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CARDIOVASCULAR DISEASE

Key Findings

- **The hospitalisation rates for stroke, congestive heart failure and ischaemic heart disease are higher but not significantly different than the national rate.**
- **Maori and Pacific people have comparatively more hospitalisations for stroke and ischaemic heart disease in younger age groups than Other, where the proportion of strokes increases with age.**
- **Persons living in the lowest deprivation quintile in Wairarapa are more likely to be hospitalised for stroke and ischaemic heart disease while the converse is true for those living in the most advantaged areas.**

Strategic Context

Cardiovascular diseases are major causes of death for all ethnic groups in New Zealand. Of the cardiovascular diseases, coronary artery disease is the major cause of death, followed by stroke, which is the greatest cause of disability in older people. Cardiovascular disease is also the leading cause of years lost to premature mortality, accounting for 33 percent of life years lost between 45 and 64 years of age. Coronary heart disease is the leading single cause of death for Maori.

In this report the burden of cardiovascular diseases in the Wairarapa population is analysed by comparing patterns in stroke, congestive heart failure and ischaemic heart disease hospitalisation to that for New Zealand. The fact sheets show mortality by ethnicity, deprivation, and TLA.

Ischaemic heart disease (IHD) is a significant cause of both morbidity and mortality in New Zealand. It is related to atherosclerosis of the arteries supplying blood to the heart, and is associated with high blood cholesterol, tobacco smoking, physical inactivity, diabetes, and inadequate vegetable and fruit intake, as well as genetic factors.

Stroke (also referred to as cerebrovascular accident) refers to the sudden onset of neurological deficit caused by an interruption of the brain's blood supply. Stroke is a leading cause of death in New Zealand (9 percent of all deaths), and is an important cause of severe disability.

One of the 13 population health objectives of the New Zealand Health Strategy is to reduce the incidence and disease impact of cardiovascular disease in New Zealand.

In addressing this priority a Cardiovascular Expert Advisory Group was established to assist the Ministry of Health to identify those cardiovascular areas that would have the greatest population impact. Following a review of the evidence, an action plan was developed, which includes the following priority areas:

- Cardiovascular risk screening and management.
- Acute coronary syndromes.
- Secondary prevention.
- Cardiac rehabilitation.

• Organised stroke care.

• Cardiovascular disease and Maori.

• Cardiovascular disease and Pacific peoples.

Hospitalisation

Prevalence

The hospitalisation rates for stroke, congestive heart failure and ischaemic heart disease are higher but not significantly different than the national rate.

Figure 1: Wairarapa Stroke Hospitalisations, Total Ethnicity Age standardised rate.

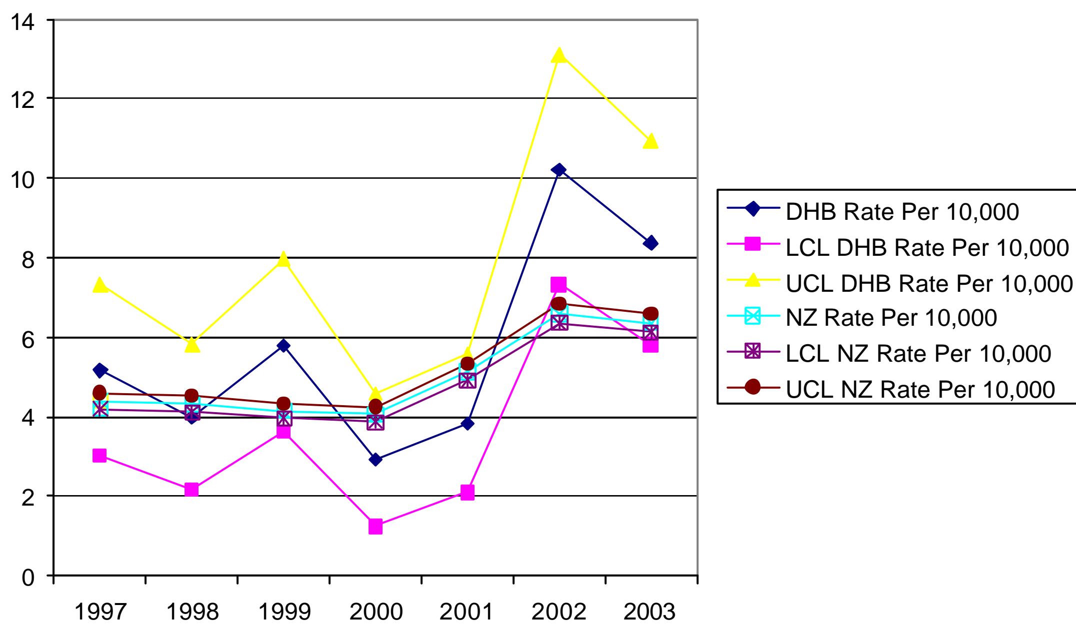


Figure 2: Wairarapa Ischaemic Heart Disease, Hospitalisations, Total Ethnicity Age standardised rate.

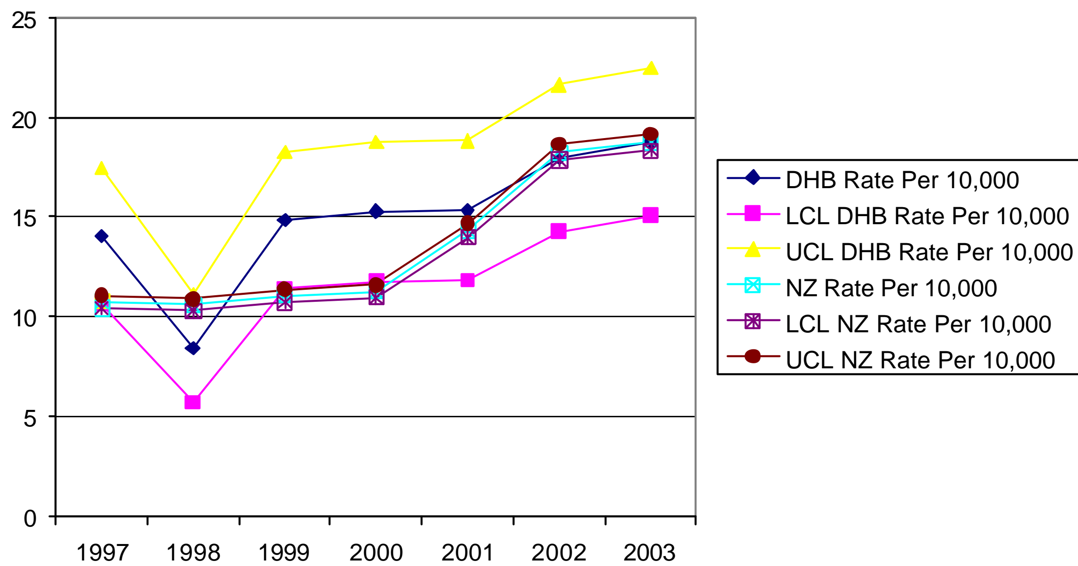
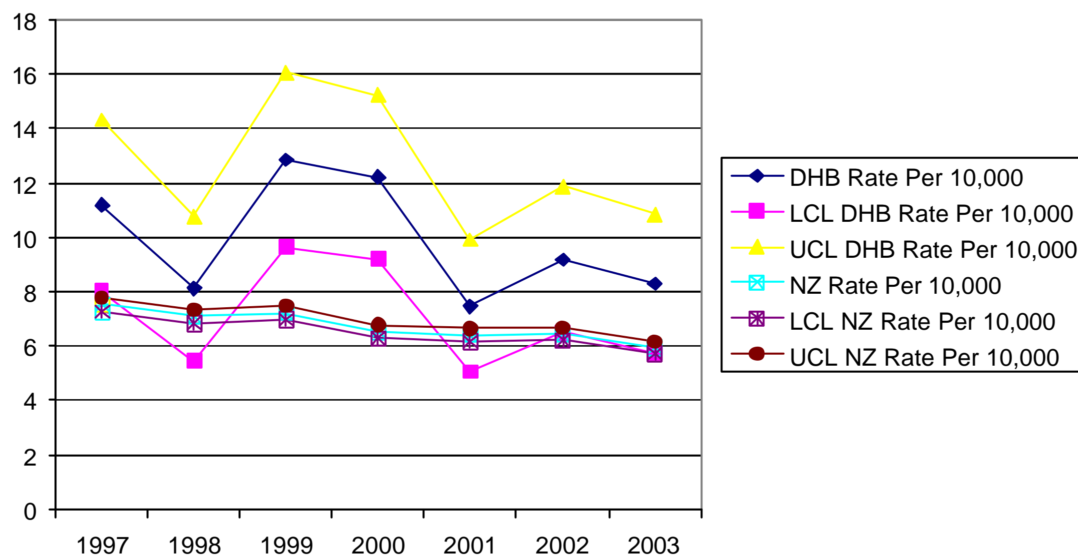


Figure 3: Wairarapa DHB Congestive heart failure, Hospitalisations, Total Ethnicity Age standardised rate.



Ethnicity

Maori and Pacific people have comparatively more hospitalisations for stroke and ischaemic heart disease in younger age groups than Other, where the proportion of strokes increases with age. Figures 4, 5 and 6 illustrate this pattern for Maori in the Wairarapa. The proportions are shown for Pacific people but the small numbers make it difficult to draw meaningful conclusions.

Figure 4: Wairarapa avoidable Hospitalisations for Stroke, proportion for age-group by ethnicity 1997- 2003

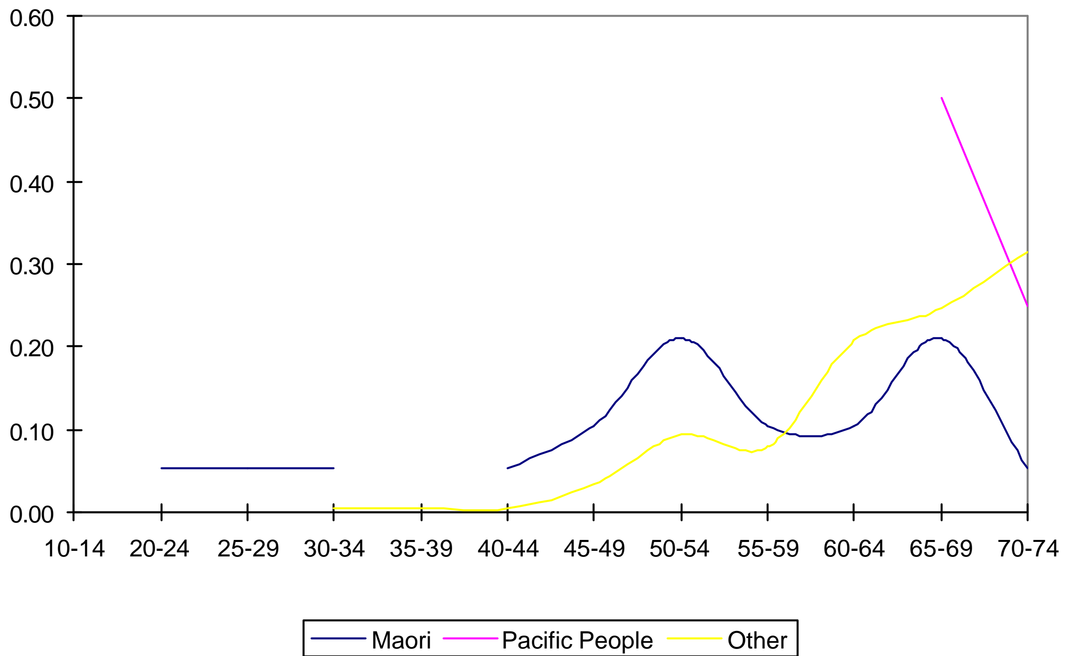


Figure 5: Wairarapa avoidable Hospitalisations for Ischaemic heart disease, proportion for age-group by ethnicity 1997- 2003

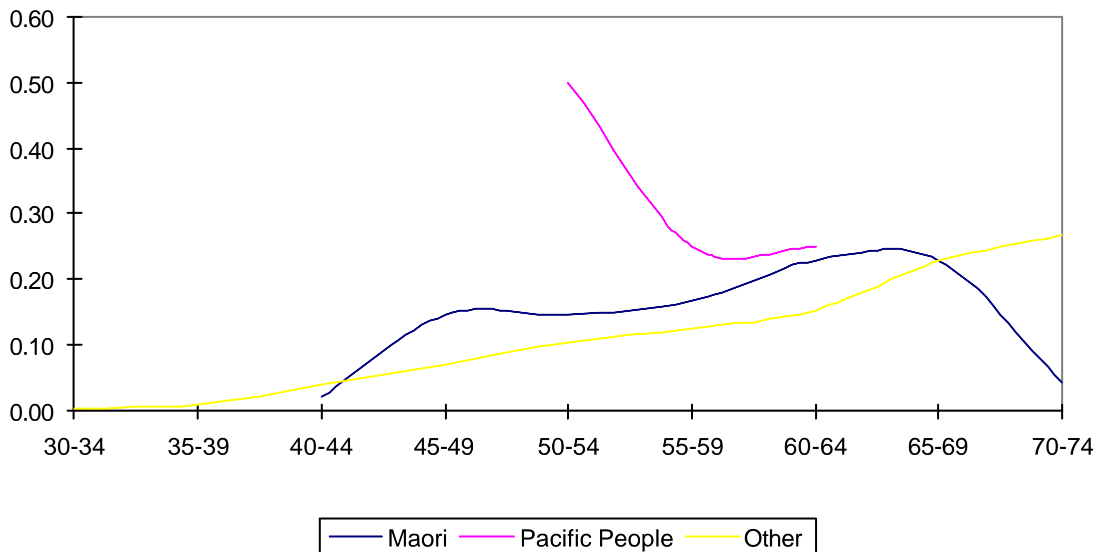
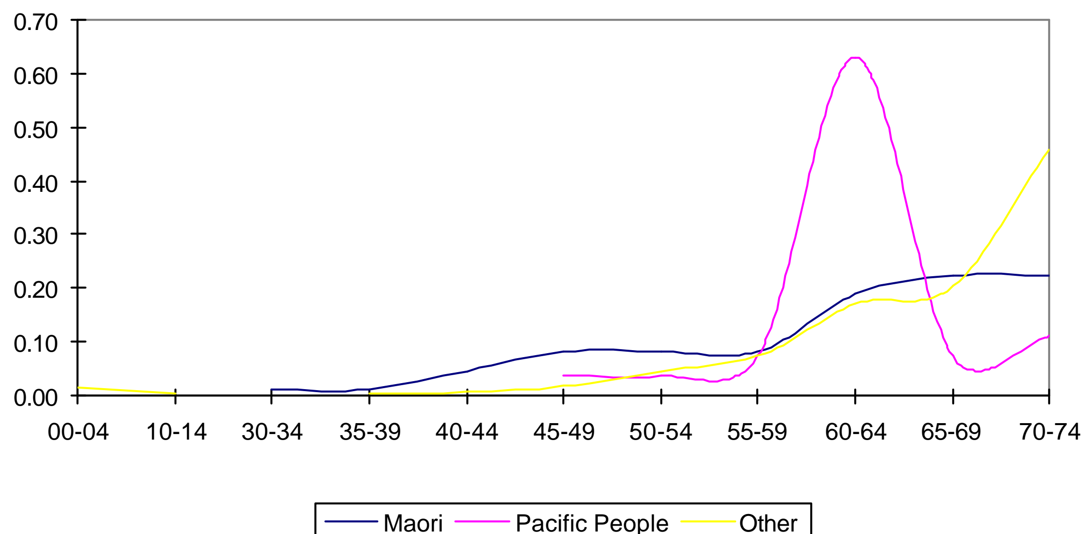


Figure 6: Wairarapa DHB avoidable Hospitalisations for congestive heart failure, proportion for age-group by ethnicity 1997- 2003



Deprivation

Persons living in the lowest deprivation quintile in Wairarapa are more likely to be hospitalised for stroke and ischaemic heart disease while the converse is true for those living in the most advantaged areas.

Figure 7: Wairarapa DHB Stroke Hospitalisations Deprivation profile 1997-2003

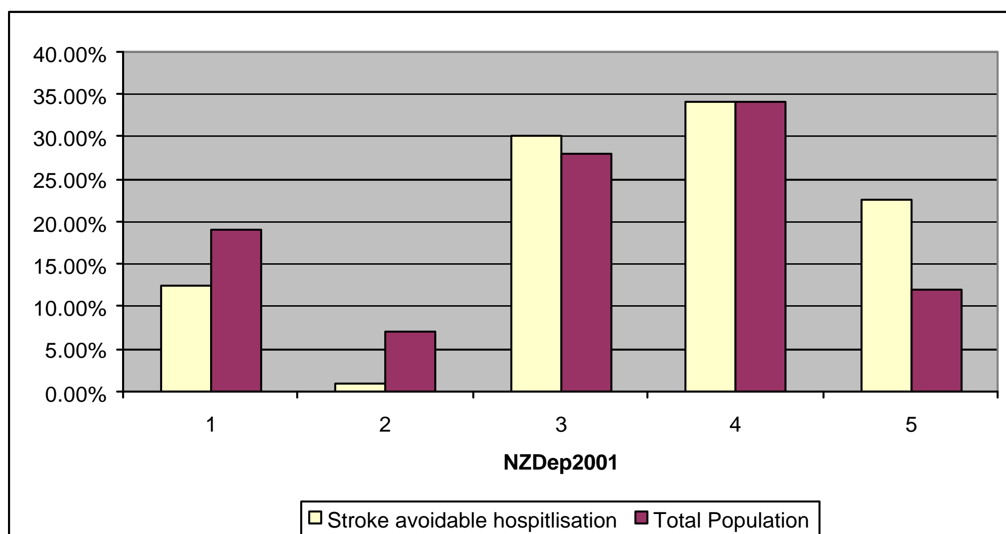
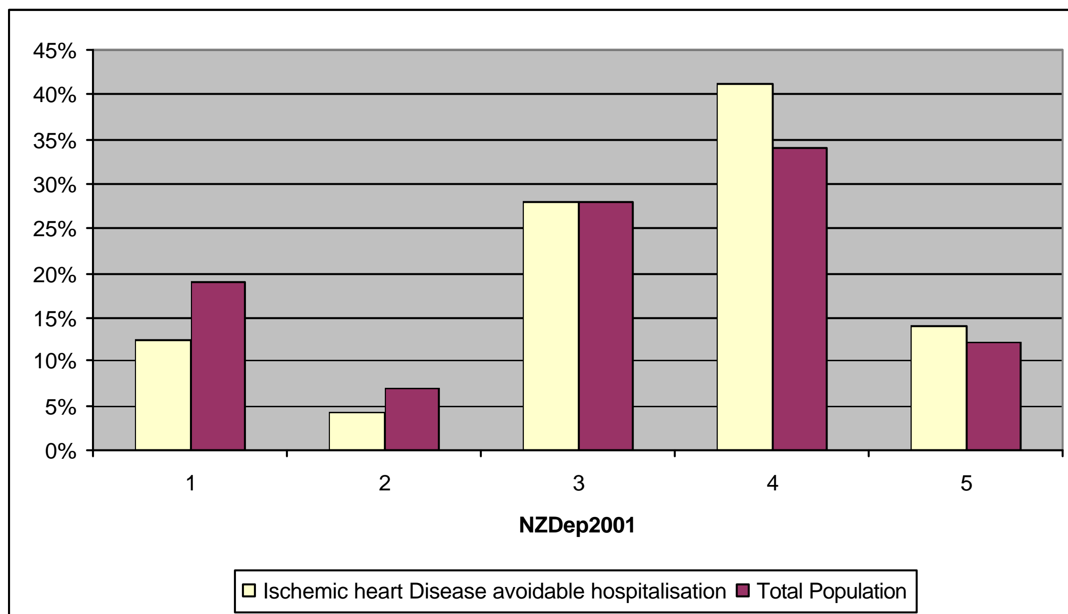


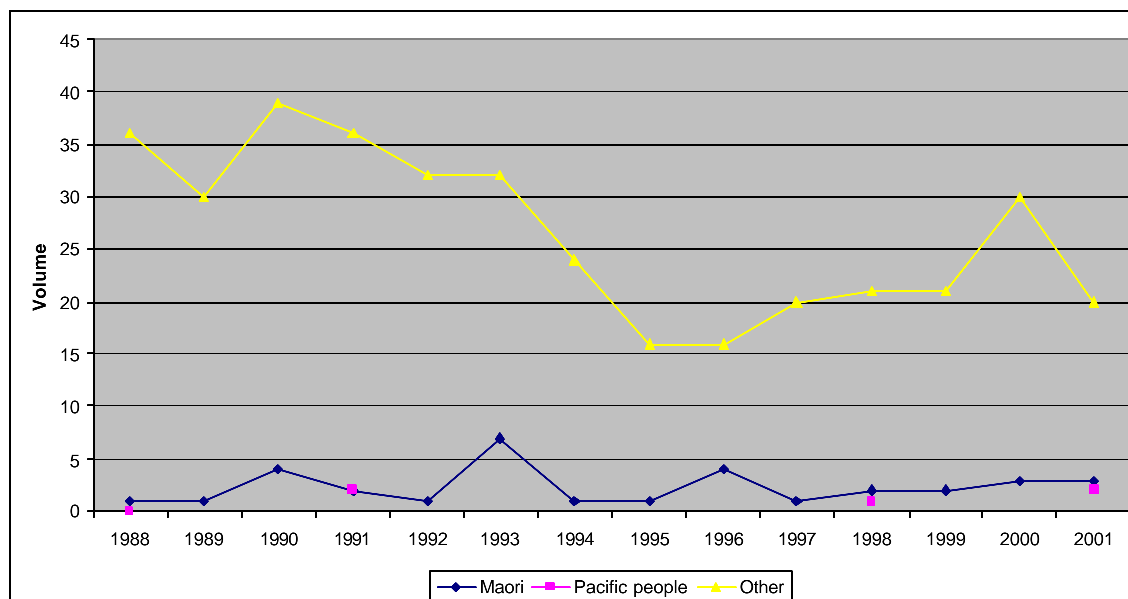
Figure 8: Wairarapa DHB Ischaemic heart disease Hospitalisations Deprivation profile 1997-2003



Mortality

Mortality from all cardiovascular diseases is higher among Maori than the general population however the small numbers in the Wairarapa do not allow meaningful conclusions. Figure 9 below shows the number of deaths for stroke and ischaemic heart disease combined.

Figure 9: Wairarapa DHB stroke and Ischaemic heart disease mortality 1988 – 2001.



Overall, persons with Maori ethnicity accounted for 8% of avoidable stroke and ischaemic heart disease combined mortality over the period 1988 to 2001. Pacific people made up 1%, while the "Other" ethnic group comprise of 91% of the discharge volume.

Conclusion

The Cardiovascular Expert Advisory Group has identified cardiovascular risk assessment and management as a national priority area. Wairarapa data does not support a higher incidence of hospitalisation and mortality for heart disease amongst Maori and pacific people than other ethnic groups in the Wairarapa.

Effective services to reduce cardiovascular disease should focus on groups at higher risk, particularly people living in high deprivation communities.