.7 (356.0 - 498.2) | 177.3 (109.7 - 271.0) | 160.6 (113.7 - 220.5) | 483.3 (466.2 - 500.8) | 464.5 (448.6 - 480.8) |
| | Total | 313.2 (273.5 - 357.1) | 208.8 (160.8 - 266.6) | 156.4 (123.4 - 195.4) | 424.0 (413.3 - 434.8) | 404.9 (395.1 - 415.0) |

### 4.58.24 Registrations of older people with malignant melanoma

Overall, the registration rate for malignant melanoma among older people in Counties Manukau DHB was not significantly different to that observed nationally. The rate for males was significantly higher than the rate for females.

**Table 4.105:** Melanoma registration, 65+ years, age-standardised rate per 100,000 (and 95% confidence intervals), 2003–05

| | | Māori | Pacific | Asian | European/Other | Total |
|---|---|---|---|---|---|---|
| Counties Manukau DHB | Female | * | * | * | 133.8 (103.9–169.6) | 104.7 (81.5–132.5) |
| | Male | * | * | * | 222.2 (179.1–272.5) | 179.0 (144.4–219.2) |
| | Total | * | * | * | 172.3 (146.6–201.2) | 136.5 (116.3–159.2) |
| New Zealand | Female | 32.6 (16.9–57.0) | * | * | 134.3 (126.2–142.6) | 122.3 (115.0–129.9) |
| | Male | 19.0 (7.6–39.1) | * | * | 224.9 (213.2–237.0) | 205.0 (194.4–216.0) |
| | Total | 27.3 (16.4–42.6) | 20.4 (7.5–44.5) | * | 174.5 (167.6–181.5) | 158.8 (152.6–165.2) |

* Rates not presented for groups with small numbers.

### 4.58.25 Mortality of older people due to malignant melanoma

Overall, the mortality rate for malignant melanoma among older people in Counties Manukau DHB was not significantly different to that observed nationally. Males had double the rate of females.

**Table 4.106:** Melanoma mortality, 65+ years, age-standardised rates per 100,000 (and 95% confidence intervals), 2003–05

| | | Māori | Pacific | Asian | European/Other | Total |
|---|---|---|---|---|---|---|
| Counties Manukau DHB | Female | * | * | * | 27.6 (15.8–44.8) | 22.2 (12.7–36.0) |
| | Male | * | * | * | 69.5 (46.2–100.5) | 56.9 (38.1–81.7) |
| | Total | * | * | * | 46.9 (34.1–63.0) | 37.8 (27.6–50.6) |
| New Zealand | Female | * | * | * | 22.0 (19.0–25.2) | 20.2 (17.5–23.2) |
| | Male | 18.0 (5.8–42.0) | * | * | 45.2 (40.1–50.8) | 42.0 (37.3–47.1) |
| | Total | 9.5 (3.5–20.6) | * | * | 32.2 (29.4–35.2) | 29.7 (27.2–32.5) |

* Rates not presented for groups with small numbers.

### 4.58.26 Hospitalisations of older people due to malignant melanoma

Overall, the hospitalisation rate for malignant melanoma among older people in Counties Manukau DHB was not significantly different to that observed nationally.

**Table 4.107:** Melanoma hospitalisation, 65+ years, age-standardised rates per 100,000 (and 95% confidence intervals), 2005–07

| | | Māori | Pacific | Asian | European/Other | Total |
|---|---|---|---|---|---|---|
| Counties Manukau DHB | Female | * | * | * | 118.2 (90.8 - 151.3) | 91.9 (70.8 - 117.4) |
| | Male | * | * | 123.4 (40.1 - 288.1) | 254.3 (208.4 - 307.3) | 211.6 (174.4 - 254.4) |
| | Total | * | * | 55.9 (18.2 - 130.5) | 178.0 (152.3 - 206.9) | 143.7 (123.4 - 166.6) |
| New Zealand | Female | 19.4 (7.1 - 42.3) | 34.1 (12.5–74.3) | * | 100.7 (93.9 - 107.9) | 91.3 (85.2 - 97.8) |
| | Male | 21.4 (9.2 - 42.1) | * | 32.4 (13.0–66.7) | 171.1 (161.0 - 181.6) | 156.5 (147.4 - 166.1) |
| | Total | 22.0 (12.0 - 36.9) | 31.2 (14.3–59.2) | 17.2 (7.4–33.9) | 132.1 (126.2 - 138.2) | 120.3 (115.0 - 125.8) |

* Rates not presented for groups with small numbers.

### 4.58.27 Older people, chronic obstructive pulmonary disease mortality

The chronic obstructive pulmonary disease mortality rate for older people in Counties Manukau DHB did not differ significantly from the national rate. The rate for older men was significantly higher than the rate for older women. The rate for older Māori was more than double the rate for older Pacific people.

**Table 4.108:** COPD mortality, 65+ years, age-standardised rate per 100,000 (and 95% confidence intervals), 2003–05

| | | Māori | Pacific | Asian | European/Other | Total |
|---|---|---|---|---|---|---|
| Counties Manukau DHB | Female | 723.9 (448.1–1106.5) | 163.7 (74.8–310.7) | * | 195.6 (162.4–233.5) | 212.4 (180.2–248.7) |
| | Male | 717.4 (382.0–1226.8) | 589.2 (373.5–884.1) | 197.5 (79.4–407.0) | 329.6 (278.3–387.6) | 364.1 (314.1–419.9) |
| | Total | 716.4 (496.1–1001.0) | 341.3 (233.5–481.8) | 118.7 (54.3–225.3) | 243.6 (215.3–274.6) | 268.5 (240.8–298.5) |
| New Zealand | Female | 496.3 (426.3–574.6) | 227.2 (160.0–313.2) | 66.4 (36.3–111.5) | 186.8 (178.3–195.7) | 198.6 (190.1–207.4) |
| | Male | 577.6 (490.0–676.4) | 563.2 (427.7–728.1) | 139.6 (88.5–209.5) | 317.1 (303.7–330.8) | 327.6 (314.6–341.1) |
| | Total | 527.3 (472.2–587.1) | 354.0 (286.4–432.8) | 98.7 (69.5–136.1) | 237.6 (230.3–245.2) | 248.9 (241.6–256.3) |

* Rates not presented for groups with small numbers.

### 4.58.28 Older people, chronic obstructive pulmonary disease hospitalisations

The hospitalisation rate for chronic obstructive pulmonary disease among older people in Counties Manukau DHB was significantly higher than the national rate. Males had a significantly higher rate than females. The rates for older Māori and Pacific people were significantly higher than the rate for older European/Other people, which was significantly higher than the rate for older Asian people.

**Table 4.109:** COPD hospitalisation, 65+ years, age-standardised rate per 100,000 (and 95% confidence intervals), 2005–07

| | | Māori | Pacific | Asian | European/Other | Total |
|---|---|---|---|---|---|---|
| Counties Manukau DHB | Female | 3396.0 (2793.7 - 4089.7) | 2050.8 (1696.1 - 2457.9) | 193.9 (93.0 - 356.6) | 1050.2 (963.9 - 1142.1) | 1173.9 (1093.1 - 1259.0) |
| | Male | 4471.4 (3710.2 - 5342.7) | 6125.3 (5421.4 - 6895.2) | 1186.8 (880.9 - 1564.6) | 1400.5 (1291.1 - 1516.8) | 1966.5 (1849.2 - 2089.2) |
| | Total | 3849.5 (3370.0 - 4378.0) | 3813.5 (3444.8 - 4210.9) | 607.2 (463.4 - 781.6) | 1181.3 (1114.0 - 1251.6) | 1514.4 (1445.9 - 1585.4) |
| New Zealand | Female | 3719.7 (3530.9 - 3916.1) | 1880.9 (1684.3 - 2094.2) | 337.9 (268.0 - 420.6) | 998.6 (976.8 - 1020.7) | 1133.4 (1111.2 - 1156.0) |
| | Male | 3366.9 (3168.3 - 3574.7) | 5063.0 (4683.2 - 5465.4) | 931.8 (802.7 - 1075.8) | 1384.7 (1356.3 - 1413.6) | 1540.3 (1511.6 - 1569.4) |
| | Total | 3557.1 (3419.6 - 3698.6) | 3212.7 (3015.7 - 3419.2) | 603.0 (532.7 - 680.0) | 1158.5 (1141.2 - 1176.0) | 1303.0 (1285.3 - 1320.8) |

### 4.58.29 Older people, hospitalisations related to falls

Overall, the hospitalisation rate for falls of older people in Counties Manukau was significantly higher than the national rate. Older females had a significantly higher rate than older males.

**Table 4.110:** Falls hospitalisation, 65+ years, age-standardised rate per 100,000 (and 95% confidence intervals), 2005–07

| | | Māori | Pacific | Asian | European/Other | Total |
|---|---|---|---|---|---|---|
| Counties Manukau DHB | Female | 2055.5 (1575.9 - 2635.0) | 1394.1 (1103.7 - 1737.4) | 1458.5 (1145.2 - 1831.0) | 2138.1 (2024.7 - 2256.2) | 2031.2 (1931.2 - 2135.1) |
| | Male | 2430.9 (1804.2 - 3204.8) | 1723.7 (1330.3 - 2197.0) | 713.7 (474.3 - 1031.5) | 1600.7 (1484.9 - 1723.2) | 1586.8 (1481.9 - 1697.2) |
| | Total | 2183.0 (1797.5 - 2626.7) | 1530.8 (1291.0 - 1802.2) | 1142.3 (931.4 - 1386.7) | 1896.5 (1815.1 - 1980.7) | 1833.7 (1761.0 - 1908.7) |
| New Zealand | Female | 1420.9 (1300.3 - 1549.6) | 1357.7 (1190.0 - 1542.4) | 1490.8 (1341.2 - 1652.6) | 1802.0 (1776.0 - 1828.2) | 1778.8 (1753.9 - 1803.9) |
| | Male | 1245.0 (1119.0 - 1381.3) | 1440.0 (1231.7 - 1673.5) | 687.6 (577.7 - 812.4) | 1333.9 (1306.4 - 1361.8) | 1321.9 (1295.7 - 1348.6) |
| | Total | 1356.1 (1267.3 - 1449.4) | 1393.8 (1261.5 - 1536.2) | 1130.6 (1033.6 - 1234.2) | 1605.9 (1587.0 - 1625.1) | 1588.2 (1570.1 - 1606.6) |

### 4.58.30 Older people, hospitalisations due to musculoskeletal disease

The hospitalisation rate due to musculoskeletal disease did not differ significantly between older people in Counties Manukau DHB and those nationally. Older Māori had the highest rate, followed by older Pacific people, then older European/Other people, older Asian people had the lowest rate. All ethnic group differences were significant.

**Table 4.111:** Musculoskeletal disease hospitalisation, 65+ years, age-standardised rate per 100,000 (and 95% confidence intervals), 2005–07

| | | Māori | Pacific | Asian | European/Other | Total |
|---|---|---|---|---|---|---|
| Counties Manukau DHB | Female | 3922.8 (3257.7 - 4683.9) | 2370.4 (1996.6 - 2793.9) | 1659.9 (1344.5 - 2027.0) | 2389.7 (2255.7 - 2529.6) | 2391.6 (2273.8 - 2513.8) |
| | Male | 3795.4 (3074.3 - 4634.9) | 3513.1 (2994.5 - 4095.7) | 886.5 (638.9 - 1198.4) | 2405.7 (2258.0 - 2560.6) | 2414.5 (2284.4 - 2550.1) |
| | Total | 3898.2 (3397.9 - 4451.4) | 2851.1 (2540.0 - 3189.7) | 1309.4 (1100.1 - 1547.0) | 2397.2 (2297.5 - 2500.1) | 2401.8 (2314.2 - 2491.8) |
| New Zealand | Female | 2606.1 (2448.4 - 2771.2) | 2206.3 (1995.3 - 2433.5) | 1328.2 (1192.5 - 1475.1) | 2443.1 (2408.1 - 2478.4) | 2406.4 (2373.5 - 2439.7) |
| | Male | 3235.7 (3042.3 - 3438.2) | 2509.3 (2251.5 - 2788.6) | 909.5 (788.1 - 1044.3) | 2304.2 (2266.5 - 2342.4) | 2300.6 (2264.9 - 2336.8) |
| | Total | 2885.7 (2762.5 - 3013.0) | 2339.5 (2174.5 - 2513.8) | 1120.7 (1029.0 - 1218.4) | 2377.9 (2352.2 - 2403.7) | 2356.8 (2332.6 - 2381.2) |

## 4.59 Birth rate

For mothers living in the Counties Manukau district, the rate of live births was higher than the national rate of births registered in 2007. Patterns across ethnic groups at the DHB level were similar to national patterns, with higher rates of live births for Māori and Pacific mothers per 1000 women aged 15 to 49 years.

**Table 4.112:** Live births registered in 2007, for mothers of all ages, by ethnic group

| | | Māori | Pacific | Asian | European/ Other | Total |
|---|---|---|---|---|---|---|
| Counties Manukau DHB | Live births | 2,318 | 2,724 | 1,417 | 2,539 | 8,998 |
| | Female population (15–49 years) | 18,765 | 23,519 | 23,888 | 50,867 | 117,039 |
| | Rate (per 1000) | 123.5 | 115.8 | 59.3 | 49.9 | 76.9 |
| New Zealand | Live births | 15,289 | 6,719 | 6,331 | 36,781 | 65,120 |
| | Female population (15–49 years) | 153,536 | 63,017 | 125,390 | 691,167 | 1,033,110 |
| | Rate (per 1000) | 99.6 | 106.6 | 50.5 | 53.2 | 63 |

**Definitions:**

Live births: The number of live births registered during 2007, for mothers of all ages (by DHB and ethnic group).

Female population, 15–49 years: The number of people in the female population aged 15–49 years in 2007, for the specified DHB and ethnic group.

## 4.60 Types of birth

In Counties Manukau DHB, 73% of (publicly funded) birth events were normal vaginal deliveries, which is higher than the proportion for New Zealand (65%). Patterns across ethnic groups at the DHB level were similar to national patterns, with a greater proportion of Māori and Pacific mothers having normal vaginal deliveries than mothers in the Asian and European/Other ethnic groups.

**Table 4.113:** Delivery events, publicly funded, by type of birth and ethnic group, 2007

| | Birth type | Māori | | Pacific | | Asian | | European/ Other | | Total | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | No. | % | No. | % | No. | % | No. | % | No. | % |
| Counties Manukau DHB | Normal birth | 1,444 | 80% | 1,972 | 78% | 591 | 64% | 1,456 | 64% | 5,463 | 73% |
| | Caesarean section | 244 | 14% | 406 | 16% | 215 | 23% | 541 | 24% | 1,406 | 19% |
| | Assisted birth | 109 | 6% | 145 | 6% | 119 | 13% | 268 | 12% | 641 | 9% |
| | Total | 1,797 | 100% | 2,523 | 100% | 925 | 100% | 2,265 | 100% | 7,510 | 100% |
| New Zealand | Normal birth | 9,266 | 77% | 4,845 | 77% | 3,246 | 58% | 21,199 | 60% | 38,556 | 65% |
| | Caesarean section | 2,095 | 17% | 1,116 | 18% | 1,563 | 28% | 9,979 | 28% | 14,753 | 25% |
| | Assisted birth | 689 | 6% | 333 | 5% | 762 | 14% | 3,935 | 11% | 5,719 | 10% |
| | Total | 12,050 | 100% | 6,294 | 100% | 5,571 | 100% | 35,113 | 100% | 59,028 | 100% |

**Notes**

This analysis presents information about (publicly funded) delivery events occurring in 2007. Deliveries are identified by the presence of the mother's outcome of delivery code (ICD10 Z37) in any of the diagnosis fields.

The following ICD-10 procedure codes are used to group into type of delivery:

Normal birth 9046700

Assisted birth

- Forceps 9046800–9046805
- Vacuum 9046900–9046901
- Breech 9047000–9047004 (includes spontaneous breech)

Caesarean 1652000–1652003

If more than one of these procedure codes is reported for each event this analysis groups deliveries with the following priority: Caesarean > assisted (includes spontaneous breech) > normal.

## 4.61 Pregnancy complications

For mothers living in the Counties Manukau DHB, the rate of admission to hospital with pregnancy complications was higher than the New Zealand rate. Patterns across ethnic groups at the DHB level were similar to national patterns, with Pacific mothers having the highest rate of admissions across all ethnic groups for the DHB.

**Table 4.114:** Pregnancy complications, number of admissions and rate per 1000 births, by ethnic group, for 2004–06

| | | Māori | Pacific | Asian | European/ Other | Total |
|---|---|---|---|---|---|---|
| Counties Manukau DHB | Admissions (2004–06) | 2,273 | 3,260 | 920 | 2,513 | 8,966 |
| | Rate per 1000 births | 377.1 | 446.3 | 258.5 | 345.1 | 370.9 |
| New Zealand | Admissions (2004–06) | 12,157 | 7,409 | 4,739 | 29,371 | 53,676 |
| | Rate per 1000 births | 301.7 | 411.7 | 284.0 | 286.9 | 302.6 |

**Definitions**

Pregnancy complications: Defined using the following AR-DRG (5.0) codes: O64A, O64B, O66A, O66B.

Rate per 1000 births: A crude rate where the denominator is the number of live and still births occurring in the years 2004–06 and the numerator is the total number of admissions in the year 2004–06. Note that not all births for this period will have been registered at the time of data extraction, but that the data presented is for less recent periods to minimise the effect of late registration.

# 5 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 at a national and DHB level.

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 health needs assessment, provides evidence for decision making on DHB priorities for health and disability services.

## Key points

- About 95% of adults in Counties Manukau were enrolled with a Primary Health Organisation, which was similar to the national rate. The coverage rate for Asian people was significantly lower than the other ethnic groups.
- More than 80% of adults in Counties Manukau DHB saw a general practitioner (GP) in the past 12 months, which is similar to the New Zealand rate.
- In Counties Manukau DHB, about 5% of adults experienced unmet need for a GP service in the past 12 months. Unmet need for a general practitioner among Māori females was significantly higher than among all females in Counties Manukau DHB.
- Overall, Counties Manukau DHB has a significantly lower prevalence rate of primary health care nurse visits in the past 12 months than the rate for all New Zealand.
- In Counties Manukau DHB, the prevalence of prescriptions received in the past 12 months among adult females was significantly higher than among adult males.
- Of those enrolled with a PHO, more than a quarter of residents in Counties Manukau were Community Service Card holders, which is similar to the national rate.
- A significantly higher proportion of adults in Counties Manukau DHB had a blood pressure or cholesterol check in the past 12 months than all New Zealand adults in total.
- In Counties Manukau DHB, a significantly higher proportion of adults had a diabetes check in the past 12 months than the proportion for all adults in New Zealand.
- Of those estimated to have diagnosed diabetes in the Counties Manukau district, a smaller percentage of Māori had a free diabetes check than people in the Pacific and other ethnic groups.
- In the Counties Manukau district, more than two-thirds of children in 2007 had received all specified immunisation vaccines by the age of two, which was similar to the national rate.
- In the Counties Manukau district, just over 60% of people aged 65 years or older either received an influenza vaccine, or had arrangements made by a primary health provider to receive an influenza vaccine, in the past 12 months.
- Of women in the Counties Manukau district aged 45 to 69 years, just over 47% had a mammogram to check for early signs of breast cancer, which was significantly lower than the national percentage (57.6).

- Of women in Counties Manukau DHB aged 20 to 69 years who had a primary health care provider, 75.8% had a cervical smear in the past three years. The prevalence among Pacific women was significantly lower than the prevalence among all women in Counties Manukau DHB, adjusted for age.
- Just under 5% of adults in Counties Manukau DHB presented at an emergency department in a public hospital in the past 12 months, which was significantly lower than the national estimate.
- Counties Manukau DHB had a significantly lower rate of elective surgery discharges than the national rate.
- For publicly funded elective services for Counties Manukau DHB, 93% of patients assured of treatment within six months received their treatment within five months, of all patients receiving treatment in 2007/08 across all specialities, which was similar to the national percentage (92%).
- In the Auckland region, 99% of cancer patients began radiation treatment within eight weeks of their first specialist assessment, which is higher than the New Zealand percentage (94%), for treatments started in March 2008.
- The rate of access to mental health and addiction services for people living in the Counties Manukau district in 2007 was significantly lower than the rate for New Zealand as a whole, for people aged under 65 years.
- Māori, Pacific and Asian people were significantly less likely than the total Counties Manukau DHB population to have seen an oral health care worker in the past 12 months.
- Pacific and Asian people were significantly less likely than the total Counties Manukau population to have seen a medical specialist in the past 12 months.

## 5.1 Primary health organisation (PHO) enrolment coverage

About 95% of adults in Counties Manukau were enrolled with a primary health organisation, which was similar to the national rate. The coverage rate for Asian people was significantly lower than the other ethnic groups. The rates in Counties Manukau were generally higher than in New Zealand.

**Table 5.1:** PHO enrolment coverage, 15+ years, age-standardised percent (and 95% confidence intervals), by ethnicity, 2006/07

| | | Counties Manukau DHB percent | New Zealand percent |
|---|---|---|---|
| Gender | Female | 96.6 (94.7–98.0) | 94.5 (93.6–95.3) |
| | Male | 93.3 (91.5–94.9) | 91.3 (90.2–92.3) |
| | Total | 95.0 (93.7–96.4) | 93.0 (92.4–93.5) |
| Ethnicity | Māori | 93.9 (91.8–95.6) | 90.9 (87.6–93.5) |
| | Pacific | 94.1 (90.9–96.4) | 91.1 (87.1–94.2) |
| | Asian | 85.9 (82.8–88.6) | 83.1 (79.2–86.6) |
| | European/Other | 96.1 (94.3–97.5) | 93.0 (89.9–95.5) |

* Ethnicity is based on total response.

## 5.2 Adult (15 years and over) visits to a general practitioner

More than 80% of adults in Counties Manukau DHB saw a general practitioner (GP) in the past 12 months, with females more likely to see a GP than males, adjusted for age. In Counties Manukau DHB, the prevalence of GP visits in the past 12 months among Asian females is significantly lower than the prevalence for all females, adjusted for age.

**Table 5.2:** Age-standardised prevalence rates (and 95% confidence intervals) of visit to a general practitioner, 15+ years, by ethnicity, 2006/07 NZHS

| | | Māori | Pacific | Asian | European/Other | Total |
|---|---|---|---|---|---|---|
| Counties Manukau DHB | Female | 84.7 (80.8–88.1) | 81.4 (76.1–85.9) | 74.9 (69.3–80.0) | 88.0 (84.6–90.8) | 86.3 (83.0–89.1) |
| | Male | 76.3 (71.9–80.3) | 78.6 (72.9–83.5) | 72.0 (67.0–76.6) | 81.0 (77.6–84.1) | 79.7 (76.5–82.7) |
| | Total | 80.8 (77.2–84.1) | 80.0 (75.5–84.0) | 73.5 (69.2–77.5) | 84.6 (81.4–87.4) | 83.1 (80.4–85.8) |
| New Zealand | Female | 81.7 (79.1–84.1) | 78.5 (74.2–82.3) | 72.2 (67.4–76.7) | 84.8 (83.1–86.4) | 83.1 (81.5–84.7) |
| | Male | 73.5 (70.1–76.7) | 75.7 (70.9–80.1) | 69.4 (65.2–73.3) | 78.1 (76.1–80.0) | 76.9 (75.1–78.6) |
| | Total | 77.9 (75.5–80.1) | 77.2 (73.7–80.4) | 70.9 (67.6–74.0) | 81.6 (80.0–83.0) | 80.1 (79.1–81.2) |

## 5.3 Adults' need for general practitioner unmet

In Counties Manukau DHB, about 5% of adults experienced unmet need for a GP service in the past 12 months, adjusted for age. Unmet need for a general practitioner among Māori females was significantly higher than among all females in Counties Manukau DHB, adjusted for age.

**Table 5.3:** Age-standardised prevalence rates (and 95% confidence intervals) of unmet need for general practitioner, 15+ years, by ethnicity, 2006/07 NZHS

| | | Māori | Pacific | Asian | European/Other | Total |
|---|---|---|---|---|---|---|
| Counties Manukau DHB | Female | 10.9 (8.3–14.1) | 8.7 (5.2–13.4) | 6.7 (4.0–10.4) | 4.5 (2.8–6.8) | 5.3 (3.6–7.5) |
| | Male | 6.6 (4.1–9.8) | 7.7 (4.5–12.2) | 4.0 (1.7–8.0) | 3.6 (2.0–6.0) | 3.9 (2.3–6.2) |
| | Total | 8.9 (6.7–11.5) | 8.2 (5.3–12.1) | 5.5 (3.3–8.5) | 4.1 (2.5–6.3) | 4.6 (2.9–6.3) |
| New Zealand | Female | 16.0 (13.7–18.5) | 12.7 (9.4–16.6) | 9.8 (7.4–12.7) | 6.6 (5.7–7.6) | 7.8 (6.9–8.8) |
| | Male | 9.6 (7.5–12.0) | 11.3 (8.3–15.0) | 5.9 (3.8–8.7) | 5.3 (4.4–6.4) | 5.7 (4.8–6.7) |
| | Total | 13.0 (11.4–14.7) | 12.0 (9.4–15.1) | 8.0 (6.2–10.1) | 6.0 (5.2–6.9) | 6.8 (6.2–7.4) |

## 5.4 Adult (15 years and over) visits to a primary health care nurse

The prevalence of visits to a primary health care nurse in the past 12 months for adults in Counties Manukau DHB was significantly lower than the national prevalence, adjusted for age. Females in Counties Manukau DHB were more likely to visit a primary health care nurse in the past 12 months than males, adjusted for age. The proportion of Asian people who visited a nurse in the past 12 months was significantly lower than the proportion of all people in Counties Manukau DHB, adjusted for age.

**Table 5.4:** Age-standardised prevalence rates (and 95% confidence intervals) of visits to a primary health care nurse, 15+ years, by ethnicity, 2006/07 NZHS

| | | Māori | Pacific | Asian | European/Other | Total |
|---|---|---|---|---|---|---|
| Counties Manukau DHB | Female | 39.2 (34.3–44.1) | 31.0 (24.1–38.6) | 22.8 (17.3–29.1) | 38.2 (33.8–42.7) | 36.5 (32.2–40.9) |
| | Male | 24.3 (19.3–29.9) | 21.0 (14.9–28.3) | 12.8 (8.0–19.0) | 28.5 (24.3–33.0) | 26.5 (22.4–31.0) |
| | Total | 32.3 (27.8–37.0) | 26.3 (20.8–32.4) | 18.1 (13.4–23.6) | 33.5 (29.4–37.8) | 31.7 (27.5–35.4) |
| New Zealand | Female | 48.8 (45.8–51.8) | 38.7 (32.7–44.9) | 28.4 (24.2–32.9) | 47.6 (45.3–49.9) | 45.4 (43.3–47.5) |
| | Male | 30.3 (26.8–33.9) | 26.2 (21.1–31.8) | 15.9 (12.5–19.9) | 35.5 (33.5–37.6) | 33.1 (31.2–34.9) |
| | Total | 40.2 (37.7–42.7) | 32.7 (28.6–37.1) | 22.6 (19.5–25.9) | 41.8 (40.0–43.5) | 39.5 (38.3–40.7) |

## 5.5 Prescriptions

Adult females in Counties Manukau DHB were more likely to have received a prescription in the past 12 months than males, adjusted for age. Asian females have a significantly lower prevalence of receiving a prescription in the past 12 months than all females in Counties Manukau DHB, adjusted for age.

**Table 5.5:** Age-standardised prevalence rates (and 95% confidence intervals) of prescription received in past 12 months, 15+ years, by ethnicity, 2006/07 NZHS

| | | Māori | Pacific | Asian | European/Other | Total |
|---|---|---|---|---|---|---|
| Counties Manukau DHB | Female | 79.2 (75.1–82.9) | 78.9 (73.5–83.7) | 69.6 (63.9–74.9) | 81.1 (77.7–84.2) | 79.8 (76.5–82.9) |
| | Male | 67.1 (62.9–71.0) | 69.1 (62.6–75.1) | 61.8 (55.7–67.6) | 70.7 (67.1–74.2) | 69.5 (66.0–72.8) |
| | Total | 73.6 (69.9–77.0) | 74.3 (69.4–78.7) | 65.9 (61.1–70.6) | 76.1 (72.8–79.2) | 74.9 (72.1–77.8) |
| New Zealand | Female | 78.5 (75.6–81.1) | 78.2 (73.7–82.3) | 69.0 (64.0–73.6) | 80.3 (78.5–82.1) | 79.1 (77.3–80.8) |
| | Male | 66.5 (63.4–69.4) | 68.5 (62.6–73.9) | 61.2 (55.8–66.4) | 70.1 (67.7–72.4) | 68.8 (66.6–71.0) |
| | Total | 72.9 (70.5–75.2) | 73.6 (69.7–77.2) | 65.3 (61.3–69.2) | 75.4 (73.6–77.1) | 74.2 (72.9–75.4) |

## 5.6 Community Services Card holders

The purpose of the Community Services Card is to reduce the amount families on low to modest incomes pay for some health services and prescriptions. Of those enrolled with a PHO, more than a quarter of residents in Counties Manukau were Community Service Card holders. Proportionally more females were card holders than males.

**Table 5.6:** PHO enrolee Community Services Card holders, percent, by ethnicity, April 2008*

| | | Counties Manukau DHB percent | New Zealand percent |
|---|---|---|---|
| Gender | Female | 31.0 | 29.9 |
| | Male | 24.8 | 23.6 |
| | Total | 28.0 | 26.9 |
| Ethnicity | Māori | 41.4 | 39.4 |
| | Pacific | 34.9 | 34.5 |
| | Asian | 29.0 | 28.3 |
| | European/Other | 19.5 | 23.7 |

* 1. Data is reported as at April 2008.
2. Ethnicity is prioritised ethnicity.

## 5.7 High Use Health Card holders

The High Use Health Card was introduced to help people who do not have a Community Services Card, but who have ongoing health problems that mean they visit a doctor often. People who have made 12 or more visits to a doctor in the previous 12 months are entitled to apply for this card.

Of those enrolled with a PHO, just under 1% of Counties Manukau residents held a High Use Health Card. European/Other people had a slightly higher percentage of card holders than the other ethnicities in Counties Manukau.

**Table 5.7:** PHO enrolee High Use Health Card holders, percent, by ethnicity, April 2008*

| | | Counties Manukau DHB percent | New Zealand percent |
|---|---|---|---|
| Gender | Female | 0.8 | 1.3 |
| | Male | 0.7 | 1.0 |
| | Total | 0.8 | 1.2 |
| Ethnicity | Māori | 0.6 | 0.8 |
| | Pacific | 0.8 | 0.7 |
| | Asian | 0.6 | 0.5 |
| | European/Other | 0.9 | 1.3 |

* 1. Data is reported as at April 2008.
2. Ethnicity is prioritised ethnicity.

## 5.8 Blood pressure screening

More than 65% of adults in Counties Manukau DHB had their blood pressure checked in the past 12 months, adjusted for age; this was significantly higher than the national prevalence.

**Table 5.8:** Age-standardised prevalence rates (and 95% confidence intervals) of blood pressure checks, 15+ years, by ethnicity, 2006/07 NZHS

| | | Māori | Pacific | Asian | European/Other | Total |
|---|---|---|---|---|---|---|
| Counties Manukau DHB | Female | 61.9 (56.4–67.3) | 71.7 (63.0–79.4) | 64.3 (57.3–70.9) | 70.6 (65.7–75.3) | 69.9 (65.1–74.4) |
| | Male | 60.2 (53.9–66.2) | 63.3 (55.9–70.3) | 59.2 (52.0–66.2) | 68.0 (62.9–72.7) | 67.1 (62.2–71.7) |
| | Total | 61.2 (55.9–66.3) | 67.8 (61.2–74.0) | 62.0 (55.9–67.9) | 69.4 (64.7–73.9) | 68.6 (62.6–71.1) |
| New Zealand | Female | 55.0 (51.4–58.6) | 63.7 (56.5–70.5) | 57.1 (51.7–62.4) | 62.8 (60.3–65.1) | 62.1 (59.9–64.2) |
| | Male | 53.5 (48.9–58.0) | 56.3 (50.3–62.1) | 52.6 (46.9–58.3) | 60.4 (57.8–62.9) | 59.6 (57.2–61.9) |
| | Total | 54.4 (51.2–57.4) | 60.3 (55.3–65.0) | 55.1 (50.8–59.4) | 61.7 (59.6–63.7) | 60.9 (59.5–62.3) |

## 5.9 Cholesterol screening

In Counties Manukau DHB, more than 40% of adults had their cholesterol checked in the past 12 months; this rate was significantly higher than that for all New Zealand, adjusted for age. Males had a significantly higher rate of having a cholesterol test in the past 12 months than that for females in Counties Manukau DHB, adjusted for age. Māori males had a lower rate of cholesterol test in the past 12 months than for all males in Counties Manukau DHB, adjusted for age.

**Table 5.9:** Age-standardised prevalence rates (and 95% confidence intervals) of cholesterol check, 15+ years, by ethnicity, 2006/07 NZHS

| | | Māori | Pacific | Asian | European/Other | Total |
|---|---|---|---|---|---|---|
| Counties Manukau DHB | Female | 27.9 (23.7–32.3) | 36.1 (29.9–42.7) | 31.1 (26.0–36.5) | 36.2 (32.4–40.1) | 35.8 (32.1–39.6) |
| | Male | 35.7 (30.7–40.9) | 39.8 (33.7–46.1) | 45.9 (40.2–51.8) | 48.5 (44.6–52.4) | 47.3 (43.5–51.1) |
| | Total | 31.2 (27.2–35.4) | 37.8 (32.8–43.1) | 37.8 (33.2–42.6) | 41.7 (38.1–45.4) | 41.0 (35.0–41.9) |
| New Zealand | Female | 20.8 (18.2–23.6) | 27.0 (21.8–32.7) | 23.2 (19.4–27.4) | 27.0 (25.2–28.9) | 26.7 (25.0–28.4) |
| | Male | 26.7 (23.0–30.6) | 29.7 (24.7–35.1) | 34.3 (29.7–39.1) | 36.2 (34.2–38.3) | 35.3 (33.4–37.2) |
| | Total | 23.3 (21.0–25.7) | 28.3 (24.5–32.3) | 28.2 (25.0–31.6) | 31.2 (29.6–32.7) | 30.6 (29.6–31.6) |

## 5.10 Diabetes screening

In Counties Manukau DHB, almost 30% of adults had a diabetes check in the past 12 months; this rate was significantly higher than that for all New Zealand, adjusted for age. The prevalence rates of having a diabetes test in the past 12 months among Pacific and Asian people were higher than the rates for total population in Counties Manukau DHB, adjusted for age.

**Table 5.10:** Age-standardised prevalence rates (and 95% confidence intervals) of diabetes check, 15+ years, by ethnicity, 2006/07 NZHS

| | | Māori | Pacific | Asian | European/Other | Total |
|---|---|---|---|---|---|---|
| Counties Manukau DHB | Female | 35.0 (24.9–45.1) | 37.3 (29.8–44.7) | 43.8 (32.5–55.0) | 25.4 (19.7–31.0) | 29.2 (24.7–33.7) |
| | Male | 37.3 (21.1–55.9) | 45.2 (33.5–57.0) | 44.6 (32.7–56.5) | 22.5 (16.9–28.1) | 28.7 (23.8–33.7) |
| | Total | 35.9 (26.7–45.1) | 40.8 (34.4–47.2) | 44.2 (35.0–53.3) | 24.1 (20.0–28.3) | 29.0 (25.4–32.6) |
| New Zealand | Female | 26.0 (23.2–28.8) | 36.8 (31.4–42.1) | 28.5 (23.8–33.2) | 16.9 (15.5–18.4) | 19.2 (17.9–20.4) |
| | Male | 30.4 (26.7–34.1) | 34.4 (28.6–40.1) | 37.2 (31.9–42.5) | 21.8 (20.3–23.3) | 23.7 (22.4–25.0) |
| | Total | 27.9 (25.4–30.3) | 35.6 (32.0–39.3) | 32.4 (28.4–36.5) | 19.1 (18.0–20.2) | 21.2 (20.2–22.2) |

### 5.10.1 Diabetes free annual check

Of those estimated to have diagnosed diabetes in the Counties Manukau district, a smaller percentage of Māori had a free diabetes check than people in the Pacific and other ethnic groups, in the 12 months to December 2007.

**Table 5.11:** Percentage of DHB population estimated to have diagnosed diabetes who had free annual diabetes checks in the 12 months to December 2007

| DHB | Total | Māori | Other | Pacific* |
|---|---|---|---|---|
| Northland | 56% | 51% | 60% | n/a |
| Waitemata | 47% | 29% | 49% | 62% |
| Auckland | 72% | 32% | 72% | 102% |
| **Counties Manukau** | **97%** | **62%** | **95%** | **133%** |
| Waikato | 57% | 33% | 69% | 62% |
| Lakes | 68% | 46% | 86% | n/a |
| Bay of Plenty | 61% | 32% | 76% | n/a |
| Tairawhiti | 48% | 41% | 59% | n/a |
| Hawkes Bay | 69% | 49% | 79% | n/a |
| Taranaki | 89% | 45% | 102% | n/a |
| MidCentral | 47% | 25% | 54% | n/a |
| Whanganui | 72% | 46% | 86% | n/a |
| Capital & Coast | 71% | 38% | 77% | 77% |
| Hutt | 69% | 38% | 79% | 77% |
| Wairarapa | 78% | 51% | 86% | n/a |
| Nelson Marlborough | 62% | 29% | 67% | n/a |
| West Coast | 70% | 38% | 76% | n/a |
| Canterbury | 60% | 29% | 64% | 49% |
| South Canterbury | 81% | 32% | 85% | n/a |
| Otago | 77% | 28% | 82% | n/a |
| Southland | 69% | 27% | 78% | n/a |

* Pacific data only presented for selected DHB where Pacific population is relatively higher than in the rest of New Zealand.

Source: 2007/08 Quarter Two Health Target data, Ministry of Health.

### 5.10.2 Satisfaction with diabetes management

Of people on the diabetes register, Pacific peoples had the lowest percentage of people whose diabetes management is rated as satisfactory or better, followed next by Māori, in the 12 months to December 2007 for the Counties Manukau district.

**Table 5.12:** Percentage of people on the diabetes register, for each DHB, who had satisfactory or better diabetes management rating in the 12 months to December 2007

| DHB | Total | Māori | Other | Pacific* |
|---|---|---|---|---|
| Northland | 71% | 59% | 79% | n/a |
| Waitemata | 79% | 68% | 84% | 59% |
| Auckland | 76% | 65% | 83% | 62% |
| **Counties Manukau** | **63%** | **57%** | **74%** | **48%** |
| Waikato | 74% | 61% | 78% | 54% |
| Lakes | 67% | 57% | 73% | n/a |
| Bay of Plenty | 73% | 58% | 78% | n/a |
| Tairawhiti | 53% | 32% | 77% | n/a |
| Hawkes Bay | 69% | 58% | 74% | n/a |
| Taranaki | 80% | 71% | 81% | n/a |
| MidCentral | 73% | 57% | 76% | n/a |
| Whanganui | 76% | 61% | 80% | n/a |
| Capital & Coast | 75% | 63% | 80% | 56% |
| Hutt | 70% | 55% | 75% | 50% |
| Wairarapa | 74% | 69% | 75% | n/a |
| Nelson Marlborough | 78% | 67% | 79% | n/a |
| West Coast | 81% | 78% | 82% | n/a |
| Canterbury | 77% | 69% | 78% | 53% |
| South Canterbury | 82% | 69% | 82% | n/a |
| Otago | 72% | 66% | 73% | n/a |
| Southland | 73% | 69% | 74% | n/a |

* Pacific data only presented for selected DHB where Pacific population is relatively higher than in the rest of New Zealand.

Source: 2007/08 Quarter Two Health Target data, Ministry of Health.

### 5.10.3 Retinal screening

In terms of the percentage of people on the diabetes register who have had retinal screening in the two years to December 2007, the percentages are similar across the ethnic groups, for people living in the Counties Manukau district.

**Table 5.13:** Percentage of people on the diabetes register, for each DHB, who have had retinal screening in the two years to September 2007**

| DHB | Total | Māori | Other | Pacific* |
|---|---|---|---|---|
| Northland | 74% | 76% | 73% | n/a |
| Waitemata | 71% | 70% | 71% | 71% |
| Auckland | 62% | 59% | 60% | 67% |
| **Counties Manukau** | **65%** | **68%** | **66%** | **64%** |
| Waikato | 58% | 51% | 60% | 53% |
| Lakes | 84% | 83% | 85% | n/a |
| Bay of Plenty | 84% | 76% | 86% | n/a |
| Tairawhiti | 52% | 48% | 58% | n/a |
| Hawkes Bay | 68% | 65% | 68% | n/a |
| Taranaki | 65% | 58% | 66% | n/a |
| MidCentral | 86% | 83% | 86% | n/a |
| Whanganui | 71% | 69% | 71% | n/a |
| Capital & Coast | 75% | 71% | 78% | 64% |
| Hutt | 60% | 56% | 61% | 59% |
| Wairarapa | 76% | 70% | 77% | n/a |
| Nelson Marlborough | 76% | 69% | 77% | n/a |
| West Coast | 89% | 88% | 90% | n/a |
| Canterbury | 54% | 48% | 55% | 41% |
| South Canterbury | 78% | 73% | 78% | n/a |
| Otago | 85% | 79% | 85% | n/a |
| Southland | 71% | 65% | 72% | n/a |

* Pacific data only presented for selected DHB where Pacific population is relatively higher than in the rest of New Zealand.

** As measured at December 2007.

Source: 2007/08 Quarter Two Health Target data, Ministry of Health.

## 5.11 Immunisation coverage at two years

Fully immunised at age two years means that, by the age of two, a child has had four doses of diphtheria, tetanus and acellular pertussis vaccine, three doses of polio vaccine, three doses of *Haemophilus influenzae* type b vaccine, three doses of hepatitis B vaccine (or four doses including neonatal doses if required), and one dose of measles, mumps and rubella vaccine.

In the Counties Manukau district, more than two-thirds of children in 2007 had received all specified immunisation vaccines by the age of two, which was similar to the national rate. The coverage rates for European/Other and Asian children were relatively higher than for Māori and Pacific children in Counties Manukau.

**Table 5.14:** Fully immunisation coverage at age two years, percent, by ethnicity,* 2007

| Ethnicity | Counties Manukau DHB | New Zealand |
|---|---|---|
| Māori | 59.4 | 62.7 |
| Pacific | 64.3 | 67.6 |
| Asian | 75.7 | 75.2 |
| European/Other | 75.2 | 75.0 |
| Total | 68.3 | 71.2 |

* Ethnicity is prioritised ethnicity.

## 5.12 Influenza vaccine coverage at 65+ years

In the Counties Manukau district, just over 60% of people aged 65 years or older either received an influenza vaccine, or had arrangements made by a primary health provider to receive an influenza vaccine, in the past 12 months.

**Table 5.15:** Flu vaccination in the last 12 months, 65+ years, age-standardised percent (and 95% confidence interval), by ethnicity, 2006/07

| | Counties Manukau DHB percent | New Zealand percent |
|---|---|---|
| Female | 58.6 (44.3–72.9) | 63.3 (60.2–66.4) |
| Male | 62.3 (49.7–75.0) | 64.6 (61.2–68.0) |
| Total | 60.5 (51.5–69.5) | 63.9 (61.7–66.1) |
| Māori | * | 63.1 (56.1–70.2) |
| Non-Māori | 60.4 (52.0–68.9) | 64.0 (61.6–66.4) |

* Rates not presented for groups with small numbers.

## 5.13 Adolescents (13–18 years) receiving free oral health services

Adolescents up to the age 18 years are entitled to free basic oral health care. In the Counties Manukau district, just over half of the young people aged 13–18 years accessed free oral health services.

**Table 5.16:** Adolescent (13–18 years) oral health service utilisation, age-specific percent, 2006

| | Counties Manukau DHB | New Zealand |
|---|---|---|
| Total | 53.5 | 58.3 |

## 5.14 Breast screening

Of women in the Counties Manukau district aged 45 to 69 years, just over 47% had a mammogram to check for early signs of breast cancer, which was significantly lower than the national percentage (57.6). The screening coverage rate was lower for European / other women in the Counties Manukau district, than the rate for European / other women in New Zealand in total, for women aged 45 to 69 years.

**Table 5.17:** Breast screening coverage rate (percent, and 95% confidence interval), women 45–69 years, 2006–07, by ethnicity

| | Māori | Pacific | Asian | European/Other | Total |
|---|---|---|---|---|---|
| Counties Manukau DHB | 45.2 (43.5–46.9) | 43.6 (42.1–45.1) | 45.2 (43.8–46.7) | 49.1 (48.3–49.8) | 47.3 (46.8–47.9) |
| New Zealand | 43.9 (43.4–44.5) | 44.7 (43.8–45.6) | 45.8 (45.1–46.5) | 60.7 (60.3–60.9) | 57.6 (57.2–57.8) |

## 5.15 Cervical screening

Of women in Counties Manukau DHB aged 20 to 69 years who had a primary health care provider, 75.8% had a cervical smear in the past three years. The prevalence among Pacific women was significantly lower than the prevalence among all women in Counties Manukau DHB, adjusted for age.

**Table 5.18:** Had cervical smear in last three years (age-standardised percent, and 95% confidence interval), of women 20–69 years who had a primary health care provider, 2006/07 NZHS, by ethnicity

| | Māori | Pacific | Asian | European/Other | Total |
|---|---|---|---|---|---|
| Counties Manukau DHB | 76.0 (65.2–86.8) | 58.7 (50.9–66.5) | 73.8 (64.3–83.3) | 83.5 (76.7–90.3) | 75.8 (70.6–81.0) |
| New Zealand | 75.1 (72.0–78.1) | 61.3 (56.0–66.6) | 57.5 (51.5–63.4) | 83.4 (81.3–85.5) | 78.4 (76.6–80.3) |

## 5.16 Use of public hospital

Just over 15% of adults in Counties Manukau DHB have been admitted to public hospital (excluding the emergency department) in the past 12 months, adjusted for age.

**Table 5.19:** Age-standardised prevalence rates (percent, and 95% confidence intervals) of use of public hospital (excluding emergency department), 15+ years, by ethnicity, 2006/07 NZHS

| | | Māori | Pacific | Asian | European/Other | Total |
|---|---|---|---|---|---|---|
| Counties Manukau DHB | Female | 21.6 (18.2–25.5) | 17.4 (12.5–23.1) | 13.2 (9.4–17.9) | 18.1 (15.2–21.2) | 17.6 (14.8–20.7) |
| | Male | 16.9 (13.0–21.4) | 11.0 (6.5–17.2) | 6.6 (3.3–11.4) | 14.0 (11.1–17.3) | 13.3 (10.5–16.6) |
| | Total | 19.5 (16.4–22.9) | 14.4 (10.5–18.9) | 10.1 (7.1–13.9) | 16.1 (13.4–19.1) | 15.6 (13.1–18.3) |
| New Zealand | Female | 24.3 (21.8–27.0) | 19.5 (15.2–24.4) | 14.9 (11.7–18.5) | 20.3 (18.7–21.9) | 19.8 (18.3–21.3) |
| | Male | 19.0 (15.8–22.5) | 12.4 (8.3–17.6) | 7.4 (4.8–10.7) | 15.7 (14.1–17.5) | 15.0 (13.5–16.6) |
| | Total | 21.9 (19.9–24.0) | 16.1 (13.0–19.6) | 11.4 (9.3–13.7) | 18.1 (16.8–19.4) | 17.5 (16.6–18.3) |

## 5.17 Presentations to public hospital emergency departments

Just under 5% of adults in Counties Manukau DHB used the emergency department of a public hospital in the last 12 months; this was significantly lower than the national rate, adjusted for age.

**Table 5.20:** Age-standardised prevalence rates (percent, and 95% confidence intervals) of use of ED at public hospital, 15+ years, by ethnicity, 2006/07 NZHS

| | | Māori | Pacific | Asian | European/Other | Total |
|---|---|---|---|---|---|---|
| Counties Manukau DHB | Female | 4.8 (2.9–7.4) | 4.3 (1.7–8.8) | 2.4 (0.8–5.6) | 3.8 (2.4–5.6) | 3.7 (2.5–5.5) |
| | Male | 5.3 (2.8–8.9) | 4.6 (1.4–10.7) | 2.6 (0.8–6.3) | 4.8 (3.3–6.7) | 4.5 (3.1–6.4) |
| | Total | 5.0 (3.3–7.3) | 4.4 (2.1–8.2) | 2.5 (1.1–4.9) | 4.3 (3.0–5.9) | 4.1 (2.9–5.3) |
| New Zealand | Female | 9.9 (8.1–12.0) | 8.9 (6.0–12.4) | 5.0 (3.3–7.3) | 7.9 (6.7–9.1) | 7.7 (6.7–8.8) |
| | Male | 11.0 (8.5–13.9) | 9.5 (5.9–14.3) | 5.4 (3.4–8.0) | 9.8 (8.6–11.2) | 9.3 (8.2–10.6) |
| | Total | 10.4 (8.8–12.2) | 9.2 (6.7–12.2) | 5.2 (3.9–6.8) | 8.8 (7.8–9.9) | 8.5 (7.8–9.2) |

## 5.18 Number of patients discharged following elective surgery

Counties Manukau DHB had a significantly lower rate of elective surgery discharges than the national rate. Māori had the highest rate, followed by Pacific people, then European/Other people, with Asian people having the lowest rate. All ethnic group differences were significant.

**Table 5.21:** Age-standardised rates per 100,000 (and 95% confidence intervals) of elective surgery discharges at public hospital, by ethnicity, 2005–07

| | | Māori | Pacific | Asian | European/Other | Total |
|---|---|---|---|---|---|---|
| Counties Manukau DHB | Female | 4106.7 (3978.2 - 4238.2) | 3719.4 (3611.1 - 3830.2) | 2116.6 (2028.6 - 2207.5) | 3227.0 (3171.3 - 3283.5) | 3270.9 (3229.0 - 3313.1) |
| | Male | 3540.2 (3417.5 - 3666.3) | 3511.4 (3404.4 - 3620.9) | 1968.2 (1877.9 - 2061.6) | 3347.8 (3289.1 - 3407.3) | 3264.2 (3220.6 - 3308.2) |
| | Total | 3865.7 (3775.7 - 3957.3) | 3628.1 (3551.5 - 3705.9) | 2057.8 (1994.2 - 2122.9) | 3281.3 (3240.9 - 3322.0) | 3268.5 (3238.3 - 3299.0) |
| New Zealand | Female | 5005.2 (4956.8 - 5053.9) | 4161.3 (4092.4 - 4231.1) | 2255.4 (2214.4 - 2297.0) | 3872.5 (3849.3 - 3889.6) | 3882.7 (3859.4 - 3897.5) |
| | Male | 3525.3 (3483.5 - 3567.6) | 3327.4 (3264.7 - 3391.0) | 1784.7 (1744.0 - 1826.1) | 3266.4 (3246.8 - 3282.2) | 3204.0 (3184.8 - 3217.7) |
| | Total | 4316.8 (4284.4 - 4349.3) | 3761.2 (3714.3 - 3808.4) | 2050.1 (2020.9 - 2079.6) | 3567.6 (3546.2 - 3579.2) | 3549.8 (3528.5 - 3559.9) |

## 5.19 Waiting times for elective treatment

For publicly funded elective services in New Zealand, the average number of days between being assured of treatment within six months and receiving that treatment was 70.2 days.

For publicly funded elective services for Counties Manukau DHB, 93% of patients assured of treatment within six months received their treatment within five months, of all patients receiving treatment in 2007/08 across the specialities shown in the table, which was similar to the national percentage (92%).

The speciality with the highest proportion of people receiving treatment nine months or more after being assured of treatment within six months was the orthopaedics speciality (3% of those treated), for Counties Manukau DHB.

**Table 5.22:** Elective services: summary of number of people treated and waiting times for people assured of treatment, for 2007/08

| Specialty | | Counties Manukau DHB | | | | | New Zealand | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Average DWA | Number treated | Time assured | | | Average DWA | Number treated | Time assured | | |
| | | | | 0–5 months | 6–8 months | 9+ months | | | 0–5 months | 6–8 months | 9+ months |
| Cardiothoracic | Number | n/a | n/a | n/a | n/a | n/a | 62.1 | 1,754 | 1,573 | 108 | 73 |
| | % | – | n/a | n/a | n/a | n/a | – | 100% | 90% | 6% | 4% |
| Ear, nose and throat | Number | 60.3 | 1,880 | 1,788 | 82 | 10 | 75.9 | 17,150 | 15,648 | 1,154 | 348 |
| | % | – | 100% | 95% | 4% | 1% | – | 100% | 91% | 7% | 2% |
| Ophthalmology | Number | 112.4 | 1,966 | 1,627 | 335 | 4 | 82.7 | 16,446 | 14,870 | 1,271 | 305 |
| | % | – | 100% | 83% | 17% | 0% | – | 100% | 90% | 8% | 2% |
| General surgery | Number | 43.9 | 2,246 | 2,214 | 32 | 0 | 55.8 | 27,686 | 26,101 | 1,101 | 484 |
| | % | – | 100% | 99% | 1% | 0% | – | 100% | 94% | 4% | 2% |
| Gynaecology | Number | 55.9 | 1,459 | 1,401 | 57 | 1 | 73 | 14,086 | 12,819 | 1,021 | 246 |
| | % | – | 100% | 96% | 4% | 0% | – | 100% | 91% | 7% | 2% |
| Neurosurgery | Number | n/a | n/a | n/a | n/a | n/a | 49.4 | 1,273 | 1,214 | 44 | 15 |
| | % | – | n/a | n/a | n/a | n/a | – | 100% | 95% | 3% | 1% |
| Orthopaedics | Number | 75.9 | 1,554 | 1,365 | 147 | 42 | 87.1 | 16,047 | 13,968 | 1,555 | 524 |
| | % | – | 100% | 88% | 9% | 3% | – | 100% | 87% | 10% | 3% |
| Paediatric surgery | Number | n/a | n/a | n/a | n/a | n/a | 64 | 2,467 | 2,248 | 141 | 78 |
| | % | – | n/a | n/a | n/a | n/a | – | 100% | 91% | 6% | 3% |
| Plastics | Number | 32.4 | 2,196 | 2,147 | 29 | 20 | 46.8 | 7,425 | 7,104 | 194 | 127 |
| | % | – | 100% | 98% | 1% | 1% | – | 100% | 96% | 3% | 2% |
| Urology | Number | n/a | n/a | n/a | n/a | n/a | 66.5 | 6,902 | 6,405 | 354 | 143 |
| | % | – | n/a | n/a | n/a | n/a | – | 100% | 93% | 5% | 2% |
| Vascular | Number | n/a | n/a | n/a | n/a | n/a | 45.4 | 1,075 | 1,041 | 19 | 15 |
| | % | – | n/a | n/a | n/a | n/a | – | 100% | 97% | 2% | 1% |
| Dental | Number | n/a | n/a | n/a | n/a | n/a | 80.9 | 6,084 | 5,486 | 479 | 119 |
| | % | – | n/a | n/a | n/a | n/a | – | 100% | 90% | 8% | 2% |
| Total | Number | 62.3 | 11,301 | 10,542 | 682 | 77 | 70.2 | 118,395 | 108,477 | 7,441 | 2,477 |
| | % | | 100% | 93% | 6% | 1% | – | 100% | 92% | 6% | 2% |

**Notes:**

Definitions:

Average DWA – The average number of days between being assured of treatment within six months, and receiving that treatment.

Time assured – The number of days between being assured of treatment within six months, and receiving that treatment.

Data inclusion criteria: Patients exited treated, 2007/08; surgical specialties only; normal procedures only; publicly funded events only; DHB agencies only.

Extracted 7 August 2008.

## 5.20 Cancer radiotherapy waiting times

The table below shows the percentage of patients who waited less than four weeks and four to eight weeks between first specialist assessment and the start of radiation oncology treatment. This excludes patients where the start of radiation treatment is scheduled to permit safe and effective sequencing of chemotherapy (category D).

The Auckland region includes Northland, Auckland, Counties Manukau and Waitemata DHBs.

In the Auckland region, 99% of cancer patients began radiation treatment within eight weeks of their first specialist assessment, which was higher than the New Zealand percentage (94%), for treatments started in March 2008.

**Table 5.23:** Percentage of cancer patients who started radiation treatment before four weeks and from four to eight weeks from their first specialist assessment, on a national and regional level

| | **Treatments started in current month** | **Patients in priority category A, B and C** | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | **Jul 2007** | **Aug 2007** | **Sep 2007** | **Oct 2007** | **Nov 2007** | **Dec 2007** | **Jan 2008** | **Feb 2008** | **Mar 2008** |
| New Zealand | % Waited < 4 weeks | 66% | 77% | 79% | 71% | 68% | 74% | 55% | 67% | 68% |
| | % Waited 4–8 weeks | 28% | 21% | 18% | 24% | 29% | 20% | 36% | 22% | 26% |
| | Total % waited 0–8 weeks | 94% | 98% | 97% | 95% | 97% | 94% | 91% | 89% | 94% |
| Auckland region | % Waited < 4 weeks | 68% | 82% | 88% | 66% | 69% | 72% | 50% | 65% | 68% |
| | % Waited 4–8 weeks | 29% | 18% | 11% | 33% | 31% | 26% | 40% | 26% | 31% |
| | Total % waited 0–8 weeks | 97% | 100% | 99% | 99% | 100% | 98% | 90% | 91% | 99% |

Source: Health Target data: Cancer Treatment Wait Times for Patients in Priority Categories A, B and C, Ministry of Health.

## 5.21 Use of secondary mental health services

In 2007, 2.2% of the Counties Manukau DHB population accessed secondary mental health and addiction services, which was slightly lower than the national percentage (2.4%), for people aged under 65 years.

After adjusting for age, the rate of access to mental health and addiction services for people living in the Counties Manukau district in 2007 was significantly lower than the rate for New Zealand as a whole, for people aged under 65 years.

**Table 5.24:** Access to secondary mental health and addiction services, for people aged 0–64 years, 2007

| | | Māori | Pacific | Asian | European/Other | Total |
|---|---|---|---|---|---|---|
| Counties Manukau DHB | Number of people seen | 2557 | 1457 | 506 | 4664 | 9184 |
| | Access rate (%) | 3.8 | 1.7 | 0.7 | 2.5 | 2.2 |
| | Age-standardised rate (per 100,000) and 95% CI | 3975.7 (3823.1–4132.9) | 1770.3 (1680.5–1863.6) | 644.6 (589.6–703.3) | 2547.5 (2474.9–2621.7) | 2217.7 (2172.6–2263.6) |
| New Zealand | Number of people seen | 17784 | 4097 | 2322 | 61414 | 85617 |
| | Access rate (%) | 3.2 | 1.8 | 0.7 | 2.5 | 2.4 |
| | Age-standardised rate (per 100,000) and 95% CI | 3354.8 (3305.7–3404.5) | 1855.3 (1798.9–1913.0) | 604.4 (580.1–629.5) | 2447.8 (2428.4–2467.2) | 2310.3 (2294.8–2325.8) |

**Definitions**

Data source: Mental Health Information National Collection (MHINC), Ministry of Health.

Number of people seen: The number of people seen by secondary mental health and addiction services during the year, aged 0–64 years, who live in the specified DHB district. People are grouped by their age and ethnicity as at the end of the year. The analysis did not include data for people aged 65 years and over, as data are not completely reported for people in this age group across New Zealand. Specifically, data for people aged 65 years and older are not reported to the MHINC from DHBs in the Central and Southern regions (due to different funding arrangements).

Access rate (%): The percentage (crude rate) of the population seen during the year (of people living in the specified DHB district aged 0–64 years) by secondary mental health and addiction services.

Age-standardised rate: The rate of access to secondary mental health and addiction services for people aged 0–64 years per 100,000 population, after adjusting for age. See the methodology section for more information about age-standardised rates (and 95% confidence intervals).

## 5.22 New admissions to acute mental health services

Out of all people seen by mental health and addiction services in 2007 who lived in the Counties Manukau district, less than 1% had an acute inpatient admission as their first contact with these services, for people aged under 65 years. This was similar to the national percentage (0.5%).

**Table 5.25:** People with an acute inpatient admission as first contact with secondary mental health and addiction services, for people aged 0–64 years, 2007

| | | Māori | Pacific | Asian | European/ Other | Total |
|---|---|---|---|---|---|---|
| Counties Manukau DHB | Number of people seen – all services | 2,557 | 1,457 | 506 | 4,664 | 9,184 |
| | Number of people seen – acute inpatient admission as first contact | 7 | 5 | 1 | 11 | 24 |
| | Percent of people seen – acute inpatient admission as first contact | 0.3% | 0.3% | 0.2% | 0.2% | 0.3% |
| New Zealand | Number of people seen – all services | 17,784 | 4,097 | 2,322 | 61,414 | 85,617 |
| | Number of people seen – acute inpatient admission as first contact | 100 | 20 | 16 | 332 | 468 |
| | Percent of all people seen who had an acute inpatient admission as first contact | 0.6% | 0.5% | 0.7% | 0.5% | 0.5% |

**Definitions**

Data source: Mental Health Information National Collection (MHINC), Ministry of Health. People are grouped by their age and ethnicity as at the end of the year. The analysis did not include data for people aged 65 years and over, as data are not completely reported for people in this age group across New Zealand. Specifically, data for people aged 65 years and older are not reported to the MHINC from DHBs in the Central and Southern regions (due to different funding arrangements).

Number of people seen – all services: The number of people seen by any secondary mental health and addiction service during the year, aged 0–64 years, who live in the specified DHB district.

Number of people seen – acute inpatient admission as first contact: The number of people aged 0–64 years seen by a general inpatient team (team type 01) who had either an acute inpatient admission (service code T02 or T03) as their first contact with secondary mental health services or a crisis attendance (T01) followed by an acute inpatient admission (T02 or T03) as their first contact with secondary mental health services. This includes only those people whose first contact was with the DHB provider from the DHB district in which the person lives. Note that the historical records used to determine a person's first contact are limited to records only as far back as the start of the MHINC (July 2000).

## 5.23 Hospital readmissions rate

The rate of acute readmissions in Counties Manukau DHB was not significantly different from the national rate.

**Table 5.26:** Acute readmissions, all ages, age-standardised rate per 1000 admissions (and 95% confidence intervals), by ethnicity, 2005–07

| | | Māori | Pacific | Asian | European/Other | Total |
|---|---|---|---|---|---|---|
| Counties Manukau DHB | Female | 25.4 (23.2 - 27.8) | 26.8 (24.9 - 28.9) | 20.2 (17.4 - 23.4) | 27.8 (26.3 - 29.4) | 25.8 (24.8 - 26.8) |
| | Male | 29.3 (26.4 - 32.4) | 27.5 (25.3 - 30.0) | 26.7 (22.9 - 31.1) | 29.8 (28.2 - 31.6) | 28.6 (27.4 - 29.8) |
| | Total | 26.2 (24.5 - 28.0) | 27.7 (26.2 - 29.3) | 23.0 (20.7 - 25.6) | 27.9 (26.8 - 29.0) | 26.5 (25.7 - 27.2) |
| New Zealand | Female | 25.0 (24.1 - 25.9) | 27.4 (26.1 - 28.7) | 22.8 (21.3 - 24.3) | 25.5 (25.1 - 25.9) | 25.0 (24.6 - 25.3) |
| | Male | 29.2 (28.2 - 30.3) | 30.5 (29.0 - 32.2) | 25.2 (23.3 - 27.2) | 28.0 (27.6 - 28.5) | 28.1 (27.7 - 28.5) |
| | Total | 26.2 (25.6 - 26.9) | 28.9 (27.9 - 30.0) | 23.3 (22.1 - 24.5) | 26.0 (25.7 - 26.2) | 25.7 (25.5 - 26.0) |

## 5.24 Use of dentist or other oral health care worker

The prevalence of seeing an oral health care worker in the past 12 months for adults in Counties Manukau DHB was significantly lower than the prevalence for adults in all New Zealand, adjusted for age. Māori, Pacific and Asian people were significantly less likely than the total Counties Manukau DHB population to have seen an oral health care worker in the past 12 months, adjusted for age.

**Table 5.27:** Age-standardised prevalence rates (and 95% confidence intervals) of use of oral health care worker, 15+ years, by ethnicity, 2006/07 NZHS

| | | Māori | Pacific | Asian | European/Other | Total |
|---|---|---|---|---|---|---|
| Counties Manukau DHB | Female | 35.5 (30.5–40.7) | 28.7 (22.6–35.4) | 31.5 (26.0–37.4) | 49.3 (44.7–53.8) | 45.5 (41.1–49.9) |
| | Male | 27.8 (22.5–33.6) | 28.6 (22.5–35.4) | 27.6 (21.8–34.0) | 42.7 (38.0–47.5) | 39.5 (35.0–44.2) |
| | Total | 31.9 (27.1–36.9) | 28.6 (23.5–34.2) | 29.6 (24.7–34.9) | 46.1 (41.7–50.6) | 42.6 (38.6–46.7) |
| New Zealand | Female | 41.6 (38.3–44.9) | 33.6 (28.7–38.9) | 36.9 (32.9–41.1) | 57.8 (55.4–60.2) | 53.3 (51.2–55.5) |
| | Male | 32.6 (28.7–36.6) | 33.5 (28.6–38.8) | 32.3 (27.8–37.1) | 50.1 (47.3–52.8) | 46.4 (43.9–48.8) |
| | Total | 37.4 (34.5–40.4) | 33.6 (30.0–37.3) | 34.8 (31.5–38.1) | 54.1 (51.8–56.3) | 50.0 (48.5–51.4) |

## 5.25 Use of medical specialist

Information about medical specialists is drawn from the New Zealand Health Survey. A medical specialist is defined here as a doctor who specialises in a branch of medicine other than general practice, working in either a public hospital or a private clinic. When

survey participants were asked about whether they had seen a medical specialist in the past twelve months, they were asked to exclude medical specialists they had seen as an inpatient at a hospital.

About 30% of adults in Counties Manukau DHB saw a medical specialist in the past 12 months, adjusted for age. The prevalence of the use of a medical specialist in the past 12 months among Pacific and Asian people was significantly lower than the prevalence among the total population in Counties Manukau DHB, adjusted for age.

**Table 5.28:** Age-standardised prevalence rates (and 95% confidence intervals) of use of specialist, 15+ years, by ethnicity, 2006/07 NZHS

| | | Māori | Pacific | Asian | European/Other | Total |
|---|---|---|---|---|---|---|
| Counties Manukau DHB | Female | 27.4 (23.2–31.9) | 19.5 (14.4–25.5) | 20.9 (16.4–26.1) | 35.0 (31.2–38.9) | 32.4 (28.7–36.2) |
| | Male | 27.7 (23.4–32.3) | 17.0 (11.7–23.6) | 16.2 (11.5–21.9) | 30.5 (26.6–34.6) | 28.5 (24.7–32.4) |
| | Total | 27.5 (23.6–31.7) | 18.4 (13.8–23.6) | 18.7 (14.7–23.3) | 32.8 (29.2–36.6) | 30.5 (26.5–33.3) |
| New Zealand | Female | 27.3 (24.6–30.2) | 19.5 (15.4–24.2) | 20.9 (17.5–24.5) | 34.9 (32.9–36.8) | 32.3 (30.6–34.0) |
| | Male | 27.6 (24.7–30.6) | 17.0 (12.6–22.2) | 16.2 (12.6–20.3) | 30.4 (28.2–32.6) | 28.4 (26.5–30.4) |
| | Total | 27.4 (25.2–29.8) | 18.3 (15.0–22.0) | 18.7 (16.1–21.4) | 32.7 (31.0–34.5) | 30.4 (29.3–31.5) |

## 5.26 Use of complementary health services

About 16% of adults in Counties Manukau DHB saw a complementary/alternative health care worker complementary and alternative health care worker in the past 12 months, adjusted for age.

**Table 5.29:** Age-standardised prevalence rates (and 95% confidence intervals) of use of complementary health services, 15+ years, by ethnicity, 2006/07 NZHS

| | | Māori | Pacific | Asian | European/Other | Total |
|---|---|---|---|---|---|---|
| Counties Manukau DHB | Female | 24.4 (14.9–33.9) | 11.2 (6.1–18.3) | 22.4 (14.8–30.0) | 25.3 (18.9–31.8) | 21.1 (16.8–25.4) |
| | Male | 6.9 (2.5–14.4) | 8.6 (4.4–14.8) | 9.7 (4.7–17.2) | 11.2 (6.2–18.2) | 10.0 (6.4–13.7) |
| | Total | 17.1 (10.8–23.5) | 10.0 (5.8–14.1) | 16.0 (11.3–20.7) | 18.7 (14.6–22.8) | 15.9 (13.1–18.7) |
| New Zealand | Female | 22.5 (19.9–25.0) | 16.5 (12.3–20.7) | 19.5 (16.2–22.9) | 23.7 (22.2–25.1) | 22.3 (21.1–23.5) |
| | Male | 17.0 (13.9–20.2) | 9.8 (6.5–13.2) | 15.3 (11.3–19.4) | 14.9 (13.1–16.7) | 14.1 (12.7–15.6) |
| | Total | 20.0 (17.9–22.0) | 13.3 (10.8–15.8) | 17.6 (15.0–20.2) | 19.4 (18.3–20.5) | 18.4 (17.4–19.3) |

# 6 Health Service Providers

This chapter provides information about the number of staff in the main health professional groups employed by the DHB and the providers of selected health services. This information is important for DHB planning which includes ensuring that services can be provided.

## Key points

- For health professionals whose main employer was located in the Counties Manukau district, there were no groups of professionals with a rate of number of professionals registered per 10,000 population higher than or equal to the rate for New Zealand in total.
- There are seven established PHOs which provide primary health care services in the Counties Manukau DHB region.
- Public health services are mainly delivered through Auckland Public Health Service in the district.
- For Counties Manukau DHB, the number of actual mental health FTEs was 345 as at 31 March 2008. This was 99% of the number of service level agreement FTEs, slightly higher than the percentage across all DHB providers in total (96%).

## 6.1 Numbers of general practitioners, nurses, midwives, dentists, and medical specialists

Information about professional groups in the New Zealand health workforce is presented in the table below, in terms of number of people (and full-time equivalent – FTE – if collected) with an annual practising certificate who took part in a workforce survey in 2006 or 2007.

For health professionals whose main employer was located in the Counties Manukau district, there were no groups of professionals with a rate of number of professionals registered per 10,000 population higher than or equal to the rate for New Zealand in total.

**Table 6.1:** Number and FTEs for selected health professional workforce groups, by year

| Year | Group | Unit | Counties Manukau DHB | | New Zealand | |
|---|---|---|---|---|---|---|
| | | | Number / FTE | Number / FTE per 10,000 population | Number / FTE | Number / FTE per 10,000 population |
| 2006 | GPs | Number | 241 | 5.5 | 3,106 | 7.6 |
| | | FTE | – | – | – | – |
| 2006 | Medical specialists | Number | 195 | 4.4 | 3,175 | 7.8 |
| | | FTE | – | – | – | – |
| 2007 | Nurses | Number | 2,851 | 63.6 | 41,811 | 101.8 |
| | | FTE | 2,362.6 | 52.7 | 32,585.4 | 79.4 |
| 2007 | Midwives | Number | 217 | 4.8 | 2,511 | 6.1 |
| | | FTE | 176.1 | 3.9 | 2,000.9 | 4.9 |
| 2007 | Medical laboratory technologists | Number | 219 | 4.9 | 7,902 | 19.2 |
| | | FTE | – | – | – | – |
| 2007 | Medical laboratory scientists | Number | 15 | 0.3 | 5,943 | 14.5 |
| | | FTE | – | – | – | – |
| 2007 | Medical radiation technologists | Number | 17 | 0.4 | 1,155 | 2.8 |
| | | FTE | 11.0 | 0.2 | 888.6 | 2.2 |
| 2006 | Psychiatrists | Number | 39 | 0.9 | 589 | 1.4 |
| | | FTE | – | – | – | – |
| 2007 | Mental health nurses | Number | 258 | 5.8 | 3,906 | 9.5 |
| | | FTE | 240.1 | 5.4 | 3,554.3 | 8.7 |
| 2007 | Psychologists | Number | 21 | 0.5 | 625 | 1.5 |
| | | FTE | 82.3 | 1.8 | 976.7 | 2.4 |
| 2006 | Dentists | Number | 59 | 1.3 | 1,575 | 3.8 |
| | | FTE | 49.0 | 1.1 | 1,292.9 | 3.2 |

**Notes on workforce data**

Data sources: GPs, specialists, and psychiatrists – MCNZ Health Workforce Annual Survey 2006. Nurses (including mental health nurses), midwives, med lab tech / scientists, MRT, psychologists – NZHIS Health Workforce Annual Survey 2007. Dentists – Dental Council of New Zealand – 2006 Workforce Analysis.

Data quality/additional notes: Accurate FTE data were not available for GPs, specialists, medical laboratory technologists / scientists, or psychiatrists; FTE data for nurses (including mental health nurses) should be used with caution. For GPs, specialists, and psychiatrists, figures less than four are suppressed by the Medical Council NZ (indicated by a * in the table).

DHB is the DHB area in which the health worker's main employer is located. This information was not reported for some people; this is summarised below:

| Group | Unit | Not reported |
|---|---|---|
| Nurses | Number | 167 |
| Midwives | Number | 112 |
| Medical laboratory technologists | Number | 98 |
| Medical laboratory scientists | Number | 50 |
| Medical radiation technologists | Number | 33 |
| Mental health nurses | Number | 11 |
| Psychologists | Number | 15 |

In addition, a number of nurses (including mental health nurses) reported main employers in two DHB areas. This is summarised below:

| DHB areas | Nurses (number) | Mental health nurses (number) |
|---|---|---|
| MidCentral and Capital & Coast | 259 | 18 |
| Otago and Southland | 88 | 6 |
| Waikato and Wanganui | 50 | 2 |

The number of dentists shown is the number of people with an annual practising certificate for 2006, and includes dentists employed in a variety of settings (but excludes dentists practising at university dental schools). Some differences exist in the way that dentists are grouped into DHB areas; see the Dental Council of New Zealand 2006 Workforce Analysis publication for more information.

## 6.2 Primary health organisations

Primary health organisations (PHOs) are the local structures for delivering and co-ordinating primary health care services. PHOs bring together doctors, nurses and other health professionals in the community to serve the needs of their enrolled populations. Other professionals include Māori health workers, health promotion workers, dieticians, pharmacists, physiotherapists, psychologists, midwives, and other allied health professionals. PHOs vary widely in size and structure. All PHOs must provide essential primary health care services to their local enrolled populations.

In the Counties Manukau DHB region, there are seven established PHOs which provide primary health care services to their enrolled populations. They are:

East Health Services
Mangere Community Health Trust
Peoples Healthcare Trust
Procare Network Manukau
TaPasefika (TaPasefika Health Trust))
Te Kupenga O Hoturoa Charitable Trust
Otara (Total Healthcare Otara).

## 6.3 Public health services

Public health services provide services aimed at improving and maintaining positive health of the population and preventing illness.

Public health services in Counties Manukau DHB region are mainly provided by the Auckland Regional Public Health Service, although local primary health organisations and other NGOs also provide some public health services. The Auckland Regional Public Health Service covers the populations in Counties Manukau, Auckland and Waitemata DHBs. It delivers a range of public health services, such as health promotion, health protection, Māori and Pacific health, healthy environment, screening and health information. The table below provides the information about staff positions and numbers in the Auckland Regional Public Health Service:

**Table 6.2:** Positions and numbers of staff in the Auckland Regional Public Health Service

| Position | Number of full-time staff | Number of part-time staff |
|---|---|---|
| Total health promotion | 30 | 5 |
| Māori health promotion | 9 | 1 |
| Pacific health promotion | 3 | 1 |
| Health protection | 23 | 1 |
| Public health nurse | 26 | 12 |
| Medical officer | 13 | 2 |
| Analyst | 15 | 1 |
| Other health professionals | 11 | 2 |
| Other support worker | 45 | 6 |
| Manager and team leader | 10 | 1 |
| Total staff | 185 | 32 |

* Notes:

1. Staff who identify as Māori ethnicity, not by Māori for Māori positions.
2. Staff who identify as Pacific, not by Pacific for Pacific positions.
3. The figures above exclude vacancies and newly funded positions.

## 6.4 Hospital and emergency services

The table below lists certified hospital providers located in the Counties Manukau district, as at June 2008, and their premises.

**Table 6.3:** Certified hospital providers located in the Counties Manukau district, as at June 2008

| Provider name | Premise name |
|---|---|
| Ambridge Rose Manor Limited | Ambridge Rose Manor Ltd |
| Christian Healthcare Trust | Hillcrest Hospital<br>Lansdowne Hospital and Resthome<br>St Christophers Rest Home and Hospital |
| Counties Manukau District Health Board | Auckland Spinal Rehabilitation and Tamaki Oranga<br>Botany Downs Hospital<br>Franklin Memorial Hospital<br>Manukau Surgery Centre<br>Papakura Obstetric Hospital<br>Pukekohe Hospital |
| ElderCare EWF Limited – Franklin | Franklin Village |
| ElderCare Greenvalley Services Limited | Takanini Lodge |
| Guardian Healthcare Group Limited | Erin Park Rest Home and Hospital<br>Guardian at Hayman<br>ParkHaven Hospital |
| Howick Baptist Healthcare Limited | Howick Baptist Home and Hospital |
| Metlifecare Limited | Metlifecare Pakuranga |
| Metlifecare Limited – Highlands | Highlands Hospital |
| Pacificare Trust – Pacificare Centre | Pacificare Centre and Hospital |
| Papakura Private Hospital 2002 Limited | Papakura Private Hospital |
| Qualcare (Elmwood) Limited | Elmwood Village |
| Sandra MacLean | Lady Elizabeth Home and Hospital |
| Seventh-Day Adventist Church Property Trustee (NZ) Limited | Bethesda Rest Home and Hospital |
| South Auckland Hospice Charitable Trust | South Auckland Hospice |
| TerraNova Homes and Care Limited | Papatoetoe Private Hospital |
| The Palms Resthome Limited | The Palms Resthome |
| The Selwyn Foundation | Selwyn Oaks |
| The Ultimate Care Group Limited | Manurewa House Rest Home and Private Hospital |

## 6.5 Mental health services

The table below presents information about service level agreement and actual mental health FTEs for 2007/08 as at 31 March 2008, by DHB provider.

For Counties Manukau DHB, the number of actual FTEs was 345 as at 31 March 2008. This was 99% of the number of service level agreement FTEs, slightly higher than the percentage across all DHB providers in total (96%).

**Table 6.4:** Mental Health FTEs for 2007/08, as at 31 March 2008

| District Health Board | Full-time equivalents March quarter | | |
|---|---|---|---|
| | Service level agreement | Actual | Percentage |
| Auckland | 428 | 406 | 95% |
| Bay of Plenty | 191 | 165 | 87% |
| Canterbury | 335 | 334 | 100% |
| Capital & Coast | 248 | 242 | 98% |
| Counties Manukau | 349 | 345 | 99% |
| Hawke's Bay | 119 | 118 | 99% |
| Hutt | 112 | 116 | 104% |
| Lakes | 98 | 86 | 88% |
| MidCentral | 194 | 129 | 67% |
| Nelson Marlborough | 121 | 114 | 94% |
| Northland | 135 | 137 | 102% |
| Otago | 167 | 167 | 100% |
| South Canterbury | 34 | 37 | 111% |
| Southland | 110 | 102 | 93% |
| Tairawhiti | 44 | 41 | 92% |
| Taranaki | 91 | 88 | 97% |
| Waikato | 247 | 248 | 101% |
| Wairarapa | 37 | 3 | 8% |
| Waitemata | 581 | 614 | 106% |
| Whanganui | 68 | 65 | 96% |
| West Coast | 55 | 45 | 82% |
| Total | 3763 | 3602 | 96% |

In addition to DHB providers, non-government organisations (NGOs) also provide mental health services. The table below shows the number of NGOs contracted to provide services for each DHB, including the number which hold direct contracts with the Ministry of Health.

**Table 6.5:** Number of NGOs contracted to provide mental health services, by funder DHB / Ministry of Health, for 2007/08

| DHB | Number of NGOs contracted with this DHB |
|---|---|
| Auckland | 40 |
| Bay of Plenty | 61 |
| Canterbury | 74 |
| Capital & Coast | 40 |
| **Counties Manukau** | **27** |
| Hawke's Bay | 18 |
| Hutt Valley | 27 |
| Lakes | 27 |
| MidCentral | 16 |
| Nelson Marlborough | 24 |
| Northland | 22 |
| Otago | 37 |
| South Canterbury | 16 |
| Southland | 17 |
| Tairawhiti | 10 |
| Taranaki | 11 |
| Waikato | 42 |
| Wairarapa | 9 |
| Waitemata | 37 |
| West Coast | 3 |
| Whanganui | 11 |
| Ministry of Health | 59 |

The following table shows the names of the NGOs with contracts with Counties Manukau DHB. Note that any NGOs providing services in the Counties Manukau district which hold direct contracts with the Ministry of Health are not included.

**Table 6.6:** NGOs with mental health contracts with Counties Manukau DHB, for 2007/08

| |
|---|
| Abacus Counselling Training & Supervision Ltd |
| Affinity Services Limited |
| Baptist Action |
| Challenge Trust |
| East Health Trust |
| Framework Trust |
| Guardian Healthcare Group Limited |
| Health and Disability Auditing New Zealand Limited |
| Health Outcomes International Pty Ltd |
| Hinemoa Lodge Limited |
| Linkage Trust |
| Mahitahi Trust |
| McKesson New Zealand Limited |
| Odyssey House Trust |
| Pacificare Trust |
| Pathways Trust |
| Penina Health Trust |
| Post Natal Psychosis Support Group |
| Procare Network Manukau Limited |
| Raukura Hauora O Tainui Trust |
| Refugees As Survivors New Zealand Trust |
| Richmond Fellowship New Zealand Incorporated |
| Schizophrenia Fellowship (Auckland) Incorporated |
| TaPasefika Health Trust |
| Te Whare Tiaki Trust |
| Waimokoia School |
| Workwise Employment Limited |

## 6.6 Complementary health services

Some types of complementary/alternative health care include osteopathy, chiropractic, acupuncture, herbal medicine, homeopathy and naturopathy. Chiropractic services and osteopathy are professions regulated under the Health Practitioners Competence Assurance Act 2003.

In Counties Manukau DHB, there are about six registered osteopathy practitioners and 28 registered chiropractic practitioners. There are also other types of complementary health practitioners who provide their services in the district.

## 6.7 Laboratories

Although a number of laboratories across New Zealand provide diagnostic services for the people of the Counties Manukau DHB district, there three main providers; these are:

Diagnostic Medlab Ltd
Counties Manukau DHB
Auckland DHB.

## 6.8 Diagnostic radiology services

The registered providers of diagnostic/screening radiology services to the people of the Counties Manukau DHB are listed below. Some of these providers work from several sites.

Manukau City Medical Centre
Auckland Radiology Group
BreastScreen Counties Manukau
Counties Care Accident and Medical Group
East Tamaki Healthcare
Hunters Corner X-ray
Mangere Health Centre
Manukau City Accident & Medical (2002) Limited
Manukau Radiology Institute
Manukau Superclinic
Manukau Surgical Centre
Medical Centre, Botany Downs
Mercy Radiology
Middlemore Hospital.

# Appendix 1: Information/Data Sources

| Data source | Data |
|---|---|
| Statistics New Zealand, 2006 Census of Population and Dwellings. Wellington | Demography<br>Socioeconomic factors<br>Disability<br>Life expectancy |
| Institute of Environmental Science and Research Limited (ESR) | Infectious disease notifications |
| The Department of Internal Affairs: Birth, Deaths and Marriages | Number of births (for birth rate calculations) |
| Dental Council of New Zealand 2006 Workforce Analysis<br>Medical Council of New Zealand Health Workforce Annual Survey 2006<br>New Zealand Health Information Service. 2007. Health Workforce Annual Survey. Wellington: Ministry of Health<br>Osteopathic Council of New Zealand<br>Chiropractic Board | Workforce |
| Action on Smoking and Health Survey (ASH) Year 10 Survey 2007 | Smoking prevalence for youth |
| Royal New Zealand Plunket Society | Breastfeeding |
| The School Dental Service | Caries-free teeth, and decayed, missing or filled teeth |
| Vision hearing technicians | Hearing failure |
| Territorial authority websites, Career Services, Statistics New Zealand | Profile of district |
| Regional Public Health Services | Public Health Service providers |
| Sector Services, Information Directorate, Ministry of Health (formerly New Zealand Health Information Service) | Mortality<br>Hospitalisations (public)<br>Cancer registrations<br>Type of birth<br>Low birthweight<br>Pregnancy complications<br>Secondary health care utilisation (except use of public hospital and presentation at emergency department)<br>Diagnostic service capacity<br>Elective services waiting times |
| Mental Health Price Volume Schedule 2007/08 (Quarter 3), Population Health Directorate, Ministry of Health | Mental health DHB provider full-time equivalent staffing numbers |

| Data source | Data |
|---|---|
| Ministry of Health Information Systems: Contract management System and Client Claims Processing System | Non-government organisations (NGO) mental health contracts |
| Quality & Safety, Sector Accountability and Funding Directorate, Ministry of Health | Certified providers of hospital services |
| Ministry of Health. 2008. *A Portrait of Health. Key Results of the 2006/07 New Zealand health Survey.* Wellington: Ministry of Health. | Behavioural and biological risk and protective factors<br>Prevalence of diseases/conditions<br>Self-reported health status<br>Primary health care utilisation (except data sourced from Sector Capability & Innovation, Ministry of Health see below)<br>Influenza vaccine coverage at 65+ years<br>Use of public hospital and emergency department |
| Sector Capability & Innovation Directorate, Ministry of Health | Community Services Card holders<br>Health Use Health Card holders<br>Immunisation coverage at two years<br>Adolescent receiving oral health services<br>Use of diabetes services<br>Primary health organisations |
| White P, Gunston J, Salmond C, et al. 2008. *Atlas of Socioeconomic Deprivation in New Zealand NZDep2006.* Wellington: Ministry of Health. | Index of deprivation |
| National Screening Unit/Cancer Screening, Health & Disability National Services Directorate, Ministry of Health. | Breast screening coverage |
| Minister of Health. 2000. *The New Zealand Health Strategy*. Wellington: Ministry of Health.<br>Minister of Health. 2001. *The New Zealand Disability Strategy*. Wellington: Ministry of Health.<br>Ministry of Health. 2000. *Health needs assessment for New Zealand: An overview and guide.* Wellington: Ministry of Health.<br>The New Zealand Public Health and Disability Act 2000.<br>Health Practitioners Competence Assurance Act 2003. | General commentary |