# Cardiac surgery in Australia 1999

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# Cardiac surgery in Australia 1999

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#### Preface

This report aims to present information on cardiac surgery procedures for acquired conditions performed in 1999. It is produced jointly by the Australian Institute of Health and Welfare and the National Heart Foundation of Australia. An advisory committee appointed by the Foundation oversees the National Cardiac Surgery Register, and the Institute collates, analyses and reports these data through its National Centre for Monitoring Cardiovascular Disease. The project is financed by the Foundation and by the Institute, through funds it receives for the National Centre from the Commonwealth Department of Health and Ageing.

Under its Act, the *Australian Institute of Health and Welfare Act 1987*, the Institute is able to provide the legislative protection for operating the register and protecting the data confidentiality interests of the participating cardiac surgery units and their patients.

This report is intended primarily for workers in the field so it uses technical terms widely. However, to make the contents more accessible to other interested readers, a brief explanatory introduction and a glossary have been included.

Mark A Newman Chairman Cardiac Surgery Advisory Committee Richard Madden Director Australian Institute of Health and Welfare

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### Summary

This report aims to provide details of cardiac surgery for acquired conditions performed in Australia in 1999. It covers patterns and trends in the use of cardiac surgery procedures for acquired conditions, and associated mortality.

The main findings of the report are:

- During 1999 there were an estimated 20,791 cardiac surgery procedures for acquired conditions performed in Australia, with an average case load of 473 patients per cardiac surgery unit. This is an increase of 1% from the previous year.
- The estimated national cardiac surgery rate for acquired conditions was 1,088 per million population, with a 30-day mortality rate of 2.9%.
- There were 74 cardiac surgeons operating in 52 hospitals throughout the country.
- Valvular heart defects accounted for an estimated 4,892 procedures. Eighty procedures were reoperations for bioprosthetic tissue valve failures, 69 procedures were reoperations for mechanical valve failures and 24 procedures were reoperations for allograft tissue valve failures.
- Valve surgery was done most frequently for the aortic and mitral valves, 56% and 35% respectively. Surgery involved a replacement in 75% of cases. Repairs were done in 18% of cases.
- There were an estimated 17,321 operations involving coronary artery bypass grafts (CABG), with a 30-day mortality rate of 2.3%. Six per cent of coronary artery bypass graft procedures were reoperations.
- The average number of bypass grafts was three per patient. Internal mammary artery grafts and saphenous vein grafts were the main types used in bypass graft operations, at 86% and 69% of patients respectively.
- The age-standardised national average rate for coronary artery bypass grafting surgery was 839 per million population. The rate varied considerably across states, ranging from 613 per million population in South Australia (including the Northern Territory) to 922 per million population in New South Wales (including the Australian Capital Territory).
- Coronary artery bypass graft surgery is done three times more frequently in males than females. The difference in procedure rates between men and women is most marked in the age range 40–59 but is evident across all adult ages.
- There were 65 heart transplants, 58 lung transplants and two combined heart–lung transplants done in 1999.