

Capital & Coast DHB
Health Needs Assessment
September 2008

Disclaimer: Care and diligence has been taken to ensure the information in this report is accurate and current. However, the authors and the Ministry of Health accept no liability for the accuracy of the information, its use, or reliance placed upon it. The data were deemed to be accurate at the time the report was produced but may be subject to slight changes over time as more information is received. It is advisable to check the current status of the information in this report before quoting the information presented here or using the figures in further analysis.

Contents

Executive Summary	xiii
Demographics and social determinants of health	xiii
Health status and service utilisation	xiv
Introduction	1
What is a health needs assessment?	1
Why are DHBs responsible for conducting health needs assessments?	1
Where do health needs assessments fit into the DHB planning cycle?	1
Purpose of this health needs assessment	2
Data notes	3
1 The Population	6
1.1 Geography	6
1.2 Transport	6
1.3 Economy	6
1.4 Industry	6
1.5 Population distribution	7
1.6 Projected population to 2026	10
2 Social Determinants of Health	12
Key points	12
2.1 The New Zealand Index of Deprivation 2006 (NZDep2006)	12
2.2 National Certificate of Educational Achievement (NCEA) Level 2 or higher	13
2.3 Low income	14
2.4 Home ownership	14
2.5 Unemployment	15
2.6 No access to telephone at home	16
2.7 No access to a motor vehicle at home	16
2.8 Household overcrowding	17
3 Health Behaviours and Risk Factors	18
Key points	18
3.1 Smoking – current daily smokers	19
3.2 Nutrition – 3+ vegetables and 2+ fruit a day	19
3.3 Physical activity	20
3.4 Hazardous drinking	20
3.5 Regular marijuana use	21
3.6 Overweight	22
3.7 Obesity	22
3.8 High blood cholesterol	23
3.9 High blood pressure	24
4 Health Status	25

Key points	25
4.1 Avoidable mortality	26
4.2 Leading causes of avoidable mortality	27
4.3 Avoidable hospitalisations	29
4.4 Leading causes of avoidable hospitalisations	29
4.5 Self-reported general health status in adults (15+ years)	31
4.6 Diabetes prevalence in adults (15+ years)	32
4.7 Diabetes hospitalisations	33
4.8 All adult cardiovascular disease mortality	34
4.9 All adult cardiovascular disease hospitalisations	35
4.10 Ischaemic heart disease prevalence	35
4.11 Ischaemic heart disease mortality	36
4.12 Hospitalisations due to ischaemic heart disease	36
4.13 Cerebrovascular disease (stroke) prevalence	37
4.14 Cerebrovascular disease (stroke) mortality	37
4.15 Hospitalisations due cerebrovascular disease (stroke)	38
4.16 All cancer mortality	38
4.17 All hospitalisations due to cancer	39
4.18 Registrations of people with lung cancer	39
4.19 Lung cancer mortality	40
4.20 Hospitalisations due to lung cancer	40
4.21 Registrations of women with breast cancer	41
4.22 Mortality in women due to breast cancer	41
4.23 Hospitalisations of women due to breast cancer	41
4.24 Registrations of men with prostate cancer	42
4.25 Mortality due to prostate cancer	42
4.26 Hospitalisations due to prostate cancer	42
4.27 Registrations of women with cancer of the cervix	43
4.28 Mortality due to cancer of the cervix	43
4.29 Hospitalisations due to cancer of the cervix	43
4.30 Registrations of people with colorectal cancer	44
4.31 Colorectal cancer mortality	44
4.32 Hospitalisations due to colorectal cancer	45
4.33 Registrations of patients with malignant melanoma	45
4.34 Mortality due to malignant melanoma	46
4.35 Hospitalisations due to malignant melanoma	46
4.36 Adult asthma prevalence	47
4.37 Hospitalisations due to asthma in adults	47
4.38 Chronic obstructive pulmonary disease prevalence	48
4.39 Chronic obstructive pulmonary disease hospitalisations	48
4.40 Unintentional injury mortality	49
4.41 Unintentional injury hospitalisations	49
4.42 Prevalence of chronic mental disorder	50
4.43 Probability of having an anxiety or depressive disorder	50
4.44 Suicide deaths	51
4.45 Self-harm hospitalisations (5+ years)	51
4.46 Infectious disease mortality	52

4.47	Campylobacteriosis notifications	52
4.48	Cryptosporidiosis notifications	54
4.49	Giardiasis notifications	54
4.50	Hepatitis B notifications	55
4.51	Meningococcal disease notifications	56
4.52	Rheumatic fever notifications	56
4.53	Salmonellosis notifications	57
4.54	Tuberculosis notifications	57
4.55	Disability	58
4.56	Child health (0–14 years)	59
4.57	Youth health (15–24 years)	69
4.58	Older people’s health (65+ years)	72
4.59	Birth rate	88
4.60	Types of birth	88
4.61	Sexually transmitted infections (STI)	90
5	Health Service Utilisation	93
	Key points	93
5.1	Primary health organisation (PHO) enrolment	94
5.2	Adult (15 years and over) visits to a general practitioner	95
5.3	Adults’ need for general practitioner unmet	96
5.4	Adult (15 years and over) visits to a primary health care nurse	97
5.5	Prescriptions	97
5.6	Community Services Card holders	98
5.7	High Use Health Card holders	98
5.8	Blood pressure screening	99
5.9	Cholesterol screening	99
5.10	Diabetes screening	100
5.11	Immunisation coverage at two years	103
5.12	Influenza vaccine coverage at 65+ years	104
5.13	Adolescents (13–18 years) receiving free oral health services	104
5.14	Breast screening	105
5.15	Cervical screening	105
5.16	Use of public hospitals	106
5.17	Presentations to public hospital emergency departments	106
5.18	Number of patients discharged following elective surgery	107
5.19	Waiting times for elective treatment	107
5.20	Cancer radiotherapy waiting times	109
5.21	Use of secondary mental health services	110
5.22	New admissions to acute mental health services	111
5.23	Hospital readmission rate	112
5.24	Use of dentist or other oral health care worker	112
5.25	Use of medical specialist	113
5.26	Use of complementary health services	113
6	Health Service Providers	115
	Key points	115

6.1	Numbers of general practitioners, nurses, midwives, dentists, and medical specialists	115
6.2	Primary health organisations	117
6.3	Public health services	118
6.4	Hospital and emergency services	118
6.5	Mental health services	120
6.6	Laboratories	123
6.7	Radiology	123

Appendix 1: Information/Data Sources 124

List of Tables

Table 1.1:	Population distribution by age group and gender, 2006 census	7
Table 1.2:	Percentage of the population in Capital & Coast DHB and New Zealand by age, 2006 census	8
Table 1.3:	Population distribution by total response ethnicity and gender, 2006 census	8
Table 1.4:	Percentage of the population in Capital & Coast DHB by total response ethnicity, 2006 census	8
Table 1.5:	Population distribution by prioritised ethnicity and gender, 2006 census	9
Table 1.6:	Percentage of the population in Capital & Coast DHB and New Zealand by prioritised ethnic group, 2006 census	9
Table 1.7:	Population distribution by territorial authority and gender, 2006 census	9
Table 1.8:	Percentage of the population in territorial authorities, census 2006	9
Table 1.9:	Population distribution by urban-rural area and gender, 2006 census	10
Table 1.10:	Percentage of the population in Capital & Coast DHB and New Zealand by urban-rural area, 2006 census	10
Table 1.11:	Projected population in the next 20 years by age group, 2006 base	11
Table 1.12:	Projected population in the next 20 years by prioritised ethnicity, 2006 base	11
Table 1.13:	Projected population in the next 20 years by territorial authority, 2006 base	11
Table 2.1:	The New Zealand Index of Deprivation 2006 (NZ Dep2006) distribution in Capital & Coast DHB and New Zealand (all ages)	13
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	13
Table 2.3:	Lower income in adults over 15, age-standardised rate (ASR) and rate ratio (SRR) (with 95% confidence intervals), 2006	14
Table 2.4:	Adults over 15 years not owning their home, age-standardised rate (ASR) and rate ratios (SRR), (with 95% confidence intervals), 2006	15
Table 2.5:	Unemployment rates in adults over 15 years, age-standardised rate (ASR) and rate ratios (SRR), (with 95% confidence intervals), 2006	15
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	16
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	17
Table 2.8:	People of all ages living in overcrowded households, age-standardised rate (ASR) and rate ratio (SRR), (with 95% confidence intervals), 2006	17
Table 3.1:	Age-standardised prevalence rates (percent, with 95% confidence intervals) of current daily smokers, 15+ years, by ethnicity, 2006/07 NZHS	19

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	19
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	20
Table 3.4:	Age-standardised prevalence rates (percent, with 95% confidence intervals) of doing regular physical activity, 15+ years, by ethnicity, 2006/07 NZHS	20
Table 3.5:	Age-standardised prevalence rates (percent, with 95% confidence intervals) of hazardous drinking, 15+ years, by ethnicity, 2006/07 NZHS	21
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	21
Table 3.7:	Age-standardised prevalence rates (percent, with 95% confidence intervals) of overweight, 15+ years, by ethnicity 2006/07 NZHS	22
Table 3.8:	Age-standardised prevalence rates (percent, with 95% confidence intervals) of obesity, 15+ years, by ethnicity, 2006/07 NZHS	23
Table 3.9:	Age-standardised prevalence rates (percent, with 95% confidence intervals) of medicated high cholesterol, 15+ years, by ethnicity, 2006/07 NZHS	23
Table 3.10:	Age-standardised prevalence rates (percent, with 95% confidence intervals) of medicated high blood pressure, 15+ years, by ethnicity, 2006/07 NZHS	24
Table 4.1:	Avoidable mortality, 0–74 years, age-standardised rates per 100,000 (and 95% confidence intervals), 2003–05	26
Table 4.2:	Leading causes of avoidable mortality, males and females, 0–74 years, 2003–05	27
Table 4.3:	Leading causes of avoidable mortality, by ethnic group, age-standardised rates per 100,000 (and 95% confidence intervals), 0–74 years, 2003–05	28
Table 4.4:	Avoidable hospitalisations, 0–74 years, age-standardised rates per 100,000 (and 95% confidence intervals), 2005–07	29
Table 4.5:	Leading causes of avoidable hospitalisations, males and females, 0–74 years, 2005–07	30
Table 4.6:	Leading causes of avoidable hospitalisations, by ethnic group, 0–74 years, 2005–07	31
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	32
Table 4.8:	Age-standardised prevalence (percent, and 95% confidence intervals) of self-reported diabetes, adults 15+ years, 2006/07 NZHS	32
Table 4.9:	Diabetes hospitalisations, 15+ years, age-standardised rates per 100,000 (and 95% confidence intervals), 2005–07	33
Table 4.10:	Diabetes complications – renal failure hospitalisations, 15+ years, age-standardised rate per 100,000 (and 95% confidence intervals), 2005–07	33
Table 4.11:	Diabetes complications – leg/foot/toe amputation hospitalisation, 15+ years, age-standardised rates per 100,000 (and 95% confidence intervals), 2005–07	34
Table 4.12:	All cardiovascular disease mortality, all ages, age-standardised rates per 100,000 (and 95% confidence intervals), 2003	34
Table 4.13:	All cardiovascular disease hospitalisation, all ages, age-standardised rates per 100,000 (and 95% confidence intervals), 2005–07	35
Table 4.14:	Age standardised prevalence (percent, and 95% confidence intervals)of self-reported ischaemic heart disease, adults 15+ years, 2006/07 NZHS	35
Table 4.15:	Ischaemic heart disease mortality, 25+ years, age-standardised rates per 100,000 (and 95% confidence intervals), 2003–05	36
Table 4.16:	Ischaemic heart disease hospitalisation, 25+ years, age-standardised rates per 100,000 (and 95% confidence intervals), 2005–07	36
Table 4.17:	Age standardised prevalence (percent, and 95% confidence intervals)of self-reported stroke, 15+ years, 2006/07 NZHS	37

Table 4.18:	Stroke mortality, 25+ years, age-standardised rates per 100,000 (and 95% confidence intervals), 2003–05	37
Table 4.19:	Stroke hospitalisation, 25+ years, age-standardised rates per 100,000 (and 95% confidence intervals), 2005–07	38
Table 4.20:	All cancer mortality, all ages, age-standardised rates per 100,000 (and 95% confidence intervals), 2003–05	38
Table 4.21:	All cancer hospitalisations, all ages, age-standardised rates per 100,000 (and 95% confidence intervals), 2005–07	39
Table 4.22:	Lung cancer registration, 25+ year, age-standardised rates per 100,000 (and 95% confidence intervals), 2003–05	39
Table 4.23:	Lung cancer mortality, 25+ years, age-standardised rates per 100,000 (and 95% confidence intervals), 2003–05	40
Table 4.24:	Lung cancer hospitalisation, 25+ years, age-standardised rates per 100,000 (and 95% confidence intervals), 2005–07	40
Table 4.25:	Female breast cancer registration, 25+ years, age-standardised rate per 100,000 (and 95% confidence intervals), 2003–05	41
Table 4.26:	Female breast cancer mortality, 25+ years, age-standardised rates per 100,000 (and 95% confidence intervals), 2003–05	41
Table 4.27:	Female breast cancer hospitalisation, 25+ years, age-standardised rates per 100,000 (and 95% confidence intervals), 2005–07	41
Table 4.28:	Prostate cancer registration, 25+ years, age-standardised rates per 100,000 (and 95% confidence intervals), 2003–05	42
Table 4.29:	Prostate cancer mortality, 25+ years, age-standardised rates per 100,000 (and 95% confidence intervals), 2003–05	42
Table 4.30:	Prostate cancer hospitalisation, 25+ years, age-standardised rates per 100,000 (and 95% confidence intervals), 2005–07	42
Table 4.31:	Cervical cancer registration, 25+ years, age-standardised rate per 100,000 (and 95% confidence intervals), 2003–05	43
Table 4.32:	Cervical cancer mortality, 25+ years, age-standardised rates per 100,000 (and 95% confidence intervals), 2003–05	43
Table 4.33:	Cervical cancer hospitalisation, 25+ years, age-standardised rates per 100,000 (and 95% confidence intervals), 2005–07	43
Table 4.34:	Colorectal cancer registrations, 25+ years, age-standardised rates per 100,000 (and 95% confidence intervals), 2003–05	44
Table 4.35:	Colorectal cancer mortality, 25+ years, age-standardised rates per 100,000 (and 95% confidence intervals), 2003–05	44
Table 4.36:	Colorectal cancer hospitalisation, 25+ years, age-standardised rates per 100,000 (and 95% confidence intervals), 2005–07	45
Table 4.37:	Melanoma registrations, 25+ years, age-standardised rates per 100,000 (and 95% confidence intervals), 2003–05	45
Table 4.38:	Melanoma mortality, 25+ years, age-standardised rates per 100,000 (and 95% confidence intervals), 2003–05	46
Table 4.39:	Melanoma hospitalisations, 25+ years, age-standardised rates per 100,000 (and 95% confidence intervals), 2005–07	46
Table 4.40:	Age-standardised prevalence (percent, and 95% confidence intervals) of medicated asthma, adults 15+ years, 2006/07 NZHS	47
Table 4.41:	Asthma hospitalisations, 15+ years, age-standardised rates per 100,000 (and 95% confidence intervals), 2005–07	48
Table 4.42:	Age-standardised prevalence (percent, and 95% confidence intervals) of self-reported chronic obstructive pulmonary disease, 45+ years, 2006/07	48
Table 4.43:	COPD hospitalisation, 45+ years, age-standardised rates per 100,000 (and 95% confidence intervals), 2005–07	49

Table 4.44:	Unintentional injury mortality, all ages, age-standardised rates per 100,000 (and 95% confidence intervals), 2003–05	49
Table 4.45:	Unintentional injury hospitalisation, all ages, age-standardised rates per 100,000 (and 95% confidence intervals), 2005	50
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	50
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	50
Table 4.48:	Suicide mortality, 5+ years, age-standardised rates per 100,000 (and 95% confidence intervals), 2003–05	51
Table 4.49:	Self-harm hospitalisation, 5+ years, age-standardised rates per 100,000 (and 95% confidence intervals), 2005–07	51
Table 4.50:	Infectious disease mortality, age-standardised rates per 100,000 (and 95% confidence intervals), 2003–05	52
Table 4.51:	Age-standardised campylobacteriosis notifications rates per 100,000 (and 95% confidence intervals), 2004–06	54
Table 4.52:	Age-standardised cryptosporidiosis notifications rates per 100,000 (and 95% confidence intervals), 2004–06	54
Table 4.53:	Age-standardised giardiasis notifications rate per 100,000 (and 95% confidence intervals), 2004–06	55
Table 4.54:	Age-standardised hepatitis B notifications rate per 100,000 (and 95% confidence intervals), 2004–06	55
Table 4.55:	Age-standardised meningococcal disease notifications rates per 100,000 (and 95% confidence intervals), 2004–06	56
Table 4.56:	Age-standardised rheumatic fever (initial attack) notifications rates per 100,000 (and 95% confidence intervals), 2004–06	56
Table 4.57:	Age-standardised salmonellosis notifications rates per 100,000 (and 95% confidence intervals), 2004–06	57
Table 4.58:	Age-standardised tuberculosis notifications rates per 100,000 (and 95% confidence intervals), 2004–06	57
Table 4.59:	Disability prevalence of residents living in private households, crude percent, 2006	58
Table 4.60:	Leading causes of hospitalisations, males and females, 0–4 years, 2005–07	59
Table 4.61:	Leading causes of hospitalisations, by ethnic group, 0–4 years, 2005–07	60
Table 4.62:	Leading causes of hospitalisations, males and females, 5–14 years, 2005–07	61
Table 4.63:	Leading causes of hospitalisations, by ethnic group, 5–14 years, 2005–07	62
Table 4.64:	Infant mortality, rate per 1000 live births (and 95% confidence intervals), 2003–05	63
Table 4.65:	Perinatal mortality, rate per 1000 total births (and 95% confidence intervals), 2003–05	63
Table 4.66:	Low birth weight, rate per 1000 live births (and 95% confidence intervals), 2003–05	64
Table 4.67:	Exclusive and full breastfeeding for 10–16 weeks, percent, by ethnicity, 2007	64
Table 4.68:	Exclusive and full breastfeeding for 16 weeks–8 months, percent, by ethnicity, 2007	65
Table 4.69:	Hearing failure at school entry, percent, 2005/2006	65
Table 4.70:	Caries-free teeth of school Year 8 children, percent, 2006	66
Table 4.71:	Decayed, missing or filled teeth of school Year 8 children, mean number, 2006	66
Table 4.72:	Asthma hospitalisation, 0–14 years, age-standardised rates per 100,000 (and 95% confidence intervals), 2005–07	66
Table 4.73:	Poisoning hospitalisation, 0–14 years, age-standardised rates per 100,000 (and 95% confidence intervals), 2005–07	67
Table 4.74:	Burns hospitalisation, 0–14 years, age-standardised rates per 100,000 (and 95% confidence intervals), 2005–07	67

Table 4.75:	Falls hospitalisation, 0–14 years, age-standardised rate per 100,000 (and 95% confidence intervals), 2005–07	68
Table 4.76:	Drowning mortality, 0–14 years, age-standardised rate per 100,000 (and 95% confidence intervals), 2003–05	68
Table 4.77:	Smoking prevalence (self-reported), 14–15 years, age-specific percent, 2007	69
Table 4.78:	Unintentional injury mortality, 15–24 years, age-standardised rate per 100,000 (and 95% confidence intervals), 2003–05	69
Table 4.79:	Unintentional injury hospitalisation, 15–24 years, age-standardised rate per 100,000 (and 95% confidence intervals), 2005–07	70
Table 4.80:	Suicide mortality, 15–24 years, age-standardised rate per 100,000 (and 95% confidence intervals), 2003–05	70
Table 4.81:	Live and still births registered in 2007 for mothers aged 15–19 years, by ethnic group	71
Table 4.82:	Leading causes of mortality, males and females, 65+ years, 2003–05	72
Table 4.83:	Leading causes of mortality, by ethnic group, 65+ years, 2003–05	73
Table 4.84:	Leading causes of hospitalisations, males and females, 65+ years, 2005–07	74
Table 4.85:	Leading causes of hospitalisations, by ethnic group, 65+ years, 2005–07	75
Table 4.86:	Ischaemic heart disease mortality, 65+ years, age-standardised rate per 100,000 (and 95% confidence intervals), 2003–05	76
Table 4.87:	Ischaemic heart disease hospitalisation, 65+ years, age-standardised rate per 100,000 (and 95% confidence intervals), 2005–07	76
Table 4.88:	Stroke mortality, 65+ years, age-standardised rate per 100,000 (and 95% confidence intervals), 2003–05	77
Table 4.89:	Stroke hospitalisation, 65+ years, age-standardised rate per 100,000 (and 95% confidence intervals), 2005–07	77
Table 4.90:	Lung cancer registrations, 65+ years, age-standardised rates per 100,000 (and 95% confidence intervals), 2003–05	78
Table 4.91:	Lung cancer mortality, 65+ years, age-standardised rate per 100,000 (and 95% confidence intervals), 2003–05	78
Table 4.92:	Lung cancer hospitalisations, 65+ years, age-standardised rate per 100,000 (and 95% confidence intervals), 2005–07	79
Table 4.93:	Female breast cancer registrations, 65+ years, age-standardised rates per 100,000 (and 95% confidence intervals), 2003–05	79
Table 4.94:	Female breast cancer mortality, 65+ years, age-standardised rate per 100,000 (and 95% confidence intervals), 2003–05	80
Table 4.95:	Female breast cancer hospitalisation, 65+ years, age-standardised rate per 100,000 (and 95% confidence intervals), 2005–07	80
Table 4.96:	Prostate cancer registration, 65+ years, age-standardised rate per 100,000 (and 95% confidence intervals), 2003–05	80
Table 4.97:	Prostate cancer mortality, all ages, age-standardised rate per 100,000 (and 95% confidence intervals), 2003–05	81
Table 4.98:	Prostate cancer hospitalisation, 65+ years, age-standardised rate per 100,000 (and 95% confidence intervals), 2005–07	81
Table 4.99:	Cervical cancer registration, 65+ years, age-standardised rate per 100,000 (and 95% confidence intervals), 2003–05	81
Table 4.100:	Cervical cancer mortality, 65+ years, age-standardised rate per 100,000 (and 95% confidence intervals), 2003–05	82
Table 4.101:	Cervical cancer hospitalisation, 65+ years, age-standardised rate per 100,000 (and 95% confidence intervals), 2005–07	82
Table 4.102:	Colorectal cancer registration, 65+ years, age-standardised rate per 100,000 (and 95% confidence intervals), 2003–05	83

Table 4.103:	Colorectal cancer mortality, 65+ years, age-standardised rate per 100,000 (and 95% confidence intervals), 2003–05	83
Table 4.104:	Colorectal cancer hospitalisation, 65+ years, age-standardised rate per 100,000 (and 95% confidence intervals), 2005–07	84
Table 4.105:	Melanoma registration, 65+ years, age-standardised rate per 100,000 (and 95% confidence intervals), 2003–05	84
Table 4.106:	Melanoma mortality, 65+ years, age-standardised rates per 100,000 (and 95% confidence intervals), 2003–05	85
Table 4.107:	Melanoma hospitalisation, 65+ years, age-standardised rates per 100,000 (and 95% confidence intervals), 2005–07	85
Table 4.108:	COPD mortality, 65+ years, age-standardised rate per 100,000 (and 95% confidence intervals), 2003–05	86
Table 4.109:	COPD hospitalisation, 65+ years, age-standardised rate per 100,000 (and 95% confidence intervals), 2005–07	86
Table 4.110:	Falls hospitalisation, 65+ years, age-standardised rate per 100,000 (and 95% confidence intervals), 2005–07	87
Table 4.111:	Musculoskeletal disease hospitalisation, 65+ years, age-standardised rate per 100,000 (and 95% confidence intervals), 2005–07	87
Table 4.112:	Live births registered in 2007, for mothers of all ages, by ethnic group	88
Table 4.113:	Delivery events, publicly funded, by type of birth and ethnic group, 2007	89
Table 4.114:	Pregnancy complications, number of admissions and rate per 1000 births, by ethnic group, for 2004–06	90
Table 4.115:	Chlamydia – number of cases and disease rates, 2006, 2007	90
Table 4.116:	Gonorrhoea – number of cases and disease rates, 2006, 2007	91
Table 4.117:	Genital herpes (first presentation) – number of cases and disease rates, 2006, 2007	91
Table 4.118:	Genital warts (first presentation) – number of cases and disease rates, 2006, 2007	91
Table 4.119:	Syphilis (first presentation) – number of cases and disease rates, 2006, 2007	92
Table 4.120:	NSU (males only) – number of cases and disease rates, 2006, 2007	92
Table 5.1:	PHO enrolment, 15+ years, age-standardised percent (and 95% confidence intervals), by ethnicity, 2006/07	94
Table 5.2:	Age-standardised prevalence rates (and 95% confidence intervals) of visit to a general practitioner, 15+ years, by ethnicity, 2006/07 NZHS	95
Table 5.3:	Age-standardised prevalence rates (and 95% confidence intervals) of unmet need for general practitioner, 15+ years, by ethnicity, 2006/07 NZHS	96
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	97
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	97
Table 5.6:	PHO enrollee Community Services Card holders, percent, by ethnicity, April 2008	98
Table 5.7:	PHO enrollee High Use Health Card holders, percent, by ethnicity, April 2008	99
Table 5.8:	Age-standardised prevalence rates (and 95% confidence intervals) of blood pressure checks, 15+ years, by ethnicity, 2006/07 NZHS	99
Table 5.9:	Age-standardised prevalence rates (and 95% confidence intervals) of cholesterol check, 15+ years, by ethnicity, 2006/07 NZHS	100
Table 5.10:	Age-standardised prevalence rates (and 95% confidence intervals) of diabetes check, 15+ years, by ethnicity, 2006/07 NZHS	100
Table 5.11:	Percentage of DHB population estimated to have diagnosed diabetes who had free annual diabetes checks in the 13 months to December 2007	101
Table 5.12:	Percentage of people on the diabetes register, for each DHB, who had satisfactory or better diabetes management rating in the 13 months to December 2007	102

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	103
Table 5.14:	Fully immunisation coverage at age two years, percent, by ethnicity, 2007	104
Table 5.15:	Flu vaccination in the last 12 months, 65+ years, age-standardised percent (and 95% confidence interval), by ethnicity, 2006/07	104
Table 5.16:	Adolescent (13–18 years) oral health service utilisation, age-specific percent, 2006	104
Table 5.17:	Breast screening coverage rate (percent, and 95% confidence interval), women 45–69 years, 2006–07, by ethnicity	105
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	105
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	106
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	106
Table 5.21:	Age-standardised rates per 100,000 (and 95% confidence intervals) of elective surgery discharges at public hospital, by ethnicity, 2005–07	107
Table 5.22:	Elective services: summary of number of people treated and waiting times for people assured of treatment, for 2007/08	108
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	109
Table 5.24:	Access to secondary mental health and addiction services, for people aged 0–64 years, 2005	110
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, 2005	111
Table 5.26:	Acute readmissions, all ages, age-standardised rate per 1000 admissions (and 95% confidence intervals), by ethnicity, 2005–07	112
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	112
Table 5.28:	Age-standardised prevalence rates (and 95% confidence intervals) of use of specialist, 15+ years, by ethnicity, 2006/07 NZHS	113
Table 5.29:	Age-standardised prevalence rates (and 95% confidence intervals) of use of complementary health services, 15+ years, by ethnicity, 2006/07 NZHS	114
Table 6.1:	Number and FTEs for selected health professional workforce groups, by year	116
Table 6.2:	Positions and numbers of staff at Regional Public Health	118
Table 6.3:	Certified hospital providers located in the Capital & Coast district, as at June 2008	119
Table 6.4:	Mental health FTEs for 2007/08, as at 31 March 2008	120
Table 6.5:	Number of NGOs contracted to provide mental health services, by funder DHB / Ministry of Health, for 2007/08	121
Table 6.6:	NGOs with contracts with Capital & Coast DHB, for 2007/08	122

List of Figures

Figure 1:	The DHB planning cycle	2
-----------	------------------------	---

Executive Summary

This health needs assessment identifies the unmet health and healthcare needs of the Capital & Coast 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 Capital & Coast DHB planning process, and ultimately achieve health gain for the Capital & Coast DHB population.

Demographics and social determinants of health

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

Current population

At the last census there were 266,661 people living in the Capital & Coast district, accounting for approximately 6.6% of the national population.

Nearly a third of the population was aged between 25–44 years and most identified as European/Other.

Most of the Capital & Coast district population lived in urban areas with only an extremely small rural population.

Population projections

The population in the Capital & Coast district was not projected to increase as much as the national population. The population is aging, with the highest percentage increase by 2026 expected to be in the number of people over 65 years old.

In the Capital & Coast district, Māori were expected to have the highest percentage increase by 2026.

Social determinants of health

Most of the Capital & Coast district had low NZDep2006 scores which are associated with better health outcomes.

Health status and service utilisation

Nutrition, physical activity and obesity

Less than half of the population in Capital & Coast DHB did regular physical activity, which was significantly lower than the total New Zealand population.

Capital & Coast DHB rates were similar to total New Zealand rates for fruit and vegetable consumption, and in terms of the proportion of people who were overweight or obese. However, the proportion of Māori, and of Pacific people who were obese was significantly higher than the total proportion of obese people in Capital & Coast DHB.

Diabetes

Self-reported diabetes prevalence was about five percent of people aged 15 years and over in Capital & Coast DHB, which was similar to the New Zealand rate.

While the diabetes hospitalisation rate in Capital & Coast DHB was significantly lower than the national rate overall, Māori and European/Other were the only ethnic groups to have significantly lower rates than their national counterparts.

Pacific people had a significantly higher prevalence rate of self-reported diabetes than the rate for Capital & Coast DHB in total, and the rate of hospitalisations for people with renal failure due to diabetes was significantly higher among Māori and Pacific ethnic groups than among other ethnic groups.

Tobacco

The prevalence of current daily smokers in Capital & Coast DHB was approximately a third of the national prevalence.

Cancer

The cancer mortality rate in Capital & Coast DHB was significantly lower than the national rate. The rate for Māori was significantly higher than the rate for Asian and European/Other ethnic groups. All ethnic groups except Pacific peoples in Capital & Coast DHB had significantly lower cancer hospitalisation rates than their New Zealand counterparts.

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 Capital & Coast DHB was significantly lower than the national rate. However, while cardiovascular disease mortality rates in Capital & Coast DHB did not differ significantly from the national rates,

ischaemic heart disease was the leading cause of avoidable mortality in total for Capital & Coast DHB.

Capital & Coast DHB had significantly higher adult medicated asthma prevalence than New Zealand as a whole, with almost 15% of adults reporting medicated asthma in Capital & Coast DHB. However, while the asthma hospitalisation rate for Capital & Coast DHB was significantly lower than the national rate, asthma was one of the top five causes of avoidable hospitalisation for Capital & Coast DHB.

Avoidable mortality and hospitalisations

Overall, both the avoidable mortality and avoidable hospitalisation rates were significantly lower in Capital & Coast DHB than national rates.

The top three causes of avoidably mortality for Capital & Coast DHB were ischaemic heart disease, lung cancer, and suicide and self-inflicted injuries, which was the same for New Zealand in total. Stroke and breast cancer also were in the top five leading causes of avoidable mortality in Capital & Coast DHB.

Respiratory infections, cellulitis, angina, and ear, nose and throat infections were among the top four avoidable hospitalisations for Capital & Coast, which was similar to patterns for New Zealand in total.

Avoidable mortality and hospitalisation rates were significantly higher among Māori and Pacific ethnic groups than among Asian and European/Other ethnic groups.

Secondary healthcare and elective services

Capital & Coast DHB had a significantly lower rate of elective surgery discharges than the national rate. For publicly funded elective services for Capital & Coast DHB, 90 percent of patients assured of treatment within six months received their treatment within five months, across all specialities.

Over 10 percent of adults in the Capital & Coast district were seen in the emergency department of a public hospital in the last 12 months.

Infectious diseases and immunisation

Capital & Coast DHB had significantly higher rates of notifications of campylobacteriosis and giardiasis, and a significantly lower meningococcal disease notification rate, than all of New Zealand.

In the Capital & Coast district, nearly four in five children had completed all specified immunisations by the age of two. The coverage rate was the highest among European/Other but lowest among Māori children. Across all ethnic groups, the rates of coverage were higher in Capital & Coast than in New Zealand.

Oral health

Māori, Pacific and Asian people were less likely than the total Capital & Coast DHB population to have seen an oral health care worker in the past 12 months.

In the Capital & Coast district, around one third of young people aged 13–18 years accessed the free oral health service, compared with nearly two thirds of young people in New Zealand in total. Dental conditions were a leading cause of hospitalisation for children aged 5–14 years, in Capital & Coast DHB and for New Zealand in total.

Mental health and addiction

Over 16 percent of people aged 15 years and older reported a chronic mental health condition in Capital & Coast 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 Capital & Coast district was significantly lower than the rate for New Zealand as a whole, for people under 65 years of age.

Self-harm hospitalisation rates for Capital & Coast DHB were significantly lower than national rates, for both males and females, and in total.

Disability

Disability data is available at the regional level, not DHB level. The central region (Hawke's Bay, Whanganui, MidCentral, Hutt Valley, Capital & Coast, and Wairarapa DHBs) had lower proportions of people experiencing disability across the 15–64 year age groups than New Zealand as a whole. Nearly 15 percent of Māori children in these areas experience disability, compared to nearly eight percent for non-Māori children.

Child and youth health

Capital & Coast DHB had four of the same leading causes of hospitalisations for children 0–4 years of age as New Zealand as a whole: respiratory infections, health supervision and care of other health infant and child, disorders related to length of gestation and fetal growth, and gastroenteritis.

Capital & Coast DHB had the same leading causes of hospitalisations for children 5–14 years of age as New Zealand as a whole: dental conditions, ear, nose and throat infections, chronic disease of the tonsils and adenoids, respiratory infections, and falls.

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

Older people

The leading causes of mortality for older people in Capital & Coast DHB were the same as those nationally: ischaemic heart disease, stroke, chronic obstructive pulmonary disease, diabetes, and lung cancer.

Capital & Coast DHB had four of the same leading causes of hospitalisations for older people for New Zealand as a whole: ischaemic heart disease, falls, respiratory infections, and chronic obstructive pulmonary disease.

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

Primary care

Just over 90 percent of adults in the Capital & Coast district were enrolled with a Primary Health Organisation, and about 80 percent of adults in Capital & Coast DHB had seen a general practitioner (GP) in the past 12 months. In Capital & Coast DHB nearly eight percent of adults experienced unmet need for a GP service in the past 12 months, with unmet need for a GP among Māori females significantly higher than among all females.

Over a third of adult males and almost half adult females had visited a primary health care nurse in the past 12 months In Capital & Coast DHB.

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?

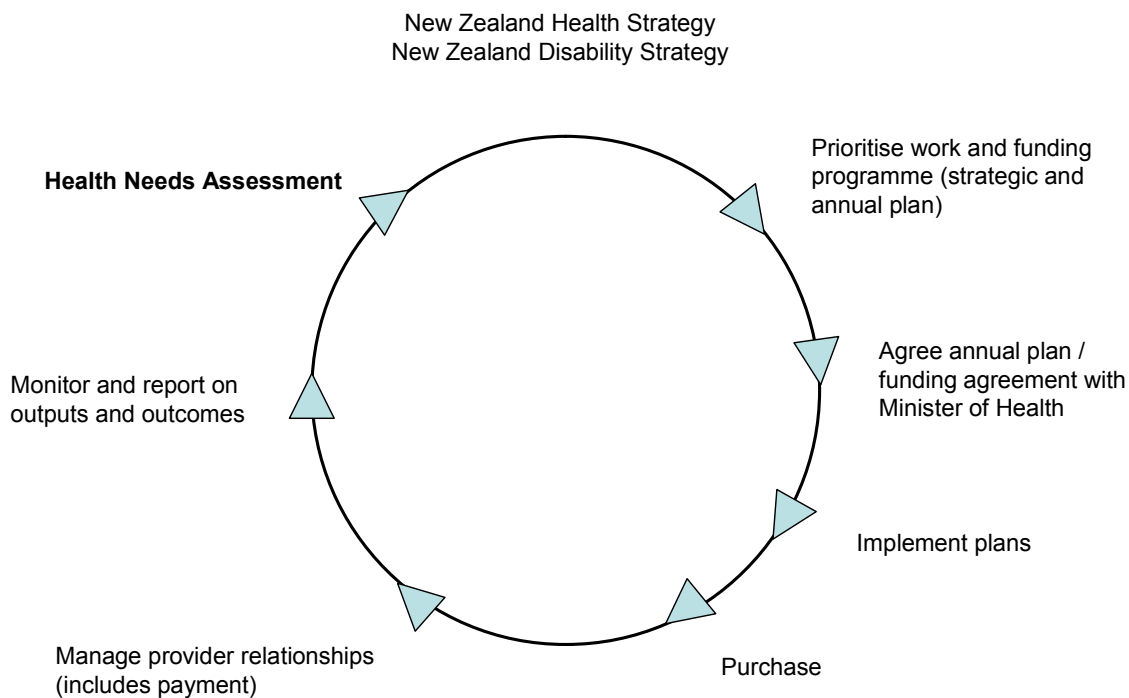
At a national level, priority areas for health and disability services, such as those described in the Minister's letter of expectations to DHBs, reflect the directions established by the two overarching strategies of the New Zealand health and disability sector: the New Zealand Health Strategy (NZHS) 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



Source: 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 Capital & Coast 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 Capital & Coast DHB population.
2. Socioeconomic characteristics of the Capital & Coast DHB population.
3. Behavioural and biological risk and protective factors, such as smoking and nutrition.
4. Information about the health status of the Capital & Coast 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 Capital & Coast DHB's planning process, and ultimately achieve health gain for the Capital & Coast 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 may 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 ninety-five percent 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 Capital & Coast 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 Capital & Coast DHB population is expected to change by 2026.

1.1 Geography

The Capital & Coast district is bordered by the Tasman Sea to the west, the Cook Strait to the south, and the Kapiti coastal area and the Tararua Ranges to the north. The land area is 739 square kilometres. There are three territorial authorities (ie, district councils or city councils) that make up the Capital & Coast DHB district: Wellington City, Porirua City and Kapiti Coast. The Kapiti Coast District Council extends into the Midland DHB district.

Between 2001 and 2006 the population increased 8.4 percent. There continues to be incremental expansion and intensification of all urban areas in the Capital & Coast DHB district. Subdivisions are replacing farmland or open space. Expansion is ongoing around Johnsonville, Churton Park, Whitby and the Kapiti Coast. However the highest degree of residential development is still focused in Wellington city itself. In terms of high density living, Wellington is second only to Auckland.

1.2 Transport

Greater Wellington Regional Council is responsible for the planning and funding of public transport services in the greater Wellington region. The region's residents are the highest users of passenger transport in New Zealand. However, nearly two thirds of commuters in the region take a vehicle to work. Regional council surveying in 2004 showed that residents think passenger transport is easy to use and that walking is a relatively 'hassle free' way to get around. Cycling is seen as more difficult than using public transport, but easier in Wellington than Auckland.

1.3 Economy

Career Service data for 2006 showed that the Capital & Coast district had the highest median income in New Zealand, at \$27,040.

Wellington has the third highest Food Price Index after Auckland and Christchurch when comparing 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.

1.4 Industry

According to Career Service information, the Wellington region has the third-highest number of businesses in the country behind the Auckland and Canterbury regions.

The business services sector accounted for 26.5% of the region's total employment in 2006. This includes banks, insurance companies, real estate agents, communication, accounting and legal services.

The second highest (24.7%) employment group in the region is the social services sector which includes government administration, education, defence, health services, justice, foreign diplomacy, community care and child care.

The retail and distribution sector, employing 23.0% of the total workforce, is made up of businesses such as airlines, ferry, bus and train services.

Tourism is a growing industry in the Wellington region. By 2012 the number of visitors is expected to increase to 4.6 million (up 9.0%). International visitors are expected to lead this growth, with the number of visits up 29.0% and an expected 4.0% more visits from domestic visitors.

1.5 Population distribution

At the last census count there were 266,658 people living in the Capital & Coast District Health Board district, accounting for approximately 6.6% of the national population (Table 1.1).

The composition of the Capital & Coast district population was comparable to the New Zealand population, although Capital & Coast DHB had a higher proportion aged 25–44 years, and slightly more females than males (Table 1.2).

The majority of the population identified with the European/Other ethnic group (81.2%), followed by Māori (9.9%), Asian (9.7%), and Pacific (8.2%) ethnic groups (Table 1.4). The percentages of European/Other (73.7%) and Pacific (7.1%) were slightly lower, and Asian (9.3%) slightly higher, when 'prioritised' ethnicity was used (Table 1.6).

The majority of the population in the Capital & Coast DHB district live in Wellington City, followed by Porirua City, and then Kapiti District (Table 1.8). A very small percentage of the Capital & Coast population (0.8%) live in rural settings compared with 14.0% of the whole New Zealand population (Table 1.10).

1.5.1 Population distribution, by age group and gender

Table 1.1: Population distribution by age group and gender, 2006 census

Age group	Capital & Coast DHB			New Zealand		
	Female	Male	Total	Female	Male	Total
0–14	25,536	26,382	51,915	423,546	444,027	867,576
15–24	22,005	20,355	42,360	283,653	287,523	571,176
25–44	44,517	40,773	85,287	592,251	542,004	1,134,252
45–64	30,318	28,668	58,983	488,418	470,922	959,340
65–74	7,944	7,161	15,105	137,490	127,989	265,482

75+	7,821	5,181	13,005	136,971	93,150	230,121
Total	138,135	128,523	266,658	2,062,329	1,965,618	4,027,947

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

Table 1.2: Percentage of the population in Capital & Coast DHB and New Zealand by age, 2006 census

Age group	Capital & Coast DHB	New Zealand
0–14	19.5	21.5
15–24	15.9	14.2
25–44	32.0	28.2
45–64	22.1	23.8
65–74	5.7	6.6
75+	4.9	5.7

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 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). This section presents both ‘total response’ and ‘prioritised’ 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

Ethnic group	Capital & Coast DHB			New Zealand		
	Female	Male	Total	Female	Male	Total
Māori	13,827	12,666	26,496	290,469	274,860	565,329
Pacific	11,241	10,713	21,954	134,967	131,010	265,974
Asian	13,599	12,159	25,758	185,178	169,374	354,549
European/Other	112,152	104,328	216,483	1,636,992	1,558,332	3,195,324

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

Table 1.4: Percentage of the population in Capital & Coast DHB by total response ethnicity, 2006 census

Ethnic group	Capital & Coast DHB	New Zealand
Māori	9.9	14.0

Pacific	8.2	6.6
Asian	9.7	8.8
European/Other	81.2	79.3

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

Table 1.5: Population distribution by prioritised ethnicity and gender, 2006 census

Ethnic group	Capital & Coast DHB			New Zealand		
	Female	Male	Total	Female	Male	Total
Māori	13,752	12,573	26,328	289,455	2,703,678	563,142
Pacific	9,780	9,231	19,011	115,035	111,180	226,206
Asian	13,032	11,715	24,744	178,107	162,645	340,767
European/Other	101,583	95,004	196,581	1,479,525	1,417,758	2,897,355

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

Table 1.6: Percentage of the population in Capital & Coast DHB and New Zealand by prioritised ethnic group, 2006 census

Ethnic group	Capital & Coast DHB	New Zealand
Māori	9.9	14.0
Pacific	7.1	5.6
Asian	9.3	8.5
European/Other	73.7	71.9

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

1.5.3 Population distribution, by Territorial Authority (TA)

Table 1.7: Population distribution by territorial authority and gender, 2006 census

Territorial Authority	Capital & Coast DHB		
	Female	Male	Total
Kapiti Coast District	24,957	21,501	46,458
Porirua City	24,999	23,673	48,672
Wellington City	95,748	89,439	185,187

Note: Counts may not sum to total due to rounding. Please note that only part of Kapiti Coast District is incorporated within the DHB boundary of Capital & Coast DHB. The population numbers presented here are for the entire Kapiti Coast District, not just the portion in Capital & Coast DHB.

Table 1.8: Percentage of the population in territorial authorities, census 2006

Territorial Authority	Capital & Coast DHB
Kapiti Coast District	16.6
Porirua City	17.4
Wellington City	66.1

Note: Percentages may not sum to 100 due to rounding. Please note that only part of Kapiti Coast District is incorporated within the DHB boundary of Capital & Coast DHB. The population numbers presented here are for the entire Kapiti Coast District, not just the portion in Capital & Coast DHB.

1.5.3 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 1,000 population. Rural areas include offshore islands.

Table 1.9: Population distribution by urban-rural area and gender, 2006 census

Area	Capital & Coast DHB			New Zealand		
	Female	Male	Total	Female	Male	Total
Urban	137,052	127,368	264,420	1,787,490	1,675,692	3,463,185
Rural	1,068	1,119	2,190	274,545	289,389	563,931

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

Table 1.10: Percentage of the population in Capital & Coast DHB and New Zealand by urban-rural area, 2006 census

Area	Capital & Coast DHB	New Zealand
Urban	99.2	86.0
Rural	0.8	14.0

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

1.6 Projected population to 2026

Note that the population data in this section uses a slightly different base to that used in previous sections because this is what is provided from Statistics New Zealand. It uses a 2006 base of 277,990 for Capital & Coast DHB (compared with 266,658), and a 2006 base of 418,4095 for New Zealand (compared with 402,7947).

The population in Capital & Coast DHB was not projected to increase by as much as the national population (Table 1.11). The population is aging, with the highest percentage increase for 2006–2026 projected to occur in the 65+ age group.

The highest percentage increase between 2006–2026 is projected to occur within Māori (31.6%), and to a lesser extent, Pacific peoples (15.4%) (Table 1.12). This contrasts with the national trend where Pacific peoples are projected to experience a percentage increase of 42.9%, and Māori an increase of 29.9%. Kapiti Coast is projected to experience the highest percentage increase in population, followed by Wellington City and Porirua City (Table 1.13).

1.6.1 Projected population by age

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

	Age	2006	2011	2016	2021	2026	% increase 2006–2026
Capital & Coast DHB	0–14	73,350	73,620	73,320	73,200	72,560	-1.1
	15–64	184,480	196,050	203,130	206,880	210,270	14.0
	65+	20,160	22,630	25,790	31,120	36,210	79.6
	Total	277,990	292,300	302,240	311,200	319,040	14.8
New Zealand	0–14	1,201,745	1,206,710	1,197,715	1,204,115	1,214,775	1.1
	15–64	2,626,290	2,789,950	2,925,190	2,999,735	3,057,450	16.4
	65+	356,060	404,800	468,130	567,545	667,625	87.5
	Total	4,184,095	4,401,460	4,591,035	4,771,395	4,939,850	18.1

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

1.6.2 Projected population by ethnicity

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

	Ethnicity	2006	2011	2016	2021	2026	% increase 2006–2026
Capital & Coast DHB	Māori	29,720	32,190	34,550	36,830	39,110	31.6
	Pacific	21,490	22,430	23,300	24,070	24,790	15.4
	Other	226,780	237,680	244,390	250,300	255,140	12.5
New Zealand	Māori	624,280	672,220	717,800	763,780	810,730	29.9
	Pacific	256,865	284,310	311,165	338,525	367,100	42.9
	Other	3,302,950	3,444,930	3,562,070	3,669,090	3,762,020	13.9

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

1.6.3 Projected population 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 2006–2026
Capital & Coast DHB	Kapiti Coast District	47,500	50,500	53,200	55,800	58,300	22.7
	Porirua City	50,600	51,700	52,600	53,100	53,400	5.5
	Wellington City	187,700	197,400	206,800	215,700	224,100	19.4

Note: Counts may not sum to total due to rounding. Please note that only part of Kapiti Coast District is incorporated within the DHB boundary of Capital & Coast DHB. The population numbers presented here are for the entire Kapiti Coast District, not just the portion in Capital & Coast DHB.

2 Social Determinants of Health

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 health 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 Capital & Coast district. In addition there is further detail about seven of the nine census question responses that are used to calculate the NZDep2006.

Key points

- Most of the Capital & Coast district has low NZDep2006 scores which are associated with better health outcomes.

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.

NZDep2006 scores are grouped into deciles, where a score of 1 is allocated to the 10 percent of areas with a low score and 10 is allocated to the 10 percent of areas with a high score. For the country as a whole the distribution across the 10 scores is fairly even.

In the Capital & Coast DHB district there are more people living in areas with low NZDep2006 scores than areas with high scores. This means that the social determinants of health are more positive for the Capital & Coast DHB district population compared with the total New Zealand population.

Table 2.1: The New Zealand Index of Deprivation 2006 (NZ Dep2006) distribution in Capital & Coast DHB and New Zealand (all ages)

NZDep2006 deciles	Capital & Coast		New Zealand	
	Count	Percent	Count	Percent
1	51,861	19.4	415,155	10.3
2	30,366	11.4	410,361	10.2
3	28,950	10.9	409,266	10.2
4	29,910	11.2	401,736	10.0
5	25,683	9.6	397,242	9.9
6	23,706	8.9	399,828	9.9
7	20,061	7.5	397,074	9.9
8	17,151	6.4	394,425	9.8
9	14,367	5.4	401,916	10.0
10	23,574	8.8	396,219	9.8
Unspecified	1,044	0.4	4,923	0.1
Total	266,673	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 adult population of the Capital & Coast DHB district had significantly better educational achievement than the New Zealand population as a whole.

In the Capital & Coast DHB population Asian people showed the greatest achievement of NCEA Level 2, or higher, followed by European/Other, then Māori, and then Pacific people.

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

		Capital & Coast ASR, percent	New Zealand ASR, percent	SRR
Gender	Female	73.3 (72.8–73.8)	61.9 (61.6–62.1)	1.2 (1.2–1.2)
	Male	74.9 (74.3–75.4)	62.4 (62.0–62.5)	1.2 (1.2–1.2)
	Total	74.1 (73.6–74.4)	62.1 (61.8–62.2)	1.2 (1.2–1.2)
Ethnicity (total response)	Māori	55.2 (54.1–56.3)	42.1 (41.8–42.3)	1.3 (1.3–1.3)
	Pacific	51.4 (50.1–52.6)	47.2 (46.8–47.5)	1.1 (1.1–1.1)
	Asian	79.0 (77.8–80.2)	79.6 (79.1–79.9)	1.0 (1.0–1.0)
	European/Other	76.1 (75.7–76.6)	63.1 (62.8–63.2)	1.2 (1.2–1.2)

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.

Significantly fewer people in the Capital & Coast DHB district had low incomes compared with New Zealand as a whole. Lower incomes were significantly more likely to be seen among females and Asian people.

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

		Capital & Coast ASR, percent	New Zealand ASR, percent	SRR
Gender	Female	25.6 (25.2–25.9)	28.5 (28.3–28.6)	0.9 (0.9–0.9)
	Male	18.3 (18.0–18.6)	18.7 (18.6–18.8)	1.0 (1.0–1.0)
	Total	22.1 (21.9–22.3)	23.7 (23.6–23.8)	0.9 (0.9–0.9)
Ethnicity (total response)	Māori	21.1 (20.4–21.8)	24.0 (23.8–24.2)	0.9 (0.9–0.9)
	Pacific	26.6 (25.7–27.5)	29.7 (29.4–30.0)	0.9 (0.9–0.9)
	Asian	35.9 (35.0–36.7)	42.2 (41.9–42.4)	0.9 (0.8–0.9)
	European/Other	20.0 (19.8–20.3)	21.1 (21.0–21.2)	1.0 (0.9–1.0)

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.

In Capital & Coast DHB a higher percentage of males than females were not living in their own home. Pacific people were significantly less likely to own their own home than any other ethnic group, followed by Māori and then Asian. Overall, the percentage of the Capital & Coast DHB population not living in their own home was significantly higher than the national percentage.

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

		Capital & Coast ASR, percent	New Zealand ASR, percent	SRR
Gender	Female	51.6 (51.1–52.0)	51.1 (50.8–51.2)	1.0 (1.0–1.0)
	Male	54.0 (53.5–54.4)	52.6 (52.3–52.8)	1.0 (1.0–1.0)
	Total	52.7 (52.4–53.1)	51.8 (51.5–51.9)	1.0 (1.0–1.0)
Ethnicity (total response)	Māori	67.1 (66.0–68.3)	66.3 (65.9–66.5)	1.0 (1.0–1.0)
	Pacific	74.8 (73.4–76.3)	74.5 (74.1–74.9)	1.0 (1.0–1.0)
	Asian	57.8 (56.8–58.8)	61.3 (61.0–61.6)	0.9 (0.9–1.0)
	European/Other	50.0 (49.6–50.3)	48.4 (48.1–48.5)	1.0 (1.0–1.0)

2.5 Unemployment

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 and Pacific people had significantly higher unemployment rates than European/Other and Asian people in the Capital & Coast DHB. The male unemployment rate in Capital & Coast DHB was significantly higher than their national counterparts. However, the rate for females was slightly lower. Māori unemployment rates in Capital & Coast DHB were significantly lower than their national counterparts.

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

		Capital & Coast ASR, percent	New Zealand ASR, percent	SRR
Gender	Female	4.0 (3.9–4.2)	4.2 (4.2–4.3)	0.9 (0.9–1.0)
	Male	4.1 (3.9–4.2)	3.7 (3.7–3.7)	1.1 (1.1–1.1)
	Total	4.0 (4.0–4.1)	4.0 (4.0–4.0)	1.0 (1.0–1.0)
Ethnicity (total response)	Māori	6.2 (5.8–6.5)	6.9 (6.8–6.9)	0.9 (0.8–1.0)
	Pacific	6.5 (6.1–6.9)	6.1 (6.0–6.2)	1.1 (1.0–1.1)
	Asian	4.6 (4.3–4.8)	4.8 (4.7–4.9)	1.0 (0.9–1.0)
	European/Other	3.6 (3.5–3.7)	3.3 (3.2–3.3)	1.1 (1.1–1.1)

2.6 No access to telephone at home

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.

There were significantly higher percentages of Māori and Pacific people who did not have access to a telephone or cellphone than European/Other and Asian people in the Capital & Coast populations. The rate for males was also higher than for females. However, except for Asian people, the rates were generally lower 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

		Capital & Coast ASR, percent	New Zealand ASR, percent	SRR
Gender	Female	1.0 (1.0–1.1)	1.6 (1.6–1.7)	0.6 (0.6–0.7)
	Male	1.4 (1.3–1.5)	2.0 (2.0–2.0)	0.7 (0.7–0.7)
	Total	1.2 (1.2–1.3)	1.8 (1.8–1.8)	0.7 (0.6–0.7)
Ethnicity (total response)	Māori	3.3 (3.0–3.6)	5.3 (5.3–5.4)	0.6 (0.6–0.7)
	Pacific	3.0 (2.7–3.3)	4.4 (4.3–4.5)	0.7 (0.6–0.8)
	Asian	1.3 (1.1–1.5)	1.3 (1.2–1.3)	1.0 (0.9–1.2)
	European/Other	0.9 (0.8–0.9)	1.2 (1.2–1.2)	0.7 (0.7–0.8)

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.

In Capital & Coast DHB nearly one in ten adults reported not having access to a motor vehicle at home. This percentage was almost double the New Zealand average. Within Capital & Coast DHB a higher percentage of females reported a lack of access to a motor vehicle than males and a higher percentage of Māori and Pacific peoples reported not having accessing to a motor vehicle than any other ethnic groups. However the district does have a well organised public transport and people make good use of this.

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

		Capital & Coast ASR, percent	New Zealand ASR, percent	SRR
Gender	Female	10.2 (10.0–10.4)	5.5 (5.5–5.6)	1.8 (1.8–1.9)
	Male	8.6 (8.4–8.8)	4.1 (4.1–4.1)	2.1 (2.0–2.1)
	Total	9.4 (9.3–9.6)	4.9 (4.8–4.9)	1.9 (1.9–2.0)
Ethnicity (total response)	Māori	12.0 (11.2–12.9)	9.4 (9.3–9.5)	1.5 (1.4–1.6)
	Pacific	12.5 (11.6–13.4)	8.7 (8.6–8.9)	1.6 (1.5–1.7)
	Asian	10.0 (9.4–10.7)	5.4 (5.3–5.5)	2.1 (2.0–2.3)
	European/Other	7.9 (7.7–8.1)	4.0 (4.0–4.0)	2.3 (2.3–2.4)

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.

The proportion of people living in overcrowded housing was significantly lower in the Capital & Coast district compared with New Zealand as a whole.

Approximately one-third of Pacific people in the Capital & Coast DHB district lived in overcrowded housing, significantly higher than the rest of the district's population.

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

		Capital & Coast ASR, percent	New Zealand ASR, percent	SRR
Gender	Female	9.7 (9.5–9.8)	11.6 (11.5–11.6)	0.8 (0.8–0.8)
	Male	9.6 (9.4–9.8)	11.2 (11.2–11.3)	0.9 (0.8–0.9)
	Total	9.6 (9.5–9.7)	11.4 (11.3–11.5)	0.8 (0.8–0.9)
Ethnicity (total response)	Māori	16.3 (15.8–16.8)	21.2 (21.0–21.3)	0.8 (0.7–0.8)
	Pacific	33.6 (32.9–34.4)	41.2 (40.9–41.4)	0.8 (0.8–0.8)
	Asian	14.9 (14.4–15.4)	19.4 (19.3–19.6)	0.8 (0.7–0.8)
	European/Other	5.5 (5.4–5.6)	5.8 (5.8–5.8)	0.9 (0.9–1.0)

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 Capital & Coast DHB was approximately a third of the national prevalence.
- Over 60 percent of people in Capital & Coast DHB ate three or more servings of vegetables on average each day. A similar proportion ate two or more servings of fruit on average each day. These rates are similar to the national rates.
- Fewer than half of people in Capital & Coast DHB did regular physical activity; this was significantly lower than the total New Zealand population.
- The prevalence of hazardous drinking in the combined Capital & Coast, Wairarapa, Hutt Valley DHB region did not differ significantly from the total New Zealand prevalence.
- For Capital & Coast DHB, the prevalence of marijuana use over a 12-month period was not significantly different from the New Zealand rate.
- The proportion of people overweight or obese in Capital & Coast DHB was not significantly different from the proportion nationally.
- The proportion of Māori, and of Pacific people who were obese was significantly higher than the total proportion of obese people in Capital & Coast DHB.

3.1 Smoking – current daily smokers

The prevalence of current daily smokers in Capital & Coast DHB was significantly lower (by approximately a third) than the national prevalence, adjusted for age.

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
Capital & Coast DHB	Female	29.3 (25.5–33.4)	13.7 (9.4–19.0)	2.8 (0.8–7.0)	11.4 (8.9–14.2)	11.9 (9.5–14.6)
	Male	25.4 (21.0–30.1)	21.2 (15.8–27.3)	10.5 (6.8–15.3)	12.5 (10.0–15.3)	13.5 (11.1–16.3)
	Total	27.5 (24.4–30.8)	17.2 (13.5–21.5)	6.4 (3.8–9.9)	11.9 (9.6–14.5)	12.7 (10.6–15.1)
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

Over 60 percent of people in Capital & Coast DHB ate three or more servings of vegetables on average each day. A similar percentage ate two or more servings of fruit on average each day. These rates are similar to the national rates, adjusted for age. The rates are significantly higher among females than males.

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
Capital & Coast DHB	Female	64.5 (58.5–70.1)	46.5 (39.1–54.0)	51.7 (44.7–58.6)	73.3 (67.9–78.3)	69.4 (64.1–74.4)
	Male	54.0 (47.8–60.1)	42.4 (34.6–50.5)	40.8 (33.5–48.3)	60.2 (54.9–65.3)	57.1 (51.9–62.2)
	Total	59.6 (54.2–64.9)	44.5 (37.9–51.3)	46.6 (40.2–53.1)	67.0 (61.8–71.9)	63.5 (58.6–68.3)
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)

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
Capital & Coast DHB	Female	64.4 (59.5–69.1)	68.0 (61.5–73.9)	63.9 (58.0–69.6)	71.7 (67.3–75.9)	70.4 (66.1–74.5)
	Male	47.9 (42.4–53.4)	51.9 (44.3–59.4)	51.2 (45.4–56.9)	52.1 (47.7–56.4)	51.7 (47.5–55.9)
	Total	56.8 (52.2–61.2)	60.3 (54.8–65.6)	58.0 (53.0–62.9)	62.3 (58.1–66.3)	61.4 (57.6–65.2)
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

Fewer than half of the people in Capital & Coast DHB did regular physical activity. This rate is significantly lower than the rate for the total New Zealand population, adjusted for age.

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
Capital & Coast DHB	Female	44.5 (38.6–50.5)	37.9 (30.0–46.2)	30.6 (24.4–37.3)	43.3 (38.0–48.8)	41.8 (36.6–47.2)
	Male	52.8 (46.8–58.8)	46.1 (38.4–54.0)	40.6 (33.6–47.8)	48.4 (43.0–53.8)	47.8 (42.5–53.1)
	Total	48.4 (42.9–53.9)	41.8 (35.1–48.7)	35.2 (29.3–41.5)	45.8 (40.6–51.1)	44.7 (39.7–49.7)
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 the combined Capital & Coast, Wairarapa, Hutt Valley DHB region did not differ significantly from the total New Zealand prevalence, after adjusting for age. The prevalence of hazardous drinking for males was significantly higher than for females.

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
Capital & Coast / Wairarapa / Hutt Valley DHB area	Female	23.4 (16.0–30.8)	15.7 (7.2–28.3)	0.9 (0.0–4.9)	15.9 (9.9–22.0)	14.5 (9.9–19.1)
	Male	33.8 (22.1–45.6)	32.9 (14.2–56.7)	17.1 (8.4–29.3)	24.3 (18.6–29.9)	24.1 (19.4–28.9)
	Total	28.4 (21.7–35.0)	23.6 (13.0–34.2)	8.1 (4.3–13.7)	19.9 (15.7–24.2)	19.1 (15.7–22.5)
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:

Due to small sample size, some DHBs have been combined.

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 ten 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

For Capital & Coast DHB, the prevalence of marijuana use over a 12 month period was not significantly different from the New Zealand rate.

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
Capital & Coast DHB	Female	15.3 (3.1–39.3)	5.9 (0.6–20.7)	3.6 (0.0–21.7)	23.3 (13.7–32.8)	20.9 (12.3–29.5)
	Male	52.0 (15.9–86.5)	*	7.6 (0.7–26.9)	20.7 (12.2–31.7)	20.1 (12.4–27.9)
	Total	31.0 (14.1–52.6)	13.9 (5.1–28.2)	5.3 (0.9–15.7)	22.1 (15.2–28.9)	20.5 (14.6–26.4)
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)

* Rates not presented for groups with small numbers.

3.6 Overweight

The proportion of people overweight in Capital & Coast DHB was not significantly different from the proportion nationally.

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
Capital & Coast DHB	Female	30.7 (26.2–35.5)	24.1 (18.2–30.8)	25.2 (20.4–30.5)	34.0 (30.2–38.0)	32.4 (28.7–36.3)
	Male	35.4 (30.4–40.5)	28.4 (22.4–35.0)	40.0 (33.8–46.4)	46.1 (42.1–50.0)	44.2 (40.3–48.1)
	Total	32.9 (28.9–37.2)	26.3 (21.5–31.5)	32.3 (27.7–37.1)	40.0 (36.4–43.8)	38.3 (34.8–41.8)
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 who were obese in Capital & Coast DHB was not significantly different from the proportion nationally.

The proportion of Māori, and of Pacific people who were obese was significantly higher than the total proportion of obese people in Capital & Coast DHB. The proportion of Asian people who are obese was significantly lower than the total proportion of obese people in Capital & Coast 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
Capital & Coast DHB	Female	36.7 (32.0–41.5)	55.8 (49.4–62.2)	10.8 (6.9–15.9)	21.5 (17.6–25.7)	23.5 (19.8–27.5)
	Male	36.0 (31.0–41.1)	55.1 (48.8–61.3)	8.3 (4.3–14.1)	20.8 (17.0–25.0)	22.6 (18.9–26.7)
	Total	36.3 (32.3–40.5)	55.5 (50.2–60.7)	9.6 (5.9–14.5)	21.1 (17.5–25.1)	23.0 (19.6–26.8)
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 prevalence rates of people taking medication for high cholesterol are not significantly different between Capital & Coast DHB and all New Zealand, 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
Capital & Coast DHB	Female	4.0 (2.3–6.4)	6.5 (3.6–10.6)	3.3 (1.5–6.1)	6.6 (4.9–8.5)	6.2 (4.7–8.1)
	Male	5.6 (3.6–8.3)	5.2 (2.9–8.6)	8.4 (5.4–12.1)	8.6 (6.9–10.6)	8.3 (6.7–10.3)
	Total	4.8 (3.1–6.9)	5.9 (3.7–8.9)	5.7 (3.7–8.2)	7.6 (6.0–9.4)	7.2 (5.8–8.9)
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 prevalence rates of people taking medication for high blood pressure are not significantly different between Capital & Coast 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
Capital & Coast DHB	Female	8.9 (6.8–11.3)	9.2 (6.6–12.4)	6.2 (3.9–9.3)	13.0 (11.1–15.0)	12.2 (10.4–14.1)
	Male	9.0 (6.6–11.8)	9.2 (6.2–12.9)	9.6 (7.0–12.8)	11.6 (9.7–13.8)	11.4 (9.6–13.5)
	Total	8.9 (7.0–11.1)	9.2 (6.8–12.1)	7.8 (5.7–10.3)	12.3 (10.6–14.3)	11.8 (10.2–13.6)
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 Capital & Coast DHB district, in comparison to all New Zealanders.

Key points

- The rate of avoidable mortality for Capital & Coast DHB was significantly lower than the New Zealand rate. Avoidable mortality rates were significantly higher among Māori and Pacific ethnic groups than among Asian and European/Other ethnic groups.
- The top three causes of avoidably mortality for Capital & Coast DHB were ischaemic heart disease, lung cancer, and suicide and self-inflicted injuries, which was the same for New Zealand in total. In addition to these, stroke and breast cancer formed the top five leading causes of avoidable mortality in Capital & Coast DHB.
- Ischaemic heart disease was the leading cause of avoidable mortality for all ethnic groups, except for European/Other where the leading cause was lung cancer.
- Avoidable hospitalisation rates for all ethnic groups and for males and females in Capital & Coast DHB were significantly lower than their national counterparts.
- Respiratory infections, cellulitis, angina, and ear, nose and throat infections were among the top four avoidable hospitalisations for Capital & Coast, which is similar to patterns for New Zealand in total. Asthma was also one of the top five causes of avoidable hospitalisation for Capital & Coast DHB.
- The self-reported diabetes prevalence is about 5 percent of people aged 15 years and over in Capital & Coast DHB, which was similar to the New Zealand rate. Pacific people have a significantly higher prevalence rate of self-reported diabetes than the rate for Capital & Coast DHB in total.
- The diabetes hospitalisation rate in Capital & Coast DHB was significantly lower than the national rate. However, Māori and European/Other were the only ethnic groups to have significantly lower rates than their national counterparts.
- The hospitalisation rate for cardiovascular disease in Capital & Coast DHB was significantly lower than the national rate.
- The cancer mortality rate in Capital & Coast DHB was significantly lower than the national rate. All ethnic groups except Pacific peoples in Capital & Coast DHB had significantly lower cancer hospitalisation rates than their New Zealand counterparts.
- Capital & Coast DHB had significantly higher adult medicated asthma prevalence than New Zealand as a whole, with almost 15 percent of adults reporting medicated asthma in Capital & Coast DHB.
- The asthma hospitalisation rate for Capital & Coast DHB was significantly lower than the national rate. The rates for Māori and Pacific ethnic groups were significantly higher than European /Other and Asian ethnic groups.

- Overall, Capital & Coast DHB had a significantly lower unintentional injury mortality rate than the national rate. Unintentional injury hospitalisation rates in Capital & Coast DHB for all ethnic groups and for males and females were significantly lower than their national counterparts.
- Over 16 percent of people aged 15 years and older reported a chronic mental health condition in Capital & Coast DHB, which was similar to the rate for New Zealand.
- Self-harm hospitalisation rates for Capital & Coast DHB were significantly lower than national rates, for both males and females, and in total.
- Capital & Coast DHB had a significantly higher rate of notifications of campylobacteriosis and giardiasis, and a significantly lower meningococcal disease notifications rate, than all of New Zealand.
- The central region had lower proportions of people experiencing disability across the 15–64 year age groups, than New Zealand as a whole.
- Capital & Coast DHB had four of the same leading causes of hospitalisations for children 0–4 years of age as New Zealand as a whole: respiratory infections, health supervision and care of other health infant and child, disorders related to length of gestation and fetal growth, and gastroenteritis.
- Capital & Coast DHB had the same leading causes of hospitalisations for children 5–14 years of age as New Zealand as a whole: dental conditions, ear, nose and throat infections, chronic disease of the tonsils and adenoids, respiratory infections, and falls.
- The leading causes of mortality for older people in Capital & Coast DHB were the same as those nationally: ischaemic heart disease, stroke, chronic obstructive pulmonary disease, diabetes, and lung cancer.
- Children in school year 8 in Capital & Coast DHB had higher proportions of caries-free teeth and lower proportions of decayed, missing or filled teeth than in New Zealand as a whole.
- For mothers aged 15 to 19 years living in the Capital & Coast district, the rate of births registered in 2007 was lower than the national rate. For mothers of all ages living in the Capital & Coast district, the rate of live births was lower than the national rate of live births registered in 2007.

4.1 Avoidable mortality

The rate of avoidable mortality for Capital & Coast DHB was significantly lower than the New Zealand rate. Males had significantly higher avoidable mortality rates than females in Capital & Coast DHB. Avoidable mortality rates were significantly higher among Māori and Pacific ethnic groups than among Asian and European/Other ethnic groups.

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

Capital & Coast DHB	Female	291.7 (227.4–368.6)	277.8 (215.7–352.1)	113.9 (78.9–159.2)	102.7 (92.4–113.8)	123.0 (112.8–133.9)
	Male	398.9 (322.4–488.2)	341.4 (268.5–427.9)	116.1 (78.3–165.8)	162.9 (149.5–177.2)	182.4 (169.6–196.1)
	Total	342.1 (291.8–398.7)	308.6 (260.1–363.5)	115.3 (88.8–147.3)	131.7 (123.2–140.5)	151.5 (143.3–160.1)
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

The top three causes of avoidably mortality for Capital & Coast DHB were ischaemic heart disease, lung cancer, and suicide and self-inflicted injuries, which was the same for New Zealand in total. In addition to these, stroke and breast cancer formed the top five leading causes of avoidable mortality in Capital & Coast DHB.

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

	New Zealand		Capital & Coast	
	Causes	Rank	Causes	Rank
Female	Neoplasms - Breast	1	Neoplasms - Breast	1
	Cardiovascular diseases - Ischaemic heart disease	2	Cardiovascular diseases - Ischaemic heart disease	2
	Neoplasms - Lung	3	Neoplasms - Lung	3
	Neoplasms - Colorectal	4	Cardiovascular diseases - Cerebrovascular diseases	4
	Cardiovascular diseases - Cerebrovascular diseases	5	Neoplasms - Colorectal	5
Male	Cardiovascular diseases - Ischaemic heart disease	1	Cardiovascular diseases - Ischaemic heart disease	1
	Neoplasms - Lung	2	Intentional injuries - Suicide and self inflicted injuries	2
	Intentional injuries - Suicide and self inflicted injuries	3	Neoplasms - Lung	3
	Unintentional injuries - Road traffic injuries, other transport injuries	4	Cardiovascular diseases - Cerebrovascular diseases	4
	Neoplasms - Colorectal	5	Neoplasms - Colorectal	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	Cardiovascular diseases - Cerebrovascular diseases	4
	Unintentional injuries - Road traffic injuries, other transport injuries	5	Neoplasms - Breast	5

Note:

Neoplasms = Cancer.

The leading causes of avoidable mortality for Capital & Coast DHB varied by ethnic group. Ischaemic heart disease was the leading cause for all groups. Breast cancer was a leading cause of avoidable mortality for Asian and Pacific 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		Capital & Coast	
	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	Intentional injuries - Suicide and self inflicted injuries	4
	Unintentional injuries - Road traffic injuries, other transport injuries	5	Respiratory diseases - COPD	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	Cardiovascular diseases - Cerebrovascular diseases	3
	Neoplasms - Lung	4	Neoplasms - Breast	4
	Respiratory diseases - COPD	5	Unintentional injuries - Road traffic injuries, other transport injuries	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	Cardiovascular diseases - Cerebrovascular diseases	3
	Neoplasms - Lung	4	Neoplasms - Breast	4
	Unintentional injuries - Road traffic injuries, other transport injuries	5	*	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	Cardiovascular diseases - Cerebrovascular diseases	4
	Unintentional injuries - Road traffic injuries, other transport injuries	5	Neoplasms - Colorectal	5

Note:

Neoplasms = Cancer.

COPD = Chronic obstructive pulmonary disease

Leading causes are only listed where the number of deaths is greater than or equal to five. An asterisk () indicates that leading cause information is not available because of insufficient numbers.

4.3 Avoidable hospitalisations

Avoidable hospitalisation rates for all ethnic groups and for males and females in Capital & Coast DHB were significantly lower than their national counterparts. Males had a significantly higher rate of avoidable hospitalisations than females. Avoidable hospitalisation rates were significantly higher among Māori and Pacific ethnic groups than among Asian and European/Other ethnic groups.

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
Capital & Coast DHB	Female	3710.1 (3514.8 - 3913.4)	4093.5 (3859.4 - 4338.1)	1534.4 (1403.6 - 1674.1)	2197.2 (2143.4 - 2252.1)	2394.5 (2346.1 - 2443.6)
	Male	3767.7 (3566.1 - 3977.7)	4458.5 (4208.1 - 4719.9)	2028.1 (1872.2 - 2193.5)	2453.2 (2394.9 - 2512.6)	2672.7 (2620.1 - 2726.1)
	Total	3740.2 (3599.3 - 3885.2)	4270.3 (4098.5 - 4447.5)	1783.0 (1680.6 - 1890.0)	2324.5 (2284.7 - 2364.7)	2533.8 (2498.0 - 2569.9)
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

Respiratory infections, cellulitis, angina, and ear, nose and throat infections were among the top four avoidable hospitalisations for Capital & Coast, which is similar to patterns for New Zealand in total. Asthma was also one of the top five causes of avoidable hospitalisation for Capital & Coast DHB.

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

	New Zealand		Capital & Coast	
	Causes	Rank	Causes	Rank
Female	Respiratory infections	1	Respiratory infections	1
	Angina	2	Cellulitis	2
	Cellulitis	3	Angina	3
	Asthma	4	Asthma	4
	Dental conditions	5	Kidney/urinary infection	5
Male	Respiratory infections	1	Respiratory infections	1
	Angina	2	Cellulitis	2
	Cellulitis	3	Angina	3
	Road traffic injury	4	ENT infections	4
	ENT infections	5	Asthma	5
Total	Respiratory infections	1	Respiratory infections	1
	Angina	2	Cellulitis	2
	Cellulitis	3	Angina	3
	ENT infections	4	ENT infections	4
	Dental conditions	5	Asthma	5

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

Respiratory infections, cellulitis and angina were among the top five leading causes of avoidable hospitalisation across all ethnic groups in Capital & Coast DHB. Ear nose and throat infections were among the leading causes for all groups except for the Asian ethnic group.

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

Ethnic group	New Zealand		Capital & Coast	
	Causes	Rank	Causes	Rank
Māori	Respiratory infections	1	Respiratory infections	1
	Cellulitis	2	Cellulitis	2
	Angina	3	COPD	3
	COPD	4	Angina	4
	Asthma	5	ENT infections	5
Pacific	Respiratory infections	1	Respiratory infections	1
	Angina	2	Cellulitis	2
	Cellulitis	3	Angina	3
	Asthma	4	ENT infections	4
	COPD	5	Asthma	5
Asian	Angina	1	Respiratory infections	1
	Respiratory infections	2	Angina	2
	Dental conditions	3	Gastroenteritis	3
	Gastroenteritis	4	Cellulitis	4
	Asthma	5	Dental conditions	5
European / Other	Angina	1	Respiratory infections	1
	Respiratory infections	2	Cellulitis	2
	Cellulitis	3	Angina	3
	Road traffic injury	4	Asthma	4
	ENT infections	5	ENT infections	5

Note:

COPD = Chronic obstructive pulmonary disease.

ENT Infections = Ear, nose and throat infections.

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

More than 60 percent of adults in Capital & Coast DHB reported that their general health status was excellent or very good, which was similar to the New Zealand rate. For Capital & Coast DHB, the prevalence rates for Māori and Pacific females were significantly lower than the total female rates, 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
Capital & Coast DHB	Female	51.9 (46.8–57.0)	51.4 (45.1–57.6)	57.7 (51.8–63.4)	65.4 (60.8–69.8)	63.1 (58.6–67.4)
	Male	52.8 (46.8–58.8)	53.4 (47.0–59.7)	56.1 (49.2–62.9)	61.2 (56.5–65.8)	59.9 (55.3–64.3)
	Total	52.3 (47.4–57.2)	52.3 (46.7–57.9)	57.0 (51.5–62.2)	63.4 (58.9–67.7)	61.6 (57.4–65.6)
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)

The self-reported diabetes prevalence is about 5 percent of people aged 15 years and over in Capital & Coast DHB, which was similar to the New Zealand rate. Pacific people have a significantly higher prevalence rate of self-reported diabetes than the rate for Capital & Coast DHB in total, 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
Capital & Coast DHB	Female	4.3 (2.9–6.0)	7.8 (5.4–11.0)	3.9 (2.3–6.0)	3.4 (2.3–4.9)	3.9 (2.8–5.2)
	Male	5.9 (4.3–8.0)	9.5 (6.2–13.6)	7.7 (5.6–10.3)	4.0 (2.9–5.5)	4.9 (3.7–6.2)
	Total	5.0 (3.7–6.6)	8.6 (6.6–11.0)	5.6 (4.2–7.4)	3.7 (2.6–5.1)	4.4 (3.4–5.5)
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 Capital & Coast DHB was significantly lower than the national rate. However, Māori and European/Other were the only ethnic groups to have significantly lower rates than their national counterparts.

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
Capital & Coast DHB	Female	422.8 (340.0 - 519.7)	768.9 (646.0 - 908.4)	269.7 (203.7 - 350.3)	88.9 (79.1 - 99.5)	152.9 (140.7 - 165.8)
	Male	462.6 (367.9 - 574.2)	712.6 (576.5 - 871.1)	321.9 (246.8 - 412.7)	121.8 (109.3 - 135.4)	174.4 (160.5 - 189.2)
	Total	434.2 (371.8 - 504.2)	726.3 (636.0 - 825.8)	291.2 (241.0 - 348.7)	103.9 (96.0 - 112.2)	162.1 (152.9 - 171.7)
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

In Capital & Coast DHB, the rate of hospitalisations for people with renal failure due to diabetes was significantly higher among Māori and Pacific ethnic groups than among Asian and European/Other ethnic groups. The rate for Pacific females was nearly three times that of Pacific males, which contrasts with the national picture.

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
Capital & Coast DHB	Female	70.1 (37.3 - 119.9)	184.5 (128.5 - 256.5)	*	6.9 (4.4 - 10.3)	20.0 (15.7 - 25.1)
	Male	108.3 (67.9 - 163.9)	61.8 (29.6 - 113.7)	26.9 (9.9 - 58.6)	9.9 (6.6 - 14.3)	20.0 (15.5 - 25.5)
	Total	87.1 (60.7 - 121.2)	128.0 (93.3 - 171.2)	17.5 (7.6 - 34.5)	8.3 (6.2 - 10.9)	20.0 (16.8 - 23.6)
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)

* Rates not presented for groups with small numbers.

4.7.2 Adult hospitalisations due to leg/foot/toe amputation as long term complication of diabetes

The rate of hospitalisations for amputation of leg, foot or toes for people with diabetes was significantly lower in Capital & Coast DHB than the national rate. The male rate was more than double the rate for females. Māori 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
Capital & Coast DHB	Female	*	*	*	3.6 (1.8 - 6.2)	4.8 (2.8 - 7.6)
	Male	36.4 (16.6 - 69.0)	*	*	7.9 (5.0 - 11.7)	10.8 (7.6 - 14.9)
	Total	19.8 (9.5 - 36.3)	*	11.9 (3.9 - 27.7)	5.4 (3.8 - 7.5)	7.5 (5.6 - 9.7)
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 Capital & Coast DHB did not differ significantly from the national rates. Males experienced a higher mortality from cardiovascular disease than their female counterparts. Māori and Pacific rates were significantly higher than European/Other and Asian rates.

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

		Māori	Pacific	Asian	European/ Other	Total
Capital & Coast DHB	Female	161.3 (108.0–231.7)	199.7 (140.6–275.2)	118.1 (80.8–166.7)	108.6 (101.4–116.1)	116.2 (108.9–123.8)
	Male	321.1 (233.3–431.0)	255.5 (182.5–347.9)	91.2 (54.9–142.5)	176.0 (163.8–188.8)	182.6 (170.7–195.1)
	Total	222.2 (174.2–279.4)	228.0 (180.0–285.0)	110.1 (82.0–144.8)	139.4 (132.7–146.3)	146.6 (139.9–153.5)
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 Capital & Coast DHB was significantly lower than the national rate. The rate was significantly higher for males than for females. The rates for Māori and Pacific people were significantly higher than those for Asian and European/Other people.

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

		Māori	Pacific	Asian	European/ Other	Total
Capital & Coast DHB	Female	1000.0 (873.3 - 1139.9)	886.6 (771.3 - 1014.3)	525.4 (445.7 - 615.3)	522.5 (503.2 - 542.4)	563.3 (544.4 - 582.7)
	Male	1369.5 (1221.1 - 1531.0)	1530.0 (1361.7 - 1713.3)	870.7 (764.2 - 987.8)	934.0 (904.2 - 964.5)	991.0 (962.4 - 1020.2)
	Total	1184.1 (1085.7 - 1289.1)	1161.5 (1063.1 - 1266.6)	682.2 (616.5 - 752.9)	714.1 (696.8 - 731.7)	762.3 (745.6 - 779.3)
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 Capital & Coast DHB, 4.1% of males and 3.5% of females reported that they have 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
Capital & Coast DHB	Female	3.4 (2.1–5.3)	2.7 (1.1–5.4)	0.8 (0.1–3.1)	3.0 (1.9–4.4)	2.9 (1.9–4.2)
	Male	2.8 (1.6–4.7)	1.1 (0.1–4.6)	2.3 (0.6–5.8)	4.5 (3.3–5.9)	4.1 (3.0–5.4)
	Total	3.1 (2.0–4.7)	1.9 (0.8–3.9)	1.5 (0.4–3.8)	3.7 (2.7–4.9)	3.5 (2.6–4.5)
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 Capital & Coast DHB was similar to the New Zealand rate. The rate for males being more than double that for females. Māori had a significantly higher rate than Asian and European/Other 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
Capital & Coast DHB	Female	197.9 (115.3–316.9)	129.4 (72.4–213.5)	90.2 (48.0–154.2)	89.9 (81.3–99.1)	96.0 (87.3–105.3)
	Male	356.7 (238.9–512.2)	221.8 (133.6–346.4)	83.5 (41.7–149.4)	190.0 (173.2–207.9)	194.4 (178.3–211.7)
	Total	270.8 (198.2–361.2)	167.8 (116.2–234.5)	91.7 (58.7–136.4)	134.9 (126.1–144.1)	140.3 (131.7–149.4)
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 rates of hospitalisations due to ischaemic heart disease in Capital & Coast DHB were significantly lower than the national rates for all ethnic groups except for Asian people. The rate was more than twice as high among males as it was among females. Māori and Asian people had a significantly higher rate than 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
Capital & Coast DHB	Female	496.3 (379.6 - 637.5)	387.6 (287.7 - 511.0)	407.7 (313.3 - 521.7)	263.3 (245.7 - 281.9)	288.3 (270.7 - 306.7)
	Male	835.3 (681.1 - 1014.0)	618.9 (482.5 - 781.9)	761.0 (634.8 - 904.8)	644.7 (612.3 - 678.5)	670.7 (639.9 - 702.7)
	Total	655.5 (558.7 - 764.2)	492.8 (408.5 - 589.2)	569.0 (491.1 - 655.6)	441.9 (424.0 - 460.3)	467.0 (449.8 - 484.7)
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 Capital & Coast DHB, just over 1 percent 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
Capital & Coast DHB	Female	1.2 (0.5–2.4)	1.6 (0.4–4.1)	0.6 (0.0–2.4)	1.3 (0.7–2.2)	1.2 (0.7–2.1)
	Male	1.2 (0.4–3.0)	1.3 (0.1–4.9)	0.7 (0.1–2.6)	1.3 (0.6–2.3)	1.3 (0.7–2.2)
	Total	1.2 (0.5–2.4)	1.4 (0.4–3.5)	0.6 (0.1–2.1)	1.3 (0.7–2.1)	1.3 (0.7–2.0)
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 rate of cerebrovascular disease mortality for Capital & Coast DHB was similar to the national rate. Pacific peoples had a significantly higher stroke mortality rate than other ethnic groups in Capital & Coast DHB. The Māori rate in Capital & Coast DHB was four times lower than their national counterparts.

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
Capital & Coast DHB	Female	*	144.5 (79.0–242.5)	60.2 (28.8–110.6)	60.9 (54.0–68.5)	64.3 (57.3–71.9)
	Male	*	150.9 (78.0–263.6)	48.7 (15.8–113.8)	59.4 (50.3–69.7)	61.9 (53.0–72.0)
	Total	19.8 (7.3–43.2)	151.0 (98.6–221.3)	55.5 (31.1–91.6)	61.4 (55.7–67.4)	64.3 (58.6–70.3)
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)

* Rates not presented for groups with small numbers.

4.15 Hospitalisations due cerebrovascular disease (stroke)

The stroke hospitalisation rate in Capital & Coast DHB was significantly lower than the national rate. The rate for males was significantly higher than that of females in Capital & Coast DHB. Māori and Pacific people had a significantly higher rate than European/Other 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
Capital & Coast DHB	Female	226.5 (146.6 - 334.4)	271.9 (189.4 - 378.1)	121.2 (74.0 - 187.1)	116.8 (105.4 - 129.1)	127.9 (116.6 - 140.1)
	Male	233.6 (148.1 - 350.6)	468.9 (342.1 - 627.5)	163.6 (104.8 - 243.4)	160.1 (144.4 - 177.0)	175.5 (160.0 - 192.1)
	Total	230.6 (170.0 - 305.8)	354.7 (281.3 - 441.5)	145.2 (105.5 - 195.0)	137.4 (127.9 - 147.5)	150.6 (141.1 - 160.6)
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 Capital & Coast DHB was significantly lower than the national rate. The male rate was significantly higher than the female rate. The rate for Māori was significantly higher than the rate for Asian and European/Other ethnic groups.

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
Capital & Coast DHB	Female	166.3 (116.5–230.2)	146.3 (98.7–208.9)	75.8 (47.5–114.7)	104.9 (96.4–114.0)	108.1 (99.9–116.8)
	Male	196.2 (133.3–278.5)	161.8 (105.7–237.1)	93.7 (58.0–143.3)	128.7 (118.0–140.1)	131.3 (121.1–142.1)
	Total	176.9 (137.1–224.7)	152.4 (115.1–197.9)	81.6 (59.0–109.9)	114.8 (108.0–121.8)	117.6 (111.2–124.3)
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

All ethnic groups, except Pacific people, in Capital & Coast DHB had significantly lower cancer hospitalisation rates than their New Zealand counterparts. Asian people had a significantly lower rate than other ethnic groups. Males in Capital & Coast DHB had a significantly higher cancer hospitalisation rate than females.

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
Capital & Coast DHB	Female	545.1 (462.4 - 638.4)	501.3 (417.3 - 597.3)	240.3 (191.6 - 297.5)	498.3 (476.9 - 520.4)	478.6 (459.6 - 498.1)
	Male	549.5 (450.3 - 664.0)	522.0 (436.5 - 619.5)	182.2 (136.9 - 237.8)	554.6 (531.2 - 578.7)	538.8 (517.5 - 560.7)
	Total	530.2 (467.8 - 598.6)	521.3 (459.4 - 589.3)	212.2 (178.3 - 250.7)	518.4 (502.8 - 534.4)	501.5 (487.4 - 515.8)
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 overall lung cancer registration rate in Capital & Coast DHB was significantly lower than the national rate. Males had a significantly higher registration rate for lung cancer than females and the rate for Māori was significantly higher than the rate for European/Other people.

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
Capital & Coast DHB	Female	80.4 (40.2–143.9)	*	40.3 (16.2–83.0)	33.8 (26.9–41.9)	35.4 (28.8–43.0)
	Male	138.5 (71.6–241.9)	100.6 (50.2–180.1)	58.3 (21.4–126.9)	52.8 (43.9–63.0)	57.9 (49.1–67.9)
	Total	100.4 (63.7–150.7)	46.6 (23.3–83.4)	44.4 (23.6–75.9)	41.7 (36.2–47.8)	44.8 (39.5–50.7)
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)

* Rates not presented for groups with small numbers.

4.19 Lung cancer mortality

The overall rate for lung cancer mortality in Capital & Coast DHB was significantly lower than the national rate. The rate for males was significantly higher than that for females. The lung cancer rate for Māori was more than three times that of any other ethnic group.

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
Capital & Coast DHB	Female	109.7 (56.7–191.5)	*	*	24.2 (18.6–31.0)	27.0 (21.4–33.6)
	Male	93.4 (40.3–184.1)	44.1 (14.3–103.0)	*	41.9 (34.0–51.1)	43.2 (35.6–51.9)
	Total	96.9 (59.2–149.7)	25.0 (9.2–54.3)	25.1 (10.1–51.8)	31.6 (26.9–36.9)	33.6 (29.0–38.7)
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)

* Rates not presented for groups with small numbers.

4.20 Hospitalisations due to lung cancer

The rate of lung cancer hospitalisations in Capital & Coast DHB was significantly lower than the national rate. Māori had significantly higher lung cancer hospitalisation rates than the European/Other ethnic groups in Capital & Coast DHB.

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
Capital & Coast DHB	Female	102.5 (56.0 - 172.0)	35.4 (11.5 - 82.6)	*	27.7 (21.5 - 35.0)	30.7 (24.7 - 37.8)
	Male	95.5 (43.7 - 181.2)	98.3 (44.9 - 186.6)	*	33.2 (26.2 - 41.5)	37.4 (30.3 - 45.5)
	Total	100.6 (63.8 - 151.0)	60.6 (33.1 - 101.7)	*	29.8 (25.2 - 35.1)	33.4 (28.8 - 38.6)
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)

* Rates not presented for groups with small numbers.

4.21 Registrations of women with breast cancer

The breast cancer registration rate for Capital & Coast DHB was similar to the national rate, for each ethnic group and in total.

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
Capital & Coast	Female	173.2 (114.1–251.9)	229.3 (153.6–329.3)	118.6 (77.4–173.7)	149.4 (134.2–165.9)	152.5 (138.5–167.5)
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 rate for Capital & Coast DHB was similar to the national rate. The breast cancer mortality rate for Pacific women was more than double that of European/Other 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
Capital & Coast DHB	Female	73.7 (35.4–135.6)	96.0 (49.6–167.6)	30.3 (9.8–70.7)	37.7 (30.8–45.6)	41.6 (34.8–49.3)
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 Capital & Coast DHB was not significantly different to the national rate. Asian people had a significantly lower rate than the other ethnic groups.

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
Capital & Coast DHB	Female	208.5 (146.8 - 287.4)	194.6 (130.3 - 279.5)	56.9 (29.4 - 99.4)	148.0 (132.8 - 164.6)	148.9 (135.0 - 163.8)

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 rate for Capital & Coast DHB was similar to the national rate. The rate for Pacific men in Capital & Coast DHB was significantly lower than their counterparts in New Zealand, as well as all men in Capital & Coast DHB.

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
Capital & Coast DHB	Male	166.7 (86.1–291.2)	55.4 (18.0–129.3)	85.0 (43.9–148.5)	177.2 (160.1–195.6)	165.1 (149.7–181.6)
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 Capital & Coast DHB did not differ 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
Capital & Coast DHB	Male	*	*	*	33.3 (26.6–41.1)	32.2 (25.9–39.6)
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 Capital & Coast was nearly half the national rate.

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
Capital & Coast DHB	Male	*	*	*	45.5 (37.4 - 54.8)	42.6 (35.2 - 51.0)

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)
-------------	------	-------------------------	-----------------------	-----------------------	-----------------------	-----------------------

* Rates not presented for groups with small numbers.

4.27 Registrations of women with cancer of the cervix

The cervical cancer registration rate for Capital & Coast DHB was not significantly different to 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
Capital & Coast DHB	Female	*	*	27.3 (8.9–63.8)	8.9 (5.3–13.8)	10.6 (7.1–15.2)
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)

* Rates not presented for groups with small numbers.

4.28 Mortality due to cancer of the cervix

The cervical cancer mortality rate in Capital & Coast DHB was not significantly different to the national rate.

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
Capital & Coast	Female	*	*	*	1.7 (0.6–3.7)	1.5 (0.5–3.3)
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 Capital & Coast DHB was not significantly different to the national rate.

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
Capital & Coast	Female	27.0 (8.8 - 62.9)	.	.	12.7 (8.5 - 18.4)	13.7 (9.7 - 18.9)

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)
-------------	--------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------

* Rates not presented for groups with small numbers.

4.30 Registrations of people with colorectal cancer

Overall, rates of colorectal cancer registrations in Capital & Coast DHB were not significantly different to those observed nationally. Males had a significantly higher registration rate for colorectal cancer than females. Asian people had a significantly lower rate of colorectal cancer than European/Other people.

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
Capital & Coast	Female	*	49.7 (20.0–102.4)	53.2 (24.3–101.0)	69.7 (60.1–80.3)	66.1 (57.5–75.7)
	Male	98.1 (49.0–175.6)	48.8 (17.9–106.2)	*	90.6 (78.7–103.9)	86.8 (75.8–98.8)
	Total	57.7 (31.6–96.9)	50.4 (26.8–86.2)	38.4 (19.8–67.1)	79.3 (71.7–87.5)	75.6 (68.7–83.0)
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)

* Rates not presented for groups with small numbers.

4.31 Colorectal cancer mortality

Capital & Coast DHB had a significantly lower rate of colorectal cancer mortality than 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
Capital & Coast DHB	Female	*	37.1 (12.1–86.7)	*	25.4 (20.3–31.4)	24.9 (20.1–30.6)
	Male	*	*	*	29.1 (22.6–36.8)	29.2 (23.0–36.4)
	Total	19.7 (6.4–45.9)	24.9 (9.1–54.2)	21.6 (7.9–47.0)	27.3 (23.2–32.0)	27.1 (23.2–31.5)
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

Capital & Coast DHB had a significantly lower colorectal cancer hospitalisation rate than the national rate. Males had a significantly higher rate than females. Asian people had a significantly lower rate than the European/Other ethnic group.

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
Capital & Coast DHB	Female	89.4 (38.6 - 176.1)	*	36.2 (13.3 - 78.7)	62.0 (53.0 - 72.2)	56.8 (48.8 - 65.7)
	Male	52.5 (19.3 - 114.3)	*	29.6 (9.6 - 69.1)	81.6 (70.4 - 94.1)	76.0 (65.9 - 87.3)
	Total	84.9 (46.4 - 142.4)	*	32.5 (16.2 - 58.2)	70.9 (63.7 - 78.7)	65.5 (59.1 - 72.4)
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)

* Rates not presented for groups with small numbers.

4.33 Registrations of patients with malignant melanoma

Unlike the national results, there were no significant differences by gender in Capital & Coast DHB in the rate of malignant melanoma registrations.

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
Capital & Coast DHB	Female	*	*	*	68.0 (58.0–79.3)	56.1 (47.9–65.3)
	Male	*	*	*	64.0 (53.8–75.6)	54.5 (45.8–64.3)
	Total	*	*	*	65.9 (58.6–73.7)	55.1 (49.1–61.7)
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 Capital & Coast DHB was not significantly different to that observed nationally.

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
Capital & Coast DHB	Female	*	*	*	5.6 (3.2–9.3)	4.8 (2.7–7.9)
	Male	*	*	*	11.8 (7.7–17.3)	10.1 (6.6–14.8)
	Total	*	*	*	8.5 (6.1–11.6)	7.3 (5.2–9.9)
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 Capital & Coast DHB was not significantly different to that observed nationally.

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
Capital & Coast DHB	Female	*	*	*	41.3 (33.6 - 50.3)	35.0 (28.6 - 42.4)
	Male	*	*	*	44.7 (36.5 - 54.3)	38.4 (31.3 - 46.6)
	Total	*	*	*	42.5 (36.8 - 48.7)	36.2 (31.4 - 41.5)
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

Capital & Coast DHB had significantly higher adult medicated asthma prevalence than New Zealand as a whole, with almost 15 percent of adults reporting medicated asthma in Capital & Coast DHB. Māori females have a significantly higher prevalence than the total population, while Asian people have a significantly lower prevalence than the total population, 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
Capital & Coast DHB	Female	24.6 (21.3–28.2)	14.1 (10.3–18.6)	6.9 (4.2–10.4)	17.6 (14.9–20.5)	16.9 (14.3–19.7)
	Male	15.0 (11.7–18.9)	8.8 (5.4–13.3)	4.5 (2.0–8.4)	13.1 (10.5–16.0)	12.1 (9.6–15.0)
	Total	20.2 (17.3–23.3)	11.6 (8.5–15.2)	5.7 (3.3–9.1)	15.4 (12.9–18.2)	14.6 (12.2–17.2)
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 Capital & Coast DHB was significantly lower than the national rate. The rate for females was more than double the rate for males. The rates for Māori and Pacific ethnic groups were significantly higher than European/Other and Asian ethnic groups.

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
Capital & Coast DHB	Female	166.8 (124.2 - 219.3)	214.0 (154.2 - 289.2)	52.4 (28.7 - 88.0)	90.6 (79.4 - 102.9)	101.1 (90.7 - 112.4)
	Male	120.6 (79.5 - 175.5)	104.8 (62.1 - 165.7)	23.1 (7.5 - 53.8)	28.1 (21.7 - 35.7)	37.2 (30.7 - 44.6)
	Total	146.1 (115.5 - 182.3)	163.6 (124.8 - 210.6)	39.5 (23.8 - 61.6)	60.4 (53.8 - 67.6)	70.5 (64.2 - 77.2)
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 the combined Capital & Coast, Wairarapa and Hutt Valley DHBs region, Pacific and Asian people had a significantly lower prevalence of self-reported chronic obstructive pulmonary disease than the whole population in this area, adjusted for age.

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

		Māori	Pacific	Asian	European/ Other	Total
Capital & Coast/ Wairarapa/ Hutt Valley DHB	Female	7.5 (0.7–26.9)	*	1.5 (0.0–9.0)	8.4 (5.1–12.9)	7.9 (4.9–11.7)
	Male	8.9 (0.6–33.2)	*	*	9.4 (5.2–15.4)	8.5 (4.7–13.8)
	Total	8.2 (2.0–20.7)	0.8 (0.0–5.2)	0.9 (0.0–5.4)	8.9 (6.1–11.8)	8.2 (5.7–10.7)
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)

* Rates not presented for groups with small numbers.

Note: Due to small numbers, the results for these DHBs have been combined.

4.39 Chronic obstructive pulmonary disease hospitalisations

Māori had the highest chronic obstructive pulmonary disease hospitalisation rate in Capital & Coast DHB, followed by Pacific, European/Other and then Asian ethnic groups. Pacific and European/Other ethnic groups in Capital & Coast DHB had lower rates than their counterparts in New Zealand.

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
Capital & Coast DHB	Female	1725.1 (1387.2 - 2120.5)	859.6 (629.3 - 1146.5)		402.7 (369.8 - 437.6)	444.9 (412.4 - 479.3)
	Male	1330.5 (966.8 - 1786.2)	923.9 (671.3 - 1240.3)	446.7 (294.4 - 650.0)	372.4 (338.5 - 408.8)	420.3 (386.1 - 456.7)
	Total	1482.5 (1242.1 - 1755.8)	916.2 (736.7 - 1126.1)	225.8 (152.4 - 322.4)	384.5 (361.0 - 409.2)	429.3 (405.8 - 453.7)
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)

* Rates not presented for groups with small numbers.

4.40 Unintentional injury mortality

Overall, Capital & Coast DHB had a significantly lower unintentional injury mortality rate than the national rate. In particular, the rate for Māori males was nearly three times lower than their counterparts in New Zealand.

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
Capital & Coast DHB	Female	25.1 (10.8–49.4)	*	*	11.6 (8.9–14.9)	12.7 (10.0–16.0)
	Male	22.1 (8.9–45.5)	39.8 (19.1–73.2)	*	17.7 (13.7–22.5)	19.1 (15.3–23.6)
	Total	24.9 (13.9–41.1)	23.3 (12.4–39.8)	11.0 (3.6–25.7)	14.5 (12.1–17.2)	15.7 (13.4–18.3)
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)

* Rates not presented for groups with small numbers.

4.41 Unintentional injury hospitalisations

Unintentional injury hospitalisation rates in Capital & Coast DHB for all ethnic groups and for males and females were significantly lower than their national counterparts. Males had a significantly higher unintentional injury hospitalisation rate than females.

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
Capital & Coast DHB	Female	850.0 (761.3 - 946.2)	956.9 (844.8 - 1079.9)	480.5 (407.8 - 562.3)	717.2 (691.0 - 744.1)	734.4 (710.6 - 758.9)
	Male	1526.4 (1407.5 - 1652.7)	1825.5 (1668.2 - 1993.6)	474.1 (403.7 - 553.2)	1177.2 (1138.0 - 1217.5)	1199.3 (1165.1 - 1234.2)
	Total	1170.3 (1096.7 - 1247.5)	1382.8 (1286.1 - 1484.8)	479.5 (428.1 - 535.4)	946.7 (923.3 - 970.5)	964.5 (943.8 - 985.6)
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

Over 16 percent of people aged 15 years and older reported a chronic mental health condition in Capital & Coast DHB, which was similar to the rate for New Zealand.

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
Capital & Coast DHB	Female	20.8 (17.2–24.7)	11.3 (8.0–15.5)	6.3 (3.4–10.3)	20.8 (17.9–23.9)	18.8 (16.0–21.9)
	Male	12.6 (9.4–16.5)	9.4 (5.8–14.1)	5.1 (2.5–9.2)	14.9 (12.0–18.1)	13.6 (10.8–16.7)
	Total	17.0 (13.9–20.5)	10.4 (7.3–14.2)	5.7 (3.2–9.4)	17.9 (15.2–21.0)	16.3 (13.7–19.2)
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 Capital & Coast DHB, just over 7 percent of adults had a high or very high probability of having an anxiety or depressive disorder, adjusted for age. This was similar to the New Zealand rate. Rates for Maori and for Pacific people were significantly higher than the total rate for Capital & Coast DHB.

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
--	--	-------	---------	-------	----------------	-------

Capital & Coast DHB	Female	14.5 (11.9–17.3)	16.1 (12.5–20.2)	10.2 (7.1–13.9)	7.4 (5.5–9.8)	8.4 (6.5–10.7)
	Male	10.0 (7.6–12.9)	13.5 (9.4–18.5)	6.5 (3.9–10.1)	5.8 (3.9–8.2)	6.4 (4.6–8.7)
	Total	12.4 (10.2–14.9)	14.9 (11.8–18.3)	8.4 (6.1–11.4)	6.6 (4.8–8.9)	7.4 (5.7–9.5)
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

In Capital & Coast DHB the suicide death rate for males was nearly four times the rate for females. Overall, the rates are comparable to those observed nationally.

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

		Māori	Pacific	Asian	European/ Other	Total
Capital & Coast DHB	Female	*	*	*	4.0 (2.1–6.8)	4.4 (2.6–6.9)
	Male	29.8 (14.9–53.3)	22.8 (8.4–49.6)	*	16.0 (11.7–21.3)	17.4 (13.4–22.2)
	Total	16.2 (8.6–27.7)	14.6 (6.3–28.7)	*	9.7 (7.4–12.5)	10.5 (8.4–13.0)
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)

Intentional self-harm hospitalisation rates for females in Capital & Coast DHB were more than double the rates for males. However, for both genders, rates were approximately half those of their national counterparts.

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
--	--	-------	---------	-------	--------------------	-------

Capital & Coast DHB	Female	53.5 (33.9 - 80.3)	60.2 (35.1 - 96.4)	*	69.0 (59.6 - 79.5)	60.1 (52.6 - 68.2)
	Male	49.9 (29.0 - 79.8)	*	*	26.5 (20.8 - 33.2)	25.8 (21.0 - 31.5)
	Total	51.4 (36.7 - 70.0)	38.1 (23.6 - 58.2)	5.8 (2.1 - 12.7)	48.6 (42.9 - 54.8)	43.7 (39.1 - 48.7)
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

Mortality rates from infectious disease in Capital & Coast were comparable to national rates.

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

		Māori	Pacific	Asian	European/ Other	Total
Capital & Coast DHB	Female	21.0 (6.8 - 49.0)	*	17.0 (5.5 - 39.7)	10.7 (8.5 - 13.3)	12.0 (9.7 - 14.7)
	Male	28.8 (9.4 - 67.2)	*	*	9.9 (7.1 - 13.4)	11.3 (8.5 - 14.8)
	Total	22.5 (10.8 - 41.3)	17.4 (7.0 - 35.9)	13.6 (5.5 - 28.0)	10.6 (8.8 - 12.6)	11.9 (10.1 - 14.1)
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

Data in this section and the following sections were sourced from Institute of Environmental Science and Research Limited (ESR) and were only provided for Māori, Pacific, and Other ethnic groups. Data for Asian peoples were not available separately, but are part of the data for the Other group.

Capital & Coast DHB has a significantly higher campylobacteriosis notifications rate than all of New Zealand, adjusted for age. Non-Māori, non-Pacific people had a significantly higher rate of campylobacteriosis notifications than Māori and Pacific people.

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

		Māori	Pacific	Other	Total
Capital & Coast DHB	Female	176.7 (138.3–222.6)	100.3 (68.2–142.4)	391.9 (371.3–413.3)	343.9 (326.5–362.0)
	Male	196.7 (155.2–245.9)	140.2 (101.1–189.5)	472.7 (449.2–497.0)	418.2 (398.2–439.0)
	Total	186.5 (157.7–218.9)	120.3 (94.3–151.3)	431.6 (416.0–447.6)	380.3 (367.0–393.9)
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)

4.48 Cryptosporidiosis notifications

The cryptosporidiosis notification rate is 20.0 per 100,000 in Capital & Coast DHB. There is no significant difference between the DHB and all New Zealand, adjusted for age.

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

		Māori	Pacific	Other	Total
Capital & Coast DHB	Female	*	*	25.1 (19.6–31.7)	20.8 (16.4–26.0)
	Male	16.2 (7.0–32.0)	*	21.9 (16.5–28.5)	19.1 (14.7–24.4)
	Total	12.3 (6.3–21.4)	*	23.6 (19.7–28.1)	20.0 (16.9–23.6)
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

Capital & Coast DHB had a significantly higher giardiasis notifications rate than all of New Zealand, adjusted for age. In Capital & Coast DHB, the notification rate for giardiasis among Māori was significantly lower than non-Māori, non-Pacific, adjusted for age.

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

		Māori	Pacific	Other	Total
Capital & Coast DHB	Female	*	*	44.0 (36.8–52.2)	35.5 (29.9–42.0)
	Male	12.2 (4.0–28.4)	*	59.8 (51.4–69.3)	49.3 (42.5–56.9)
	Total	11.6 (5.3–22.0)	*	51.8 (46.2–57.8)	42.3 (37.8–47.1)
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)

* Rates not presented for groups with small numbers.

4.50 Hepatitis B notifications

The hepatitis B notification rate in Capital & Coast DHB was not available due to small numbers (counts less than 5).

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

		Māori	Pacific	Other	Total
Capital & Coast DHB	Female	*	*	*	*
	Male	*	*	*	*
	Total	*	*	*	*
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 disease notifications

Capital & Coast DHB had a significantly lower meningococcal disease notifications rate than all of New Zealand, 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
Capital & Coast DHB	Female	*	*	2.6 (1.1–5.4)	3.8 (2.0–6.6)
	Male	11.0 (3.6–25.6)	*	3.4 (1.6–6.3)	4.8 (2.8–7.7)
	Total	7.3 (2.9–15.0)	8.8 (3.2–19.1)	3.0 (1.7–4.8)	4.3 (2.9–6.2)
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)

* Rates not presented for groups with small numbers.

4.52 Rheumatic fever notifications

The rheumatic fever (initial attack) notification rate in Capital & Coast DHB was not available due to small numbers (counts less than 5).

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

		Māori	Pacific	Other	Total
Capital & Coast DHB	Female	*	*	*	*
	Male	*	*	*	*
	Total	*	*	*	*
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)

* Rates not presented for groups with small numbers.

4.53 Salmonellosis notifications

The rate of salmonellosis notifications in Capital & Coast DHB was 28.9 per 100,000. Māori had a significantly lower notification rate than non-Māori, non-Pacific people.

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

		Māori	Pacific	Other	Total
Capital & Coast DHB	Female	12.1 (4.4–26.4)	23.2 (8.5–50.6)	29.6 (23.7–36.5)	26.1 (21.2–31.8)
	Male	17.3 (7.0–35.7)	55.0 (31.5–89.4)	32.4 (26.2–39.5)	31.9 (26.4–38.2)
	Total	14.2 (7.6–24.3)	38.7 (24.2–58.6)	30.9 (26.6–35.7)	28.9 (25.2–33.0)
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

The tuberculosis notification rate in Capital & Coast DHB was 11.0 per 100,000.

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

		Māori	Pacific	Other	Total
Capital & Coast DHB	Female	24.0 (8.8–52.2)	*	10.6 (7.6–14.4)	11.0 (8.2–14.4)
	Male	*	*	11.7 (8.4–15.9)	11.0 (8.1–14.7)
	Total	18.8 (9.0–34.5)	13.9 (4.5–32.4)	11.1 (8.8–13.8)	11.0 (8.9–13.4)
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)

* Rates not presented for groups with small numbers.

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 central region had lower proportions of people experiencing disability across the 15–64 year age groups than New Zealand as a whole. Nearly 15 percent of Māori children in these areas experience disability, compared to nearly eight percent for non-Māori children.

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

	Central 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	7.6	8.0	17.4	43.7	8.6	8.3	19.1	41.0
Male	11.1	5.6	18.0	41.0	12.1	9.5	20.8	41.2
Total	9.4	6.9	17.7	42.5	10.4	8.9	19.9	41.1
Māori	14.6	12.7	24.2	41.2	14.2	13.2	27.9	46.6
Non-Māori	7.8	5.6	17.1	42.5	9.3	8.1	19.2	40.8

* Central DHBs region includes Hawke's Bay, Whanganui, MidCentral, Hutt Valley, Capital & Coast, and Wairarapa DHBs.

4.56 Child health (0–14 years)

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

Capital & Coast DHB had four of the same leading causes of hospitalisations for children 0–4 years of age as New Zealand as a whole: respiratory infections, health supervision and care of other healthy infant and child, disorders related to length of gestation and fetal growth, and gastroenteritis.

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

	New Zealand		Capital & Coast	
	Causes	Rank	Causes	Rank
Female	Respiratory infections	1	Health supervision and care of other healthy infant and child	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	Respiratory infections	3
	Gastroenteritis	4	Gastroenteritis	4
	ENT infections	5	Haemorrhagic and haematological disorders of fetus	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	Health supervision and care of other healthy infant and child	3
	ENT infections	4	ENT infections	4
	Gastroenteritis	5	Haemorrhagic and haematological disorders of fetus	5
Total	Respiratory infections	1	Respiratory infections	1
	Health supervision and care of other healthy infant and child	2	Health supervision and care of other healthy infant and child	2
	Disorders related to length of gestation and fetal growth	3	Disorders related to length of gestation and fetal growth	3
	ENT infections	4	Haemorrhagic and haematological disorders of fetus	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.

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

Leading causes of hospitalisation for children 0–4 years of age were similar across ethnic groups. For example, respiratory infections were a leading cause of hospitalisation for children aged 0–4 years across all ethnic groups.

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

	New Zealand		Capital & Coast	
	Causes	Rank	Causes	Rank
Māori	Respiratory infections	1	Respiratory infections	1
	Disorders related to length of gestation and fetal growth	2	Health supervision and care of other healthy infant and child	2
	Asthma	3	Disorders related to length of gestation and fetal growth	3
	Health supervision and care of other healthy infant and child	4	ENT infections	4
	Dental conditions	5	Dental conditions	5
Pacific	Respiratory infections	1	Respiratory infections	1
	Disorders related to length of gestation and fetal growth	2	Health supervision and care of other healthy infant and child	2
	Asthma	3	Disorders related to length of gestation and fetal growth	3
	Dental conditions	4	Dental conditions	4
	Health supervision and care of other healthy infant and child	5	Haemorrhagic and haematological disorders of fetus	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	Haemorrhagic and haematological disorders of fetus	2
	Respiratory infections	3	Respiratory infections	3
	Haemorrhagic and haematological disorders of fetus	4	Health supervision and care of other healthy infant and child	4
	Gastroenteritis	5	Gastroenteritis	5
European/ Other	Health supervision and care of other healthy infant and child	1	Health supervision and care of other healthy infant and child	1
	Respiratory infections	2	Disorders related to length of gestation and fetal growth	2
	Disorders related to length of gestation and fetal growth	3	Respiratory infections	3
	ENT infections	4	Gastroenteritis	4
	Gastroenteritis	5	ENT infections	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

Capital & Coast DHB had the same leading causes of hospitalisations for children 5–14 years of age as New Zealand as a whole: dental conditions, ear, nose and throat infections, chronic disease of the tonsils and adenoids, respiratory infections, and falls.

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

	New Zealand		Capital & Coast	
	Causes	Rank	Causes	Rank
Female	Dental conditions	1	Dental conditions	1
	Falls	2	Falls	2
	ENT infections	3	ENT infections	3
	Chronic diseases of tonsils and adenoids	4	Chronic diseases of tonsils and adenoids	4
	Respiratory infections	5	Respiratory infections	5
Male	Falls	1	Dental conditions	1
	Dental conditions	2	Falls	2
	ENT infections	3	ENT infections	3
	Respiratory infections	4	Respiratory infections	4
	Exposure to inanimate mechanical forces	5	Exposure to inanimate mechanical forces	5
Total	Dental conditions	1	Dental conditions	1
	Falls	2	Falls	2
	ENT infections	3	ENT infections	3
	Chronic diseases of tonsils and adenoids	4	Respiratory infections	4
	Respiratory infections	5	Chronic diseases of tonsils and adenoids	5

Note:

ENT Infections = Ear, nose and throat infections

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

Leading causes of hospitalisations for children 5–14 years differed across ethnic groups, but hospitalisations for dental conditions was one of the leading cause for all ethnic groups.

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

	New Zealand		Capital & Coast	
	Causes	Rank	Causes	Rank
Māori	Dental conditions	1	Dental conditions	1
	Falls	2	Falls	2
	ENT infections	3	ENT infections	3
	Respiratory infections	4	Exposure to inanimate mechanical forces	4
	Cellulitis	5	Cellulitis	5
Pacific	Dental conditions	1	Dental conditions	1
	ENT infections	2	ENT infections	2
	Falls	3	Falls	3
	Cellulitis	4	Respiratory infections	4
	Respiratory infections	5	Cellulitis	5
Asian	Dental conditions	1	Dental conditions	1
	Falls	2	Falls	2
	Chronic diseases of tonsils and adenoids	3	Respiratory infections	3
	Respiratory infections	4	Asthma	4
	Asthma	5	Gastroenteritis	5
European/ Other	Falls	1	Falls	1
	Dental conditions	2	Dental conditions	2
	ENT infections	3	Chronic diseases of tonsils and adenoids	3
	Chronic diseases of tonsils and adenoids	4	ENT infections	4
	Respiratory infections	5	Respiratory infections	5

Note:

ENT Infections = Ear, nose and throat infections

4.56.5 Infant mortality (birth–1 year)

The rate of infant mortality in Capital & Coast DHB was 4.6 per 1000 live births, which was similar to the national rate.

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

		Māori	Pacific	Asian	European/ Other	Total
Capital & Coast DHB	Female	*	9.1 (3.3–19.8)	*	3.4 (1.7–6.1)	4.6 (3.0–6.7)
	Male	5.2 (1.9–11.4)	7.4 (2.4–17.2)	*	4.2 (2.3–7.1)	4.7 (3.1–6.8)
	Total	4.6 (2.2–8.4)	8.2 (4.1–14.7)	5.2 (1.9–11.4)	3.8 (2.5–5.6)	4.6 (3.5–6.1)
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 rates of perinatal mortality within Capital & Coast DHB were comparable with the national rates.

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

		Māori	Pacific	Asian	European/ Other	Total
Capital & Coast DHB	Female	8.6 (3.9–16.3)	10.6 (4.2–21.8)	12.9 (5.2–26.7)	10.7 (7.5–14.9)	10.5 (8.0–13.6)
	Male	7.0 (3.0–13.7)	21.7 (12.1–35.8)	11.3 (4.5–23.3)	8.1 (5.3–11.8)	9.9 (7.5–12.8)
	Total	7.7 (4.5–12.4)	16.2 (10.2–24.6)	12.1 (6.6–20.2)	9.4 (7.2–12.1)	10.2 (8.4–12.2)
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

The rate of low birth weight in Capital & Coast DHB was significantly lower than the national rate. Asian people had a significantly higher rate of low birth weight than the other ethnic groups.

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

		Māori	Pacific	Asian	European/ Other	Total
Capital & Coast DHB	Female	70.0 (54.9–88.0)	53.0 (36.9–73.6)	80.1 (58.0–107.9)	52.3 (44.7–60.8)	58.5 (52.2–65.3)
	Male	42.0 (31.0–55.7)	54.4 (38.3–75.0)	86.6 (64.9–113.3)	49.3 (42.0–57.5)	52.4 (46.7–58.7)
	Total	55.4 (45.9–66.1)	53.7 (42.0–67.6)	83.6 (67.7–102.0)	50.8 (45.5–56.6)	55.4 (51.1–59.9)
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.

Capital & Coast DHB had higher breastfeeding rates than New Zealand as a whole, with over 60 percent of babies exclusively or fully breastfed for 10–16 weeks from birth.

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

Ethnicity	Capital & Coast	New Zealand
Māori	52.4	44.0
Pacific	47.9	43.0
Asian	59.5	51.8
European/Other	65.1	58.4
Total	61.7	53.7

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

Ethnicity	Capital & Coast	New Zealand
Māori	23.9	17.8
Pacific	22.9	17.9
Asian	32.1	26.2
European/Other	31.4	28.9
Total	29.8	25.5

4.56.9 Hearing test failure

Hearing screening is conducted with new entry school children (5 years old) to identify children with hearing loss.

About 1 percent of new entry school children had hearing loss in the Capital & Coast and Hutt Valley DHB regions. The rates in Capital & Coast and Hutt Valley DHB areas were lower than in New Zealand.

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

Ethnicity	Hutt Valley /Capital Coast	New Zealand
Māori	1.3	8.4
Non-Māori	0.9	4.8
Total	1.0	6.6

* Hearing failure includes audiometry failure only. The year period is school calendar year 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 Capital & Coast DHB had higher proportions of caries-free teeth and lower proportions of decayed, missing or filled teeth than in New Zealand as a whole. Māori and Pacific children had lower rates of caries-free teeth, and more mean numbers of decayed, missing or filled teeth than non-Māori, non-Pacific children in Capital & Coast DHB.

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

Ethnicity	Capital & Coast		New Zealand	
	Fluoridated	Non-fluoridated	Fluoridated	Non-fluoridated
Maori	58.1	n/a	36.9	28.4
Pacific	59.1	n/a	43.1	33.0
Other*	68.3	80.0	55.4	43.8
Total	65.4	78.6	50.8	40.2

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

'n/a': Data are not available.

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

Ethnicity	Capital & Coast		New Zealand	
	Fluoridated	Non-fluoridated	Fluoridated	Non-fluoridated
Maori	1.1	n/a	1.9	2.8
Pacific	1.1	n/a	1.7	2.3
Other*	0.7	0.2	1.1	1.6
Total	0.8	0.4	1.3	1.8

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

'n/a': Data are not available.

4.56.11 Childhood asthma hospitalisations

The Capital & Coast DHB childhood asthma hospitalisation rate was significantly lower than the national rate. Males had a significantly higher rate than females. Pacific children had a significantly higher rate than all children in Capital & Coast DHB.

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
Capital & Coast DHB	Female	418.1 (313.2 - 546.9)	294.6 (190.6 - 434.9)	82.0 (30.1 - 178.6)	234.8 (193.7 - 282.1)	257.5 (222.9 - 296.0)
	Male	382.2 (285.5 - 501.2)	839.0 (655.3 - 1058.3)	504.2 (360.2 - 686.5)	415.3 (360.8 - 475.7)	462.0 (416.2 - 511.5)
	Total	398.4 (325.9 - 482.3)	567.4 (459.6 - 692.8)	311.1 (227.7 - 414.9)	325.7 (291.1 - 363.3)	361.8 (332.7 - 392.8)
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 Capital & Coast DHB hospitalisation rate due to poisoning was significantly lower than the national rate.

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
Capital & Coast DHB	Female	*	70.9 (26.0 - 154.4)	*	38.3 (23.1 - 59.9)	39.9 (27.1 - 56.6)
	Male	43.2 (15.8 - 93.9)	58.0 (18.8 - 135.3)	65.8 (21.4 - 153.6)	53.9 (35.5 - 78.4)	53.4 (38.6 - 71.9)
	Total	37.6 (18.0 - 69.2)	64.6 (32.2 - 115.5)	48.3 (19.4 - 99.6)	46.2 (33.8 - 61.7)	46.8 (36.7 - 58.7)
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)

* Rates not presented for groups with small numbers.

4.56.13 Child hospitalisations due to burns

The hospitalisation rate due to burns in Capital & Coast DHB was not significantly different to 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
Capital & Coast DHB	Female	*	*	*	*	*
	Male	*	*	*	*	*
	Total	*	*	*	*	4.4 (1.8 - 9.0)
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

Boys in Capital & Coast DHB had a significantly higher hospitalisation rate due to falls than girls.

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
Capital & Coast DHB	Female	496.7 (381.7 - 635.5)	510.4 (370.9 - 685.2)	288.4 (178.5 - 440.9)	410.9 (355.8 - 472.1)	425.6 (380.7 - 474.3)
	Male	712.2 (575.5 - 871.6)	614.7 (463.1 - 800.2)	379.4 (256.0 - 541.6)	688.0 (617.4 - 764.5)	653.5 (598.8 - 711.9)
	Total	606.5 (515.4 - 709.2)	562.4 (457.1 - 684.7)	335.9 (250.1 - 441.6)	552.0 (506.7 - 600.4)	541.8 (506.0 - 579.4)
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 Capital & Coast DHB were not available due to small numbers (counts less than 5).

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

		Māori	Pacific	Asian	European/ Other	Total
Capital & Coast DHB	Female	*	*	*	*	*
	Male	*	*	*	*	*
	Total	*	*	*	*	*
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 (14–15 years)

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 Capital & Coast were similar to the New Zealand rates. In Capital & Coast DHB 12.6 percent of youth smoked cigarettes on a regular basis.

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

Frequency	Capital & Coast	New Zealand
Smoking daily	6.4	7.3
Smoking regularly*	12.6	12.8

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

4.57.2 Youth unintentional injury mortality

Overall, Capital & Coast DHB had a significantly lower mortality rate for youth unintentional injury than New Zealand. The rate for males in Capital & Coast DHB was approximately three times lower than the national rate for males.

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
Capital & Coast DHB	Female	*	*	*	14.7 (5.4–31.9)	19.9 (10.3–34.7)
	Male	*	*	*	14.2 (5.2–30.8)	12.9 (5.6–25.5)
	Total	38.6 (14.2–84.1)	*	*	14.4 (7.4–25.1)	16.4 (10.0–25.4)
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.

4.57.3 Youth hospitalisations due to unintentional injury

Unintentional injury hospitalisation rates among youth in Capital & Coast DHB were significantly lower than those nationally. The rate of youth hospitalisation due to unintentional injury for males in Capital & Coast DHB was three times the rate for females. The rates for Māori and Pacific ethnic groups were significantly higher than for Asian and European/Other ethnic groups.

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
Capital & Coast DHB	Female	730.6 (560.1 - 936.6)	715.8 (504.0 - 986.6)	124.1 (64.1 - 216.8)	437.7 (377.8 - 504.4)	456.2 (406.2 - 510.6)
	Male	2446.2 (2100.0 - 2833.1)	2129.2 (1749.9 - 2566.3)	296.5 (193.7 - 434.4)	1237.8 (1131.0 - 1352.1)	1337.4 (1246.7 - 1433.0)
	Total	1520.6 (1334.3 - 1725.7)	1418.8 (1198.7 - 1667.6)	206.7 (146.3 - 283.8)	821.4 (761.0 - 885.3)	878.4 (827.5 - 931.7)
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)

4.57.4 Youth suicide

Youth suicide rates in Capital & Coast DHB were not significantly different to those nationally. The youth suicide rate among males in Capital & Coast DHB was four times as high as the female rate.

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
Capital & Coast DHB	Female	*	*	*	*	8.0 (2.6–18.7)
	Male	67.7 (22.0–157.9)	*	*	28.3 (14.6–49.5)	34.1 (21.1–52.2)
	Total	38.6 (14.2–84.1)	*	*	17.3 (9.7–28.6)	20.5 (13.4–30.0)
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.

4.57.5 Teenage mothers – birth rates (15–19 years)

For mothers aged 15 to 19 years living in the Capital & Coast district, the rate of births was two thirds 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 Maori 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
Capital & Coast DHB	Live and still births	112	36	8	63	219
	Female population	1,478	957	1,044	6,798	10,277
	Rate (per 1000)	75.8	37.6	7.7	9.3	21.3
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

The leading causes of mortality for older people in Capital & Coast DHB were the same as those nationally: ischaemic heart disease, stroke, chronic obstructive pulmonary disease, diabetes, and lung cancer.

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

	New Zealand		Capital & Coast	
	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	Nutritional, endocrine and metabolic - Diabetes	4
	Neoplasms - Lung	5	Neoplasms - Lung	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 individuals aged 65 years and over in Capital & Coast DHB. Ischaemic heart disease, and diabetes were in the top five leading causes for all ethnic groups. Lung cancer was a leading cause across all ethnic groups except for Pacific peoples.

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

	New Zealand		Capital & Coast	
	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	Respiratory diseases - COPD	3
	Respiratory diseases - COPD	4	Neoplasms - Lung	4
	Neoplasms - Lung	5	Genitourinary Disorders - Nephritis and Nephrosis	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	Respiratory diseases - COPD	4
	Neoplasms - Lung	5	*	5
Asian	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
	Neoplasms - Lung	4	Neoplasms - Lung	4
	Respiratory diseases - COPD	5	*	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	Nutritional, endocrine and metabolic - Diabetes	4
	Nutritional, endocrine and metabolic - Diabetes	5	Neoplasms - Lung	5

Note: Neoplasms = Cancer COPD = Chronic obstructive pulmonary disease

Leading causes are only listed where the number of deaths is greater than or equal to five. An asterisk () indicates that leading cause information is not available because of insufficient numbers.

4.58.3 Older people, leading causes of hospitalisations by gender

Capital & Coast DHB had four of the five leading causes of hospitalisations for older people for New Zealand as a whole: ischaemic heart disease, falls, respiratory infections, and chronic obstructive pulmonary disease. Disorders of the eye and adnexa and diabetes were in the top five causes for women, while skin cancer was in the top five for men.

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

Gender	New Zealand		Capital & Coast	
	Causes	Rank	Causes	Rank
Female	Ischaemic heart disease	1	Falls	1
	Falls	2	Ischaemic heart disease	2
	COPD	3	Disorders of the eye and adnexa	3
	Disorders of the eye and adnexa	4	COPD	4
	Arthrosis	5	Arthrosis	5
Male	Ischaemic heart disease	1	Ischaemic heart disease	1
	Skin cancers	2	Respiratory infections	2
	COPD	3	Skin cancers	3
	Respiratory infections	4	COPD	4
	Congestive heart failure	5	Falls	5
Total	Ischaemic heart disease	1	Ischaemic heart disease	1
	COPD	2	Falls	2
	Falls	3	COPD	3
	Skin cancers	4	Respiratory infections	4
	Respiratory infections	5	Disorders of the eye and adnexa	5

Note:

COPD = Chronic obstructive pulmonary disease

4.58.4 Older people, leading causes of hospitalisations by ethnicity

Respiratory infections were a leading cause of hospitalisation for all ethnic groups. Chronic obstructive pulmonary disease was a leading cause of hospitalisations for all ethnic groups except Asian people. Ischaemic heart disease was a leading cause for all ethnic groups except older Pacific people.

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

	New Zealand		Capital & Coast	
	Causes	Rank	Causes	Rank
Māori	COPD	1	COPD	1
	Ischaemic heart disease	2	Ischaemic heart disease	2
	Respiratory infections	3	Congestive heart failure	3
	Congestive heart failure	4	Respiratory infections	4
	Diabetes	5	Diabetes	5
Pacific	Respiratory infections	1	Respiratory infections	1
	COPD	2	Diabetes	2
	Diabetes	3	COPD	3
	Ischaemic heart disease	4	Disorders of the eye and adnexa	4
	Congestive heart failure	5	Congestive heart failure	5
Asian	Ischaemic heart disease	1	Disorders of the eye and adnexa	1
	Disorders of the eye and adnexa	2	Ischaemic heart disease	2
	Diabetes	3	Diabetes	3
	Respiratory infections	4	Respiratory infections	4
	Angina	5	Stroke	5
European/ Other	Ischaemic heart disease	1	Ischaemic heart disease	1
	Skin cancers	2	Falls	2
	Falls	3	COPD	3
	COPD	4	Respiratory infections	4
	Arthrosis	5	Disorders of the eye and adnexa	5

Note:

COPD = Chronic obstructive pulmonary disease

4.58.5 Older people, ischaemic heart disease mortality

The rate of ischaemic heart disease mortality was not significantly different to that observed nationally. Older males had significantly higher mortality rates from ischaemic heart disease than older females in Capital & Coast DHB and the rates for older Māori were significantly higher than for Asian and European/Other ethnic groups.

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
Capital & Coast DHB	Female	1263.6 (690.8–2120.2)	678.8 (325.5–1248.3)	629.1 (334.9–1075.7)	574.1 (518.3–634.2)	604.9 (548.7–665.3)
	Male	1721.1 (916.4–2943.1)	1205.4 (622.8–2105.6)	344.6 (126.4–749.9)	1040.8 (940.2–1149.3)	1043.7 (946.5–1148.2)
	Total	1460.8 (962.7–2125.5)	888.9 (557.1–1345.9)	529.2 (318.6–826.4)	774.9 (721.4–831.3)	793.7 (741.1–849.0)
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 Capital & Coast DHB ischaemic heart disease hospitalisation rate for older people was significantly lower than the national rate. The hospitalisation rate for older males due to ischaemic heart disease was nearly twice that of older females in Capital & Coast 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
Capital & Coast DHB	Female	1989.3 (1287.4 - 2936.6)	1059.1 (605.4 - 1720.0)	2197.7 (1609.0 - 2931.4)	1345.9 (1246.1 - 1451.5)	1389.9 (1292.9 - 1492.4)
	Male	2448.8 (1599.6 - 3588.1)	1840.7 (1139.4 - 2813.8)	1704.3 (1165.7 - 2405.9)	2519.5 (2356.2 - 2691.1)	2456.6 (2304.0 - 2616.7)
	Total	2228.1 (1659.0 - 2929.5)	1390.5 (979.1 - 1916.7)	1965.8 (1553.8 - 2453.4)	1867.3 (1775.7 - 1962.4)	1862.9 (1776.0 - 1952.9)
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 Capital & Coast DHB was not significantly different from the national rate. In Capital & Coast DHB, older Pacific peoples had significantly higher stroke mortality rates than older European/Others.

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
Capital & Coast DHB	Female	*	862.6 (430.6–1543.5)	292.3 (107.3–636.3)	398.7 (353.0–448.7)	400.7 (356.0–449.4)
	Male	*	796.3 (320.2–1640.7)	340.0 (110.4–793.5)	366.4 (307.6–433.2)	374.7 (317.3–439.4)
	Total	*	853.1 (505.6–1348.3)	316.5 (158.0–566.3)	391.0 (354.2–430.7)	395.7 (359.7–434.3)
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, there was no significant difference between the stroke hospitalisation rate in Capital & Coast DHB and the national rate. Males in Capital & Coast DHB had a significantly higher stroke hospitalisation rate than females, and Māori and Pacific peoples had significantly higher rates than 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
Capital & Coast DHB	Female	1217.6 (695.9 - 1977.2)	1204.3 (735.6 - 1860.0)	762.2 (444.0 - 1220.4)	585.3 (522.5 - 653.7)	640.5 (576.7 - 709.4)
	Male	1119.5 (578.5 - 1955.6)	2449.6 (1640.6 - 3518.1)	933.5 (562.1 - 1457.8)	786.4 (697.3 - 883.8)	869.2 (779.5 - 966.4)
	Total	1178.9 (783.4 - 1703.9)	1719.4 (1272.0 - 2273.2)	872.1 (610.8 - 1207.4)	679.6 (626.2 - 736.4)	748.4 (694.4 - 805.6)
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 Capital & Coast DHB was not significantly different to that observed nationally. The lung cancer registration rate for older people in Capital & Coast DHB was significantly higher for males than for females and the rate for Māori was significantly higher than the rate for the European/Other ethnic group.

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
Capital & Coast DHB	Female	316.9 (102.9–739.5)	*	*	112.9 (82.6–150.5)	118.1 (88.4–154.4)
	Male	790.4 (341.2–1557.4)	487.0 (195.8–1003.5)	371.9 (120.8–868.0)	274.4 (222.2–335.1)	301.7 (249.3–361.8)
	Total	489.0 (260.4–836.2)	218.3 (87.8–449.9)	196.1 (78.9–404.1)	182.2 (153.4–214.7)	196.7 (168.2–228.7)
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 Capital & Coast DHB for older people was significantly lower than that observed nationally. Lung cancer mortality followed a similar trend to lung cancer registration, with significantly higher rates for males than for females and significantly higher rates for Māori than for the European/Other ethnic groups in Capital & Coast 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
Capital & Coast DHB	Female	532.9 (214.3–1098.1)	*	*	95.3 (68.4–129.3)	109.5 (81.5–144.0)
	Male	580.9 (213.2–1264.4)	*	*	215.5 (169.8–269.8)	224.6 (179.9–277.1)
	Total	522.8 (278.4–894.1)	*	140.6 (45.6–328.0)	145.7 (120.5–174.6)	156.6 (131.6–185.1)
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 Capital & Coast DHB was significantly lower than that observed nationally. There was a significantly higher rate for males than females and significantly higher rates among Māori and Pacific people than among the European/Other ethnic group.

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
Capital & Coast DHB	Female	*	*	*	88.8 (62.2 - 123.0)	95.0 (68.8 - 128.0)
	Male	557.8 (224.2 - 1149.2)	685.7 (313.5 - 1301.7)	*	200.7 (155.8 - 254.4)	229.6 (183.9 - 283.2)
	Total	418.8 (209.0 - 749.3)	382.9 (197.9 - 668.9)	*	139.7 (114.2 - 169.3)	156.8 (131.0 - 186.1)
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 Capital & Coast DHB did not differ significantly to that observed nationally. However, the rate of breast cancer registration in Capital & Coast DHB was significantly higher among Pacific women than among the European/Other ethnic group, and this rate was nearly three times the national Pacific rate.

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
Capital & Coast DHB	Female	*	770.9 (384.8–1379.3)	*	311.0 (260.1–369.1)	310.3 (262.2–364.7)
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)

* Rates not presented for groups with small numbers.

4.58.13 Mortality in older women due to breast cancer

In Capital & Coast DHB the breast cancer mortality rate of older women was not significantly different to 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
Capital & Coast DHB	Female	*	*	*	110.6 (84.2–142.7)	118.0 (91.4–149.8)
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

There were no significant differences, overall or by ethnicity, between New Zealand rates and those observed for Capital & Coast DHB for breast cancer hospitalisations in older women.

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
Capital & Coast DHB	Female	363.8 (118.1 - 848.9)	380.8 (153.1 - 784.5)	*	309.7 (256.3 - 370.9)	303.4 (253.9 - 359.8)
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)

* Rates not presented for groups with small numbers.

4.58.15 Registrations of older men with prostate cancer

There were no significant differences between the prostate cancer registration rates observed for Capital & Coast DHB and New Zealand as a whole for older 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
Capital & Coast DHB	Male	962.8 (415.7–1897.1)	*	314.7 (115.5–685.0)	773.1 (681.8–873.3)	737.1 (652.9–829.2)
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)

* Rates not presented for groups with small numbers.

4.58.16 Mortality in older men due to prostate cancer

There were no significant differences between the prostate cancer mortality rate in Capital & Coast DHB and that observed nationally for older men.

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
Capital & Coast DHB	Male	*	*	*	200.5 (158.0–251.0)	195.6 (155.1–243.4)
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

Capital & Coast DHB had a significantly lower prostate cancer hospitalisation rate for older men than the national rate.

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
Capital & Coast DHB	Male	*	*	*	220.7 (175.3 - 274.4)	207.7 (165.7 - 257.1)
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)

* Rates not presented for groups with small numbers.

4.58.18 Registrations of older women with cancer of the cervix

The rates of registrations of older women with cervical cancer in Capital & Coast DHB are not available due to small numbers (counts less than 5).

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
Capital & Coast DHB	Female	*	*	*	*	*
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

There were no significant differences between the cervical cancer mortality rates in Capital & Coast and those observed nationally for older women.

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
Capital & Coast DHB	Female	*	*	*	8.7 (2.8–20.2)	8.0 (2.6–18.6)
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 were no significant differences between the cervical cancer hospitalisation rates in Capital & Coast and those observed nationally for older 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
Capital & Coast DHB	Female	*	*	*	*	13.7 (5.0 - 29.7)
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.

4.58.21 Registrations of older people with colorectal cancer

There was no significant difference between the colorectal cancer registration rate in Capital & Coast DHB and that observed nationally for older 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
Capital & Coast DHB	Female	*	*	225.6 (73.3–526.5)	307.1 (257.8–363.1)	288.6 (243.5–339.5)
	Male	461.3 (169.3–1004.0)	*	*	392.3 (329.3–463.7)	376.2 (317.4–442.6)
	Total	261.1 (105.0–537.9)	*	132.6 (43.1–309.4)	344.3 (304.8–387.6)	327.4 (290.8–367.3)
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)

* Rates not presented for groups with small numbers.

4.58.22 Mortality in older people due to colorectal cancer

Overall, the colorectal cancer mortality rate among older people in Capital & Coast 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
Capital & Coast DHB	Female	*	*	*	134.0 (104.9–168.8)	130.9 (103.3–163.5)
	Male	*	*	*	137.7 (102.2–181.5)	136.3 (102.4–177.9)
	Total	*	*	*	136.4 (113.2–162.8)	134.3 (112.2–159.3)
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 Capital & Coast DHB, the overall hospitalisation rate of older people due to colorectal cancer was significantly lower than the national rate.

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
Capital & Coast DHB	Female	494.0 (160.4 - 1152.9)	*	221.5 (71.9 - 517.0)	269.7 (222.7 - 323.7)	256.6 (213.6 - 305.7)
	Male	334.3 (108.5 - 780.1)	*		334.2 (276.6 - 400.2)	324.1 (270.2 - 385.6)
	Total	511.0 (245.0 - 939.7)	*	179.4 (77.5 - 353.5)	296.3 (259.5 - 336.9)	285.2 (251.1 - 322.7)
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)

* Rates not presented for groups with small numbers.

4.58.24 Registrations of older people with malignant melanoma

Overall, the registration rate for malignant melanoma among older people in Capital & Coast DHB was not significantly different to that observed nationally.

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
Capital & Coast DHB	Female	*	*	*	133.5 (102.1–171.4)	121.4 (93.1–155.7)
	Male	*	*	*	202.5 (157.2–256.7)	183.2 (142.5–231.8)
	Total	*	*	*	165.4 (138.1–196.5)	149.9 (125.3–177.9)
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 Capital & Coast DHB was not significantly different to that observed nationally.

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
Capital & Coast DHB	Female	*	*	*	19.6 (8.9–37.1)	17.5 (8.0–33.2)
	Male	*	*	*	44.6 (24.9–73.5)	39.7 (22.2–65.5)
	Total	*	*	*	31.0 (19.9–46.2)	27.6 (17.7–41.1)
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 Capital & Coast DHB was not significantly different to that observed nationally. Hospitalisation rates were significantly greater among males than among females.

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
Capital & Coast DHB	Female	*	*	*	87.5 (62.2 - 119.6)	83.5 (60.2 - 112.8)
	Male	*	*	*	172.6 (132.0 - 221.7)	156.4 (119.9 - 200.4)
	Total	*	*	*	124.9 (101.6 - 151.9)	115.3 (94.2 - 139.7)
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

In Capital & Coast DHB, mortality rates from chronic obstructive pulmonary disease were significantly higher among males than among females and among Māori than among European/Other.

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
Capital & Coast DHB	Female	558.2 (204.8–1215.0)	*	*	162.4 (130.3–200.1)	165.6 (134.6–201.6)
	Male	1147.7 (421.2–2498.1)	*	*	284.6 (233.0–344.3)	291.1 (240.9–348.6)
	Total	730.7 (377.6–1276.4)	341.4 (137.2–703.3)	*	211.8 (183.1–243.8)	216.5 (188.6–247.3)
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

Overall, the hospitalisation rate for chronic obstructive pulmonary disease was lower than the national rate. Māori in Capital & Coast DHB had a significantly higher hospitalisation rate for chronic obstructive pulmonary disease than any other ethnic group, followed by Pacific 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
Capital & Coast DHB	Female	4409.8 (3357.0 - 5688.3)	2223.3 (1520.8 - 3138.7)	*	959.8 (870.7 - 1055.6)	1057.1 (968.0 - 1152.2)
	Male	4142.5 (2916.7 - 5709.9)	2233.8 (1472.1 - 3250.1)	1422.0 (920.2 - 2099.1)	1066.4 (962.3 - 1178.8)	1192.4 (1087.2 - 1304.9)
	Total	4082.2 (3306.6 - 4985.1)	2313.1 (1760.8 - 2983.7)	705.3 (464.8 - 1026.2)	1000.3 (932.5 - 1071.7)	1109.9 (1041.8 - 1181.2)
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)

* Rates not presented for groups with small numbers.

4.58.29 Older people, hospitalisations related to falls

Older females in Capital & Coast DHB had a significantly higher hospitalisation rate for falls than males, and Asian peoples had a significantly lower rate than all older Capital & Coast DHB older people.

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
Capital & Coast DHB	Female	1321.3 (755.2 - 2145.7)	2191.8 (1444.4 - 3189.0)	1508.6 (1031.8 - 2129.6)	1951.8 (1841.1 - 2067.4)	1910.6 (1805.5 - 2020.2)
	Male	*	1859.5 (1102.1 - 2938.9)	383.1 (140.6 - 833.9)	1317.7 (1205.4 - 1437.5)	1280.9 (1174.6 - 1394.2)
	Total	975.7 (596.0 - 1506.8)	2191.0 (1598.2 - 2931.8)	1004.9 (711.1 - 1379.3)	1690.0 (1609.8 - 1773.1)	1653.1 (1577.0 - 1731.9)
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

Overall, the hospitalisation rates due to musculoskeletal disease were significantly lower for older people in Capital & Coast DHB than the national rate. In Capital & Coast DHB females had a significantly higher hospitalisation rate for musculoskeletal disease than males.

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
Capital & Coast DHB	Female	1493.0 (924.2 - 2282.2)	2380.2 (1675.9 - 3280.8)	1290.4 (857.4 - 1865.0)	2286.8 (2146.3 - 2434.0)	2214.9 (2084.3 - 2351.5)
	Male	1798.8 (1098.8 - 2778.2)	763.3 (366.0 - 1403.6)	1225.7 (758.8 - 1873.7)	1573.4 (1443.8 - 1711.5)	1528.8 (1408.3 - 1656.9)
	Total	1582.8 (1135.8 - 2147.3)	1799.7 (1322.3 - 2393.2)	1198.5 (886.6 - 1584.4)	1957.6 (1860.7 - 2058.2)	1896.9 (1806.9 - 1990.2)
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 Capital & Coast district, the rate of live births was lower 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
Capital & Coast DHB	Live births	626	442	436	2,552	4,056
	Female population (15–49 years)	8,166	5,325	9,251	54,098	76,840
	Rate (per 1000)	76.7	83	47.1	47.2	52.8
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 Capital & Coast DHB 28 percent of births were Caesarean section and 11 percent were assisted births. This does not differ greatly from the national pattern. 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.	%
Capital & Coast	Normal birth	375	71%	300	78%	205	53%	1,378	56%	2,258	60%
	Caesarean section	110	21%	69	18%	122	32%	758	31%	1,059	28%
	Assisted birth	43	8%	15	4%	58	15%	311	13%	427	11%
	Total	528	100%	384	100%	385	100%	2,447	100%	3,744	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.

4.60.1 Pregnancy complications

For mothers living in the Capital & Coast DHB, the rate of admission to hospital with pregnancy complications was lower than the New Zealand rate, in total and for all ethnic groups. 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
Capital and Coast	Admissions (2004–06)	342	288	164	1,121	1,915
	Rate per 1000 births	213.1	241.8	144.6	152.4	169.7
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.

4.61 Sexually transmitted infections (STI)

For this section, the only data available was from sexual health clinics. There are two sexual health clinics in the Capital and Coast DHB region: Wellington and Porirua. People seek treatment for STIs from a variety of sources including sexual health clinics, family planning clinics, student and youth health clinics, and general practitioners. The rates in the following tables are for sexual health clinics only and the rates may not be representative of other types of clinics or the general population.

4.61.1 Chlamydia

Rates of chlamydia amongst sexual health clinic attendees were lower than the national rate for both clinics in the Capital and Coast DHB in 2006 but higher for the Porirua sexual health clinic in 2007.

Table 4.115: Chlamydia – number of cases and disease rates, 2006, 2007

Sexual health clinic	2006		2007	
	No. of cases	Rate %	No. of cases	Rate %
Wellington	240	2.6	202	2.4
Porirua	24	3.8	34	6.1
All New Zealand	4294	4.8	4501	5.0

Rate = (total number of cases / total number of clinic visits) x 100, expressed as a percentage.

4.61.2 Gonorrhoea

Gonorrhoea rates were higher than the national rate amongst attendees at the Porirua sexual health clinic in both 2006 and 2007. For attendees of the Wellington sexual health clinic the rate was lower than the national rate.

Table 4.116: Gonorrhoea – number of cases and disease rates, 2006, 2007

Sexual health clinic	2006		2007	
	No. of cases	Rate %	No. of cases	Rate %
Wellington	48	0.5	66	0.8
Porirua	11	1.7	9	1.6
All New Zealand	802	0.9	925	1.0

Rate = (total number of cases / total number of clinic visits) x 100, expressed as a percentage.

4.61.3 Genital herpes

The rate of genital herpes among sexual health clinic attendees in the Capital and Coast DHB was lower than the national rate in 2006 and 2007.

Table 4.117: Genital herpes (first presentation) – number of cases and disease rates, 2006, 2007

Sexual health clinic	2006		2007	
	No. of cases	Rate %	No. of cases	Rate %
Wellington	55	0.6	49	0.6
Porirua	0	0.0	0	0.0
All New Zealand	720	0.8	746	0.8

Rate = (total number of cases / total number of clinic visits) x 100, expressed as a percentage.

4.61.4 Genital warts

Rates of first presentation for genital warts were higher than the national rate amongst attendees at the Porirua sexual health clinic in both 2006 and 2007. For attendees of the Wellington sexual health clinic the rate was lower than the national rate.

Table 4.118: Genital warts (first presentation) – number of cases and disease rates, 2006, 2007

Sexual health clinic	2006		2007	
	No. of cases	Rate %	No. of cases	Rate %
Wellington	299	3.2	280	3.3
Porirua	33	5.2	33	6.0
All New Zealand	3201	3.6	3797	4.3

Rate = (total number of cases / total number of clinic visits) x 100, expressed as a percentage.

4.61.5 Syphilis

Rates of first presentation for syphilis among sexual health clinic attendees in the Capital and Coast DHB were higher than the national rate in 2006. In 2007 the rate for attendees of the Porirua sexual health clinic was lower than the national rate and for attendees of the Wellington sexual health clinic it was the same.

Table 4.119: Syphilis (first presentation) – number of cases and disease rates, 2006, 2007

Sexual health clinic	2006		2007	
	No. of cases	Rate %	No. of cases	Rate %
Wellington	15	0.2	12	0.1
Porirua	3	0.5	0	0.0
All New Zealand	68	0.1	71	0.1

Rate = (total number of cases / total number of clinic visits) x 100, expressed as a percentage.

4.61.6 Non-specific urethritis

The rate of non-specific urethritis (NSU) among male sexual health clinic attendees in the Capital and Coast DHB was lower than the national rate in 2006 and 2007.

Table 4.120: NSU (males only) – number of cases and disease rates, 2006, 2007

Sexual health clinic	2006		2007	
	No. of cases	Rate %	No. of cases	Rate %
Wellington	15	0.3	7	0.2
Porirua	0	0.0	1	0.4
All New Zealand	686	1.9	769	2.1

Rate = (total number of cases / total number of clinic visits) x 100, expressed as a percentage.

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

- Just over 90 percent of adults in the Capital & Coast district were enrolled with a Primary Health Organisation in 2006/07, and about 80 percent of adults in Capital & Coast DHB have seen a general practitioner in the past 12 months.
- In Capital & Coast DHB 7.6 percent 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 Capital & Coast DHB.
- The proportion of Asian people who have visited a primary health care nurse in the past 12 months is significantly lower than the proportion of all people in Capital & Coast DHB.
- Over 80 percent of adult females received a prescription in the past 12 months in Capital & Coast DHB, which is significantly higher than the male rate.
- About one fifth of Capital & Coast residents enrolled with a PHO were Community Service Card holders. Less than one percent of residents in Capital & Coast enrolled with a PHO held a High Use Health Card.
- In Capital & Coast DHB, over one third of adult males had their cholesterol checked in the past 12 months.
- Of those estimated to have diagnosed diabetes in the Capital & Coast district, a smaller percentage of Māori had a free diabetes check than people in the Pacific and other ethnic groups, in the 13 months to December 2007.
- In the Capital & Coast district, nearly four in five children had completed all immunisations specified on the immunisation schedule by the age of two, during 2007.
- In the combined Capital & Coast, Hutt Valley and Wairarapa DHBs region, about two thirds of people aged 65 years or older in the past 12 months either received an influenza vaccine, or had arrangements made by a primary health provider to receive an influenza vaccine.
- Of women in the Capital & Coast district aged 45 to 69 years, nearly 57 percent had a mammogram to check for early signs of breast cancer, which was similar to the national percentage (57.6). The screening coverage rate was lower for Pacific women in the Capital & Coast district, than the rate for Pacific women in New Zealand in total, for women aged 45 to 69 years.

- Of women aged 20 to 69 years in the combines Capital & Coast, Hutt Valley, and Wairarapa DHB region who had a primary health care provider, 77.5 percent had a cervical smear in the past three years. The rate for Pacific women was significantly lower than the rate for all women in these DHBs, adjusted for age.
- Over 10 percent of adults in Capital & Coast DHB were seen in the emergency department of a public hospital in the past 12 months, adjusted for age.
- Capital & Coast DHB had a significantly lower rate of elective surgery discharges than the national rate.
- For publicly funded elective services for Capital & Coast DHB, 90 percent of patients assured of treatment within six months received their treatment within five months after being assured, of patients receiving treatment in 2007/08 across all specialities.
- In the Central region, 81 percent of cancer patients began radiation treatment within eight weeks of their first specialist assessment, which was lower than the New Zealand percentage (94 percent), for treatments started in March 2008.
- The rate of access to mental health and addiction services for people living in the Capital & Coast district in 2005 was significantly lower than the rate for New Zealand as a whole, for people aged under 65 years.
- Māori, Pacific and Asian people were less likely than the total Capital & Coast DHB population to have seen an oral health care worker in the past 12 months.

5.1 Primary health organisation (PHO) enrolment

Just over 90 percent of adults in the Capital & Coast district were enrolled with a Primary Health Organisation in 2006/07. The coverage rate for Asian people was significantly lower than the other ethnic groups.

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

	Capital & Coast percent	New Zealand percent
Female	93.5 (90.3–95.9)	94.5 (93.6–95.3)
Male	90.3 (87.2–92.9)	91.3 (90.2–92.3)
Total	92.0 (89.0–94.4)	93.0 (92.4–93.5)
Māori	91.8 (90.4–93.1)	90.9 (87.6–93.5)
Pacific	92.1 (89.5–94.2)	91.1 (87.1–94.2)
Asian	84.0 (81.3–86.5)	83.1 (79.2–86.6)
European/Other	94.0 (93.2–94.8)	93.0 (89.9–95.5)

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

About 80 percent of adults in Capital & Coast DHB had seen a general practitioner (GP) in the past 12 months, rates adjusted for age. The prevalence of visits to GPs in the past 12 months among Asian people was lower than the prevalence among all people in Capital & Coast DHB, rates 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
Capital & Coast DHB	Female	82.3 (78.2–85.8)	79.0 (73.7–83.7)	72.7 (67.0–78.0)	85.4 (81.8–88.5)	83.7 (80.3–86.8)
	Male	74.1 (69.5–78.3)	76.3 (70.5–81.4)	69.9 (64.8–74.7)	78.6 (75.0–81.9)	77.4 (74.0–80.6)
	Total	78.5 (74.6–82.0)	77.7 (73.1–81.9)	71.4 (66.9–75.6)	82.1 (78.8–85.2)	80.7 (77.5–83.6)
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 Capital & Coast DHB 7.6 percent of adults experienced unmet need for a GP service in the past 12 months, rates adjusted for age. Unmet need for a general practitioner among Māori females was significantly higher than among all females in Capital & Coast 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
Capital & Coast DHB	Female	17.8 (14.6–21.4)	14.2 (10.2–18.9)	10.9 (7.7–15.0)	7.4 (5.0–10.4)	8.7 (6.3–11.6)
	Male	10.7 (7.7–14.4)	12.6 (8.8–17.3)	6.6 (3.6–10.8)	5.9 (3.6–9.0)	6.4 (4.1–9.5)
	Total	14.5 (11.7–17.7)	13.4 (10.0–17.5)	8.9 (6.1–12.4)	6.7 (4.4–9.7)	7.6 (5.3–10.4)
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

In Capital & Coast DHB, over a third of adult males and almost half adult females visited a primary health care nurse in the past 12 months. The proportion of Asian people who had visited a nurse in the past 12 months was significantly lower than the proportion of all people in Capital & Coast 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
Capital & Coast DHB	Female	51.8 (47.1–56.5)	41.1 (34.1–48.3)	30.2 (24.7–36.1)	50.5 (46.3–54.8)	48.3 (44.1–52.4)
	Male	32.2 (27.2–37.4)	27.8 (21.7–34.6)	16.9 (12.2–22.7)	37.7 (33.7–41.9)	35.1 (31.2–39.3)
	Total	42.7 (38.4–47.1)	34.8 (29.3–40.5)	24.0 (19.4–29.1)	44.4 (40.4–48.4)	42.0 (38.2–45.8)
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

Over 80 percent of adult females received a prescription in the past 12 months in Capital & Coast DHB, which was significantly higher than the male rate, 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
Capital & Coast DHB	Female	82.8 (78.3–86.6)	82.5 (76.7–87.3)	72.7 (66.8–78.2)	84.7 (80.9–88.1)	83.4 (79.7–86.7)
	Male	70.1 (65.7–74.2)	72.2 (65.4–78.3)	64.5 (58.2–70.5)	73.9 (69.9–77.6)	72.6 (68.8–76.2)
	Total	76.9 (72.9–80.5)	77.6 (72.4–82.2)	68.9 (63.8–73.7)	79.5 (75.8–82.9)	78.2 (74.8–81.4)
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. About one fifth of Capital & Coast residents enrolled with a PHO were Community Service Card holders. There were proportionally more Māori and Pacific card holders than Asian and European/Other. The percentages of card holders were generally lower in the Capital & Coast district than in New Zealand in total.

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

	Capital & Coast percent	New Zealand percent
Female	21.9	29.9
Male	17.3	23.6
Total	19.8	26.9
Māori	29.5	39.4
Pacific	32.2	34.5
Asian	23.7	28.3
European/Other	16.9	23.7

Note 1 Data are reported as at April 2008.
2 Ethnicity is based on priorities method.

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.

Less than 1 percent of residents in Capital & Coast enrolled with a PHO held a High Use Health Card. At both a national and DHB level, a higher percentage of people in the European/Other group compared to other ethnic groups were card holders. A higher proportion of females had a High Use Health Card compared to males. As for the Community Services Card, the percentages of High Use Health Card holders in the Capital & Coast district were generally lower than that of New Zealand, out of those enrolled with a PHO.

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

	Capital & Coast percent	New Zealand percent
Female	0.8	1.3
Male	0.5	1.0
Total	0.7	1.2
Māori	0.3	0.8
Pacific	0.2	0.7
Asian	0.4	0.5
European/Other	0.8	1.3

Note 1 Data are reported as at April 2008.
 2 Ethnicity is based on priorities method.

5.8 Blood pressure screening

Over 60 percent of the adults in New Zealand and in Capital & Coast DHB had their blood pressure checked in the past 12 months.

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
Capital & Coast DHB	Female	56.3 (51.2–61.2)	65.2 (57.0–72.8)	58.4 (51.9–64.8)	64.2 (59.8–68.3)	63.5 (59.3–67.5)
	Male	54.7 (48.9–60.4)	57.5 (50.6–64.3)	53.8 (47.0–60.5)	61.7 (57.3–66.0)	60.9 (56.6–65.1)
	Total	55.6 (50.9–60.2)	61.6 (55.5–67.5)	56.4 (50.7–61.8)	63.1 (58.9–67.1)	62.3 (58.5–66.0)
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 Capital & Coast DHB, over one-third of adult males had their cholesterol checked in the past 12 months; this rate is significantly higher than that for adult females, 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
Capital & Coast DHB	Female	21.5 (17.1–26.4)	27.9 (21.6–34.9)	24.0 (18.8–29.9)	27.9 (23.9–32.2)	27.6 (23.6–31.8)
	Male	27.6 (22.4–33.2)	30.7 (24.6–37.4)	35.4 (29.6–41.6)	37.4 (33.2–41.8)	36.5 (32.4–40.7)
	Total	24.1 (19.9–28.7)	29.2 (24.0–34.9)	29.2 (24.3–34.3)	32.2 (28.3–36.3)	31.6 (27.9–35.5)
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 the combined Capital & Coast, Wairarapa and Hutt Valley DHBs region, significantly more Pacific adult females had a diabetes check in the previous 12 months than all adult females, 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
Capital & Coast/ Wairarapa/ Hutt Valley DHB	Female	20.9 (11.9–29.8)	38.8 (26.1–52.6)	23.1 (11.0–39.5)	14.1 (9.8–18.5)	17.0 (12.9–21.1)
	Male	21.7 (10.4–37.2)	36.4 (16.5–60.4)	41.2 (21.4–63.4)	21.6 (16.0–27.3)	23.7 (18.7–28.8)
	Total	21.2 (12.8–29.6)	37.7 (26.1–50.5)	30.6 (20.3–41.0)	17.4 (13.8–21.1)	20.0 (16.8–23.2)
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)

Note: Due to small sample size, results for these DHB have been combined.

5.10.1 Diabetes free annual check

Of those estimated to have diagnosed diabetes in the Capital & Coast 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*
Counties Manukau	97%	62%	95%	133%
Taranaki	89%	45%	102%	N/A
South Canterbury	81%	32%	85%	N/A
Wairarapa	78%	51%	86%	N/A
Otago	77%	28%	82%	N/A
Auckland	72%	32%	72%	102%
Whanganui	72%	46%	86%	N/A
Capital & Coast	71%	38%	77%	77%
West Coast	70%	38%	76%	N/A
Hawkes' Bay	69%	49%	79%	N/A
Hutt	69%	38%	79%	77%
Southland	69%	27%	78%	N/A
Lakes	68%	46%	86%	N/A
Nelson Marlborough	62%	29%	67%	N/A
Bay of Plenty	61%	32%	76%	N/A
Canterbury	60%	29%	64%	49%
Waikato	57%	33%	69%	62%
Northland	56%	51%	60%	N/A
Tairāwhiti	48%	41%	59%	N/A
Waitemata	47%	29%	49%	62%
MidCentral	47%	25%	54%	N/A

* Pacific data only presented for selected DHBs 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, the ethnic group with the lowest percentage of people whose diabetes management was rated as satisfactory or better was Pacific peoples, followed next by Māori, in the 12 months to December 2007 for the Capital & Coast 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
Tairāwhiti	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 DHBs 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 had retinal screening in the two years to December 2007, the percentage for Pacific peoples was the lowest, followed by Māori.

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
Tairāwhiti	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 DHBs 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 Capital & Coast district, nearly four in five children had completed all specified immunisations by the age of two, during 2007. The coverage rate was the highest among European/Other but lowest among Māori children. Across all ethnic groups, the rates of coverage were higher in Capital & Coast than in New Zealand.

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

Ethnicity	Capital & Coast	New Zealand
Māori	66.9	62.7
Pacific	75.6	67.6
Asian	78.7	75.2
European/Other	81.8	75.0
Total	78.6	71.2

* Ethnicity is based on prioritised method.

5.12 Influenza vaccine coverage at 65+ years

In the combined Capital & Coast, Hutt Valley and Wairarapa DHBs region, about two thirds of people aged 65 years or older in the past 12 months either received an influenza vaccine, or had arrangements made by a primary health provider to receive an influenza vaccine.

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

	Capital & Coast/Hutt Valley/Wairarapa percent	New Zealand percent
Female	67.6 (57.4–77.8)	63.3 (60.2–66.4)
Male	65.7 (55.0–76.4)	64.6 (61.2–68.0)
Total	66.6 (59.3–73.8)	63.9 (61.7–66.1)
Māori	*	63.1 (56.1–70.2)
Non-Māori	65.2 (57.2–73.2)	64.0 (61.6–66.4)

Note:

- 1 Due to small sample size, DHBs have been combined
- 2 * 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 a free basic oral health care. In the Capital & Coast district, around one-third of young people aged 13–18 years accessed an oral health service, compared to nearly two thirds of young people in New Zealand in total.

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

	Capital & Coast	New Zealand
Total	34.3	58.3

5.14 Breast screening

Of women in the Capital & Coast district aged 45 to 69 years, nearly 57 percent had a mammogram to check for early signs of breast cancer, which was similar to the national percentage (57.6). The screening coverage rate was lower for Pacific women in the Capital & Coast district, than the rate for Pacific 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
Capital & Coast	47.2 (44.4–50.0)	36.1 (33.5–38.9)	43.4 (41.0–45.9)	59.9 (59.1–60.8)	56.6 (55.8–57.4)
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 aged 20 to 69 years in the combined Capital & Coast, Hutt Valley, and Wairarapa DHB region who had a primary health care provider, 77.5 percent had a cervical smear in the past three years. The rate for Pacific women was significantly lower than the rate for all women in these DHBs, 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
Capital & Coast/Hutt/ Wairarapa	83.2 (75.8–90.6)	57.3 (44.1–70.5)	61.6 (44.9–78.2)	80.4 (72.4–88.4)	77.5 (70.8–84.2)
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)

* Due to small sample size, DHBs have been combined.

5.16 Use of public hospitals

In Capital & Coast DHB, 17.1 percent of adults were 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
Capital & Coast DHB	Female	23.7 (20.2–27.5)	19.0 (14.1–24.7)	14.5 (10.6–19.2)	19.8 (16.9–22.9)	19.3 (16.5–22.4)
	Male	18.5 (14.6–23.0)	12.1 (7.5–18.2)	7.2 (3.9–11.9)	15.3 (12.5–18.6)	14.6 (11.8–17.8)
	Total	21.4 (18.2–24.8)	15.7 (11.9–20.3)	11.1 (8.0–14.9)	17.7 (14.9–20.7)	17.1 (14.5–19.9)
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

Over 10 percent of adults in the Capital & Coast district were seen in the emergency department (ED) of a public hospital in the last 12 months, 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
Capital & Coast DHB	Female	13.1 (9.7–17.2)	11.7 (7.8–16.8)	6.7 (3.5–11.3)	10.4 (7.4–14.2)	10.3 (7.3–14.0)
	Male	14.6 (10.7–19.1)	12.6 (8.0–18.5)	7.1 (3.8–11.9)	13.0 (9.9–16.8)	12.4 (9.3–16.1)
	Total	13.8 (10.5–17.7)	12.1 (8.4–16.8)	6.9 (3.9–11.1)	11.7 (8.6–15.3)	11.3 (8.3–14.8)
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

Capital & Coast DHB had a significantly lower rate of elective surgery discharges than the national rate. The rate for females was significantly higher than the rate for males. Māori and Pacific people had significantly higher rates than European/Other people, who had a significantly higher rate than Asian people.

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
Capital & Coast DHB	Female	5130.1 (4913.9 - 5353.3)	5465.7 (5201.7 - 5739.7)	3154.1 (2983.6 - 3331.7)	3327.9 (3266.2 - 3390.4)	3660.9 (3604.6 - 3717.9)
	Male	2735.8 (2565.1 - 2914.7)	3206.0 (2994.9 - 3428.0)	1685.6 (1541.2 - 1839.9)	2267.1 (2214.4 - 2320.8)	2350.1 (2302.6 - 2398.2)
	Total	4035.8 (3894.4 - 4181.0)	4367.0 (4196.2 - 4542.9)	2478.1 (2364.3 - 2595.9)	2813.9 (2773.0 - 2855.1)	3033.4 (2996.2 - 3070.9)
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 Capital & Coast DHB, 90 percent of patients assured of treatment within six months received their treatment within five months of being assured, of patients receiving treatment in 2007/08 across the specialities shown in the table. This was slightly less than the national percentage (92 percent). The speciality with the highest proportion of people receiving treatment nine months or more after being assured of treatment within six months was the cardiothoracic speciality (13 percent of those treated), for Capital & Coast DHB.

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

Specialty		Capital & Coast					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 %	110.2 -	291 100%	224 77%	30 10%	37 13%	62.1 -	1,754 100%	1,573 90%	108 6%	73 4%
Ear, nose and throat	Number %	72.2 -	799 100%	717 90%	48 6%	34 4%	75.9 -	17,150 100%	15,648 91%	1,154 7%	348 2%
Ophthalmology	Number %	80.1 -	1,167 100%	1,063 91%	77 7%	27 2%	82.7 -	16,446 100%	14,870 90%	1,271 8%	305 2%
General surgery	Number %	61.4 -	675 100%	617 91%	40 6%	18 3%	55.8 -	27,686 100%	26,101 94%	1,101 4%	484 2%
Gynaecology	Number %	106.4 -	840 100%	646 77%	187 22%	7 1%	73 -	14,086 100%	12,819 91%	1,021 7%	246 2%
Neurosurgery	Number %	38.2 -	248 100%	239 96%	9 4%	0 0%	49.4 -	1,273 100%	1,214 95%	44 3%	15 1%
Orthopaedics	Number %	56.5 -	880 100%	810 92%	49 6%	21 2%	87.1 -	16,047 100%	13,968 87%	1,555 10%	524 3%
Paediatric surgery	Number %	60.7 -	298 100%	285 96%	7 2%	6 2%	64 -	2,467 100%	2,248 91%	141 6%	78 3%
Plastics	Number %	N/A -	N/A N/A	N/A N/A	N/A N/A	N/A N/A	46.8 -	7,425 100%	7,104 96%	194 3%	127 2%
Urology	Number %	64.6 -	557 100%	521 94%	22 4%	14 3%	66.5 -	6,902 100%	6,405 93%	354 5%	143 2%
Vascular	Number %	61.6 -	382 100%	364 95%	10 3%	8 2%	45.4 -	1,075 100%	1,041 97%	19 2%	15 1%
Dental	Number %	25.2 -	593 100%	588 99%	1 0%	4 1%	80.9 -	6,084 100%	5,486 90%	479 8%	119 2%
Total	Number %	69.2 -	6,730 100%	6,074 90%	480 7%	176 3%	70.2 -	118,395 100%	108,477 92%	7,441 6%	2,477 2%

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.

Source: 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 was scheduled to permit safe and effective sequencing of chemotherapy (category D).

The Central region includes Capital & Coast, Hutt Valley, Wairarapa, Hawkes Bay, MidCentral and Whanganui DHBs.

In the Central region, 81 percent of cancer patients began radiation treatment within eight weeks of their first specialist assessment, which was lower than the New Zealand percentage (94 percent), 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%
Central region	% Waited < 4 weeks	63%	69%	64%	70%	71%	57%	51%	55%	62%
	% Waited 4–8 weeks	29%	22%	22%	20%	23%	25%	35%	21%	19%
	Total % waited 0–8 weeks	92%	91%	86%	90%	94%	82%	86%	76%	81%

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 2005, 2.1 percent of the Capital & Coast DHB population accessed secondary mental health and addiction services, which was slightly lower than the national percentage (2.3 percent), 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 Capital & Coast district in 2005 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, 2005

		Māori	Pacific	Asian	European/Other	Total
Capital & Coast	Number of people seen	853	229	146	3,854	5,082
	Access rate (%)	3.3	1.2	0.6	2.2	2.1
	Age-standardised rate (per 100,000) and 95% CI	3252.3 (3037.7–3478.1)	1191.9 (1042.5–1356.6)	575.9 (486.3–677.3)	2102.8 (2036.9–2170.3)	1975.8 (1921.9–2030.9)
New Zealand	Number of people seen	15,608	3310	2102	61,856	82,876
	Access rate (%)	2.8	1.5	0.7	2.5	2.3
	Age-standardised rate (per 100,000) and 95% CI	2931.2 (2885.4–2977.5)	1525.1 (1473.6–1578.0)	604.6 (579.0–631.0)	2415.8 (2396.8–2435.0)	2233.0 (2217.8–2248.3)

Definitions

Data source: Mental Health Information National Collection (MHINC), Ministry of Health. Data for Capital & Coast DHB for 2006 and 2007 has not been completely reported; the most recent complete year is 2005, which is presented here.

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 data notes 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 2005 who lived in the Capital & Coast district, less than one percent 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 (0.7 percent).

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, 2005

		Māori	Pacific	Asian	European/ Other	Total
Capital & Coast	Number of people seen – all services	853	229	146	3,854	50,82
	Number of people seen – acute inpatient admission as first contact	4	4	4	20	32
	Percent of people seen – acute inpatient admission as first contact	0.5%	1.7%	2.7%	0.5%	0.6%
New Zealand	Number of people seen – all services	15,608	3,310	2,102	61,856	82,876
	Number of people seen – acute inpatient admission as first contact	129	33	38	372	572
	Percent of all people seen who had an acute inpatient admission as first contact	0.8%	1.0%	1.8%	0.6%	0.7%

Definitions

Data source: Mental Health Information National Collection (MHINC), Ministry of Health. Data for Capital & Coast DHB for 2006 and 2007 have not been completely reported; the most recent complete year is 2005, which is presented here. 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 readmission rate

Capital & Coast DHB had a similar rate of acute readmissions to the national rate. Māori had a significantly lower rate than Pacific and European/Other people.

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
Capital & Coast DHB	Female	17.2 (13.7 - 21.3)	23.4 (18.8 - 28.8)	16.3 (11.9 - 21.8)	28.0 (26.1 - 29.9)	24.5 (23.1 - 26.0)
	Male	25.6 (19.9 - 32.6)	33.4 (27.2 - 40.7)	32.4 (24.4 - 42.1)	31.8 (29.5 - 34.2)	31.6 (29.6 - 33.7)
	Total	20.4 (17.2 - 23.9)	29.3 (25.3 - 33.8)	23.8 (19.4 - 28.9)	27.6 (26.2 - 29.0)	26.3 (25.1 - 27.5)
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

More than half of the adults in Capital & Coast DHB saw an oral health care worker in the past 12 months. Māori, Pacific and Asian people are less likely than the total Capital & Coast DHB population to have seen an oral health care worker in the past 12 months.

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
Capital & Coast DHB	Female	44.8 (39.4–50.2)	36.2 (29.7–43.1)	39.7 (33.9–45.8)	62.2 (57.2–67.0)	57.4 (52.5–62.1)
	Male	35.1 (29.4–41.1)	36.1 (29.6–43.0)	34.8 (28.6–41.3)	53.9 (48.8–59.0)	49.9 (45.0–54.8)
	Total	40.2 (35.1–45.5)	36.1 (30.6–41.9)	37.4 (32.1–42.9)	58.2 (53.3–62.9)	53.8 (49.2–58.3)
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 12 months, they were asked to exclude medical specialists they had seen as an inpatient at a hospital.

Just over a third of adults in Capital & Coast DHB saw a medical specialist in the past 12 months. Pacific and Asian people are significantly less likely than the total Capital & Coast population to have seen a medical specialist in the past 12 months.

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
Capital & Coast DHB	Female	31.7 (27.6–36.1)	22.6 (17.5–28.5)	24.2 (19.7–29.2)	40.5 (36.8–44.3)	37.5 (33.9–41.2)
	Male	32.1 (27.8–36.5)	19.7 (14.4–26.1)	18.8 (14.1–24.2)	35.3 (31.5–39.3)	33.0 (29.3–36.8)
	Total	31.9 (28.0–35.9)	21.3 (16.7–26.4)	21.7 (17.7–26.1)	38.0 (34.4–41.7)	35.3 (32.0–38.8)
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

Around 18 percent of adults in the combined Capital & Coast, Wairarapa and Hutt Valley DHB region saw a complementary/alternative health care provider in the past 12 months. The prevalence among females in the region was significantly higher than among males, 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
Capital & Coast/ Wairarapa/ Hutt Valley DHB	Female	28.9 (17.9–39.8)	24.3 (11.8–41.0)	15.0 (6.6–27.8)	22.7 (18.0–27.5)	21.9 (17.8–26.1)
	Male	16.2 (7.9–28.2)	13.6 (4.2–29.9)	11.3 (4.7–21.7)	14.6 (9.8–19.5)	13.8 (9.9–17.7)
	Total	22.8 (15.5–30.1)	19.3 (11.6–29.3)	13.4 (7.4–21.6)	18.9 (15.5–22.2)	18.0 (15.3–20.8)
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)

* Due to small sample size, DHBs have been combined.

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 Capital & Coast district, groups that had higher rate of number of professionals registered per 10,000 population compared to New Zealand in total included: GPs, medical specialists, nurses, midwives, medical radiation technologists, psychiatrists, mental health nurses, psychologists, and dentists.
- In the Capital & Coast district, there are seven established Primary Health Organisations which provide primary health care services to their enrolled populations.
- Public health services in the Capital & Coast district are mainly provided by the Regional Public Health Unit located in the Hutt Valley DHB, although local primary health organisations and other NGOs also provide some public health services.
- For Capital & Coast DHB, the number of actual mental health FTEs was at 98 percent of the number of service level agreement mental health FTEs, slightly higher than the percentage across all DHB providers in total (96 percent).

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 Capital & Coast district, groups with a higher rate of number of professionals registered per 10,000 population compared to New Zealand in total included: GPs, medical specialists, nurses, midwives, medical radiation technologists, psychiatrists, mental health nurses, psychologists, and dentists.

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

Year	Group	Unit	Capital & Coast		New Zealand	
			Number / FTE	Number / FTE per 10,000 population	Number / FTE	Number / FTE per 10,000 population
2006	GPs	Number	231	8.5	3,106	7.6
		FTE	–	–	–	–
2006	Medical specialists	Number	300	11.1	3,175	7.8
		FTE	–	–	–	–
2007	Nurses	Number	2,915	107.6	41,811	101.8
		FTE	2,371.9	87.5	32,585.4	79.4
2007	Midwives	Number	184	6.8	2,511	6.1
		FTE	151.2	5.6	2,000.9	4.9
2007	Medical laboratory technologists	Number	52	1.9	7,902	19.2
		FTE	–	–	–	–
2007	Medical laboratory scientists	Number	393	14.5	5,943	14.5
		FTE	–	–	–	–
2007	Medical radiation technologists	Number	84	3.1	1,155	2.8
		FTE	66.3	2.4	888.6	2.2
2006	Psychiatrists	Number	53	2.0	589	1.4
		FTE	–	–	–	–
2007	Mental health nurses	Number	326	12.0	3,906	9.5
		FTE	300.7	11.1	3,554.3	8.7
2007	Psychologists	Number	71	2.6	625	1.5
		FTE	36.9	1.4	976.7	2.4
2006	Dentists	Number	145	5.4	1,575	3.8
		FTE	119.9	4.4	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 practicing at university dental schools). Some differences exist in the way that dentists are grouped into DHBs; 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 coordinating 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 Capital & Coast district, there are seven established PHOs which provide primary health care services to their enrolled populations. They are:

- Capital PHO
- Kapiti PHO
- Karori
- Ora Toa PHO
- Porirua Plus
- South East and City Primary Health Organisation (SECPHO)
- Tumai mo te Tangata Inc.

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 the Capital & Coast district are mainly provided by the Regional Public Health unit located in the Hutt Valley DHB, although local Primary Health Organisations and other NGOs also provide some public health services. Regional Public Health covers populations in the Hutt Valley, Capital & Coast, and Wairarapa DHBs. It delivers a range of public health services, which include health promotion, health protection, school health, social environments and health information. The table below details staff positions and numbers in Regional Public Health.

Table 6.2: Positions and numbers of staff at Regional Public Health

Position	Number of full-time staff (FTE)	Number of part-time staff (FTE)
Total health promotion	25.4	3.41
Māori health promotion	3	1.5
Pacific health promotion	5	0
Health protection	8.6	0.8
Public health nurse	30.7	9.1
Community worker	0	0
Medical officer	2	1.6
Analyst	3.9	0.6
Other health professionals	9.6	0.9
Other support worker	11.51	1.8
Manager and team leader	4	0
Registrar		0.6
Total staff	103.71	20.31

Notes

1. Information provided is for FTE not individuals.
2. FTE of 0.8 or more is included in full time.
3. Regional public health sub contract some public health services to the Wairarapa DHB. The FTE provided above is for Regional Public Health only. It does not include approximately nine FTE directly employed by Wairarapa DHB who carry out health promotion and health protection work.
4. Information is not provided for vacancies (currently 10 FTE).
5. Other health professional includes vision hearing testers, community dieticians, a public health medicine specialist, a coordinator for an interagency/community collaborative project and a Māori strategic advisor.
6. Other support worker includes technical officers, the NIR administrator, other administration support workers.

6.4 Hospital and emergency services

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

Table 6.3: Certified hospital providers located in the Capital & Coast district, as at June 2008

Provider name	Premise name
Capital & Coast District Health Board	Kapiti Health Centre – Maternity Service Kenepuru Hospital Wellington Hospital
Capital & Coast District Health Board – Mental Health	Porirua Hospital Campus (Mental Health Services) Wellington Hospital (Mental Health)
ElderCare Greenvally Services Limited	Eldon Lodge Rest Home and Hospital
Elizabeth Memorial Home Limited	Elizabeth Memorial Hospital
Guardian Healthcare Group Limited	Guardian at Whitby Harbourview Rest Home and Hospital
Huntleigh Hospital and Rest Home Limited	Huntleigh Hospital and Rest Home
James Haines and Alison Hume Partnership	Millvale Waikanae
Johnsonvale Home Trust Board	Johnsonvale Home
Kapiti District Trust	Sevenoaks Lodge Continuing Care Hospital
Malvina Major Retirement Village Limited	Malvina Major Retirement Village
Mary Potter Hospice Charitable Trust	Mary Potter Hospice
Metlifecare Coastal Villas Limited	Metlifecare Coastal Villas
Mission Residential Care Limited	Kemp Home and Hospital
Parkwood Lodge – Charitable Trust	Parkwood Lodge Rest Home and Hospital
Presbyterian Support Central	Aotea Hospital PSC Cashmere Hospital Hazelwood Hospital and Rest Home
Rita Angus Retirement Village Limited	Rita Angus Retirement Village
Southern Cross Health Trust	Southern Cross Hospital Wellington
Sprott Care Limited	Sprott House
Summerset Care Limited	Summerset Group Ltd – Paraparaumu
Te Hopai Trust Group	Hospital level care, rest home level care and dementia level care
Te Karaka Private Hospital Limited	Te Karaka Private Hospital
The Ultimate Care Group Limited	Churtonleigh Medical Hospital Hadleigh Hospital & Rest Home Maupuia Hospital & Rest Home
Village at The Park Care Limited	Village At The Park
Vincentian Home For The Elderly Limited	Vincentian Home for the Elderly Berhampore
Waikanae Country Lodge Limited	Waikanae Country Lodge
Wakefield Health Limited	Bowen Hospital Wakefield 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 Capital & Coast DHB, the number of actual FTEs was 242 as at 31 March 2008. This was 98 percent of the number of service level agreement FTEs, slightly higher than the percentage across all DHB providers in total (96 percent).

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%
Tairāwhiti	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 from 2007/08, including the number which held 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
Tairāwhiti	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 Capital & Coast DHB. Note that NGOs providing services in the Capital & Coast district which hold direct contracts with the Ministry of Health are not included.

Table 6.6: NGOs with contracts with Capital & Coast DHB, for 2007/08

Awhina Wahine Incorporated
Case Consulting Limited
Hillcrest Lodge 2000 Limited
Kapiti Choices Incorporated
Kapiti Crossroads
Kites Trust
M.A.S.H Trust Board
Mahora House Inc
Mana Community Enterprises Inc
Maninoa Community Care Trust Inc
McKesson New Zealand Limited
Menenga Pai Charitable Trust
Newtown Union Health Service Incorporated
NZIM
Ora Toa PHO Limited
Pacific Community Health Inc
Pathways Trust Board
Pauatahanui Preschool
Platform Inc
Porch Limited
Royal NZ Plunket Society Inc
Schizophrenia Fellowship – Wellington Branch Inc
Second Chance Enterprises Inc
South East & City Primary Health Organisation
Taeaomanino Trust
Te Roopu Awhina Ki Porirua Trust
Te Roopu Pookai Taaniwhaniwha Inc
Te Roopu Whakapakari Ora Trust
Te Runanga o Toa Rangatira Incorporated
The Greater Wellington Health Trust
The Kapiti Welcome Trust
The Wellington Mental Health Consumers Union Incorporated
The Wellink Trust
Wellington After Care Association Incorporated
Wellington City Council
Wellington Refugees as Survivors Trust
Wellington Tenths Development Trust
WellTrust
Wesley Wellington Mission Incorporated
Wheeler Campbell Management Leasing Limited

6.6 Laboratories

Although a number of laboratories across New Zealand provide diagnostic services for the people of the Capital & Coast district, there are four main providers. These are:

- Aotea Pathology Ltd
- Capital & Coast DHB
- Medical Laboratory Wellington
- Valley Diagnostic Laboratories Ltd.

6.7 Radiology

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

- Bowen Hospital
- Kelvin Radiology
- Kenepuru Hospital; Department of Radiology
- Pacific Radiology Limited
- Porirua Radiology
- Southern Cross Hospital
- Team Medical at Coastlands
- Wakefield Cardiology
- Wellington Hospital.

Appendix 1: Information/Data Sources

Data source	Data
Statistics New Zealand, 2006 Census of Population and Dwellings, Wellington	Demography Socioeconomic factors Disability 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 Medical Council of New Zealand Health Workforce Annual Survey 2006 New Zealand Health Information Service. 2007. Health Workforce Annual Survey. Wellington: Ministry of Health	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 Hospitalisations (public) Cancer registrations Type of birth Low birthweight Pregnancy complications Secondary health care utilisation (except use of public hospital and presentation at emergency department) Diagnostic service capacity 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
Ministry of Health Information Systems: Contract management System and Client Claims Processing System	Non-government organisations (NGO) mental health contracts

Data source	Data
Quality & Safety, Sector Accountability and Funding Directorate, Ministry of Health	Certified providers of hospital services
Ministry of Health. 2008. <i>A Portrait of Health. Key Results of the 2006/07 New Zealand health Survey</i> . Wellington: Ministry of Health	Behavioural and biological risk and protective factors Prevalence of diseases/conditions Self-reported health status Primary health care utilisation (except data sourced from Sector Capability & Innovation, Ministry of Health see below) Influenza vaccine coverage at 65+ years Use of public hospital and emergency department
Sector Capability & Innovation Directorate, Ministry of Health	Community Services Card holders Health Use Health Card holders Immunisation coverage at 2 years Adolescent receiving oral health services Use of diabetes services Primary health organisations
White P, Gunston J, Salmond C, Atkinson J, Crampton P. 2008. <i>Atlas of Socioeconomic Deprivation in New Zealand NZDep2006</i> . Wellington: Ministry of Health	Index of deprivation
National Screening Unit/Cancer Screening, Health & Disability National Services Directorate, Ministry of Health	Breast screening coverage
Institute of Environmental Science and Research Limited, 2008. <i>Sexually Transmitted Infections in New Zealand, Annual Surveillance Report 2007</i> .	Sexually transmitted infections
Minister of Health. 2000. <i>The New Zealand Health Strategy</i> . Wellington: Ministry of Health. Minister of Health. 2001. <i>The New Zealand Disability Strategy</i> . Wellington: Ministry of Health. Ministry of Health. 2000. <i>Health Needs Assessment for New Zealand: An overview and guide</i> . Wellington: Ministry of Health. The New Zealand Public Health and Disability Act 2000.	General commentary