INTRODUCTION

BACKGROUND

Much progress has been made in recent years in improving the cardiovascular health of Australians. Death rates have fallen dramatically, some risk factors have improved, and there have been major advances in treatment and care.

Nevertheless, cardiovascular disease¹ continues to place a heavy burden on Australians in terms of illness, disability and death, and its health care costs exceed those of any other disease. The invasive treatment of heart disease uses a high level of health resources. The heavy burden of disability due to stroke is of particular concern. These issues are expected to become more acute over the next decades with the growing number of elderly Australians, among whom cardiovascular disease is most common.

Certain groups have higher mortality from cardiovascular disease, especially Indigenous Australians and people who are at a socioeconomic disadvantage. Those who live in rural and remote areas of Australia have special needs, and cardiovascular mortality also varies between the States and Territories.

Much of the death, disability and illness caused by cardiovascular disease is preventable. Many Australians remain at higher risk of the disease through smoking cigarettes, being physically inactive, eating a diet high in saturated fats and being overweight. Levels of blood pressure and blood cholesterol among many Australians are higher than recommended. Cardiovascular risk is markedly increased in individuals with more than one risk factor.

Risk factors themselves are strongly influenced by wider circumstances. The importance of factors such as people's economic resources, education, living conditions, working conditions, social support and access to health care and social services is now recognised.

1. The term 'cardiovascular disease' is used in this report to refer to heart, stroke and vascular diseases.

NATIONAL ACTION TO COMBAT THE DISEASE

Because of the widespread nature of cardiovascular disease and its potential for prevention, Australian Health Ministers made cardiovascular health one of five National Health Priority Areas (NHPAs). The first report on cardiovascular health is expected to be released later in 1999. The NHPA initiative involves various levels of government and draws heavily on advice from non-government sources. The main aim is to reduce the incidence and impact of heart, stroke and vascular diseases in Australia. Strategies are in place or being developed to improve the risk factor profile of Australians, and the treatment, management and rehabilitation of those with existing cardiovascular disease. The Commonwealth Government also funds the Australian Institute of Health and Welfare to operate a national system to monitor the disease and its risk factors, treatment and care.

PURPOSE AND STRUCTURE OF THIS REPORT

This report was produced by the National Centre for Monitoring Cardiovascular Disease at the Institute with funding support from the Heart Foundation of Australia. The report aims to provide the community, health professionals and policy makers with a concise summary of the latest data and trends in heart, stroke and vascular diseases in Australia. As such, there are many medical details it does not cover and it is not designed to be a source of personal medical advice.

The report includes fact sheets on cardiovascular disease and its major components, and on each major risk factor. This format allows the sheets to be used individually or as a coherent set, but it means that there is some repetition between sheets.

There are also fact sheets on health care costs, drug treatment, procedures and international comparisons. Population groups at greater risk of cardiovascular disease are given a special focus where data are available. Each fact sheet concludes with information for the reader who wishes to investigate further.

Methods and data sources and statistical tables are included at the back of the report.

HISTORICAL PERSPECTIVE

Before looking at the fact sheets which contain the latest information, it is useful to take a longer-term view.

Death rates from coronary heart disease peaked in 1968 and have fallen since by over 60% among males and females. Death rates from stroke were fairly steady during the 1950s and 1960s and have fallen by about 68% since 1968. These declines are substantial, especially when compared with declines of around 20% in mortality from noncardiovascular diseases.

The declines observed nationally have also occurred in special populations such as Indigenous Australians, people in lower socioeconomic groups and people living in rural and remote areas.



Death rates for coronary heart disease and stroke, 1950-97

REASONS FOR THE DECLINE

There is evidence that the fall in death rates for coronary heart disease was initially due to lower heart attack rates but, more recently, improved survival after a heart attack has played an important part as well.

For stroke, a decline in attack rates is likely to have been the main reason for the fall in national death rates.

CHANGES IN RISK FACTORS AND MEDICAL CARE

The declines in heart attack and stroke rates suggest that levels of risk factors in the population have improved, perhaps resulting from changes in lifestyle. Consistent with this, levels of blood pressure, tobacco smoking and saturated fat in the diet have declined. However, there has been little change in participation in physical activity during leisure-time, and the proportion of Australians who are overweight and obese has risen sharply. There are no recent data on the levels of blood cholesterol.

Improved survival rates after heart attack suggests more effective acute medical interventions as well as better longterm care in such patients (especially from beta blocker drugs). Drugs such as ACE inhibitors, thrombolytics, aspirin and other antiplatelet agents have increased in usage and are known to reduce the risk of death if given during or soon after a heart attack.

The increase in prescribing of drugs for lowering blood pressure and a dramatic increase in the use of cholesterol lowering drugs will have reduced the risk of heart attacks. The steady rise in coronary artery bypass surgery and the introduction of coronary angioplasty from the 1980s would be expected to have reduced death rates.

For stroke, it is likely that the increased use of drugs for lowering blood pressure, antiplatelet agents and anticoagulant therapy have contributed to the decline in death rates.

In summary, the evidence suggests that the declines in death rates for coronary heart disease and stroke have been influenced by changes in some risk factors and in medical intervention such as counselling, drug use, emergency care, medical and surgical treatment and follow-up care.

Where data are available, these factors are considered in more detail in the fact sheets that form the main body of this report.

CURRENT SITUATION

The latest national information on deaths and risk factor prevalence are shown below. These diseases and risk factors are defined in the fact sheets that follow.

Number of deaths in Australia, all ages, 1997

Males	Females
15,565	13,486
4,879	7,254
2,185	2,295
1,253	928
1,041	1,662
448	687
125	223
25,717	26,924
67,752	61,598
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(a) High blood pressure relates to ICD-9 codes 401-405.

Source: AIHW National Mortality Database.

Number of Australians with a risk factor, 18 years and over, 1995

Risk factor	Men	Women
Overweight	4,169,700	3,182,300
High blood cholesterol ^(a)	2,479,700	2,029,400
Physical inactivity	2,260,800	2,399,500
Smoking	1,797,700	1,382,900
High blood pressure ^(b)	1,112,600	1,079,900
Diabetes type 2	163,000	151,000

(a) Most recent data are from 1989 and only includes those aged 20–69. High blood cholesterol is defined as 5.5 mmol/L.

(b) High blood pressure includes all persons with high blood pressure and those receiving treatment for high blood pressure.

Sources: AIHW analysis of the 1995 National Health Survey, 1995 National Nutrition Survey and 1989 Risk Factor Prevalence Survey.

FURTHER INFORMATION

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Detailed data

Refer to the Statistical tables section.

Main data sources

National Mortality Database (Australian Institute of Health and Welfare).

1995 National Health Survey (Australian Bureau of Statistics).

1995 National Nutrition Survey (Australian Bureau of Statistics and Commonwealth Department of Health and Aged Care).

References/further reading

Australian Institute of Health and Welfare (AIHW) 1998. Australia's health 1998: the sixth biennial health report of the Australian Institute of Health and Welfare. AIHW Cat. No. AUS 10. Canberra: AIHW.

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Jamrozik K, Broadhurst RJ, Lai N, Hankey GJ, Burvill PW & Anderson CS (in press). Trends in the incidence, severity and outcome of stroke in Perth, Western Australia. Nedlands: University of Western Australia and Royal Perth Hospital.

Heart, stroke and vascular diseases