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ABORIGINAL AND TORRES STRAIT ISLANDER  
HEALTH SERIES NO. 4

# Overview of Aboriginal health status in Queensland

Neil Thomson  
Norma Briscoe



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Australian Government Publishing Service  
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## Background to the report

This report has been prepared for the Royal Commission into Aboriginal Deaths in Custody as part of a consultancy arrangement, and the views presented are not necessarily those of the Royal Commission.

The report focuses on current State-wide social and health status indicators for Queensland Aborigines and, along with similar reports for New South Wales, Western Australia, South Australia and the Northern Territory, supplements the information provided to the Commission in a general Australian overview (Thomson 1990). The production of similar reports for Victoria, Tasmania and the Australian Capital Territory was prevented by the limited availability of data for those places.

It was beyond the scope of this report to undertake an analysis of the time trends of these indicators, or to summarise the available disease-specific information, usually the results of special surveys or other research. Similarly, no attempt has been made to consider in detail the underlying causes of the poor health status, or the various programs and services aimed at redressing the health disadvantages experienced by Aborigines.

## Acknowledgements

The Australian Institute of Health is grateful to the Queensland Department of Health for providing data on births and deaths.

Thanks are extended also to the Department of Health, New South Wales, the Health Department of Western Australia, the South Australian Health Commission and the Northern Territory Department of Health and Community Services for the provision of data. The Institute acknowledges the cooperation of the South Australian Registry of Births, Deaths and Marriages in providing information on Aboriginal deaths in South Australia to the Royal Commission.

# 1 Introduction

Since the early 1970s, there have been substantial improvements in some measures of the health of Queensland's Australian Aboriginal and Torres Strait Islander populations<sup>1</sup>. However, the available evidence shows their health status is still well below that of other Queenslanders<sup>2</sup>.

In responding to an unpublished study of the mortality rates of Aboriginal and Islander women in the period 1979-1988, Mr Ken McElligott, the State Minister for Health, described recently the high rates of deaths as 'unacceptable', and acknowledged that the challenge for his Government was to improve the general health and well-being of the State's Aborigines and Islanders (McElligott 1990).

The lower health status of Queensland Aborigines is clearly illustrated in differences in mortality. For the almost 13,500 Aborigines living in the Queensland Aboriginal communities<sup>3</sup>, in 1987-1989 the death rate of males was more than three times that of the total Australian male population, and that of females was almost four-and-a-half times that of all Australian females. Death rates for all the main categories of disease are higher for Aborigines living in the communities than for other Queenslanders.

For Aborigines across the State, in 1987 perinatal mortality was almost twice that of other Queenslanders. For those living in the Queensland communities, it was even higher, about two-and-a-half times that of non-Aboriginal Queenslanders. Infant mortality for Aborigines living in the communities in 1986-1988 was almost two-and-a-half times that of the total Australian population.

The causes of the poor health of Aborigines, in Queensland and in other parts of Australia, are complex. However, in its Australia-wide assessment of Aboriginal health, the Health Targets and Implementation (Health for All) Committee (1988) concluded that the social and economic disadvantages experienced by Aborigines were of central importance. These social and economic disadvantages, directly related to Aboriginal dispossession and characterised by poverty and powerlessness, are reflected in measures of education, employment, income and housing.

More Aborigines than non-Aborigines have never attended school, and the proportion of Aborigines who have achieved post-secondary qualifications is about a fifth of the proportion of non-Aborigines. The overall rate of unemployment among Aborigines is more than three times that of other Queenslanders. As a result, Aborigines are disproportionately represented

1. In this paper, the term 'Aborigines' generally will be used to mean both Australian Aborigines and Torres Strait Islanders. Where specific reference is made to either Australian Aborigines or Torres Strait Islanders, these terms will be used. Aboriginal identification is in accordance with the accepted 'working definition': an Aboriginal or Torres Strait Islander is a person of Aboriginal or Torres Strait Islander descent who identifies as an Aboriginal or Torres Strait Islander and is accepted as such by the community in which he (she) lives (Department of Aboriginal Affairs 1981).

2. Attention is drawn to differences in the populations used for comparison purposes. Wherever possible, comparisons have been made between Queensland Aborigines and non-Aborigines, in which cases the comparative data are described as relating to Queensland non-Aborigines or to other Queenslanders. In some cases, when it has not been possible to derive separate data for non-Aborigines in Queensland, the comparative data are described as relating to the total Queensland population or to all Queenslanders. In those instances where the comparative data are for the total Australian population, they have been described as relating to the total Australian population or to all Australians. Where separate data relate to either Australian Aborigines or Torres Strait Islanders, these terms are used.

3. The 1987-1989 data relate to: Aurukun, Bamaga, Cherbourg, Doomadgee, Gununa (Mornington Island), Hopevale, Kowanyama, Lockhart River, Palm Island, Pormpuraaw (Edward River), Weipa, Woorabinda, Wujal Wujal and Yarrabah.



among those people in the State living in poverty, and are much more dependent on social welfare payments than are non-Aborigines.

In 1987, almost a third of all Aborigines were homeless or living in inadequate accommodation, and many were without access to those facilities taken for granted by other Queenslanders.

## 2 The Aboriginal population

According to the 1986 Australian Census of Population and Housing, for Australia the Aboriginal population was 227,645: 206,104 Australian Aborigines and 21,541 Torres Strait Islanders (Table 1). Of these, 48,098 (23.3 per cent) Australian Aborigines and 13,170 (61.1 per cent) Torres Strait Islanders lived in Queensland. The total of 61,268 Aborigines living in Queensland comprised 26.9 per cent of the total Australian Aboriginal population and 2.4 per cent of the total Queensland population. In Queensland, 31.2 per cent of Aborigines lived in the Far North Statistical Division, and 18.4 per cent in the Brisbane Statistical Division (Table 2).

The Aboriginal population of Queensland is relatively young compared with the non-Aboriginal population. More than 40 per cent of Aborigines are less than 15 years of age, compared with less than 25 per cent of the non-Aboriginal population (Figure 1). Only 4.5 per cent of Queensland Aborigines are aged 60 years or over, compared with 15 per cent of non-Aborigines.

Almost 65 per cent of the State's Aborigines live in urban areas (defined by the Australian Bureau of Statistics as centres with a total population of 1,000 or more), compared with almost 85 per cent of non-Aborigines. The remaining 35 per cent of Aborigines live in rural areas, with almost 17 per cent of these living in 'other rural' locations: an increasing number in small groups in their traditional homelands, and the rest in Aboriginal towns and settlements on Aboriginal lands and reserves.

**Table 1: Australian Aboriginal and Torres Strait Islander population, by States and Territories, 1986**

<i>State/Territory</i>	<i>Total</i>	<i>Australian Aborigines</i>	<i>Torres Strait Islanders</i>	<i>Proportion of total population (%)</i>
Queensland	61,268	48,098	13,170	2.4
New South Wales	59,011	55,672	3,339	1.1
Western Australia	37,789	37,110	679	2.7
Northern Territory	34,739	34,197	542	22.4
South Australia	14,291	13,298	993	1.1
Victoria	12,611	10,740	1,871	0.3
Tasmania	6,716	5,829	887	1.5
Australian Capital Territory	1,220	1,160	60	0.5
<b>Australia</b>	<b>227,645</b>	<b>206,104</b>	<b>21,541</b>	<b>1.4</b>

Source: Australian Bureau of Statistics (1987a)

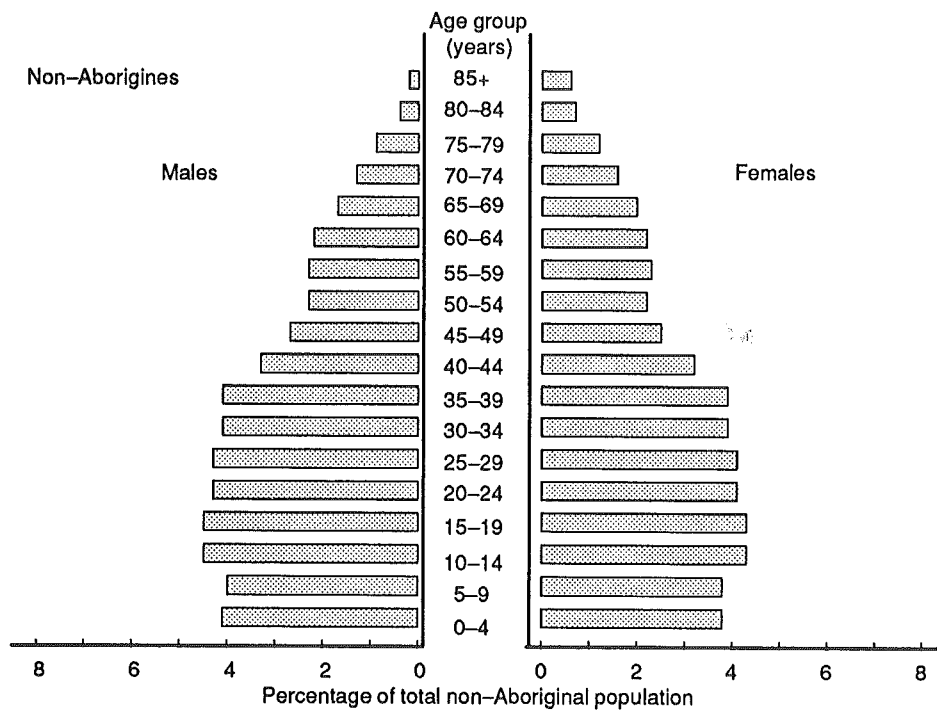
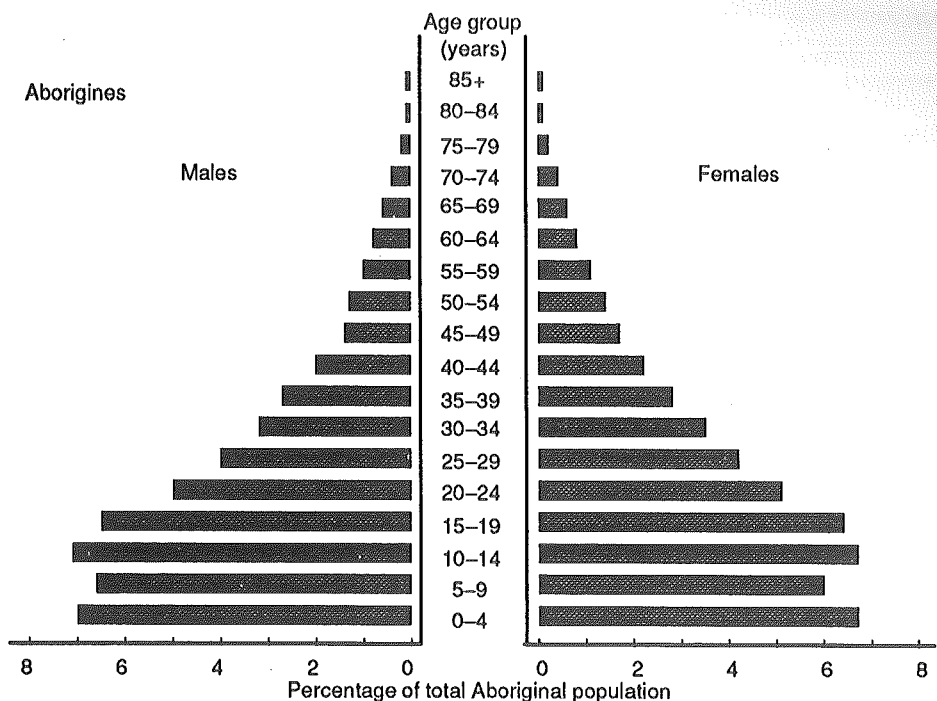
**Table 2: Australian Aboriginal and Torres Strait Islander populations, Queensland, by Statistical Division, 1986**

<i>Statistical Division</i>	<i>Total Aborigines</i>	<i>Australian Aborigines</i>	<i>Torres Strait Islanders</i>	<i>Proportion of total population (%)</i>
Brisbane	11,257	9,935	1,322	1.0
Moreton	2,233	1,918	315	0.5
Wide Bay-Burnett	3,214	3,000	214	1.9
Darling Downs	1,917	1,806	111	1.1
South-West	1,858	1,831	27	6.5
Fitzroy	4,560	4,081	479	2.9
Central-West	627	611	16	4.6
Mackay	2,221	1,161	1,060	2.1
Northern	7,204	5,505	1,699	4.2
Far North	19,121	11,452	7,669	11.4
North-West	7,011	6,771	240	18.3
<b>All Divisions</b>	<b>61,268</b>	<b>48,098</b>	<b>13,170</b>	<b>2.4</b>

Note: The totals includes 27 Australian Aborigines and 18 Torres Strait Islanders classified under 'Migratory and off-shore'.

Source: Australian Bureau of Statistics (1989d)

**Figure 1: Age structure: Queensland, Aborigines and non-Aborigines, 30 June 1986**



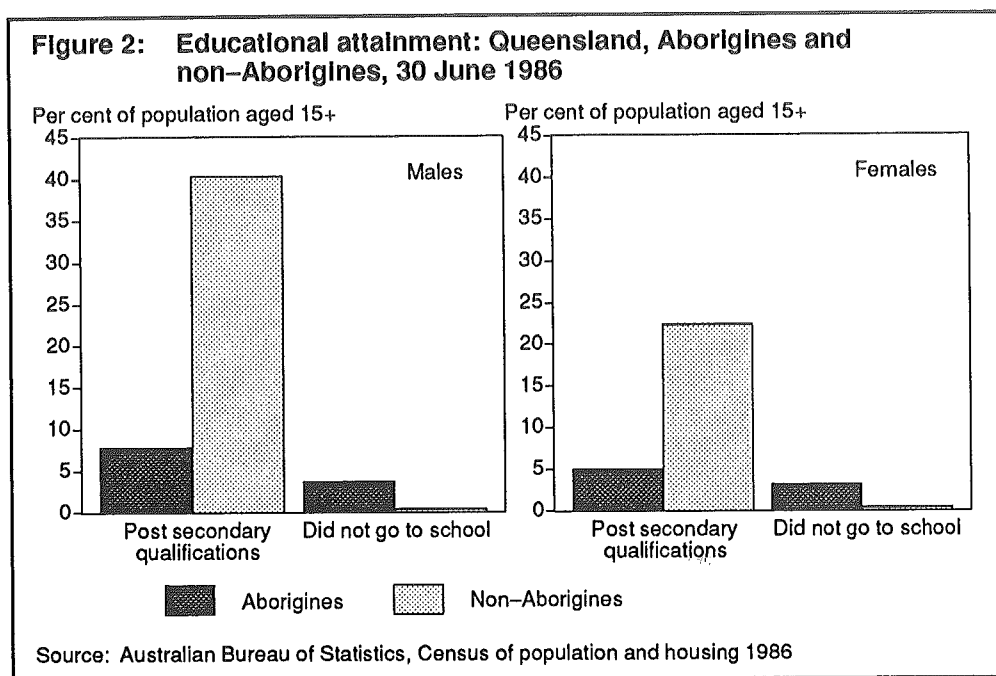
Source: Australian Bureau of Statistics, Census of population and housing 1986

### 3 Selected social indicators

#### Education

The 1986 Australian Census revealed substantial improvements in educational attendance of Aborigines in Queensland. Almost 98 per cent of Aborigines aged 15 to 24 years had had some schooling, whereas 14.2 per cent of those aged 55 years or more had not attended school. Overall, for people aged 15 years or more, 3.4 per cent of Aborigines had never attended school, compared with 0.4 per cent of non-Aborigines (see Figure 2, which shows the proportions for males and females separately).

Despite these improvements, a lower proportion of Aborigines than of the total population participate in education beyond 15 years of age. In 1986, 6.0 per cent of Aborigines aged 15-24 years were participating in post-secondary education, compared with 13.2 per cent of non-Aborigines. The net result is that only 6.4 per cent of Aborigines had achieved post-secondary qualifications, compared with 31.4 per cent of non-Aborigines. Tertiary qualifications had been achieved by 1.0 per cent of Aborigines, and by 8.2 per cent of non-Aborigines.



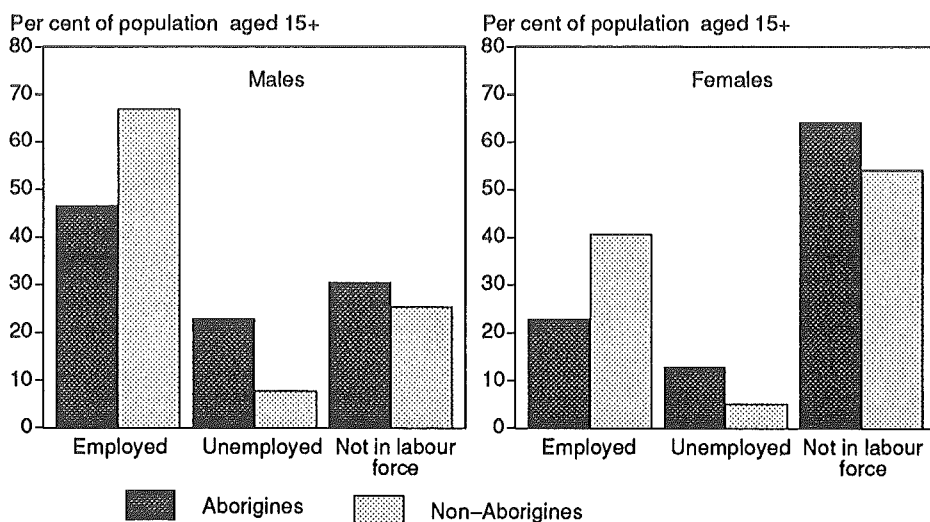
#### Employment status

The lower educational level of Aborigines no doubt contributes to their poor employment status. According to the Census, for males aged 15 years or more 30.5 per cent of Aborigines were not in the labour force, compared with 25.4 per cent of non-Aborigines. For females, 64.2 per cent of Aborigines were not in the labour force, compared with 54.1 per cent of other females in Queensland. Of males in the labour force, 32.9 per cent of Aborigines were unemployed, compared with 10.4 per cent of other males in Queensland. Of

females in the labour force, 36.0 per cent of Aborigines were unemployed, as were 11.3 per cent of non-Aborigines. Figure 3 shows the proportions not in the labour force and, of those in the labour force, the proportions employed and unemployed.

Unemployment rates were particularly high for Aborigines in the 15 to 24 year age group, with 42.9 per cent of males and 47.2 per cent of females being unemployed. The actual level of Aboriginal unemployment varies across the State, with the highest overall rates, around 40 per cent, being reported for the Northern and Far North statistical divisions. The occupational distribution of Aborigines is also atypical. Almost 49 per cent of Aboriginal males were employed in labouring and related occupations, compared with 17.3 per cent of employed non-Aboriginal males in Queensland. More than 28 per cent of Aboriginal females were employed in these occupations, compared with 13.4 per cent of employed non-Aboriginal females. Less than 12 per cent of the State's employed Aborigines were described as 'managers and administrators', 'professionals' or 'para-professionals', compared with 29.6 per cent of employed non-Aborigines.

**Figure 3: Labour force status: Queensland, Aborigines and non-Aborigines, 30 June 1986**



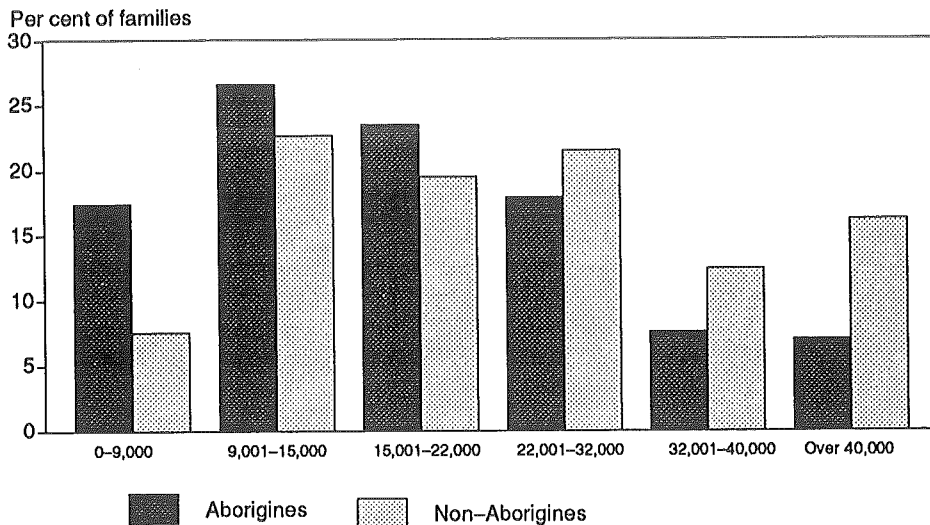
Source: Australian Bureau of Statistics, Census of population and housing 1986.

### Economic status

The low levels of education and high rates of unemployment result in a substantially lower economic status for Aborigines. According to the 1986 Census, for those people aged 15 years or more providing details of income, only 13.2 per cent of Aborigines had an individual income of more than \$15,000, compared with 31.3 per cent of other Queenslanders. Only 32.5 per cent of Aboriginal families had an income of more than \$22,000, compared with 50.1 per cent of non-Aboriginal families in Queensland (see Figure 4).

The prospects for future improvements in economic status are limited by the extent to which current Aboriginal income is derived from social security sources: a much higher proportion of Aboriginal than of non-Aboriginal income is derived from such sources.

**Figure 4: Annual family income: Queensland, Aborigines and non-Aborigines, 30 June 1986**



Source: Australian Bureau of Statistics, Census of population and housing 1986

## Housing

The level and standard of current housing is a clear expression of Aboriginal disadvantage, not only in remote areas, but also in long-settled parts of Australia. For Australia as a whole, it was estimated in 1987 that over 70,000 Aborigines (31 per cent of the Census population) were homeless or living in inadequate accommodation (Aboriginal Development Commission 1988). The sub-standard living conditions are generally characterised by overcrowding, inadequate water and washing facilities, poor sanitation and sewage disposal, limited food storage and sub-optimal food preparation facilities.

To adequately house Aboriginal Queenslanders living in sub-standard or overcrowded conditions, it was estimated in 1987 that 4,715 additional dwellings were required, at an estimated cost of \$356 million (Aboriginal Development Commission 1988).

The 1986 Australian Census confirmed that each Aboriginal dwelling housed a higher number of people than did other dwellings. For separate houses in Queensland, the median number of occupants per dwelling was 5.0 for Aborigines and 3.3 for other Queenslanders.

## 4 Fertility and pregnancy outcome

### Fertility

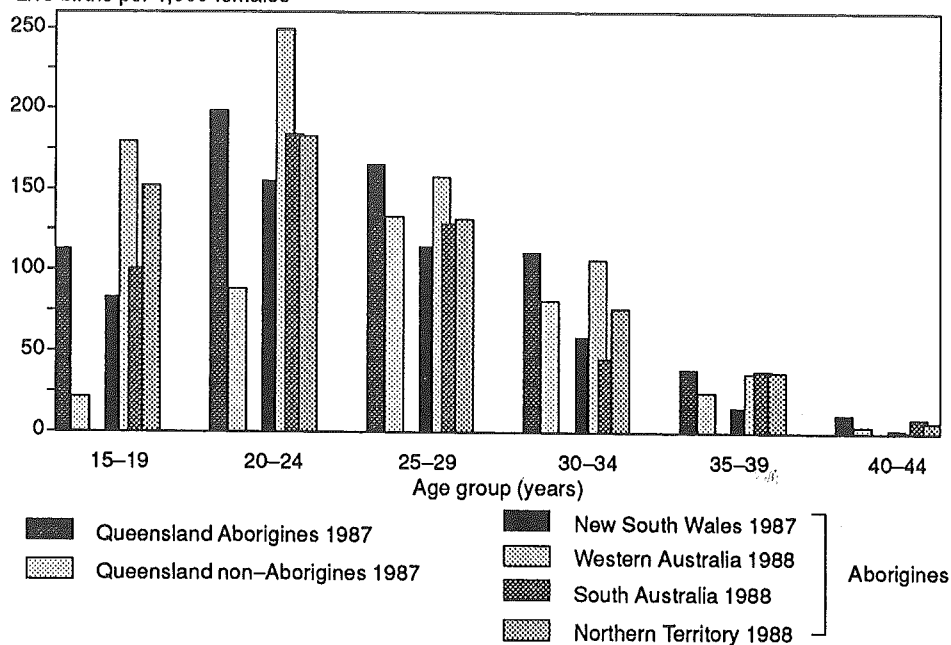
The fertility<sup>4</sup> of Aboriginal women living in Queensland remains much higher than that of non-Aboriginal women. This is despite the fact that Aboriginal fertility in Queensland, and in other parts of Australia, has declined substantially since the late 1960s, largely in parallel with the decline in fertility in the total population (Gray 1983, Gray 1990a).

Data from the Queensland Department of Health's maternal/perinatal collection for 1987 confirm that the higher present-day fertility of Aboriginal women is largely due to the great excess of births occurring at young ages, including the teenage years (see Figure 5).

The differences in maternal age mean that 24.6 per cent of all Aboriginal women having babies in 1987 were 19 years or younger, compared with 6.6 per cent of other Queensland women. The overall proportion for Aboriginal women 19 years or younger having babies conceals a difference between Australian Aborigines, 26.8 per cent, and Torres Strait Islanders, 18.0 per cent.

**Figure 5: Age-specific fertility rates: Aborigines and non-Aborigines**

Live births per 1,000 females



Note: The figures for New South Wales Aborigines probably underestimate the true rates.

Source: Australian Institute of Health, unpublished, from data provided by the Queensland Department of Health, the Health Department of Western Australia, the South Australian Health Commission and the Northern Territory Department of Health and Community Services; New South Wales Department of Health 1990

4. Note: 'fertility' is used in the technical sense, denoting actual, rather than potential, reproductive performance. See glossary for further detail.



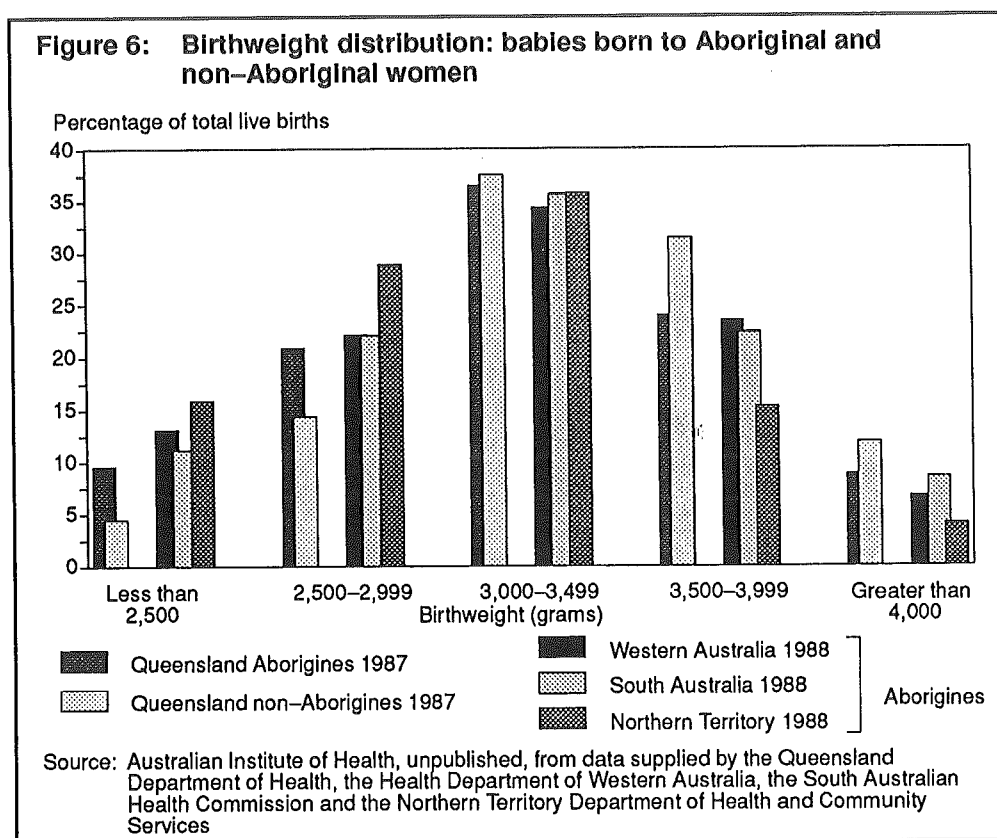
Compared with the total fertility rate of 1,770 children per 1,000 non-Aboriginal women in Queensland in 1987, the rate for Aboriginal women was 3,190 per 1,000.

### Birthweight

At birth, babies born to Aboriginal mothers are around 150 grams lighter than those born to non-Aboriginal mothers, in terms both of mean and median birthweight. In 1987, the mean birthweight of babies born to Aboriginal mothers was 3,235 grams, compared with 3,405 grams for those born to non-Aboriginal mothers. The median weight was 3,265 grams, compared with 3,415 grams.

Again, the difference was greater for Australian Aborigines than for Torres Strait Islanders. The mean birthweight of babies born to Australian Aboriginal women was 3,195 grams and the median 3,230 grams, while the mean of those born to Torres Strait Islander women was 3,345 grams and the median 3,380 grams.

Of particular significance is the proportion of babies of low birthweight (less than 2,500 grams) born to Aboriginal women. For singleton births in Queensland in 1987, 9.6 per cent of babies born to Aboriginal women were of low birthweight, compared with 4.5 per cent of babies born to non-Aboriginal women (see Figure 6). Reflecting the overall differences in birthweights, 10.1 per cent of babies born to Australian Aboriginal women were of low birthweight, as were 8.1 per cent of those born to Torres Strait Islander women.



## 5 Mortality

### Data sources

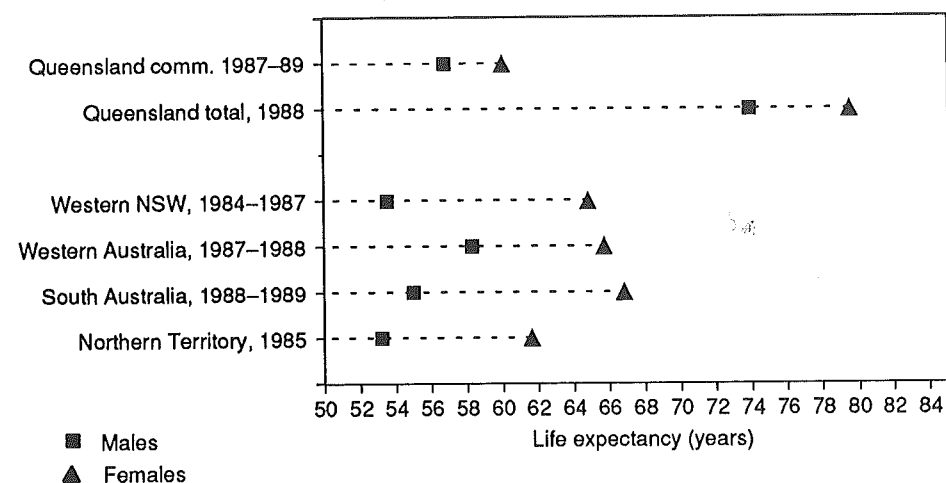
At present, Aborigines are not identified in the Queensland-wide death data, but information on deaths of people living in a number of Aboriginal communities has been collected for a number of years by the Aboriginal Health Programme. For 1987-1989, the total mean population of these communities was 6,846 males and 6,389 females. For this period, there were 226 deaths of Aboriginal males and 168 of Aboriginal females.

### Expectation of life

For Aboriginal males living in the Queensland communities in 1987-1989, the expectation of life at birth was 56.8 years (see Table 3 and Figure 7), about 17 years less than that of the total male population of Queensland in 1988, 73.9 years. For Aboriginal females, the expectation of life at birth was 60.0 years, almost 20 years less than that of the total female population of Queensland in 1988, 79.5 years.

These estimates of expectation of life at birth for Aborigines living in the communities are broadly consistent with those for Aborigines living in other parts of Australia. The estimate for Aboriginal males is similar to that derived from an intercensus survival analysis applied to the total Queensland Aboriginal population figures from the 1981 and 1986 Australian Censuses (see Table 4) (Gray 1990b), but the estimate for females is somewhat lower than the intercensus survival estimate of 63.9 years.

Figure 7: Expectation of life at birth: Aborigines by selected region and total Queensland population



Source: Australian Institute of Health, unpublished, from data supplied by the Queensland Department of Health, the Health Department of Western Australia, the South Australian Registry of Births, Deaths and Marriages and the Northern Territory Department of Health and Community Services; Gray and Hogg 1989

**Table 3: Expectation of life at birth: Aborigines for selected regions, by sex**

	<i>Male</i>	<i>Female</i>
Queensland communities 1987-1989	56.8	60.0
Western New South Wales 1984-1987	53.5	64.8
Western Australia 1987-1988	58.3	65.7
South Australia 1988-1989	55.0	66.8
Northern Territory 1985	53.2	61.6

Source: Australian Institute of Health, unpublished, from data supplied by the Queensland Department of Health, the Health Department of Western Australia, the South Australian Registry of Births, Deaths and Marriages and the Northern Territory Department of Health and Community Services; Gray and Hogg 1989

**Table 4: Expectation of life at birth: Aborigines for States and Territories, based on intercensal survival estimates (years)**

	<i>Male</i>	<i>Female</i>
Queensland	55.6	63.9
New South Wales/Australian Capital Territory	56.9	65.0
Victoria/Tasmania	57.2	66.6
Western Australia	55.3	63.2
South Australia	56.2	65.1
Northern Territory	53.7	61.8
Australia	55.7	63.9

Source: Gray 1990b

### **Standardised mortality**

After adjustment is made for differences in the age structures of the Aboriginal and total Australian populations<sup>5</sup>, the death rate of Aboriginal males living in the Queensland communities in 1987-1989 was 3.1 times that of the 1986 total Australian male population. The death rate of Aboriginal females was 4.4 times that of the 1986 total Australian female population. Table 5 shows the number of observed and expected deaths for Aborigines living in the Queensland communities, along with the standardised mortality ratios (including 95 per cent confidence intervals) (see Figure 8). For comparison, data from a number of other regions are also shown.

The actual differences in mortality between Aborigines and non-Aborigines in Queensland are slightly greater than the comparison with Australian total population age-specific death rates suggests, as overall mortality in Queensland is lower than that of the total Australian populations. For Queensland overall, in 1988 there were 10,597 male deaths and 8,205 female deaths. Based on age-specific death rates for the total Australian populations (the standard populations used for the estimates of SMRs for Aborigines), 11,015 male deaths (SMR 0.96 (0.94-0.98)) and 8,823 female deaths (SMR 0.93 (0.91-0.95)) would be expected.

5. A technique known as indirect standardisation is used to provide an estimate of the number of deaths expected by the various Aboriginal sub-populations if they experienced the same age-specific death rates as a standard population. The ratio of the number of deaths observed to the number expected is known as the standardised mortality ratio (SMR). In this analysis, the 1986 total Australian male and female populations have been used as the standards.

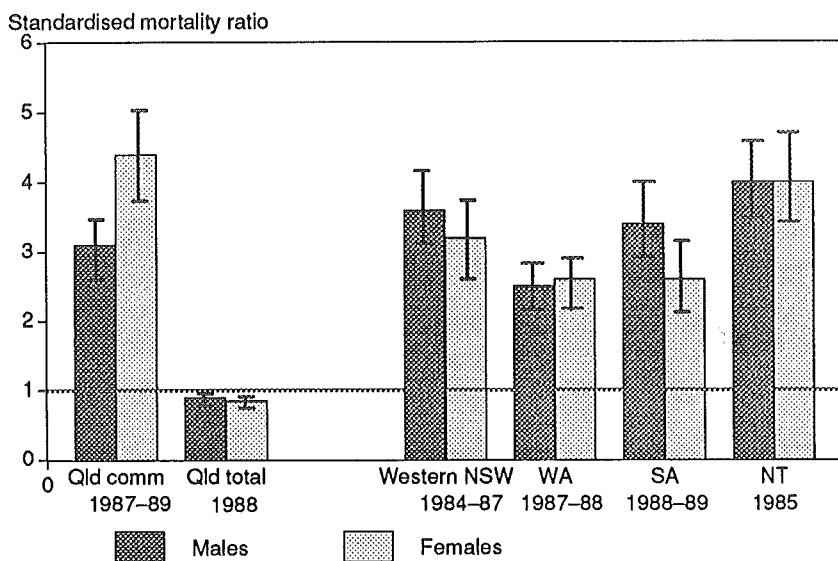
**Table 5: Aboriginal observed and expected number of deaths, and standardised mortality ratios**

	Observed no.	Expected no.	SMR
<b>Male</b>			
Queensland communities, 1987-1989	226	73.8	3.1 (2.7-3.5)
Western New South Wales, 1984-1987	205	56.8	3.6 (3.1-4.1)
Western Australia, 1987-1988	387	156.9	2.5 (2.2-2.7)
South Australia, 1988-1989	155	45.4	3.4 (2.9-4.0)
Northern Territory, 1985	209	52.2	4.0 (3.5-4.6)
<b>Female</b>			
Queensland communities, 1987-1989	168	38.4	4.4 (3.7-5.0)
Western New South Wales, 1984-1987	110	34.6	3.2 (2.6-3.8)
Western Australia, 1987-1988	240	93.3	2.6 (2.2-2.9)
South Australia, 1988-1989	90	34.0	2.6 (2.1-3.2)
Northern Territory, 1985	151	37.4	4.0 (3.4-4.7)

Note: The estimated numbers of deaths and the SMRs may differ slightly from those provided in the sources, as they have been recalculated using the 1986 age-specific death rates of the total Australian male and female populations.

Source: Australian Institute of Health, unpublished, from data supplied by the Queensland Department of Health, the Health Department of Western Australia, the South Australian Registry of Births, Deaths and Marriages and the Northern Territory Department of Health and Community Services; Gray and Hogg 1989

**Figure 8: Standardised mortality ratios: Aborigines by selected region and total Queensland population**



Note: The vertical lines indicate the 95 per cent confidence range for each SMR. The SMR has been estimated using the age-specific death rates for the 1986 Australian populations.

Source: Australian Institute of Health, unpublished, from data supplied by the Queensland Department of Health, the Health Department of Western Australia, the South Australian Registry of Births, Deaths and Marriages and the Northern Territory Department of Health and Community Services; Gray and Hogg 1989; the Australian Bureau of Statistics, *Deaths Australia 1986*, Cat. No. 3302.0

### Age-specific death rates

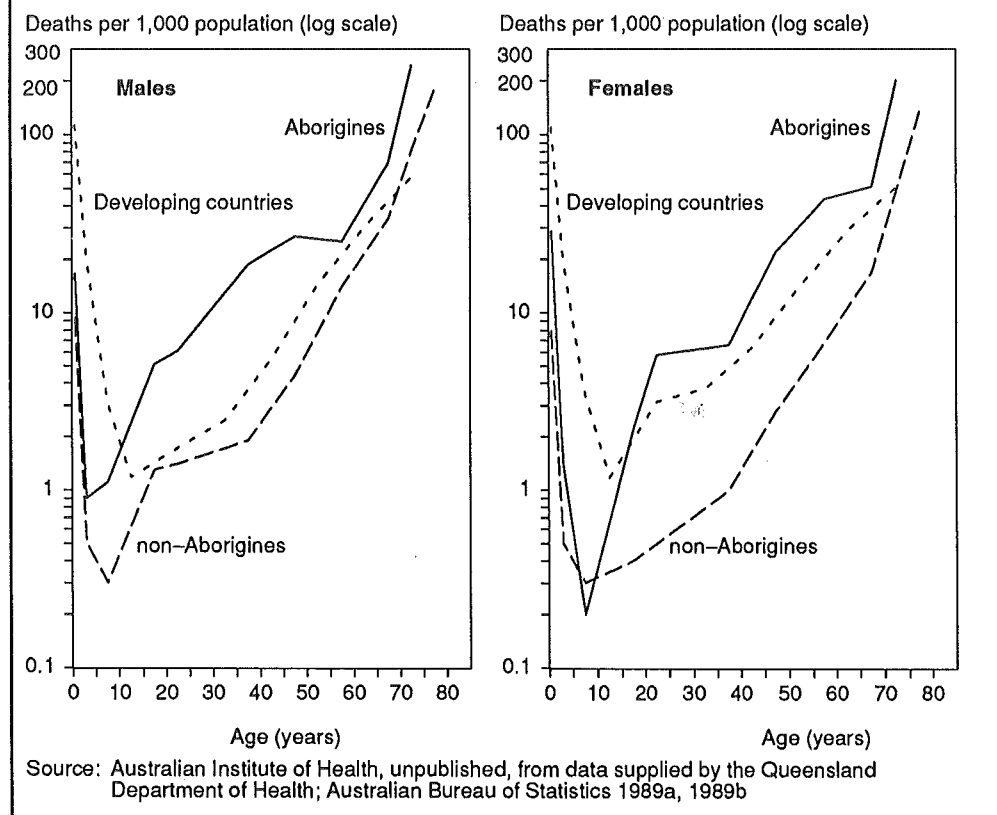
The most striking aspect of Aboriginal mortality is the higher death rates experienced by young adults, with the Aboriginal:non-Aboriginal ratios of age-specific death rates being highest for young and middle aged adults. For males, the age-group 35-44 years had the highest rate ratio, 10.3. For females, the rate ratio was highest (11.0) for 25-34 year olds. The age-specific death rates for Aborigines from the Queensland communities, for 1987-1989, are shown in Figure 9, along with the rates for the non-Aboriginal population of Queensland.

The pattern of Aboriginal age-specific death rates is highly unusual, even compared with the rates typical of a developing country, also shown in Figure 9. While Aboriginal death rates in infancy and early childhood are much lower than those in developing countries, beyond the teenage years the position is reversed, with death rates for young and middle aged Aboriginal adults, particularly males, being higher.

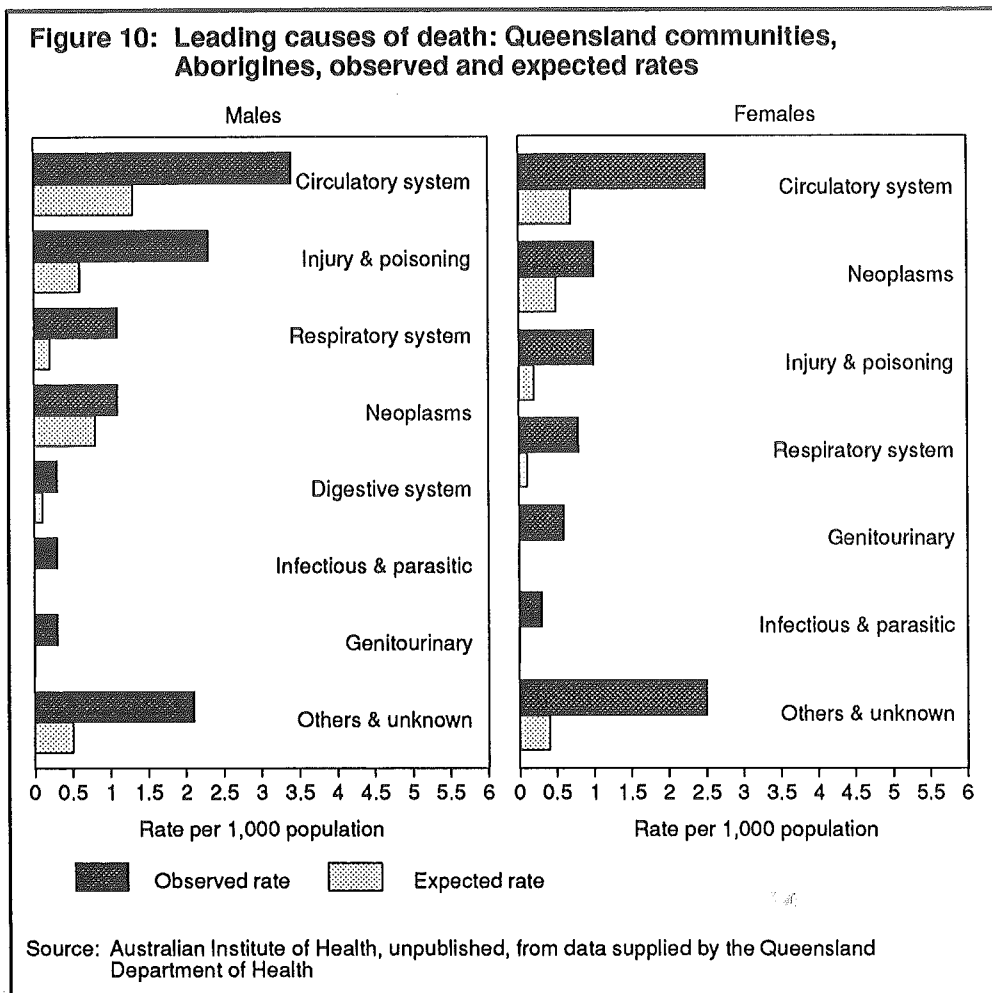
### Causes of death

Unfortunately, information about the precise cause of death for Aborigines living in the Queensland communities in 1987-1989 was not available for a considerable number of deaths (23 of the male deaths and 22 of the female deaths).

**Figure 9: Age-specific death rates: Queensland, Aboriginal communities and total population, and developing countries**



Of those deaths where a cause was known, the major cause of deaths, for both males and females, was disease of the circulatory system (see Figure 10). Overall, death rates from these diseases, including ischemic and other heart disease, were 2.6 times higher than expected for males, and 3.5 times higher for females. Disease of the circulatory system accounted for 28 per cent of the excess mortality experienced by Aboriginal males, and for 25 per cent of that experienced by Aboriginal females.



The second most frequent cause of death for Aboriginal males, and third for Aboriginal females, was the ICD group 'External causes of injury and poisoning' (including motor vehicle and other accidents, suicide and self-inflicted injury, and homicide and injury purposely inflicted by others). Overall death rates were 3.9 times higher than expected for males, and 4.6 times higher for females. In terms of the excess mortality for Aborigines living in the Queensland communities, causes of death in this group were responsible for 23 per cent of the excess experienced by Aboriginal males, and for 11 per cent of that experienced by Aboriginal females.

In 1987-1989, malignant neoplasms was the second most frequent cause of death for females, and fourth for males. Overall death rates were 2.0 times higher than expected for females, and 1.3 times for males. Malignant neoplasms were responsible for only 3.1 per cent of the excess mortality experienced by Aboriginal males, but of 7.2 per cent of that experienced by Aboriginal females. For females, cancer of the cervix alone was responsible for 4.9 per cent of the excess mortality.

Disease of the respiratory system was the third most frequent cause of death for Aboriginal males, and fourth for females, with overall death rates 4.9 times higher than expected for males, and 8.2 times higher for females. These causes were responsible for 12.0 per cent of the excess mortality experienced by Aboriginal males, and for 10.3 per cent of that experienced by Aboriginal females.

### **Other evidence of Aboriginal mortality**

Indirect evidence of the excess mortality experienced by Aborigines has been derived from an analysis of regional mortality in Queensland for 1983-1988 (Balanda & Ring 1990). Unpublished results (Wilkey, personal communication) for a number of regions combined, each of which comprised at least 50 per cent Aborigines (Aborigines made up 74 per cent of the total population for the combined regions), found substantial differences in mortality.

While noting that the actual contribution made by Aborigines to the death rates for the combined regions is not known, male mortality was twice the overall rate for Queensland, and female mortality was three times higher.

Death rates for a number of specific causes of death were particularly high. For males, the death rate for pneumonia was 8.7 times the overall Queensland rate, and the rate for diabetes mellitus was 7.2 times the overall rate. For females, the death rate for pneumonia was 12.9 times the overall Queensland rate, and the rate for diabetes mellitus was 17.1 times the overall rate.

Death rates for various diseases of the circulatory system were also higher than overall Queensland rates. For total heart disease, the male rate was 1.7 times higher than the overall rate, and the female rate 2.0 times higher. For cerebrovascular disease, the male rate was 2.5 times higher, and the female rate 2.4 times higher. For hypertension, the male rate was 4.8 times higher, and the female rate 4.3 times higher.

Consistent with the excess mortality noted above for females from cancer of the cervix, the death rate for this cancer for the combined regions was 9.4 times the overall Queensland rate.

### **Fetal and infant mortality**

Until 1987, the only data about Aboriginal fetal and infant survival were those relating to the Queensland communities. With the recent modification of the Department of Health's maternal/perinatal collection to provide for the identification of Aborigines, State-wide information about fetal and neonatal survival (that is, until 28 days of life) is now starting to become available, but this will still not enable estimation of infant mortality rates (deaths in the first year of life per 1,000 live births).

For Aborigines living in the Queensland communities, the infant mortality rate has declined significantly since the early 1970s, from 82.6 infant deaths per 1,000 live births in 1972-1973 to 20.7 per 1,000 in 1986-1988 (Table 6 and Figure 11).

For the Queensland communities, and for Western Australia and the Northern Territory, the major decline occurred during the 1970s, and there has been much less improvement in the 1980s. For 1986-1988, the infant mortality rate for Aborigines living in the Queensland communities was 2.4 times that of the total Australian population.

The other useful indicator of fetal and infant survival is the perinatal mortality rate, which is the number of late fetal deaths (death of a fetus of at least 500 grams or, if weight is not known, of at least 22 weeks gestation; also known as stillbirths) and neonatal deaths (deaths of live born infants within the first 28 days of life) per 1,000 total births (live births plus late fetal deaths). Some caution needs to be used in comparing the figures quoted here with international figures, some of which relate only to late fetal deaths and the deaths of live born infants within the first seven days of life.

Data from the maternal/perinatal collection for 1987 estimate a State-wide Aboriginal perinatal mortality rate of 24.0 deaths per 1,000 total births, almost twice the rate for non-Aboriginal Queenslanders, 12.3. For Australian Aborigines, the rate was 21.6 deaths for 1,000 total births. For Torres Strait Islanders, it was 30.7 deaths for 1,000 total births.

Estimates for Aborigines living in the Queensland communities reveal that the perinatal mortality rate has declined substantially since the early 1970s (Table 7 and Figure 12), but the rate for 1986-1988, 32.1 deaths per 1,000 total births, is a third higher than that of all Aborigines in Queensland.

**Table 6: Infant mortality rates<sup>(a)(b)</sup>: Aborigines and total population**

Period <sup>(c)</sup>	Aborigines				Total population
	Queensland communities	Western Australia	South Australia <sup>(d)</sup>	Northern Territory	
1972-1973	82.6 (5.0)	n.a.	n.a.	83.4 (5.0)	16.6
1974-1976	63.4 (4.3)	n.a.	n.a.	52.8 (3.6)	14.8
1977-1979	42.0 (3.5)	25.8 (2.1)	n.a.	55.9 (4.7)	12.0
1980-1982	27.2 (2.6)	25.1 (2.4)	n.a.	34.9 (3.4)	10.3
1983-1985	28.1 (2.9)	25.1 (2.6)	n.a.	33.5 (3.5)	9.6
1986-1988	20.7 (2.4)	24.1 (2.8)	20.4 (2.3)	32.2 (3.7)	8.7

(a) Rates are infant deaths per 1,000 live births.

(b) Numbers in parentheses are the Aboriginal:total population rate ratios.

(c) Except for the first period (1972-1973) and the figures included under 1977-1979 for Western Australia, these estimates represent the grouped data for three-year periods. Reliable data are not available for 1971, nor for Western Australia for 1977.

(d) The data provided for 1988 by the South Australian Health Commission have been updated with figures from Hampton and Rogers 1990.

Source: Australian Institute of Health, unpublished, from data supplied by the Queensland Department of Health, the Health Department of Western Australia, the South Australian Health Commission and the Northern Territory Department of Health and Community Services; Hampton and Rogers 1990



**Table 7: Perinatal mortality rates<sup>(a)(b)</sup>: Aboriginal and total population**

Period <sup>(c)</sup>	Aborigines				Total population
	Queensland communities	Western Australia	South Australia	Northern Territory	
1972-1973	52.3 (2.2)	n.a.	n.a.	56.7 (2.4)	23.4
1974-1976	63.4 (3.0)	n.a.	n.a.	55.4 (2.6)	21.2
1977-1979	40.8 (2.5)	23.6 (1.4)	n.a.	58.0 (3.5)	16.3
1980-1982	21.4 (1.6)	32.0 (2.4)	n.a.	49.0 (3.6)	13.6
1983-1985	35.3 (3.0)	23.1 (1.9)	29.2 (2.4)	36.2 (3.0)	11.9
1986-1988	32.1 (2.9)	19.6 (1.8)	33.1 (3.0)	46.1 (4.2)	10.9

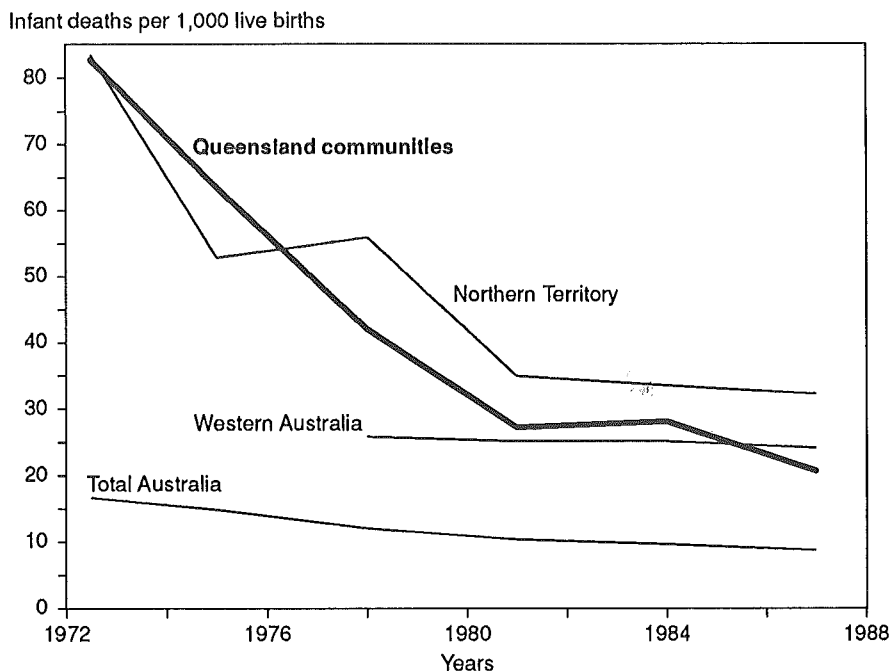
(a) Rates are late fetal deaths (stillbirths) plus neonatal deaths per 1,000 total births (live births plus late fetal deaths).

(b) Numbers in parentheses are the Aboriginal:total population rate ratios.

(c) Except for the first period (1972-1973) and the figures included under 1977-1979 for Western Australia, these estimates represent the grouped data for three-year periods. Reliable data are not available for 1971, nor for Western Australia for 1977.

Source: Australian Institute of Health, unpublished, from data supplied by the Queensland Department of Health, the Health Department of Western Australia, the South Australian Health Commission and the Northern Territory Department of Health and Community Services; Hampton and Rogers 1990

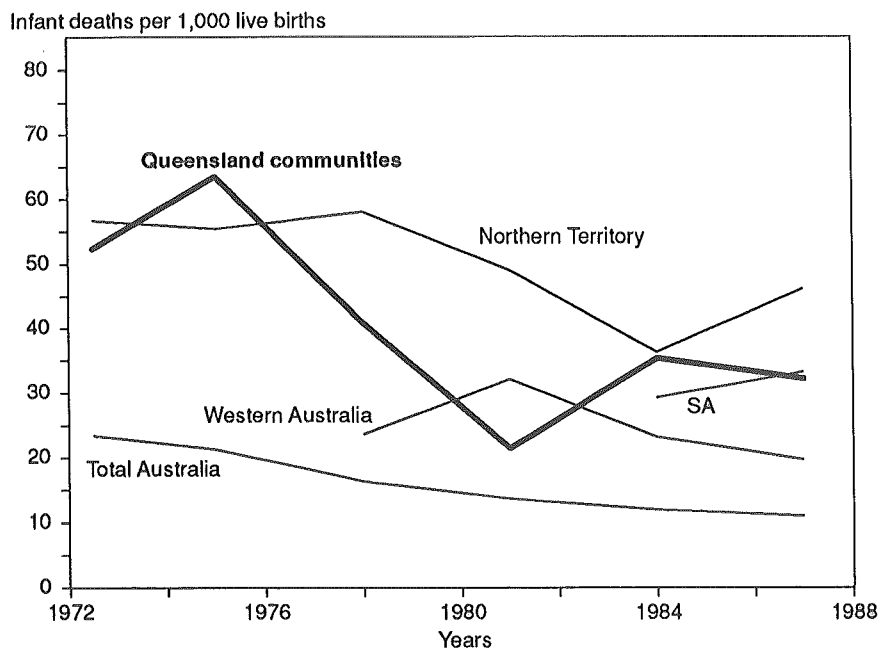
**Figure 11: Infant mortality rates, Aboriginal and total Australian population**



Note: Rates are infant deaths per 1,000 live births.

Source: Australian Institute of Health, unpublished, from data supplied by the Queensland Department of Health, the Health Department of Western Australia, the Northern Territory Department of Health and Community Services

**Figure 12: Perinatal mortality rates, Aboriginal and total Australian population**



Note: Rates are perinatal deaths per 1,000 total births.

Source: Australian Institute of Health, unpublished, from data supplied by the Queensland Department of Health, the Health Department of Western Australia, the South Australian Health Commission and the Northern Territory Department of Health and Community Services

## 6 Summary

The current data reveal that the health status of Queensland's Australian Aborigines and Torres Strait Islanders remains much lower than that of other Queenslanders.

Overall, the mortality of Aborigines living in the Queensland communities is three-and-a-half to four times that of the total Australian population. The major cause of Aboriginal deaths is disease of the circulatory system, including heart disease, with injuries, and diseases of the respiratory system also making major contributions to the excess mortality experienced by Aborigines. For Aboriginal females, malignant neoplasms also make a significant contribution.

The greatest difference between Aboriginal and non-Aboriginal death rates is found among young and middle aged adults. The net result of the excess mortality experienced by Aborigines living in the communities is that the expectation of life at birth of Aborigines is much less than that of all Queenslanders, around 17 years for males, and almost 20 years for females.

For Aborigines in Queensland, perinatal mortality is almost twice that of other Queenslanders. For Aborigines living in the communities, infant mortality is almost two-and-a-half that of the total Australian population.

The magnitude of the health problems experienced by Queensland's Australian Aboriginal and Torres Strait Islander populations clearly justifies the alarm expressed recently by the State Minister for Health in foreshadowing new initiatives to improve their health and well-being and 'to bring mortality rates into line with rates applying throughout the rest of the community'.

# Glossary

- Aborigine/Torres Strait Islander.* A person of Aboriginal or Torres Strait Islander descent who identifies as an Aborigine or Torres Strait Islander and is accepted as such by the community in which he (she) lives.
- age specific death rate.* Number of deaths in a specified period of persons of a specific age group per 1,000 persons of the same age group.
- age specific fertility rate.* The number of live births to women in a specified age group in one year per 1,000 women in the same age group.
- age standardised.* Weighted average of age-specific rates according to a standard distribution of age to eliminate the effect of different age distributions and thus facilitate valid comparison of groups with differing age compositions.
- expectation of life.* Predicted number of years of life remaining to a person if the present pattern of mortality does not change.
- fertility.* The actual production of live offspring. Fetal deaths and abortions are not included in the measurement of fertility in a population.
- fertility rate.* See age specific fertility rate.
- infant death.* Death of an infant within a year of birth.
- infant mortality rate.* Number of infant deaths per 1,000 live births.
- late fetal death.* Birth of a fetus weighing at least 500 grams (or where birthweight is unavailable, of at least 22 weeks gestation), which shows no signs of life.
- late fetal death rate.* Number of late fetal deaths per 1,000 total births, live and stillborn.
- low birthweight.* Less than 2,500 grams.
- neonatal death.* Death of an infant within 28 days of birth.
- neonatal mortality rate.* Number of neonatal deaths per 1,000 live births.
- perinatal death.* Stillbirths (fetal deaths) plus neonatal deaths.
- perinatal mortality rate.* Number of perinatal deaths per 1,000 total births.
- postneonatal death.* Death between 28 days and one year of birth of an infant surviving the neonatal period.
- postneonatal mortality rate.* Number of postneonatal deaths per 1,000 live births.
- prevalence.* The number of instances of a given disease or other condition in a given population at a designated time.
- Queensland Aboriginal communities.* Data relate to Aurukun, Bamaga, Cherbourg, Doomadgee, Pormpuraaw (Edward River), Hopevale, Kowanyama, Lockhart River, Gununa (Morningside Island), Palm Island, Weipa South, Woorabinda, Wujal Wujal and Yarrabah. Some recent data also include Camooweal, Cowal Creek, Thursday Island and Weipa North.
- relative risk.* The ratio of the risk of disease or death among the exposed to the risk among the unexposed.
- stillbirth.* See late fetal death.
- stillbirth rate.* See late fetal death rate.
- total fertility rate.* The number of live births a woman would have if, throughout her reproductive years, she had children at the rates prevailing in the reference calendar year. It is the sum of the age specific fertility rates for that calendar year.

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