ISCHAEMIC HEART DISEASE MORTALITY: QUEENSLAND

1. Ischaemic Heart Disease (IHD) is the **leading cause of death** (27% of all deaths) in Queensland. (Figure 1). This is comparable with Australian data where IHD causes 26% of all deaths.

2. IHD mortality rates in Australia are relatively **high by world standards**. (Figure 2). In 1987, Japanese IHD mortality rates were one fifth the Australian rates and French rates were about one third the Australian rates

3. Queensland has experienced a **42% decline in IHD mortality** over the last 20 years in keeping with trends in Australia and other countries. (Figure 3) Despite this impressive decline, IHD mortality for the State is **above the 1954 level** whereas other cardiovascular causes of death are now well below these earlier levels. (Figure 4)

4. **Regional IHD mortality differences** are illustrated in Figure 5.

   The standardised mortality rate in six of the regions is within the "average" range for the State. Northern, Central West, South West, Central and West Moreton Regions have higher mortality rates. The South Coast and Sunshine Coast Regions have lower mortality rates.

5. There are important **mortality differentials** for gender, socio-economic status and ethnicity in Queensland.

   The standardised IHD mortality rate is 2 times higher in males compared to females (Figures 6 and 7). The mortality rate in the least affluent group is 25% higher than in the most affluent group for both males and females. (Figure 6)

   In areas of the State with a predominant Aboriginal and Torres Strait Islander population, there is an excess IHD mortality. (Figure 7) The population in these areas consists of 75% Aboriginal and Torres Strait Islanders which results in an underestimate of the true IHD mortality differential when compared with the general population. The Aboriginal and Torres Strait Islander IHD mortality rate is estimated to be almost 2 times higher than the general population rate.
Figure 1: MAJOR CAUSES OF DEATH, QUEENSLAND 1989

- Ischaemic Heart Disease 27%
- Cancer 24%
- Cerebrovascular Disease 10%
- Accidents 7%
- Chronic Respiratory 6%
- Other 26%

Source: Epidemiology and Health Information Branch, Queensland Health

Figure 2: ISCHAEMIC HEART DISEASE MORTALITY, AGE STANDARDISED RATES, SELECTED COUNTRIES 1987

Source: Australian Institute of Health (1)
Figure 3: TRENDS IN MORTALITY, QUEENSLAND 1952-1988

<table>
<thead>
<tr>
<th>Disease</th>
<th>Percentage Change</th>
<th>1952-55 to 1984-88</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Causes</td>
<td>33%</td>
<td></td>
</tr>
<tr>
<td>Ischaemic Heart Disease</td>
<td>-42%</td>
<td></td>
</tr>
<tr>
<td>Malignant Neoplasms</td>
<td>+6%</td>
<td></td>
</tr>
<tr>
<td>Cerebrovascular Disease</td>
<td>-51%</td>
<td></td>
</tr>
<tr>
<td>Accidents</td>
<td>-43%</td>
<td></td>
</tr>
<tr>
<td>Pneumonia</td>
<td>-69%</td>
<td></td>
</tr>
<tr>
<td>Arteriosclerosis</td>
<td>-73%</td>
<td></td>
</tr>
<tr>
<td>Hypertension</td>
<td>-64%</td>
<td></td>
</tr>
</tbody>
</table>

(a) Percentage in brackets is the change between 1969-72 and 1984-88
* Standardised to World Population.

Source: Epidemiology and Health Information Branch, Queensland Health

Figure 4: STANDARDISED* MORTALITY RATIOS
QUEENSLAND 1979 - 83 & 1984 - 88

<table>
<thead>
<tr>
<th>Disease</th>
<th>SMR 1979-83</th>
<th>SMR 1984-88</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ischaemic Heart Disease</td>
<td>175</td>
<td>145</td>
</tr>
<tr>
<td>Cerebrovascular Disease</td>
<td>120</td>
<td>100</td>
</tr>
<tr>
<td>Arteriosclerosis</td>
<td>50</td>
<td>40</td>
</tr>
<tr>
<td>Diabetes</td>
<td>50</td>
<td>40</td>
</tr>
<tr>
<td>Hypertension</td>
<td>50</td>
<td>40</td>
</tr>
</tbody>
</table>

* Standardised to 1954 Queensland population

Sources: Epidemiology and Health Information Branch, Queensland Health.
Figure 5: ISCHAEMIC HEART DISEASE, STANDARDISED* MORTALITY RATES, QUEENSLAND HEALTH REGIONS 1984-1988

* Standardised to world population with 95% confidence intervals, ages 0 to 65+

Source: Epidemiology and Health Information Branch, Queensland Health

Figure 6: ISCHAEMIC HEART DISEASE, STANDARDISED* MORTALITY RATES BY SOCIO-ECONOMIC STATUS, QUEENSLAND 1984-88

* Standardised to world population, ages 0 to 65+

Source: Epidemiology and Health Information Branch, Queensland Health
Figure 7: ISCHAEMIC HEART DISEASE, STANDARDISED* MORTALITY RATES, QUEENSLAND 1984-1988

* Standardized to world population

Source: Epidemiology and Health Information Branch, Queensland Health
Comment

IHD mortality is still the *major cause of death* in Queensland despite the continuing decline in the mortality rate. The fact that Australian rates are three times the French rates indicates that there is considerable scope for further reduction in the heart disease mortality rate.

The *trend of declining IHD mortality* rates has been assessed by various Australian authors. The reduction in risk factor levels (e.g. cigarette consumption, high blood pressure and cholesterol levels) are estimated to account for about half of the decline in IHD mortality for men and about three quarters of the decline for women.

Important *regional variations in mortality* patterns have been highlighted. The higher mortality patterns described are thought to be related to the higher proportion of Aboriginal and Torres Strait Islanders in remote areas. The lower mortality pattern in the Sunshine Coast and South Coast regions is probably related to the selective migration of healthy persons.

*Programs to address ischaemic heart disease* and its risk factors will continue to be needed for the *whole community* because of the high mortality rates generally. Programs targeted at the male population, the Aboriginal and Torres Strait Islander communities and the socio-economically disadvantaged are needed to reduce the excess IHD mortality in these groups.

A further circular will provide information on the control of ischaemic heart disease including prevention and treatment issues.

**References**


May 1992