

Cardiac surgery in Australia 1994

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Susana Senes-Ferrari

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Australian Institute of Health and Welfare

Board Chair
Professor Janice Reid

Director
Dr Richard Madden

Any enquiries about or comments on this publication should be directed to:

Susana Senes-Ferrari
Cardiovascular Disease and Diabetes Unit
Australian Institute of Health and Welfare
GPO Box 570
Canberra ACT 2601

Phone: (02) 6244 1052
Facsimile: (02) 6244 1166
e-mail: susana.senes-ferrari@aihw.gov.au

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Preface

This is the thirty-second national cardiac surgery report and presents information on all procedures performed in 1994. It is the first in the series to be produced jointly by the National Heart Foundation and the Australian Institute of Health and Welfare. The National Heart Foundation has been compiling data and reporting on cardiac surgery performed in Australia since 1962. For this and future reports, a standing Advisory Committee appointed by the Foundation will oversee the cardiac surgery register as in the past and the Institute will be responsible for collating, analysing and reporting the data through its National Centre for Monitoring Cardiovascular Disease. The project is financed by the Foundation and the Institute, through funds it receives for the National Centre from the Commonwealth Department of Health and Aged Care.

Under its Act, the *Australian Institute of Health and Welfare Act 1987*, the Institute is able to provide the legislative protection that is required to operate the cardiac surgery register and protect the data confidentiality interests of the participating units and their patients. The Act protects provider interests by specifying that information may only be released under circumstances that are not contrary to the written terms and conditions under which it was supplied to the Institute. It protects confidentiality of units and patients by a requirement that the release of any identifiable information to researchers is subject to the approval of the Institute's Health Ethics Committee.

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.

Reports covering procedures done in 1995, 1996 and 1997 are in preparation and will be issued as soon as the data are made available by all participating units.

Mark A Newman
Chairman
Cardiac Surgery Advisory Committee

Richard Madden
Director
Australian Institute of Health & Welfare

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Summary

This report was prepared within the National Centre for Monitoring Cardiovascular Disease at the Australian Institute of Health and Welfare. It aims to provide details of cardiac surgery as performed in Australia in 1994. The report covers patterns and trends in the use of cardiac surgery procedures for acquired and congenital conditions, and associated mortality.

The main findings of the report are:

- During 1994 there were 19,409 cardiac surgery procedures performed in Australia, with an average case load of 571 patients per unit.
- Cardiac surgery procedures increased by 2.5% compared with the previous year.
- The national cardiac surgery rate was 1,088 per million population, with a mortality rate of 2.8%.
- There were 70 cardiac surgeons operating in 37 units throughout the country, compared with 33 units in 1993.
- There were 1,520 operations for congenital heart defects, with a mortality rate of 3.4%. These figures are comparable to those for 1993. Septal defects were the main reasons for congenital heart surgery.
- Among congenital defects, compared with the previous year, the number of operations for valve defects, atrial septal defects and persistent ductus arteriosus increased, whereas those for coarctation of the aorta, Tetralogy of Fallot and ventricular septal defects fell, and those for transposition of great vessels remained constant.
- Valvular heart defects accounted for 3,686 procedures, which is a slight increase from the previous year total, with a mortality rate of 3.9%. Fifty-nine procedures were reoperations for mechanical valve failures and 130 procedures were reoperations for tissue valve failures.
- Surgery was done most frequently for the aortic and mitral valves, and involved replacing the valve with a prosthesis in 63.9% of cases. Repairs were done in 16.3% of cases.
- There were 14,994 operations for coronary artery disease. Of these, 14,941 involved bypass grafts, with a mortality rate of 2.5%. Eight per cent of coronary artery bypass graft procedures were reoperations.
- The average number of bypass grafts was 3 per patient. Saphenous vein and internal mammary artery grafts were the main types used in bypass graft operations, at 91.5% and 77.8% respectively.
- The national average rate for coronary artery bypass graft surgery was 837 per million population. The rate varied across States, ranging from 707 per million population in Tasmania to 1,010 per million population in South Australia.
- There were 93 heart transplants, 41 lung transplants and 14 combined heart/lung transplants done in 1994.