# HAUORA WAITAHA I

Health Profile for Māori in Canterbury - Summary Document

E ngā iwi o Waitaha, ngā mihi me ngā whakau, Tēnā koutou

# Canterbury District Health Board Te Poari Hauora ō Waitaha

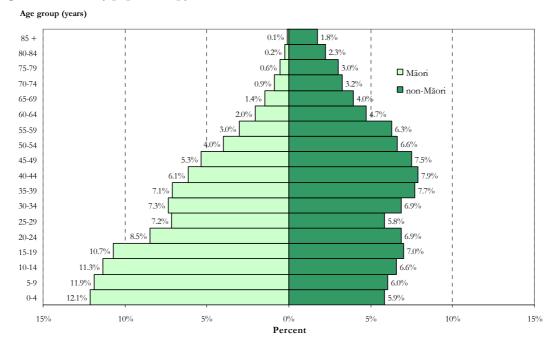
# **Purpose**

- This is a summarised version of Hauora Waitaha Health Profile for Māori in Canterbury. This summary provides an overview of the main points of the health profile. It presents key information concerning health status and health need for Māori in Canterbury. The intention is that this summary will inform and provide a starting point for discussion both within the broader CDHB and the community.
- The full document Hauora Waitaha Health Profile for Māori in Canterbury can be obtained from the Canterbury District Health Board.
- In this summary rates discussed are adjusted to take into account different age structures of the Māori
  and non-Māori populations. This was done by a process known as age-standardisation using the 2001
  Census Māori population as the standard.
- Where differences between rates are mentioned (e.g. the rate of admission to hospital was higher or lower for Māori) these differences are statistically significant unless stated otherwise.

# The Canterbury Māori population

- Māori made up 7.2% of people in Canterbury in 2006. Māori are projected to make up 9.4% of the Canterbury population in 2026.
- 33,417 people in Canterbury identified as Māori in 2006, which represented 5.9% of all Māori in New Zealand.
- Like the national Māori population, the Canterbury Māori population is younger than the non-Māori population (Figure 1).

Figure 1 Canterbury population pyramid, 2006



- Māori in Canterbury have a higher birth rate than non-Māori, both because a higher proportion of Māori women is of childbearing age and because Māori women have more children, on average.
- Ngāi Tahu/Kāi Tahu was the most common iwi affiliation followed by Ngāpuhi and Ngāti Porou.

# **Social Indicators**

The Canterbury population is relatively socioeconomically advantaged compared to all of New Zealand. However, in Canterbury, more Māori than non-Māori live in areas with higher deprivation (Figure 2). This is also the case at the national level, but more so (Figure 3). In Canterbury Ngai Tahu/Kai Tahu live in slightly less deprived areas than Māori affiliated with other iwi.

Figure 2 Deprivation profile for Canterbury, 2006

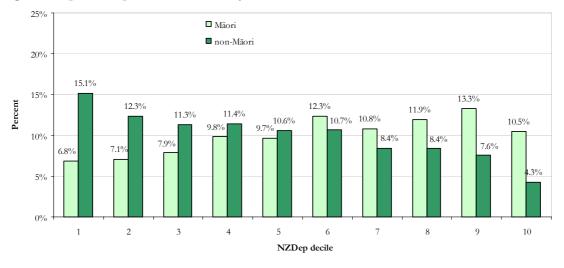
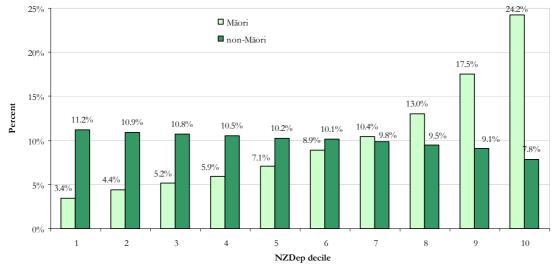


Figure 3 Deprivation profile for New Zealand, 2006

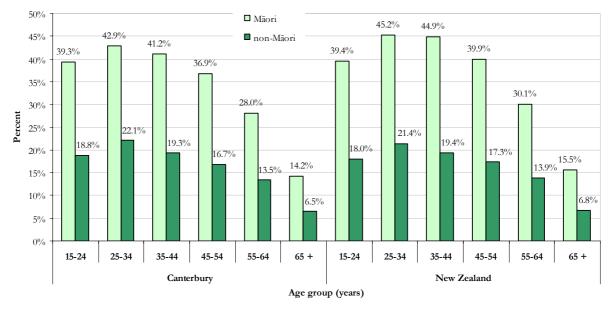


- Māori in Canterbury, when compared to non-Māori:
  - Are more likely to have lower income, be on a benefit and be unemployed
  - Are less likely to have a qualification beyond NCEA level 2
  - Are less likely to own their home, or have access to a car or telephone
  - Are more likely to live in an over-crowded house
  - Are less likely to heat their home.

# Risk and protective factors

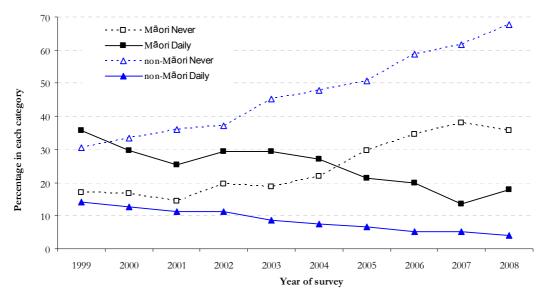
 In Canterbury, more Māori aged over 15 years smoke than non-Māori. This is especially true for females and for those aged 15 to 24 years. However, Māori in Canterbury smoke less than Māori nationally (Figure 4).

Figure 4 Smoking prevalence by age group, 2006



Māori youth (Year 10 students) are over four times as likely to smoke as non-Māori. This is especially
true for girls. There has been a reduction in Māori youth smoking from 1999 to 2008, but this
reduction has been less than that seen for non-Māori (Figure 5).

Figure 5 Smoking status in Year 10 students in Canterbury



- A higher proportion of Māori youth are exposed to smoking at home than non-Māori, although this
  proportion is falling over time.
- Obesity in adults is more common for Māori than non-Māori in Canterbury.
- Although differences are not statistically significant there are indications that for adults in Canterbury:
  - Healthy nutrition (eating 3+ vegetables and 2+ fruit per day) is less common and physical activity more common for Māori compared to non-Māori;
  - Hazardous drinking and marijuana smoking are more common among Māori than non-Māori.

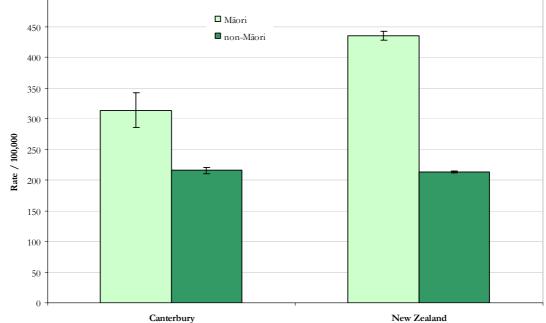
#### Health status

#### Death from all causes

Figure 6 Rate of death from all causes, 2000-04\*

- The rate of death from all causes is significantly higher for Māori than non-Māori in Canterbury (Figure 6).
- The difference between the rates of death from all causes for Māori and non-Māori in Canterbury is not as great as it is nationally.

500 □ Māori 450 ■ non-Māori 400



The five leading specific causes of death for Māori in Canterbury are ischaemic heart disease (heart attacks), lung cancer, chronic obstructive pulmonary disease (COPD - emphysema and chronic bronchitis), type 2 diabetes (adult-onset diabetes), and transport accidents. For non-Māori the leading causes were ischemic heart disease, stroke, lung cancer, suicide, and colorectal cancer.

#### Hospitalisation

- The overall rate of admission to hospital is lower for Māori than non-Māori in Canterbury, in contrast to a higher rate for Māori than non-Māori nationally.
- Māori in Canterbury also have lower rates of admission to hospital than Māori nationally, both overall and for every major cause.

<sup>\*</sup> Indicates that the rate presented is age-standardised to the 2001 Census Maori population.

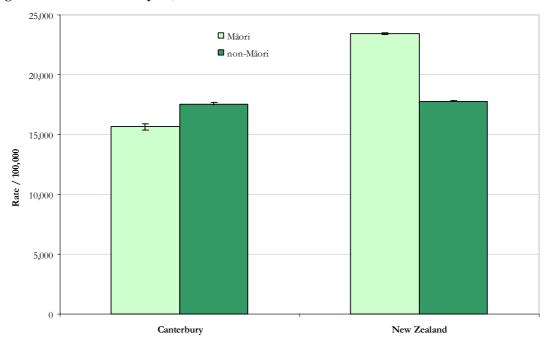


Figure 7 Admissions to hospital, 2003-05\*

- Among the leading major causes of admission to hospital:
  - The rates of hospitalisation for pregnancy and childbirth, respiratory disease, mental illness and circulatory system diseases are higher for Māori than non-Māori in Canterbury.
  - The rates of hospitalisation for injury and poisoning, and digestive system disease are lower for Māori than non-Māori in Canterbury.
- Hospitalisation may not be a good measure of health status, as lower rates of admission to hospital
  may be partly a reflection of poorer access to healthcare, and conversely higher rates may reflect
  poorer care.

# Self-reported health

• Māori in Canterbury report poorer health status than European/Others.

## Cardiovascular disease

The rate of death from ischaemic heart disease is higher for Māori in Canterbury than non-Māori, but there is no statistical difference in the rate of admission to hospital (Figure 8). This suggests an important area of unmet need in the treatment of ischaemic heart disease for Māori.

400 □ Māori 350 ■ non-Māori 300 Rate / 100,000 250 200 150 100 50 0 Hospitalisation Hospitalisation Deaths

Figure 8 Admissions to hospital and deaths from ischaemic heart disease, 2000-05\*

There is no statistically significant difference between the rates of angiography (x-ray procedure that identifies blockages in the arteries supplying blood to the heart) for Māori and non-Māori in Canterbury, but Māori have a lower rate of angioplasty (balloon procedure that opens up the arteries supplying blood to the heart) and a higher rate of coronary artery bypass grafting (CABG - an operation that uses other blood vessels to bypass blockages in the arteries supplying blood to the heart) (Figure 9). As CABG is usually done for more severe disease, this may indicate that Māori receive interventions when their ischaemic heart disease is worse, compared to non-Māori.

New Zealand

Deaths

Canterbury

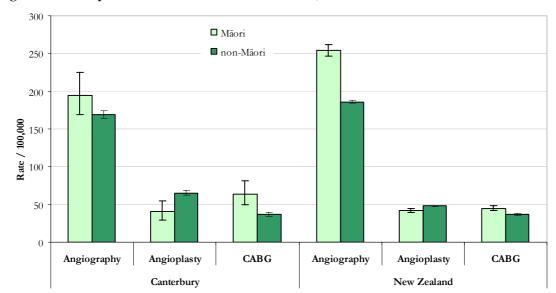


Figure 9 Rates of procedures for ischaemic heart disease, 2000-05\*

- Rates of admission to hospital and death from stroke are similar for Māori and non-Māori in Canterbury, but the rates for Māori in Canterbury are about half those for Māori nationally.
- The rate of admission to hospital for heart failure for Māori in Canterbury is higher than for non-Māori, but lower than for Māori nationally.
- The rate of admission to hospital for hypertensive disease (high blood pressure) for Māori in Canterbury is three times higher than for non-Māori in Canterbury, and similar to that for Māori nationally.
- Rates of admission to hospital and of death from chronic rheumatic heart disease are higher for Māori
  in Canterbury than for non-Māori, but there is no difference in the rate of heart valve replacement.

#### Cancer

- The rate at which cancer is found (known as cancer incidence, calculated from cancer registrations) is lower for Māori in Canterbury than for non-Māori, but the rate of death is higher for Māori (Figure 10).
- Rates of incidence and death from cancer for Māori in Canterbury are lower than for Māori nationally.

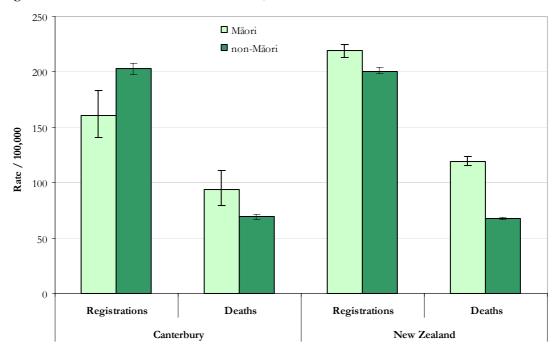


Figure 10 Incidence and death rates for cancer, 2000-05\*

- The incidence and death rates for lung cancer are higher for Māori in Canterbury than for non-Māori.
- The incidence of colorectal cancer is lower for Māori than non-Māori in Canterbury, but there is no difference in the rate of death.
- The incidence of breast cancer is the same for Māori and non-Māori in Canterbury but the rate of death is higher for Māori.
- These results indicate that Māori in Canterbury have a higher risk of death once diagnosed with cancer than non-Māori.
- Screening coverage rates for breast and cervical cancer are lower for Māori than non-Māori women (Figure 11). This means Māori women are less likely to have had a mammogram (breast x-ray to detect breast cancer) or a cervical smear within the last 3 years

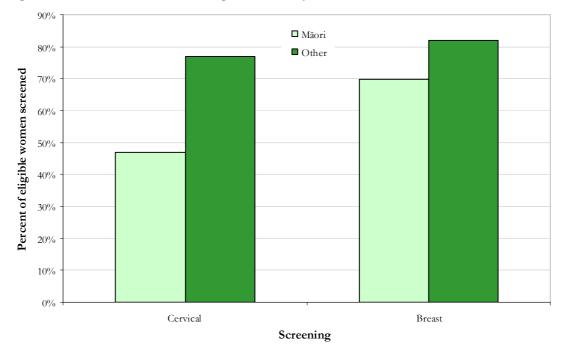


Figure 11 Cervical and breast screening in Canterbury, 2008/09

# Respiratory disease

 Rates of death (Figure 12) and admission to hospital (Figure 13) for Māori in Canterbury are higher than for non-Māori, but lower than for Māori nationally.

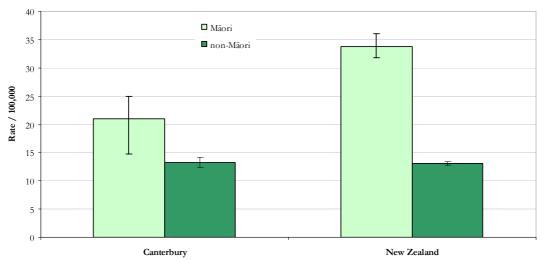


Figure 12 Deaths from respiratory disease, 2000-04\*

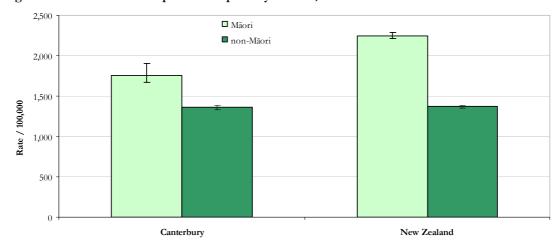


Figure 13 Admissions to hospital for respiratory disease, 2003-2005\*

- Rates of admission to hospital for asthma, chronic obstructive pulmonary disease (COPD –
  emphysema and chronic bronchitis) and bronchiectasis (permanent widening and scarring of the
  airways, caused by infection) are higher for Māori than non-Māori in Canterbury, but there is no
  significant difference between Māori and non-Māori for pneumonia admissions.
- The rates of admission to hospital for asthma and bronchiectasis are similar for Māori in Canterbury
  to those for Māori nationally. The rates for COPD and pneumonia are lower for Māori in Canterbury
  than nationally.

## **Diabetes**

- The rate of admission to hospital (Figure 14) for type 2 diabetes is over two and a half times higher for Māori in Canterbury than for non-Māori, while the rate of death (Figure 15) is more than five and a half times higher for Māori.
- The rates of admission to hospital and death from type 2 diabetes for Māori in Canterbury are lower than for Māori nationally.

Figure 14 Admissions to hospital for type 2 diabetes, 2003-2005\*

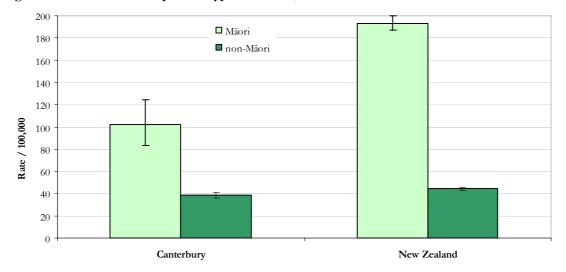
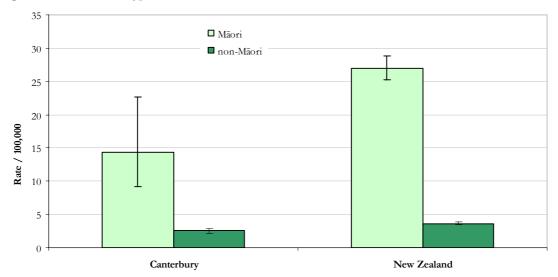
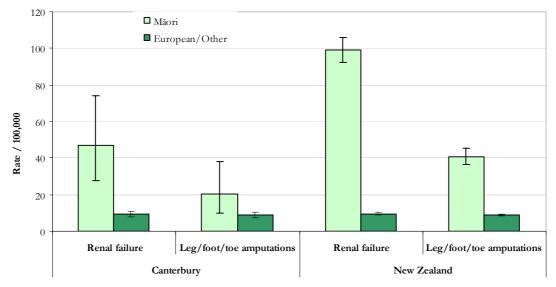


Figure 15 Deaths from type 2 diabetes, 2000-04\*



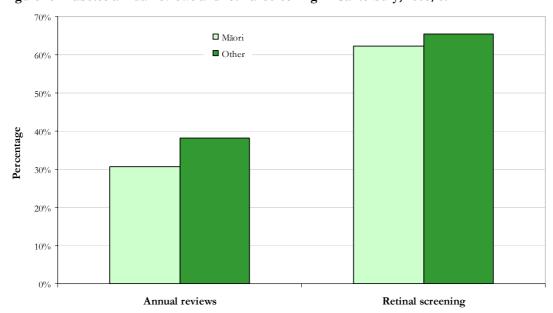
• The rates of long term complications from diabetes (kidney failure and leg/foot/toe amputations) are two to five times higher, respectively, for Māori than European/Others in Canterbury (Figure 16).

Figure 16 Complications from diabetes, 2005-07\*



 A lower proportion of Māori than Others (non-Māori, non-Pacific) with diabetes have an annual review and undergo retinal screening (examination to look for damage to the back of the eye) (Figure 17).

Figure 17 Diabetes annual reviews and retinal screening in Canterbury, 2008/09



## Communicable disease

- The rate of death from communicable diseases is not statistically different for Māori and non-Māori in Canterbury, but the rate of hospitalisation is lower for Māori.
- The rates of admission to hospital and notification (by GPs or laboratories to the Public Health Service) for intestinal infections are lower for Māori than for non-Māori in Canterbury. This does not

- necessarily mean that Māori have less disease, as it may be due to Māori being less likely to be diagnosed or to visit a health provider when they are ill.
- The rate of admission to hospital for viral hepatitis is three times higher for Māori than for non-Māori
  in Canterbury. Notifications for invasive pneumococcal disease and tuberculosis disease are
  significantly more frequent for Māori than non-Māori in Canterbury.
- The national immunisation register shows lower immunisation coverage for Māori children in Canterbury than for non-Māori, but higher than for Māori nationally (Figure 18).

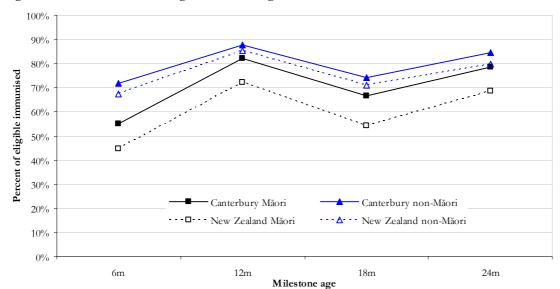


Figure 18 Immunisation coverage at different ages, 2008/09

# Mental health

- Māori in Canterbury access mental health services more frequently than non-Māori, but less frequently than the target set by the Mental Health Commission for Māori nationally.
- The rate of admission to hospital for mental illness for Māori males is higher than for non-Māori, but there is no difference in the rate for Māori females compared to non-Māori.
- Māori are admitted to hospital for schizophrenia and similar disorders twice as frequently as non-Māori in Canterbury. Māori are also admitted more frequently for manic episodes and bipolar disorder and psychoactive substance use than non-Māori (Figure 19), about the same for depression, but less commonly for personality and behavioural disorders.
- The rate of admission to hospital for Māori for schizophrenia is lower in Canterbury than nationally, but higher for depression.

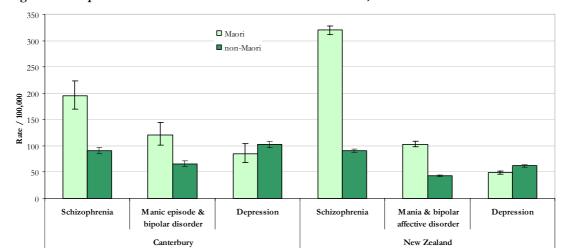


Figure 19 Hospitalisations for mental and behavioural disorders, 2003-05\*

• The rate of admission to hospital for psychoactive substance use for Māori in Canterbury is much higher than for Māori nationally. The rate for Māori in Canterbury is higher than non-Māori for use of cannabinoids and opioids (Figure 20). The different rates in Canterbury may reflect different management of mental illness rather than necessarily because the level of mental illness differs.

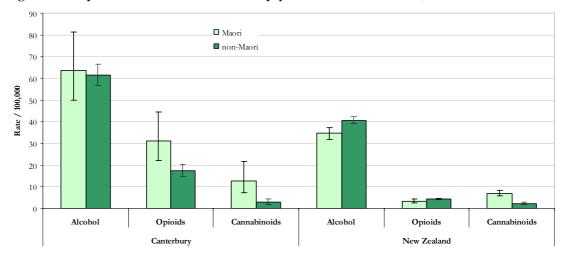


Figure 20 Hospitalisation for disorders due to psychoactive substance use, 2003-05\*

• The mortality rate from suicide is not significantly different for Māori and non-Māori in Canterbury.

# Injury

- The rate of death from injuries and poisoning is higher for Māori in Canterbury than for non-Māori.
   Deaths due to drowning, fires, and accidental poisoning are significantly higher for Māori in Canterbury than non-Māori.
- The rate of admission to hospital for injuries is lower for Māori in Canterbury than non-Māori and lower than for Māori nationally.

#### Oral health

- Māori children in Canterbury have worse oral health (more decayed, missing or filled teeth) than non-Māori in Canterbury, and worse oral health than Māori living in fluoridated areas of New Zealand.
- Māori children in Canterbury have better oral health status than Māori living in other non-fluoridated areas nationally.

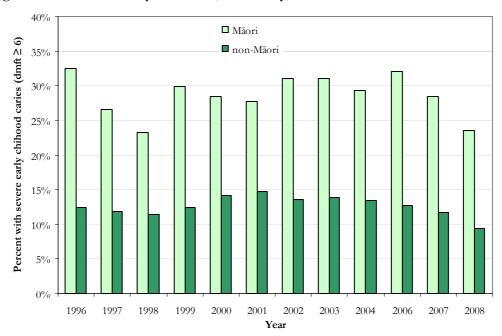


Figure 21 Severe tooth decay in children, Canterbury, 1996-2008

• The rates of admission to hospital for removal of teeth (all ages) and general anaesthesia for dental procedures on children are higher for Māori in Canterbury than non-Māori.

## Tamariki and Rangatahi health

- Māori in Canterbury have higher rates of preterm birth (birth before 37 weeks of pregnancy) than European/Others.
- Although the differences are not statistically significant, there are indications that Māori have a higher rate of low birthweight and a higher infant mortality rate than European/Others.
- Rates of breastfeeding are lower for Māori than for European/Others at six weeks, three months and six months age groups (Figure 22).

□ Māori ■ European/Other 69.0% 69.3%  $\begin{array}{c} 70\% \\ 70\% \\ 60\% \\ 50\% \\ 30\% \\ 20\% \\ 10\% \end{array}$ 58.4% 56.2% 56.89 56.0% 45.3% 43.8% 32.4% 29.1% 20.1% 17.9% 0% 3 months <6 weeks 3 months 6 months <6 weeks 6 months

New Zealand

Figure 22 Breastfeeding (fully/exclusively) rates at different ages, 2008

- Māori children and young people in Canterbury are admitted to hospital less frequently than
   Europeans for upper respiratory tract infection, tonsillectomy, and gastroenteritis.
- Māori infants are admitted to hospital more frequently for bronchiolitis than Europeans.
- The rate of hospital admission for Māori children and young people compared to Europeans is slightly higher for pneumonia and substantially higher for asthma (Figure 23).

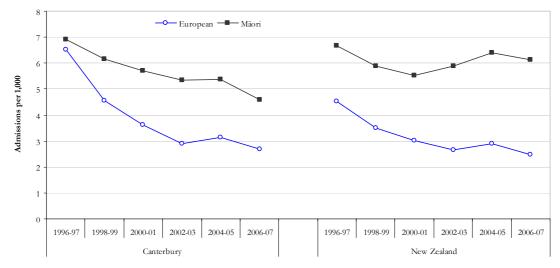


Figure 23 Hospitalisations for asthma, 0-24 year olds, 1996-2007

Canterbury

Māori children fail school entry hearing tests more frequently than Others in Canterbury, and the
failure rate for Māori worsened over the period from 2003 to 2007 (Figure 24). Māori children in
Canterbury are admitted to hospital for grommet insertion (to fix glue ear) more frequently than
Europeans (Figure 25), but no more frequently for ear infections.

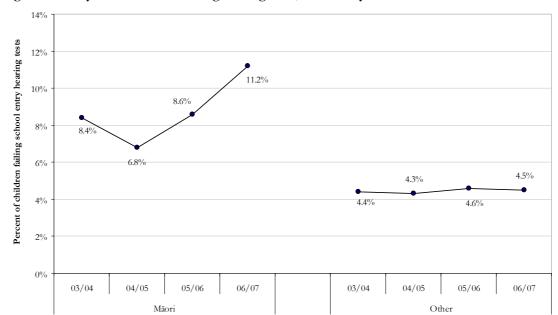
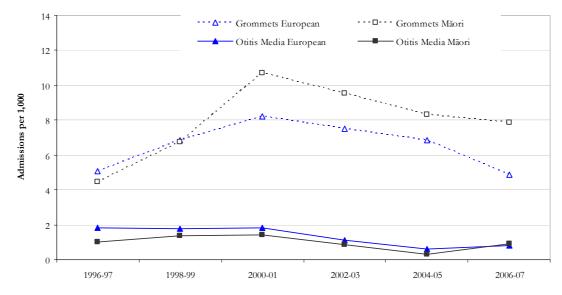


Figure 24 Five year old children failing hearing tests, Canterbury 2003-07

Figure 25 Admissions for ear infections and grommet insertion, 0-14 year olds, Canterbury, 1996-2007



# Sexual and reproductive health

- The rate of manually assisted deliveries (without need for intervention) during birth is higher for Māori in Canterbury than for non-Māori, but the rates of procedures related to delivery for example, caesarean section (emergency and elective), most inductions of labour, deliveries using instruments (vacuum and forceps) are lower for Māori.
- The rate of teenage pregnancy has been three to four times higher for Māori in Canterbury than for Europeans over the period from 1996 to 2007 (Figure 26).

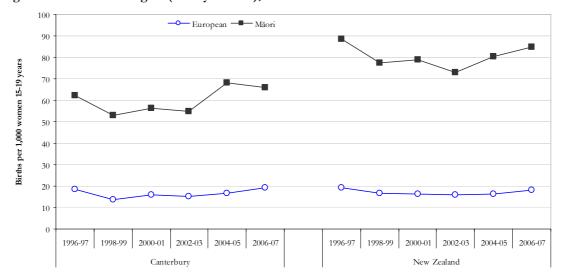


Figure 26 Births to teenagers (15-19 year olds), 1996-2007

# Kaumatua health

• A lower proportion of Māori (and of Māori over 65 year) in Canterbury are in aged care facilities.

# Health services utilisation

- Māori are more likely than European/Others to have an unmet need for a visit to a general practitioner.
- PHO enrolment is lower for Māori in Canterbury than for Others.
- Māori in Canterbury are under-represented in hospital activity including bed days, discharges and average length of stay.

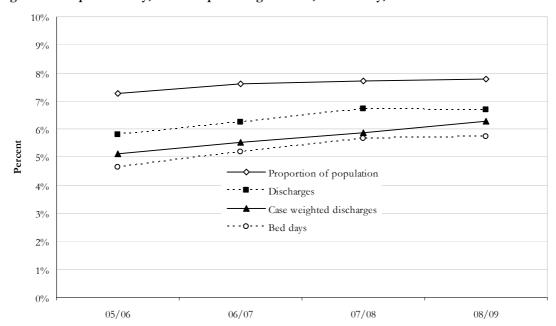


Figure 27 Hospital activity, Māori as percentage of total, Canterbury, 2005-2009

- Spending per person on prescriptions and laboratory testing is lower for Māori than for Others.
- These findings are at odds with the higher burden of disease carried by Māori.

# Health system indicators

 Avoidable mortality (deaths that could have been prevented by effective public health and primary health interventions) is twice as high for Māori in Canterbury than for European/Others, but lower than for Māori nationally (Figure 28).

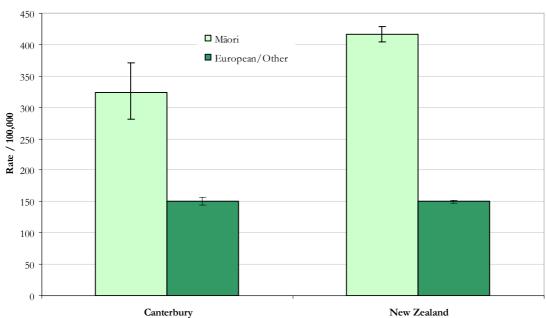
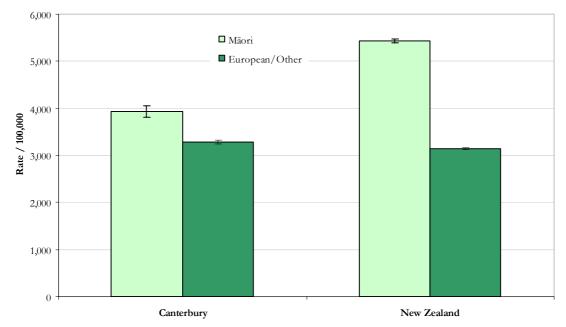


Figure 28 Avoidable mortality (0-74 year olds), 2003-05

Avoidable hospitalisation (admissions to hospital that could have been prevented by effective public
health and primary health interventions) is higher for Māori in Canterbury than for European/Others,
but lower than for Māori nationally (Figure 29).

Figure 29 Avoidable hospitalisation (0-74 year olds) 2005-07



• The rate of ambulatory sensitive hospitalisation (admissions to hospital that are preventable by access to effective primary health care) for Māori under five year olds in Canterbury was lower in 1996 than that for Europeans but has increased over time, while the rate for Europeans has fallen. By 2007 the rate for Māori had become higher than that for Europeans (Figure 30).

Figure 30 Ambulatory sensitive hospitalisation 0-4 year olds, Canterbury 1996-2007

