

# **Cancer in Australia 1998**

**Incidence and mortality data for 1998**

The Australian Institute of Health and Welfare is Australia's national health and welfare statistics and information agency. The Institute's mission is to improve the health and wellbeing of Australians by informing community discussion and decision making through national leadership in developing and providing health and welfare statistics and information.

The Australasian Association of Cancer Registries (AACR) is a collaborative body representing State and Territory cancer registries in Australia and New Zealand. Most are members of the International Association of Cancer Registries. The AACR was formed in November 1982 to provide a formal mechanism for promoting uniformity of collection, classification and collation of cancer data.

The purposes of the AACR are:

- to provide a continuing framework for the development of population-based cancer registration in Australia and New Zealand;
- to facilitate the exchange of scientific and technical information between cancer registries and to promote standardisation in the collection and classification of cancer data;
- to facilitate cancer research both nationally and internationally; and
- to facilitate the dissemination of cancer information.

The Australian Institute of Health and Welfare has joined with the AACR to produce national cancer statistics from the National Cancer Statistics Clearing House.

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## Preface

The Australian Institute of Health and Welfare (AIHW) and the Australasian Association of Cancer Registries (AACR) are pleased to present *Cancer in Australia 1998*, the most recent report generated from the National Cancer Statistics Clearing House. This report contains national cancer incidence and mortality data and also includes data from another of the AACR members, New Zealand.

The AACR and the AIHW wish to acknowledge the efforts of all the cancer registries in compiling and providing timely data to the National Cancer Statistics Clearing House so that this report could be published. We intend to continue to improve the provision of data on cancer in Australia, undertake a work program that encourages further standardisation of cancer registry information and increase analysis of the national data collection (for example survival analysis).

Cancer registration is a legal requirement in all States and Territories. The data are collected to monitor cancer trends, assist national efforts to understand the causes of cancer, and assist prevention efforts and treatment decisions. Data confidentiality and the uses to which cancer registry data can be put are controlled by State and Territory registries (under State and Territory law) and within the AIHW under the *Australian Institute of Health and Welfare Act 1987*. The cancer registries, together with the AIHW and community organisations (for example cancer charity organisations), intend to promote further public awareness of their data collections and findings. Particular use has been made of the Internet in improving public access to data by a number of the registries. A home page for the AACR has been developed on the AIHW's web site <http://www.aihw.gov.au/cancer> with links to Australian and international cancer-related organisations. The national incidence data since 1983 are available on the same site.

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# Contributors

This joint report between the Australian Institute of Health and Welfare and the Australasian Association of Cancer Registries would not have been possible without the cooperation and effort of those who direct the operation, promotion and development of the State and Territory cancer registries. These people, identified below, have all worked to produce the national cancer incidence statistics in this publication.

Incidence information provided by State and Territory cancer registries is sourced predominantly from hospitals, pathologists and departments of radiation oncology, with supplementary information provided by medical practitioners in private practice. The major contributors of information on cancer deaths are the State and Territory Registrars of Births, Deaths and Marriages, and the Australian Bureau of Statistics. We thank them for their contribution.

Funding and support of cancer registries in Australia is undertaken by State and Territory Governments and various charity bodies. We recognise the support of the State and Territory Governments, the New South Wales Cancer Council, the Anti-Cancer Council of Victoria, the Queensland Cancer Fund, the Cancer Foundation of Western Australia, the Northern Territory Anti-Cancer Foundation and the Australian Cancer Society. Finally, the contributions of the staff and volunteers who work with the State and Territory cancer registries are acknowledged.

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## Executive summary

This report presents national cancer incidence and mortality statistics for 1998 and is part of a series of publications concerning cancer patterns in Australia. The State and Territory cancer registries provide the incidence data for this report whereas the mortality data are provided by the State and Territory Registrars of Births, Deaths and Marriages and coded by the Australian Bureau of Statistics.

The main findings are as follows.

### *New cases of cancer and mortality*

- Excluding non-melanocytic skin cancers, there were 80,864 new cancer cases and 34,270 deaths due to cancer in Australia in 1998. At the incidence rates prevailing in 1998, it would be expected that 1 in 3 men and 1 in 4 women would be directly affected by cancer in the first 75 years of life. Further, an estimated 260,000 potential years of life would be lost to the community each year as a result of people dying of cancer before the age of 75. Cancer currently accounts for 29% of male deaths and 25% of female deaths.

### *Cancers in males and females*

- In males, prostate cancer (9,869 new cases diagnosed in 1998) is the most common registrable cancer, followed by colorectal cancer (6,131), lung cancer (5,307) and melanoma (4,398). These four cancers account for 59% of all registrable cancers in males.
- In females, breast cancer (10,665) is the most common registrable cancer, followed by colorectal cancer (5,158), melanoma (3,493) and lung cancer (2,488). These four cancers account for 59% of all registrable cancers in females.

### *Most common cancers causing death*

- The most common cancers causing death are lung (4,817), prostate (2,544) and colorectal (2,475) cancers in males, and breast (2,526), colorectal (2,159) and lung (2,076) cancers in females.

### *Age distribution*

- The risk of cancer increases with age, with over twice as many cancers diagnosed in those over the age of 60 as in those under 60.

### *Trends*

- Between 1993 and 1998, age-standardised incidence rates for all cancers combined (except non-melanocytic skin cancers) declined for males by an average of 1.9% per year and rose for females by an average of 0.6% per year but death rates declined for both males and females by an average of 1.7% and 1.3% per year, respectively.
- A significant proportion of the rise in female incidence rates can be attributed to the continuing increase of breast cancer incidence which in turn can be attributed in part to detection of prevalent cancers by the breast screening programs. The recent fall in male incidence rates is strongly influenced by the decline in prostate and lung cancer rates. The introduction of prostate-specific antigen testing and its later fall in use has induced the rapid rise and subsequent fall in the rates of the incidence of prostate cancer in recent years.

- Despite a slight increase in incidence rates for cervical cancer over the last year, between 1993 and 1998 incidence and mortality fell rapidly by an average of 6.9% and 6.5% per annum, respectively.

#### *Smoking-related new cases and mortality*

- Cigarette smoking is estimated to have directly caused 10,506 new cases of cancer (13% of all new cases of cancer) and 7,068 deaths (21% of cancer deaths) in 1998. Between 1993 and 1998, the male incidence rate for smoking-related cancers fell by an average of 1.2% per year, while the rate for females rose by 0.3% per year. Over the same period, mortality rates fell for both males and females by 1.8% and 0.4% per annum respectively.

#### *Alcohol-related new cases and mortality*

- It is estimated that 715 new cases of cancer were directly attributable to hazardous and harmful alcohol consumption in 1998 at a rate of 3.6 cases per 100,000 population, as were 307 deaths at a rate of 1.5 per 100,000 population.

#### *Comparison with New Zealand*

At an international level, New Zealand serves as a good comparison to Australia due to its similar heritage, economic development and patterns of cancer risk factors. The most frequently occurring cancers in both countries are very similar. However, when comparing age-standardised mortality rates, Australia's female rates are substantially lower than New Zealand's for several cancers, with cancers of the breast and lung showing the largest differences. Cancer incidence and mortality rates in New Zealand males are slightly higher than those of Australian males for most types of cancer. Incidence rates for melanoma in both Australia and New Zealand are among the highest in the world, with higher incidence rates observed in Australia and higher mortality rates in New Zealand.