

Health of Queensland's Aborigines and Torres Strait Islanders

STATUS REPORT

Health Information Centre

# HEALTH OF QUEENSLAND'S ABORIGINES AND TORRES STRAIT ISLANDERS: STATUS REPORT

#### **FOREWORD**

This information paper presents an overview of key aspects of the health status of Aborigines and Torres Strait Islanders in Queensland using the latest information available and includes some national and international comparisons with indigenous groups in comparable countries to Australia.

The report focuses on adult and child health, and presents the status of Queensland Aborigines and Torres Strait Islanders in these two groups, measured by mortality, life expectancy, morbidity, immunisation, and growth and nutrition. The report also provides information about risk factors, including smoking, overweight, alcohol consumption and breastfeeding. In addition, information about housing, education and employment is provided, these being recognised as important contributors to overall health and well-being.

Inequalities in the health status experienced by this population group are clearly apparent. Queensland Health is committed to assisting all groups in the population to better health and well-being. The ultimate goal is for all Queenslanders to have a level of health equal to the best in the world. The report identifies programs which are needed to reduce inequities in the health of Queensland Aborigines and Torres Strait Islanders, as well as identifying related and critical issues which must be addressed systematically if headway is to be made in health. The information in this report will assist Queensland Health to plan and implement effective strategies to achieve improved health outcomes for Aborigines and Torres Strait Islanders in Queensland.

(Dr) R.L. Stable Director General

December 1996

#### CONTENTS

SUM	MARY	. 1
1.	BACKGROUND	. 3
2.	ADULT HEALTH Life Expectancy Life Expectancy: International comparisons Life Expectancy: Interstate comparisons Sources of excess mortality	3
3.	HOSPITAL MORBIDITY	5
4.	CHILD HEALTH Perinatal Mortality Infant Mortality Risk factors for perinatal mortality Immunisation Growth and nutrition	5 5 6 6
5.	RISK FACTORS, HOUSING, EDUCATION, EMPLOYMENT Smoking Relative weight Alcohol Breastfeeding Attitudes to health Housing Education Employment	7 7 7 8 8 8 8 9
<ol> <li>6.</li> </ol>	Smoking Relative weight Alcohol Breastfeeding Attitudes to health Housing Education	7 7 8 8 8 8 9
	Smoking Relative weight Alcohol Breastfeeding Attitudes to health Housing Education Employment	7 7 7 8 8 8 9 10
6.	Smoking Relative weight Alcohol Breastfeeding Attitudes to health Housing Education Employment  VARIATIONS IN QUEENSLAND	7 7 7 8 8 8 9 10
<ul><li>6.</li><li>7.</li><li>8.</li></ul>	Smoking Relative weight Alcohol Breastfeeding Attitudes to health Housing Education Employment  VARIATIONS IN QUEENSLAND  PROGRAMS	77 77 88 89 10 11

### LIST OF ATTACHMENTS

Attachment 1	Estimated expectation of life for indigenous persons
Attachment 2	Life expectancy at birth by race and sex
Attachment 3	Standardised mortality rates for indigenous persons aged 20-69 years
Attachment 4	Age specific mortality ratios for Queensland indigenous persons and Maoris
Attachment 5	Selected causes of death (deaths per 100,000 population)
Attachment 6	Expectation of life at birth for Aborigines and Torres Strait Islanders by ATSIC region, 1986 to 1991
Attachment 7	Contributions to indigenous excess mortality 1990-94 by condition within age class
Attachment 8	Mortality rates for selected conditions for Queensland indigenous persons 1989-93
Attachment 9	Hospital admission ratios for Queensland indigenous persons 1994/95
Attachment 10	Indigenous perinatal and infant mortality
Attachment 11	Proportion of low birthweight babies (below 2500 grams) by ethnicity of mother 1987-94
Attachment 12	Risk factors, education levels, and unemployment rates for Aboriginal and

#### **SUMMARY**

In Queensland, the health of Aboriginal and Torres Strait Islander people remains substantially worse than any other section of the Queensland population.

- The gap in the expectation of life between Queensland's indigenous people and other Queenslanders is estimated to be 18-19 years;
- The age adjusted death rate of indigenous people in Queensland is estimated to be over three times (3.2) greater than that for the total Queensland population;
- While considerable gains have been made in infant mortality rates since the early 1970s, the reduction has stabilised in recent years, and rates are still unacceptably high at two and a half times greater than the all Queensland rate.

The estimated mortality rates for Queensland Aboriginal and Torres Strait Islander people in middle age (40-64 years) are among the highest recorded in the world.

- Mortality rates in early middle age are estimated to be more than 5 times greater than the rest of the population.
- There has been little improvement in adult mortality over the last 20 years, and this lack of progress is virtually without precedent on a world scale.
- The major causes of excess mortality are heart disease (death rate is estimated to be two times that in the non-indigenous population), diabetes (17 times as high), chronic respiratory disease (5 times as high), pneumonia (10 times), accidents (3 times). These five conditions account for 56% of excess deaths.

Hospital admission patterns generally follow mortality patterns, with relatively high levels of admissions for conditions with high mortality, such as diabetes, hypertension, pneumonia (estimated to be over 5 times the Queensland rate), nephritis, nephrotic syndrome and nephrosis, chronic obstructive airways disease (other than asthma), chronic rheumatic heart disease, and injury inflicted by others (over 6 times).

- Hospital admissions for these conditions, however, are usually not as extreme as corresponding mortality ratios.
- This suggests that access to hospital services by many indigenous persons is not as high as it should be, given the level of illness.

Differences are observed in health risk factors:

- Smoking rates in the Aboriginal and Torres Strait Islander population are almost twice as high as the all Queensland rate.
- Rates of obesity/overweight are just over 1½ times as high.
- While fewer people consume alcohol, those that do frequently consume significantly greater amounts.

Twenty three percent of the indigenous population worry about going without food, and family violence is perceived by nearly half of the population as a common problem.

In other areas which are known to contribute to overall health and well being, differences are noted. Compared to all Queenslanders:

- More than three times as many parents are unemployed;
- Seven percent are homeless;
- Two and a half times as many live in rented accommodation;
- Half as many children are in school at age 17.

Comparisons with similar international indigenous populations show Queensland's indigenous population lag well behind on a number of health indices.

A key difference between Australia, North America and New Zealand has been the relative failure to reduce the gap in the expectation of life in Australia, which is still 18-19 years less than non-indigenous people.

In the US this gap has been progressively reduced from 13 years to 3 years in recent

decades, and in New Zealand it has been reduced to 5-6 years.

The life expectancy of the indigenous population in Queensland is 12-13 years less than the Maori population of New Zealand.

Queensland indigenous death rates are estimated to be over three times those of the nonindigenous population, while the New Zealand Maori death rates are only 30% higher than the non-indigenous population.

While there is a widespread public perception that a lot of money has been directed to Aboriginal and Torres Strait Islander health, it is difficult to get up-to-date information on levels of funding. In contrast to that perception, in the late 1980s in Queensland, spending on indigenous people in remote areas was 70% of that spent on non-indigenous health in those areas, even though the health of Aborigines and Torres Strait Islanders in these areas was three times worse than the rest of the population. There has been a significant increase in funding of Aboriginal and Torres Strait Islander services in recent years, but there is a need to further develop programs and health services which are appropriate for the level of need and which provide an effective approach to the main problems that have been described.

Making headway on health depends on systematically addressing five related areas of need. These are:

- making improvements in infrastructure, including housing, water, sanitation, education, (i) land and economic development, etc;
- increasing community participation and control in service delivery; (ii)
- establishing a network of primary health care services that deliver effective services; (iii)
- providing an adequate level of health resources; (iv)
- and developing a skilled health labour force. (v)

Intersectoral collaboration between health and other agencies is required, particularly for dealing with infrastructure issues.

Cabinet recently endorsed the Implementation Plan for the Aboriginal and Torres Strait Islander Policy which calls for sustained action to address these issues. To measure its performance in implementing the plan, Queensland Health has set goals and targets for children and adults.

#### 1. BACKGROUND

Queensland Health aims to help people to better health and well-being. The ultimate goal is for the people of Queensland to have a level of health equal to the best in the world. In order to achieve this, inequalities in health in the population need to be identified and addressed.

This information paper presents a brief overview of the current health status of Queensland Aboriginal and Torres Strait Islander people.

#### 2. ADULT HEALTH

#### Life Expectancy

Life expectancy for Queensland Aborigines changed very little in the period 1981-91<sup>1</sup> (see Attachment 1a). At around 56 years, male expectation of life was estimated to be some 19 years lower than the all Queensland figure, and at around 64 years was some 17 years less for females. Furthermore, with the exception of the Brisbane area, where life expectancies were two to three years higher, there was little variation across the state (Attachment 1b). This lack of variation is supported by data from WA which showed no consistent pattern in death rates between urban, rural and remote regions of the state for males or females.

#### Life Expectancy: International comparisons

Comparisons of the statistics available in the United States, New Zealand and in Queensland indicate that the health of indigenous Americans and New Zealanders is considerably better than that of their Australian counterparts. While life expectancy of indigenous Queenslanders is about 19 years less than it is for other Queenslanders, the life expectancy of indigenous Americans is only 3 years less than for other Americans, and indigenous New Zealanders five years less than the rest of the population (see Attachment 2). The life expectancy of indigenous Queensland men is about 13 years less than the life expectancy of New Zealand Maori men, and indigenous Queensland women have a life expectancy about 12 years less than Maori women.

While Maori death rates have fallen steadily since the early seventies, there has been no comparable drop in adult indigenous death rates in Queensland or elsewhere in Australia (see Attachment 3). While indigenous Queenslanders suffered an excess of deaths at all ages compared to the non-indigenous population, the differences are most striking in middle age (45-64 years) (see Attachment 4). In 1990-94, middle-age indigenous persons had more than 5 times the expected number of deaths. In contrast, ratios of Maori deaths to expected deaths were always less than for Queensland indigenous persons at all ages, and were never larger than 2.

When indigenous groups from different countries are compared for particular causes of death, indigenous Queenslanders die at a much higher rate from homicides, pneumonia

Gray A, Tesfaghiorghis H. Aboriginal population prospects. *Journal of the Australian Population Association* 1993; 10(2): 81-99.

and influenza, and heart disease than indigenous Americans or Maoris in New Zealand (see Attachment 5).

#### Life Expectancy: Interstate comparisons

Life expectancy for Queensland Aborigines in the period 1981-91 was comparable to expectations of life for indigenous people in other states with good identification of indigenous deaths (see Attachment 1a).

Death rates in North Queensland are of the same order as those in Western Australia and the Northern Territory (see Attachment 3).

Variation by ATSIC region for life expectancy between 1986-91 shows Queensland Aboriginal and Torres Strait Islander people rank in the middle to lower ranges, and are similar to Western Australia and Northern Territory (Attachment 6). Life expectancies in the Cairns, Mt Isa, Rockhampton, and Townsville are amongst the lowest in Australia.

#### Sources of excess mortality

Sources of excess mortality are based on mortality estimates for remote northern Queensland indigenous populations<sup>2</sup>. Indigenous persons aged between 15 and 64 years contribute an estimated 70% of all excess deaths<sup>3</sup>. Deaths in children (aged 0-14 years) contribute 10% of the excess while those 65 years or more contribute 20%. For each of the age groups (0-14, 15-44, 45-64 and over 64), a limited number of conditions are responsible for most of the excess deaths (see Attachment 7).

For children, perinatal conditions (54%), pneumonia (21%) and infectious diseases (26%) contribute nearly all the excess.

In the 15-44 year age group, accidents (20%), homicide (15%) and total heart disease (14%) are the principal contributors to excess deaths, accounting for almost 50% of excess deaths. Suicide (6%) and pneumonia (8%) are other relatively important contributors.

For those aged 45-64 years, total heart disease (31%), diabetes (17%) and cancer (15%) are the main causes of excess deaths, together contributing over 60% of the excess. Again, pneumonia (5%) is a prominent cause of excess deaths, as is chronic respiratory diseases (7%).

For those aged 65 years and over, chronic respiratory diseases (bronchitis, emphysema and asthma) account for 23% of the excess, diabetes 24%, and pneumonia 12%. The three conditions account for over 60% of the excess. Total heart disease (7%) and hypertension (7%) are other important causes of excess mortality.

See Appendix

Excess deaths are defined as the difference between the observed number of deaths and an expected number of deaths obtained by applying all Queensland mortality rates to the indigenous population.

Overall age adjusted mortality levels are estimated to be more than three times higher than the non-indigenous population. Across all ages, total heart disease, accidents, pneumonia, bronchitis, emphysema and asthma, and diabetes account for 56% of excess deaths. The major contributors to excess mortality are associated with high relative mortality rates. The diabetes rate is 17 times the average Queensland rate, the rate for pneumonia is 10 times greater, and the rate for bronchitis, emphysema and asthma 5 times greater (see Attachment 8). The indigenous ischaemic heart disease (IHD) rate is only twice the Queensland rate, but IHD is a major cause of death in the non-indigenous population so that many excess deaths are associated with a smaller increase in death rate.

#### 3. HOSPITAL MORBIDITY<sup>4</sup>

Attachment 9 shows hospital admission ratios for a variety of conditions.

For most conditions, numbers of admission are well above expected totals based on average Queensland rates. Admissions for nephritis, nephrotic syndrome and nephrosis, chronic obstructive airways disease (other than asthma), chronic rheumatic heart disease, and injury purposely inflicted by others, are all over six times the expected number. Admissions for hypertension, diabetes and pneumonia are over five times the expected number, and admissions for tuberculosis and infections of the kidney over four times, and for epilepsy and accidents caused by fire and flames, admissions are over three times expected numbers.

In contrast, numbers of admissions for cancers, especially the common cancers, are either well below or slightly above expected numbers (admissions for all cancers were a third of expected, breast cancer five times lower, prostate cancer around half), while admissions for cervical cancer and lung cancer are less than 20% higher.

#### 4. CHILD HEALTH

#### Perinatal Mortality<sup>5</sup>

The perinatal mortality rate<sup>6</sup> for Aborigines and Torres Strait Islanders was almost three times the non-indigenous rate in 1987. In the next eight years, rates fell slightly, but were still two and a half times the Queensland rate in 1994 (see Attachment 10a).

#### Infant Mortality<sup>7</sup>

Gains have been made in infant mortality rates (deaths in the first year of life) in the Deed of Grant in Trust (DOGIT) communities over the last 20 years, but most of the improvement occurred during the seventies (see Attachment 10b).

See Appendix

<sup>5</sup> Ibid

Perinatal mortality rate is: stillbirths and deaths in the first month of life/live births +still births

See Appendix

Attachment 10c shows infant death rates for 1987-94 for all children whose mothers lived in one of the four remote northern SLAs with high proportions of Aborigines, and Torres SLA. Trends in infant deaths over the eight years 1987-94 were similar to those for perinatal deaths. Despite evidence of a gradual decline after 1989, deaths were still occurring at two and half times the Queensland rate in 1994.

#### Risk factors for perinatal mortality

Around 10% of Aboriginal mothers report fewer than two antenatal visits to a GP, clinic or midwife, compared to 6% for Torres Strait Islanders and 2% for non-indigenous mothers. Although rates have declined somewhat over the past eight years, on average 25% of Aboriginal mothers were aged under 20 years in this period compared to 19% of Torres Strait Islanders and 6% of other mothers. Furthermore, a relatively high proportion of Aboriginal mothers give birth to babies weighing less than 2500 grams (the WHO definition of low birthweight). In the 1990s, around 6% of caucasian babies weighed under 2500 gms compared to around 13% of Aboriginal babies, while the proportion of Torres Strait Islander babies was very similar to the caucasian value (see Attachment 11).

#### **Immunisation**

The limited amount of information available suggests that although most (over 95 per cent) children start the immunisation schedule, many either do not complete it, or complete it too late<sup>8</sup>. Only 60 per cent of indigenous children were fully immunised by two years of age.

#### Growth and nutrition

In remote communities many Aboriginal children display a failure to thrive. At four to six months of age, growth of some Cape York children slows down after they are weaned because they are not getting enough food. Poor nutrition predisposes children to infection, and the cycle is reinforced by poor appetite. In this way infections can make poor nutrition worse and poor nutrition can make a baby more likely to get infections. It is known that poor nutrition at a critical time in a child's development can slow down development and learning as well as growth. For example, children who are anaemic learn more slowly than other children.

The growth pattern of Torres Strait Islander children appears to be similar to those of other Australian children. However, there appears to be a high prevalence of obesity among school-age children of Torres Strait Islander descent.

Both Aboriginal and Torres Strait Islander groups experience high levels of gestational (during pregnancy) diabetes. Provisional figures show that gestational diabetes rates for Aboriginal mothers are more than twice the Queensland rate, while the rate for Torres

Hanna JN, Wakefield JE, Dooloan CJ, Messner JL. Childhood immunisation: factors associated with failure to complete the recommended schedule by two years of age. *Australian Journal of Public Health* 1994; 18(1): 15-21.

Strait Islander mothers is over three times the Queensland rate. These relatively high rates have long term health implications for both the child and the mother. In remote areas access to fresh fruit and vegetables is limited and people with relatively low incomes have restricted access because of the cost.

#### 5. RISK FACTORS, HOUSING, EDUCATION, EMPLOYMENT

A national Aboriginal and Torres Strait Islander population survey in 1994 provided information about health risk factors, attitudes to health, housing, education and employment<sup>9</sup>.

#### **Smoking**

The World Health Organisation has identified smoking as the single greatest preventable cause of ill health and premature death in developed countries such as Australia.

Nearly half of all people aged 13 years and over who were surveyed smoked cigarettes, which was almost twice as high as the 28% of all Queenslanders aged 18 and over who smoked<sup>10</sup>. The age pattern among the Aboriginal and Torres Strait Islander smokers is presented in Attachment 12a. The highest smoking rate was in the 25-44 year age group, which is different from the total Queensland population where the highest proportion of smokers was in the younger age groups<sup>4,5</sup>.

The dangers of tobacco use are very much under-rated among Aboriginal and Torres Strait Islander people<sup>11</sup>. This lack of awareness of the hazards of smoking contributes largely to these high rates of smoking in indigenous populations.

#### Relative weight

Being overweight or obese is associated with increased mortality and morbidity from a number of conditions including coronary heart disease, hypertension, non-insulin dependent diabetes mellitus and degenerative joint disease. The incidence of these conditions can be reduced by reducing body mass index (BMI).

Rates of overweight and obesity were over one and a half times greater for Aborigines and Torres Strait Islanders than for all Queenslanders<sup>4,12</sup> (Attachment 12b).

#### Alcohol

The proportion of indigenous people who drank alcohol was lower than the Australian

Australian Bureau of Statistics. *National Aboriginal and Torres Strait Islander Survey* 1994, Cat. No. 4190.0. Canberra: Australian Government Publishing Service.

Regional Health Survey 1993, Survey Summary, Epidemiology and Health Information Branch, Queensland Health.

National Drug Strategy: Urban Aboriginal and Torres Strait Islander Supplement 1994.

National Health Survey 1989-90, Australian Bureau of Statistics, 1994, Cat No. 4364.0.

average (see Attachment 12c). However, those who did were 16 times more likely than non-indigenous people to consume large amounts in one drinking session<sup>13, 14</sup>.

#### **Breastfeeding**

Breastfeeding is an important contributing factor to infant health. Based on the 1994 ABS survey<sup>15</sup>, 71% of children aged 12 years and under were breastfed as infants, and 29% were breastfed for 12 months or longer. There is a lack of comparable data for the total Queensland population, but the breast feeding rates for all Victorians 16 (representing the best available comparable data) were slightly lower at 3 and 6 months of age (Attachment 12d). The prevalence of breastfeeding for at least 6 months was higher in rural than urban areas.

#### Attitudes to health

The major perceived health problems of Aboriginal and Torres Strait Islander people were alcohol, drugs, diabetes and diet, and 23% of the indigenous population worried about going without food. Family violence was perceived by nearly half of the population as a common problem17.

#### Housing

Census data in 1991 showed that 72% of indigenous households lived in rented premises compared to 28% of all Queenslanders18.

Of all private dwellings of indigenous households:

- 2% did not have running water connected;
- 2% did not have electricity or gas connected;
- 3% did not have a toilet; and
- 4% did not have bathing facilities in the dwelling, although half of these (2%) had access to a communal bathroom or shower.

In rural areas, 61% of households comprised six or more usual residents, and in most cases (74%), these households lived in dwellings with three bedrooms or less. This compares with only 5% of all Queensland households comprising six or more usual

Townsville Nutrition Survey. A report of the Nutrition Program, University of Queensland, to the 13 Townsville Aboriginal and Islander Program, Queensland Health, 1994

Regional Health Survey 1993, Survey Summary, Epidemiology and Health Information Branch, 14 **Oueensland Health** 

Australian Bureau of Statistics. National Aboriginal and Torres Strait Islander Survey 1994, Cat. 15 No. 4190.0. Canberra: Australian Government Publishing Service

Victorian Department of Health and Community Services, Maternal and Child Health Centre Annual 16 Reports, 1988.

<sup>17</sup> See footnote 10.

<sup>1991</sup> Census of Population and Housing, Australian Bureau of Statistics, Cat No. 2721.0. 18

residents, and in most cases these households lived in dwellings with three or four bedrooms.

Australian Aboriginal and Torres Strait Islander people were twice as likely to rent for below \$77 per week compared to all Australians in the 1991 Census (60% versus 32%).

A 1994 publication indicated that 7% of indigenous families in Queensland were homeless, and in Townsville, Cairns, Mount Isa, Torres Strait and Cooktown regions, 3-4% of families lived in improvised dwellings<sup>19</sup>.

#### Education

School participation rates for the Aboriginal and Torres Strait Islander population are lower than all Queensland rates, especially in senior high school, and fall significantly as age increases<sup>20</sup> (Attachment 12e). Females have a slightly higher participation rate than males. Compared to Queenslanders as a whole, just over half as many children are in school at age 17.

The highest educational qualification attained for Aboriginal and Torres Strait Islander people aged 15 years and over who had left school, and all Queenslanders aged 15-69 years is presented in Attachment 12f<sup>21</sup>. For all educational attainments, Aboriginal and Torres Strait Islander people fall well behind the levels of all Queenslanders.

Queensland Department of Education data for the period 1991-1994<sup>22</sup> indicate that the participation rate for Aborigines and Torres Strait Islanders found in the National Survey may be a serious overestimate. The retention rate for students from Year 8 to Year 12 is about 29% at best, and perhaps as low as 20%.

The average education level for Aboriginal and Torres Strait Islander people in Queensland may be declining relative to the general population. A Year 12 participation rate of less than 25% is below the long-term replacement level for combined Year 12 and post-school qualification found in the survey. This could mean there will not be enough Aboriginal and Torres Strait Islander students going on to post-school qualifications to maintain even current levels of career placement as education requirements for employment continue to increase.

Jones, R., The Housing Need of Indigenous Australians, 1991; Centre for Aboriginal Economic Policy Research, Australian National University, Canberra. Research Monograph No. 8, 1994.

Schools Australia 1994, Australian Bureau of Statistics, Cat No. 4221.0.

Labour Force Status and Educational Attainment 1994, Australian Bureau of Statistics, Cat No. 6235.0.

Queensland Department of Education, NATSIS 1994: Findings on education and training - an assessment.

#### **Employment**

The 1994 survey showed that the overall unemployment rate for Aborigines and Torres Strait Islanders was 33%, with little difference between males and females (Attachment 12g). This is much higher than the all Queensland rate of 10% in February 1994<sup>23</sup>. Of those working, an estimated 31% were employed in a Community Development Project scheme.

Three-quarters of unemployed persons had been out of work for 3 months or longer and 40% for 12 months or longer.

#### 6. VARIATIONS IN QUEENSLAND

While the health of both Aborigines and Torres Strait Islanders is very poor by comparison with other Queenslanders, the health of indigenous people of the Torres Strait area appears to have shown some modest improvement over the past ten to fifteen years. The significant areas showing improvement for the Torres Strait are in childhood indicators and adult mortality.

Torres Strait Islander perinatal mortality, which was comparable or higher than for Aborigines ten years ago, has fallen slowly since, and by 1994 was 70% higher than the Queensland average compared to the Aboriginal rate<sup>24</sup> which was 150% higher. Recent infant mortality rates are also lower, with the Torres Strait Islander rate about 80% of the Aboriginal rate<sup>25</sup>.

Current levels of Torres Strait Islander adult mortality also show some improvement. The all causes mortality rate fell from around 1700/100,000 in 1981-86 to around 1300/100,000 in 1988-94. The Aboriginal rate, initially comparable, increased slightly over the same period. While both Aboriginal and Torres Strait Islander populations have high relative mortality in middle age, the peak is not as high for Torres Strait Islanders (4 times the Queensland rate) as it is for Aborigines (8 times the Queensland rate).

Causes of excess mortality are comparable between the two ethnic groups, with the relative importance of each cause varying by age group. Infections were a relatively minor source of excess mortality in Islander children (4% of excess versus 62%), as were accidents in 15-44 year olds (5% of excess versus 23% for Aborigines). However, diabetes (35% of 45-64 year olds and 47% of those over 64 versus 7% of Aborigines over 44) and hypertension (15% of those over 64 versus 1%) were relatively more important causes of death in older age groups in the Torres Strait than for Aborigines.

Some of the changes are too small and too recent to be confident of a continuing trend, but they do suggest that health service changes which are perhaps somewhat more

Labour Force Status and Educational Attainment 1994, Australian Bureau of Statistics, Cat No. 6235.0.

<sup>24</sup> Rates calculated from remote SLAs with high proportions of Aborigines

<sup>25</sup> HIC Mortality Collection

developed in the Torres Strait may be working. Similar changes are being progressively introduced in other parts of the state.

#### 7. PROGRAMS

Programs to address these issues would include treatment, immunisation, Pap smear, STD/AIDS, disease control (diabetes, hypertension), health promotion (smoking, nutrition), alcohol, antenatal care, environmental health, counselling, dental, and mental health.

#### 8. OTHER RELEVANT ACTION

Making headway on health depends on systematically addressing five related areas of need. These are:

- (i) making improvements in infrastructure, which includes housing, water, sanitation, education, land and economic development, etc;
- (ii) increasing community participation and control in service delivery;
- (iii) establishing a network of primary health care services that deliver effective services;
- (iv) providing an adequate level of health resources;
- (v) and developing a skilled health labour force.

Intersectoral collaboration between health and other agencies is required, particularly for dealing with infrastructure issues.

Cabinet recently endorsed the Implementation Plan for the Aboriginal and Torres Strait Islander Policy which calls for sustained action to address these issues. To measure its performance in implementing the plan, Queensland Health has set goals and targets for children and adults.

#### APPENDIX

#### **DATA SOURCES**

#### Adult mortality

Prior to 1996 indigenous persons were not identified on death certificates. Consequently, no statewide information on indigenous deaths is available. Indigenous mortality has been estimated for six remote ABS Statistical Local Areas (SLAs) which have high (> 75%) proportions of indigenous persons. Indigenous life expectancies for Queensland ATSIC regions show little variation (see Attachment 1) and in Western Australia, where indigenous persons have been identified on death certificates for some time, no consistent differences were found between urban, rural and remote indigenous death rates<sup>26</sup>. For the purpose of this publication, the mortality experience of indigenous persons living in the six remote SLAs is used as the best available estimate of indigenous mortality in Queensland.

The six SLAs comprise four clustered around the Gulf of Carpentaria and Cape York Peninsula (Burke, Mornington, Aurukun and Carpentaria), Palm Island north of Townsville, and Torres SLA in the Torres Strait.

The usual death certification process provided total deaths for these areas. The number of indigenous deaths for any period was calculated by firstly estimating the number of non-indigenous deaths that had occurred and subtracting this estimate from the total number of deaths. The number of non-indigenous deaths was estimated by applying the age and sex specific death rates of remote areas of the state which have low proportions of indigenous persons to the age and sex specific non-indigenous population counts of the six SLAs. These six SLAs have relatively small populations and consequently a small number of deaths per year so that average rates for a number of years were calculated to provide stability of estimates.

#### Perinatal and infant mortality

The Queensland Health Perinatal Data Collection (PDC) records perinatal deaths (stillbirths and neonatal deaths of 28 days or less) and has a relatively well completed ethnic identifier field, so that accurate statewide information was available on perinatal indigenous deaths for the period 1987-94 from the PDC. Whole of state information on infant deaths was not available. Infant death rates were calculated from two sources. Numbers of infant deaths for the Deed of Grant in Trust (DOGIT) communities from the early seventies to mid eighties were available and infant deaths were identified by PDC staff for the five Gulf and Cape SLAs with high proportions of indigenous persons for the period 1987-94, the relatively small numbers of deaths making the identification process practicable for these areas only.

Aboriginal and Torres Strait Islander Health Unit, Australian Institute of Health and Welfare. Regional variation in Aboriginal mortality, 1989-1993. May, 1995.

#### **Hospital Morbidity**

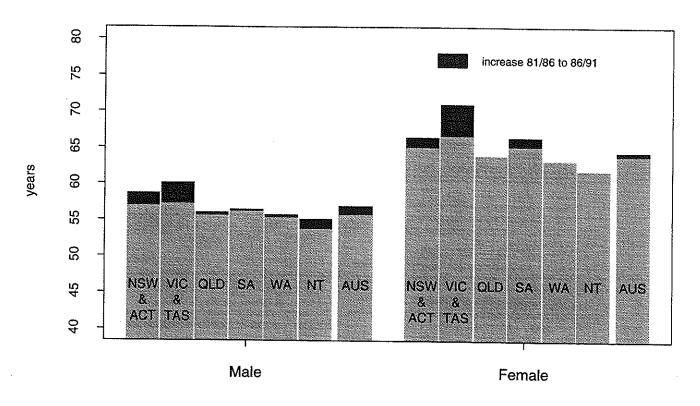
Queensland hospitals (public and private) provide to Queensland Health information on inpatient activity generating one record for every hospital separation. Hospitals have been required to provide ethnicity of patient since 1991. Preliminary validation survey work has established that indigenous patients are under-identified in public hospitals in the South-East of the state, while the accuracy of identification is better elsewhere. Consequently, indigenous hospital morbidity rates for financial year 1994/95, the most recent year of clean data, calculated for residents of Queensland excluding Brisbane, the Sunshine Coast, the Gold Coast and Ipswich were used to estimate all Queensland indigenous hospital morbidity. There are significant patient flows from other parts of the state into Brisbane so that estimated indigenous morbidity rates are likely to under-estimate the true rates.

**ATTACHMENTS** 

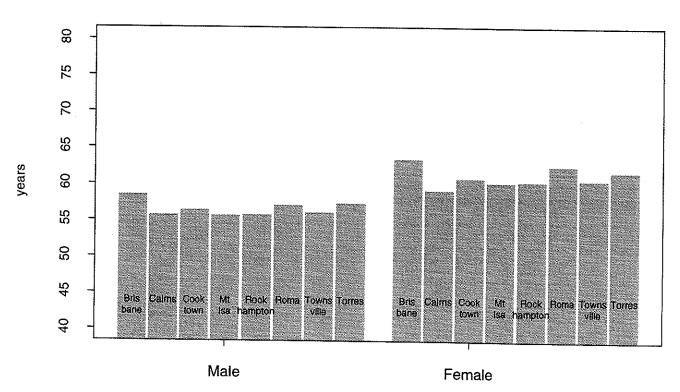
#### Attachment 1

# Estimated expectation of life for indigenous persons

1a: Australian states 1981-86 & 1986-91

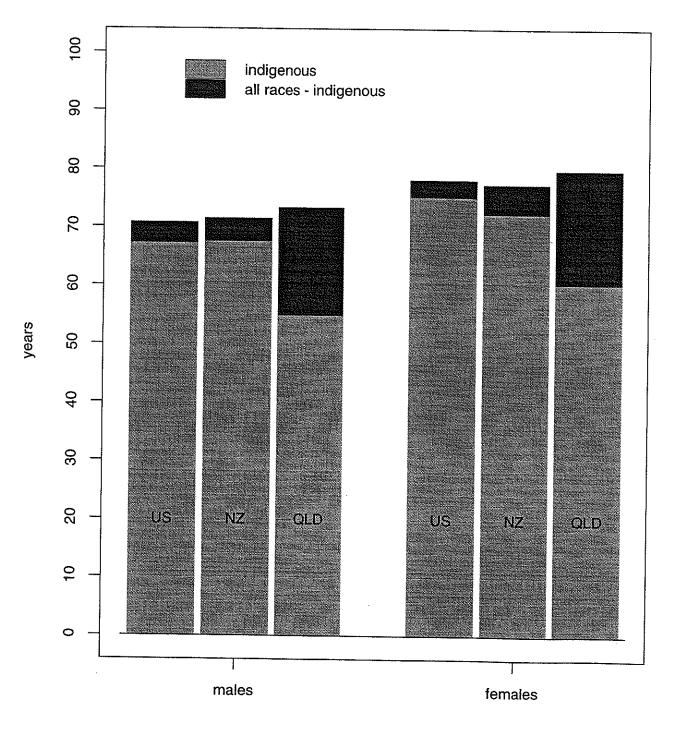


#### 1b: Queensland ATSIC Regions 1986-91



#### Attachment 2

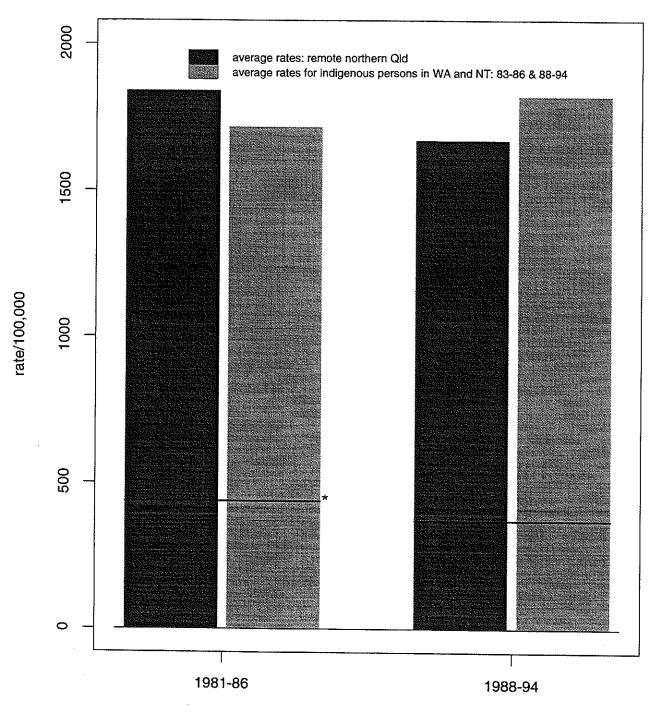
# Life expectancy at birth by race and sex



sex

Attachment 3:

# Standardised mortality rates for Indigenous persons aged 20-69 years



period

\* - all Queensland mortality rate, persons aged 20-69 years (source: HIC Mortality Collection)

Attachment 4:

# Age specific mortality ratios\* for Queensland indigenous persons\*\* and Maoris

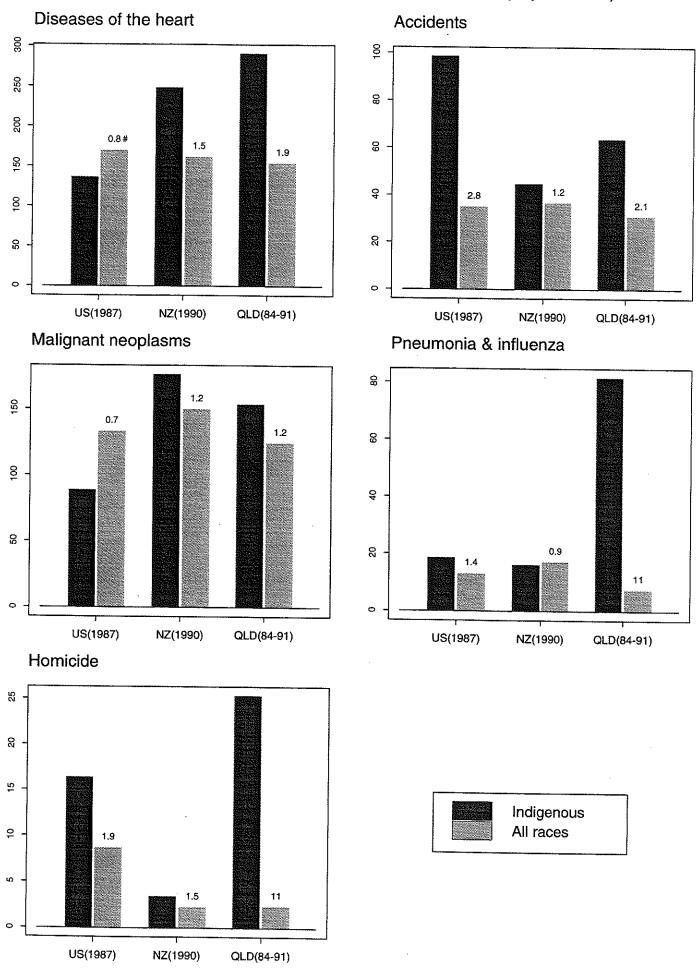
	Indigenous - Qld (1990-94)	Maoris 1993
0-14	2.6	1.6
15-44	5.5	1.4
45-64	5.6	1.9
65+	1.8	1.0
SMR	3.2	1.3

<sup>\* -</sup> mortality of Australian Indigenous persons compared to overall Australian mortality: Maoris compared to all New Zealanders

(Source: HIC Mortality Collection; Mortality and Demographic Data 1993. NZ Health Information Service 1995)

<sup>\*\* -</sup> remote northern Qld only

## Attachment 5 Selected causes of death (deaths per 100,000 population\*)



Indian Health Service 1992:43; HIC Mortality Collection; Mortality and Demographic Data 1990 National Health Statistics Centre, NZ Dept. Health, 1993)

<sup>\* -</sup> age standardised to the world standard population # - indigenous rate/all races rate

Attachment 6: Expectation of life at birth for Aborigines and Torres Strait Islanders by ATSIC region, 1986 to 1991

	Male		Female		
Rank	Region	Years	Region	Years	
1	Hobart	66.0	Hobart	71.3	
2	Wangaratta	63.5	Ballarat	70.9	
3	Ballarat	62.9	Wangaratta	69.3	
4	Sydney	61.3	Sydney	67.8	
5	Coffs Harbour	60.8	Queanbeyan	67.6	
6	Wagga Wagga	60.6	Coffs Harbour	67.4	
7	Queanbeyan	60.2	Adelaide	67.4	
8	Broome	60.2	Wagga Wagga	67.2	
9	Tamworth	60.1	Bourke	66.9	
10	Adelaide	59.0	Tamworth	65.7	
11	Bourke	58.5	South Hedland	65.3	
12	Brisbane	<i>58.5</i>	Geraldton	64.5	
13	Narrogin	57.9	Broome	64.0	
14	Perth	57.7	Narrogin	63.9	
15	Derby	57.6	Perth	63.6	
16	South Hedland	57.3	Derby	63.5	
17	Thursday Island	<i>57.3</i>	Brisbane	63.4	
18	Kalgoorlie	57.1	Warburton	63.3	
19	Nhulunbuy	57.1	Kalgoorlie	63.0	
20	Roma	57.0	Port Augusta	62.8	
21	Geraldton	56.9	Roma	62.5	
22	Warburton	56.9	Thursday Island	61.8	
23	Port Augusta	56.7	Ceduna	61.5	
24	Tennant Creek	56.4	Darwin	61.2	
25	Cooktown	56.3	Cooktown	60.8	
26	Darwin	56.2	Townsville	60.6	
27	Townsville	56.0	Tennant Creek	60.5	
28	Rockhampton	55.7	Rockhampton	60.4	
29	Cairns	55.7	Jabiru	60.4	
30	Katherine	55.6	Mount Isa	60.2	
31	Alice Springs	55.6	Katherine	60.1	
32	Mount Isa	55.6	Nhulunbuy	60.0	
33	Jabiru	55.5	Aputula	59.6	
34	Aputula	54.8	Kununura	59.5	
35	Kununurra	54.7	Cairns	59.1	
36	Ceduna	53.9	Alice Springs	58.9	

(Source: A. Gray, Regional Indicators of Aboriginal Survival 1986 to 1991, unpublished data)

Attachment 7:

Contributions to indigenous excess mortality 1990-94\*
by condition within age class

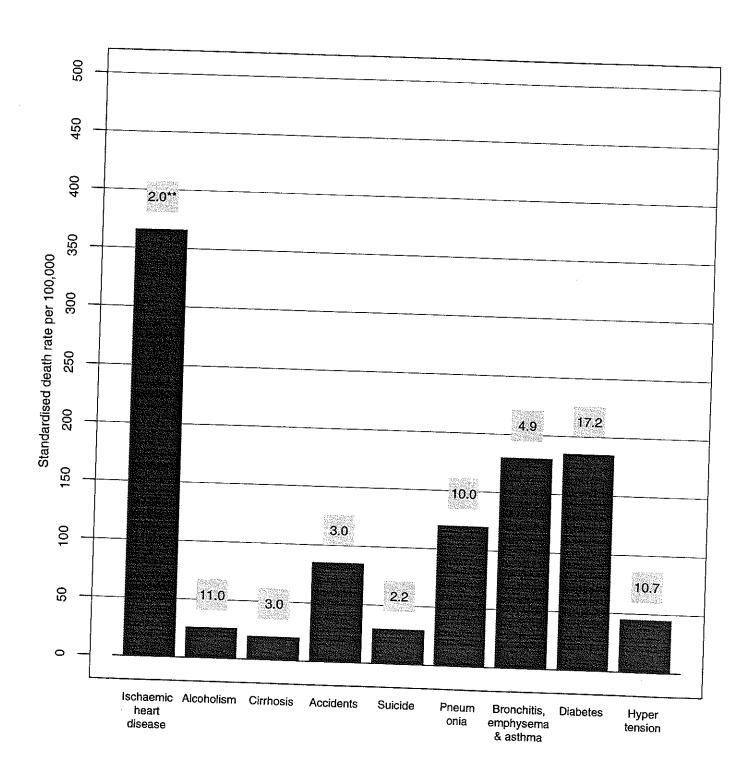
Age	Condition	percent
0-14	Perinatal conditions	54
	Infectious and parasitic diseases	26
	Pneumonia	21
15-44	Total accidents	20
	Homicide	15
	*Total heart disease	14
	Pneumonia	8
	Suicide	6
45-64	Total heart disease	31
	Diabetes	17
	Cancer	15
	Bronchitis, emphysema, asthma	7
	Pneumonia	5
65+	Diabetes	24
	Bronchitis, emphysema, asthma	23
	Pneumonia	12
	Total heart disease	7
	Hypertension	7
III ages	Total heart disease	19
	Diabetes	13
	Pneumonia	9
	Bronchitis, emphysema, asthma	8
	Total Accidents	8
	Total: five main causes	56

<sup>\* -</sup> expressed as a percentage of total excess deaths for indigenous persons in remote northern Queensland (source: HIC Mortality collection)

<sup># -</sup> ICD9 codes: 410-414, 416, 420-424

### Attachment 8

# Mortality rates\* for selected conditions for Queensland Indigenous persons 1989-93



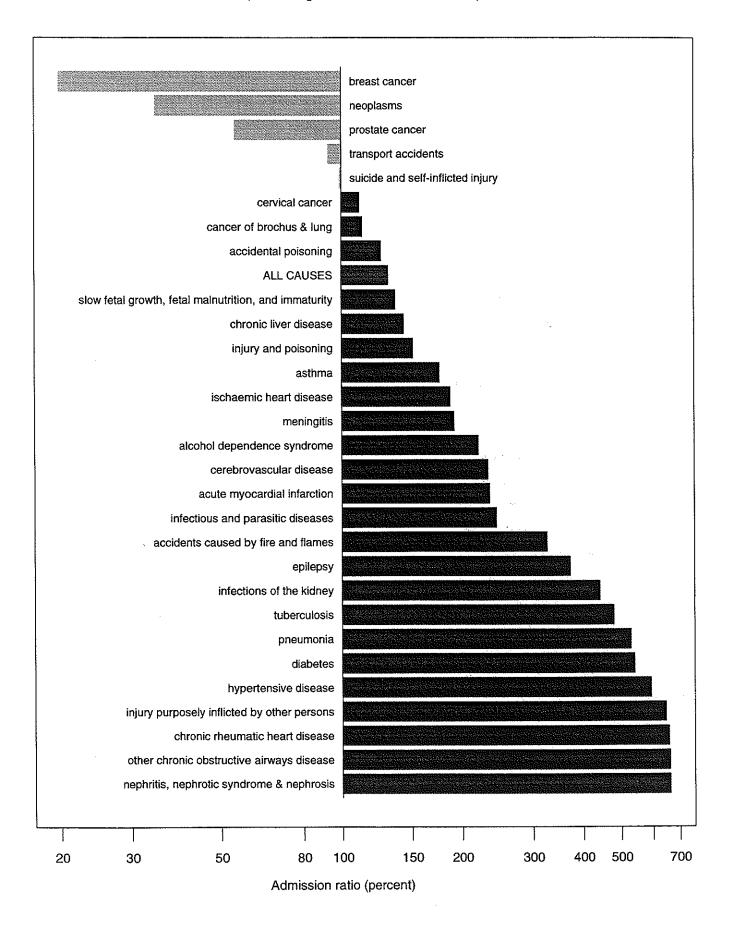
<sup>\* -</sup> estimated standardised rates for the remote northern after adjusting for non-indigenous mortality

<sup>\*\* -</sup> ratio of the indigenous rate to the all Qld rate (source: HIC, Qld Health)

#### Attachment 9

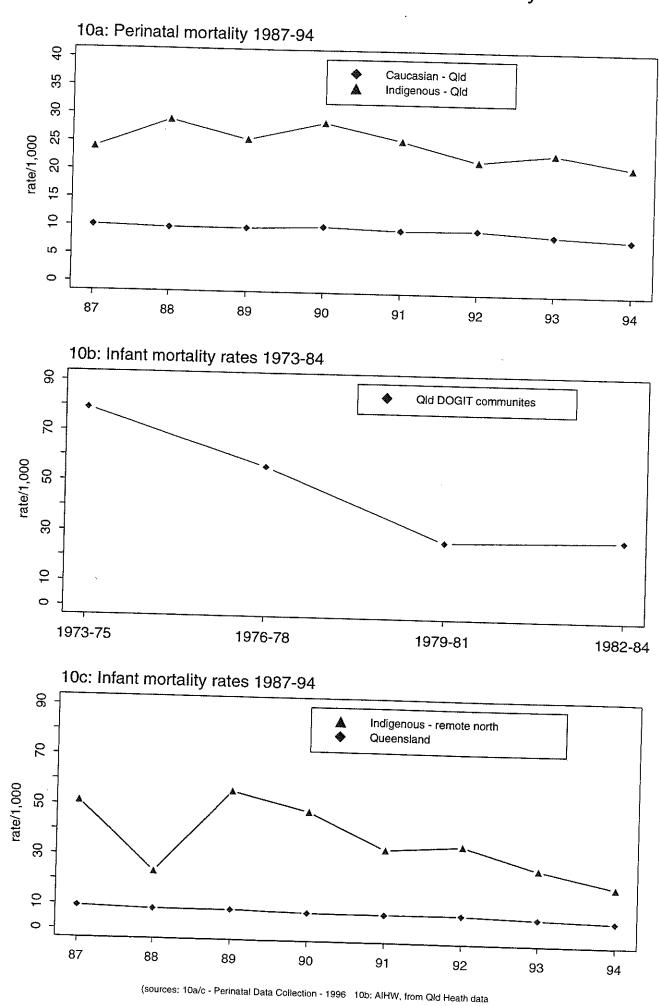
# Hospital admission ratios for Queensland Indigenous persons 1994/95

(excluding South-East Queensland)



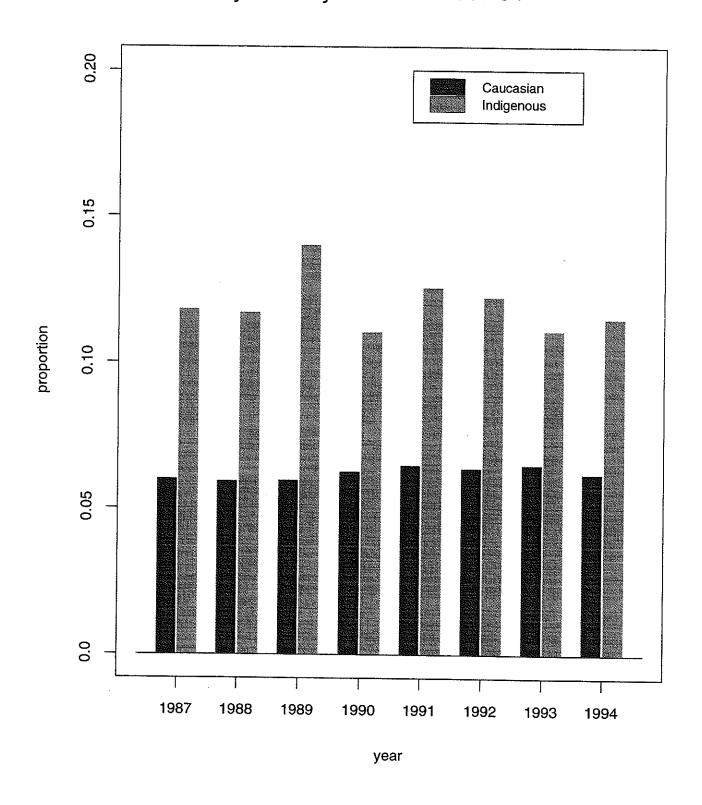
(Source: HIC Hospital Morbidity Collection)

# Attachment 10 Indigenous perinatal and infant mortality



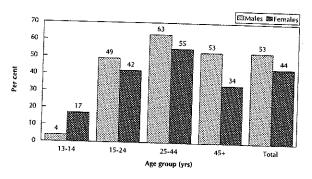
Attachment 11

Proportion of low birthweight babies (below 2500 grams)
by ethnicity of mother 1987-94



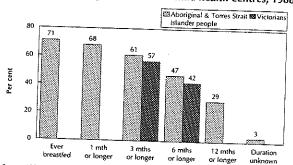
#### Attachment 12

12(a): Proportion of Aboriginal and Torres Strait Islander people over 13 years who smoke, by age and gender, 1994



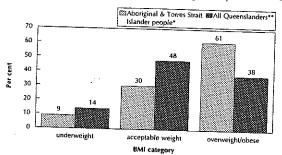
Source: ABS 'National Aboriginal and Torres Strait Islander Survey'

12(d): Duration of breastfeeding for Aboriginal and Torres Strait Islander persons aged 12 years and under, 1994 and Victorian children presenting at maternal & child health centres, 1988



Source: ABS 'National Aboriginal and Torres Strait Islander Survey'
Victorian department of health & community services, maternal & chil health centre annual reports, 1988

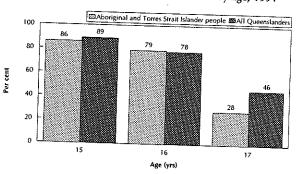
12(b): Body mass index for Queensland Aboriginal and Torres Strait Islander people and all Queenslanders aged 18 years or over



BMI calculated from height and weight measurements; 26% not state
 BMI calculated from self-reported height and weight, 4% not stated

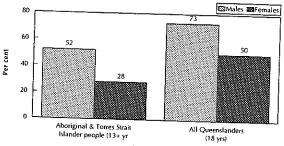
Source: ABS 'National Aboriginal and Torres Strait Islander Survey', 1994 ABS 'National Health Survey', 1989-90

12(e): School participation rate by age for Aboriginal and Torres Strait Islander people and all Queenslanders by age, 1994



: ABS 'National Aboriginal and Torres Strait Islander Survey', 1994 ABS Cat. No. 4221.0, 1994

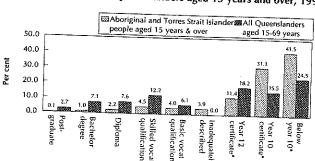
12(c): Proportion of the population who had consumed alcohol in the previous week by gender for Aboriginal and Torres Strait Islander people and all Queenslanders



Age group (yes)

Source: ABS 'National Aboriginal and Torres Strait Islander Survey', 1994 ABS 'National Health Survey', 1989-90

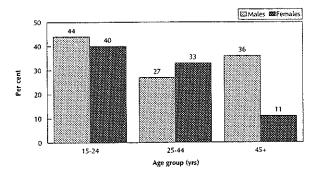
12(f): Highest qualification attained for Aboriginal and Torres Strait Islander people and all Queenslanders aged 15 years and over, 1994



Figures relate to all Australia
\*\* Figures relate to all Australia & include persons with no formal education
Source: ABS 'National Aboriginal and Torres Strait Islander Survey', 1994
ABS Cat. No. 6235.0, February 1994

#### Attachment 12 cont.

12(g): Unemployment rate among Aboriginal and Torres Strait Islander persons in the labour force by age group and gender, 1994



Source: ABS 'National Aboriginal and Torres Strait Islander Survey'