

4. Health outcomes

This section examines the following health outcomes:

- life expectancy at birth and at 65 years
- all-cause mortality and selected causes by DHB and by ethnic group for CMDHB
- self-reported health status, SF36, and ability to self care
- prevalence of major chronic diseases
- incident cases for major chronic diseases.

4.1. Life expectancy

Life expectancy (LE) is a long-standing indicator of a population's health. While it does not measure quality of life it is still of considerable importance and is used internationally as a benchmark of population health. Life expectancy looks at the estimated life span of a person should they experience the current age-specific mortality rates for the rest of their life. This section examines the latest life expectancy at birth and at 65 years of age by sex according to DHB and ethnic group. LE by Territorial Authority within CM is discussed in Section 10, p169.

[Life expectancy by District Health Board](#)

Table 4.1.1 compares life expectancy (LE) at birth in years for males and females by DHB. Males do poorly compared with females across all DHBs, and for NZ as a whole, with a gap of 4-5 years. CM had the largest gap. In Counties Manukau, male LE (75.9 years) is 1.7 to 2.5 years shorter than for males in Auckland and Waitemata, respectively, while female LE (81.1 years) is 1.1 to 1.4 years shorter than for females in Waitemata and Auckland, respectively. Life expectancy at 65 years of age shows similar trends for males and females and between DHBs, although LE is greater and the differences in LE between males and females and the DHBs are less for those reaching 65 years of age compared with LE at birth (Table 4.1.2).

Table 4.1.1: Life expectancy at birth in 2001, by sex and DHB

Life expectancy at birth in years (2001)			
DHB	Male	Female	Gap
Counties Manukau	75.9	81.1	5.2
Auckland	77.6	82.5	4.9
Waitemata	78.4	82.2	3.8
Northland	75.0	79.3	4.3
New Zealand	76.3	81.1	4.8

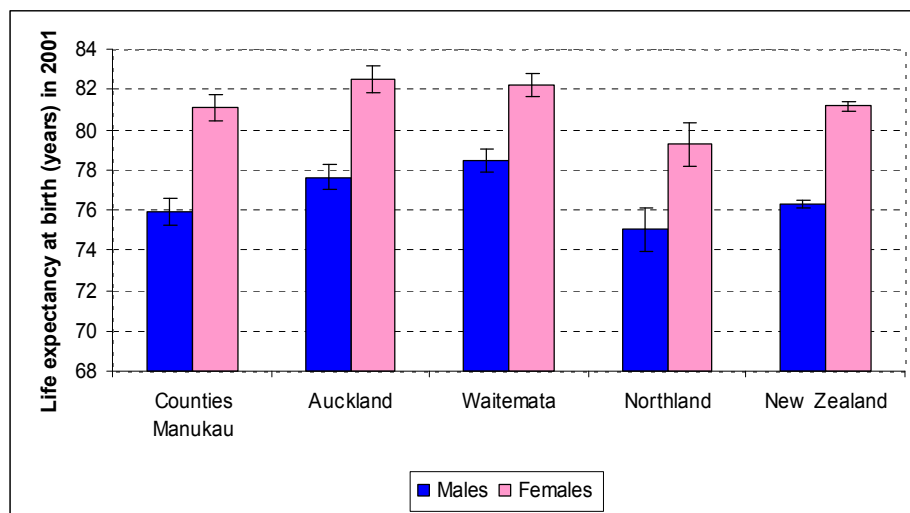
Table 4.1.2: Life expectancy at age 65 years in 2001, by sex and DHB

Life expectancy at 65 years (2001)			
DHB	Male	Female	Gap
Counties Manukau	81.8	85.0	3.2
Auckland	82.4	85.9	3.5
Waitemata	82.6	85.3	2.7
Northland	81.1	84.6	3.5
New Zealand	81.7	85.0	3.3

Differences in LE at birth between males and females in the Auckland region, Northland, and all NZ are shown graphically in Figure 4.1.1. Females in CM had a significantly shorter LE than females in Auckland, a significantly longer LE than females in Northland, and a similar

LE to all NZ females. Males in CM had a similar LE to males in Northland and NZ, and a significantly shorter LE than males in the rest of the Auckland region.

Figure 4.1.1: Life expectancy at birth in years, by sex and DHB, 2001



Changes in LE at birth from 1996 to 2001 are presented below for males and females in the Auckland region, Northland, and nationally (Table 4.1.3, Figures 4.1.2 and 4.1.3). LE has generally been increasing for both males and females in all regions since 1996. Within the Auckland region, CM has generally had the lowest LE and has shown the smallest increase in female LE from 1996 to 2001 i.e. 1.5 years compared with 1.9 years for Waitemata and 2.7 years for Auckland. Similarly, male LE in CM has shown an increase of 1.6 years, compared to 1.9 years for Waitemata and 3.2 years for Auckland.

Table 4.1.3: Life expectancy at birth for males and females from 1996 to 2001, by DHB

Year	Female life expectancy at birth (years)				
	CM	Auckland	Waitemata	Northland	NZ
1996	79.6	79.8	80.3	78.0	79.5
1997	79.9	80.4	81.7	78.9	80.3
1998	81.2	81.1	83.2	79.9	81.1
1999	80.7	81.0	82.6	78.9	80.5
2000	81.8	82.7	83.4	80.3	81.6
2001	81.1	82.5	82.2	79.3	81.1

Year	Male life expectancy at birth (years)				
	CM	Auckland	Waitemata	Northland	NZ
1996	74.3	74.4	76.5	72.7	74.2
1997	75.6	75.1	75.8	72.9	74.6
1998	76.2	76.1	77.1	73.7	75.5
1999	75.6	76.6	77.5	72.8	75.3
2000	76.6	76.7	79.1	74.1	76.0
2001	75.9	77.6	78.4	75.0	76.1

Figure 4.1.2: Female life expectancy at birth (years) from 1996 to 2001, by DHB

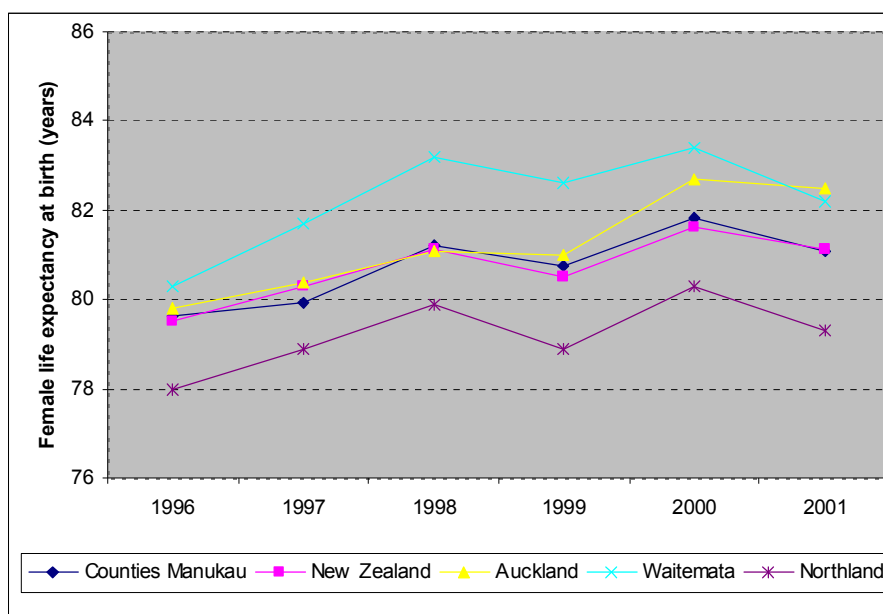


Figure 4.1.3: Male life expectancy at birth (years) from 1996 to 2001, by DHB



Life expectancy by ethnic group

Within Counties Manukau female LE at birth for 2001 was greatest for Other ethnic groups (83.2 years) than for Pacific (78.7 years) or Maori (73.5 years) (Table 4.1.4). Other females lived for 9.7 years longer than Maori females, and 4.5 years longer than Pacific females. Male LE at birth for 2001 was also greatest for Other ethnic groups (78.2 years) followed by Pacific (70.8 years) and Maori (69.7 years) (Table 4.1.4). Other males lived for 8.5 years longer than Maori males, and 7.4 years longer than Pacific males.

These differences by ethnicity are larger than is seen by using the NZDep01 neighbourhood measure. A forthcoming PHI report⁵ on neighbourhood life expectancy puts the difference between decile 10 and decile 1 neighbourhoods at 6.5 years – less than the Maori differences

⁵ PHI Occasional Report 28. In press, 2005. See www.moh.govt.nz/phi.

and Pacific male differences noted above. The report notes that deprivation and ethnic segregation appear equally powerful in generating health inequality in New Zealand. We have concentrated on ethnic differences rather than deprivation differences in the present report, but they should be considered two sides of the same coin in the Counties Manukau context.

Table 4.1.4: Life expectancy at birth (years) in Counties Manukau for males and females from 1996 to 2001, by ethnic group

Ethnic group	Female life expectancy at birth (years)					
	1996	1997	1998	1999	2000	2001
Maori	69.9	72.5	73.9	72.3	72.2	73.5
Pacific	76.5	75.3	73.2	74.6	75.1	78.7
Other	81.3	81.9	83.5	82.7	84.1	83.2
Total	79.6	79.9	81.2	80.7	81.8	81.1

Ethnic group	Male life expectancy at birth (years)					
	1996	1997	1998	1999	2000	2001
Maori	64.9	66.9	66.4	67.8	67.3	69.7
Pacific	68.7	69.0	69.4	68.1	69.6	70.8
Other	76.4	77.7	78.4	77.9	79.1	78.2
Total	74.3	75.6	76.2	75.6	76.6	75.9

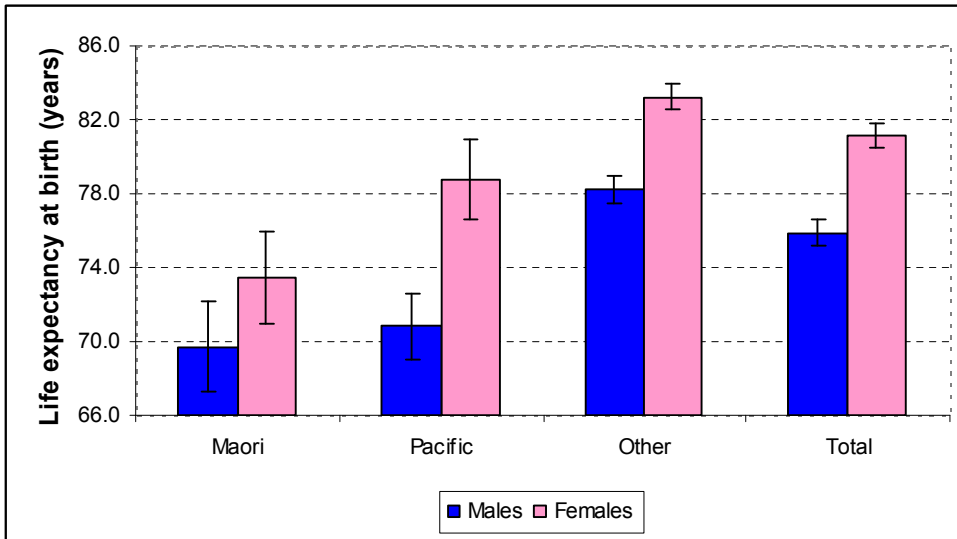
Within Counties Manukau LE at 65 years of age was considerably longer than at birth for all ethnic groups, with the overall increase in male LE being 5.9 years compared with 3.9 years for females (Table 4.1.5). The greatest increase in LE at 65 years compared with birth occurred in Maori males (9.5 years) and Maori females (8.2 years), and the smallest increase occurred in Other males (4.1 years) and Other females (2.2 years). Pacific showed a remarkable 5.6 year gap in life expectancy between males and females at age 65.

Table 4.1.5: Life expectancy at 65 years of age in Counties Manukau for males and females, by ethnic group, 2001.

Life expectancy at 65 years (average 2000-01)			
Ethnic group	Male	Female	Gap
Maori	77.6	80.3	2.7
Pacific	78.1	83.6	5.6
Other	82.7	86.4	3.8
All CMDHB	82.0	85.8	3.8

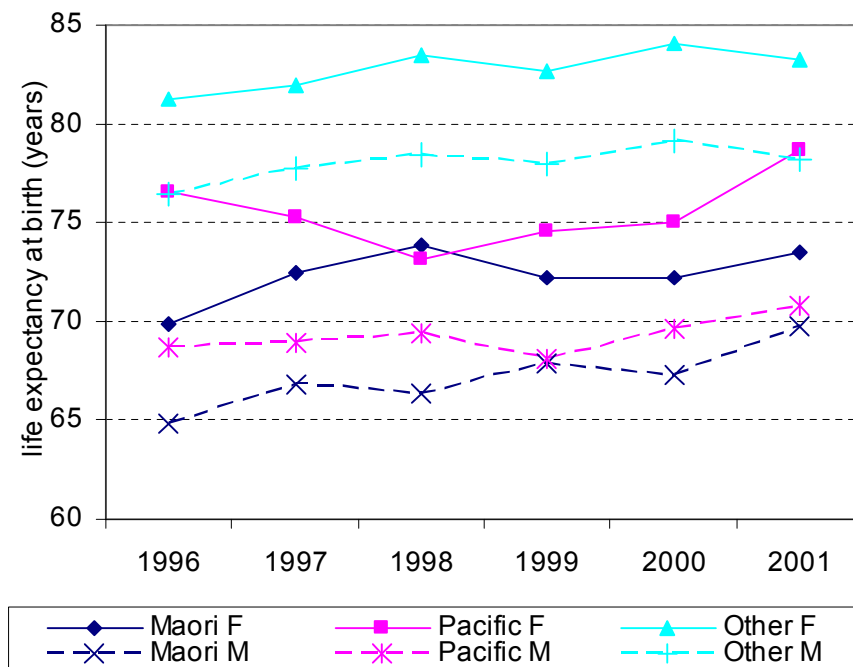
Figure 4.1.4 shows that there was a significant difference in female LE at birth between the three ethnic groups shown (Maori, Pacific, and Other). Other males also had a significantly longer LE than Maori or Pacific males, although Maori and Pacific male LE was not significantly different.

Figure 4.1.4: Life expectancy at birth (years) in Counties Manukau according to sex and ethnic group (NZHIS, 2001).



As shown in Table 4.1.4 and Figure 4.1.5 there has been a general improvement in LE since 1996 for all ethnic groups, although Pacific females and males showed little if any increase beyond the 1996 LE until 2001. Maori and Pacific males and females had a shorter LE than Other for the entire time period shown (1996-2001), with Maori having the lowest LE for every year except 1998 (females only). Both Maori and Pacific males and females showed an increase in LE in 2001, while Other males and females showed a slight decline. The male/female gap appears to be widening for Pacific people, but closing for Maori. In stark illustration of the difference between the Other group and Maori and Pacific is that even the Other males mostly had a higher LE than Maori and Pacific females.

Figure 4.1.5: Male and female life expectancy at birth (years) in Counties Manukau from 1996 to 2001, by ethnic group



4.2. Mortality

Mortality data was obtained from the NZHIS (New Zealand Health Information Service) for specific conditions classified by ICD 9 and ICD 10 codes (ICD 10 replaced ICD 9 in 2000) (see Section 11). This section presents data for the following:

- The top ten causes of mortality in children and adults in CM and nationally
- Adult cardiovascular and cancer deaths by DHB and by ethnic group for CM
- Child and adult all-cause mortality and selected causes of mortality by DHB, and by ethnic group for CM.

4.2.1 Top ten causes of mortality

Table 4.2.1 shows the age-standardised mortality rate (per 100,000) for the top ten causes of mortality in children aged 0-14 years for CM and NZ. Causes of death are presented in descending order from highest to lowest mortality rate for CM. The ranking for each condition is also given as this differed between CM and NZ. The top four causes of death in children were the same for CM and NZ, and occurred almost exclusively in children aged <1 year. Malformations of the nervous system and accidental suffocation also ranked in the top ten for both CM and NZ. Mortality rates for the top ten causes of death in CM were higher in CM than nationally for all causes.

Death from heart disease was more likely in CM, in part due to the comparatively high rate of rheumatic heart disease in CM. Pedestrian injury and death due to a motor vehicle accident was more common in CM while death due to an occupant injury was more common nationally. Nationally, death due to chromosomal abnormalities and cancers of the central nervous system were approximately twice as common as in CM. Differences between CM and NZ were not statistically significant (95% CI not shown).

Table 4.2.1: Age-standardised mortality rate (per 100,000) in 0-14 year-olds for the top ten causes of mortality in Counties Manukau and New Zealand, 2000 - 2001

Cause of death	Counties Manukau		New Zealand	
	Rank	Mortality rate	Rank	Mortality rate
Ill-defined/unknown (including cot death)	1	11.42	1	8.03
Low birth weight	2	10.50	2	5.77
Perinatal respiratory and cardiovascular conditions	3	8.25	3	5.31
Congenital circulatory system malformations	4	4.11	4	3.73
Other heart disease (rheumatic, valvular etc.)	5	3.20	16	0.91
Congenital nervous system malformations (cerebral palsy etc.)	6	2.87	5	2.44
Accidental suffocation	7	2.77	6	1.98
Pedestrian injured in transport accident	8	2.35	12	1.54
Infectious bacterial disease	9	2.28	13	1.53
Haemorrhagic/haematological disorders of the foetus and newborn	10	2.28	11	1.58
Accidental drowning	11	1.92	10	1.59
Car occupant injured in transport accident	14	1.44	9	1.60
Chromosomal abnormalities	20	0.95	7	1.81
Cancers of the eye, brain, and other parts of the central nervous system	21	0.91	8	1.65

Source: NZHIS mortality data, average of 2000 and 2001

Counties Manukau and NZ share the same top ten causes of mortality for adults (Table 4.2.2). The leading causes of death were ischaemic heart disease and stroke, with the rate for ischaemic heart disease being more than double that of stroke. Although none of the differences between CM and NZ were statistically significant (95% confidence intervals not shown), CM residents had higher rates of respiratory cancer/disease and diabetes than nationally.

Table 4.2.2: Age-standardised mortality rate (per 100,000) in 15+ year-olds for the top ten causes of mortality in Counties Manukau and New Zealand, 2000 - 2001

Cause of death	Counties Manukau		New Zealand	
	Rank	Mortality rate	Rank	Mortality rate
Ischaemic heart disease	1	193.4	1	204.8
Cerebrovascular disease (stroke)	2	91.7	2	90.8
Cancer of the gastrointestinal system (colon cancer etc.)	3	67.6	3	75.7
Chronic lower respiratory disease (CORD etc.)	4	64.4	4	57.0
Lung cancer	5	54.2	5	49.1
Other forms of heart disease	6	42.3	6	41.3
Diabetes mellitus	7	32.0	7	26.4
Cancer of the blood or immune systems	8	21.2	8	22.9
Cancer of the male genital organs (prostate, testicular cancer etc.)	9	19.9	10	20.1
Breast cancer	10	18.3	9	20.7

Source: NZHIS mortality data, average of 2000 and 2001

4.2.2 Cardiovascular and cancer mortality

Cardiovascular disease (diseases of the heart and blood vessels) is the leading cause of death in NZ, and cardiovascular mortality is often used as a measure of the effectiveness of prevention measures and treatment. Cancer is a significant contributor to years of life lost, and lung, bowel, breast, and prostate cancer are the most common cancers in NZ, in descending order of mortality rate. Cancer mortality is a reflection of the effectiveness of cancer prevention strategies (such as tobacco control legislation), detection measures (including population screening measures), and treatment services. The effects of cardiovascular disease and cancer can be reduced by effective primary, secondary, and tertiary prevention measures.

[Cardiovascular and cancer deaths by DHB](#)

Table 4.2.3 and Figures 4.2.1 and 4.2.2 present the mortality rates per 100,000 population for circulatory disease (total, ischaemic heart disease (IHD), and stroke) and cancer (total, lung, colorectal, breast, and prostate), using data from years 2000 and 2001 combined. The mortality rate from IHD in CM (193 per 100,000) was not significantly different from rates in Auckland, Northland, and nationally. The lowest rate was in Waitemata (174 per 100,000), which was significantly less than Auckland, Northland, and national rates.

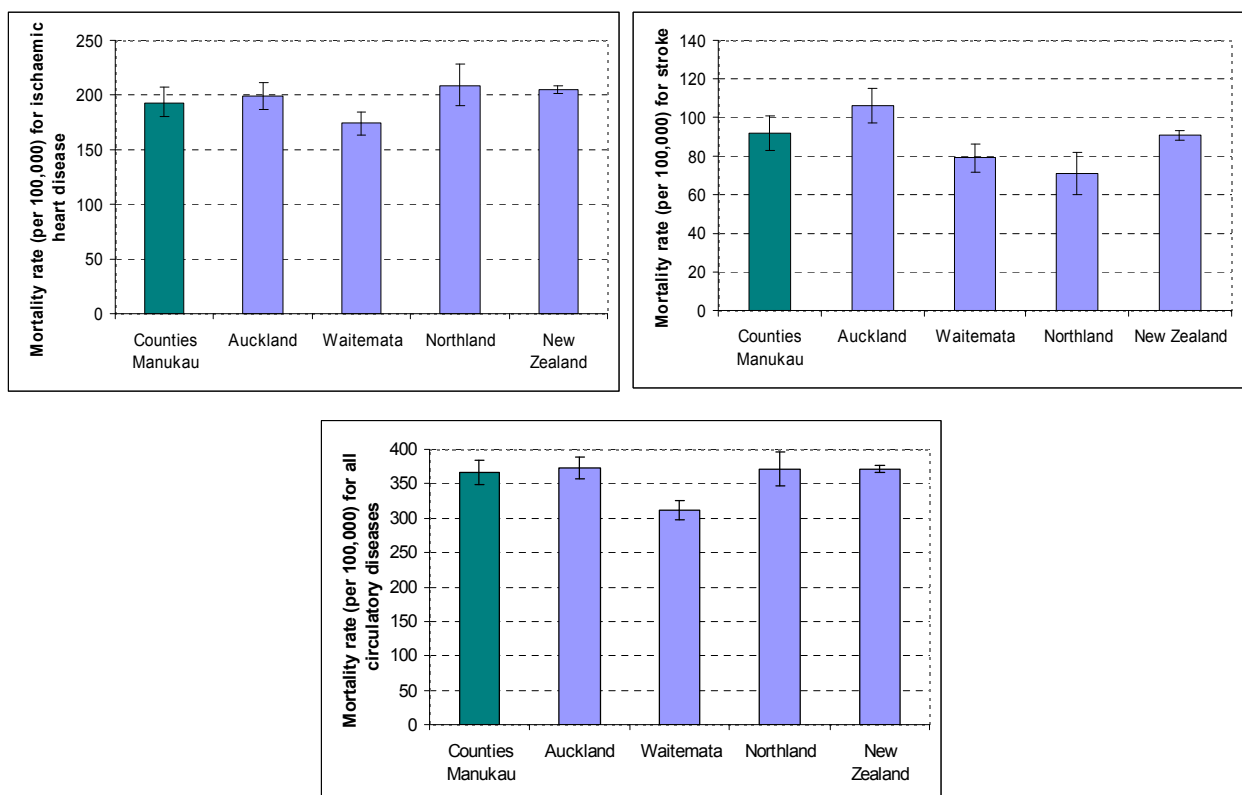
The mortality rate from stroke in CM (92 per 100,000) was not significantly different from rates in Auckland, Waitemata or nationally, but was significantly greater than the rate in Northland (71 per 100,000).

Table 4.2.3: Age-standardised mortality rate (deaths per 100,000) for circulatory diseases and cancers by DHB, 2000 - 2001

DHB	Circulatory deaths			Cancer deaths				
	Ischaemic heart disease	Stroke	All	Lung	Colorectal	Breast	Prostate	All
Counties Manukau	193	92	367	52	33	18	19	256
Auckland	199	106	372	37	33	18	20	231
Waitemata	174	79	311	39	35	20	17	236
Northland	208	71	371	63	40	24	23	296
New Zealand	205	91	371	47	39	21	20	261

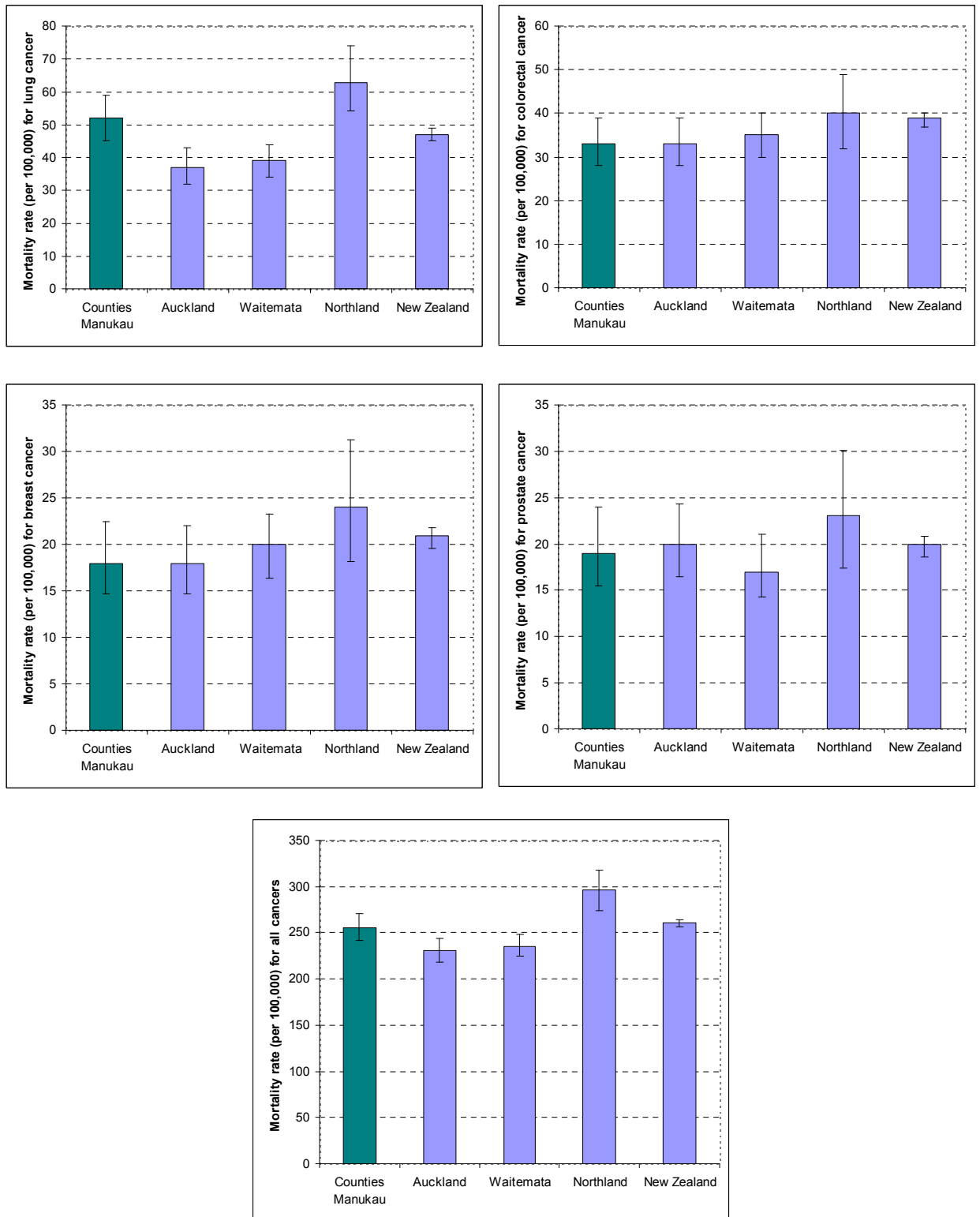
The mortality rate from all circulatory diseases in CM (367 per 100,000) was not significantly different from rates in Auckland, Northland, or nationally, but was significantly more than Waitemata (311 per 100,000).

Figure 4.2.1: Age-standardised mortality rates (deaths per 100,000) for ischaemic heart disease, stroke, and all circulatory diseases combined, by DHB (NZHS, 2000-2001)



As shown in Figure 4.2.2, CM had a significantly higher mortality rate for lung cancer (52 per 100,000) than Auckland (37 per 100,000) or Waitemata (39 per 100,000), and a non-significantly higher rate than the national rate (47 per 100,000). Northland had the highest mortality rate for lung cancer (63 per 100,000) and this was significantly higher than Auckland, Waitemata or nationally.

Figure 4.2.2: Age-standardised mortality rates (deaths per 100,000) for lung, colorectal, breast, and prostate cancers, and all cancers combined, by DHB (NZHIS, 2000-2001)



Counties Manukau had the lowest mortality rate for colorectal cancer (33 per 100,000) although this was not significantly different from the rest of the Auckland region, Northland (40 per 100,000), or national rates (39 per 100,000).

Counties Manukau also had the lowest mortality rate for breast cancer (18 per 100,000) although this was not significantly different from Auckland (18 per 100,000), Waitemata (20 per 100,000), Northland (24 per 100,000), or national (21 per 100,000) rates.

Mortality rates for prostate cancer were similar for CM (19 per 100,000), Auckland (20 per 100,000), Waitemata (17 per 100,000), Northland (23 per 100,000), and nationally (20 per 100,000).

Overall cancer rates followed the same trends shown for lung cancer, with CM having the highest rate in the Auckland region (256 per 100,000), similar to the national rate (261 per 100,000), and Northland having the highest mortality rate (296 per 100,000).

Table 4.2.4 shows the mortality rate for circulatory diseases and cancers in CM from 1996 to 2001. Figure 4.2.3 compares CM mortality rates with the other DHBs from 1996 to 2001.

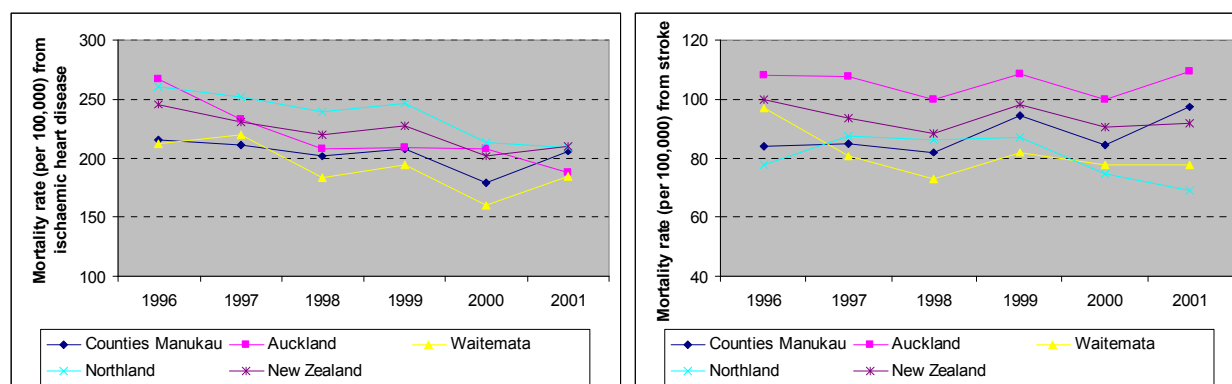
Table 4.2.4: Age-standardised mortality rate (per 100,000) for circulatory diseases and cancers from 1996 – 2001 in CM

Disease	1996	1997	1998	1999	2000	2001
Ischaemic heart disease	215	211	201	209	179	205
Stroke	84	85	82	94	85	97
All circulatory deaths	386	389	363	374	345	383
Lung cancer	55	48	49	55	51	52
Colorectal cancer	38	33	34	36	30	36
Breast cancer	27	29	27	20	20	17
Prostate cancer	17	22	21	19	18	20
All cancers	278	255	271	259	249	263

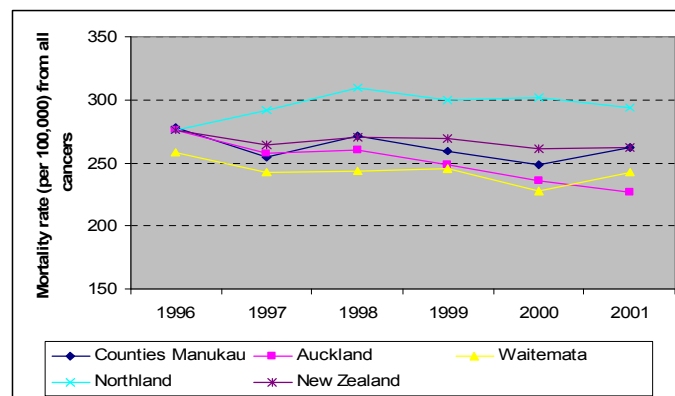
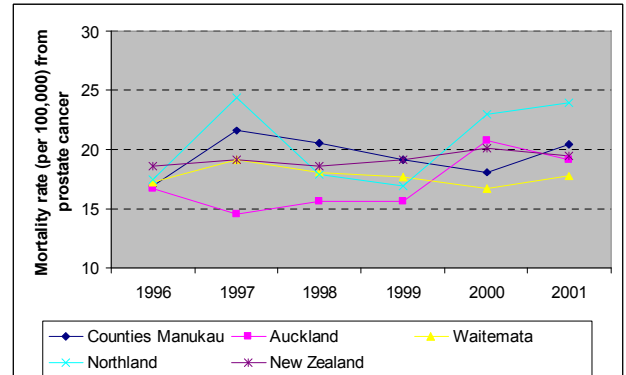
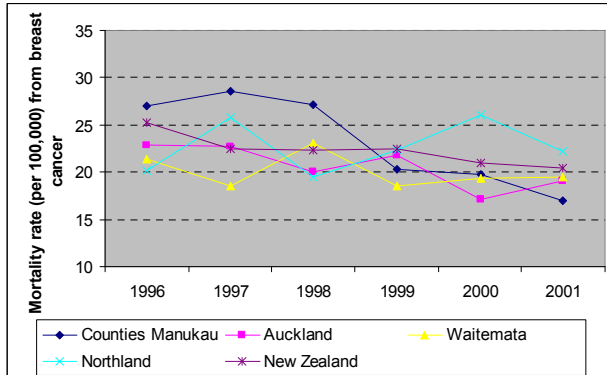
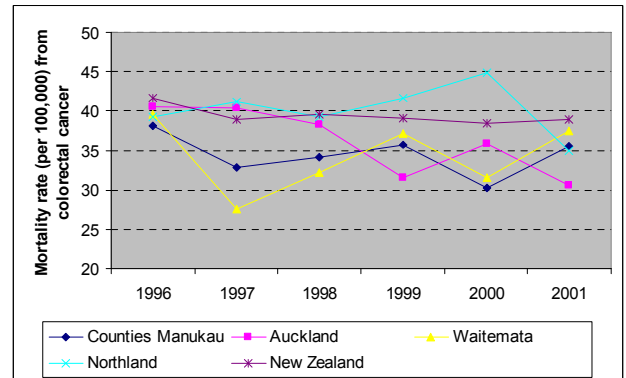
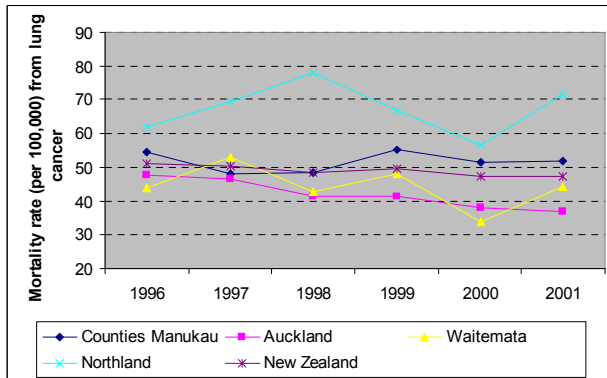
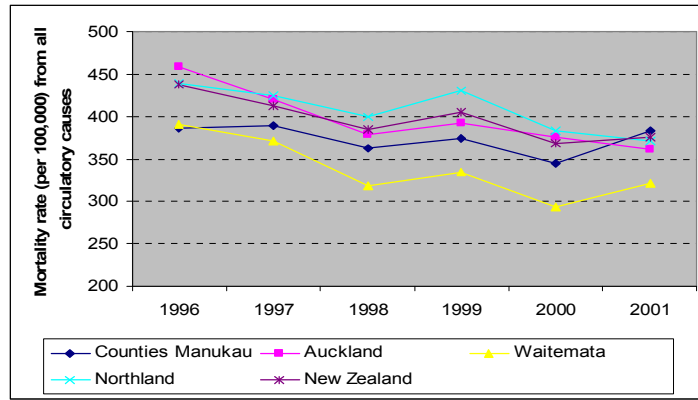
Unlike the other DHBs, Counties Manukau has not yet shown a sustained change in mortality rate for all circulatory diseases combined, although there has been a general decline in the rate for ischaemic heart disease. However, mortality rate for stroke, unlike the other DHBs shown, has generally been increasing in CM.

The overall cancer mortality rate has generally decreased in CM, Waitemata, and nationally since 1996, although the change has been modest. Auckland has shown the greatest decrease in cancer mortality rate, while Northland's rate has increased since 1996. Counties Manukau has also shown an overall decrease in mortality rate since 1996 for breast cancer particularly, and also small decreases for colorectal and lung cancers. Auckland has shown the greatest decrease in lung and colorectal cancer mortality, while Northland has shown a decline in colorectal cancer mortality only. Compared to 1996, CM has shown an increase in prostate cancer mortality, and this was also shown for the other DHBs and nationally.

Figure 4.2.3: Age-standardised mortality rate (per 100,000) for circulatory diseases and cancers from 1996 – 2001 by DHB



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[Cardiovascular and cancer deaths for CM by ethnic group](#)

Table 4.2.5 presents the mortality rates per 100,000 population for circulatory disease (total, ischaemic heart disease, and stroke) and cancer (total, lung, colorectal, breast, and prostate),

using data from years 2000 and 2001 combined, for Maori, Pacific, Asian, and Other ethnic groups in CM.

Table 4.2.5: Age-standardised mortality rate (deaths per 100,000) in CMDHB for circulatory diseases and cancers by ethnic group (NZHIS, 2000-2001)

Ethnic group	Circulatory deaths			Cancer deaths				
	Ischaemic heart disease	Stroke	All	Lung	Colorectal	Breast	Prostate	All
Maori	267	77	464	197	44	19	10	487
Pacific	186	149	441	66	18	20	28	287
Asian	151	65	277	16	9	1	0	83
Other	187	85	344	43	37	19	21	249
Total	193	92	367	52	33	18	19	256

As shown in Figure 4.2.4 Maori were more likely to die from circulatory disease, particularly ischaemic heart disease (267 per 100,000), than any other ethnic group. Pacific people were more likely to die from stroke (149 per 100,000) than any other ethnic group, and this increase in mortality was significantly higher than Other or combined rates. Asians were least likely to die from circulatory disease, including ischaemic heart disease (151 per 100,000) and stroke (65 per 100,000), and had a significantly lower rate than Maori or Pacific for all circulatory disease combined.

Figure 4.2.4: Age-standardised mortality rates (deaths per 100,000) in CM for ischaemic heart disease, stroke, and all circulatory diseases combined, by ethnic group (NZHIS, 2000-2001)

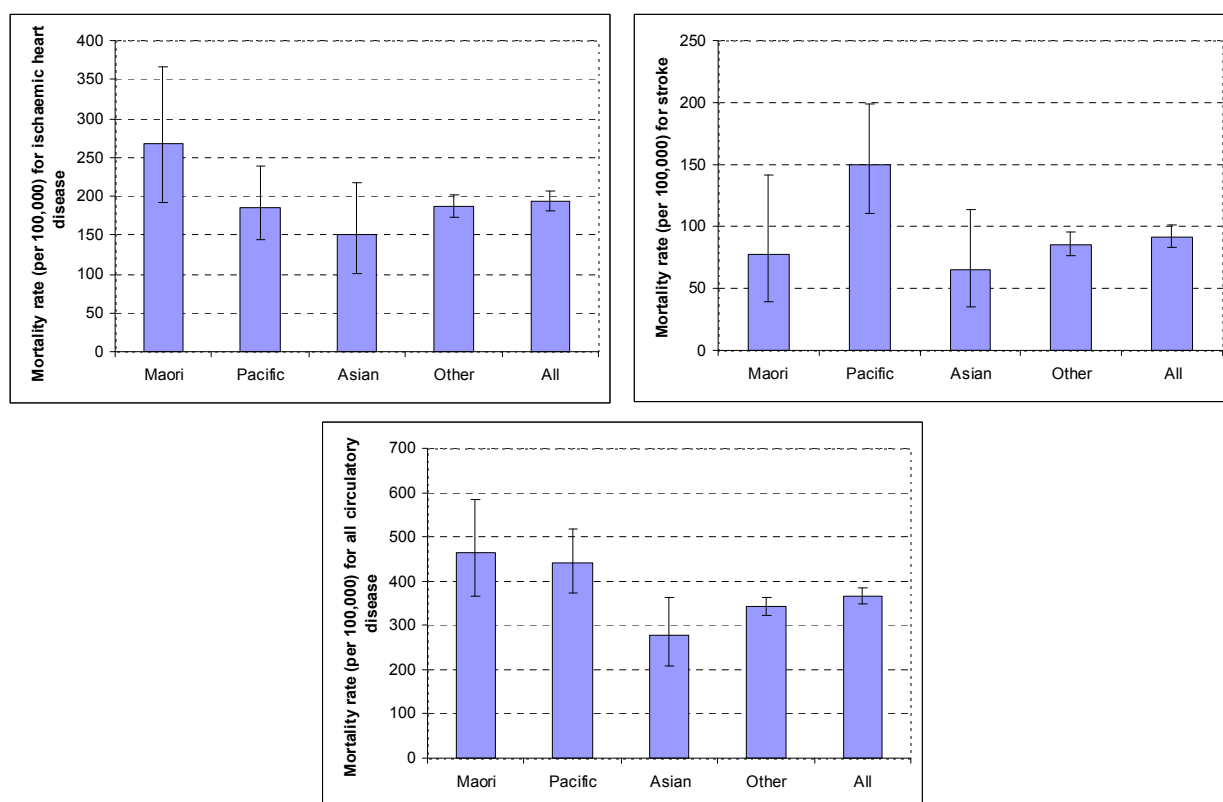
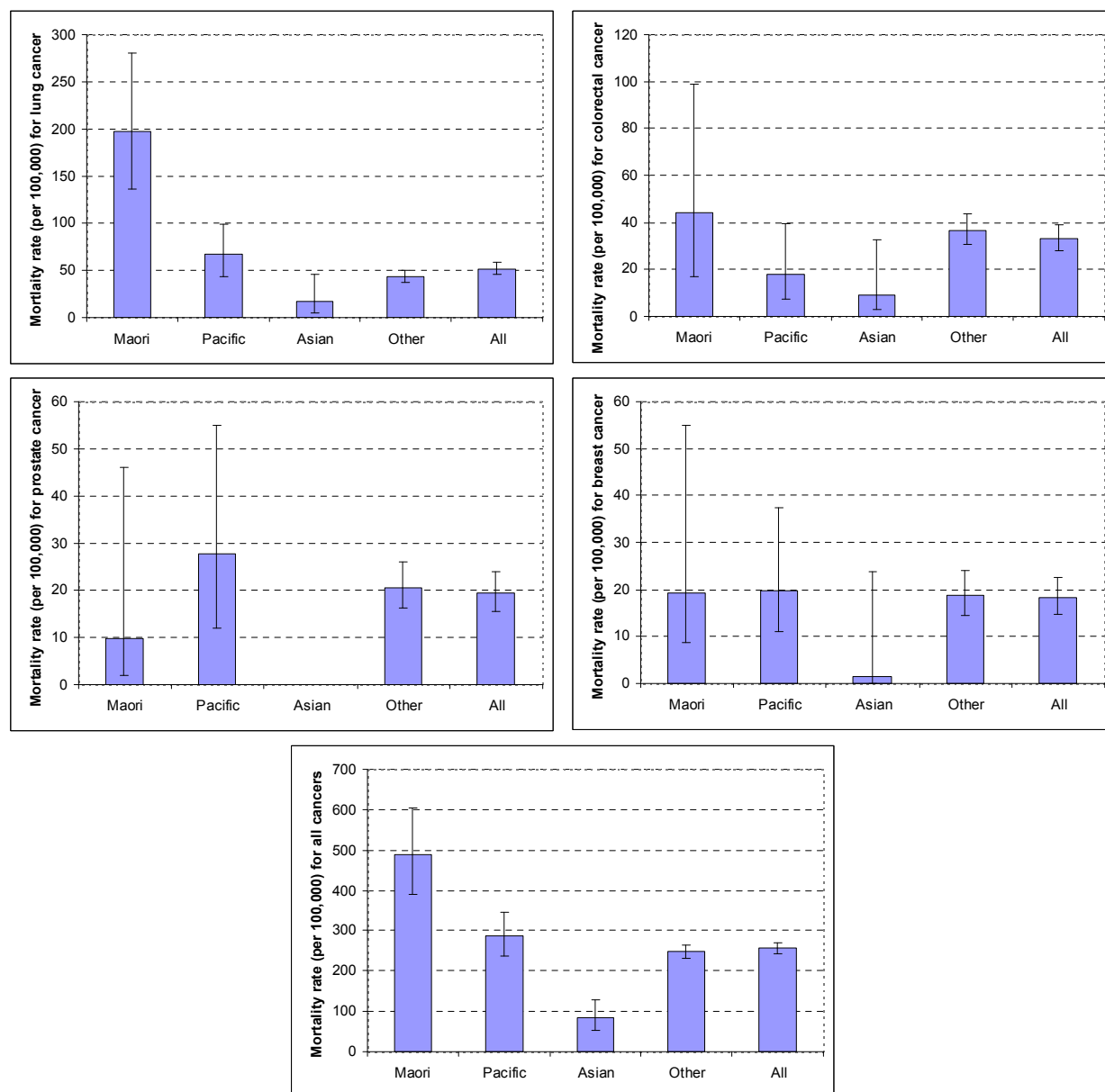


Figure 4.2.5: Age-standardised mortality rates (deaths per 100,000) in CM for lung, colorectal, prostate, and breast cancer, and all cancers combined, by ethnic group (NZHIS, 2000-2001)



Within CM Maori had the highest mortality rates for lung (197 per 100,000) and colorectal cancer (44 per 100,000), and for overall cancer mortality (487 per 100,000). Mortality rates for Maori lung cancer and overall cancer mortality were also significantly higher than for all other ethnic groups (Figure 4.2.5). Pacific had the highest death rates for prostate (28 per 100,000) and breast (20 per 100,000) cancers although rates were not significantly different from other ethnic groups. Asians had the lowest cancer mortality rates for each of the cancers shown and for overall cancer mortality rate (83 per 100,000). The Other ethnic group had the lowest overall cancer mortality rate (249 per 100,000) after Asians, with a rate that was significantly higher than for Asians and significantly lower than for Maori.

4.2.3 All-cause and selected causes of mortality

This section presents mortality rates for all causes and selected causes of mortality, for children (0-14 years of age) and adults (15+ years of age). As with life expectancy, all-cause mortality is an important measure of population health. Selected causes of mortality include suicide, injury, pneumonia, and all respiratory causes combined. New Zealand has one of the highest suicide rates, particularly in the 15-24 year age group, compared with other OECD countries. Injury mortality rates have been included as a measure of the effectiveness of, and potential for, injury prevention measures, health promotion activities, trauma care, and the provision of adequate services to manage injuries. Respiratory infections are a significant cause of mortality in both older adults and young children.

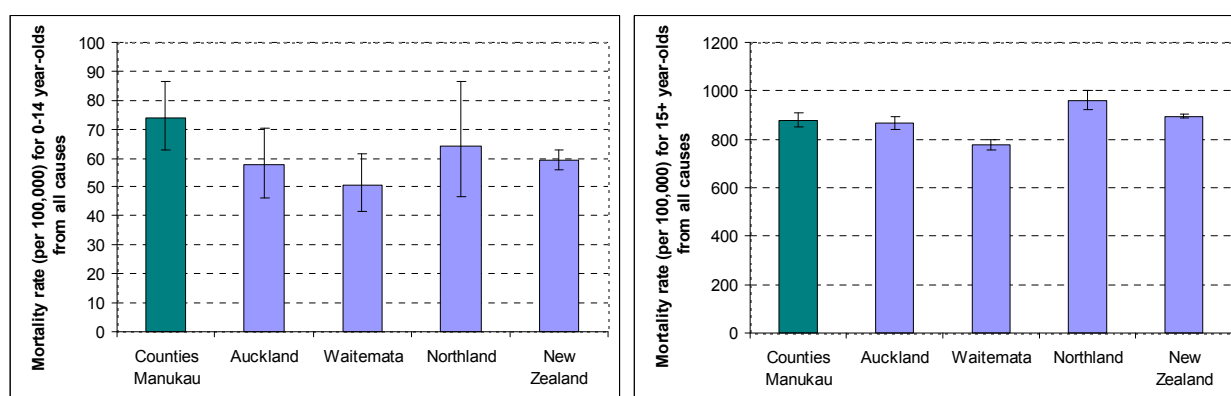
[All-cause and selected causes of mortality by DHB](#)

Table 4.2.6 and Figure 4.2.6 show the mortality rates for all-cause and selected causes of mortality by age group (0-14 years, 15+ years) and DHB, for 2000 and 2001 combined. Within the Auckland region, CM had the highest mortality rates for all-causes combined (significantly higher than Waitemata) and respiratory disease, similar rates for injury and suicide, and the lowest rate for pneumonia (although not significantly different from Auckland and Waitemata). Adult mortality rates for CM were not significantly different from national rates. Within the Auckland region, children in CM had the highest mortality rates for all causes combined (significantly higher than Waitemata) and injury, a similar rate for suicide, and the lowest rates for respiratory diseases and pneumonia (although not significantly different from Auckland and Waitemata). Child mortality rates for CM were not significantly different from national rates.

Table 4.2.6: Age-standardised mortality rates (per 100,000) for all-causes, injury, suicide, respiratory disease, and pneumonia, by age and DHB (NZHIS, 2000-2001)

DHB	All-cause mortality		Injury		Suicide		Respiratory		Pneumonia	
	0-14 years	15+ years	0-14 years	15+ years	0-14 years	15+ years	0-14 years	15+ years	0-14 years	15+ years
Counties Manukau	74.0	878.3	11.4	38.6	0.5	14.5	1.0	80.0	0.0	9.8
Auckland	57.5	864.6	8.1	39.0	0.0	12.5	1.9	69.7	0.6	10.5
Waitemata	50.7	778.0	7.9	38.5	0.5	14.9	1.5	68.3	1.0	11.6
Northland	64.4	962.5	15.7	69.4	0.0	15.1	1.5	72.5	0.0	15.3
New Zealand	59.4	893.5	11.7	49.7	0.4	15.7	1.5	74.1	0.6	12.5

Figure 4.2.6: Age-standardised mortality rate (per 100,000) for all-causes, injury, suicide, respiratory disease, and pneumonia, by age and DHB (NZHIS, 2000-2001)



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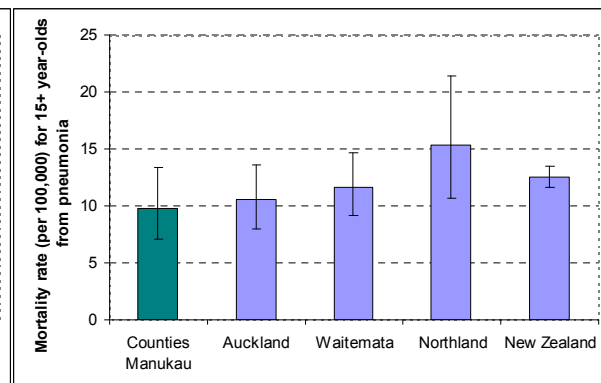
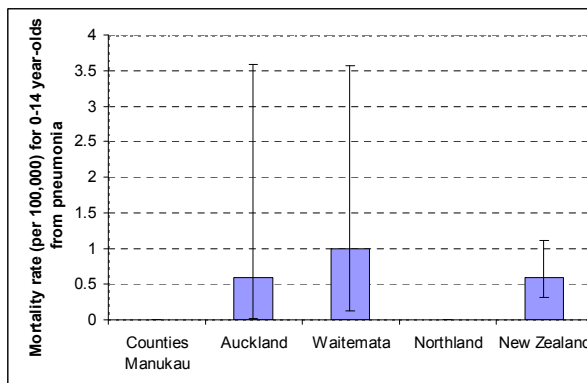
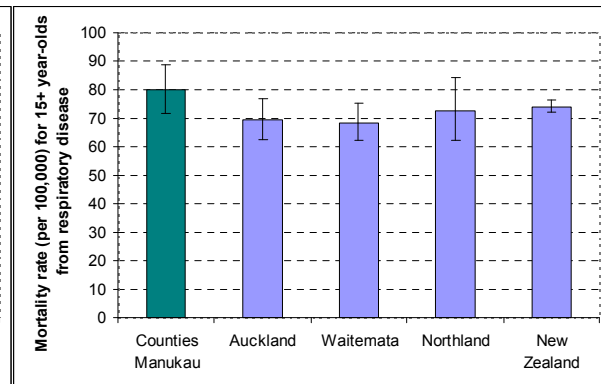
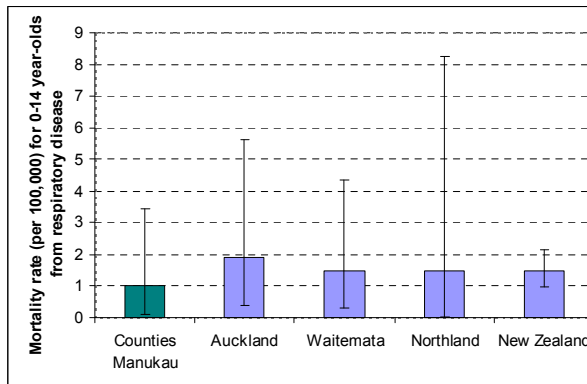
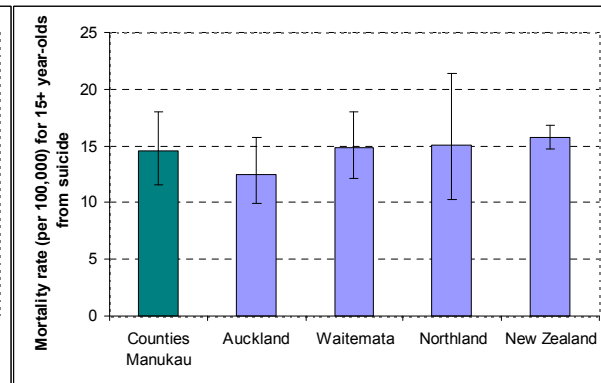
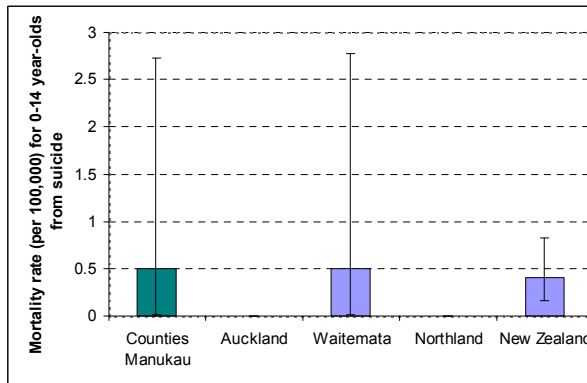
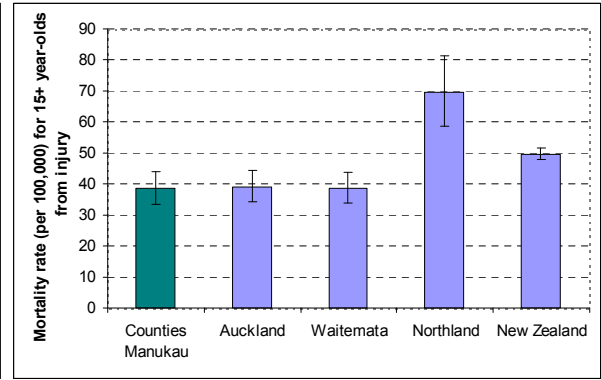
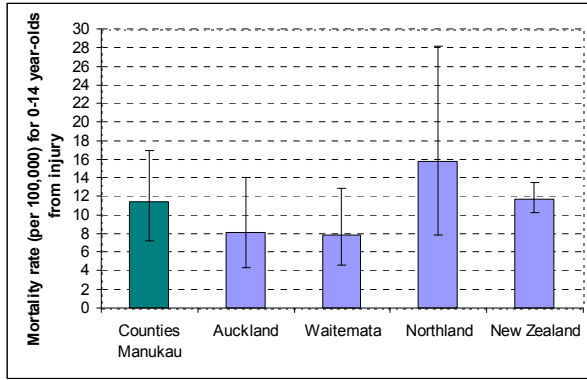
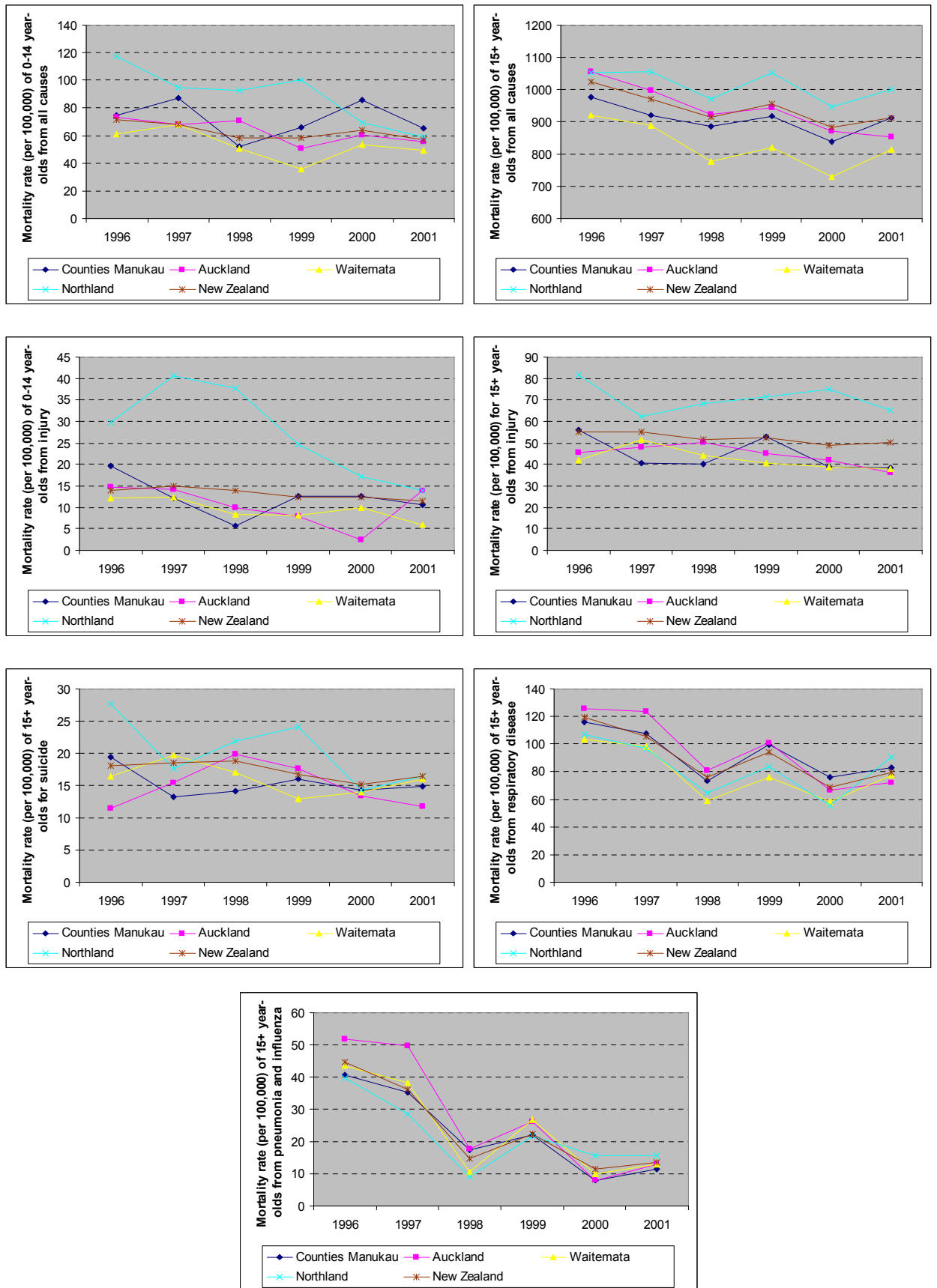


Figure 4.2.7: Age-standardised mortality rate (per 100,000) for all causes, injury, suicide, respiratory disease, and pneumonia, from 1996 – 2001 by DHB and age group



4. Health outcomes

Figure 4.2.7 shows the change in mortality rate for all causes and selected causes by age and DHB from 1996 to 2001. Childhood mortality rates for suicide, respiratory disease, and pneumonia were not shown due to the low rates and small numbers of children dying from these causes. Northland has generally had the highest rates of mortality for the causes shown except for respiratory causes, and the all cause mortality rate for Northland also dropped below CM for 2000 and 2001. In CM, mortality rates have generally been declining since 1996 for both children and adults for the conditions shown, except for suicide rates which have been fairly stable in CM since 1996.

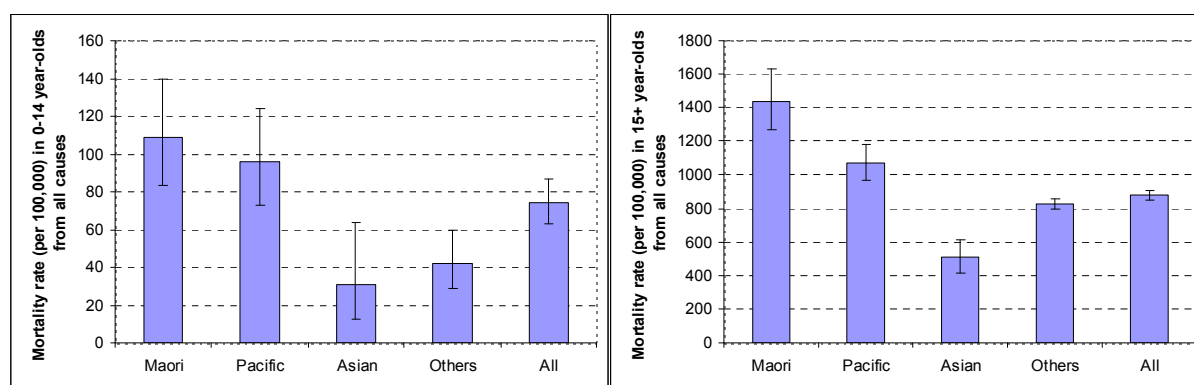
All-cause and selected causes of mortality for CM by ethnic group

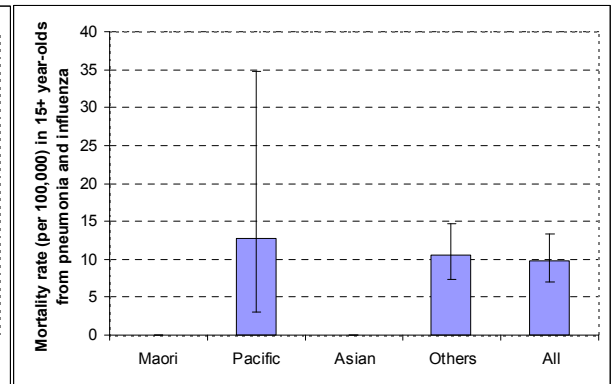
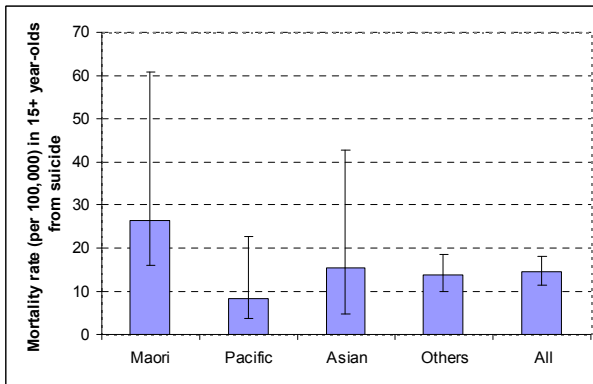
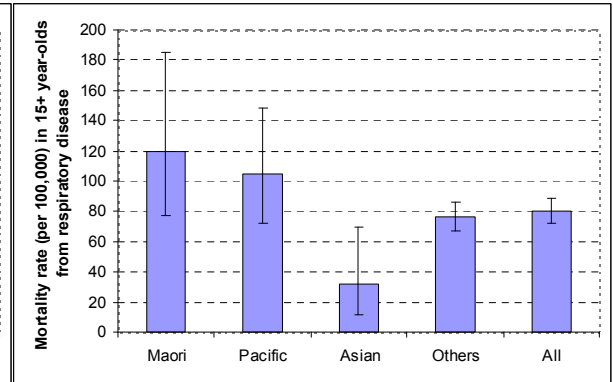
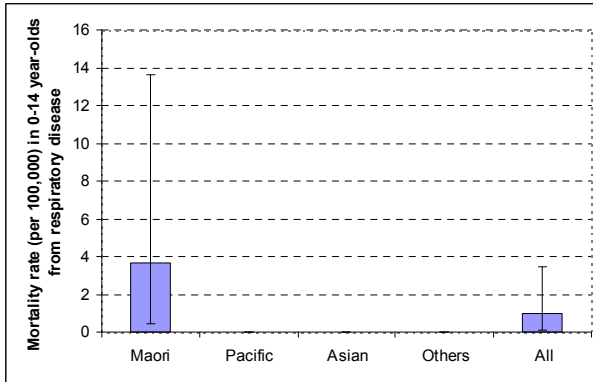
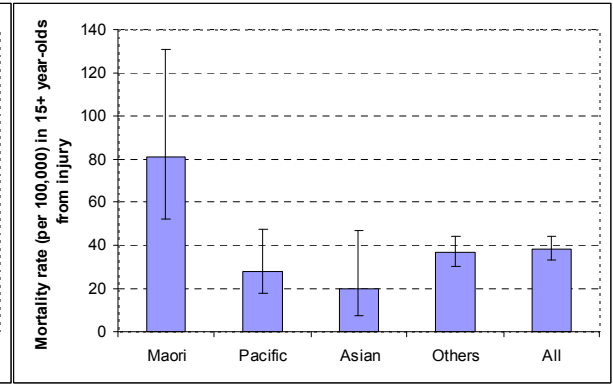
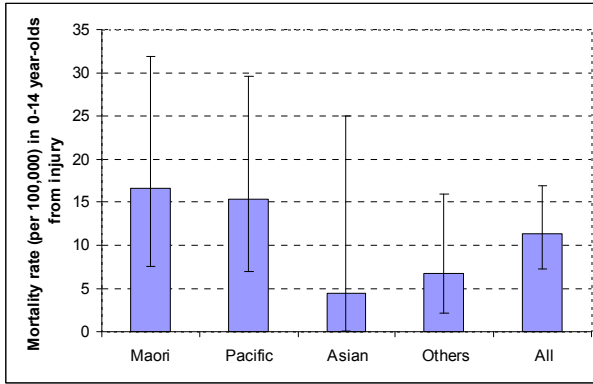
Table 4.2.7 and Figure 4.2.8 show the mortality rates from all causes and selected causes by ethnic group in CM, for 0-14 year-olds and 15+ year-olds. Maori had the highest mortality rates from all causes, injury, respiratory disease, and suicide. Adult Maori mortality rates from all causes and injury were significantly higher than the other ethnic groups. Pacific adults had the highest rate for pneumonia and influenza, and significantly higher rates from all causes combined than Asians or Others. Asians generally had the lowest mortality rates from the conditions shown. Asian suicide rates were higher than Pacific or Others, although the differences were not statistically significant.

Table 4.2.7: Age-standardised mortality rate (per 100,000) in CM for all causes, injury, suicide, respiratory disease, and pneumonia, by ethnic group and age, 2000 - 2001

Ethnic group	0-14 year-olds			15+ year-olds				
	All-cause	Injury	Respiratory disease	All-cause	Injury	Suicide	Respiratory disease	Pneumonia
Maori	108.7	16.6	3.7	1,439	81.0	26.4	119.6	0.0
Pacific	95.8	15.4	0.0	1,071	28.3	8.2	104.7	12.8
Asian	30.7	4.5	0.0	507	19.9	15.5	31.6	0.0
Others	42.1	6.7	0.0	823	36.7	13.9	76.2	10.6
All	74.0	11.4	1.0	878	38.6	14.5	80.0	9.8

Figure 4.2.8: Age-standardised mortality rate (per 100,000) in CM for all causes, injury, suicide, respiratory disease, and pneumonia, by ethnic group and age (NZHIS, 2000 & 2001)





4.3. Health status

This section presents results obtained from the 2002/03 New Zealand Health Survey (NZHS) for self-reported general health status, SF-36 score (a questionnaire that measures self-reported health status), and ability to self care.

General health status

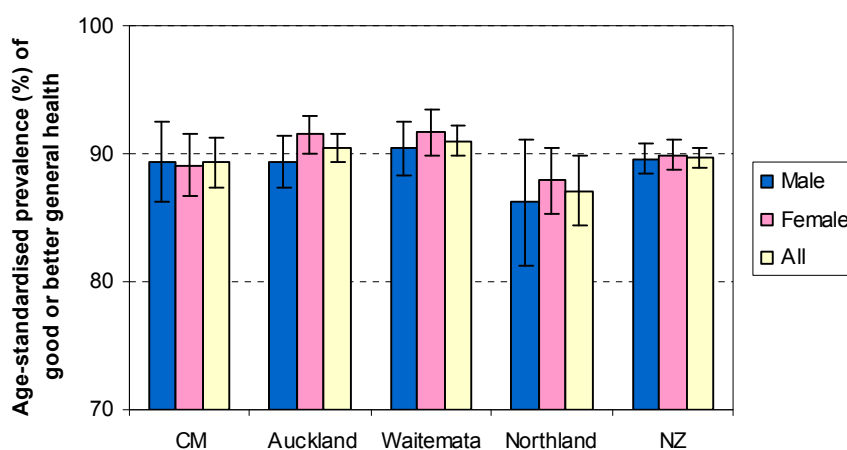
Results are presented here for the age-standardised prevalence of those who self-reported their general health status as 'good or better' from a range of three options, the other two being 'fair' and 'poor'. Table 4.3.1 shows the age-standardised prevalence of those reporting 'good or better' general health by gender, ethnic group, and DHB. All ethnic groups in CM had a lower prevalence of self-reported good or better health status than the rest of the Auckland region, except for Pacific people.

Table 4.3.1: Age-standardised prevalence of self-reported 'good or better' general health by gender, ethnic group and DHB (NZHS 2002/03)

DHB	General health status 'good or better': age-standardised prevalence (% adult population)														
	Males					Females					Males & females				
	Maori	Pacific	Asian	Other	All	Maori	Pacific	Asian	Other	All	Maori	Pacific	Asian	Other	All
CM	87.5	97.5	89.9	87.6	89.4	82.7	92.4	87.8	89.9	89.1	84.9	94.8	88.7	88.8	89.3
Auckland	86.6	88.7	88.4	90.1	89.4	90.9	87.5	92.9	91.8	91.5	88.9	88.0	90.8	91.0	90.5
Waitemata	85.4	88.2	89.5	91.1	90.4	89.1	89.4	92.2	92.0	91.7	87.3	88.9	91.0	91.5	91.0
Northland	86.6	97.3	91.1	85.8	86.2	82.7	89.4	97.5	89.4	87.9	84.5	94.3	95.0	87.6	87.1
NZ	87.1	91.1	85.8	90.1	89.6	84.3	86.9	88.2	91.0	89.9	85.6	88.9	87.1	90.6	89.7

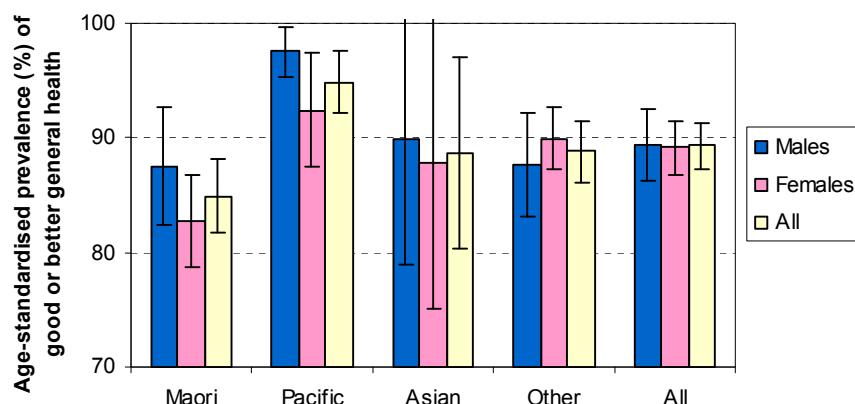
Figure 4.3.1 shows that the prevalence of self-reported 'good or better' health was lower in CM (89.3%) than Auckland (90.5%), Waitemata (91%), or nationally (89.7%), and higher than Northland (87.1%), although these differences were not statistically significant. Females in the Auckland region and Northland were more likely to report good health than males except in CM where slightly fewer females than males reported good health.

Figure 4.3.1: Age-standardised prevalence of self-reported 'good or better' general health by sex and DHB (NZHS 2002/03)



Within CM Pacific people (97.5%) had a significantly higher prevalence of self-reported good health than Maori (87.5%) or Other (87.6%) ethnic groups, with Maori and Other ethnic groups having the lowest prevalence of self-reported good health (Figure 4.3.2). This high self-rating by Pacific people perhaps flies in the face of some of the more objective health measures – it seems a mismatch, and may be a barrier to lifestyle change.

Figure 4.3.2: Age-standardised prevalence of self-reported 'good or better' general health in CMDHB by sex and ethnicity (NZHS 2002/03)



SF-36 score: physical functioning

Results are presented here for the age-standardised SF-36 score for 'physical functioning', with 100 corresponding to perfect physical function and 0 to no functioning. Only adults are included. Table 4.3.2 shows the age-standardised SF-36 score for physical functioning by gender, ethnic group, and DHB. All ethnic groups in CM had a lower score for physical functioning than the rest of the Auckland region or nationally.

Table 4.3.2: Age-standardised SF-36 score for physical functioning by gender, ethnic group and DHB (NZHS 2002/03)

DHB	SF-36 score for physical functioning: age-standardised, age 15+														
	Males					Females					Males & females				
	Maori	Pacific	Asian	Other	All	Maori	Pacific	Asian	Other	All	Maori	Pacific	Asian	Other	All
CM	89.6	86.8	85.8	89.2	88.5	82.9	82.3	92.6	86.7	86.1	85.9	84.4	89.4	87.9	87.3
Auckland	90.8	94.3	95.4	91.4	92.3	86.1	92.2	93.7	87.5	89.0	88.3	93.2	94.5	89.4	90.6
Waitemata	89.2	95.0	96.4	92.0	92.4	87.7	93.0	94.1	88.6	89.3	88.4	93.9	95.1	90.2	90.8
Northland	88.5	83.8	82.5	87.8	87.9	82.6	76.6	89.9	87.2	86.0	85.3	81.1	86.9	87.5	86.9
NZ	89.4	89.1	91.6	91.2	90.9	83.3	85.0	90.5	88.4	87.8	86.1	86.9	91.0	89.8	89.3

Figure 4.3.3: Age-standardised SF-36 score for physical functioning by sex and DHB (NZHS 2002/03)

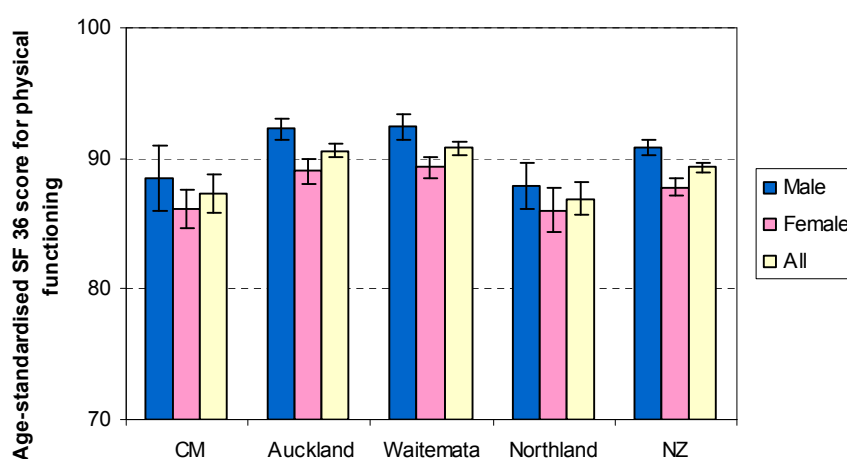
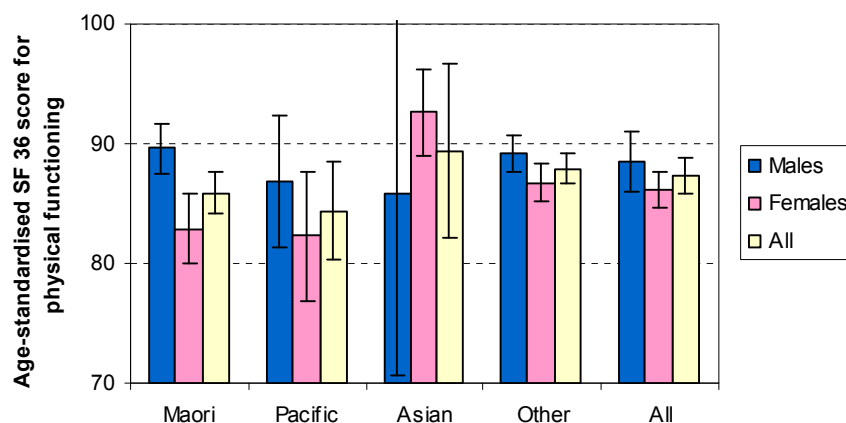


Figure 4.3.3 shows that CM (87.3) and Northland (86.9) had significantly lower age-standardised scores for physical functioning than Auckland (90.6), Waitemata (90.8), or nationally (89.3). In addition, Waitemata and Auckland had significantly higher average scores than nationally.

Within CM SF-36 scores were slightly higher for Asian (89.4) and Other (87.9) ethnic groups than for Maori (85.9) and Pacific (84.4) ethnic groups, although these differences were not statistically significant (Figure 4.3.4). It is interesting to note that while Pacific people scored lowest on SF-36 physical functioning, they also had the highest prevalence of self-reported good health suggesting that different groups vary in their perception of what constitutes 'good health'.

Figure 4.3.4: Age-standardised SF-36 score for physical functioning in CMDHB by sex and ethnicity (NZHS 2002/03)



[SF-36 score: mental health](#)

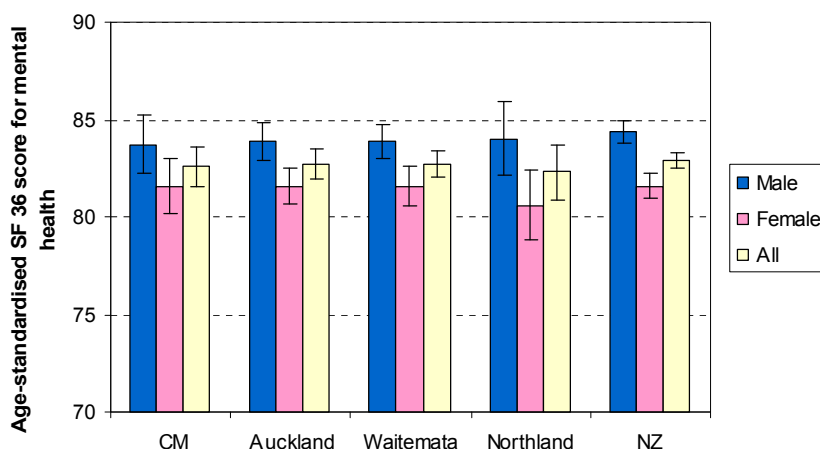
Results are presented here for the age-standardised SF-36 score for 'mental health', with 100 corresponding to perfect mental health and 0 to worst mental health. Only adults are included. Table 4.3.3 shows the age-standardised SF-36 score for mental health by gender, ethnic group, and DHB. All ethnic groups in CM had a lower score for mental health than the rest of the Auckland region and nationally, except for Others who had a higher score than the rest of the region and nationally.

Table 4.3.3: Age-standardised SF-36 score for mental health by gender, ethnic group and DHB (NZHS 2002/03)

DHB	SF-36 score for mental health: age-standardised, age 15+														
	Males					Females					Males & females				
	Maori	Pacific	Asian	Other	All	Maori	Pacific	Asian	Other	All	Maori	Pacific	Asian	Other	All
CM	83.3	80.0	80.8	85.3	83.7	79.5	80.9	81.4	82.3	81.6	81.3	80.5	81.1	83.8	82.6
Auckland	84.2	82.9	84.6	83.8	83.9	81.4	81.6	82.3	81.4	81.6	82.7	82.2	83.4	82.6	82.7
Waitemata	85.1	80.7	84.8	83.9	83.9	81.4	83.5	83.3	81.2	81.6	83.2	82.3	84.0	82.5	82.7
Northland	83.2	78.3	81.1	84.4	84.0	79.3	79.4	83.5	81.0	80.6	81.1	78.7	82.5	82.7	82.3
NZ	84.1	82.3	84.3	84.6	84.4	80.1	81.5	81.8	81.8	81.6	81.9	81.9	82.9	83.2	82.9

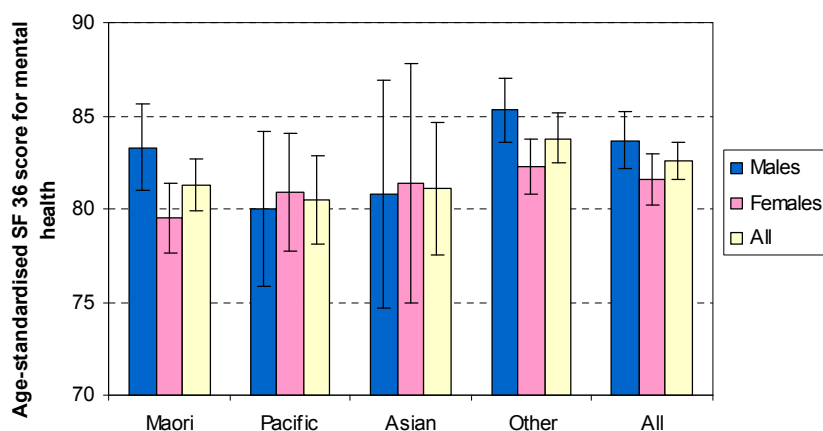
As shown in Figure 4.3.5 there was no significant difference in overall SF-36 mental health score between CMDHB (82.6) and the rest of the Auckland region or nationally (82.9). Males had better mental health scores than females in the Auckland region and nationally (84.4 males, 81.6 females), and this difference was statistically significant in Auckland, Waitemata, and nationally. Females in Northland had the lowest mental health score (80.6).

Figure 4.3.5: Age-standardised SF-36 score for mental health by sex and DHB (NZHS 2002/03)



In CM mental health scores were similar for Maori (81.3), Asian (81.1), and Pacific (80.5), and mental health score was highest for Other (83.8) (Figure 4.3.6). Once again, the score for Pacific health contrasts with the prevalence of Pacific reporting good general health. For Maori, Other, and overall, male mental health scores were higher for males than females, while for Pacific and Asian, females had similar but slightly higher scores than males.

Figure 4.3.6: Age-standardised SF-36 score for mental health in CMDHB by sex and ethnicity (NZHS 2002/03)



Self care

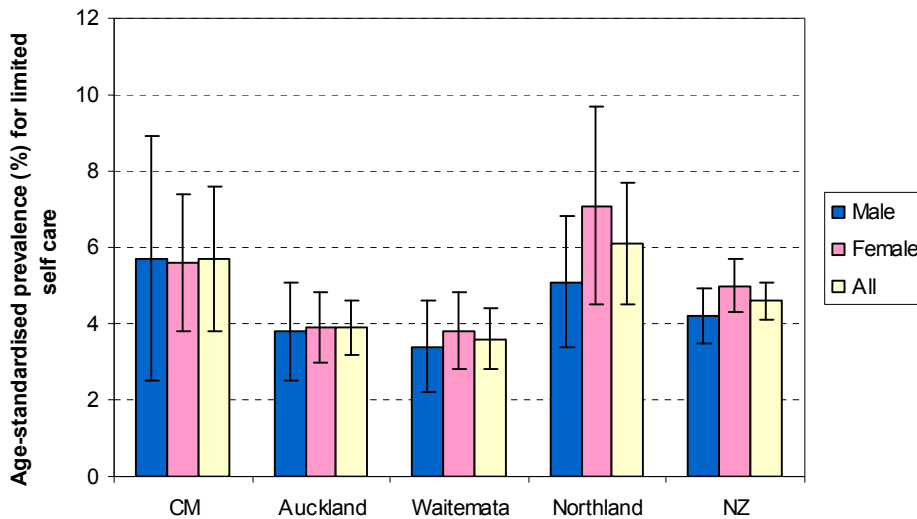
Self care here is defined as where a person is at least a little limited in any of the following: using the toilet, bathing, dressing, grooming, eating, or being able to stay alone for a few days. Table 4.3.4 shows the age-standardised prevalence (%) for limited self care by gender, ethnic group, and DHB. All ethnic groups in CM had a higher score for limited self care than the rest of the Auckland region and nationally.

Table 4.3.4: Age-standardised prevalence for limited self care by gender, ethnic group and DHB (NZHS 2002/03)

DHB	Limited self care: age-standardised prevalence (% adult population)								
	Males			Females			Males & females		
	Maori	Non-Maori	All	Maori	Non-Maori	All	Maori	Non-Maori	All
CM	6.7	5.5	5.7	8.3	5.2	5.6	7.6	5.4	5.7
Auckland	No data	3.9	3.8	6.5	3.7	3.9	4.7	3.8	3.9
Waitemata	No data	3.5	3.4	7.8	3.5	3.8	5.1	3.5	3.6
Northland	6.5	4.7	5.1	8.2	6.7	7.1	7.4	5.7	6.1
NZ	4.4	4.2	4.2	8.5	4.5	5.0	6.6	4.4	4.6

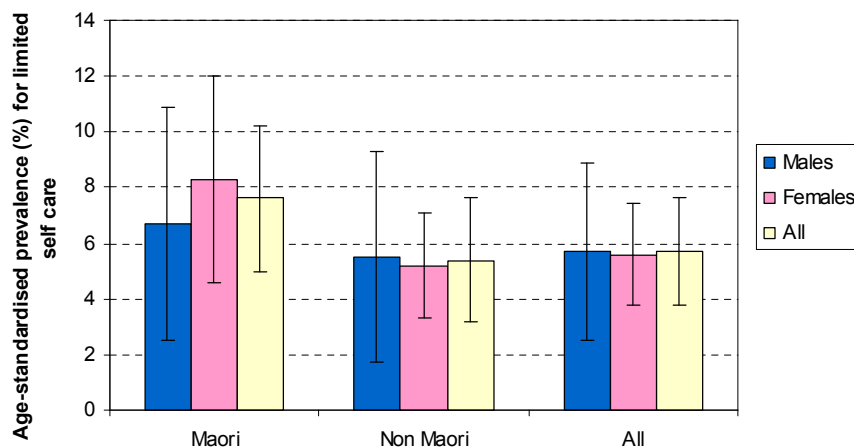
Figure 4.3.7 shows that the prevalence of limited self care was higher in CM (5.7%) than the rest of the Auckland region or nationally (4.6%), although results were not statistically significant. The highest prevalence of limited self care was in Northland (6.1%), and the lowest in Waitemata (3.6%), with the difference between the two reaching statistical significance. Women generally had a higher prevalence of limited self care than men, except in CM where the prevalence for men and women was similar.

Figure 4.3.7: Age-standardised prevalence (%) for limited self care by sex and DHB (NZHS 2002/03)



Within CM Maori (7.6%) had a greater prevalence of limited self care than non-Maori (5.4%) although the difference was not statistically significant (Figure 4.3.8). Maori women had a higher prevalence with limited self care than men while the opposite was true for non-Maori.

Figure 4.3.8: Age-standardised prevalence (%) for limited self care in CMDHB by sex and ethnicity (NZHS 2002/03)



4.4. Prevalence of chronic disease

This section presents results obtained from the 2002/03 New Zealand Health Survey (NZHS) on the prevalence of the following chronic diseases: heart disease, stroke, diabetes, asthma, chronic obstructive respiratory disease, arthritis, spinal disorders, osteoporosis, and cancer. At the CMDHB level estimates from the NZHS were not precise enough to quote separate Pacific or Asian figures – rather the results are presented as Maori/non-Maori.

Heart disease

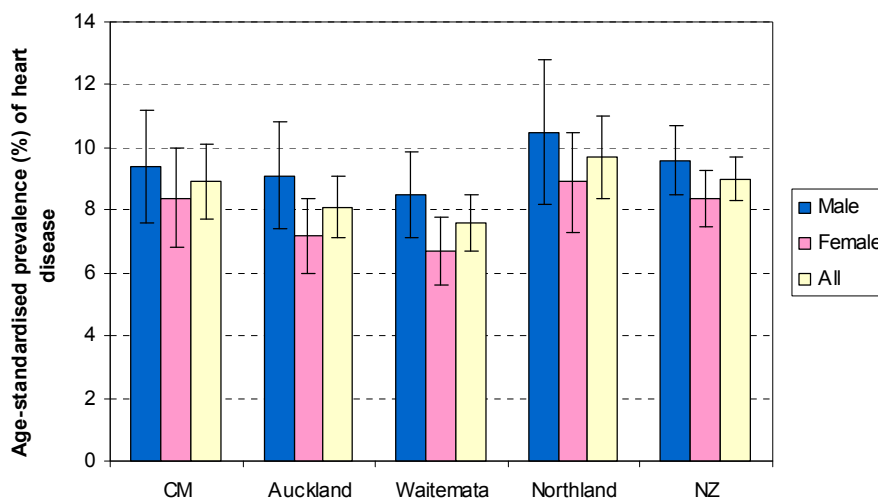
These results show the age-standardised prevalence for heart disease which was defined in the NZHS as ‘doctor diagnosed heart disease (heart attack, angina, abnormal heart rhythm) or heart failure’. Table 4.4.1 shows the age-standardised prevalence (%) of heart disease by gender, ethnic group, and DHB. Both ethnic groups in CM had a higher prevalence for heart disease than the rest of the Auckland region, with Maori prevalence also being greater than the national prevalence.

Table 4.4.1: Age-standardised prevalence for heart disease by gender, ethnic group and DHB (NZHS 2002/03)

DHB	Heart disease: age-standardised prevalence (% adult population)								
	Males			Females			Males & females		
	Maori	Non-Maori	All	Maori	Non-Maori	All	Maori	Non-Maori	All
CM	15.0	8.6	9.4	12.6	7.7	8.4	13.7	8.2	8.9
Auckland	12.6	8.9	9.1	5.4	7.3	7.2	8.7	8.1	8.1
Waitemata	12.5	8.2	8.5	5.3	6.8	6.7	8.7	7.5	7.6
Northland	15.0	9.3	10.5	12.7	7.7	8.9	13.7	8.5	9.7
NZ	13.6	9.2	9.6	10.6	8.2	8.4	12.0	8.6	9.0

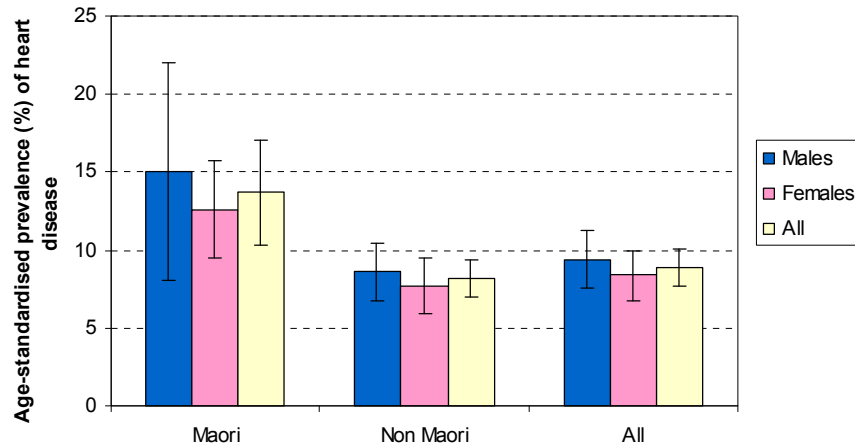
Counties Manukau had a higher prevalence of heart disease (8.9%) than Auckland (8.1%) or Waitemata (7.6%), and was very similar to the national prevalence (9.0%), although differences were not statistically significant (Figure 4.4.1). Northland had a higher prevalence of heart disease (9.7%) than the Auckland region or nationally. In all DHBs shown, and nationally, males had higher prevalence of heart disease than females although differences were not statistically significant.

Figure 4.4.1: Age-standardised prevalence (%) of heart disease by sex and DHB (NZHS 2002/03)



Within CM, Maori had a significantly higher prevalence of heart disease (13.7%) than non-Maori (8.2%), and males (9.4%) had a higher prevalence than women (8.4%) (Figure 4.4.2).

Figure 4.4.2: Age-standardised prevalence (%) of heart disease in CMDHB by sex and ethnicity (NZHS 2002/03)



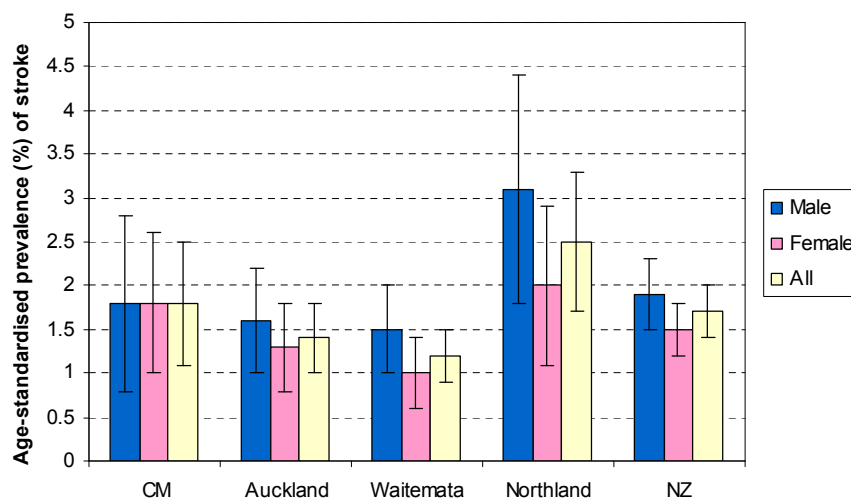
Stroke

Cerebrovascular disease or stroke was defined in the NZHS as ‘doctor diagnosed stroke (excludes transient ischaemic attack)’. Table 4.4.2 shows the age-standardised prevalence (%) of stroke by gender, ethnic group, and DHB. Maori females in CM and Northland had a higher prevalence of stroke than Maori males, or nationally.

Table 4.4.2: Prevalence of stroke by gender, ethnic group and DHB (NZHS 2002/03)

DHB	Stroke: age-standardised prevalence (% adult population)								
	Males			Females			Males & females		
	Maori	Non-Maori	All	Maori	Non-Maori	All	Maori	Non-Maori	All
CM	2.4	1.8	1.8	3.8	1.5	1.8	3.2	1.6	1.8
Auckland	No data	1.7	1.6	No data	1.2	1.3	No data	1.4	1.4
Waitemata	No data	1.5	1.5	No data	1.0	1.0	No data	1.2	1.2
Northland	2.6	3.2	3.1	4.0	1.4	2.0	3.4	2.3	2.5
NZ	2.5	1.8	1.9	2.8	1.4	1.5	2.7	1.6	1.7

Figure 4.4.3: Age-standardised prevalence (%) of stroke by sex and DHB (NZHS 2002/03)

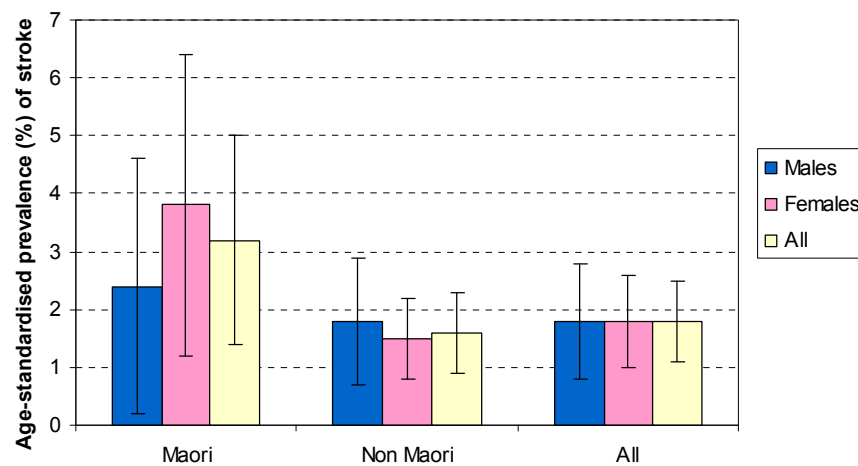


Prevalence of stroke was higher in CM (1.8%) than Auckland (1.4%) or Waitemata (1.2%), and was similar to national prevalence (1.7%), while prevalence in Northland (2.5%) was

highest (Figure 4.4.3). Prevalence was higher in males than females in all areas shown, except CM where prevalence was the same.

Within CM, Maori had the highest prevalence of stroke (3.2%), with Maori women having a higher prevalence (3.8%) than Maori men (2.4%) (Figure 4.4.4). Amongst non-Maori, males had a higher prevalence of stroke (1.8%) than females (1.5%).

Figure 4.4.4: Age-standardised prevalence (%) of stroke in CMDHB by sex and ethnicity (NZHS 2002/03)



Diabetes

Diabetes was defined in the NZHS as 'doctor diagnosed diabetes (other than during pregnancy)'. Table 4.4.3 shows the age-standardised prevalence (%) of diabetes by gender, ethnic group, and DHB. Maori and non-Maori in CM had a higher prevalence of diabetes than the same groups in Waitemata, Auckland, Northland, or nationally.

Table 4.4.3: Prevalence of diabetes by gender, ethnic group and DHB (NZHS 2002/03)

DHB	Diabetes: age-standardised prevalence (% adult population)								
	Males			Females			Males & females		
	Maori	Non-Maori	All	Maori	Non-Maori	All	Maori	Non-Maori	All
CM	10.6	3.5	4.4	8.5	5.0	5.5	9.5	4.3	5.0
Auckland	7.0	4.6	4.7	4.8	3.5	3.6	5.8	4.0	4.2
Waitemata	6.5	3.7	3.9	3.8	2.5	2.6	5.1	3.1	3.2
Northland	10.1	3.9	5.2	8.9	2.8	4.3	9.4	3.3	4.7
NZ	9.5	4.0	4.5	6.7	3.3	3.7	8.0	3.6	4.1

Prevalence of diabetes was higher in CM (5.0%) than Auckland (4.2%), Waitemata (3.2%), Northland (4.7%), and nationally (4.1%) (Figure 4.4.5). Prevalence was higher in females (5.5%) than males (4.4%) in CM, but for the rest of the Auckland region, Northland, and nationally, prevalence was highest in males.

Within CM Maori (9.5%) had a significantly higher prevalence of diabetes than non-Maori (4.3%), with Maori males having the highest prevalence (10.6%) (Figure 4.4.6). The CM Maori figures are higher than the NZ equivalent (not shown). By way of comparison the overall NZ Pacific figures from the NZHS were similar at around 8% for males and 12% for females (age-standardised, from MoH: *A Portrait of Health: Key results of the 2002/03 NZ Health Survey* Aug 2004, p44). These high survey prevalence rates for Maori and Pacific fit with the figures being obtained with the CMDHB Chronic Care Management Programme, and are the target of the CMDHB Lets Beat Diabetes campaign.

Figure 4.4.5: Age-standardised prevalence (%) of diabetes by sex and DHB (NZHS 2002/03)

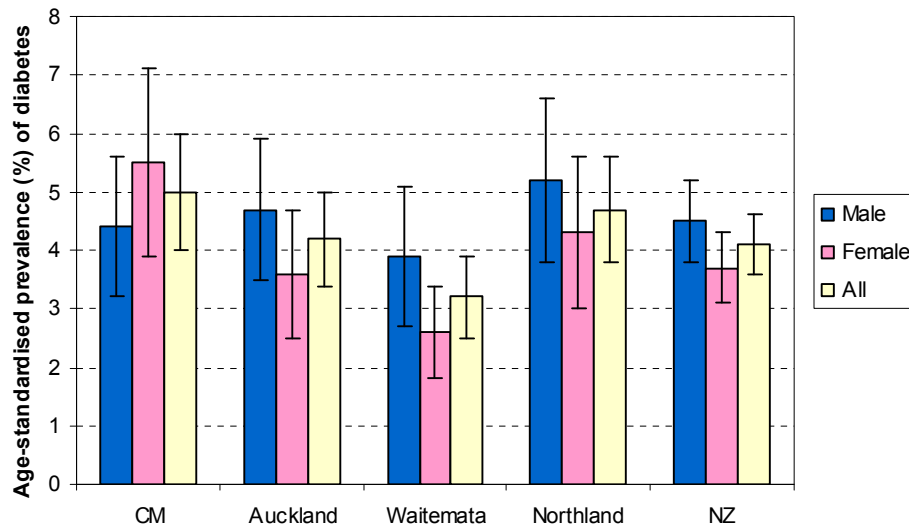
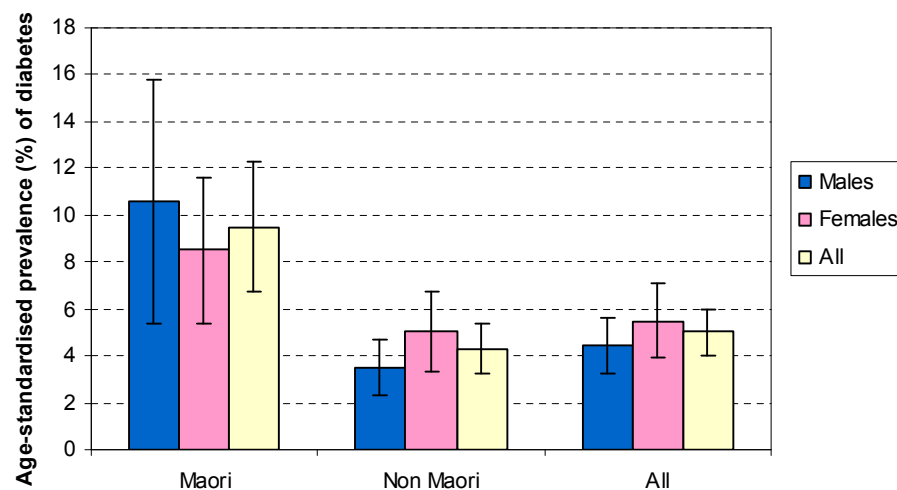


Figure 4.4.6: Age-standardised prevalence (%) of diabetes in CMDHB by sex and ethnicity (NZHS 2002/03)



Counties Manukau is experiencing a growing epidemic of Type 2 diabetes with more than 12,000 diagnosed with diabetes and almost double this number undiagnosed. Figure 4.4.7 (solid lines) shows that the number of people with diabetes is expected to more than double over the next 20 years due solely to population growth – driven by the ethnic, youthful, and generally low socioeconomic makeup of the CM population⁶. The dotted lines show the expected growth rate in diabetes if the prevalence of obesity continues to increase as it has been, ie increasing the prevalence of diabetes. Figure 4.4.8 maps the relationship between rate of diabetes in the CM population and geographic census area unit, with the darkest areas having the highest rate of diabetes in addition to being the most deprived areas³.

⁶ Lindsay A. Diabetes rates by census area unit in Counties Manukau, 2003.

Figure 4.4.7: Prevalence of diagnosed type 2 diabetes for 25 - 89 year-olds by ethnicity (bold lines - assume no change in risk factor prevalence; dotted lines – assume an increasing prevalence of obesity)

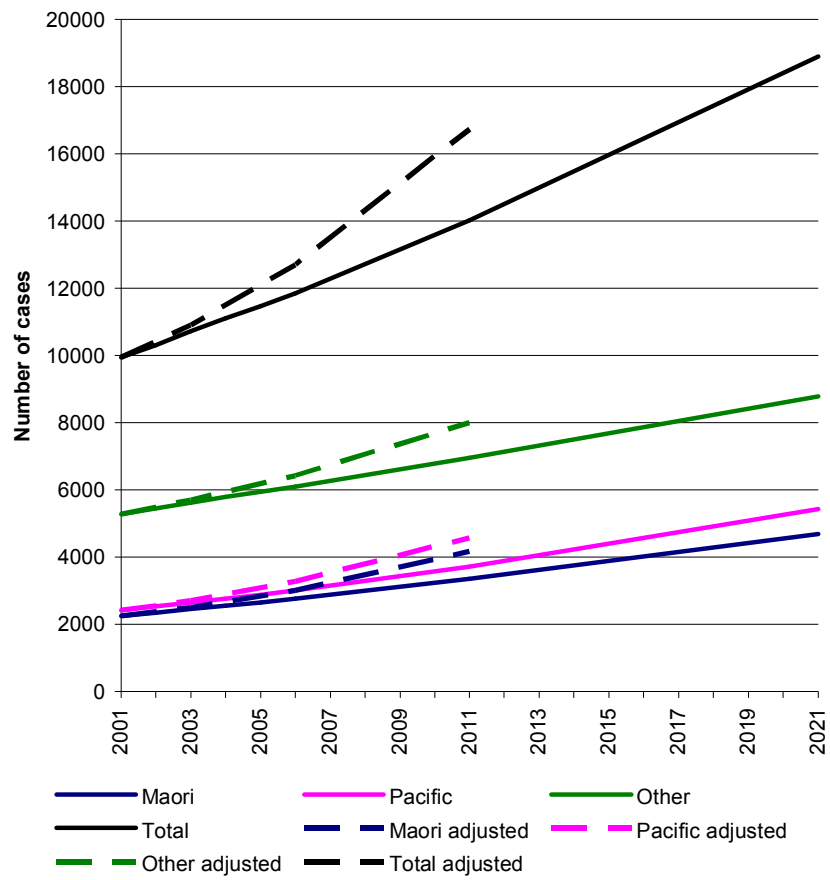
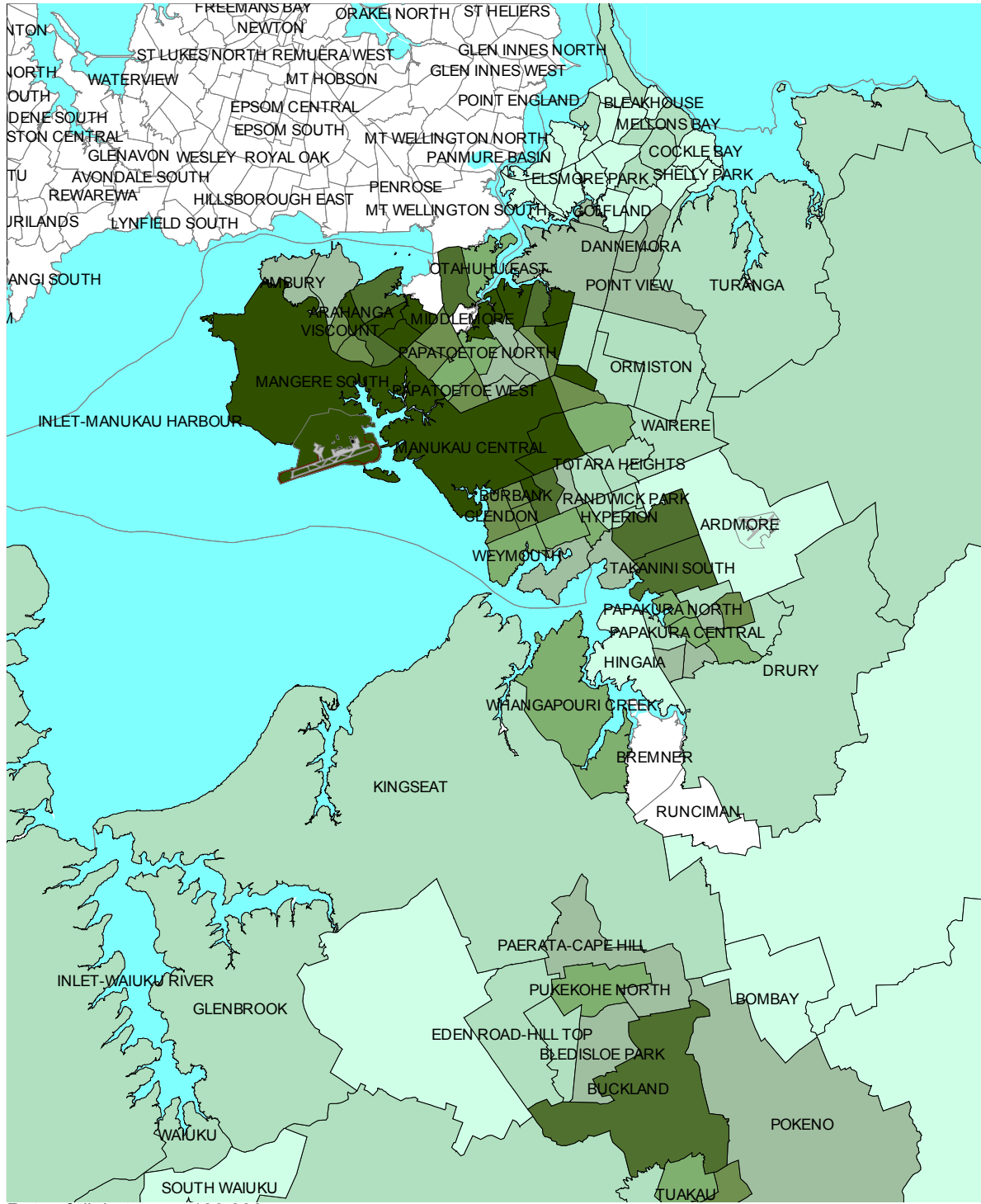


Figure 4.4.8: Rate of diabetes per 100,000 population in Counties Manukau DHB by Census Area Unit (CAU)



Rate of diabetes per 100,000

- 2,400 to 6,550
- 2,000 to 2,400
- 1,600 to 2,000
- 1,200 to 1,600
- 800 to 1,200
- 400 to 800
- 1 to 400

Asthma

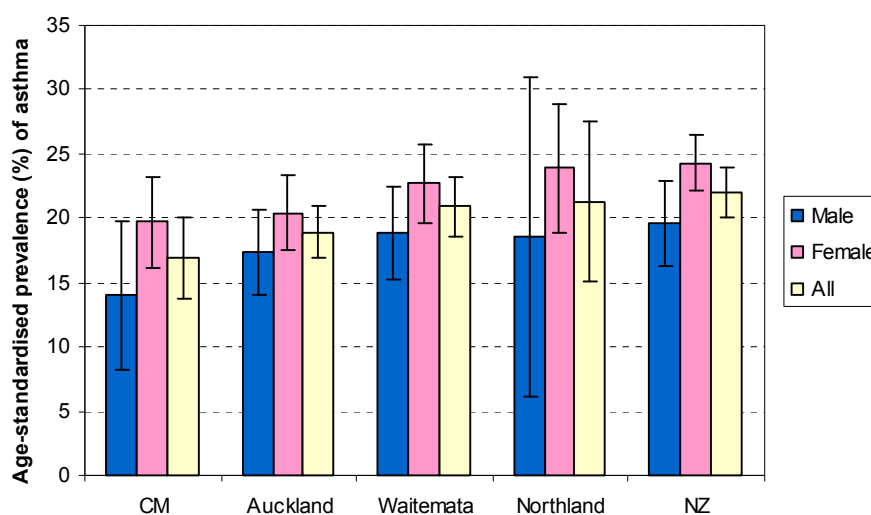
Asthma was defined in the NZHS as 'doctor diagnosed asthma', and was restricted to people aged 15-44 years. Table 4.4.4 shows the age-standardised prevalence (%) of asthma by gender, ethnic group, and DHB. Non-Maori in the Auckland region and nationally had a lower prevalence of asthma than Maori. Non-Maori in CM also had the lowest prevalence of asthma for males and females.

Table 4.4.4: Age-standardised prevalence of asthma by gender, ethnic group and DHB (NZHS 2002/03)

DHB	Asthma: age-standardised prevalence (% 15-44 year olds)								
	Males			Females			Males & females		
	Maori	Non-Maori	All	Maori	Non-Maori	All	Maori	Non-Maori	All
CM	19.4	13.2	14.0	29.1	18.2	19.7	24.8	15.8	16.9
Auckland	29.1	16.6	17.4	24.5	20.1	20.4	26.6	18.4	18.9
Waitemata	25.5	18.4	18.9	26.9	22.3	22.7	26.3	20.4	20.9
Northland	19.3	18.4	18.6	28.7	22.4	23.9	24.4	20.4	21.3
NZ	21.6	19.3	19.6	27.2	23.9	24.3	24.6	21.7	22.0

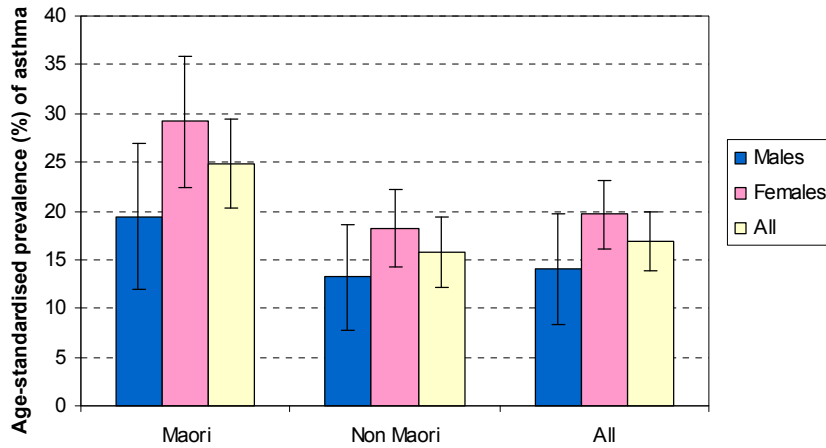
The prevalence of asthma in CM (16.9%) was lower than for the rest of the Auckland region and Northland (21.3%), and significantly lower than nationally (22.0%) (Figure 4.4.9). Prevalence was higher for females (24.3%) than males (19.6%) in all regions and nationally although differences were not statistically significant.

Figure 4.4.9: Age-standardised prevalence of asthma as % of all 15-44 year olds, by sex and DHB (NZHS 2002/03)



Within CM Maori had a significantly higher prevalence of asthma (24.8%) than non-Maori (15.8%), with females in both ethnic groups having a higher prevalence than males (Figure 4.4.10).

Figure 4.4.10: Age-standardised prevalence of asthma (% 15-44 olds) in CMDHB by sex and ethnicity (NZHS 2002/03)



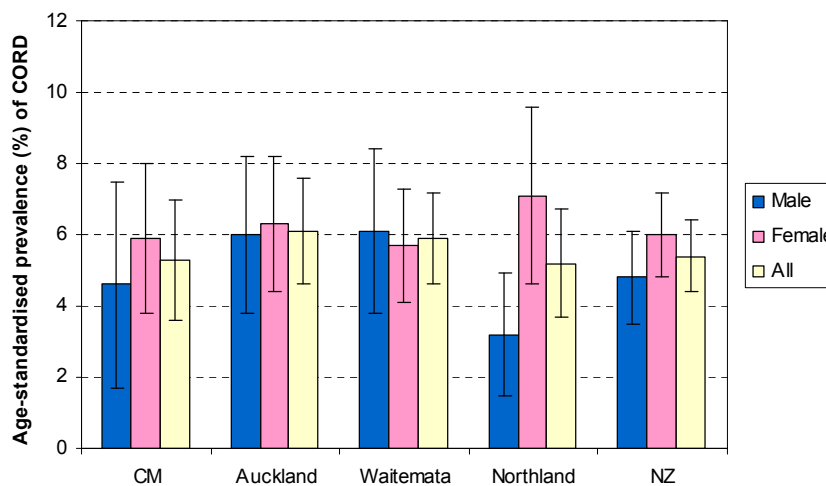
Chronic Obstructive Pulmonary Disease (COPD)

COPD was defined in the NZHS as 'doctor diagnosed chronic bronchitis or emphysema (people aged 45+ years, excludes asthma)'. Table 4.4.5 shows the age-standardised prevalence (%) of COPD by gender, ethnic group, and DHB. Maori in CM had a lower prevalence of COPD than the rest of Auckland, Northland or nationally, for both males and females.

Table 4.4.5: Prevalence of COPD by gender, ethnic group and DHB (NZHS 2002/03)

DHB	COPD: age-standardised prevalence (% of population aged 45+)								
	Males			Females			Males & females		
	Maori	Non-Maori	All	Maori	Non-Maori	All	Maori	Non-Maori	All
CM	3.1	4.8	4.6	5.1	6.0	5.9	4.2	5.4	5.3
Auckland	No data	5.4	6.0	11.2	5.9	6.3	13.3	5.6	6.1
Waitemata	No data	5.1	6.1	6.7	5.7	5.7	12.2	5.4	5.9
Northland	3.8	3.0	3.2	5.5	7.6	7.1	4.7	5.4	5.2
NZ	6.0	4.6	4.8	6.3	6.0	6.0	6.2	5.3	5.4

Figure 4.4.11: Age-standardised prevalence of COPD by sex and DHB (NZHS 2002/03)

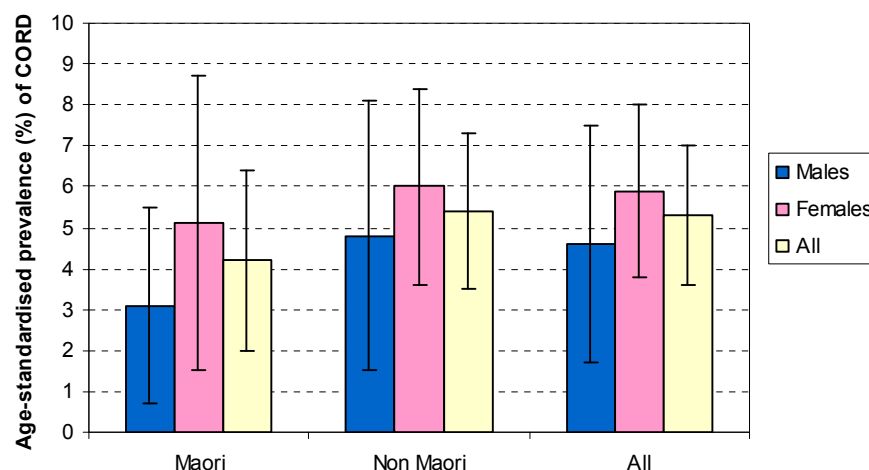


The prevalence of COPD in CM (5.3%) was lower than the rest of the Auckland region but similar to Northland (5.2%) and national (5.4%) prevalence (Figure 4.4.11). Prevalence was generally higher for females than males, although prevalence was similar for males and

females in Auckland and Waitemata. The greatest difference in prevalence was found between males (3.2%) and females (7.1%) in Northland.

Within CM non-Maori had a higher prevalence of CORD (5.4%) than Maori (4.2%), and females (5.9%) had a higher prevalence than males (4.8%) (Figure 4.4.11). This apparent low rate in Maori is surprising given the much higher smoking rates in Maori in CMDHB (see p21), the higher death rate (included in respiratory disease, p42) and the four-fold higher rate of hospital admission with CORD (not shown). There may be a communication/comprehension issue –either with the survey instrument itself or in Maori persons interactions with the health care system.

Figure 4.4.12: Age-standardised prevalence (%) of CORD in CMDHB by sex and ethnicity (NZHS 2002/03)



Arthritis

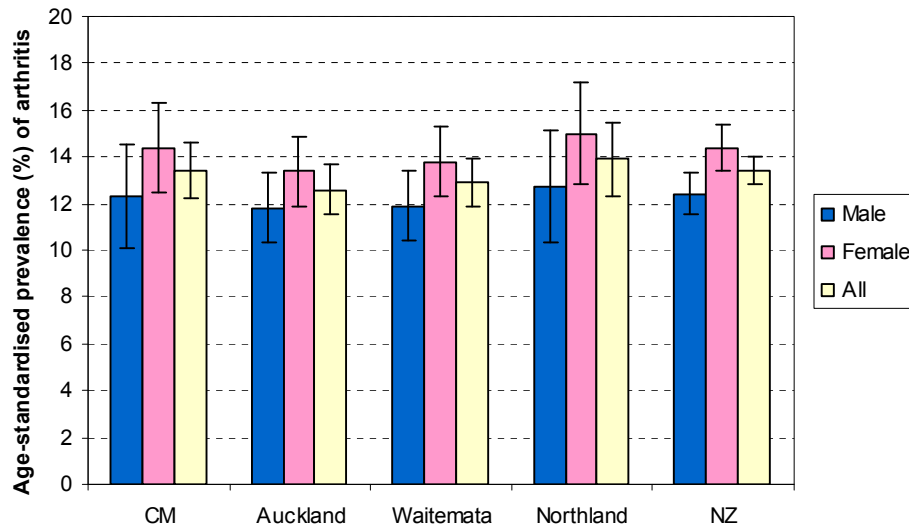
Arthritis was defined in the NZHS as ‘doctor diagnosed arthritis’. Table 4.4.6 shows the age-standardised prevalence (%) of arthritis by gender, ethnic group, and DHB.

Table 4.4.6: Age-standardised prevalence of arthritis according to gender, ethnic group and DHB (NZHS 2002/03)

DHB	Arthritis: age-standardised prevalence (% adult population)								
	Males			Females			Males & females		
	Maori	Non-Maori	All	Maori	Non-Maori	All	Maori	Non-Maori	All
CM	17.7	11.5	12.3	14.7	14.3	14.4	16.0	13.0	13.4
Auckland	12.4	11.8	11.8	12.7	13.4	13.4	12.6	12.6	12.6
Waitemata	12.7	11.8	11.9	12.5	13.9	13.8	12.6	12.9	12.9
Northland	17.5	11.4	12.7	14.5	15.1	15.0	15.9	13.3	13.9
NZ	15.6	12.0	12.4	13.8	14.5	14.4	14.6	13.3	13.4

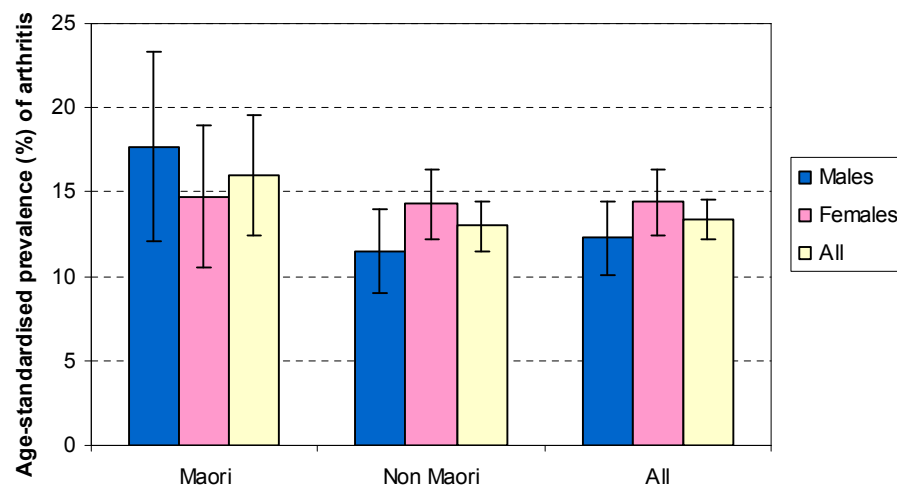
There were no significant differences in arthritis prevalence between CM (13.4%) and the rest of the Auckland region, Northland (13.9%) and nationally (13.4%) (Figure 4.4.13). Females had a greater prevalence of arthritis than males, and this difference was statistically significant at the national level (12.4% for males, 14.4% for females).

Figure 4.4.13: Age-standardised prevalence (%) of arthritis by sex and DHB (NZHS 2002/03)



Within CM, the prevalence of arthritis was higher in Maori (16.0%) than non-Maori (13.0%), and higher in Maori men (17.7%) than Maori women (14.7%), while the opposite was true for non-Maori, possibly due to the high prevalence of gout in Maori males (Figure 4.4.14). In fact Maori men from CM and Northland had the highest prevalence of arthritis in the Auckland region, Northland, or nationally.

Figure 4.4.14: Age-standardised prevalence (%) of arthritis in CMDHB by sex and ethnicity (NZHS 2002/03)



Spinal disorders

Spinal disorders were defined in the NZHS as ‘doctor diagnosed disorder of the neck or back’. Table 4.4.7 shows the age-standardised prevalence (%) of spinal disorders by gender, ethnic group, and DHB. Maori males in CM had a lower prevalence of spinal disorders than Maori males in the rest of the Auckland region.

Table 4.4.7: Age-standardised prevalence of spinal disorders by gender, ethnic group and DHB (NZHS 2002/03)

DHB	Spinal disorders: age-standardised prevalence (% adult population)								
	Males			Females			Males & females		
	Maori	Non-Maori	All	Maori	Non-Maori	All	Maori	Non-Maori	All
CM	22.4	23.7	23.5	18.2	21.0	20.6	20.1	22.3	22.0
Auckland	31.6	22.7	23.3	16.7	22.5	22.2	23.5	22.6	22.7
Waitemata	34.3	24.8	25.5	20.3	24.2	23.9	27.0	24.5	24.7
Northland	20.4	26.9	25.5	18.2	24.8	23.2	19.2	25.8	24.3
NZ	22.8	25.0	24.7	18.7	23.3	22.8	20.6	24.1	23.7

The prevalence of spinal disorders was lower in CM (22.0%) than the rest of the Auckland region, Northland (24.3%), or nationally (23.7%) although differences were not statistically significant (Figure 4.4.15).

Figure 4.4.15: Age-standardised prevalence (%) of spinal disorders by sex and DHB (NZHS 2002/03)

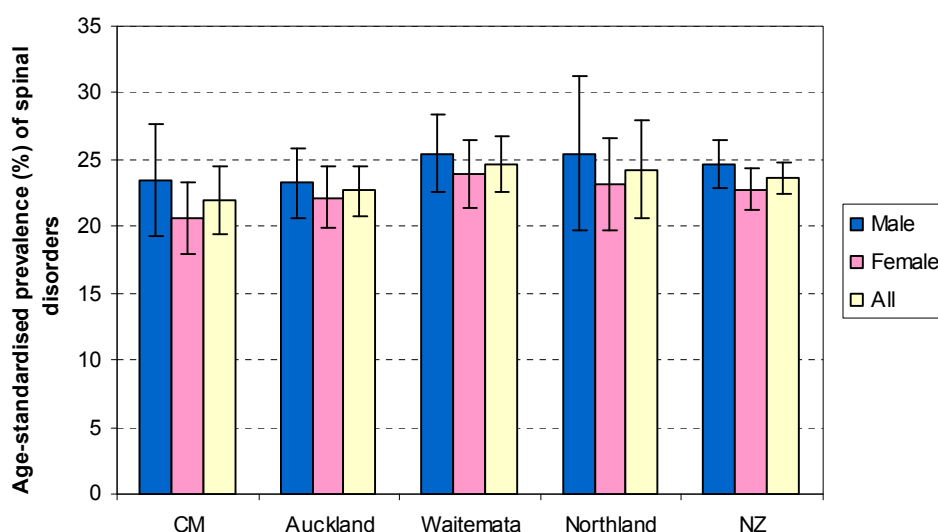
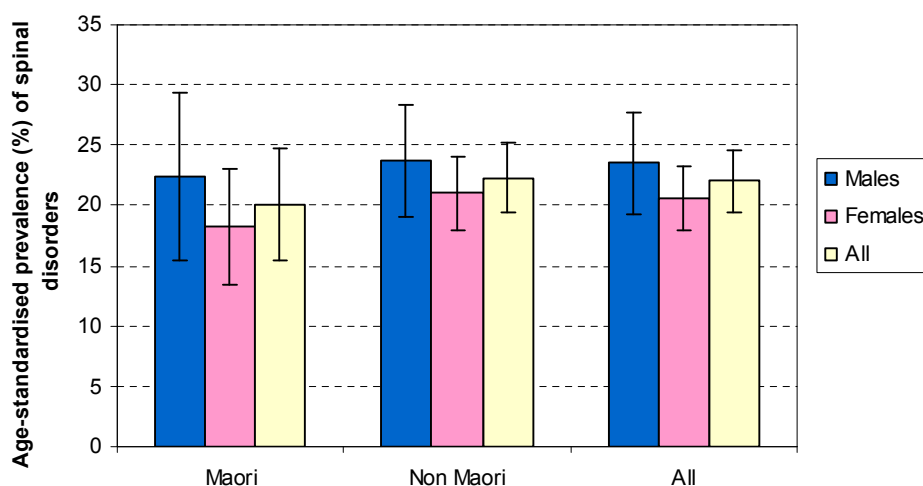


Figure 4.4.16: Age-standardised prevalence (%) of spinal disorders in CMDHB by sex and ethnicity (NZHS 2002/03)



Within CM Maori (20.1%) had a lower prevalence of spinal disorders than non-Maori (22.3%), and both Maori and non-Maori females had a lower prevalence than males (Figure 4.4.16).

Osteoporosis

Osteoporosis was defined in the NZHS as ‘doctor diagnosed osteoporosis’. Osteoporosis is a weakening of the bone resulting from a loss of bone density. Table 4.4.8 shows the age-standardised prevalence (%) of osteoporosis by gender, ethnic group, and DHB. Non-Maori females in all regions had a higher prevalence of osteoporosis (3.0%) than Maori females (1.6%), or males of either ethnic groupings (0.7% prevalence nationally for all males).

Table 4.4.8: Prevalence of osteoporosis by gender, ethnicity and DHB (NZHS 2002/03)

DHB	Osteoporosis: age-standardised prevalence (% adult population)								
	Males			Females			Males & females		
	Maori	Non-Maori	All	Maori	Non-Maori	All	Maori	Non-Maori	All
CM	0.4	0.9	0.8	2.2	3.7	3.5	1.4	2.3	2.2
Auckland	No data	0.6	0.6	No data	3.0	2.9	No data	1.9	1.8
Waitemata	No data	0.6	0.6	No data	3.3	3.1	No data	2.0	1.9
Northland	0.5	0.9	0.8	2.2	4.1	3.7	1.5	2.5	2.3
NZ	0.4	0.8	0.7	1.6	3.0	2.9	1.1	1.9	1.8

The prevalence of osteoporosis was slightly higher in CM (2.2%) and Northland (2.3%) than in Auckland (1.8%), Waitemata (1.9%), or nationally (1.8%), although these differences were not statistically significant (Figure 4.4.17). Females had a significantly higher prevalence of osteoporosis than males in the northern region and nationally (females 2.9%, males 0.7%).

Figure 4.4.17: Age-standardised prevalence of osteoporosis by sex and DHB

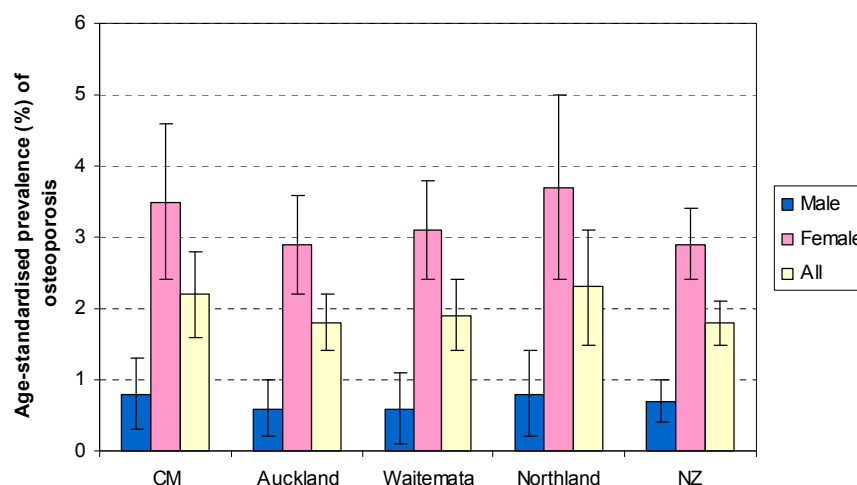
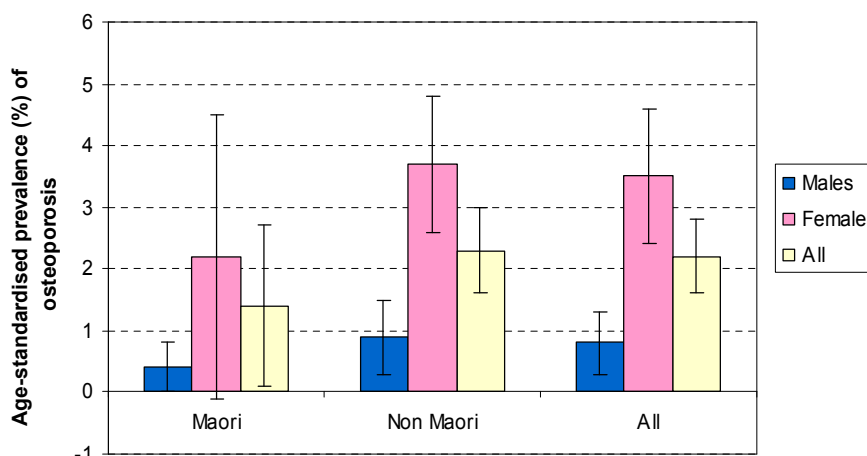


Figure 4.4.18: Prevalence of osteoporosis in CMDHB by sex and ethnicity



Within CM non-Maori had the highest prevalence of osteoporosis (2.3%), with non-Maori females having a significantly higher prevalence (3.7%) than non-Maori males (0.9%) (Figure 4.4.18).

Cancer

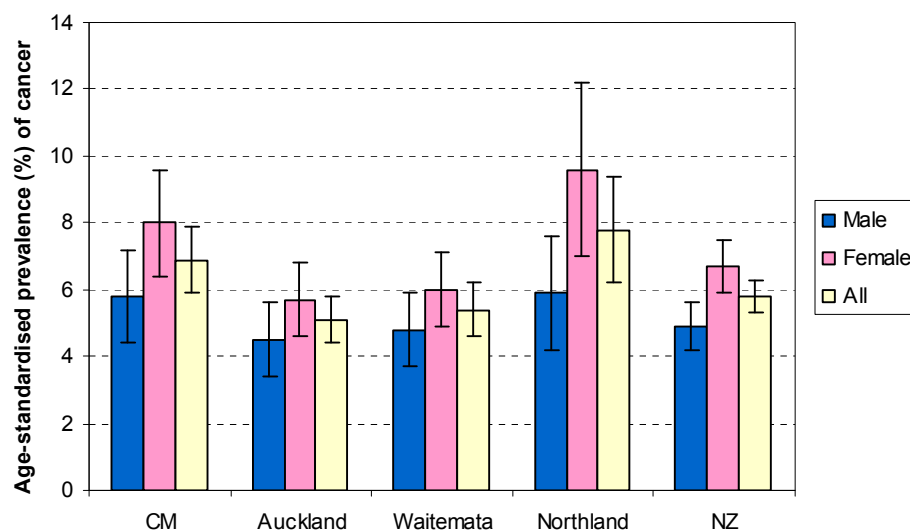
For the purposes of the NZHS cancer was defined as ever having a 'doctor diagnosed cancer' (excludes non-melanoma skin cancer). Table 4.4.9 shows the age-standardised prevalence (%) of cancer by gender, ethnic group, and DHB. Cancer prevalence was highest in Maori females in CM (9.9%), Northland (10.5%), and nationally (8.1%).

Table 4.4.9: Age-standardised prevalence of ever having cancer by gender, ethnic group and DHB (NZHS 2002/03)

DHB	Cancer: age-standardised prevalence (% adult population)								
	Males			Females			Males & females		
	Maori	Non-Maori	All	Maori	Non-Maori	All	Maori	Non-Maori	All
CM	4.3	6.0	5.8	9.9	7.7	8.0	7.4	6.9	6.9
Auckland	No data	4.6	4.5	No data	5.6	5.7	5.0	5.1	5.1
Waitemata	No data	4.9	4.8	No data	6.1	6.0	4.1	5.5	5.4
Northland	3.5	6.6	5.9	10.5	9.2	9.6	7.3	7.9	7.8
NZ	3.1	5.1	4.9	8.1	6.5	6.7	5.8	5.8	5.8

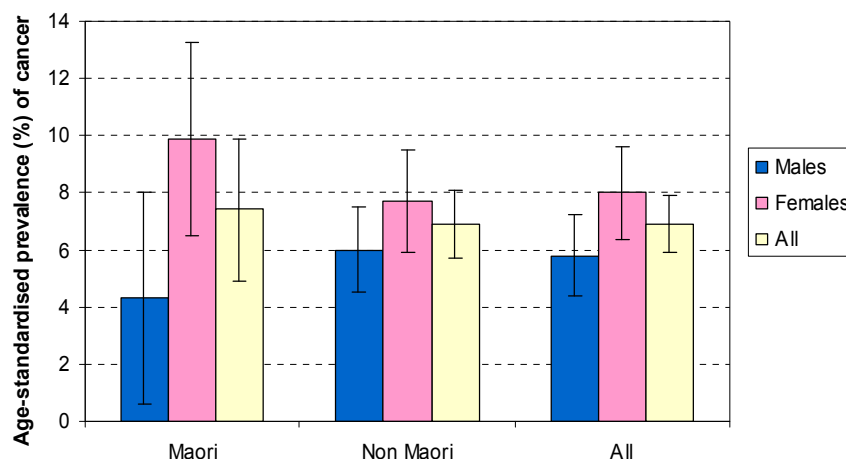
The prevalence of ever having cancer was higher in CM (6.9%) than in Auckland (5.1%), Waitemata (5.4%), or nationally (5.8%), with the prevalence in Auckland being significantly lower than in CM or Northland (Figure 4.4.19). Prevalence was greater for females, and this difference was statistically significant at a national level (females 6.7%, males 4.9%).

Figure 4.4.19: Age-standardised prevalence (%) of ever having cancer by sex and DHB (NZHS 2002/03)



Within CM Maori had a higher prevalence of ever having cancer (7.4%) than non-Maori (6.9%), with Maori women having the highest (9.9%), and Maori men the lowest (4.3%), prevalence, although differences were not significant (Figure 4.4.20).

Figure 4.4.20: Age-standardised prevalence (%) of cancer in CMDHB by sex and ethnicity (NZHS 2002/03)



Overall

Table 4.4.10 presents a summary of chronic disease prevalence in descending order of prevalence in CMDHB from the NZHS 2002/03. Counties Manukau DHB residents had a higher prevalence of heart disease, cancer, diabetes and stroke than the rest of Auckland and nationally except for stroke. In addition, the prevalence of these diseases in Maori was greater than in non-Maori in CM, the other DHBs shown, and nationally; the only exception being cancer which was more prevalent in Maori in CM, but less prevalent in Maori elsewhere. Stroke was equally prevalent in males and females in CM, but more prevalent in males in the other regions shown, possibly because diabetes was more prevalent in females than males in CM but more prevalent in males than females elsewhere, although the reason for the increased prevalence of female diabetes in CM is unclear.

There was also a small increase in prevalence of osteoporosis in CM compared with the rest of Auckland and nationally, with all regions showing the highest prevalence in females and in non-Maori compared to males and Maori, respectively. In addition, the prevalence of arthritis was slightly higher in CM than the rest of Auckland, and higher in females and Maori compared to males and Maori, respectively, although the highest prevalence was in Maori males in CM.

The lowest prevalence of spinal disorders, asthma, and CORD occurred in CM compared with the rest of Auckland, Northland, and nationally, although CORD prevalence was similar for CM and Northland.

Table 4.4.10: Summary of disease prevalence in descending order, by DHB, 2002/03

Disease	Age-standardised disease prevalence (% adult population)				
	CM	Auckland	Waitemata	Northland	NZ
Spinal disorders	22.0	22.7	24.7	24.3	23.7
Asthma (15-44 yrs)	16.9	18.9	20.9	21.3	22.0
Arthritis	13.4	12.6	12.9	13.9	13.4
Heart disease	8.9	8.1	7.6	9.7	9.0
Cancer	6.9	5.1	5.4	7.8	5.8
CORD (45+ yrs)	5.3	6.1	5.9	5.2	5.4
Diabetes	5.0	4.2	3.2	4.7	4.1
Osteoporosis	2.2	1.8	1.9	2.3	1.8
Stroke	1.8	1.4	1.2	2.5	1.7

4.5. Chronic disease incidence

Incidence rate data was obtained from Middlemore hospital discharge data for specific chronic conditions classified by ICD-9 and ICD-10 codes (ICD-9-CM was replaced by ICD-10-AM in 2000 - for specific codes see Section 12, p179). Only the first admission for each chronic disease of interest for that CM resident was counted.

Disease prevalence measures the total number of people with a disease at any given time. In contrast, disease incidence rate is defined as the number of new disease cases in a population of interest (in this case the CM population) over a given time interval (annual data in this case). Therefore, a disease with high incidence occurs frequently while a disease with low incidence occurs rarely, and it is useful to see how disease occurrence changes over time for specific diseases.

This section presents annual incidence rate data from 1996 to 2004 for the following chronic diseases for adults aged 15+ years in CM and nationally (Table 4.5.1, Figure 4.5.1). In addition for each disease the average annual incidence rate, obtained from averaging the incidence rate for 2002, 2003, and 2004, is presented for Maori, Pacific and Others in CM and nationally (Table 4.5.2, Figure 4.5.2):

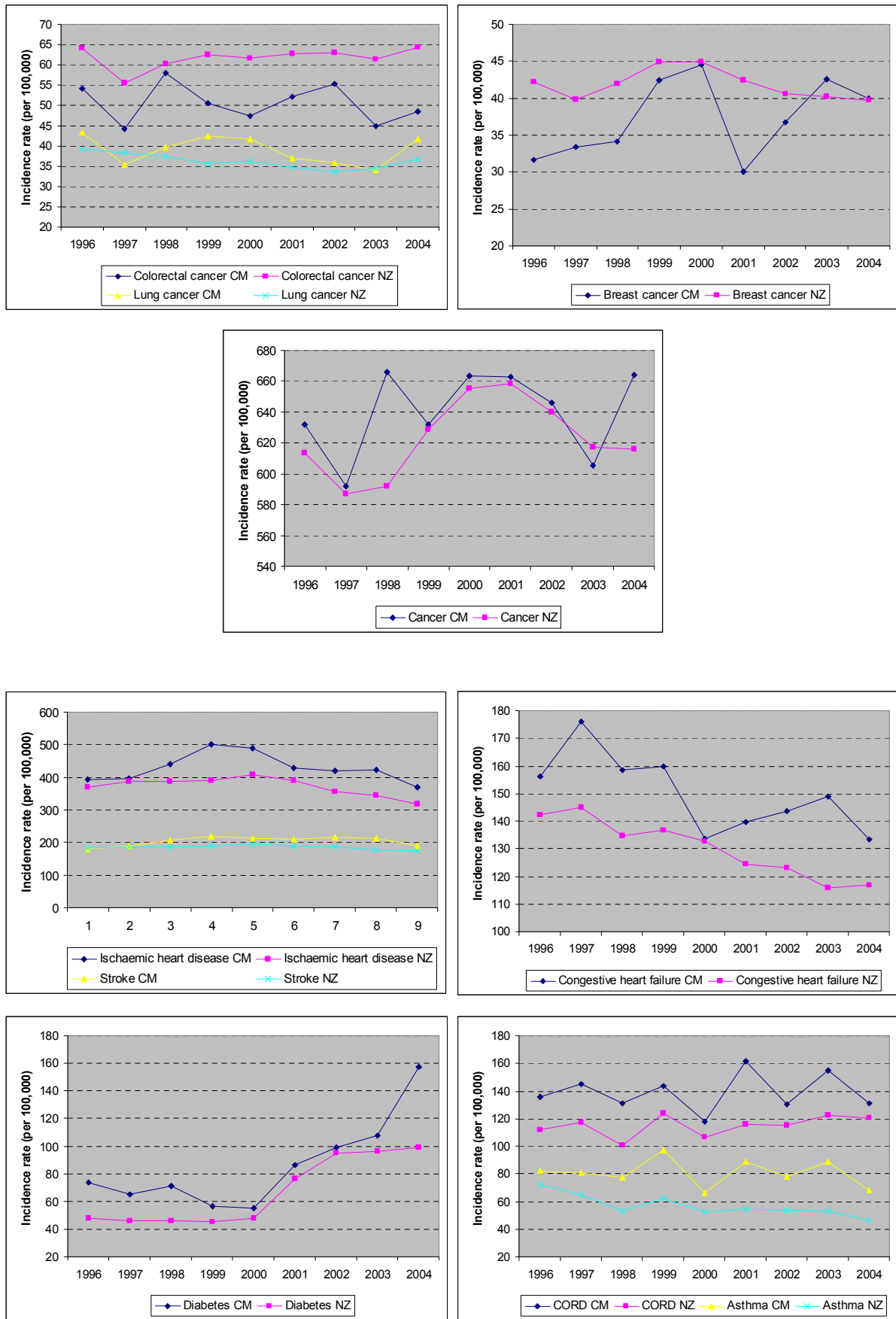
- Ischaemic heart disease
- Stroke
- Diabetes
- Cancer (all, colorectal, lung, and breast)
- Congestive heart failure
- Chronic obstructive respiratory disease (CORD) (NB all 15+)
- Asthma (NB all 15+).

Table 4.5.1: Adult incidence rate (per 100,000 per year) of chronic diseases in CM and nationally, 1996-2004

Disease	Region	1996	1997	1998	1999	2000	2001	2002	2003	2004
Ischaemic heart disease	CM	392	397	439	501	488	429	420	423	370
	NZ	369	386	388	390	407	389	356	344	319
Stroke	CM	179	189	206	217	213	211	215	213	190
	NZ	184	187	187	188	195	190	187	177	175
Diabetes	CM	74	65	71	57	56	86	99	108	158
	NZ	48	46	46	45	48	76	95	96	99
All cancer	CM	632	592	666	632	663	663	646	605	664
	NZ	613	587	592	629	655	659	640	617	616
Colorectal cancer	CM	54	44	58	51	47	52	55	45	49
	NZ	64	56	60	63	62	63	63	61	64
Lung cancer	CM	43	35	40	42	42	37	36	34	42
	NZ	39	38	38	36	36	35	34	35	37
Breast cancer	CM	32	33	34	42	45	30	37	43	40
	NZ	42	40	42	45	45	42	41	40	40
Congestive heart failure	CM	156	176	159	160	134	140	144	149	134
	NZ	142	145	135	137	133	124	123	116	117
Chronic obstructive pulmonary disease	CM	136	145	131	144	118	161	130	155	131
	NZ	112	117	100	124	107	116	115	123	121
Asthma	CM	82	81	78	97	66	89	79	89	69
	NZ	72	65	53	62	53	54	54	53	47

4. Health outcomes

Figure 4.5.1: Adult incidence rate (per 100,000 per year) of chronic diseases in CM and nationally for 1996-2004



As shown in Figure 4.5.1 there has been a lower incidence of colorectal cancer and breast cancer in CM than nationally, with little overall change from 1996 to 2004. For every other condition there has been a consistently higher annual incidence in CM than nationally; that is for congestive heart failure, ischaemic heart disease, stroke, diabetes, lung cancer, all cancers combined, CORD and asthma. There is a trend in CM towards declining rates of congestive heart failure and rising rates of diabetes with time.

The average annual incidence rate for 2002-2004 by ethnic group is shown in Table 4.5.2 and Figure 4.5.2 for CM and nationally. Maori in CM and nationally had the highest incidence rates for lung cancer, breast cancer, ischaemic heart disease, and congestive heart failure. Rates were higher in CM Maori than NZ Maori for lung cancer, ischaemic heart disease, CORD and congestive heart failure.

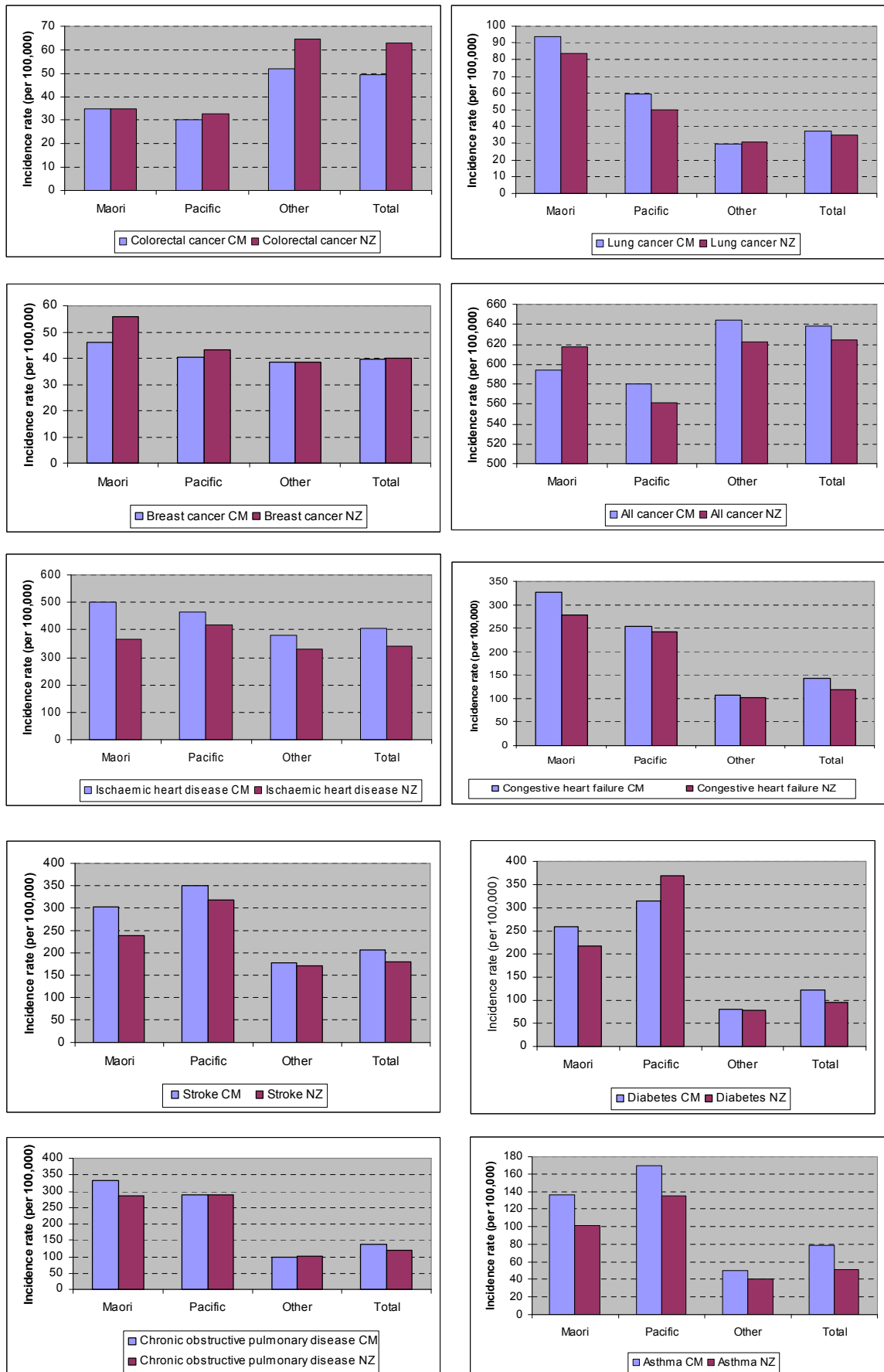
Table 4.5.2: Average adult incidence rate (per 100,000 per year) for chronic diseases in CM and nationally for 2002-2004

Disease	Region	Maori	Pacific	Other	Total
Ischaemic heart disease	CM	501	466	379	404
	NZ	364	419	331	340
Stroke	CM	303	350	177	206
	NZ	238	318	170	179
Diabetes	CM	260	315	80	121
	NZ	218	370	79	97
All cancer	CM	593	580	644	638
	NZ	617	561	623	624
Colorectal cancer	CM	35	30	52	50
	NZ	35	33	65	63
Lung cancer	CM	94	59	30	37
	NZ	84	50	31	35
Breast cancer	CM	46	41	39	40
	NZ	56	43	38	40
Congestive heart failure	CM	327	255	107	142
	NZ	278	243	102	119
Chronic obstructive pulmonary disease	CM	333	289	99	139
	NZ	285	290	102	120
Asthma	CM	136	169	50	79
	NZ	101	135	41	51

Pacific people in CM and nationally had the highest incidence rates for stroke, diabetes, CORD, and asthma. Rates were higher in CM Pacific than NZ Pacific for stroke, CORD and asthma. Nationally, Pacific also had the highest rate of ischaemic heart disease although Maori had the highest rate in CM. Pacific in CM and nationally had the lowest rate for all cancers combined, colorectal cancer, and breast cancer.

The Other ethnic group in CM and nationally had the highest incidence rates for all cancer and colorectal cancer. Rates were lower in CM Others than NZ Others for colorectal cancer. Others in CM and nationally had the lowest incidence rate for lung cancer, ischaemic heart disease, congestive heart failure, stroke, diabetes, CORD, and asthma.

Figure 4.5.2: Adult chronic disease incidence rates by ethnicity, CM and NZ (2002-04)



4.6. Disability

This section presents data on disability in CM compared with Auckland, Waitemata, and NZ. The latest national disability survey (The New Zealand Disability Survey 2001) did not present data to the DHB level. Therefore, local disability data was obtained from WINZ (Work and Income NZ) via the Ministry of Social Development. Data is only available for those people with disability who are were also on a benefit (as at April 2005) and is therefore an underestimate of those with disability. Another limitation is that the client's area of residence was determined by the geographical location of the WINZ office where the benefit application was made although clients do not necessarily have to reside in the area concerned.

The proportion of disabled children was determined from the number of children who received a Child Disability Allowance (CDA). This is an allowance that is paid to the principal caregiver of a dependent child who has a serious disability, and is paid to reimburse the extra care needed by a child who has a sensory, psychiatric, or intellectual disability. The caregiver may also be eligible to receive a Disability Allowance to meet any additional costs the child has because of their disability.

Disability Allowance provides assistance to people who have ongoing, additional costs because of a disability. To be eligible a person must have a disability which is likely to last at least six months with ongoing additional costs arising from that disability. In addition, some will be ineligible for the Disability Allowance if their income/earnings are considered too great. Therefore, the Disability Allowance is only a crude measure of the overall rate of disability.

The major causes of disability in the working population were determined from those who received a Sickness or Invalids' Benefit. All clients who apply for these benefits are required to be assessed by a registered medical practitioner and their diagnosis is recorded as an 'incapacity group' by WINZ. This was used to provide an indication of the causes of disability.

The Sickness Benefit provides income support for people who can not work due to sickness, injury, disability, or pregnancy. The Invalids' Benefit provides assistance to people who are permanently and severely restricted in their capacity for work because of a sickness, injury, or disability. Therefore, the Sickness Benefit is a crude measure of temporary disability while the Invalids' Benefit is a crude measure of more permanent disability. In addition, as for the Disability Allowance, some will be ineligible for the Sickness or Invalids' Benefit if their income/earnings are considered too great. This may result in more single disabled people being on these benefits than people who are married or have partners who are receiving an income.

Data is presented below for the following⁷.

- The number and rate of disability in children by DHB and by Territorial Authority (TA) in CM (determined from CDA data).
- The number and rate of disability in the overall population by DHB and by TA in CM (determined from Disability Allowance data).
- Numbers and rates for the main causes of disability in the working population (determined from Sickness and Invalids' Benefit data).

[Childhood Disability Allowance data](#)

As shown in Table 4.6.1 and Figure 4.6.1, the number of children per 100,000 population receiving the CDA was less in the Auckland region than for all NZ. For children aged 0-4 years, this rate was highest for children in CM and Waitemata, while for children aged 5-14 years, the rate was lowest in CM and highest in Waitemata. In addition, the rate for children on CDA was higher in 5-14 year-olds than 0-4 year-olds and higher in males than females.

⁷ Note that these rates were not age-standardised. Rates for the CDA data were determined using the total number of 0-4 year-olds and 5-14 year-olds for each DHB as the denominator. The denominators for Disability Allowance rates and Sickness/Invalids' Benefit rates were determined using the total population and the working population (18-64 year-olds), respectively.

4. Health outcomes

The difference between males and females was greater in the 5-14 year-olds than the 0-4 year-olds.

Table 4.6.1: Number and rate (per 100,000) of children receiving Child Disability Allowance by DHB (WINZ, April 2005)

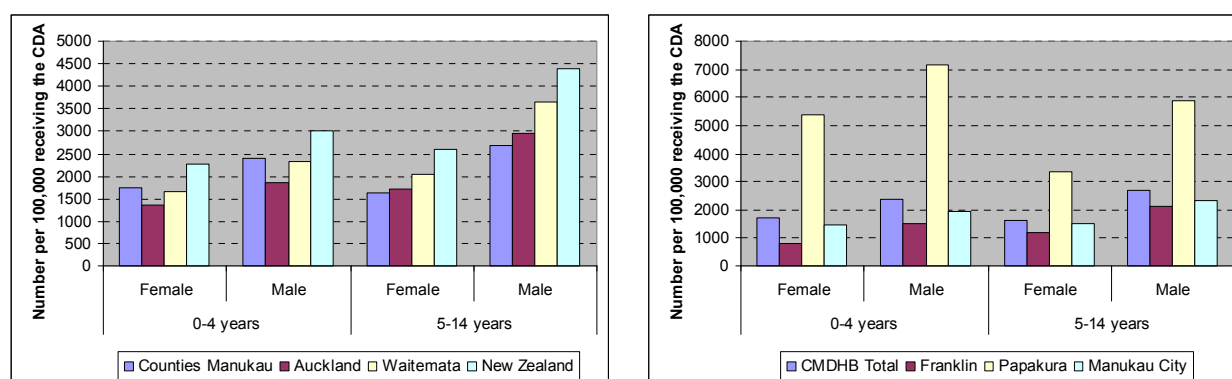
DHB	0-4 year-olds				5-14 year-olds			
	Number		Rate		Number		Rate	
	Female	Male	Female	Male	Female	Male	Female	Male
CM	303	435	1,743	2,396	589	1,021	1,637	2,680
Auckland	183	262	1,354	1,853	432	788	1,721	2,950
Waitemata	277	404	1,659	2,329	722	1,339	2,045	3,634
NZ	3,139	4,353	2,265	3,001	7,548	13,597	2,589	4,400

As shown in Table 4.6.2 and Figure 4.6.1, within CM the highest number of children per 100,000 receiving the CDA were in Papakura (or at least, attended a WINZ office in Papakura) and the lowest proportion were in Franklin. In addition, a greater proportion of 0-4 year-old children in Papakura were receiving the CDA compared with 5-14 year-olds, while the converse was true for Manukau and Franklin.

Table 4.6.2: Number and rate of children receiving Child Disability Allowance by TLA in CMDHB (WINZ, April 2005)

TLA	0-4 year-olds				5-14 year-olds			
	Number		Rate		Number		Rate	
	Female	Male	Female	Male	Female	Male	Female	Male
CM DHB total	303	435	1,743	2,396	589	1,021	1,637	2,680
Franklin	16	32	776	1,486	56	106	1,176	2,102
Papakura	90	125	5,398	7,178	121	224	3,358	5,872
Manukau City	197	278	1,443	1,949	412	691	1,492	2,363

Figure 4.6.1: Number of children per 100,000 on CDA by DHB, and by TLA in CMDHB



[Disability Allowance data](#)

Table 4.6.3: Number and rate (per 100,000) of people receiving Disability Allowance by DHB (WINZ, April 2005)

DHB	Number	Rate
Counties Manukau	17,329	4,024
Auckland	14,307	3,344
Waitemata	20,176	4,095
NZ	228,760	5,580

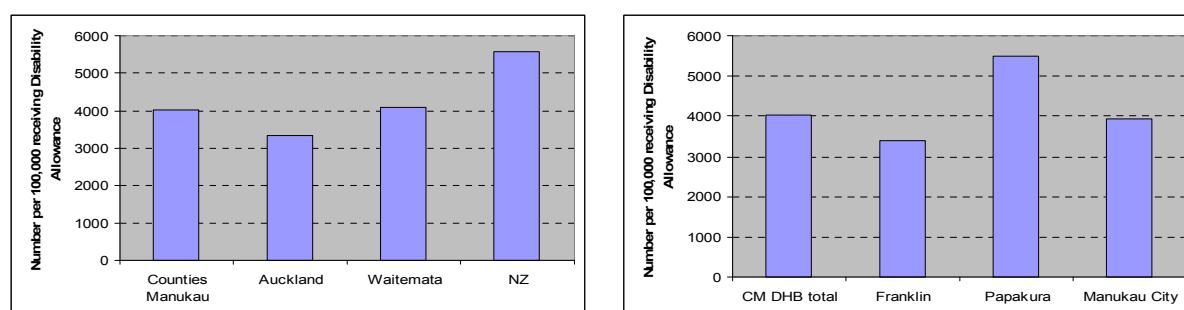
As shown in Table 4.6.3 and Figure 4.6.2, the number of people per 100,000 population receiving the Disability Allowance (DA) was less in the Auckland region than for all NZ. Counties Manukau and Waitemata had the highest number of people per 100,000 on DA, while Auckland DHB had the lowest proportion in the region.

Table 4.6.4: Number and rate of people receiving Disability Allowance by TA in CMDHB

TLA	Number	Rate
CM DHB total	17,329	4,024
Franklin	1,948	3,393
Papakura	2,430	5,479
Manukau City	12,951	3,938

As shown in Table 4.6.4 and Figure 4.6.2, the greatest proportion of people on DA were in Papakura while the smallest proportion were in Franklin, similar to the trend for CDA.

Figure 4.6.2: People/100,000 on Disability Allowance by DHB, and by TLA in CMDHB

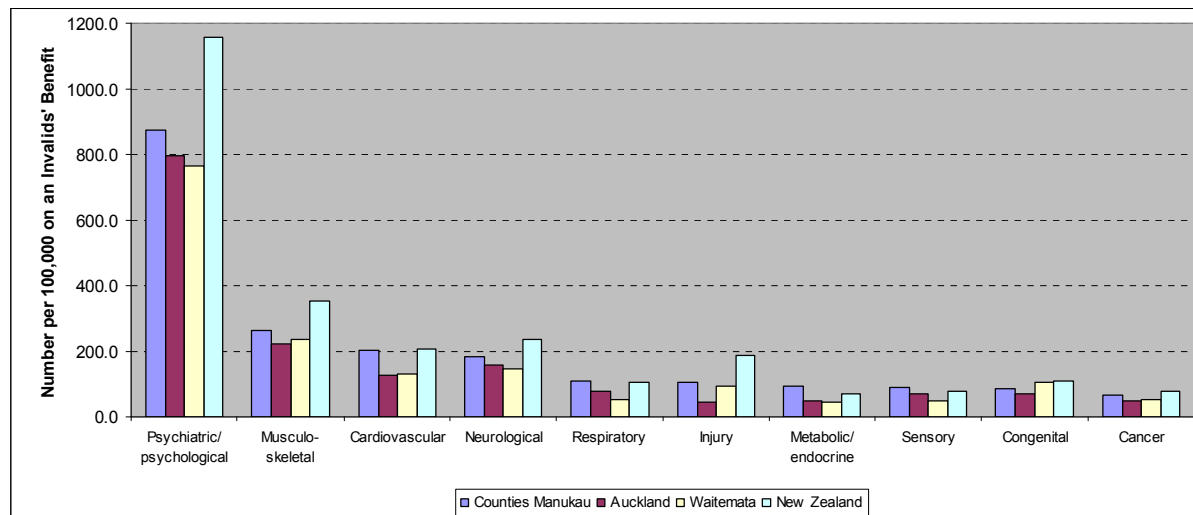


[Invalids' Benefit data](#)

Table 4.6.5: Number and rate of people on an Invalids' Benefit by category, by DHB

Category	Counties Manukau		Auckland		Waitemata		New Zealand	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Psychiatric/psychological	2,461	874.0	2,397	796.6	2,494	763.6	31,033	1,156.5
Musculo-skeletal	740	262.8	665	221.0	762	233.3	9,437	351.7
Cardiovascular	572	203.1	375	124.6	425	130.1	5,553	206.9
Neurological	516	183.3	480	159.5	472	144.5	6,275	233.9
Respiratory	304	108.0	231	76.8	167	51.1	2,862	106.7
Injury	292	103.7	129	42.9	310	94.9	5,040	187.8
Metabolic/endocrine	264	93.8	143	47.5	149	45.6	1,835	68.4
Sensory	251	89.1	207	68.8	160	49.0	2,114	78.8
Congenital	244	86.7	209	69.5	343	105.0	2,947	109.8
Cancer	179	63.6	147	48.9	177	54.2	2,088	77.8
Genito-urinary	110	39.1	76	25.3	74	22.7	883	32.9
Gastrointestinal	52	18.5	86	28.6	112	34.3	1,019	38.0
Substance abuse	34	12.1	123	40.9	75	23.0	1,099	41.0
Haematological	27	9.6	18	6.0	26	8.0	286	10.7
Infectious/ parasitic	25	8.9	63	20.9	33	10.1	442	16.5
Immunological	22	7.8	55	18.3	67	20.5	535	19.9
Dermatological	16	5.7	28	9.3	19	5.8	273	10.2
Other	6	1.4	18	4.2	3	0.6	313	7.6
Total	6,115	1,420.0	5,550	1,297.4	5,868	1,190.9	74,034	1,806.0

Figure 4.6.3: Number per 100,000 population on an Invalids' Benefit for the top ten categories of disability, by DHB (WINZ, April 2005)



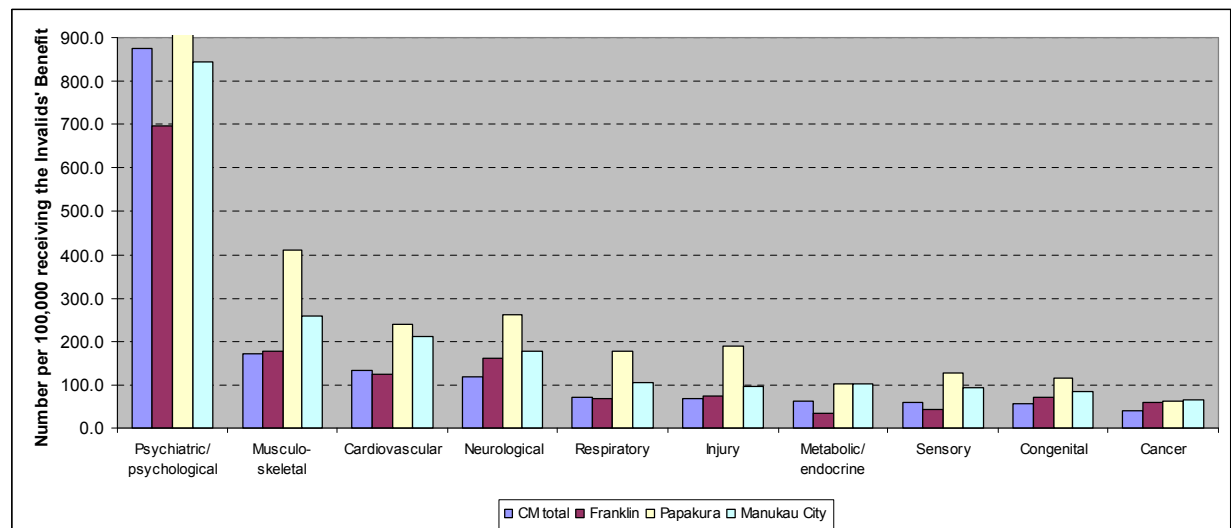
As shown in Table 4.6.5 and Figure 4.6.3, the greatest proportion of the population were receiving an Invalids' Benefit for psychiatric or psychological disabilities. For all categories of disability, the national proportions were higher than those for the three Auckland regional DHBs. Of the three Auckland DHBs, CM had the highest proportion on an Invalid's Benefit for all categories except congenital disorders.

Table 4.6.6: Number and rate of people on an Invalids' Benefit for all categories of disability, by TLA in CMDHB (WINZ, April 2005)

Category	CM total		Franklin		Papakura		Manukau City	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Psychiatric/psychological	2,461	874.0	260	696.5	385	1,329.8	1,816	843.5
Musculo-skeletal	740	171.8	66	176.8	119	411.0	555	257.8
Cardiovascular	572	132.8	47	125.9	69	238.3	456	211.8
Neurological	516	119.8	61	163.4	76	262.5	379	176.0
Respiratory	304	70.6	26	69.6	51	176.2	227	105.4
Injury	292	67.8	28	75.0	55	190.0	209	97.1
Metabolic/endocrine	264	61.3	13	34.8	30	103.6	221	102.7
Sensory	251	58.3	16	42.9	37	127.8	198	92.0
Congenital	244	56.7	27	72.3	33	114.0	184	85.5
Cancer	179	41.6	22	58.9	18	62.2	139	64.6
Total	6,115	2,171.8	598	1,601.9	912	3,150.1	4,605	2,139.0

Within CM Papakura's high rate of people on a Disability Benefit extended to a high rate on the Invalid's benefit. No one category stood out - Papakura had the highest proportion of people on an Invalids' Benefit for all categories of disability except for cancer, while Franklin generally had the smallest proportion (Table 4.6.6, Figure 4.6.4).

Figure 4.6.4: Number per 100,000 population on an Invalids' Benefit for the top ten categories of disability, by TLA in CMDHB (WINZ, April 2005)

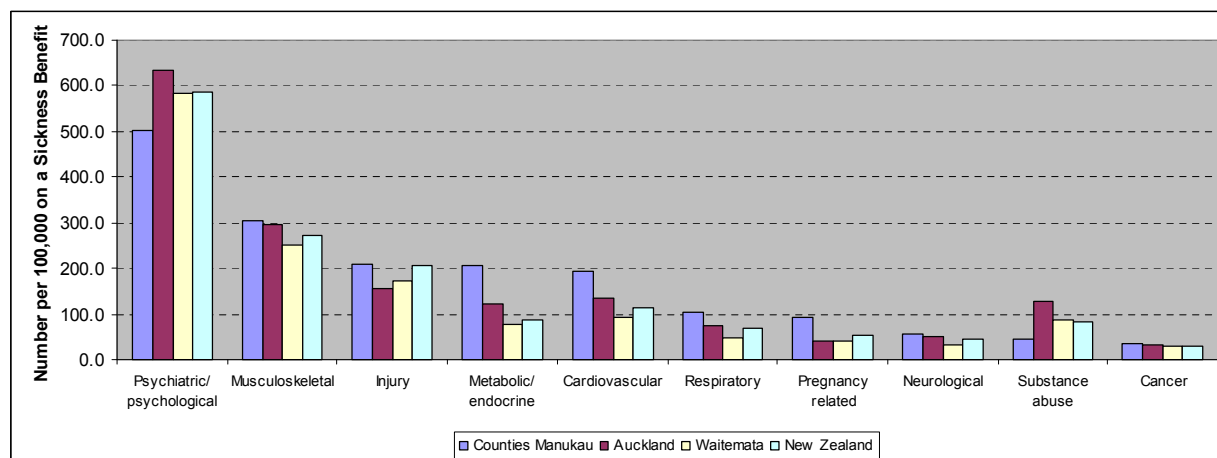


[Sickness Benefit data](#)

Table 4.6.7: Number and rate of people on an Sickness Benefit for all categories of disability, by DHB (WINZ, April 2005)

Category	Counties Manukau		Auckland		Waitemata		New Zealand	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Psychiatric/psychological	1,415	502.5	1,908	634.1	1,904	583.0	15,727	586.1
Musculoskeletal	861	305.8	887	294.8	822	251.7	7,334	273.3
Injury	591	209.9	467	155.2	570	174.5	5,568	207.5
Metabolic/endocrine	578	205.3	368	122.3	251	76.9	2,339	87.2
Cardiovascular	544	193.2	402	133.6	301	92.2	3,054	113.8
Respiratory	299	106.2	229	76.1	156	47.8	1,814	67.6
Pregnancy related	262	93.0	129	42.9	132	40.4	1,427	53.2
Neurological	158	56.1	152	50.5	109	33.4	1,202	44.8
Substance abuse	126	44.7	389	129.3	279	85.4	2,213	82.5
Cancer	101	35.9	99	32.9	99	30.3	807	30.1
Gastrointestinal	85	30.2	93	30.9	85	26.0	796	29.7
Sensory	69	24.5	61	20.3	52	15.9	450	16.8
Genito-urinary	62	22.0	54	17.9	56	17.1	455	17.0
Dermatological	28	9.9	34	11.3	22	6.7	283	10.5
Infectious/parasitic	23	8.2	41	13.6	31	9.5	299	11.1
Haematological	21	7.5	22	7.3	13	4.0	131	4.9
Immune	18	6.4	41	13.6	27	8.3	222	8.3
Congenital	8	2.8	14	4.7	15	4.6	114	4.2
Other	6	2.1	4	1.3	3	0.9	31	1.2
Total	5,255	1,866.3	5,394	1,792.6	4,917	1,505.5	44,266	1,649.7

Figure 4.6.5: Number on a Sickness Benefit for the top ten categories of disability, by DHB (WINZ, April 2005)



As shown in Table 4.6.7, overall CM had a higher number of people per 100,000 receiving a Sickness Benefit than Auckland, Waitemata or nationally. Counties Manukau residents also had the highest rate of sickness beneficiaries in the top ten disability categories, except for psychiatric/psychological disorders and substance abuse (Figure 4.6.5).

Table 4.6.8: Number and rate of people on a Sickness Benefit for all categories of disability, by TLA in CMDHB (WINZ, April 2005)

Category	CM total		Franklin		Papakura		Manukau City	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Psychiatric/psychological	1,415	502.5	137	367.0	212	732.3	1,066	495.2
Musculoskeletal	861	305.8	79	211.6	91	314.3	691	321.0
Injury	591	209.9	54	144.7	82	283.2	455	211.3
Metabolic/endocrine	578	205.3	23	61.6	35	120.9	520	241.5
Cardiovascular	544	193.2	34	91.1	45	155.4	465	216.0
Respiratory	299	106.2	20	53.6	35	120.9	244	113.3
Pregnancy related	262	93.0	26	69.6	37	127.8	199	92.4
Neurological	158	56.1	10	26.8	16	55.3	132	61.3
Substance abuse	126	44.7	13	34.8	28	96.7	85	39.5
Cancer	101	35.9	10	26.8	10	34.5	81	37.6
Total	5,255	1,866.3	426	1,141.2	619	2,138.0	4,210	1,955.5

Within CM, Papakura had the highest overall rate for people receiving a Sickness Benefit while Franklin had the lowest rate (Table 4.6.8). Papakura residents also had the highest rate of sickness beneficiaries in half of the top ten disability categories (most notably psychiatric/psychological, injury, and substance abuse), while Manukau City had the highest rate for the other half (especially metabolic/endocrine, and cardiovascular).

[Summary – Section 4 health outcomes](#)

A large amount of data has been presented in Section 4. As a general pattern:

- CMDHB residents tend to have worse health than their counterparts in Auckland and Waitemata
- CMDHB tends to be at or slightly below the New Zealand average
- Poor people do worse than the non-poor
- Males tend to do worse than females
- Maori tend to do worse than any other group
- Pacific tend to do worse than Asian and European/other groups
- Asians tend to do better than any other group

CMDHB

Life expectancy (LE) at birth in CMDHB is 1-2.5 years less than in the rest of Auckland. Of note is that CMDHB manages to match the NZ LE despite the socioeconomic and ethnic makeup of its population. This feat is also matched looking at specific causes of death – IHD, stroke, many cancers – perhaps under-appreciated here is that merely reaching the average is quite an achievement. Of the three Auckland DHBs, CM had the lowest prevalence of ‘good or better’ self-reported health status and had lower scores for physical and mental functioning than the rest of Auckland or nationally. CM had a higher prevalence of limited self-care than the rest of Auckland. For disease prevalence and incidence diabetes stands out – CM is higher than the rest of Auckland, NZ, and is continuing to rise.

Males

Males have a life expectancy about 5 years less than females – and even worse for Pacific men (8 years). For almost every disease males are more likely to have more of it, a higher mortality rate due to it, and to die earlier than females. Despite this, worryingly, males are more likely to consider themselves in ‘good or better’ health and to have good physical and mental health. This mismatch between perception and reality will make effecting change that much harder.

Maori

Maori have a life expectancy 9-10 years less than for the European/other group. This is reflected in the mortality rates - for almost every disease Maori are more likely to have a higher mortality rate. Diabetes, IHD, respiratory disease, cancer – especially lung cancer, and injury had the widest disparities. Maori are less likely to consider themselves in ‘good or better’ health or to rate themselves as having good physical and mental health. To be male and Maori is to be at highest risk.

Pacific

Pacific people have a life expectancy at birth 5-8 years less than for the European/other group (5 for females, 8 males). Mortality for diabetes, stroke, respiratory disease, and all causes were high. Pacific people had a higher rate of considering themselves to be in ‘good or better’ health than other ethnic groups. Being a male Pacifican puts one at high risk.