Cancer in Australia 1991–1994

(with projections to 1999)

The Australian Institute of Health and Welfare is an independent health and welfare statistics and information agency in the Commonwealth Health and Family Services portfolio. The Institute's mission is to inform community discussion and decision making though national leadership in the development and provision of authoritative and timely information on the health and welfare of Australians.

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 (IACR). The AACR was formed in November 1982, with the backing of the IACR, 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 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 through the establishment of the National Cancer Statistics Clearing House.

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(with projections to 1999)

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Preface

Cancer in Australia 1991–1994 (with Projections to 1999) is an invaluable publication arising from the National Cancer Statistics Clearing House. The Australian Institute of Health and Welfare (AIHW) is delighted to publish national incidence data from the eight Australian cancer registries and national mortality data.

Cancer registration is required in all States and Territories under the law to assist national efforts to understand the causes of cancer, and assist prevention efforts and treatment decisions. Data is strictly confidential to State and Territory registries (under State law) and within the AIHW under the *Australian Institute of Health and Welfare Act 1987*.

Timeliness of national incidence data continues to be a problem. Despite improvements in the past two years, national data is published three and a half years after the end of the last reference year. Publication of projections to 1999, informed by more recent data from some jurisdictions, is some offset, but still an unsatisfactory alternative.

The Institute is actively encouraging and working with States and Territories to reduce the time delay. It is notable that four jurisdictions supply incidence data to the AIHW within 18 months of the end of the reference year.

Given the special status given by State legislation to cancer registration, and the significant disease burden imposed by cancer in Australia, AIHW will continue its efforts to improve timeliness of national data.

Richard Madden
Director
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Contributors

This report 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 and the Australian Institute of Health and Welfare staff responsible for the operation of the National Cancer Statistics Clearing House (NCSCH). These people, identified below, have all worked together, through the Australasian Association of Cancer Registries (AACR), to produce the national cancer incidence statistics in this publication. In particular we would like to acknowledge the assistance of Marylon Coates, Graham Giles and Dace Shugg who reviewed the first draft of the report.

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

Funding and support of cancer registries in Australia is undertaken by State and Territory governments and various charity bodies. We would like to acknowledge 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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1 Introduction

Cancer is a notifiable disease in all States and Territories and is the only major disease category for which an almost complete coverage of incidence data is available. Cancer is also a major cause of death in Australia, with the number of deaths due to many of the most common cancers continuing to increase as the population grows and ages. If this situation is to be changed, good information on the occurrence of different types of cancer, on characteristics of patients, and on survival and mortality is essential. Such information facilitates the monitoring of trends and the impact of interventions, and provides a sound basis for epidemiological studies and the initiation of prevention and treatment programs.

What is cancer?

Cancer describes a range of diseases in which abnormal cells proliferate and spread out of control. Other terms for cancer are tumours and neoplasms, although these terms can also be used for non-cancerous growths.

Normally, cells grow and multiply in an orderly way and have a specific function in the body. Occasionally, however, they multiply in an uncontrolled way after being affected by a carcinogen or developing from a random mutation, and form a lump which is called a tumour or neoplasm. Tumours can be benign (not a cancer) or malignant (a cancer). Benign tumours do not invade other tissues or spread to other parts of the body, although they can expand to interfere with healthy structures.

The main features of a malignant tumour (cancer) are its ability to grow in an uncontrolled way and to invade and spread to other parts of the body (metastasise). Invasion occurs when cancer cells push between and break through other surrounding cells and structures. Spread to other parts of the body occurs when some cancer cells are carried by the bloodstream or the lymphatic system and lodge some distance away. They can then start a new tumour (a secondary cancer) and begin invading again. They can cause serious damage by destruction, crushing or blocking.

Cancer can develop from most types of cells in different parts of the body, and each cancer has its own pattern of growth and spread. Some cancers remain in the body for years without showing any symptoms. Others can grow, invade and spread rapidly and are fatal less than a year after detection. Apart from the cancer's natural behaviour, its effects can also depend on how much room it has before it damages nearby structures, and whether it starts in a vital organ or is close to other vital organs.

Although a number of cancers share risk factors, most cancers have a unique set of risk factors that are responsible for their onset. It is estimated that 30% of cancers occur as a direct result of smoking, 30% are due to dietary influences, 5–15% to infectious agents, 2% to radiation exposure, and the remainder to other causes (e.g. inherited genetic faults) (Trichopoulos et al. 1996). It should be noted that for some cancers the causes are unknown. While some of the causes are modifiable through lifestyle changes, some others are inherited and cannot be avoided. However, the risk of death due to particular cancers may be reduced through intense monitoring of individuals, reducing other risk factors, and detecting and treating cancers early in their development.

Many cancers can be serious and even fatal. However, medical treatment is often successful if the cancer is detected early. The aim is to destroy the cancer cells and stop them from returning. This can be done by surgery to cut out the growth, or by other methods such as cancer-destroying drugs (chemotherapy), or ray treatment (radiation therapy). The growth of some cancers can also be controlled through hormone therapy.

The treatment approach often combines a number of these methods and uses them in stages. The first line of treatment aims to remove as many cancer cells as possible; the second line, which may go on for a long time, aims to ensure the cancer does not recur.

Each year, approximately 345,000 new cancer cases are diagnosed in Australia. A large proportion of these, approximately 270,000, are non-melanocytic skin cancers which are less life-threatening than most other cancers. Cancer currently accounts for 29% of male deaths and 25% of female deaths, and has been the leading cause of death since 1991, when it became more common than ischaemic heart disease (ABS 1997a).

Cancer surveillance in Australia

National data on cancer deaths have been available for many years, based on information in medical certificates of cause of death, as provided to the Registrar of Births, Deaths and Marriages in each State and Territory. The Australian Institute of Health and Welfare (AIHW) and the Australian Bureau of Statistics (ABS) use these data to report national cause of death statistics. Information concerning cancer deaths and non-cancer deaths of cancer cases is also collected by State and Territory cancer registries, based on death certificates and other diagnostic information.

The only effective method of obtaining cancer incidence data is through universal registration of cancer diagnoses. In Australia, cancer registration is required under State and Territory legislation. The cancer registrations are collated by cancer registries that are supported by a mix of State and Territory government and non-government charity organisations. Some State and Territory cancer registries have been operating for more than 20 years and obtain their information from hospital, pathology, radiotherapy and physician records (Appendix D). It was not until 1982, however, that cancer registration was universal in Australia (data were published in *Cancer in Australia 1982* (Giles et al. 1987)). Before then, there was no registration in some States, and in some others, registries covered only particular areas, hospitals or cancer sites.

The National Cancer Statistics Clearing House

In June 1984 the National Health and Medical Research Council endorsed the concept of a national collection of cancer statistics. In April 1985 the National Committee on Health and Vital Statistics agreed that the National Cancer Statistics Clearing House (NCSCH) should be operated by the then Australian Institute of Health under the supervision of the Australasian Association of Cancer Registries (AACR).

Following the enactment of Commonwealth legislation establishing the then Australian Institute of Health as a statutory body in 1987, and subsequent legislation providing for the protection of confidentiality of records supplied to it, the Institute and the AACR established the NCSCH. This provides a facility for compiling data produced by individual State and Territory registries on a continuing basis, identifying multiple registrations and producing accurate national incidence statistics.

The aim of the NCSCH is to foster the development and dissemination of national cancer statistics for Australia and specifically to:

- enable computation and publication of national statistics on cancer;
- allow tracking of interstate movement of cancer cases via record linkage;
- facilitate exchange of scientific and technical information between cancer registries and promote standardisation in the collection and classification of cancer data; and
- facilitate cancer research both nationally and internationally.

The NCSCH receives data from individual State and Territory cancer registries on cancer diagnosed in residents of Australia. This commenced with cases first diagnosed in 1982. The data items provided to the NCSCH by the State and Territory cancer registries enable record linkage to be performed and the analysis of cancer by site and behaviour.

The NCSCH produces reports of national incidence and mortality data. Periodically, analyses of cancer histology, differentials in cancer rates by country of birth, geographical variation and trends over time are undertaken on an accumulation of data which permits examination of the data in greater depth. In the future it is anticipated that survival estimates at a national level will be presented in this publication.

The NCSCH is able to make available a broad range of statistical data. Data identifying individuals may only be released by State and Territory cancer registries to bona fide researchers subject to satisfactory scientific and ethical review and approval. General database inquiries and inquiries about the release of statistical data should be addressed to:

Australian Institute of Health and Welfare
National Cancer Statistics Clearing House
Attention: Ms Anne-Marie Waters
GPO Box 570
Canberra ACT 2601.

Structure of this report

This report is divided into five major components:

- an introduction and overview of cancer in Australia in 1991–1994 and the projected rates for the years 1995 to 1999;
- summary tables for all cancer sites for each year over the period 1991–1994;
- a series of data tables for the most common cancer sites, and some less common but topical cancer sites, for 1994;
- appendixes comprising cancer coding system, methods, State and Territory registration features, glossary and reference sections; and
- a floppy disk containing a comprehensive series of data tables by cancer site for each of the years from 1991 to 1994. The floppy disk also contains summary tables for 1994 and tables of projections for 1995–1999.

The overview of cancer in Australia provides a selection of highlights from the data tables. It describes the patterns of cancer incidence and mortality by site, age, sex, and State and Territory. Trends in cancer incidence and mortality are discussed and a series of graphs are provided presenting the most common cancers by sex and age group, and trends in national cancer incidence and mortality for the period 1983–1999.

Summary tables of incidence and mortality for each year from 1991 to 1994 for all cancer sites are provided. These tables list numbers of new cases and deaths, and crude and age-standardised incidence and mortality rates for Australia. Cumulative rates are given for incidence, while the mortality tables provide estimates of the person-years of life lost. Sex ratios are presented in both the incidence and mortality tables.

The series of data tables for the most common or topical cancers in 1994 contain age-specific, crude, and age-standardised incidence and mortality rates for males, females and persons for each cancer site. The order of the tables is based on the International Classification of Diseases (World Health Organization 1977). All rates are expressed per 100,000 population and, at the Australian level, are directly age-standardised to both the total estimated resident population of Australia at 30 June 1991 and the World Standard Population. Included in these tables are estimates of the lifetime risk of contracting each cancer, the person-years of life lost, and the numbers of each cancer as a proportion of the total (excluding non-melanocytic skin cancers).

The data tables also include average annual numbers of new cancer cases and deaths, and age-standardised incidence and mortality rates for each State and Territory. **It should be noted that the State and Territory incidence and mortality rates have been directly age-standardised to the total estimated resident population of Australia at 30 June 1991. Therefore, particular care should be taken not to compare these State and Territory rates with those in previous issues of *Cancer in Australia* where age-standardisation used the World Standard Population.** The total estimated resident population of Australia at 30 June 1991will be used as the standard population from this issue onwards. The NCSCH is able to provide State and Territory rates that have been age-standardised to the World Standard Population on request.

The appendixes include the International Classification of Diseases coding system; a methods section providing formulae, explanations and examples of the techniques used to present the data in the report; population data for Australia during 1991–1999; and a summary table of State and Territory cancer registry characteristics.

The floppy disk enclosed at the back of this report is an IBM-formatted disk that contains compressed executable Microsoft® Excel files (Version 5). There are five files:

- Publication tables 1991.exe– tables for all cancer sites for 1991;
- Publication tables 1992.exe– tables for all cancer sites for 1992;
- Publication tables 1993.exe– tables for all cancer sites for 1993;
- Publication tables 1994.exe– tables for all cancer sites for 1994; and
- Summary tables.exe– summary tables for 1994 and tables of projections for 1995–1999.

The files on floppy disk include tables in the same format as the published tables as described above. A list of the tables included on the disk can be found in Appendix E.

This report and the Excel tables on floppy disk will also be available on the Institute's Internet web site at the following address:

http://www.aihw.gov.au

If you are unable to access these data via computer then contact the Australian Institute of Health and Welfare for a hard copy.

It should be noted that Queensland was not able to provide unit record data for this publication for each of the years between 1991 and 1994 as did other States and Territories. To compensate for the missing data, two different types of estimates were used to compile

the national and State-specific estimates. National estimates were derived by the AIHW for single years (Tables 1, 4–33 and Figures 1–6 and 8–14) using an extrapolation of Queensland 1990 data (see Appendix B for details). Queensland-specific estimates in Tables 14–33 and Figure 7 for the combined years 1990–1994 are preliminary aggregate data provided by the cancer registry. The Queensland data for 1987–1991, 1988–1992 and 1989–1993 were unavailable.

2 Cancer in Australia

General

Non-melanocytic skin cancer is the most common cancer in Australia (Marks et al. 1993). Incidence data for this cancer are not collected on a routine basis by cancer registries, and are not reported in this publication. However, survey-based estimates show age-standardised incidence rates (standardised to the World Standard Population) for treated non-melanocytic skin cancers in 1995 were 1,374 per 100,000 for males and 857 per 100,000 for females (Giles G, personal communication). These rates are 8 times the next most common male cancer (prostate) and 7 times the next most common female cancer (breast). Non-melanocytic skin cancer has a relatively low mortality rate at 1.9 per 100,000 compared with the high mortality rates of male lung cancer at 59.0 per 100,000, female breast cancer (26.6) and prostate cancer (35.0). Non-melanocytic skin cancer will be excluded from any further comparisons in this publication. The totality of other cancers will be referred to as 'registerable cancers'.

In this publication the term 'cancer site' is used to represent cancers located in specific organs or tissues as well as systemic cancers such as leukaemia and lymphoma.

Excluding non-melanocytic skin cancers, there was an average of 69,200 new cancer cases and 32,010 deaths due to cancer each year in Australia over the 1991–1994 period. At the rates prevailing during that period, 1 in 3 men and 1 in 4 women would be directly affected by cancer in the first 75 years of life. Further, over 263,000 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.

Most common cancers

Prostate cancer is the most common registerable cancer with 12,787 new cases registered in 1994 (Table 1). Among all persons, the combination of cancers of the colon and rectum (10,016 new cases), often referred to as bowel or colorectal cancer, is the next most common registerable cancer. Prostate and colorectal cancers are followed by breast (9,764) and lung (7,306) cancers, and melanoma (6,776). Together these five cancers account for 62% of all registerable cancers in 1994.

In males, the most common registerable cancers after prostate cancer are colorectal cancer (5,433 new cases diagnosed in 1994), lung cancer (5,196) and melanoma (3,695) (Table 1, Figure 1). These four cancers account for 64% of all registerable cancers in males.

In females, breast cancer (9,694) is the most common registerable cancer, followed by colorectal cancer (4,583), melanoma (3,081) and lung cancer (2,110) which in total account for 59% of all cancers in females.

The most common cancers causing death are lung (4,833), prostate (2,613) and colorectal (2,501) cancers in males, and breast (2,669), colorectal (2,126) and lung (1,901) cancers in females (Table 1). Lung cancer causes approximately seven times as many deaths as melanoma in females, despite the higher incidence of melanoma in this group. This

indicates the poor survival rates of those diagnosed with lung cancer compared with those diagnosed with melanoma.

The number of person-years of life lost due to cancer is generally dominated by the most common cancers due to the large numbers of cases diagnosed. Lung cancer is responsible for the highest number of person-years of life lost before 75 years of age (46,798 in 1994), followed by colorectal cancer (32,730) and breast cancer (31,378). Cancer of the brain and nervous system is responsible for the fourth highest number of person-years of life lost (16,253). This contrasts with its ranking as the thirteenth most common cancer (1,169 new cases diagnosed in 1994). Further, the ratio of person-years of life lost to new cases for cancer of the brain and nervous system (13.2) is much higher than that for lung cancer (6.4), colorectal cancer (3.3) or breast cancer (3.2). This is a direct result of the relatively large number of younger people diagnosed with, and dying from, cancer of the brain and nervous system.

The most common cancers vary depending on age (Figure 2). In people aged less than 15, the most common cancers diagnosed are lymphatic leukaemia and cancers of the brain and central nervous system. These two cancer sites account for 46% of all cancers in this age group. In those aged 15–44, melanoma and breast cancer are the most common cancers, while breast, colorectal, prostate and lung cancers are predominant in people aged over 45 years.

Table 1: Most frequently occurring cancers in Australia, 1994

	New cases				Deaths			
	Number	% of all new cancer cases	AS Rate	Lifetime risk*	Number	% of all cancer deaths	AS Rate	PYLL*
Males								
Prostate	12,787	30.0	158.7	1 in 8	2,613	13.7	34.9	6,455
Colorectal	5,433	12.7	65.6	1 in 18	2,501	13.1	30.7	19,710
Lung	5,196	12.2	63.1	1 in 19	4,833	25.3	59.0	32,830
Melanoma	3,695	8.7	42.9	1 in 28	609	3.2	7.3	7,468
Bladder	1,772	4.2	22.1	1 in 61	509	2.7	6.7	2,008
Unknown primary site	1,547	3.6	19.0	1 in 68	1,164	6.1	14.5	8,505
Non-Hodgkin's lymphoma	1,468	3.4	17.2	1 in 70	790	4.1	9.6	9,195
Stomach	1,199	2.8	14.7	1 in 89	827	4.3	10.2	6,105
Kidney	1,036	2.4	12.2	1 in 89	464	2.4	5.6	4,453
Pancreas	767	1.8	9.3	1 in 128	790	4.1	9.7	5,830
Females								
Breast	9,694	29.5	100.9	1 in 11	2,669	18.6	26.6	31,273
Colorectal	4,583	13.9	44.9	1 in 27	2,126	14.9	20.1	13,020
Melanoma	3,081	9.4	32.4	1 in 37	288	2.0	2.9	3,565
Lung	2,110	6.4	21.1	1 in 51	1,901	13.3	18.9	13,968
Unknown primary site	1,306	4.0	12.3	1 in 109	957	6.7	8.9	5,518
Uterus	1,304	4.0	13.4	1 in 77	248	1.7	2.4	1,478
Non-Hodgkin's lymphoma	1,217	3.7	12.2	1 in 98	639	4.5	6.1	4,505
Cervix	1,121	3.4	12.0	1 in 101	340	2.4	3.5	5,135
Ovary	1,039	3.2	10.8	1 in 100	743	5.2	7.5	7,638
Pancreas	708	2.2	6.7	1 in 201	690	4.8	6.5	3,375
Persons								
Prostate	12,787	16.9	69.3	1 in 17	2,613	7.8	13.8	6,455
Colorectal	10,016	13.3	54.1	1 in 22	4,627	13.8	24.8	32,730
Breast	9,764	12.9	52.9	1 in 21	2,689	8.0	14.4	31,378
Lung	7,306	9.7	39.6	1 in 28	6,734	20.1	36.5	46,798
Melanoma	6,776	9.0	36.9	1 in 32	897	2.7	4.9	11,033
Unknown primary site	2,853	3.8	15.3	1 in 85	2,121	6.3	11.3	14,023
Non-Hodgkin's lymphoma	2,685	3.6	14.5	1 in 82	1,429	4.3	7.7	13,700
Bladder	2,367	3.1	12.7	1 in 99	725	2.2	3.9	2,630
Stomach	1,819	2.4	9.7	1 in 131	1,293	3.9	6.9	8,690
Kidney	1,697	2.2	9.2	1 in 117	784	2.3	4.2	6,770

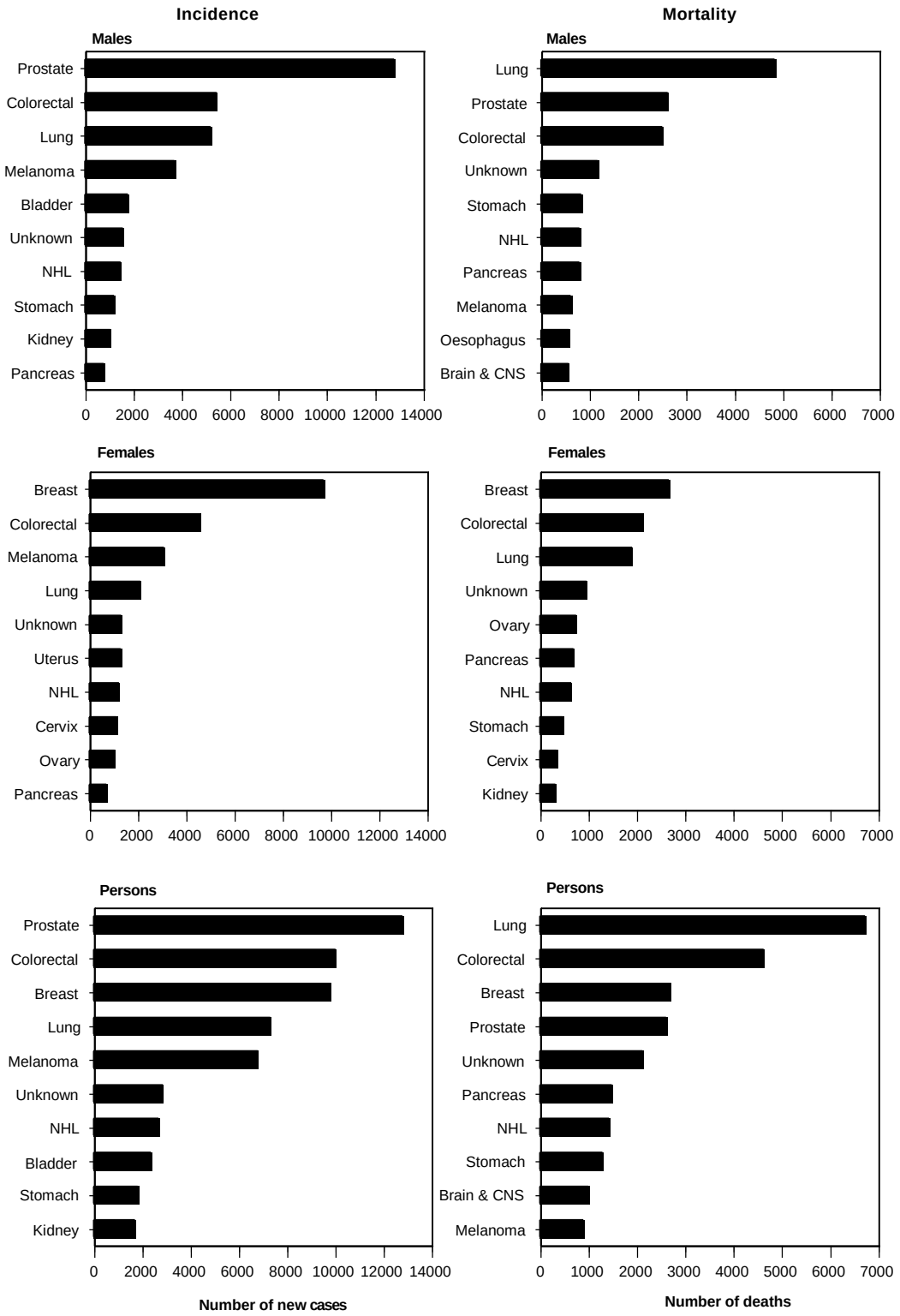
Notes

1. Rates are expressed per 100,000 population and age-standardised to the Australian 1991 Population (AS Rate).
2. Non-melanocytic skin cancer, known to be the most common cancer type, is excluded from this list as it is not a registerable cancer.

* These measures are calculated for ages 0–74 years; PYLL refers to person-years of life lost. Methods for the calculation of these measures are presented in Appendix B.

Source: Cancer in Australia 1991–1994 (with Projections to 1999), Australian Institute of Health and Welfare, 1998.

Most frequently occurring cancers

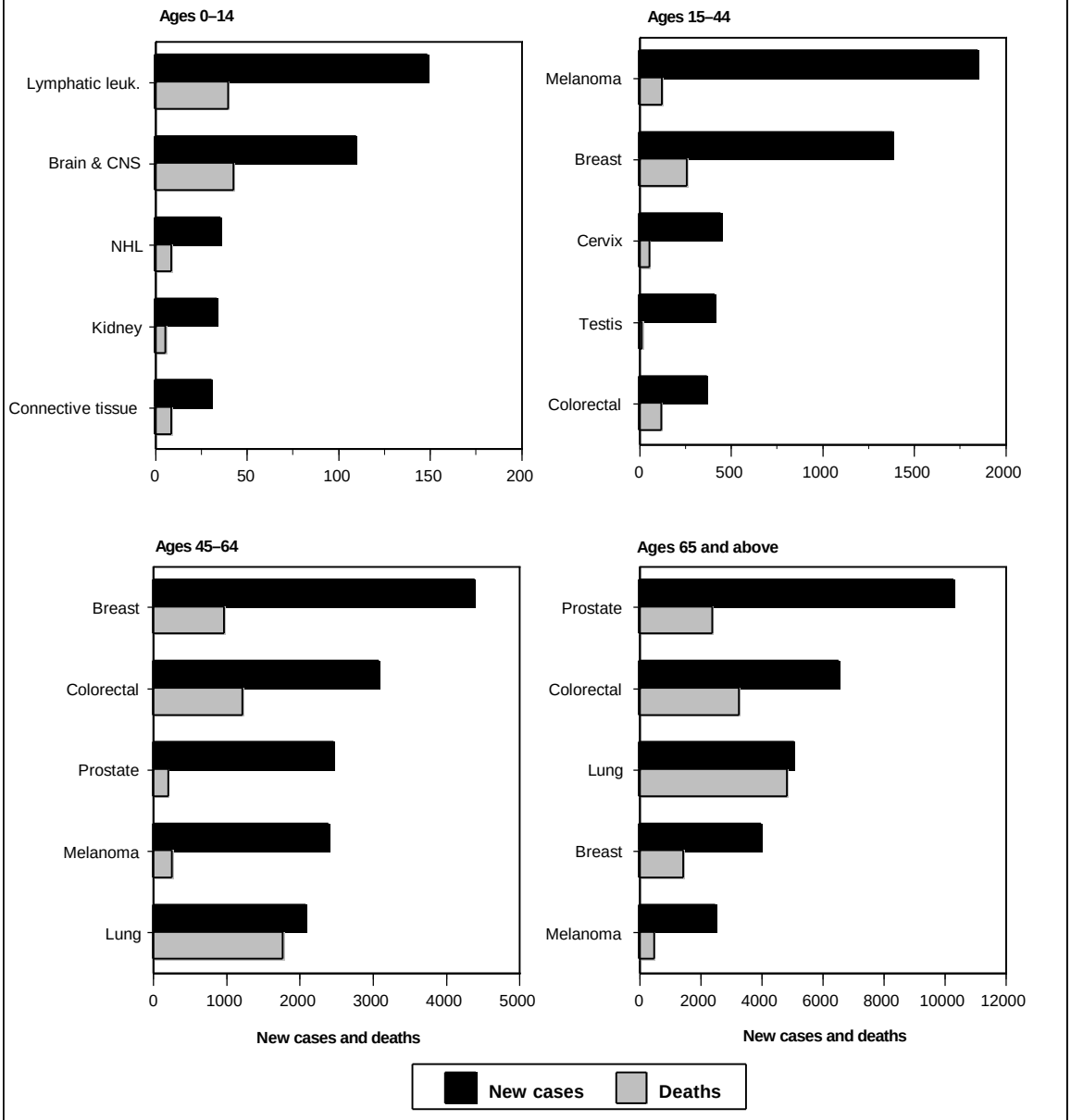


Note: NHL refers to Non-Hodgkin's lymphoma, CNS refers to central nervous system.

Source: Cancer in Australia 1991–1994 (with Projections to 1999), Australian Institute of Health and Welfare, 1998

Figure 1: Most frequently occurring cancers, Australia, 1994

Most frequently occurring cancers by age group



Note: NHL refers to Non-Hodgkin's lymphoma, CNS refers to central nervous system.

Source: Cancer in Australia 1991–1994 (with Projections to 1999), Australian Institute of Health and Welfare, 1998

Figure 2: Most frequently occurring cancers by age group, ranked by number of new cases (persons), Australia, 1994

Age and sex differences

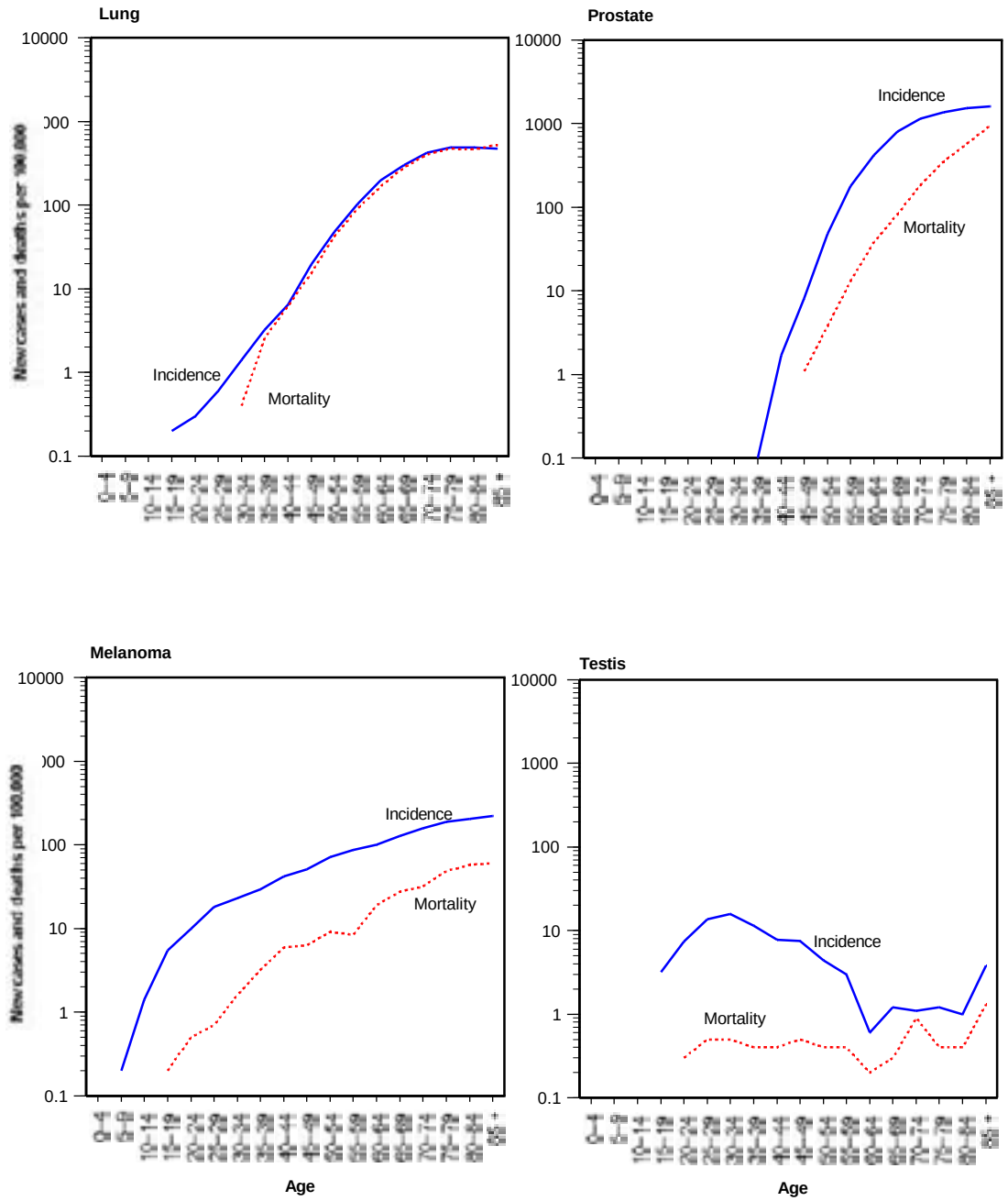
Cancer occurs more commonly in males than females. The age-standardised incidence rate in 1994 for all cancers (excluding non-melanocytic skin cancers) was 515.9 new cases per 100,000 for males and 333.8 per 100,000 for females, resulting in an age-adjusted sex ratio of 1.5 male cases to every female cancer case. Males have an excess of cases for every major cancer site, except for cancers of the breast, gallbladder, thyroid, other nervous system, and monocytic leukaemia.

The risk of cancer increases with age. The age-standardised incidence rate in 1994 for all cancers (excluding non-melanocytic skin cancers) was 14.1 per 100,000 for people aged less than 15 years; 88.2 per 100,000 for 15–44 year olds; 654.6 per 100,000 for 45–64 year olds; and 2,106.5 per 100,000 for people aged 65 years and over.

Of people diagnosed with cancer, 0.7% of all cancers (excluding non-melanocytic skin cancers) occur in those aged less than 15 years, 9.8% in the 15–44 age group, 30.4% in the 45–64 age group, and 59.1% in those aged 65 and over. While the pattern of deaths across age groups is similar to that of incidence, a larger proportion (70%) of cancer deaths occur in those aged 65 and over. Cervical and testicular cancer are exceptions to the age pattern with the number of cases in the 15–44 age group exceeding that in the 45–64 and 65 and over age groups.

Age-specific incidence and mortality rates vary depending upon the cancer site (Figures 3–6). For example, lung cancer incidence and mortality rates parallel each other closely, rising sharply from ages 20–24 through to 80–84 before dropping in the oldest age group, whereas the age-specific incidence rates for melanoma of the skin rise much more steadily across the whole age range.

Age-specific incidence and mortality rates—males

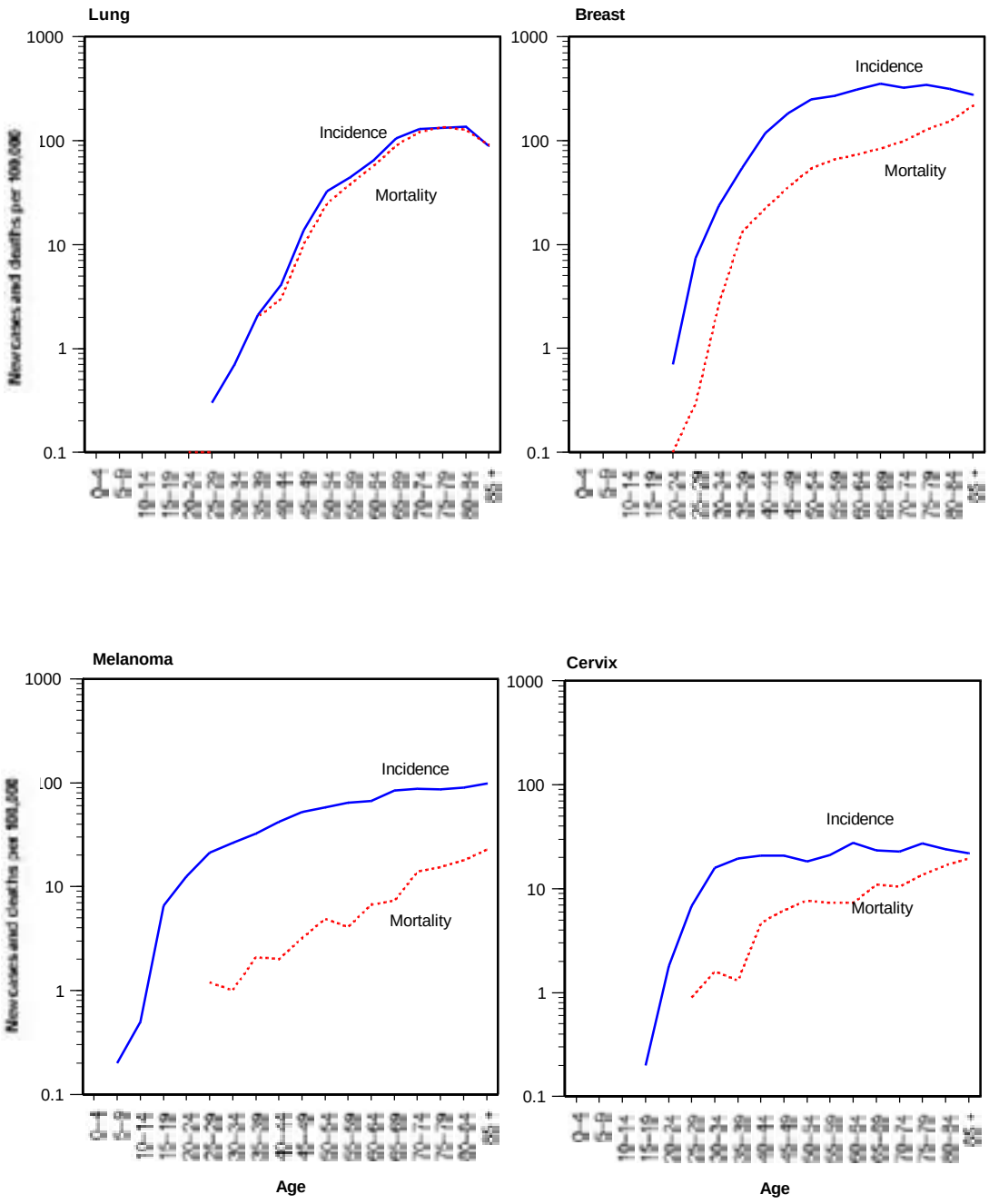


Note: Mortality data for cancer of the testis have been averaged over 1990-1994 to provide more stable estimates.

Source: Cancer in Australia 1991–1994 (with Projections to 1999), Australian Institute of Health and Welfare, 1998.

Figure 3: Age-specific incidence and mortality rates for melanoma and cancers of the lung, prostate and testis in males, Australia, 1994

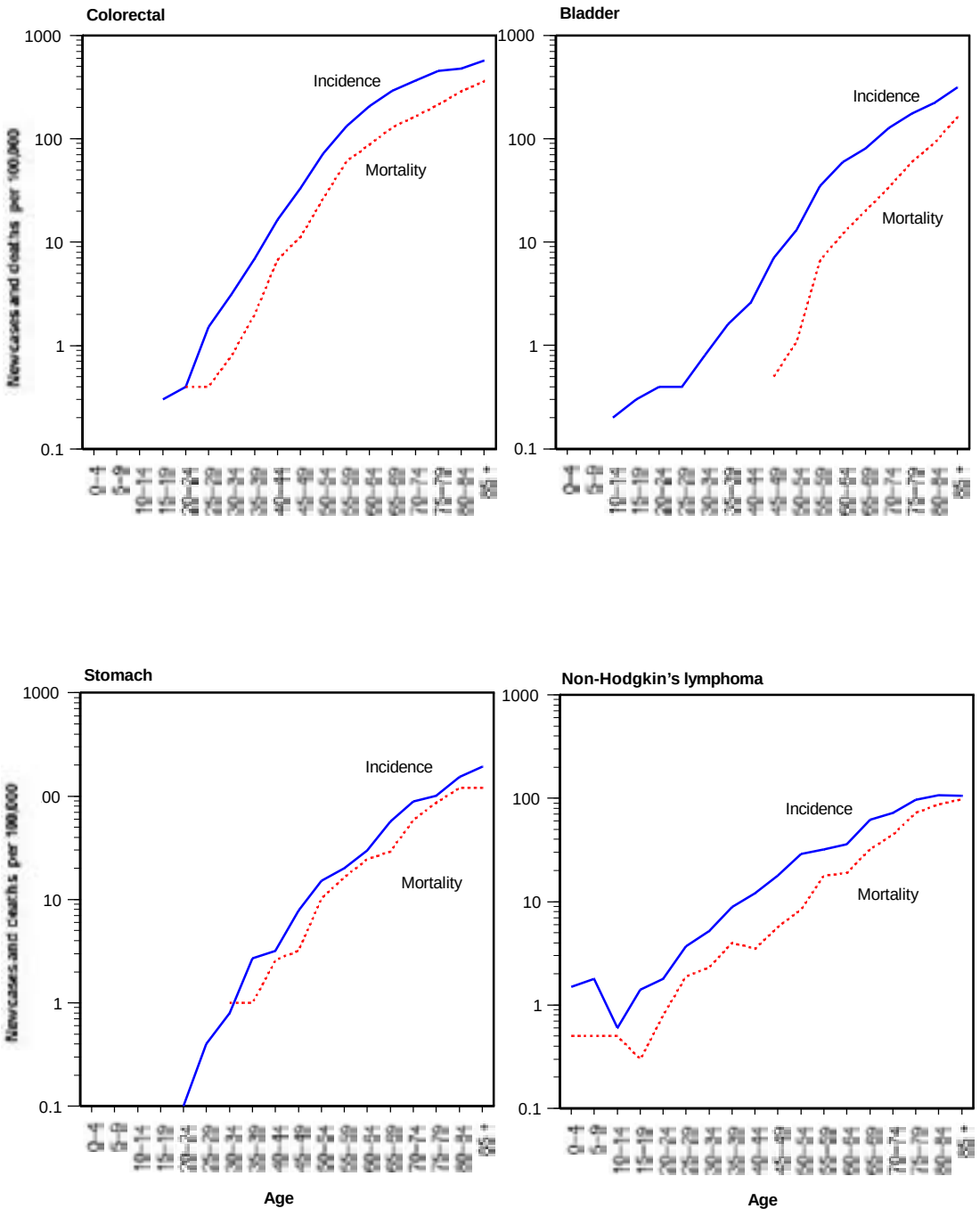
Age-specific incidence and mortality rates—females



Source: Cancer in Australia 1991–1994 (with Projections to 1999), Australian Institute of Health and Welfare, 1998.

Figure 4: Age-specific incidence and mortality rates for melanoma and cancers of the lung, breast and cervix in females, Australia, 1994

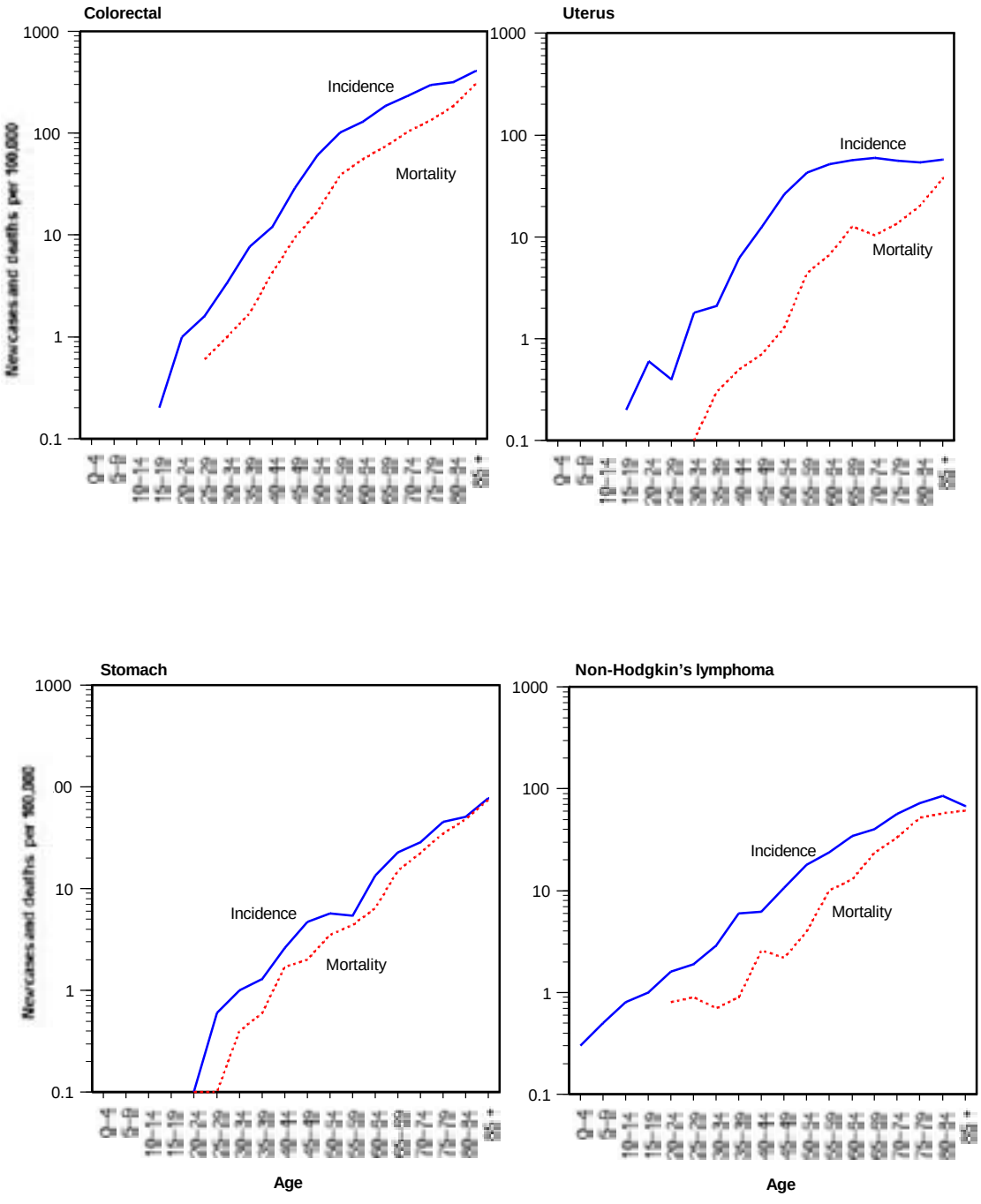
Age-specific incidence and mortality rates—males



Source: Cancer in Australia 1991–1994 (with Projections to 1999), Australian Institute of Health and Welfare, 1998.

Figure 5: Age-specific incidence and mortality rates for colorectal cancer, cancers of the bladder and stomach, and non-Hodgkin's lymphoma in males, Australia, 1994

Age-specific incidence and mortality rates—females



Source: Cancer in Australia 1991–1994 (with Projections to 1999), Australian Institute of Health and Welfare, 1998.

Figure 6: Age-specific incidence and mortality rates for colorectal cancer, cancers of the bladder and stomach, and non-Hodgkin's lymphoma in females, Australia, 1994

Alcohol- and smoking-related cancers

Alcohol and smoking are risk factors for some cancers. In 1994, alcohol-related cancers accounted for 0.8% of all new cancers, while smoking-related cancers accounted for 12.6%. Smoking-related cancers also accounted for a large proportion of deaths from cancer in 1994 (20.8% of all cancer deaths). These data and those in Tables 32–33 are derived from a series of age- and sex-specific aetiological fractions developed by English et al. (1995) and the cancer incidence estimates for specific cancer sites for 1991 to 1994. These fractions are based on an analysis of international and Australian studies and estimate the probability that a specific agent (alcohol or tobacco) causes a specific disease (cancer). The cancers thought to be directly attributable to smoking (excludes passive smoking) and alcohol are listed in Table 2.

It is estimated that 641 new cases of cancer were directly attributable to hazardous and harmful alcohol consumption in 1994 at a rate of 3.5 per 100,000, as were 300 deaths at a rate of 1.6 per 100,000. While other cancers may be indirectly caused by alcohol consumption in combination with other risk factors, alcohol is believed to be the primary causative agent for differing proportions of specific cancers. The mechanism by which alcohol causes cancer has not been fully determined, but the major metabolite of ethanol has been shown to be carcinogenic in animal experiments (English et al. 1995). The lifetime risk of an alcohol-related cancer is 1 in 242 for males and 1 in 294 for females. Between 1989 and 1994, the incidence rate for alcohol-related cancers in males fell by an average of 1.5% per annum, while the rate in females increased by 3.5% per annum.

Smoking-related cancers account for 17.0% of all cancers in males and 7.0% of all cancers in females. This large difference is attributable to the higher rates of smoking among men than women in the past 30 years. Twenty-five years ago smoking rates in men were almost double those in women. However, this is no longer the case with the latest estimates indicating that 27.3% of men and 22.7% of women aged over 18 years currently smoke (AIHW 1995). Organs associated with the respiratory system are the ones most affected by cigarette smoke, probably as a result of the known carcinogens in cigarette smoke such as aromatic amines (Table 2). Epidemiological evidence indicates that other cancers, including cancer of the upper digestive tract, bladder, renal pelvis and pancreas are also associated with cigarette smoking.

Cigarette smoking is estimated to have caused 9,539 new cases of cancer (51.9 new cases per 100,000) and 6,952 deaths (37.7 per 100,000) in 1994. Between 1989 and 1994, the male incidence rate for smoking-related cancers fell by an average of 1.2% per year, while the rate for females rose marginally at 0.3% per year, both probably a reflection of the changing lung (Figure 10) and oesophagus cancer incidence rates. Over the same period, mortality rates fell by 1.7% per annum for males and rose by 0.4% per annum for females. These trends in incidence and mortality rates for smoking-related cancers are depicted in Figure 10.

Table 2: Per cent of cancers attributable to alcohol and smoking

	Males (%)	Females (%)
Alcohol-related cancers		
Oropharynx	21	8
Oesophagus	14	6
Liver	18	12
Larynx	21	13
Female breast cancer	—	3
Smoking-related cancers		
Oropharynx	57	51
Oesophagus	54	46
Stomach	14	11
Anus	48	41
Pancreas	24	19
Larynx	73	66
Lung	84	77
Uterus	—	10
Cervix	—	19
Vulva	—	40
Penis	30	—
Bladder	43	36
Renal parenchyma	28	21
Renal pelvis	55	48

Source: English et al. (1995).

Cancer rates in the States and Territories 1990–1994

Cancer incidence and mortality are reported here for the combined period 1990–1994 for all States and Territories. However, incidence data for Queensland are preliminary estimates for 1990–1994 combined and are based on data provided by the Queensland cancer registry. They are expected to be revised in June 1998. For some individual cancer sites Queensland's preliminary incidence rates are the highest in Australia; it is anticipated that for some of these sites the rates will be revised downward. This revision is not expected to affect melanoma or breast cancer rates as they have been the subject of a special registration process.

Cancer incidence varies between States and Territories. Tasmania reported the highest incidence rate for all cancers (excluding non-melanocytic skin cancers) among males (502.7 per 100,000), while the Northern Territory reported the lowest with 354.1 cases per 100,000. For females, Western Australia reported the highest rate (326.7 per 100,000) and the Northern Territory reported the lowest (282.4 per 100,000) (Figure 7, Table 14).

The cancer mortality rates reported for males across the States and Territories ranged from 224.0 per 100,000 in Western Australia to 262.9 per 100,000 in the Australian Capital Territory and 251.6 per 100,000 in the Northern Territory (Table 14). For females, the mortality rates varied from a low of 132.0 per 100,000 in Queensland to a high of 177.1 per 100,000 in the Northern Territory.

There is more variation among the States and Territories when selected cancer sites are examined. The cancer with the greatest variation between States and Territories is melanoma. Melanoma incidence rates are highest in Queensland and lowest in the Northern

Territory for both males and females (Figure 7, Table 19). The high incidence rate in Queensland has been consistent since the early 1980s, and is currently the focus of a major epidemiological study. Despite the large differences in melanoma incidence, there is relatively little variation in mortality rates between States and Territories (Figure 7).

Lung cancer incidence rates are highest for males in Tasmania and the Northern Territory (approximately 69 cases per 100,000), and for females in the Northern Territory (39.0 per 100,000) (Table 18). The lowest lung cancer incidence rates are reported for males in the Australian Capital Territory (50.5 per 100,000) and for females in Queensland (19.3 per 100,000) and New South Wales and South Australia (both 21.0 per 100,000).

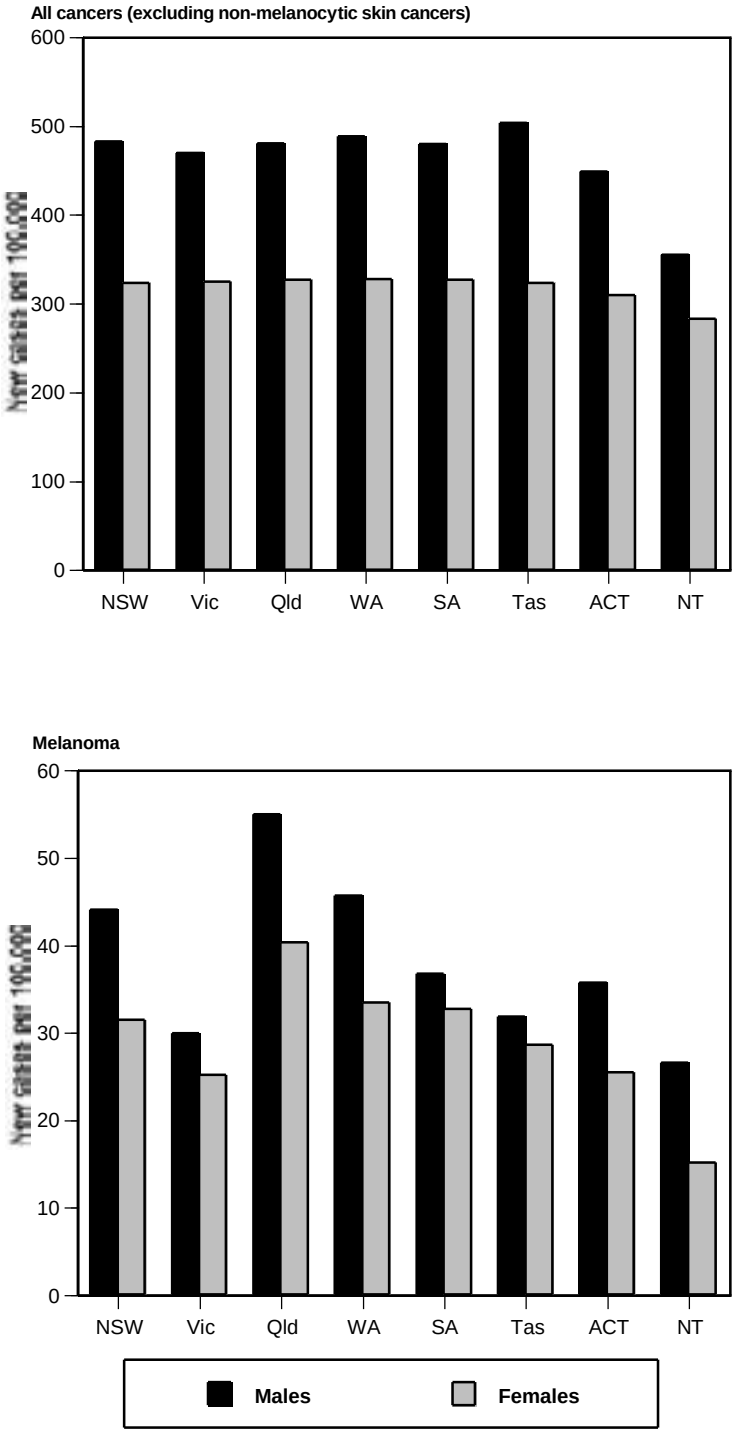
Queensland and Western Australia reported the highest incidence rates for breast cancer (92.8 per 100,000 and 91.9 per 100,000 respectively), while the Northern Territory reported the lowest incidence rate (59.6 per 100,000) (Table 20). Tasmania and Western Australia reported high rates of prostate cancer (approximately 129 cases per 100,000) while significantly lower rates were reported in Victoria (105.6 per 100,000) and the Northern Territory (53.8 per 100,000) (Table 24). These variations in prostate cancer incidence might be explained by differences in the time and rate of uptake of prostate specific antigen (PSA) testing in the States and Territories.

State and Territory variations in smoking-related cancers generally reflect those observed for lung cancer (Table 33). Tasmania (98.3 per 100,000) and the Northern Territory (95.5 per 100,000) reported the highest incidence rates for males, and the Northern Territory (35.8 per 100,000) the highest for females. The Australian Capital Territory reported the lowest smoking-related cancer incidence rates for both males (74.7 per 100,000) and females (22.2 per 100,000). Death rates from smoking-related cancers were highest in the Northern Territory for both males and females.

These patterns of incidence probably reflect smoking behaviour approximately 10–20 years ago, due to the lag-time between exposure to carcinogens in the tobacco smoke and the diagnosis of cancer. Differentials in smoking rates between the States and Territories reported in the 1995 National Health Survey (ABS 1997b) are likely to affect smoking-related cancer incidence rates in the future. Tasmania (57.3%) reported the highest proportion of current and ex-smokers followed by the Northern Territory with 56.0%. The lowest smoking and ex-smoking rates were found in New South Wales at 49.2%. In the other States and the Australian Capital Territory the proportions of smokers and ex-smokers ranged from 50–53%.

Differences in State and Territory cancer incidence rates may also be explained by variations in underlying cancer risk, the availability and utilisation of diagnostic procedures, reporting and coding inconsistencies, and normal incidence rate fluctuations. A case in point is bladder cancer (Table 26), where State and Territory comparisons vary by as much as 100%. This is largely due to differences in local coding practices, particularly in regard to the inclusion or exclusion of tumours of uncertain behaviour. The AACR plans to address this issue in the near future by standardising coding practices. Care should be taken when interpreting incidence rates, especially for less common cancers and for States and Territories with small populations. To reduce the problems of statistical variation due to a small number of cases, the numbers and rates presented for the States and Territories in Tables 14 to 33 in this publication, and in the tables on floppy disk, are annual averages of 5-year periods (1987–1991, 1988–1992, 1989–1993 and 1990–1994). Therefore these data will not correspond to the annual data published by the individual State and Territory cancer registries. For annual sex- and cancer-specific data, or data cross-classified by other variables (e.g. age, geographic area), the State and Territory cancer registries should be contacted directly (see page 84 for contact details).

All cancers



Note: Data for Queensland are preliminary only.

Source: Cancer in Australia 1991–1994 (with Projections to 1999), Australian Institute of Health and Welfare, 1998.

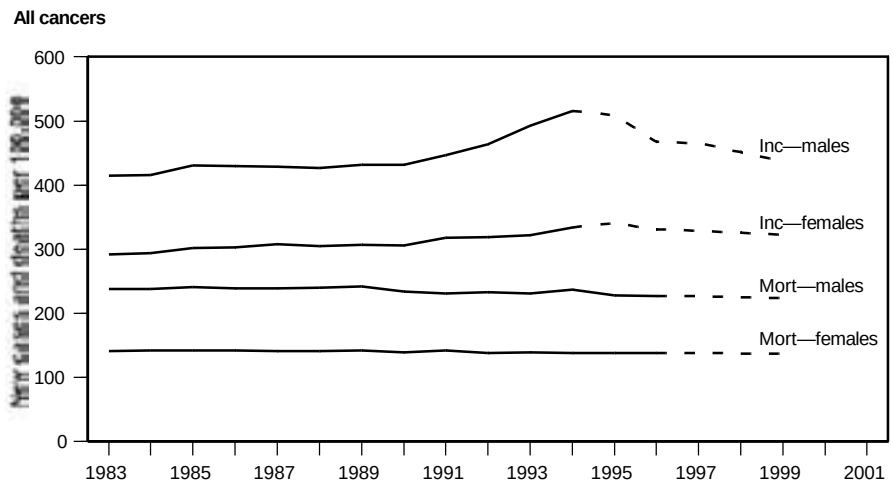
Figure 7: Age-standardised incidence rates for all cancers (excluding non-melanocytic skin cancers) and for melanoma by State and Territory, 1990–1994

3 National trends and projections in cancer incidence and mortality

Trends

National cancer incidence and mortality rates for the most common cancer sites are presented in Figures 8–14 for the period 1983–1999. On the graphs the solid lines represent available data (incidence to 1994 and mortality to 1996) while the broken lines represent projections (incidence for 1995–1999 and mortality for 1997–1999). Projections are based on knowledge of past incidence and mortality patterns and population projections (see Appendix C). Additional incidence data for breast and prostate cancers are available for some States and Territories for 1995 and 1996 and are used to supplement the projections for these two cancers (see 'Guide to interpreting incidence and mortality tables' page 33).

The trends in incidence and mortality data vary with cancer site. Some have shown an increase since 1983 while others have remained relatively stable or decreased. Between 1983 and 1994, age-standardised death rates for all cancers combined (excluding non-melanocytic skin cancers) have remained relatively stable, but incidence rates increased by 25% for males and by 14% for females (Figure 8). Projections to 1999 indicate that incidence rates will decline in both males and females.



Source: Cancer in Australia 1991–1994 (with Projections to 1999), Australian Institute of Health and Welfare, 1998.

Figure 8: Trends in age-standardised incidence and mortality rates for all cancers (excluding non-melanocytic skin cancers), Australia, 1983–1999

Between 1990 and 1994 there was a dramatic rise in the number of new cases of prostate cancer registered (Figure 9) and this sudden upward trend has been attributed to increased detection of the disease through increased investigations, particularly the introduction of prostate specific antigen (PSA) testing. However, in States with data available for 1995 and 1996, prostate cancer incidence rates have fallen by 26% since 1994. These data lead to prediction of a further reduction by 1999. PSA tests are specifically designed to identify cancers before the onset of clinical symptoms. Many of these prevalent cancers may not show any symptoms, and therefore would not be detected except for PSA testing. Much of the rise in the incidence rates of prostate cancer can be attributed to detection of these prevalent cancers. The recent decline in incidence rates indicates a return towards the underlying incidence rate, removing the effect of these previously undetected cases. The incidence rate is also declining as the number of PSA tests conducted also fall, reducing the number of prevalent cases detected (Smith et al. 1998; Threlfall et al. (in press)). The death rate from prostate cancer, which is significantly lower than the incidence rate, increased between 1983 and 1994 but has since fallen. This results in a small decrease in the projected rate for 1999.

Among females, breast cancer is the most frequently diagnosed cancer and it is the most common cause of cancer-related death. The incidence of breast cancer in females rose from 71 cases per 100,000 in 1983 to 101 cases per 100,000 in 1994, an average annual rise of 3.3% (Figure 9). Based on the changes in incidence between 1994 and 1996, breast cancer incidence is predicted to decrease slightly by 1999. However, it was noted that this projected fall consisted of increases in incidence rates for women aged between 30 and 59 years but decreases for women aged 60 years and over. This predicted trend is based on early downturns in incidence rates in some States and Territories and the knowledge that the number of cancers detected by the breast cancer screening program is likely to decrease as an increasing proportion of women have been screened (diagnosing a large proportion of prevalent cancers) and are now having a repeat screen (where incident cancers are detected). Despite this national trend, there may be some States and Territories where this effect has not yet occurred due to the staged introduction of screening across Australia. The breast cancer mortality rate has been relatively stable since 1983 and is expected to remain so. However, the mortality projection does not take into account any effect of breast cancer screening, as there are presently no national data on which to model this effect.

For colorectal cancer, there were marginal increases in incidence among both males and females between 1983 and 1994 (Figure 9). Trends since the early 1990s indicate that incidence rates will continue to increase slowly to 1999. In comparison, mortality rates have fallen slightly since 1983.

Between 1983 and 1994, the incidence of lung cancer among males fell by an average of 1.7% per year (Figure 10). Mortality from lung cancer in males also fell at a similar rate and, as expected, incidence and mortality rates parallel each other closely. These declining rates are attributed to decreased tobacco smoking among men. In contrast, lung cancer incidence among females increased at an average rate of 2% per annum to 1994, and rates are expected to continue to rise. However, the increase in lung cancer incidence is predominantly in women aged 65 years and over, while rates in younger women have generally remained stable or fallen. The death rate from lung cancer among females is also increasing.

The incidence rates for melanoma among males and females increased sharply between 1983 and 1988, levelled until 1991 and have increased at a lower rate since then (Figure 10). The early high increases are partly due to improved notification. Mortality rates for melanoma have changed very little since 1983.

The incidence of non-Hodgkin's lymphoma increased by 30% for males and by 21% for females from 1983 to 1994 (Figure 11). Some of this rise in incidence may be linked to an increased number of cases of non-Hodgkin's lymphoma among people with HIV. A similar trend has been observed for Kaposi's sarcoma in HIV-affected people. The mortality rate in females with non-Hodgkin's lymphoma has risen steadily since 1983, whereas in males the mortality rate increased between 1990 and 1994 but has since fallen.

Between 1983 and 1991 the incidence of bladder cancer decreased in males; however, beyond 1991 it increased and this pattern has continued for the projections (Figure 11). It is likely that the increase in incidence since 1991 is a result of the increased use of screening for prostate cancer leading to a diagnosis of bladder cancer as part of the diagnostic work-up. In contrast, the incidence rate in females declined marginally between 1983 and 1994 and is now expected to remain stable. Despite fluctuations in the incidence of bladder cancer in males, mortality rates remained relatively static throughout the period.

Stomach cancer incidence fell by 26% in males over the period 1983–1994 (Figure 11). The fall in the incidence rate for females over the same period was even higher at 34%. Mortality rates also decreased substantially for both sexes.

The incidence rate for leukaemias in females increased slightly between 1983 and 1994, and is projected to continue to rise (Figure 12). At the same time the mortality rate decreased marginally, and is expected to continue to decline. There were fluctuations in the incidence rates in males; however, generally an inverse trend to the female pattern is seen in leukaemias in males. As with the female rates, these changes are relatively small.

Recently there has been debate surrounding the effect of mobile phone use and placement of mobile phone towers on the incidence of brain cancer. Although these data cannot answer this issue directly, it is able to indicate general patterns in Australia and set baselines for further study. Trends in brain cancer in males and females between 1983 and 1994 show only minor increases in incidence, with most of the increase being attributable to those aged over 85 years. Some of this increase may be attributable to the detection of cancer of the brain when investigating stroke using imaging technologies, as the use of these technologies has increased in recent years. The trend in incidence rates in the early 1990s for males and females suggests marginal decreases in incidence to 1999. Between 1992 and 1996, the mortality rate rose slightly in males and it is expected that there will be little change to 1999. In contrast, the mortality rate in females has fallen since 1992 and this trend is predicted to continue to 1999 (Figure 12).

There was little change in incidence or mortality rates for cancer of the pancreas between 1983 and 1994. Trends since the early 1990s indicate that incidence rates will rise by 1999 in both males and females, while mortality rates will fall slightly in males but remain fairly stable in females (Figure 12).

The incidence rate for cancer of the uterus increased by 13% between 1983 and 1994 (Figure 13). Over the same period, there were falls in the age-standardised incidence rates for cancers of the cervix and ovary, by 13% and 3% respectively (Figure 13). Mortality rates for cancer of the uterus and ovary remained relatively stable between 1983 and 1996, while mortality from cancer of the cervix fell by 35%. Some of the decline in mortality from cancer of the cervix can be attributed to the population-based cervical cancer screening program.

'Cancer of unknown primary site' is a category that captures cancer diagnoses which cannot be attributed to a particular body site. While some of these cancers have common features, at least in terms of aetiology, behaviour and outcome, others are a mixed collection. This makes it difficult to interpret with certainty the patterns of this cancer, particularly for mortality where often little histological evidence is available to identify a cancer site, and

therefore an accumulation of cancers occurs in this category. However, given that this cancer group represents approximately 4% of new cases and 6% of deaths it is important to know the current and likely future trends. Between 1983 and 1991 there was little variation in incidence or mortality; however, since 1991, in both males and females a small decline was apparent in the incidence rates which is projected to continue through to 1999. However, this is contrasted by a small rise in mortality rates for males and females since 1994
(Figure 14).

Between 1983 and 1994, incidence rates for cancer of the kidney rose by 1.2% per annum for males and 1.6% per annum for females (Figure 14). Mortality rates for cancer of the kidney have changed very little in males since 1983 but have increased slightly in females.

The incidence of testicular cancer has increased steadily since 1987 (Figure 14), rising by an average of 4.3% per annum between 1987 and 1994. Projections indicate this trend will continue. Despite the increase in the incidence rate, the mortality rate for cancer of the testis is low and is not expected to change.

Projections

The projections of cancer incidence and mortality (Tables 4 and 5) to 1999 show an increasing number of new cases and deaths for all cancers combined (722 additional new cases and 3,156 additional deaths since 1994) and for many of the most common cancer sites. This was expected as the population increased by 1.2% per annum over this period and the proportion of those aged over 65, who are at high risk of cancer, increased from 11.8% to 12.2%. The overall population increase was higher than the estimated growth in new cancer cases.

Projections by sex, however, indicate a rise in the number of new cases of all cancers for females (2,340 additional new cases) and a fall for males (1,620 fewer cases). This projected fall in new cases of cancer in males results from the expected fall in prostate cancer incidence based on data from Victoria, Western Australia, South Australia and Tasmania for 1995 and 1996. However, the projections indicate increases in the number of new cases for all other common cancer sites in males. Specifically, the biggest projected increases in the number of new cases in males between 1994 and 1999 are for melanoma (approximately 1,000 new cases) and colorectal cancer (approximately 900 new cases). In females, the largest increases are projected for breast cancer (approximately 850 new cases), colorectal cancer (approximately 700 new cases) and melanoma (approximately 700 new cases). In some instances the projected number of new cases or deaths for some cancers may be increasing even though the incidence or mortality rate is falling, for example lung cancer incidence in males or breast cancer incidence in females. This can be explained by the increase in and ageing of the population.

It should be noted that, while in terms of numbers of cases or deaths the percentage change in the age-standardised rate may be relatively large, the impact will depend on how common the cancer is in the community. For example, a 2.1% increase in melanoma incidence in females resulted in a projected increase of approximately 700 new cases whereas a similar percentage increase in cancer of the pancreas (2.2%) resulted in only 180 additional cases. The increase or decrease in these cancers may not necessarily be shared across both sexes, or age groups within each sex. For example, the 0.5% projected decrease in breast cancer incidence consisted of increases in incidence rates for women aged between 30 and 59 years but decreases for women aged 60 years and over.

The largest projected increases in the age-standardised incidence rates in males between 1994 and 1999 are for melanoma (2.8% per annum), multiple myeloma (1.7% per annum), non-Hodgkin's lymphoma (1.7% per annum), and cancer of the bladder (1.4% per annum) (Table 3). Among females, the largest increases are non-Hodgkin's lymphoma (2.4% per annum), cancers of the pancreas (2.2% per annum) and uterus (2.2% per annum), and melanoma (2.1% per annum).

The age-standardised incidence rate for prostate cancer is estimated to decline by an average of 7.6% per annum between 1994 and 1999. This would mean approximately 2,750 fewer cases of prostate cancer diagnosed in 1999 compared to 1994. In males, declines are also projected for lymphatic leukaemia (–1.8%) and cancers of the larynx and lung (both –1.5% per annum). In females, falls in age-standardised incidence rates are projected for multiple myeloma (–5.8% per annum), cancer of the cervix (–2.8% per annum) and breast cancer (–0.5%). Age-standardised incidence rates for cancer of the stomach are projected to fall in both males and females.

Changes in the mortality rates over the period 1994–1999 are generally similar to those in the incidence rates, although of a smaller magnitude. The incidence and mortality trends over the period 1983–1994 and the projections to 1999 are presented in Figures 8–14.

Table 3: Projected changes in incidence and mortality rates 1994–1999 by sex, Australia

	Incidence		Mortality	
	Per cent change per annum 1994–1999		Per cent change per annum 1994–1999	
Cancer description	Males	Females	Males	Females
Oesophagus	1.0	1.8	1.3	1.9
Stomach	–1.4	–3.0	–3.5	–2.1
Colorectal	0.6	0.4	–1.4	–1.7
Pancreas	0.5	2.2	–1.5	1.9
Larynx	–1.5	–3.6	–4.2	–3.2
Lung	–1.5	1.6	–2.0	2.0
Melanoma	2.8	2.1	–0.4	–0.2
Breast	—	–0.5	—	–1.3
Cervix	—	–2.8	—	–4.1
Uterus	—	2.2	—	3.7
Ovary	—	0.4	—	1.0
Prostate	–7.6	—	–1.2	—
Bladder	1.4	–0.3	1.0	–0.6
Kidney	0.8	1.3	0.2	0.6
Brain	–0.5	–0.3	0.6	–3.2
Unknown primary	–1.9	–3.7	–0.7	1.3
Non-Hodgkin's lymphoma	1.7	2.4	–3.1	2.4
Multiple myeloma	1.7	–5.8	–0.1	–3.7
Lymphatic leukaemia	–1.8	–1.3	–0.6	–5.6
Smoking-related cancers	–0.9	0.1	–1.8	1.3
All cancers (excluding non-melanocytic skin cancers)	–3.2	–0.7	–1.1	–0.2

Table 4: Projections of incidence for selected cancer sites, Australia, 1995–1999

ICD-9	Cancer description	New cases*					Age-standardised incidence rates*				
		1995	1996	1997	1998	1999	1995	1996	1997	1998	1999
Males											
140–208	All cancers (excluding NMSC)	43,230	40,770	41,650	41,340	41,000	509.2	467.6	465.5	451.4	437.4
150	Oesophagus	590	590	590	590	590	6.9	7.0	7.1	7.2	7.3
151	Stomach	1,220	1,240	1,250	1,260	1,270	14.6	14.4	14.2	14.0	13.8
153–154	Colorectal	5,600	5,780	5,960	6,130	6,320	66.0	66.3	66.7	67.1	67.4
157	Pancreas	790	820	850	870	900	9.3	9.4	9.5	9.5	9.6
161	Larynx	510	510	510	510	510	5.9	5.7	5.5	5.4	5.2
162	Lung	5,150	5,230	5,300	5,370	5,440	61.1	60.5	59.8	59.2	58.6
172	Melanoma	3,920	4,110	4,310	4,510	4,720	44.6	45.7	46.8	48.0	49.1
185	Prostate	12,580	10,040	10,840	10,460	10,040	150.5	117.1	122.4	114.7	107.0
188	Bladder	1,830	1,910	2,000	2,090	2,180	22.1	22.5	22.9	23.3	23.7
189	Kidney	1,070	1,110	1,140	1,180	1,210	12.4	12.5	12.6	12.7	12.7
191	Brain	670	680	700	710	720	7.6	7.6	7.6	7.6	7.6
195–199	Unknown primary	1,560	1,570	1,570	1,570	1,570	18.8	18.4	18.0	17.7	17.3
200+202	Non-Hodgkin's lymphoma	1,570	1,630	1,690	1,740	1,800	18.0	18.2	18.4	18.6	18.7
203	Multiple myeloma	450	470	490	510	530	5.4	5.5	5.6	5.7	5.8
204	Lymphatic leukaemia	460	460	470	480	490	5.4	5.4	5.3	5.3	5.2
	Smoking-related cancers	7,320	7,440	7,550	7,660	7,780	85.8	85.1	84.5	83.8	83.1
Females											
140–208	All cancers (excluding NMSC)	34,320	34,090	34,590	34,900	35,220	340.8	330.9	329.0	325.6	322.3
150	Oesophagus	360	360	360	360	360	3.3	3.3	3.4	3.4	3.5
151	Stomach	610	610	610	600	600	5.6	5.5	5.4	5.2	5.1
153–154	Colorectal	4,720	4,860	5,010	5,150	5,300	45.0	45.2	45.4	45.6	45.8
157	Pancreas	760	790	820	860	890	7.0	7.1	7.2	7.4	7.5
162	Lung	2,200	2,290	2,380	2,480	2,590	21.4	21.7	22.0	22.4	22.8
172	Melanoma	3,240	3,370	3,510	3,640	3,780	33.4	34.0	34.7	35.3	35.9
174	Breast	10,370	9,950	10,270	10,400	10,540	105.7	99.2	100.2	99.4	98.6
180	Cervix	1,070	1,070	1,070	1,070	1,070	11.2	11.0	10.8	10.6	10.4
179+182	Uterus	1,360	1,420	1,480	1,550	1,620	13.7	14.0	14.3	14.6	14.9
183	Ovary	1,080	1,110	1,130	1,150	1,180	10.9	11.0	11.0	11.0	11.0
188	Bladder	590	610	630	650	670	5.6	5.6	5.6	5.6	5.6
189	Kidney	710	730	750	760	790	7.0	7.0	7.0	7.0	7.1
191	Brain	520	530	530	540	550	5.3	5.3	5.3	5.2	5.2
195–199	Unknown primary	1,330	1,310	1,300	1,280	1,250	12.2	11.7	11.2	10.7	10.2
200+202	Non-Hodgkin's lymphoma	1,290	1,350	1,420	1,480	1,550	12.6	12.9	13.2	13.4	13.7
203	Multiple myeloma	300	290	290	280	270	2.8	2.6	2.5	2.3	2.2
204	Lymphatic leukaemia	330	330	340	340	350	3.3	3.3	3.3	3.2	3.2
	Smoking-related cancers	2,350	2,410	2,470	2,520	2,580	23.4	23.4	23.5	23.5	23.5

Note: Rates are expressed per 100,000 population and age-standardised to the Australian 1991 Population (AS Rate).

* Projected number of new cases are rounded to the nearest 10.

Source: Cancer in Australia 1991–1994 (with Projections to 1999), Australian Institute of Health and Welfare, 1998.

Table 5: Projections of mortality for selected cancer sites, Australia, 1995–1999

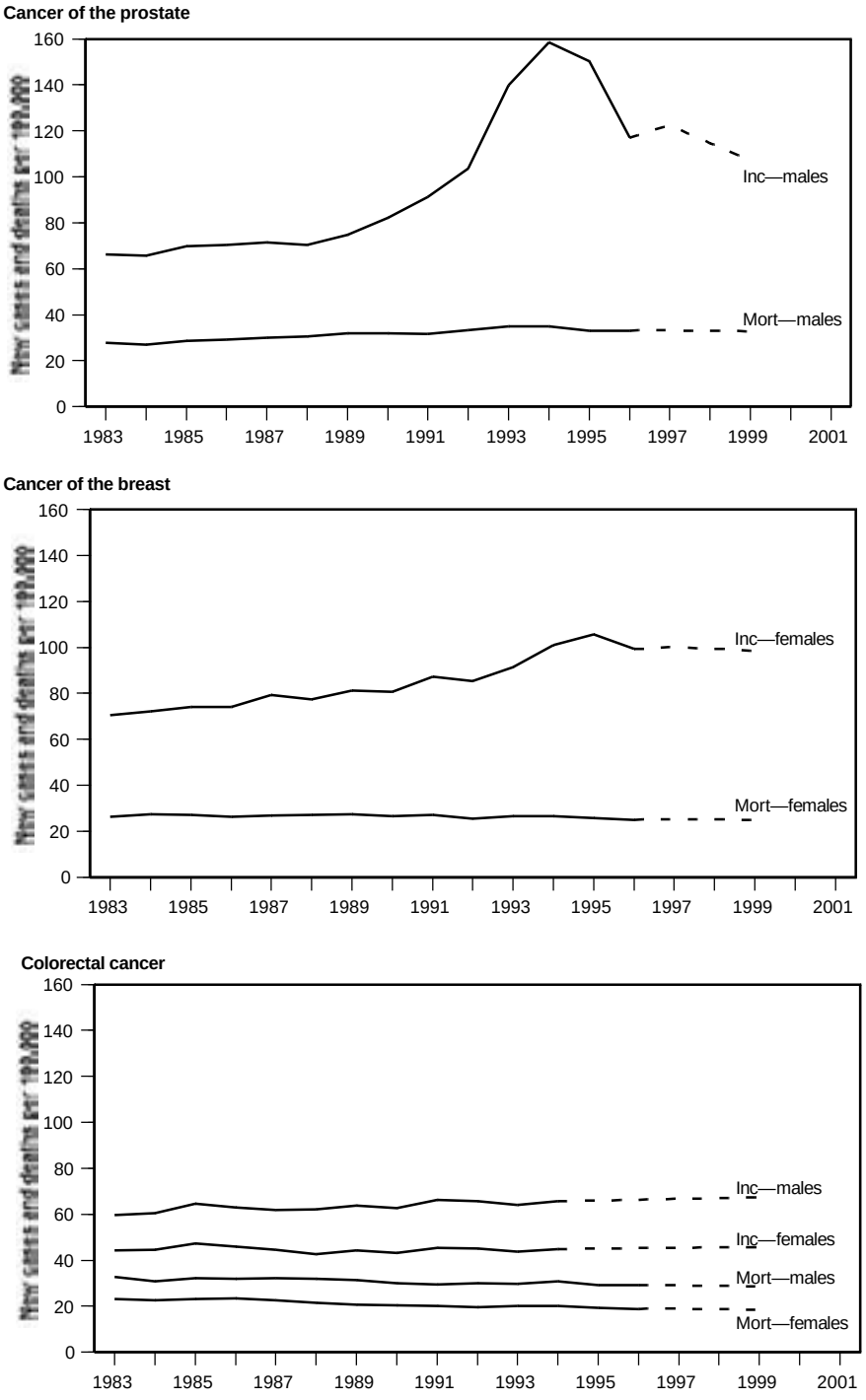
ICD-9	Cancer description	Deaths*					Age-standardised death rates*				
		1995	1996	1997	1998	1999	1995	1996	1997	1998	1999
Males											
140–208	All cancers (excluding NMSC)	18,885	19,333	19,830	20,190	20,580	228.2	227.1	226.8	225.3	223.9
150	Oesophagus	615	616	640	660	690	7.3	7.2	7.3	7.3	7.4
151	Stomach	818	749	800	800	800	10.0	8.8	9.1	8.8	8.6
153–154	Colorectal	2,418	2,506	2,560	2,610	2,650	29.1	29.2	29.1	28.9	28.7
157	Pancreas	776	776	810	820	830	9.3	9.0	9.1	9.1	9.0
161	Larynx	203	219	200	190	190	2.4	2.5	2.2	2.1	2.0
162	Lung	4,697	4,773	4,840	4,880	4,930	56.0	55.4	54.9	54.1	53.3
172	Melanoma	601	586	630	650	670	7.1	6.7	7.1	7.1	7.2
185	Prostate	2,564	2,660	2,760	2,830	2,910	33.1	33.1	33.3	33.1	32.8
188	Bladder	580	550	590	600	630	7.4	6.7	7.0	7.0	7.0
189	Kidney	463	453	490	500	520	5.5	5.3	5.5	5.6	5.7
191	Brain	556	598	600	610	630	6.3	6.7	6.6	6.6	6.7
195–199	Unknown primary	1,132	1,190	1,210	1,240	1,280	13.7	14.1	14.0	14.0	14.0
200+202	Non-Hodgkin's lymphoma	730	718	760	760	770	8.6	8.3	8.5	8.3	8.2
203	Multiple myeloma	304	328	340	350	360	3.7	3.9	3.9	3.9	3.9
204	Lymphatic leukaemia	219	267	270	280	290	2.6	3.2	3.1	3.2	3.2
	Smoking-related cancers	5,230	5,300	5,360	5,410	5,460	62.0	61.2	60.6	59.8	58.9
Females											
140–208	All cancers (excluding NMSC)	14,613	14,968	15,330	15,670	16,020	138.1	137.7	137.8	137.6	137.5
150	Oesophagus	295	324	340	360	370	2.7	2.8	2.9	3.0	3.0
151	Stomach	458	478	470	460	460	4.2	4.2	4.0	3.9	3.9
153–154	Colorectal	2,090	2,112	2,160	2,180	2,210	19.3	18.9	18.9	18.7	18.5
157	Pancreas	757	834	830	860	890	6.9	7.3	7.0	7.1	7.1
162	Lung	1,998	2,054	2,170	2,260	2,360	19.3	19.4	20.0	20.4	20.9
172	Melanoma	334	326	320	320	330	3.3	3.0	2.9	2.9	2.8
174	Breast	2,634	2,623	2,720	2,760	2,800	25.6	25.0	25.3	25.1	25.0
180	Cervix	334	302	320	310	310	3.3	2.9	3.0	2.9	2.8
179+182	Uterus	290	281	300	310	320	2.7	2.6	2.7	2.8	2.8
183	Ovary	724	814	830	860	900	7.0	7.7	7.6	7.8	7.9
188	Bladder	235	239	240	240	240	2.1	2.0	1.9	1.9	1.9
189	Kidney	353	339	360	360	370	3.3	3.1	3.2	3.2	3.2
191	Brain	399	402	400	400	410	4.1	4.0	3.9	3.8	3.8
195–199	Unknown primary	1,084	1,130	1,120	1,150	1,170	9.8	9.9	9.6	9.5	9.5
200+202	Non-Hodgkin's lymphoma	700	688	730	760	790	6.6	6.3	6.6	6.8	6.9
203	Multiple myeloma	251	267	270	270	270	2.3	2.4	2.4	2.3	2.3
204	Lymphatic leukaemia	166	156	160	150	150	1.5	1.4	1.3	1.2	1.2
	Smoking-related cancers	1,710	1,770	1,840	1,910	1,980	16.8	17.0	17.3	17.5	17.8

Note: Rates are expressed per 100,000 population and age-standardised to the Australian 1991 Population (AS Rate).

* 1995–1996 are current data, 1997–1999 are projected data, projected number of deaths for 1997–1999 are rounded to the nearest 10.

Source: Cancer in Australia 1991–1994 (with Projections to 1999), Australian Institute of Health and Welfare, 1998.

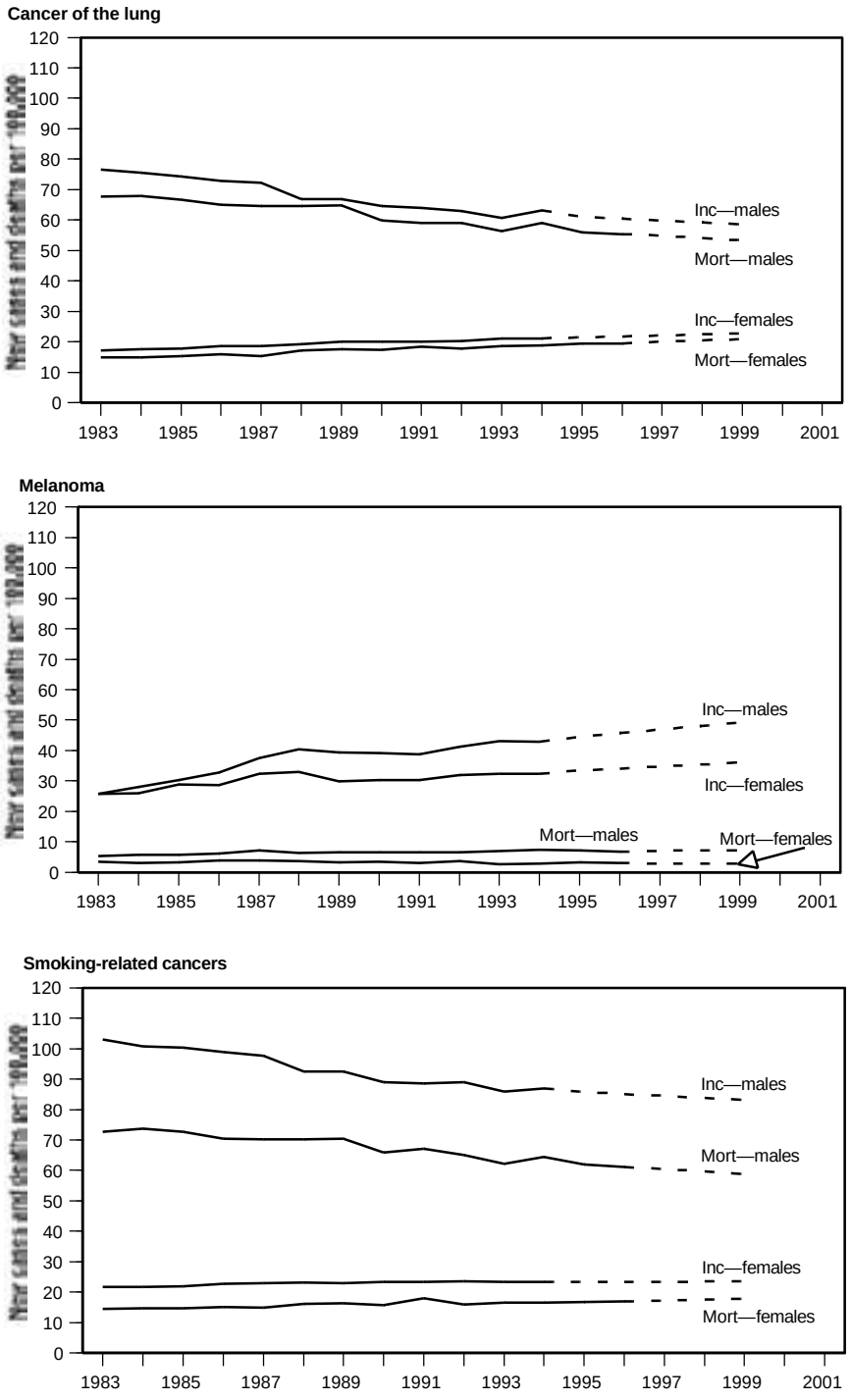
Cancers of the prostate and breast, and colorectal cancer



Source: Cancer in Australia 1991–1994 (with Projections to 1999), Australian Institute of Health and Welfare, 1998.

Figure 9: Trends in age-standardised incidence and mortality rates for cancers of the prostate and breast, and colorectal cancer, Australia, 1983–1999

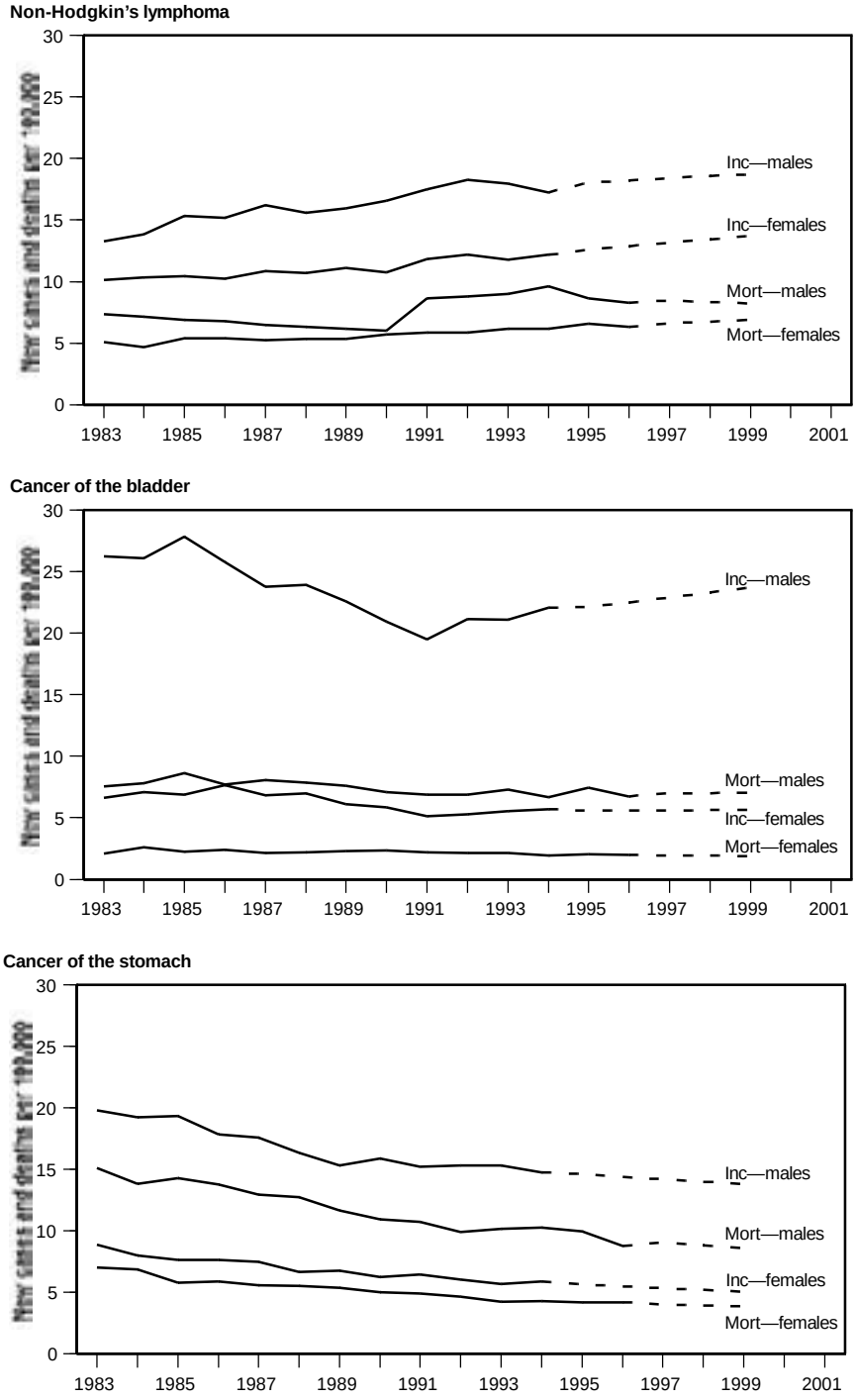
Cancer of the lung, melanoma and smoking-related cancers



Source: Cancer in Australia 1991–1994 (with Projections to 1999), Australian Institute of Health and Welfare, 1998.

Figure 10: Trends in age-standardised incidence and mortality rates for cancer of the lung, melanoma and smoking-related cancers, Australia, 1983–1999

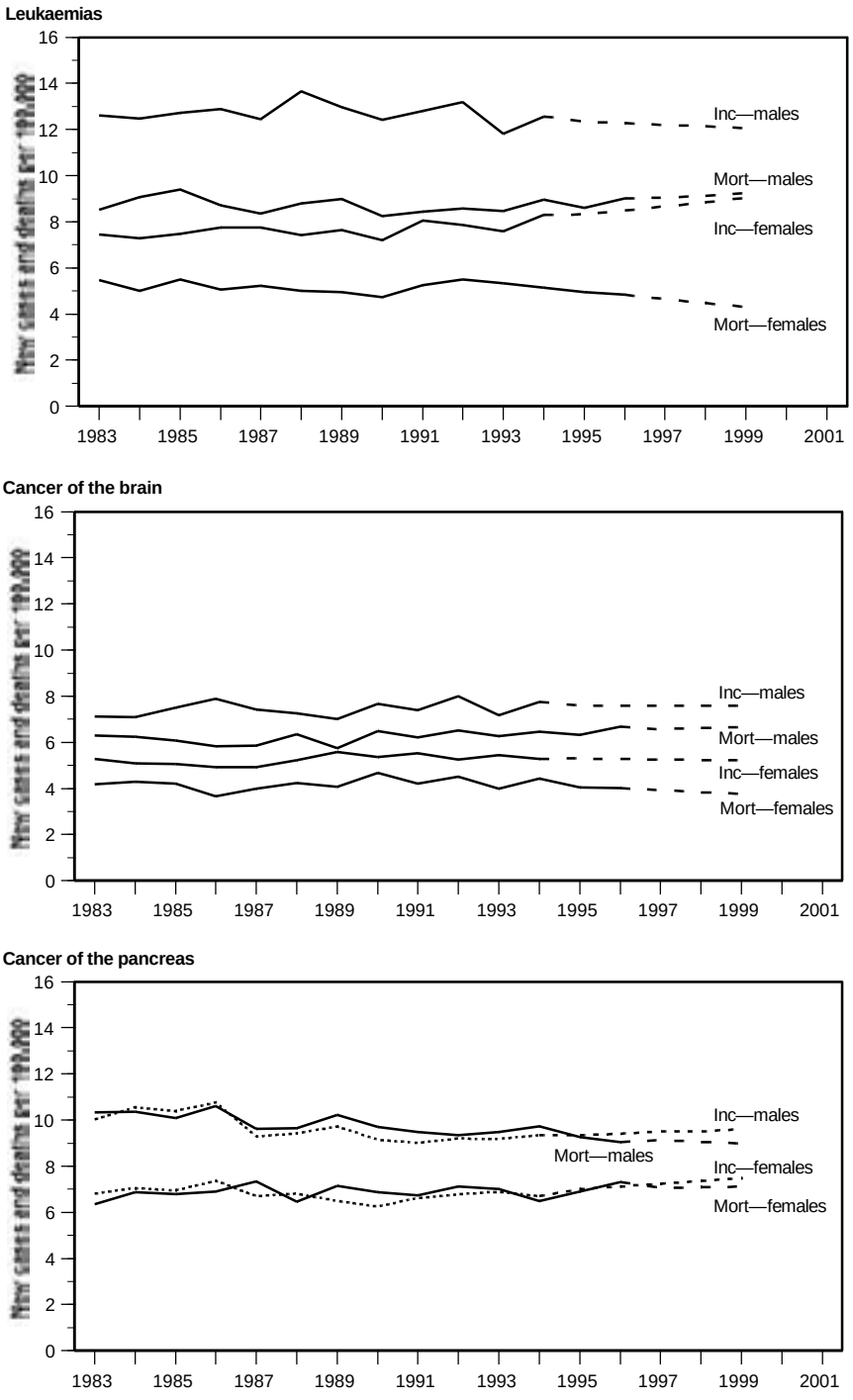
Non-Hodgkin's lymphoma, cancers of the bladder and stomach



Source: Cancer in Australia 1991–1994 (with Projections to 1999), Australian Institute of Health and Welfare, 1998.

Figure 11: Trends in age-standardised incidence and mortality rates for non-Hodgkin's lymphoma, and cancers of the bladder and stomach, Australia, 1983–1999

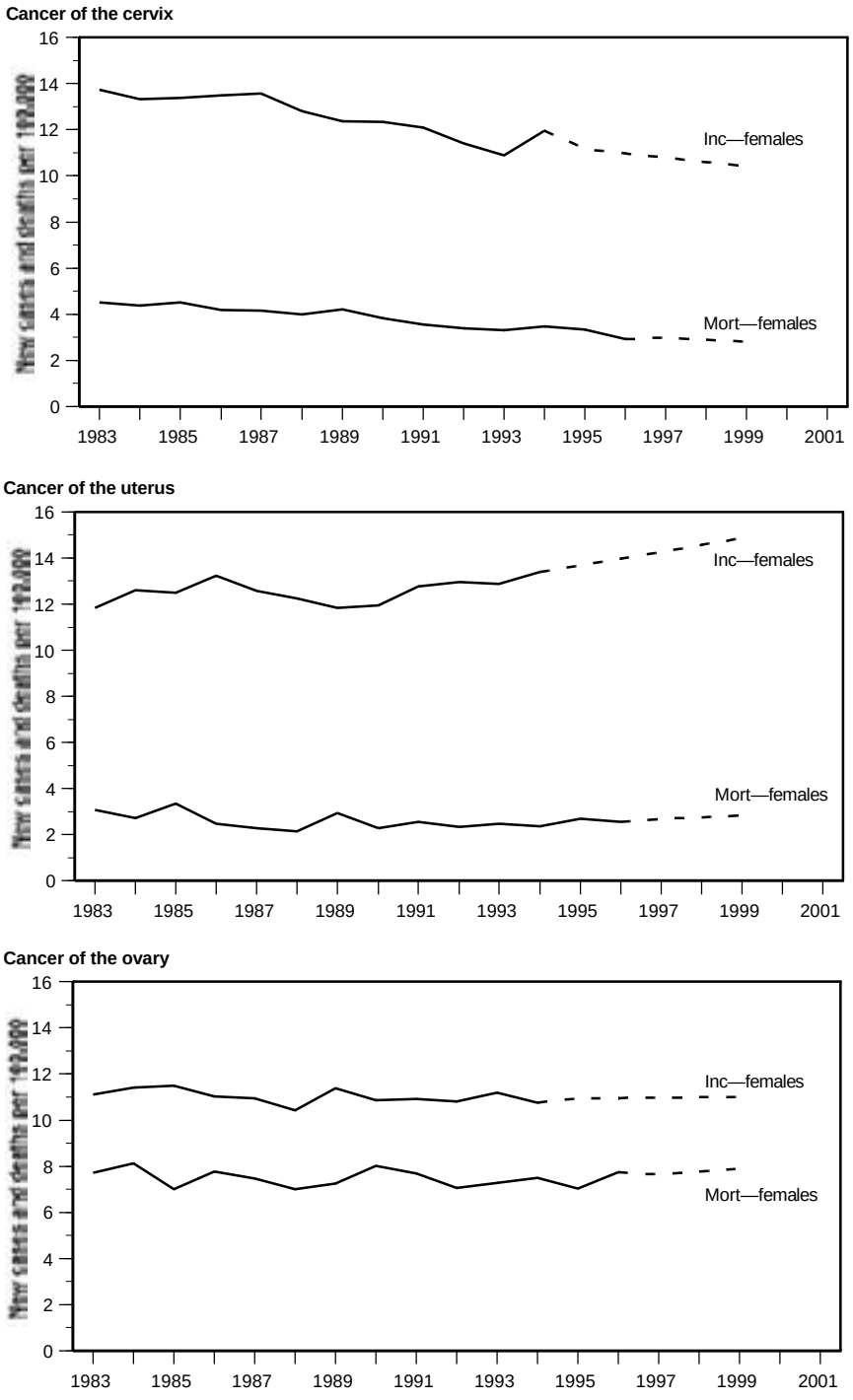
Leukaemias and cancers of the brain and pancreas



Source: Cancer in Australia 1991–1994 (with Projections to 1999), Australian Institute of Health and Welfare, 1998.

Figure 12: Trends in age-standardised incidence and mortality rates for leukaemias and cancers of the brain and pancreas, Australia, 1983–1999

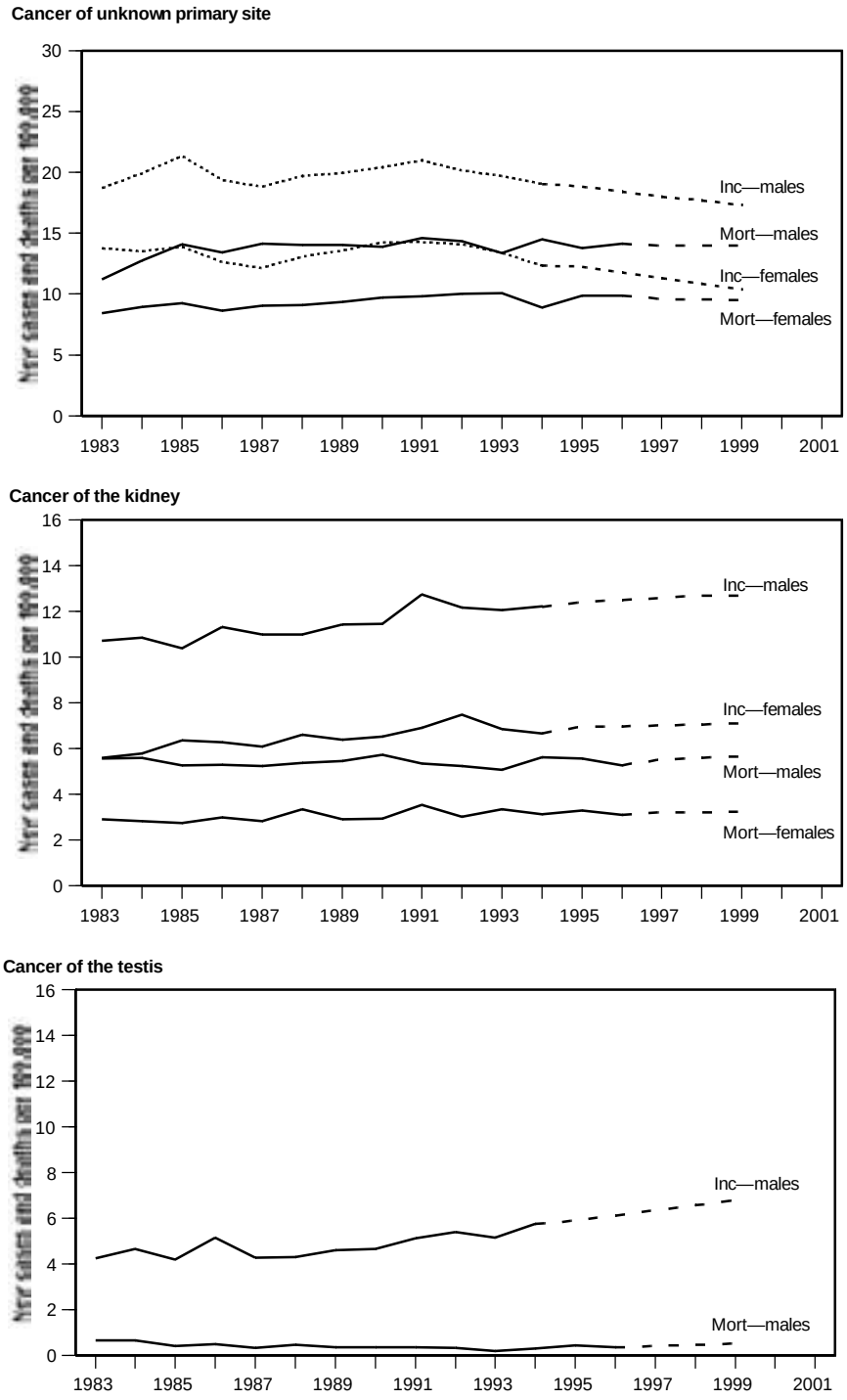
Cancers of the cervix, uterus and ovary



Source: Cancer in Australia 1991–1994 (with Projections to 1999), Australian Institute of Health and Welfare, 1998.

Figure 13: Trends in age-standardised incidence and mortality rates for cancers of the cervix, uterus and ovary, Australia, 1983–1999

Cancer of unknown primary site, and cancers of the kidney and testis



Note: Cancer of unknown primary site is graphed on a different scale to cancers of the kidney and testis.

Source: Cancer in Australia 1991–1994 (with Projections to 1999), Australian Institute of Health and Welfare, 1998.

Figure 14: Trends in age-standardised incidence and mortality rates for cancer of unknown primary site, and cancers of the kidney and testis, Australia, 1983–1999

4 Incidence and mortality tables

Guide to interpreting incidence and mortality tables

This section provides information to assist in the interpretation of the tables in this report. More detailed information on methods is given in Appendix B.

Table features

- All rates are presented per 100,000 population.
- Age-standardised rates are calculated by the 'direct method'. Age-standardised rates for Australia use both the total 1991 Australian population and the World Standard Population as the standard populations. Age-standardised rates for the States and Territories use only the total 1991 Australian population as the standard population. **Therefore, particular care should be taken not to compare these State and Territory rates with those in previous issues of *Cancer in Australia* where age-standardisation used the World Standard Population.**
- The person-years of life lost (PYLL) and lifetime risk estimates are for age group 0–74.
- The confidence intervals used for crude and age-standardised rates are at the 95% level.
- The 'all cancers' estimates exclude non-melanocytic skin cancers.
- In this publication the term cancer site is used to represent cancers located in specific organs or tissues as well as systemic cancers such as leukaemia and lymphoma.
- In this publication the term melanoma refers to melanoma of the skin only. Melanomas generally occur on the skin, but may also occur on the eye and mucous membranes (such as the vagina and nasal cavities).

Comparison of rates

Care should be exercised when interpreting a comparison between incidence or mortality rates: for example, when comparing different cancers or when comparing the same cancer in different years. The confidence intervals indicate the likely annual range of fluctuation of each rate. Some fluctuations may be within expectations, while others may indicate a change in the patterns of cancer incidence or mortality. Where small annual numbers of cancer cases or deaths are presented in a table, a direct comparison may produce a false perception of dramatic changes over time and, in these instances, averages over a period of time should be used. In general, cancer incidence and mortality rates change relatively slowly over time, though from year to year there may be marked fluctuations due to significant change in diagnostic procedures or exposure to risk factors.

Combining rates

- Age-specific rates may be summed over cancer sites for a particular age and sex.
- Age-specific rates may not be summed across different ages or sexes, but should be recalculated from the raw data. However, if populations are similar, the crude rates for a 10-year age group will be approximated by the average of the two 5-year age-specific rates. For comparison within broader age groups summary rates should be age-standardised.

State and Territory data

Cancer mortality data are available to 1996 for all States and Territories. Incidence data for all cancer sites are available to 1994 for all States and Territories except Queensland for which data are available to 1990, although a preliminary data set for the period 1990–1994 has been provided for this publication. This preliminary data set is expected to be finalised by June 1998.

Breast cancer incidence data are available to 1996 for New South Wales, Victoria, Western Australia, South Australia, Tasmania and the Australian Capital Territory. Prostate cancer incidence data are available to 1996 for Victoria, Western Australia, South Australia and Tasmania. The extra years of data for breast and prostate cancer incidence have been incorporated into the national incidence projections for 1995 and 1996.

The Australian data are presented as annual numbers and rates, while the data for each State and Territory are presented as average annual rates and numbers of cases and deaths based on the five-year averages 1987–1991, 1988–1992, 1989–1993 and 1990–1994. Care should be taken in the interpretation of these rates, especially for less common cancers or for States and Territories with small populations. By presenting the data in this manner, natural statistical variation due to small numbers of cases or deaths within each State and Territory and cancer site are averaged across the period and provide a more stable and representative rate of incidence or mortality. Consequently, the average annual number of cases or deaths for the States and Territories do not sum to the Australian totals for the years 1990–1994.

All numbers of cases or deaths in the State and Territory tables are rounded to the nearest integer. Occasionally the number of cases or deaths will be zero but a small corresponding rate will appear. This indicates that there were, on average, fewer than 0.5 cases or deaths per year over the 5-year period and, although the rounding process has made the entry zero, a rate can still be presented at one decimal point.

The data in this report will not correspond exactly to data published by the individual State and Territory cancer registries due to the 5-year annual averaging, the use of different standard populations for age-standardisation and the continual updating of data sets by the cancer registries. If single-year data are required for individual States and Territories then their annual reports may be consulted or direct requests can be made to the registries.

In this report, State and Territory incidence and mortality rates have been directly age-standardised to the total estimated resident population of Australia at 30 June 1991. Therefore, particular care should be taken not to compare these State and Territory rates with those in previous issues of *Cancer in Australia* where age-standardisation was done using the World Standard Population. However, the NCSCH is able to provide State and Territory rates that have been age-standardised to the World Standard Population on request.

Cancer incidence estimates provided in this publication were made at November 1997. These estimates may be updated at any time as case details are added, modified or deleted in the national database. These modifications may occur several years after the initial diagnosis as additional case details are received by the State and Territory cancer registries from data suppliers and then passed to the NCSCH. This may have the impact of making incidence estimates for the same year incompatible between publications, but for the most part these changes are trivial.

Summary tables
1991–1994

- Summary tables for all cancer sites for each year.
- A complete set of tables for all cancer sites for each year is available on the floppy disk contained in the back of this publication.

Table 6: Incidence summary table, 1991

Australia 1991		Males					Females			
ICD-9	Cancer description	Number	AS Rate (A)	AS Rate (W)	Cum. rate per cent	Sex ratio M:F	Number	AS Rate (A)	AS Rate (W)	Cum. rate per cent
140–208	All cancers (excluding NMSC)	34,313	446.3	316.2	36.4	1.4	29,493	318.2	246.2	27.4
140	Lip	756	9.4	7.3	0.8	3.5	256	2.7	1.9	0.2
141	Tongue	220	2.7	2.2	0.3	2.2	115	1.2	0.9	0.1
142	Salivary gland	114	1.5	1.1	0.1	2.4	56	0.6	0.5	0.1
143	Gum	22	0.3	0.2	0.0	1.1	25	0.3	0.2	0.0
144	Floor of mouth	108	1.3	1.1	0.1	2.8	42	0.5	0.4	0.0
145	Other mouth	116	1.4	1.2	0.1	1.4	92	1.0	0.8	0.1
146	Oropharynx	171	2.1	1.7	0.2	3.3	57	0.6	0.5	0.1
147	Nasopharynx	70	0.8	0.7	0.1	3.6	21	0.2	0.2	0.0
148	Hypopharynx	142	1.7	1.4	0.2	7.2	22	0.2	0.2	0.0
149	Other lip, oral cavity and pharynx	47	0.6	0.5	0.1	4.5	12	0.1	0.1	0.0
141–149	Head and neck	1,010	12.3	9.9	1.2	2.6	442	4.8	3.8	0.5
150	Oesophagus	514	6.7	4.7	0.6	2.1	310	3.2	2.2	0.3
151	Stomach	1,152	15.2	10.4	1.2	2.4	632	6.4	4.4	0.5
152	Small intestine	96	1.2	0.9	0.1	1.5	76	0.8	0.6	0.1
153	Colon	3,144	40.9	28.9	3.4	1.3	3,021	31.5	22.3	2.6
154	Rectum	1,970	25.3	18.3	2.2	1.8	1,315	13.9	10.0	1.2
153–154	Colorectal	5,114	66.2	47.1	5.7	1.5	4,336	45.3	32.4	3.8
155	Liver	295	3.7	2.8	0.4	4.1	85	0.9	0.7	0.1
156	Gallbladder	210	2.8	1.9	0.2	0.9	298	3.1	2.1	0.2
157	Pancreas	678	9.0	6.2	0.7	1.4	646	6.6	4.5	0.5
158	Peritoneum	39	0.5	0.4	0.0	1.2	36	0.4	0.3	0.0
159	Other digestive organs	36	0.5	0.3	0.0	1.2	40	0.4	0.3	0.0
160	Nasal cavity	82	1.0	0.8	0.1	2.5	39	0.4	0.3	0.0
161	Larynx	500	6.2	4.8	0.6	8.8	65	0.7	0.5	0.1
162	Lung	4,953	64.0	45.5	5.8	3.2	1,871	20.0	15.0	2.0
163	Pleura	235	3.0	2.2	0.3	7.1	40	0.4	0.3	0.0
164	Other respiratory organs	27	0.3	0.3	0.0	1.4	22	0.2	0.2	0.0
170	Bone	90	1.1	1.0	0.1	1.7	57	0.6	0.6	0.0
171	Connective tissue	325	4.1	3.1	0.3	1.9	196	2.1	1.8	0.2
172	Skin—melanoma	3,152	39.0	30.5	3.3	1.3	2,739	30.6	25.2	2.6
173	Skin—non-melanocytic (NMSC)*									
174–175	Breast	58	0.8	0.5	0.1	<0.01	7,895	87.2	70.7	7.9
180	Cervix						1,072	12.1	9.9	1.0
181	Placenta						6	0.1	0.1	0.0
179+182	Uterus						1,173	12.8	10.1	1.3
183	Ovary						997	10.9	8.8	1.0
184	Other female genital organs						240	2.5	1.8	0.2
#	Gynaecological						3,482	38.3	30.5	3.4
185	Prostate	6,543	91.2	55.2	6.2					
186	Testis	443	5.1	4.6	0.4					
187	Penis & other male genital organs	70	0.9	0.7	0.1					
188	Bladder	1,457	19.5	12.9	1.5	3.8	504	5.1	3.5	0.4
189	Kidney	1,002	12.8	9.4	1.1	1.8	647	6.9	5.3	0.6
190	Eye	102	1.2	1.1	0.1	1.1	98	1.1	0.9	0.1
191	Brain	607	7.4	6.2	0.6	1.3	495	5.5	4.8	0.5
192	Other nervous system	38	0.5	0.4	0.0	1.4	29	0.3	0.3	0.0
193	Thyroid	152	1.8	1.5	0.1	0.4	398	4.6	3.9	0.4
194	Other endocrine	38	0.4	0.5	0.0	1.2	32	0.4	0.5	0.0
195–199	Unknown primary site	1,597	21.0	14.5	1.7	1.5	1,393	14.2	9.8	1.0
200+202	Non-Hodgkin's lymphoma	1,384	17.5	13.2	1.4	1.5	1,109	11.8	8.8	1.0
201	Hodgkin's disease	180	2.1	1.9	0.2	1.3	142	1.6	1.4	0.1
200–202	Lymphoma	1,564	19.6	15.1	1.6	1.5	1,251	13.4	10.2	1.1
203	Multiple myeloma	384	5.0	3.5	0.4	1.5	318	3.3	2.3	0.3
204	Lymphatic leukaemia	474	6.0	5.1	0.5	1.6	342	3.7	3.2	0.3
205	Myeloid leukaemia	432	5.7	4.1	0.4	1.6	342	3.6	2.8	0.3
206	Monocytic leukaemia	10	0.1	0.1	0.0	0.9	15	0.2	0.2	0.0
207–208	Other and unspecified leukaemia	78	1.0	0.7	0.1	1.7	60	0.6	0.4	0.0
204–208	Leukaemia	994	12.8	10.1	1.0	1.6	759	8.0	6.6	0.6
#	Alcohol-related	323	3.9	3.3	0.4	1.3	255	2.9	2.4	0.3
#	Smoking-related	6,947	88.7	64.8	8.1	3.8	2,145	23.3	18.0	2.3

Note: Rates are expressed per 100,000 population and age-standardised to both the Australian 1991 Population standard (AS Rate (A)) and the World Standard Population (AS Rate (W)).

* Non-melanocytic skin cancer incidence data is not collected by State and Territory cancer registries.

See Appendix A for ICD-9 codes.

Source: Cancer in Australia 1991–1994 (with Projections to 1999), Australian Institute of Health and Welfare, 1998.

Table 7: Mortality summary table, 1991

Australia 1991		Males					Females			
ICD-9	Cancer description	Number	AS Rate (A)	AS Rate (W)	PYLL (<75 yrs)	Sex ratio M:F	Number	AS Rate (A)	AS Rate (W)	PYLL (<75 yrs)
140–208	All cancers (excluding NMSC)	17,290	231.0	155.7	141,903	1.6	13,637	141.9	101.4	118,960
140	Lip	13	0.2	0.1	115	7.0	3	0.0	0.0	3
141	Tongue	115	1.4	1.1	1,320	2.6	56	0.6	0.4	408
142	Salivary gland	45	0.6	0.4	365	2.4	27	0.3	0.2	125
143	Gum	9	0.1	0.1	93	1.6	8	0.1	0.1	35
144	Floor of mouth	32	0.4	0.3	410	2.6	15	0.2	0.1	58
145	Other mouth	34	0.4	0.3	330	1.4	29	0.3	0.2	210
146	Oropharynx	103	1.3	1.0	1,393	3.6	33	0.4	0.3	293
147	Nasopharynx	49	0.6	0.5	720	4.5	13	0.1	0.1	165
148	Hypopharynx	67	0.8	0.6	688	12.8	6	0.1	0.1	78
149	Other lip, oral cavity and pharynx	18	0.2	0.2	185	2.2	9	0.1	0.1	88
141–149	Head and neck	472	5.9	4.5	5,503	3.0	196	2.0	1.4	1,458
150	Oesophagus	519	6.8	4.7	4,288	2.4	277	2.8	1.8	1,255
151	Stomach	788	10.7	6.9	5,315	2.2	489	4.9	3.2	3,025
152	Small intestine	40	0.5	0.4	395	1.5	32	0.3	0.3	358
153	Colon	1,566	20.9	14.2	12,195	1.4	1,501	15.3	10.4	9,590
154	Rectum	647	8.5	5.9	5,408	1.7	482	4.9	3.3	3,190
153–154	Colorectal	2,213	29.4	20.0	17,603	1.5	1,983	20.2	13.7	12,780
155	Liver	297	3.7	2.7	3,290	2.7	134	1.4	1.0	955
156	Gallbladder	136	1.8	1.2	1,038	0.8	221	2.2	1.5	1,220
157	Pancreas	710	9.5	6.4	5,105	1.4	665	6.7	4.4	3,783
158	Peritoneum	20	0.3	0.2	178	0.9	27	0.3	0.2	153
159	Other digestive organs	130	1.8	1.1	898	1.6	116	1.1	0.7	395
160	Nasal cavity	27	0.3	0.2	263	2.1	16	0.2	0.1	148
161	Larynx	218	2.8	2.1	1,985	7.0	38	0.4	0.3	263
162	Lung	4,518	59.1	40.8	33,608	3.2	1,729	18.4	13.5	13,783
163	Pleura	124	1.6	1.1	895	5.9	26	0.3	0.2	143
164	Other respiratory organs	16	0.2	0.2	298	1.6	13	0.1	0.1	95
170	Bone	45	0.6	0.5	1,143	1.5	36	0.4	0.3	545
171	Connective tissue	108	1.4	1.0	1,790	1.5	87	0.9	0.7	1,180
172	Skin—melanoma	512	6.5	4.8	6,895	2.1	292	3.1	2.4	4,008
173	Skin—non-melanocytic (NMSC)	200	2.8	1.8	2,315	4.4	66	0.6	0.4	230
174–175	Breast	15	0.2	0.1	98	<0.01	2,525	27.1	20.9	30,718
180	Cervix						331	3.6	2.7	4,895
181	Placenta						0	0.0	0.0	0
179+182	Uterus						251	2.6	1.7	1,343
183	Ovary						722	7.7	5.8	6,860
184	Other female genital organs						74	0.7	0.5	385
#	Gynaecological						1,378	14.5	10.7	13,483
185	Prostate	2,142	31.6	17.8	5,948					
186	Testis	29	0.4	0.3	738					
187	Penis & other male genital organs	18	0.3	0.2	123					
188	Bladder	483	6.9	4.2	2,275	3.1	229	2.2	1.3	720
189	Kidney	411	5.3	3.7	4,068	1.5	342	3.5	2.5	2,540
190	Eye	15	0.2	0.1	163	1.7	11	0.1	0.1	143
191	Brain	502	6.2	4.9	8,490	1.5	382	4.2	3.4	6,410
192	Other nervous system	9	0.1	0.1	243	0.8	13	0.1	0.1	228
193	Thyroid	26	0.3	0.2	280	1.0	33	0.3	0.2	160
194	Other endocrine	26	0.3	0.3	870	1.4	19	0.2	0.2	458
195–199	Unknown primary site	1,094	14.6	9.9	8,253	1.5	975	9.8	6.5	6,003
200+202	Non-Hodgkin's lymphoma	663	8.6	6.1	7,973	1.5	569	5.9	4.0	4,285
201	Hodgkin's disease	47	0.6	0.5	1,083	1.4	38	0.4	0.3	748
200–202	Lymphoma	710	9.2	6.6	9,055	1.5	607	6.3	4.3	5,033
203	Multiple myeloma	270	3.7	2.3	1,730	1.5	235	2.4	1.5	1,133
204	Lymphatic leukaemia	197	2.6	1.9	3,453	1.8	145	1.5	1.1	1,830
205	Myeloid leukaemia	408	5.4	3.7	5,268	1.6	332	3.5	2.5	4,260
206	Monocytic leukaemia	2	0.0	0.0	100	0.3	9	0.1	0.0	28
207–208	Other and unspecified leukaemia	27	0.4	0.2	153	1.9	22	0.2	0.2	273
204–208	Leukaemia	634	8.4	5.9	8,973	1.6	508	5.2	3.8	6,390
#	Alcohol-related	196	2.4	2.0	2,601	2.2	96	1.1	0.9	1,193
#	Smoking-related	5,161	67.1	47.1	41,997	3.7	1,677	18.0	13.5	15,501

Note: Rates are expressed per 100,000 population and age-standardised to both the Australian 1991 Population standard (AS Rate (A)) and the World Standard Population (AS Rate (W)).

See Appendix A for ICD-9 codes.

Source: Cancer in Australia 1991–1994 (with Projections to 1999), Australian Institute of Health and Welfare, 1998.

Table 8: Incidence summary table, 1992

Australia 1992		Males					Females			
ICD-9	Cancer description	Number	AS Rate (A)	AS Rate (W)	Cum. rate per cent	Sex ratio M:F	Number	AS Rate (A)	AS Rate (W)	Cum. rate per cent
140–208	All cancers (excluding NMSC)	36,463	463.7	327.2	37.4	1.5	30,239	319.2	247.2	27.4
140	Lip	811	9.8	7.6	0.8	3.0	321	3.3	2.4	0.3
141	Tongue	233	2.8	2.3	0.3	2.0	128	1.4	1.1	0.1
142	Salivary gland	120	1.6	1.1	0.1	2.2	67	0.7	0.5	0.1
143	Gum	18	0.2	0.2	0.0	1.0	22	0.2	0.1	0.0
144	Floor of mouth	119	1.4	1.2	0.1	2.5	52	0.5	0.4	0.0
145	Other mouth	133	1.6	1.3	0.2	1.5	99	1.0	0.8	0.1
146	Oropharynx	170	2.0	1.7	0.2	4.1	47	0.5	0.4	0.0
147	Nasopharynx	74	0.9	0.7	0.1	2.5	31	0.3	0.3	0.0
148	Hypopharynx	142	1.7	1.4	0.2	9.1	18	0.2	0.1	0.0
149	Other lip, oral cavity and pharynx	54	0.7	0.5	0.1	3.7	17	0.2	0.1	0.0
141–149	Head and neck	1,063	12.7	10.2	1.3	2.5	481	5.1	3.9	0.5
150	Oesophagus	502	6.4	4.6	0.6	2.0	322	3.2	2.1	0.2
151	Stomach	1,180	15.3	10.4	1.2	2.5	605	6.0	4.1	0.4
152	Small intestine	86	1.1	0.8	0.1	1.4	73	0.8	0.6	0.1
153	Colon	3,193	40.7	28.6	3.4	1.3	3,040	31.0	22.2	2.6
154	Rectum	1,981	24.9	18.0	2.2	1.8	1,371	14.1	10.4	1.2
153–154	Colorectal	5,174	65.7	46.6	5.5	1.5	4,411	45.2	32.6	3.9
155	Liver	321	4.0	3.0	0.4	3.9	98	1.0	0.8	0.1
156	Gallbladder	210	2.7	1.8	0.2	0.9	286	2.9	2.0	0.2
157	Pancreas	713	9.2	6.3	0.7	1.4	682	6.8	4.6	0.5
158	Peritoneum	39	0.5	0.4	0.0	0.9	47	0.5	0.4	0.1
159	Other digestive organs	33	0.4	0.3	0.0	1.0	48	0.5	0.3	0.0
160	Nasal cavity	87	1.1	0.8	0.1	3.9	26	0.3	0.2	0.0
161	Larynx	569	7.0	5.3	0.7	12.0	53	0.6	0.5	0.1
162	Lung	4,968	62.9	44.3	5.6	3.1	1,939	20.3	15.0	1.9
163	Pleura	274	3.5	2.4	0.3	9.9	34	0.3	0.3	0.0
164	Other respiratory organs	43	0.5	0.4	0.0	1.7	27	0.3	0.3	0.0
170	Bone	99	1.2	1.1	0.1	1.7	62	0.7	0.7	0.1
171	Connective tissue	340	4.2	3.2	0.3	1.8	214	2.3	1.9	0.2
172	Skin—melanoma	3,418	41.3	32.4	3.5	1.3	2,937	32.0	26.3	2.7
173	Skin—non-melanocytic (NMSC)*									
174–175	Breast	49	0.6	0.4	0.0	<0.01	7,925	85.5	69.4	7.7
180	Cervix						1,030	11.4	9.4	1.0
181	Placenta						7	0.1	0.1	0.0
179+182	Uterus						1,210	12.9	10.3	1.3
183	Ovary						1,005	10.8	8.8	1.0
184	Other female genital organs						217	2.2	1.6	0.2
#	Gynaecological						3,462	37.4	30.1	3.4
185	Prostate	7,694	103.5	63.4	7.2					
186	Testis	473	5.4	4.7	0.4					
187	Penis & other male genital organs	59	0.7	0.5	0.1					
188	Bladder	1,619	21.1	14.0	1.6	4.0	528	5.3	3.6	0.4
189	Kidney	980	12.2	9.0	1.1	1.6	717	7.5	5.7	0.7
190	Eye	89	1.1	0.9	0.1	1.1	92	1.0	0.8	0.1
191	Brain	672	8.0	6.8	0.7	1.5	480	5.2	4.5	0.5
192	Other nervous system	31	0.4	0.4	0.0	1.3	25	0.3	0.3	0.0
193	Thyroid	170	2.0	1.7	0.2	0.4	474	5.3	4.5	0.4
194	Other endocrine	39	0.4	0.5	0.0	1.0	39	0.4	0.5	0.0
195–199	Unknown primary site	1,549	20.1	13.6	1.5	1.4	1,415	14.0	9.5	1.0
200+202	Non-Hodgkin's lymphoma	1,478	18.3	13.7	1.5	1.5	1,169	12.2	9.2	1.0
201	Hodgkin's disease	195	2.3	2.0	0.2	1.2	174	2.0	1.7	0.1
200–202	Lymphoma	1,673	20.5	15.7	1.6	1.4	1,343	14.2	10.9	1.2
203	Multiple myeloma	395	5.1	3.5	0.4	1.6	313	3.2	2.2	0.3
204	Lymphatic leukaemia	449	5.6	4.7	0.4	1.7	308	3.3	3.0	0.3
205	Myeloid leukaemia	489	6.2	4.4	0.5	1.6	370	3.8	2.9	0.3
206	Monocytic leukaemia	16	0.2	0.2	0.0	3.1	7	0.1	0.0	0.0
207–208	Other and unspecified leukaemia	87	1.1	0.8	0.1	1.6	68	0.7	0.5	0.1
204–208	Leukaemia	1,041	13.2	10.1	1.0	1.7	753	7.9	6.4	0.6
#	Alcohol-related	340	4.0	3.4	0.4	1.4	255	2.8	2.4	0.3
#	Smoking-related	7,130	89.0	64.8	8.1	3.8	2,217	23.6	18.0	2.2

Note: Rates are expressed per 100,000 population and age-standardised to both the Australian 1991 Population standard (AS Rate (A)) and the World Standard Population (AS Rate (W)).

* Non-melanocytic skin cancer incidence data is not collected by State and Territory cancer registries.

See Appendix A for ICD-9 codes.

Source: Cancer in Australia 1991–1994 (with Projections to 1999), Australian Institute of Health and Welfare, 1998.

Table 9: Mortality summary table, 1992

Australia 1992		Males					Females			
ICD-9	Cancer description	Number	AS Rate (A)	AS Rate (W)	PYLL (<75 yrs)	Sex ratio M:F	Number	AS Rate (A)	AS Rate (W)	PYLL (<75 yrs)
140–208	All cancers (excluding NMSC)	17,925	233.4	157.4	143,810	1.7	13,592	137.9	98.5	118,848
140	Lip	12	0.2	0.1	95	3.3	5	0.0	0.0	13
141	Tongue	116	1.4	1.1	1,440	3.0	46	0.5	0.3	340
142	Salivary gland	29	0.4	0.2	140	2.8	14	0.1	0.1	85
143	Gum	10	0.1	0.1	93	2.3	6	0.1	0.0	18
144	Floor of mouth	40	0.5	0.4	483	2.9	17	0.2	0.1	90
145	Other mouth	42	0.5	0.4	360	2.2	24	0.2	0.2	110
146	Oropharynx	97	1.2	0.9	1,118	3.6	31	0.3	0.3	280
147	Nasopharynx	51	0.6	0.5	833	3.9	15	0.2	0.1	203
148	Hypopharynx	64	0.8	0.6	513	12.9	6	0.1	0.0	40
149	Other lip, oral cavity and pharynx	21	0.3	0.2	223	6.1	4	0.0	0.0	33
141–149	Head and neck	470	5.8	4.4	5,200	3.5	163	1.7	1.2	1,198
150	Oesophagus	555	7.1	5.0	4,778	2.8	258	2.5	1.6	1,150
151	Stomach	753	9.9	6.5	5,383	2.1	478	4.7	3.1	3,000
152	Small intestine	39	0.5	0.4	410	1.6	32	0.3	0.2	165
153	Colon	1,641	21.5	14.4	12,125	1.4	1,548	15.4	10.5	9,898
154	Rectum	657	8.5	5.8	5,325	2.0	426	4.3	3.0	3,075
153–154	Colorectal	2,298	30.0	20.3	17,450	1.5	1,974	19.6	13.4	12,973
155	Liver	332	4.2	3.0	2,998	3.0	136	1.4	1.0	1,063
156	Gallbladder	118	1.6	1.0	645	0.7	215	2.1	1.4	1,155
157	Pancreas	724	9.4	6.4	5,635	1.3	718	7.1	4.7	3,883
158	Peritoneum	19	0.2	0.2	270	0.8	24	0.3	0.2	380
159	Other digestive organs	125	1.7	1.1	905	1.4	120	1.1	0.7	578
160	Nasal cavity	35	0.5	0.3	295	3.1	15	0.2	0.1	165
161	Larynx	240	3.0	2.2	2,205	11.7	24	0.3	0.2	183
162	Lung	4,638	59.1	40.9	34,175	3.3	1,720	17.8	12.8	12,740
163	Pleura	154	2.0	1.4	1,268	8.0	23	0.2	0.2	268
164	Other respiratory organs	21	0.3	0.2	465	1.7	14	0.1	0.1	140
170	Bone	56	0.7	0.6	1,438	2.0	34	0.3	0.3	623
171	Connective tissue	120	1.5	1.1	1,950	1.6	92	1.0	0.8	1,590
172	Skin—melanoma	523	6.6	4.7	6,845	1.8	344	3.6	2.7	4,768
173	Skin—non-melanocytic (NMSC)	286	3.9	2.5	2,813	4.8	87	0.8	0.5	290
174–175	Breast	19	0.3	0.2	110	<0.01	2,428	25.3	19.4	29,250
180	Cervix						322	3.4	2.6	4,680
181	Placenta						0	0.0	0.0	0
179+182	Uterus						237	2.3	1.6	1,428
183	Ovary						674	7.0	5.3	6,720
184	Other female genital organs						56	0.5	0.3	260
#	Gynaecological						1,289	13.3	9.8	13,088
185	Prostate	2,337	33.2	18.9	6,660					
186	Testis	25	0.3	0.2	680					
187	Penis & other male genital organs	14	0.2	0.1	113					
188	Bladder	498	6.9	4.1	2,275	3.2	225	2.1	1.4	883
189	Kidney	409	5.2	3.6	3,585	1.7	304	3.0	2.0	1,820
190	Eye	12	0.1	0.1	95	0.8	17	0.2	0.1	303
191	Brain	542	6.5	5.2	9,103	1.4	416	4.5	3.7	7,400
192	Other nervous system	16	0.2	0.2	298	2.8	7	0.1	0.0	38
193	Thyroid	37	0.5	0.3	465	1.1	45	0.4	0.3	223
194	Other endocrine	24	0.3	0.3	620	1.4	18	0.2	0.2	573
195–199	Unknown primary site	1,095	14.4	9.4	7,575	1.4	1,021	10.0	6.6	5,665
200+202	Non-Hodgkin's lymphoma	681	8.8	6.1	7,740	1.5	586	5.9	4.0	4,478
201	Hodgkin's disease	41	0.5	0.4	988	1.1	40	0.4	0.3	775
200–202	Lymphoma	722	9.3	6.5	8,728	1.5	626	6.3	4.3	5,253
203	Multiple myeloma	278	3.7	2.4	1,865	1.4	264	2.6	1.7	1,293
204	Lymphatic leukaemia	216	2.8	2.1	3,978	1.6	171	1.7	1.4	2,618
205	Myeloid leukaemia	411	5.3	3.7	5,023	1.5	341	3.5	2.5	4,130
206	Monocytic leukaemia	6	0.1	0.1	58	1.6	6	0.1	0.0	8
207–208	Other and unspecified leukaemia	32	0.4	0.3	175	1.8	25	0.2	0.2	278
204–208	Leukaemia	665	8.6	6.1	9,233	1.6	543	5.5	4.1	7,033
#	Alcohol-related	209	2.5	2.1	2,615	2.6	90	1.0	0.8	1,129
#	Smoking-related	5,124	65.0	45.6	40,485	4.1	1,520	15.9	11.7	12,858

Note: Rates are expressed per 100,000 population and age-standardised to both the Australian 1991 Population standard (AS Rate (A)) and the World Standard Population (AS Rate (W)).

See Appendix A for ICD-9 codes.

Source: Cancer in Australia 1991–1994 (with Projections to 1999), Australian Institute of Health and Welfare, 1998.

Table 10: Incidence summary table, 1993

Australia 1993		Males					Females			
ICD-9	Cancer description	Number	AS Rate (A)	AS Rate (W)	Cum. rate per cent	Sex ratio M:F	Number	AS Rate (A)	AS Rate (W)	Cum. rate per cent
140–208	All cancers (excluding NMSC)	39,742	492.6	347.4	40.9	1.5	31,050	321.4	249.9	28.0
140	Lip	706	8.4	6.5	0.7	3.6	234	2.4	1.7	0.2
141	Tongue	243	2.9	2.3	0.3	2.6	107	1.1	0.8	0.1
142	Salivary gland	114	1.4	1.1	0.1	1.9	68	0.7	0.5	0.1
143	Gum	22	0.3	0.2	0.0	1.2	23	0.2	0.2	0.0
144	Floor of mouth	114	1.3	1.1	0.1	3.2	38	0.4	0.3	0.0
145	Other mouth	131	1.5	1.2	0.2	1.9	77	0.8	0.6	0.1
146	Oropharynx	138	1.6	1.3	0.2	3.2	49	0.5	0.4	0.1
147	Nasopharynx	81	0.9	0.8	0.1	3.2	27	0.3	0.3	0.0
148	Hypopharynx	156	1.8	1.5	0.2	6.9	27	0.3	0.2	0.0
149	Other lip, oral cavity and pharynx	49	0.6	0.5	0.1	3.4	17	0.2	0.1	0.0
141–149	Head and neck	1,048	12.3	10.0	1.2	2.8	433	4.4	3.5	0.4
150	Oesophagus	536	6.6	4.7	0.6	2.0	344	3.3	2.2	0.2
151	Stomach	1,214	15.3	10.4	1.2	2.7	584	5.7	3.9	0.4
152	Small intestine	88	1.1	0.8	0.1	1.8	57	0.6	0.5	0.1
153	Colon	3,180	39.5	27.9	3.3	1.3	3,040	30.3	21.7	2.5
154	Rectum	2,026	24.7	18.0	2.2	1.8	1,352	13.6	10.0	1.2
153–154	Colorectal	5,206	64.1	45.9	5.6	1.5	4,392	43.9	31.6	3.7
155	Liver	352	4.2	3.2	0.4	3.3	124	1.3	0.9	0.1
156	Gallbladder	198	2.4	1.7	0.2	0.9	294	2.9	2.0	0.2
157	Pancreas	734	9.2	6.3	0.8	1.3	708	6.9	4.6	0.5
158	Peritoneum	45	0.5	0.4	0.0	1.1	45	0.5	0.4	0.0
159	Other digestive organs	39	0.5	0.3	0.0	1.1	52	0.5	0.3	0.0
160	Nasal cavity	101	1.2	0.9	0.1	3.3	36	0.4	0.3	0.0
161	Larynx	525	6.3	4.8	0.6	11.1	54	0.6	0.4	0.1
162	Lung	4,913	60.7	42.5	5.5	2.9	2,053	21.0	15.5	2.0
163	Pleura	282	3.5	2.5	0.3	6.7	51	0.5	0.4	0.0
164	Other respiratory organs	33	0.4	0.3	0.0	1.6	24	0.2	0.2	0.0
170	Bone	89	1.0	0.9	0.1	1.4	65	0.7	0.7	0.1
171	Connective tissue	309	3.7	2.9	0.3	1.7	212	2.2	1.8	0.2
172	Skin—melanoma	3,642	43.2	33.7	3.7	1.3	3,023	32.5	26.8	2.8
173	Skin—non-melanocytic (NMSC)*									
174–175	Breast	63	0.8	0.6	0.1	<0.01	8,607	91.3	74.6	8.5
180	Cervix						1,002	10.9	9.0	0.9
181	Placenta						5	0.1	0.1	0.0
179+182	Uterus						1,235	12.9	10.2	1.2
183	Ovary						1,068	11.2	8.9	1.0
184	Other female genital organs						229	2.3	1.6	0.2
#	Gynaecological						3,534	37.3	29.7	3.4
185	Prostate	10,860	139.9	88.2	10.8					
186	Testis	458	5.2	4.5	0.4					
187	Penis & other male genital organs	75	0.9	0.7	0.1					
188	Bladder	1,668	21.1	14.2	1.7	3.8	567	5.6	3.8	0.4
189	Kidney	996	12.1	9.0	1.1	1.8	669	6.8	5.2	0.6
190	Eye	120	1.4	1.2	0.1	1.7	80	0.9	0.7	0.1
191	Brain	616	7.2	6.2	0.6	1.3	513	5.4	4.6	0.5
192	Other nervous system	30	0.3	0.3	0.0	1.2	27	0.3	0.3	0.0
193	Thyroid	137	1.6	1.3	0.1	0.3	496	5.5	4.7	0.4
194	Other endocrine	42	0.5	0.6	0.0	1.3	33	0.4	0.4	0.0
195–199	Unknown primary site	1,557	19.7	13.5	1.5	1.5	1,365	13.3	9.2	1.0
200+202	Non-Hodgkin's lymphoma	1,492	17.9	13.6	1.5	1.5	1,154	11.8	8.8	1.0
201	Hodgkin's disease	194	2.2	2.0	0.2	1.3	152	1.7	1.5	0.1
200–202	Lymphoma	1,686	20.2	15.7	1.6	1.5	1,306	13.5	10.3	1.1
203	Multiple myeloma	422	5.3	3.7	0.4	1.6	317	3.2	2.3	0.3
204	Lymphatic leukaemia	420	5.1	4.3	0.4	1.7	286	2.9	2.7	0.2
205	Myeloid leukaemia	443	5.5	3.9	0.4	1.4	395	4.0	3.1	0.3
206	Monocytic leukaemia	10	0.1	0.1	0.0	2.4	6	0.1	0.0	0.0
207–208	Other and unspecified leukaemia	78	1.0	0.7	0.1	1.8	59	0.6	0.4	0.0
204–208	Leukaemia	951	11.8	9.0	0.9	1.6	746	7.6	6.2	0.6
#	Alcohol-related	337	3.9	3.3	0.4	1.3	276	3.0	2.5	0.3
#	Smoking-related	7,030	85.8	62.2	7.8	3.7	2,243	23.4	17.8	2.2

Note: Rates are expressed per 100,000 population and age-standardised to both the Australian 1991 Population standard (AS Rate (A)) and the World Standard Population (AS Rate (W)).

* Non-melanocytic skin cancer incidence data is not collected by State and Territory cancer registries.

See Appendix A for ICD-9 codes.

Source: Cancer in Australia 1991–1994 (with Projections to 1999), Australian Institute of Health and Welfare, 1998.

Table 11: Mortality summary table, 1993

Australia 1993		Males					Females			
ICD-9	Cancer description	Number	AS Rate (A)	AS Rate (W)	PYLL (<75 yrs)	Sex ratio M:F	Number	AS Rate (A)	AS Rate (W)	PYLL (<75 yrs)
140–208	All cancers (excluding NMSC)	18,102	230.5	154.6	141,993	1.7	14,049	139.2	99.0	118,478
140	Lip	12	0.2	0.1	78	20.6	1	0.0	0.0	0
141	Tongue	116	1.4	1.1	1,485	2.4	56	0.6	0.4	483
142	Salivary gland	42	0.5	0.4	358	2.8	20	0.2	0.1	160
143	Gum	4	0.0	0.0	48	0.8	6	0.1	0.0	80
144	Floor of mouth	39	0.5	0.4	453	3.1	15	0.1	0.1	83
145	Other mouth	23	0.3	0.2	228	1.1	24	0.2	0.2	145
146	Oropharynx	102	1.2	1.0	1,230	3.5	33	0.3	0.2	255
147	Nasopharynx	42	0.5	0.4	588	2.8	18	0.2	0.1	248
148	Hypopharynx	57	0.7	0.5	623	4.2	16	0.2	0.1	145
149	Other lip, oral cavity and pharynx	26	0.3	0.2	348	3.2	9	0.1	0.1	98
141–149	Head and neck	451	5.3	4.2	5,358	2.7	197	2.0	1.4	1,695
150	Oesophagus	549	6.9	4.8	4,400	2.6	279	2.6	1.7	1,258
151	Stomach	786	10.2	6.6	5,305	2.4	446	4.2	2.8	2,663
152	Small intestine	26	0.3	0.2	213	0.9	35	0.3	0.2	335
153	Colon	1,682	21.4	14.4	12,513	1.4	1,607	15.5	10.6	10,205
154	Rectum	658	8.3	5.8	5,278	1.8	480	4.6	3.1	2,668
153–154	Colorectal	2,340	29.7	20.1	17,790	1.5	2,087	20.1	13.7	12,873
155	Liver	354	4.3	3.2	3,428	3.0	147	1.4	1.0	1,153
156	Gallbladder	107	1.4	0.9	525	0.8	190	1.8	1.2	1,005
157	Pancreas	754	9.5	6.5	5,688	1.4	722	7.0	4.6	3,913
158	Peritoneum	25	0.3	0.2	288	1.1	25	0.3	0.2	263
159	Other digestive organs	89	1.1	0.8	570	1.3	90	0.9	0.6	440
160	Nasal cavity	31	0.4	0.3	383	2.1	17	0.2	0.1	133
161	Larynx	219	2.7	1.9	1,660	9.4	28	0.3	0.2	240
162	Lung	4,522	56.4	38.8	32,665	3.0	1,828	18.5	13.3	13,435
163	Pleura	166	2.0	1.5	1,605	9.1	22	0.2	0.2	235
164	Other respiratory organs	17	0.2	0.2	243	2.1	10	0.1	0.1	33
170	Bone	53	0.6	0.5	1,353	1.3	48	0.5	0.4	1,170
171	Connective tissue	100	1.2	0.9	1,385	1.2	102	1.1	0.9	1,783
172	Skin—melanoma	581	7.1	5.2	8,123	2.6	272	2.7	2.0	2,985
173	Skin—non-melanocytic (NMSC)	270	3.5	2.3	2,465	3.8	104	0.9	0.6	448
174–175	Breast	15	0.2	0.1	60	<0.01	2,611	26.6	20.3	30,005
180	Cervix						318	3.3	2.6	4,925
181	Placenta						1	0.0	0.0	38
179+182	Uterus						253	2.5	1.7	1,508
183	Ovary						718	7.3	5.4	6,233
184	Other female genital organs						77	0.7	0.5	460
#	Gynaecological						1,366	13.8	10.1	9,708
185	Prostate	2,538	35.1	19.7	6,475					
186	Testis	16	0.2	0.2	560					
187	Penis & other male genital organs	12	0.1	0.1	130					
188	Bladder	533	7.3	4.3	2,028	3.4	233	2.1	1.3	705
189	Kidney	406	5.1	3.5	3,568	1.5	340	3.4	2.3	2,130
190	Eye	12	0.2	0.1	90	1.0	17	0.2	0.1	98
191	Brain	534	6.3	5.1	9,645	1.6	381	4.0	3.1	5,658
192	Other nervous system	11	0.1	0.1	213	1.7	7	0.1	0.1	220
193	Thyroid	30	0.4	0.2	308	0.8	48	0.5	0.3	338
194	Other endocrine	31	0.4	0.4	1,023	1.7	20	0.2	0.2	733
195–199	Unknown primary site	1,038	13.3	8.8	7,150	1.3	1,051	10.0	6.6	6,068
200+202	Non-Hodgkin's lymphoma	722	9.0	6.3	8,513	1.5	623	6.1	4.2	4,925
201	Hodgkin's disease	59	0.7	0.5	1,238	2.9	24	0.2	0.2	475
200–202	Lymphoma	781	9.7	6.8	9,750	1.5	647	6.4	4.4	5,400
203	Multiple myeloma	304	3.9	2.5	1,883	1.7	242	2.3	1.6	1,268
204	Lymphatic leukaemia	211	2.8	1.9	2,948	1.6	171	1.7	1.3	2,895
205	Myeloid leukaemia	419	5.3	3.6	4,700	1.6	346	3.4	2.5	3,945
206	Monocytic leukaemia	6	0.1	0.0	70	1.7	5	0.0	0.0	0
207–208	Other and unspecified leukaemia	23	0.3	0.2	340	1.7	17	0.2	0.1	248
204–208	Leukaemia	659	8.5	5.8	8,058	1.6	539	5.3	3.9	7,088
#	Alcohol-related	203	2.4	2.0	2,538	2.3	97	1.0	0.8	1,194
#	Smoking-related	5,003	62.3	43.4	38,337	3.8	1,614	16.5	12.2	13,524

Note: Rates are expressed per 100,000 population and age-standardised to both the Australian 1991 Population standard (AS Rate (A)) and the World Standard Population (AS Rate (W)).

See Appendix A for ICD-9 codes.

Source: Cancer in Australia 1991–1994 (with Projections to 1999), Australian Institute of Health and Welfare, 1998.

Table 12: Incidence summary table, 1994

Australia 1994		Males					Females			
ICD-9	Cancer description	Number	AS Rate (A)	AS Rate (W)	Cum. rate per cent	Sex ratio M:F	Number	AS Rate (A)	AS Rate (W)	Cum. rate per cent
140–208	All cancers (excluding NMSC)	42,619	515.9	364.4	43.1	1.5	32,879	333.8	259.7	29.2
140	Lip	668	7.8	6.0	0.6	3.1	255	2.5	1.8	0.2
141	Tongue	235	2.7	2.2	0.3	2.0	135	1.4	1.1	0.1
142	Salivary gland	116	1.4	1.0	0.1	2.1	63	0.6	0.5	0.1
143	Gum	26	0.3	0.2	0.0	1.7	19	0.2	0.1	0.0
144	Floor of mouth	123	1.4	1.1	0.1	3.1	43	0.5	0.4	0.0
145	Other mouth	131	1.5	1.2	0.2	1.6	92	0.9	0.7	0.1
146	Oropharynx	151	1.7	1.4	0.2	3.7	45	0.5	0.4	0.0
147	Nasopharynx	72	0.8	0.6	0.1	1.9	40	0.4	0.4	0.0
148	Hypopharynx	144	1.7	1.3	0.2	7.7	22	0.2	0.2	0.0
149	Other lip, oral cavity and pharynx	38	0.4	0.4	0.0	2.2	20	0.2	0.1	0.0
141–149	Head and neck	1,036	11.9	9.5	1.2	2.5	479	4.9	3.8	0.4
150	Oesophagus	578	7.0	5.0	0.6	2.2	340	3.2	2.0	0.2
151	Stomach	1,199	14.7	9.9	1.1	2.5	620	5.9	4.0	0.4
152	Small intestine	96	1.2	0.8	0.1	1.6	73	0.7	0.6	0.1
153	Colon	3,331	40.5	28.4	3.4	1.3	3,123	30.4	21.7	2.5
154	Rectum	2,102	25.1	18.2	2.2	1.7	1,460	14.4	10.6	1.3
153–154	Colorectal	5,433	65.6	46.6	5.6	1.5	4,583	44.9	32.3	3.8
155	Liver	350	4.1	3.1	0.4	3.1	136	1.3	1.0	0.1
156	Gallbladder	236	2.9	1.9	0.2	1.0	304	2.8	1.9	0.2
157	Pancreas	767	9.3	6.5	0.8	1.4	708	6.7	4.5	0.5
158	Peritoneum	46	0.5	0.4	0.0	1.2	46	0.5	0.4	0.0
159	Other digestive organs	35	0.4	0.3	0.0	1.1	47	0.4	0.2	0.0
160	Nasal cavity	83	1.0	0.8	0.1	2.8	34	0.3	0.3	0.0
161	Larynx	485	5.7	4.4	0.6	9.7	57	0.6	0.4	0.1
162	Lung	5,196	63.1	43.6	5.5	3.0	2,110	21.1	15.5	2.0
163	Pleura	318	3.8	2.7	0.3	8.4	46	0.5	0.3	0.0
164	Other respiratory organs	27	0.3	0.3	0.0	1.6	19	0.2	0.2	0.0
170	Bone	82	1.0	0.9	0.1	1.1	80	0.9	0.8	0.1
171	Connective tissue	331	3.9	3.1	0.3	1.7	213	2.2	1.8	0.2
172	Skin—melanoma	3,695	42.9	33.5	3.6	1.3	3,081	32.4	26.7	2.8
173	Skin—non-melanocytic (NMSC)*									
174–175	Breast	70	0.9	0.6	0.1	<0.01	9,694	100.9	82.5	9.5
180	Cervix						1,121	12.0	9.8	1.0
181	Placenta						2	0.0	0.0	0.0
179+182	Uterus						1,304	13.4	10.6	1.3
183	Ovary						1,039	10.8	8.7	1.0
184	Other female genital organs						240	2.4	1.7	0.2
#	Gynaecological						3,704	38.5	30.8	3.5
185	Prostate	12,787	158.7	103.4	13.0					
186	Testis	514	5.8	5.1	0.4					
187	Penis & other male genital organs	77	0.9	0.7	0.1					
188	Bladder	1,772	22.1	14.6	1.6	3.9	595	5.7	3.9	0.4
189	Kidney	1,036	12.2	9.2	1.1	1.8	661	6.7	5.1	0.6
190	Eye	112	1.3	1.1	0.1	1.3	96	1.0	0.8	0.1
191	Brain	670	7.8	6.6	0.7	1.5	499	5.3	4.6	0.5
192	Other nervous system	23	0.3	0.2	0.0	0.7	35	0.4	0.4	0.0
193	Thyroid	170	2.0	1.6	0.2	0.4	507	5.5	4.8	0.4
194	Other endocrine	47	0.5	0.6	0.0	1.7	29	0.3	0.3	0.0
195–199	Unknown primary site	1,547	19.0	13.0	1.5	1.5	1,306	12.3	8.4	0.9
200+202	Non-Hodgkin's lymphoma	1,468	17.2	13.1	1.4	1.4	1,217	12.2	9.1	1.0
201	Hodgkin's disease	204	2.3	2.1	0.2	1.3	160	1.8	1.6	0.1
200–202	Lymphoma	1,672	19.6	15.2	1.6	1.4	1,377	13.9	10.7	1.2
203	Multiple myeloma	432	5.3	3.6	0.4	1.8	308	3.0	2.0	0.2
204	Lymphatic leukaemia	478	5.7	4.8	0.4	1.7	338	3.4	3.2	0.3
205	Myeloid leukaemia	480	5.9	4.3	0.4	1.5	414	4.1	3.1	0.3
206	Monocytic leukaemia	11	0.1	0.1	0.0	1.0	13	0.1	0.1	0.0
207–208	Other and unspecified leukaemia	60	0.8	0.5	0.0	1.2	70	0.6	0.4	0.0
204–208	Leukaemia	1,029	12.6	9.7	0.9	1.5	835	8.3	6.8	0.6
#	Alcohol-related	334	3.8	3.2	0.4	1.2	307	3.2	2.8	0.3
#	Smoking-related	7,247	86.9	62.4	7.7	3.7	2,292	23.4	17.8	2.2

Note: Rates are expressed per 100,000 population and age-standardised to both the Australian 1991 Population standard (AS Rate (A)) and the World Standard Population (AS Rate (W)).

* Non-melanocytic skin cancer incidence data is not collected by State and Territory cancer registries.

See Appendix A for ICD-9 codes.

Source: Cancer in Australia 1991–1994 (with Projections to 1999), Australian Institute of Health and Welfare, 1998.

Table 13: Mortality summary table, 1994

Australia 1994		Males					Females			
ICD-9	Cancer description	Number	AS Rate (A)	AS Rate (W)	PYLL (<75 yrs)	Sex ratio M:F	Number	AS Rate (A)	AS Rate (W)	PYLL (<75 yrs)
140–208	All cancers (excluding NMSC)	19,132	237.1	159.1	149,768	1.7	14,312	138.6	98.7	120,020
140	Lip	8	0.1	0.1	88	1.7	6	0.1	0.0	33
141	Tongue	120	1.4	1.1	1,495	2.7	53	0.5	0.3	320
142	Salivary gland	41	0.5	0.3	278	2.7	21	0.2	0.1	133
143	Gum	7	0.1	0.1	85	1.4	7	0.1	0.0	25
144	Floor of mouth	45	0.5	0.4	513	3.9	14	0.1	0.1	98
145	Other mouth	31	0.4	0.3	345	1.5	26	0.2	0.1	75
146	Oropharynx	85	1.0	0.8	978	4.3	24	0.2	0.2	180
147	Nasopharynx	62	0.7	0.5	1,010	4.7	15	0.2	0.1	215
148	Hypopharynx	59	0.7	0.5	615	4.2	17	0.2	0.1	140
149	Other lip, oral cavity and pharynx	19	0.2	0.2	118	4.7	5	0.0	0.0	20
141–149	Head and neck	469	5.5	4.2	5,435	3.2	182	1.7	1.2	1,205
150	Oesophagus	572	6.9	4.9	5,038	2.5	303	2.8	1.7	1,148
151	Stomach	827	10.2	6.7	6,105	2.4	466	4.3	2.8	2,585
152	Small intestine	50	0.6	0.4	470	1.7	36	0.4	0.3	293
153	Colon	1,826	22.5	15.4	14,210	1.4	1,711	16.2	11.1	10,520
154	Rectum	675	8.2	5.7	5,500	2.1	415	3.9	2.7	2,500
153–154	Colorectal	2,501	30.7	21.1	19,710	1.5	2,126	20.1	13.7	13,020
155	Liver	358	4.3	3.0	3,190	2.3	196	1.9	1.2	1,265
156	Gallbladder	96	1.2	0.8	638	0.6	209	1.9	1.3	998
157	Pancreas	790	9.7	6.6	5,830	1.5	690	6.5	4.2	3,375
158	Peritoneum	40	0.5	0.4	460	2.8	17	0.2	0.1	108
159	Other digestive organs	97	1.2	0.8	645	1.1	117	1.1	0.7	633
160	Nasal cavity	27	0.3	0.2	370	2.4	14	0.1	0.1	225
161	Larynx	203	2.5	1.7	1,513	7.4	36	0.3	0.2	143
162	Lung	4,833	59.0	40.3	32,830	3.1	1,901	18.9	13.6	13,968
163	Pleura	179	2.2	1.5	1,460	7.4	29	0.3	0.2	248
164	Other respiratory organs	19	0.2	0.2	345	2.1	11	0.1	0.1	135
170	Bone	61	0.7	0.6	1,658	1.9	38	0.4	0.3	850
171	Connective tissue	90	1.1	0.8	1,398	1.5	73	0.7	0.6	1,055
172	Skin—melanoma	609	7.3	5.2	7,468	2.6	288	2.9	2.1	3,565
173	Skin—non-melanocytic (NMSC)	261	3.3	2.1	2,290	3.9	97	0.8	0.5	365
174–175	Breast	20	0.2	0.2	105	<0.01	2,669	26.6	20.4	31,273
180	Cervix						340	3.5	2.7	5,135
181	Placenta						5	0.1	0.0	198
179+182	Uterus						248	2.4	1.6	1,478
183	Ovary						743	7.5	5.7	7,638
184	Other female genital organs						63	0.6	0.4	335
#	Gynaecological						1,394	13.9	10.4	10,928
185	Prostate	2,613	34.9	19.6	6,455					
186	Testis	27	0.3	0.3	920					
187	Penis & other male genital organs	14	0.2	0.1	118					
188	Bladder	509	6.7	4.0	2,008	3.4	216	1.9	1.2	623
189	Kidney	464	5.6	4.0	4,453	1.8	320	3.1	2.2	2,318
190	Eye	10	0.1	0.1	83	0.9	16	0.1	0.1	95
191	Brain	555	6.4	5.1	9,268	1.5	431	4.4	3.5	6,668
192	Other nervous system	6	0.1	0.1	115	0.9	7	0.1	0.1	203
193	Thyroid	24	0.3	0.2	188	0.8	41	0.4	0.3	403
194	Other endocrine	28	0.3	0.3	1,095	1.4	22	0.2	0.2	728
195–199	Unknown primary site	1,164	14.5	9.6	8,505	1.6	957	8.9	5.9	5,518
200+202	Non-Hodgkin's lymphoma	790	9.6	6.7	9,195	1.6	639	6.1	4.1	4,505
201	Hodgkin's disease	45	0.5	0.4	803	1.8	28	0.3	0.2	438
200–202	Lymphoma	835	10.1	7.1	9,998	1.6	667	6.4	4.3	4,943
203	Multiple myeloma	317	4.0	2.6	2,310	1.4	292	2.8	1.9	1,640
204	Lymphatic leukaemia	263	3.3	2.5	4,353	2.1	165	1.6	1.2	2,248
205	Myeloid leukaemia	428	5.3	3.6	4,698	1.6	341	3.3	2.4	3,435
206	Monocytic leukaemia	8	0.1	0.1	130	1.2	8	0.1	0.0	43
207–208	Other and unspecified leukaemia	18	0.2	0.2	323	1.1	23	0.2	0.1	258
204–208	Leukaemia	717	9.0	6.3	9,503	1.7	537	5.2	3.7	5,983
#	Alcohol-related	200	2.3	1.9	2,547	2.2	100	1.0	0.8	1,203
#	Smoking-related	5,297	64.5	44.6	39,319	3.9	1,655	16.6	12.2	13,660

Note: Rates are expressed per 100,000 population and age-standardised to both the Australian 1991 Population standard (AS Rate (A)) and the World Standard Population (AS Rate (W)).

See Appendix A for ICD-9 codes.

Source: Cancer in Australia 1991–1994 (with Projections to 1999), Australian Institute of Health and Welfare, 1998.

Tables for selected cancers 1994

- Tables of new cases, deaths, incidence and mortality rates for Australia and the States and Territories for selected cancers.
- A complete set of tables for all cancer sites is available on the floppy disk contained in the back of this publication.

Table 14: All cancers (except non-melanocytic skin cancer) (ICD 140–172, 174–208)

Australia 1994

	Incidence						*Mortality*					
	Males		Females		Persons		Males		Females		Persons	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Age group												
0–4	146	21.9	104	16.5	250	19.3	29	4.4	22	3.5	51	3.9
5–9	82	12.5	71	11.4	153	11.9	36	5.5	19	3.0	55	4.3
10–14	79	12.0	64	10.3	143	11.2	37	5.6	19	3.0	56	4.4
15–19	171	26.1	125	20.1	296	23.2	28	4.3	20	3.2	48	3.8
20–24	235	32.2	236	33.3	471	32.7	42	5.8	32	4.5	74	5.1
25–29	403	59.0	430	63.3	833	61.2	67	9.8	54	7.9	121	8.9
30–34	554	75.4	744	101.3	1,298	88.3	106	14.4	94	12.8	200	13.6
35–39	700	100.7	1,116	159.9	1,816	130.3	195	28.0	214	30.7	409	29.4
40–44	978	148.4	1,690	257.2	2,668	202.7	319	48.4	386	58.7	705	53.6
45–49	1,500	243.3	2,400	402.7	3,900	321.6	500	81.1	599	100.5	1,099	90.6
50–54	2,100	442.3	2,620	578.3	4,720	508.7	858	180.7	755	166.6	1,613	173.8
55–59	3,226	819.0	2,819	731.0	6,045	775.5	1,329	337.4	994	257.7	2,323	298.0
60–64	4,993	1,405.5	3,327	932.1	8,320	1,168.2	2,074	583.8	1,275	357.2	3,349	470.2
65–69	7,355	2,212.4	4,188	1,181.5	11,543	1,680.4	3,025	909.9	1,831	516.5	4,856	706.9
70–74	7,922	3,002.9	4,258	1,341.9	12,180	2,096.0	3,526	1,336.6	2,188	689.6	5,714	983.3
75–79	5,855	3,585.9	3,576	1,569.8	9,431	2,411.5	2,970	1,819.0	2,067	907.4	5,037	1,288.0
80–84	3,929	3,987.1	2,804	1,677.3	6,733	2,534.0	2,305	2,339.1	1,859	1,112.0	4,164	1,567.1
85 and over	2,391	4,487.5	2,307	1,809.3	4,698	2,598.6	1,686	3,164.4	1,884	1,477.6	3,570	1,974.7
Total	**42,619**		**32,879**		**75,498**		**19,132**		**14,312**		**33,444**	
Rates per 100,000 with 95 per cent confidence intervals												
Crude rate	479.5		366.7		422.8		215.3		159.6		187.3	
Conf. interval	475.0 – 484.1		362.7 – 370.6		419.8 – 425.9		212.2 – 218.3		157.0 – 162.2		185.3 – 189.3	
AS Rate (A)	515.9		333.8		409.2		237.1		138.6		179.9	
Conf. interval	511.0 – 520.8		330.1 – 337.4		406.3 – 412.1		233.7 – 240.5		136.3 – 140.9		177.9 – 181.8	
AS Rate (W)	364.4		259.7		304.0		159.1		98.7		124.9	
Conf. interval	360.9 – 368.0		256.7 – 262.7		301.7 – 306.3		156.8 – 161.5		96.9 – 100.4		123.5 – 126.3	
Lifetime risk (0–74)	1 in 3		1 in 4		1 in 3		1 in 6		1 in 10		1 in 8	
PYLL (0–74)							149,768		120,020		269,788	
Per cent of all cancers	100.0		100.0		100.0		100.0		100.0		100.0	

Average annual numbers and rates by State and Territory 1990–1994

	Incidence						*Mortality*					
	Males		Females		Persons		Males		Females		Persons	
	Number	AS Rate	Number	AS Rate	Number	AS Rate	Number	AS Rate	Number	AS Rate	Number	AS Rate
NSW	13,353	481.6	10,744	322.6	24,097	386.7	6,242	231.8	4,722	135.1	10,964	174.9
Vic	9,439	468.5	8,025	323.6	17,464	381.6	4,699	238.2	3,831	148.3	8,530	185.2
Qld*	6,467	479.3	5,002	326.4	11,469	386.8	3,023	230.7	2,123	132.0	5,146	174.6
WA	3,310	487.2	2,671	326.7	5,980	392.9	1,476	224.0	1,153	139.3	2,629	175.0
SA	3,425	479.2	2,822	326.3	6,248	386.9	1,639	232.2	1,278	140.0	2,916	177.8
Tas	1,092	502.7	837	322.2	1,929	395.2	529	247.3	398	147.0	927	188.5
ACT	394	447.8	356	308.7	750	363.6	207	262.9	166	157.8	373	199.9
NT	133	354.1	115	282.4	248	317.6	78	251.6	53	177.1	132	215.5

Note: AS Rates use Australian 1991 Population standard (A) unless World Standard Population (W) indicated. All rates expressed per 100,000.

* Data for Queensland are preliminary only. National incidence estimates have been constructed using modelled Queensland data.

Source: Cancer in Australia 1991–1994 (with Projections to 1999) , Australian Institute of Health and Welfare, 1998.

Table 15: Cancer of the stomach (ICD 151)

Australia 1994

	Incidence						*Mortality*					
	Males		Females		Persons		Males		Females		Persons	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Age group												
0–4	0	0.0	1	0.2	1	0.1	0	0.0	0	0.0	0	0.0
5–9	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
10–14	1	0.2	0	0.0	1	0.1	0	0.0	0	0.0	0	0.0
15–19	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
20–24	1	0.1	1	0.1	2	0.1	0	0.0	1	0.1	1	0.1
25–29	3	0.4	4	0.6	7	0.5	0	0.0	1	0.1	1	0.1
30–34	6	0.8	7	1.0	13	0.9	7	1.0	3	0.4	10	0.7
35–39	19	2.7	9	1.3	28	2.0	7	1.0	4	0.6	11	0.8
40–44	21	3.2	17	2.6	38	2.9	17	2.6	11	1.7	28	2.1
45–49	48	7.8	28	4.7	76	6.3	20	3.2	12	2.0	32	2.6
50–54	72	15.2	26	5.7	98	10.6	49	10.3	16	3.5	65	7.0
55–59	79	20.1	21	5.4	100	12.8	65	16.5	17	4.4	82	10.5
60–64	106	29.8	48	13.4	154	21.6	87	24.5	23	6.4	110	15.4
65–69	190	57.2	80	22.6	270	39.3	97	29.2	53	15.0	150	21.8
70–74	234	88.7	91	28.7	325	55.9	155	58.8	71	22.4	226	38.9
75–79	165	101.1	103	45.2	268	68.5	141	86.4	79	34.7	220	56.3
80–84	151	153.2	85	50.8	236	88.8	118	119.7	80	47.9	198	74.5
85 and over	103	193.3	99	77.6	202	111.7	64	120.1	95	74.5	159	87.9
Total	**1,199**		**620**		**1,819**		**827**		**466**		**1,293**	
Rates per 100,000 with 95 per cent confidence intervals												
Crude rate	13.5		6.9		10.2		9.3		5.2		7.2	
Conf. interval	12.7 – 14.3		6.4 – 7.5		9.7 – 10.7		8.7 – 9.9		4.7 – 5.7		6.8 – 7.6	
AS Rate (A)	14.7		5.9		9.7		10.2		4.3		6.9	
Conf. interval	13.9 – 15.6		5.4 – 6.4		9.3 – 10.2		9.5 – 10.9		3.9 – 4.7		6.5 – 7.3	
AS Rate (W)	9.9		4.0		6.7		6.7		2.8		4.6	
Conf. interval	9.3 – 10.5		3.7 – 4.4		6.4 – 7.0		6.3 – 7.2		2.5 – 3.0		4.3 – 4.8	
Lifetime risk (0–74)	1 in 89		1 in 232		1 in 131		1 in 137		1 in 353		1 in 200	
PYLL (0–74)							6,105		2,585		8,690	
Per cent of all cancers	2.8		1.9		2.4		4.3		3.3		3.9	

Average annual numbers and rates by State and Territory 1990–1994

	Incidence						*Mortality*					
	Males		Females		Persons		Males		Females		Persons	
	Number	AS Rate	Number	AS Rate	Number	AS Rate	Number	AS Rate	Number	AS Rate	Number	AS Rate
NSW	397	14.5	215	6.0	611	9.7	254	9.5	158	4.3	412	6.6
Vic	330	16.6	185	7.0	514	11.2	213	11.0	138	5.1	351	7.6
Qld*	198	14.9	100	6.0	298	10.1	125	9.7	69	4.1	194	6.6
WA	113	17.0	55	6.6	168	11.2	77	11.8	42	4.9	119	7.9
SA	108	15.2	56	6.0	164	10.0	78	11.0	45	4.7	122	7.4
Tas	36	17.0	19	6.8	55	11.1	29	13.5	14	4.9	43	8.6
ACT	12	14.6	7	6.1	18	9.7	8	11.2	5	4.8	14	7.3
NT	4	8.1	2	6.9	6	7.4	3	6.5	2	6.2	5	6.3

Note: AS Rates use Australian 1991 Population standard (A) unless World Standard Population (W) indicated. All rates expressed per 100,000.

* Data for Queensland are preliminary only. National incidence estimates have been constructed using modelled Queensland data.

Source: Cancer in Australia 1991–1994 (with Projections to 1999) , Australian Institute of Health and Welfare, 1998.

Table 16: Cancer of the colon and rectum (ICD 153–154)

Australia 1994

	Incidence						*Mortality*					
	Males		Females		Persons		Males		Females		Persons	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Age group												
0–4	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
5–9	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
10–14	0	0.0	0	0.0	0	0.0	1	0.2	0	0.0	1	0.1
15–19	2	0.3	1	0.2	3	0.2	0	0.0	0	0.0	0	0.0
20–24	3	0.4	7	1.0	10	0.7	3	0.4	0	0.0	3	0.2
25–29	10	1.5	11	1.6	21	1.5	3	0.4	4	0.6	7	0.5
30–34	23	3.1	25	3.4	48	3.3	6	0.8	7	1.0	13	0.9
35–39	48	6.9	54	7.7	102	7.3	14	2.0	12	1.7	26	1.9
40–44	109	16.5	79	12.0	188	14.3	45	6.8	28	4.3	73	5.5
45–49	205	33.2	172	28.9	377	31.1	69	11.2	56	9.4	125	10.3
50–54	342	72.0	275	60.7	617	66.5	127	26.7	78	17.2	205	22.1
55–59	517	131.3	389	100.9	906	116.2	238	60.4	149	38.6	387	49.6
60–64	730	205.5	462	129.4	1,192	167.4	311	87.5	198	55.5	509	71.5
65–69	965	290.3	654	184.5	1,619	235.7	429	129.0	263	74.2	692	100.7
70–74	963	365.0	735	231.6	1,698	292.2	432	163.8	329	103.7	761	131.0
75–79	742	454.4	672	295.0	1,414	361.6	348	213.1	304	133.5	652	166.7
80–84	471	478.0	529	316.4	1,000	376.3	284	288.2	308	184.2	592	222.8
85 and over	303	568.7	518	406.3	821	454.1	191	358.5	390	305.9	581	321.4
Total	**5,433**		**4,583**		**10,016**		**2,501**		**2,126**		**4,627**	

Rates per 100,000 with 95 per cent confidence intervals

Crude rate	61.1	51.1	56.1	28.1	23.7	25.9
Conf. interval	59.5 – 62.8	49.6 – 52.6	55.0 – 57.2	27.0 – 29.2	22.7 – 24.7	25.2 – 26.7
AS Rate (A)	65.6	44.9	54.1	30.7	20.1	24.8
Conf. interval	63.8 – 67.3	43.5 – 46.2	53.1 – 55.2	29.5 – 31.9	19.2 – 20.9	24.1 – 25.6
AS Rate (W)	46.6	32.3	38.9	21.1	13.7	17.2
Conf. interval	45.4 – 47.9	31.3 – 33.3	38.1 – 39.7	20.3 – 21.9	13.1 – 14.4	16.6 – 17.7
Lifetime risk (0–74)	1 in 18	1 in 27	1 in 22	1 in 41	1 in 66	1 in 51
PYLL (0–74)				19,710	13,020	32,730
Per cent of all cancers	12.7	13.9	13.3	13.1	14.9	13.8

Average annual numbers and rates by State and Territory 1990–1994

	Incidence						*Mortality*					
	Males		Females		Persons		Males		Females		Persons	
	Number	AS Rate	Number	AS Rate	Number	AS Rate	Number	AS Rate	Number	AS Rate	Number	AS Rate
NSW	1,844	66.2	1,524	44.0	3,367	53.8	795	29.4	660	18.4	1,456	23.2
Vic	1,367	67.7	1,256	48.7	2,623	57.1	633	32.1	607	22.8	1,240	26.8
Qld*	893	65.7	716	45.4	1,609	54.7	385	29.2	310	19.0	695	23.6
WA	422	62.5	372	45.1	793	52.7	182	27.6	172	20.4	354	23.6
SA	471	65.4	427	46.8	898	54.9	206	29.2	184	19.6	390	23.7
Tas	148	66.8	127	47.3	275	56.2	70	32.4	59	21.3	129	26.3
ACT	58	64.5	49	46.8	107	55.4	29	35.6	24	23.6	53	28.9
NT	15	47.5	11	38.0	26	43.1	8	26.1	6	24.4	14	26.0

Note: AS Rates use Australian 1991 Population standard (A) unless World Standard Population (W) indicated. All rates expressed per 100,000.

* Data for Queensland are preliminary only. National incidence estimates have been constructed using modelled Queensland data.

Source: Cancer in Australia 1991–1994 (with Projections to 1999) , Australian Institute of Health and Welfare, 1998.

Table 17: Cancer of the pancreas (ICD 157)

Australia 1994

	Incidence						*Mortality*					
	Males		Females		Persons		Males		Females		Persons	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Age group												
0–4	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
5–9	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
10–14	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
15–19	0	0.0	1	0.2	1	0.1	0	0.0	0	0.0	0	0.0
20–24	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
25–29	0	0.0	2	0.3	2	0.1	1	0.1	1	0.1	2	0.1
30–34	4	0.5	2	0.3	6	0.4	3	0.4	0	0.0	3	0.2
35–39	7	1.0	3	0.4	10	0.7	8	1.2	4	0.6	12	0.9
40–44	14	2.1	11	1.7	25	1.9	13	2.0	7	1.1	20	1.5
45–49	26	4.2	18	3.0	44	3.6	17	2.8	16	2.7	33	2.7
50–54	39	8.2	21	4.6	60	6.5	38	8.0	12	2.6	50	5.4
55–59	69	17.5	27	7.0	96	12.3	60	15.2	36	9.3	96	12.3
60–64	100	28.1	64	17.9	164	23.0	95	26.7	46	12.9	141	19.8
65–69	129	38.8	97	27.4	226	32.9	128	38.5	97	27.4	225	32.8
70–74	150	56.9	118	37.2	268	46.1	165	62.5	123	38.8	288	49.6
75–79	102	62.5	125	54.9	227	58.0	118	72.3	135	59.3	253	64.7
80–84	73	74.1	110	65.8	183	68.9	81	82.2	102	61.0	183	68.9
85 and over	54	101.3	109	85.5	163	90.2	63	118.2	111	87.1	174	96.2
Total	**767**		**708**		**1,475**		**790**		**690**		**1,480**	

Rates per 100,000 with 95 per cent confidence intervals

Crude rate	8.6	7.9	8.3	8.9	7.7	8.3
Conf. interval	8.0 – 9.2	7.3 – 8.5	7.8 – 8.7	8.3 – 9.5	7.1 – 8.3	7.9 – 8.7
AS Rate (A)	9.3	6.7	7.9	9.7	6.5	7.9
Conf. interval	8.7 – 10.0	6.2 – 7.2	7.5 – 8.3	9.0 – 10.4	6.0 – 7.0	7.5 – 8.4
AS Rate (W)	6.5	4.5	5.4	6.6	4.2	5.3
Conf. interval	6.0 – 7.0	4.1 – 4.8	5.1 – 5.7	6.1 – 7.1	3.9 – 4.6	5.0 – 5.6
Lifetime risk (0–74)	1 in 128	1 in 201	1 in 157	1 in 128	1 in 210	1 in 160
PYLL (0–74)				5,830	3,375	9,205
Per cent of all cancers	1.8	2.2	2.0	4.1	4.8	4.4

Average annual numbers and rates by State and Territory 1990–1994

	Incidence						*Mortality*					
	Males		Females		Persons		Males		Females		Persons	
	Number	AS Rate	Number	AS Rate	Number	AS Rate	Number	AS Rate	Number	AS Rate	Number	AS Rate
NSW	268	9.9	273	7.7	541	8.6	264	9.8	261	7.3	524	8.3
Vic	195	9.8	178	6.6	373	8.1	195	9.9	186	6.9	382	8.3
Qld*	134	9.9	109	6.6	243	8.2	121	9.0	98	6.0	219	7.4
WA	61	9.1	55	6.6	116	7.8	59	8.9	56	6.8	115	7.7
SA	69	9.8	72	7.4	141	8.5	64	9.1	66	6.8	131	7.9
Tas	22	10.1	18	6.4	39	8.0	20	9.5	15	5.4	35	7.1
ACT	9	11.0	6	5.8	15	8.0	11	13.9	7	7.0	18	10.0
NT	2	9.1	2	5.3	4	7.0	3	11.9	1	3.7	4	7.6

Note: AS Rates use Australian 1991 Population standard (A) unless World Standard Population (W) indicated. All rates expressed per 100,000.

* Data for Queensland are preliminary only. National incidence estimates have been constructed using modelled Queensland data.

Source: Cancer in Australia 1991–1994 (with Projections to 1999) , Australian Institute of Health and Welfare, 1998.

Table 18: Cancer of the trachea, bronchus and lung (ICD 162)

Australia 1994

	Incidence						*Mortality*					
	Males		Females		Persons		Males		Females		Persons	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Age group												
0–4	1	0.2	0	0.0	1	0.1	0	0.0	0	0.0	0	0.0
5–9	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
10–14	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
15–19	1	0.2	1	0.2	2	0.2	1	0.2	0	0.0	1	0.1
20–24	2	0.3	0	0.0	2	0.1	0	0.0	1	0.1	1	0.1
25–29	4	0.6	2	0.3	6	0.4	0	0.0	1	0.1	1	0.1
30–34	10	1.4	5	0.7	15	1.0	3	0.4	0	0.0	3	0.2
35–39	22	3.2	15	2.1	37	2.7	18	2.6	14	2.0	32	2.3
40–44	42	6.4	27	4.1	69	5.2	41	6.2	20	3.0	61	4.6
45–49	121	19.6	82	13.8	203	16.7	95	15.4	61	10.2	156	12.9
50–54	225	47.4	148	32.7	373	40.2	203	42.8	113	24.9	316	34.1
55–59	410	104.1	172	44.6	582	74.7	356	90.4	147	38.1	503	64.5
60–64	703	197.9	229	64.2	932	130.9	601	169.2	203	56.9	804	112.9
65–69	1,009	303.5	372	104.9	1,381	201.0	940	282.8	320	90.3	1,260	183.4
70–74	1,116	423.0	411	129.5	1,527	262.8	1,066	404.1	385	121.3	1,451	249.7
75–79	794	486.3	304	133.5	1,098	280.8	773	473.4	307	134.8	1,080	276.2
80–84	483	490.1	228	136.4	711	267.6	456	462.7	213	127.4	669	251.8
85 and over	253	474.8	114	89.4	367	203.0	280	525.5	116	91.0	396	219.0
Total	**5,196**		**2,110**		**7,306**		**4,833**		**1,901**		**6,734**	
Rates per 100,000 with 95 per cent confidence intervals												
Crude rate	58.5		23.5		40.9		54.4		21.2		37.7	
Conf. interval	56.9 – 60.0		22.5 – 24.5		40.0 – 41.9		52.8 – 55.9		20.2 – 22.2		36.8 – 38.6	
AS Rate (A)	63.1		21.1		39.6		59.0		18.9		36.5	
Conf. interval	61.4 – 64.8		20.2 – 22.0		38.7 – 40.5		57.4 – 60.7		18.0 – 19.7		35.6 – 37.3	
AS Rate (W)	43.6		15.5		28.3		40.3		13.6		25.6	
Conf. interval	42.4 – 44.9		14.8 – 16.2		27.6 – 29.0		39.1 – 41.4		12.9 – 14.2		25.0 – 26.3	
Lifetime risk (0–74)	1 in 19		1 in 51		1 in 28		1 in 20		1 in 58		1 in 31	
PYLL (0–74)							32,830		13,968		46,798	
Per cent of all cancers	12.2		6.4		9.7		25.3		13.3		20.1	

Average annual numbers and rates by State and Territory 1990–1994

	Incidence						*Mortality*					
	Males		Females		Persons		Males		Females		Persons	
	Number	AS Rate	Number	AS Rate	Number	AS Rate	Number	AS Rate	Number	AS Rate	Number	AS Rate
NSW	1,802	64.4	715	21.0	2,517	40.1	1,612	58.4	612	17.7	2,224	35.4
Vic	1,302	64.4	545	21.7	1,847	40.4	1,192	59.3	486	19.3	1,678	36.6
Qld*	866	63.5	299	19.3	1,167	39.8	775	58.0	256	16.3	1,031	35.1
WA	441	66.1	193	24.1	634	42.7	388	58.3	160	19.9	548	36.9
SA	475	65.5	188	21.0	663	40.4	428	59.2	152	16.8	580	35.3
Tas	153	69.6	61	23.7	215	43.8	127	58.3	55	21.0	182	37.1
ACT	42	50.5	23	22.3	65	34.7	46	55.1	21	20.1	66	35.7
NT	24	68.7	12	39.0	36	55.3	24	74.7	12	41.6	36	59.3

Note: AS Rates use Australian 1991 Population standard (A) unless World Standard Population (W) indicated. All rates expressed per 100,000.

* Data for Queensland are preliminary only. National incidence estimates have been constructed using modelled Queensland data.

Source: Cancer in Australia 1991–1994 (with Projections to 1999) , Australian Institute of Health and Welfare, 1998.

Table 19: Cancer of the skin—melanoma (ICD 172)

Australia 1994

	Incidence						*Mortality*					
	Males		Females		Persons		Males		Females		Persons	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Age group												
0–4	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
5–9	1	0.2	1	0.2	2	0.2	0	0.0	0	0.0	0	0.0
10–14	9	1.4	3	0.5	12	0.9	0	0.0	0	0.0	0	0.0
15–19	36	5.5	41	6.6	77	6.0	1	0.2	0	0.0	1	0.1
20–24	73	10.0	89	12.5	162	11.3	4	0.5	0	0.0	4	0.3
25–29	123	18.0	145	21.3	268	19.7	5	0.7	8	1.2	13	1.0
30–34	168	22.9	193	26.3	361	24.6	12	1.6	7	1.0	19	1.3
35–39	204	29.3	226	32.4	430	30.9	22	3.2	15	2.1	37	2.7
40–44	277	42.0	277	42.2	554	42.1	39	5.9	13	2.0	52	4.0
45–49	313	50.8	310	52.0	623	51.4	39	6.3	19	3.2	58	4.8
50–54	336	70.8	261	57.6	597	64.3	43	9.1	22	4.9	65	7.0
55–59	342	86.8	247	64.0	589	75.6	33	8.4	16	4.1	49	6.3
60–64	354	99.6	239	67.0	593	83.3	68	19.1	24	6.7	92	12.9
65–69	421	126.6	300	84.6	721	105.0	91	27.4	26	7.3	117	17.0
70–74	416	157.7	276	87.0	692	119.1	84	31.8	44	13.9	128	22.0
75–79	305	186.8	197	86.5	502	128.4	79	48.4	35	15.4	114	29.2
80–84	200	203.0	150	89.7	350	131.7	57	57.8	30	17.9	87	32.7
85 and over	117	219.6	126	98.8	243	134.4	32	60.1	29	22.7	61	33.7
Total	**3,695**		**3,081**		**6,776**		**609**		**288**		**897**	
Rates per 100,000 with 95 per cent confidence intervals												
Crude rate	41.6		34.4		38.0		6.9		3.2		5.0	
Conf. interval	40.2 – 42.9		33.1 – 35.6		37.0 – 38.9		6.3 – 7.4		2.8 – 3.6		4.7 – 5.4	
AS Rate (A)	42.9		32.4		36.9		7.3		2.9		4.9	
Conf. interval	41.5 – 44.3		31.3 – 33.6		36.1 – 37.8		6.7 – 7.9		2.5 – 3.2		4.5 – 5.2	
AS Rate (W)	33.5		26.7		29.8		5.2		2.1		3.6	
Conf. interval	32.4 – 34.6		25.8 – 27.7		29.0 – 30.5		4.8 – 5.6		1.9 – 2.4		3.3 – 3.8	
Lifetime risk (0–74)	1 in 28		1 in 37		1 in 32		1 in 176		1 in 432		1 in 253	
PYLL (0–74)							7,468		3,565		11,033	
Per cent of all cancers	8.7		9.4		9.0		3.2		2.0		2.7	

Average annual numbers and rates by State and Territory 1990–1994

	Incidence						*Mortality*					
	Males		Females		Persons		Males		Females		Persons	
	Number	AS Rate	Number	AS Rate	Number	AS Rate	Number	AS Rate	Number	AS Rate	Number	AS Rate
NSW	1,266	44.0	998	31.4	2,264	36.8	221	7.9	111	3.3	332	5.3
Vic	629	29.9	596	25.1	1,225	27.0	112	5.5	72	2.9	184	4.0
Qld*	783	54.9	621	40.3	1,405	46.9	111	8.1	53	3.4	165	5.5
WA	341	45.6	273	33.4	615	38.8	44	6.3	28	3.4	72	4.7
SA	265	36.7	265	32.7	531	34.2	36	5.1	25	2.9	61	3.9
Tas	71	31.8	71	28.6	142	29.8	11	4.8	8	2.8	18	3.7
ACT	39	35.7	34	25.4	73	29.8	8	7.7	4	3.6	12	5.4
NT	14	26.5	10	15.1	25	20.6	4	10.7	1	3.3	5	7.3

Note: AS Rates use Australian 1991 Population standard (A) unless World Standard Population (W) indicated. All rates expressed per 100,000.

* Data for Queensland are preliminary only. National incidence estimates have been constructed using modelled Queensland data.

Source: Cancer in Australia 1991–1994 (with Projections to 1999) , Australian Institute of Health and Welfare, 1998.

Table 20: Cancer of the breast (ICD 174)

Australia 1994

	Incidence						*Mortality*					
	Males		Females		Persons		Males		Females		Persons	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Age group												
0–4	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
5–9	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
10–14	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
15–19	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
20–24	0	0.0	5	0.7	5	0.3	0	0.0	1	0.1	1	0.1
25–29	1	0.1	50	7.4	51	3.7	0	0.0	2	0.3	2	0.1
30–34	0	0.0	174	23.7	174	11.8	0	0.0	20	2.7	20	1.4
35–39	3	0.4	380	54.5	383	27.5	0	0.0	92	13.2	92	6.6
40–44	0	0.0	772	117.5	772	58.7	0	0.0	146	22.2	146	11.1
45–49	4	0.6	1,096	183.9	1,100	90.7	0	0.0	212	35.6	212	17.5
50–54	7	1.5	1,123	247.9	1,130	121.8	1	0.2	245	54.1	246	26.5
55–59	5	1.3	1,043	270.4	1,048	134.4	0	0.0	254	65.9	254	32.6
60–64	8	2.3	1,109	310.7	1,117	156.8	1	0.3	262	73.4	263	36.9
65–69	12	3.6	1,252	353.2	1,264	184.0	8	2.4	298	84.1	306	44.5
70–74	8	3.0	1,026	323.4	1,034	177.9	4	1.5	313	98.6	317	54.6
75–79	7	4.3	787	345.5	794	203.0	3	1.8	292	128.2	295	75.4
80–84	7	7.1	525	314.1	532	200.2	2	2.0	255	152.5	257	96.7
85 and over	8	15.0	352	276.1	360	199.1	1	1.9	277	217.2	278	153.8
Total	**70**		**9,694**		**9,764**		**20**		**2,669**		**2,689**	

Rates per 100,000 with 95 per cent confidence intervals

Crude rate	0.8	108.1	54.7	0.2	29.8	15.1
Conf. interval	0.6 – 1.0	106.0 – 110.3	53.6 – 55.8	0.1 – 0.3	28.6 – 30.9	14.5 – 15.6
AS Rate (A)	0.9	100.9	52.9	0.2	26.6	14.4
Conf. interval	0.7 – 1.1	98.9 – 102.9	51.8 – 53.9	0.1 – 0.4	25.6 – 27.6	13.9 – 15.0
AS Rate (W)	0.6	82.5	42.5	0.2	20.4	10.8
Conf. interval	0.5 – 0.8	80.8 – 84.2	41.6 – 43.4	0.1 – 0.2	19.5 – 21.2	10.3 – 11.2
Lifetime risk (0–74)	1 in 1,555	1 in 11	1 in 21	1 in 4,531	1 in 45	1 in 87
PYLL (0–74)				105	31,273	31,378
Per cent of all cancers	0.2	29.5	12.9	0.1	18.6	8.0

Average annual numbers and rates by State and Territory 1990–1994

	Incidence						*Mortality*					
	Males		Females		Persons		Males		Females		Persons	
	Number	AS Rate	Number	AS Rate	Number	AS Rate	Number	AS Rate	Number	AS Rate	Number	AS Rate
NSW	25	0.9	2,917	90.1	2,942	47.5	6	0.2	868	25.8	874	14.0
Vic	17	0.9	2,145	89.2	2,162	47.5	6	0.3	725	29.0	731	15.9
Qld*	9	0.6	1,440	92.8	1,449	48.3	2	0.2	390	24.7	392	13.2
WA	4	0.6	746	91.9	751	47.9	1	0.1	209	25.4	210	13.7
SA	8	1.2	742	89.5	751	47.6	2	0.2	230	26.4	232	14.4
Tas	1	0.6	218	86.1	219	45.4	0	0.2	65	24.6	65	13.4
ACT	1	0.6	109	88.9	109	46.9	0	0.3	36	33.0	37	18.2
NT	0	0.0	29	59.6	29	27.8	0	0.0	7	16.9	7	7.7

Note: AS Rates use Australian 1991 Population standard (A) unless World Standard Population (W) indicated. All rates expressed per 100,000.

* Data for Queensland are preliminary only. National incidence estimates have been constructed using modelled Queensland data.

Source: Cancer in Australia 1991–1994 (with Projections to 1999) , Australian Institute of Health and Welfare, 1998.

Table 21: Cancer of the cervix (ICD 180)

Australia 1994

	Incidence						*Mortality*					
	Males		Females		Persons		Males		Females		Persons	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Age group												
0–4			0	0.0					0	0.0		
5–9			1	0.2					0	0.0		
10–14			0	0.0					0	0.0		
15–19			1	0.2					0	0.0		
20–24			13	1.8					0	0.0		
25–29			46	6.8					6	0.9		
30–34			116	15.8					12	1.6		
35–39			136	19.5					9	1.3		
40–44			136	20.7					31	4.7		
45–49			124	20.8					37	6.2		
50–54			83	18.3					35	7.7		
55–59			81	21.0					28	7.3		
60–64			99	27.7					26	7.3		
65–69			83	23.4					39	11.0		
70–74			72	22.7					33	10.4		
75–79			62	27.2					31	13.6		
80–84			40	23.9					28	16.7		
85 and over			28	22.0					25	19.6		
Total			**1,121**						**340**			
Rates per 100,000 with 95 per cent confidence intervals												
Crude rate				12.5						3.8		
Conf. interval				11.8 – 13.2						3.4 – 4.2		
AS Rate (A)				12.0						3.5		
Conf. interval				11.3 – 12.7						3.1 – 3.8		
AS Rate (W)				9.8						2.7		
Conf. interval				9.3 – 10.4						2.4 – 3.0		
Lifetime risk (0–74)				1 in 101						1 in 343		
PYLL (0–74)										5,135		
Per cent of all cancers				3.4						2.4		

Average annual numbers and rates by State and Territory 1990–1994

	Incidence						*Mortality*					
	Males		Females		Persons		Males		Females		Persons	
	Number	AS Rate	Number	AS Rate	Number	AS Rate	Number	AS Rate	Number	AS Rate	Number	AS Rate
NSW			369	11.8					114	3.5		
Vic			265	11.4					81	3.3		
Qld*			178	11.8					55	3.5		
WA			103	12.6					34	4.2		
SA			71	9.2					23	2.7		
Tas			31	12.7					13	5.2		
ACT			15	11.3					3	2.7		
NT			10	17.1					6	14.7		

Note: AS Rates use Australian 1991 Population standard (A) unless World Standard Population (W) indicated. All rates expressed per 100,000.

* Data for Queensland are preliminary only. National incidence estimates have been constructed using modelled Queensland data.

Source: Cancer in Australia 1991–1994 (with Projections to 1999) , Australian Institute of Health and Welfare, 1998.

Table 22: Cancer of the uterus (ICD 179 + 182)

Australia 1994

	Incidence						*Mortality*					
	Males		Females		Persons		Males		Females		Persons	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Age group												
0–4			0	0.0					0	0.0		
5–9			0	0.0					0	0.0		
10–14			0	0.0					0	0.0		
15–19			1	0.2					0	0.0		
20–24			4	0.6					0	0.0		
25–29			3	0.4					0	0.0		
30–34			13	1.8					1	0.1		
35–39			15	2.1					2	0.3		
40–44			41	6.2					3	0.5		
45–49			75	12.6					4	0.7		
50–54			119	26.3					6	1.3		
55–59			165	42.8					17	4.4		
60–64			186	52.1					24	6.7		
65–69			201	56.7					45	12.7		
70–74			190	59.9					33	10.4		
75–79			128	56.2					31	13.6		
80–84			90	53.8					34	20.3		
85 and over			73	57.3					48	37.6		
Total			**1,304**						**248**			
Rates per 100,000 with 95 per cent confidence intervals												
Crude rate				14.5						2.8		
Conf. interval				13.8 – 15.3						2.4 – 3.1		
AS Rate (A)				13.4						2.4		
Conf. interval				12.6 – 14.1						2.1 – 2.7		
AS Rate (W)				10.6						1.6		
Conf. interval				10.0 – 11.2						1.4 – 1.8		
Lifetime risk (0–74)				1 in 77						1 in 540		
PYLL (0–74)										1,478		
Per cent of all cancers				4.0						1.7		

Average annual numbers and rates by State and Territory 1990–1994

	Incidence						*Mortality*					
	Males		Females		Persons		Males		Females		Persons	
	Number	AS Rate	Number	AS Rate	Number	AS Rate	Number	AS Rate	Number	AS Rate	Number	AS Rate
NSW			405	12.2					76	2.1		
Vic			338	13.8					76	2.8		
Qld*			215	13.8					37	2.3		
WA			100	12.6					19	2.3		
SA			119	13.8					22	2.3		
Tas			31	12.2					8	2.7		
ACT			11	10.3					2	2.3		
NT			3	9.3					1	4.6		

Note: AS Rates use Australian 1991 Population standard (A) unless World Standard Population (W) indicated. All rates expressed per 100,000.

* Data for Queensland are preliminary only. National incidence estimates have been constructed using modelled Queensland data.

Source: Cancer in Australia 1991–1994 (with Projections to 1999) , Australian Institute of Health and Welfare, 1998.

Table 23: Cancer of the ovary and other uterine adnexae (ICD 183)

Australia 1994

	Incidence						*Mortality*					
	Males		Females		Persons		Males		Females		Persons	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Age group												
0–4			0	0.0					0	0.0		
5–9			1	0.2					0	0.0		
10–14			3	0.5					1	0.2		
15–19			6	1.0					2	0.3		
20–24			12	1.7					1	0.1		
25–29			16	2.4					3	0.4		
30–34			20	2.7					8	1.1		
35–39			27	3.9					5	0.7		
40–44			46	7.0					22	3.3		
45–49			85	14.3					43	7.2		
50–54			106	23.4					71	15.7		
55–59			105	27.2					65	16.9		
60–64			128	35.9					90	25.2		
65–69			139	39.2					95	26.8		
70–74			132	41.6					107	33.7		
75–79			105	46.1					114	50.0		
80–84			66	39.5					74	44.3		
85 and over			42	32.9					42	32.9		
Total			**1,039**						**743**			
Rates per 100,000 with 95 per cent confidence intervals												
Crude rate				11.6						8.3		
Conf. interval				10.9 – 12.3						7.7 – 8.9		
AS Rate (A)				10.8						7.5		
Conf. interval				10.1 – 11.4						6.9 – 8.0		
AS Rate (W)				8.7						5.7		
Conf. interval				8.1 – 9.2						5.2 – 6.1		
Lifetime risk (0–74)				1 in 100						1 in 152		
PYLL (0–74)										7,638		
Per cent of all cancers				3.2						5.2		

Average annual numbers and rates by State and Territory 1990–1994

	Incidence						*Mortality*					
	Males		Females		Persons		Males		Females		Persons	
	Number	AS Rate	Number	AS Rate	Number	AS Rate	Number	AS Rate	Number	AS Rate	Number	AS Rate
NSW			345	10.5					242	7.1		
Vic			285	11.7					207	8.3		
Qld*			150	9.9					105	6.7		
WA			85	10.6					63	7.8		
SA			95	11.2					69	7.8		
Tas			30	11.8					22	8.2		
ACT			14	11.4					8	7.4		
NT			4	10.3					2	4.3		

Note: AS Rates use Australian 1991 Population standard (A) unless World Standard Population (W) indicated. All rates expressed per 100,000.

* Data for Queensland are preliminary only. National incidence estimates have been constructed using modelled Queensland data.

Source: Cancer in Australia 1991–1994 (with Projections to 1999) , Australian Institute of Health and Welfare, 1998.

Table 24: Cancer of the prostate (ICD 185)

Australia 1994

	Incidence						*Mortality*					
	Males		Females		Persons		Males		Females		Persons	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Age group												
0–4	0	0.0					0	0.0				
5–9	0	0.0					0	0.0				
10–14	0	0.0					0	0.0				
15–19	0	0.0					0	0.0				
20–24	0	0.0					0	0.0				
25–29	1	0.1					0	0.0				
30–34	0	0.0					0	0.0				
35–39	1	0.1					0	0.0				
40–44	11	1.7					0	0.0				
45–49	50	8.1					7	1.1				
50–54	230	48.4					18	3.8				
55–59	706	179.2					52	13.2				
60–64	1,488	418.9					136	38.3				
65–69	2,671	803.5					271	81.5				
70–74	3,032	1,149.3					486	184.2				
75–79	2,244	1,374.3					574	351.5				
80–84	1,503	1,525.2					564	572.3				
85 and over	850	1,595.3					505	947.8				
Total	**12,787**						**2,613**					

Rates per 100,000 with 95 per cent confidence intervals

Crude rate	143.9				29.4	
Conf. interval	141.4 – 146.4				28.3 – 30.5	
AS Rate (A)	158.7				34.9	
Conf. interval	155.9 – 161.4				33.6 – 36.3	
AS Rate (W)	103.4				19.6	
Conf. interval	101.5 – 105.2				18.8 – 20.3	
Lifetime risk (0–74)	1 in 8				1 in 63	
PYLL (0–74)					6,455	
Per cent of all cancers	30.0				13.7	

Average annual numbers and rates by State and Territory 1990–1994

	Incidence						*Mortality*					
	Males		Females		Persons		Males		Females		Persons	
	Number	AS Rate	Number	AS Rate	Number	AS Rate	Number	AS Rate	Number	AS Rate	Number	AS Rate
NSW	3,172	118.8					814	33.1				
Vic	2,036	105.6					606	33.5				
Qld*	1,555	120.5					413	34.5				
WA	822	129.4					183	30.6				
SA	856	122.4					224	33.6				
Tas	272	129.5					72	36.2				
ACT	83	116.0					24	40.9				
NT	11	53.8					6	35.7				

Note: AS Rates use Australian 1991 Population standard (A) unless World Standard Population (W) indicated. All rates expressed per 100,000.

* Data for Queensland are preliminary only. National incidence estimates have been constructed using modelled Queensland data.

Source: Cancer in Australia 1991–1994 (with Projections to 1999) , Australian Institute of Health and Welfare, 1998.

Table 25: Cancer of the testis (ICD 186)

Australia 1994

	Incidence						*Mortality*					
	Males		Females		Persons		Males		Females		Persons	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Age group												
0–4	7	1.1					1	0.2				
5–9	0	0.0					0	0.0				
10–14	0	0.0					0	0.0				
15–19	21	3.2					0	0.0				
20–24	54	7.4					4	0.5				
25–29	93	13.6					1	0.1				
30–34	115	15.6					5	0.7				
35–39	80	11.5					4	0.6				
40–44	51	7.7					3	0.5				
45–49	46	7.5					3	0.5				
50–54	21	4.4					0	0.0				
55–59	12	3.0					2	0.5				
60–64	2	0.6					1	0.3				
65–69	4	1.2					0	0.0				
70–74	3	1.1					0	0.0				
75–79	2	1.2					1	0.6				
80–84	1	1.0					2	2.0				
85 and over	2	3.8					0	0.0				
Total	**514**						**27**					

Rates per 100,000 with 95 per cent confidence intervals

Crude rate	5.8						0.3					
Conf. interval	5.3 – 6.3						0.2 – 0.4					
AS Rate (A)	5.8						0.3					
Conf. interval	5.3 – 6.3						0.2 – 0.4					
AS Rate (W)	5.1						0.3					
Conf. interval	4.6 – 5.5						0.2 – 0.4					
Lifetime risk (0–74)	1 in 257						1 in 5,221					
PYLL (0–74)							920					
Per cent of all cancers	1.2						0.1					

Average annual numbers and rates by State and Territory 1990–1994

	Incidence						*Mortality*					
	Males		Females		Persons		Males		Females		Persons	
	Number	AS Rate	Number	AS Rate	Number	AS Rate	Number	AS Rate	Number	AS Rate	Number	AS Rate
NSW	165	5.6					9	0.3				
Vic	125	5.6					8	0.4				
Qld*	86	5.7					3	0.2				
WA	43	5.1					2	0.2				
SA	35	4.8					3	0.5				
Tas	14	6.2					0	0.1				
ACT	6	3.8					0	0.0				
NT	4	3.9					0	0.2				

Note: AS Rates use Australian 1991 Population standard (A) unless World Standard Population (W) indicated. All rates expressed per 100,000.

* Data for Queensland are preliminary only. National incidence estimates have been constructed using modelled Queensland data.

Source: Cancer in Australia 1991–1994 (with Projections to 1999) , Australian Institute of Health and Welfare, 1998.

Table 26: Cancer of the bladder (ICD 188)

Australia 1994

	Incidence						*Mortality*					
	Males		Females		Persons		Males		Females		Persons	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Age group												
0–4	1	0.2	0	0.0	1	0.1	0	0.0	0	0.0	0	0.0
5–9	0	0.0	1	0.2	1	0.1	0	0.0	0	0.0	0	0.0
10–14	1	0.2	0	0.0	1	0.1	0	0.0	0	0.0	0	0.0
15–19	2	0.3	1	0.2	3	0.2	1	0.2	0	0.0	1	0.1
20–24	3	0.4	2	0.3	5	0.3	0	0.0	0	0.0	0	0.0
25–29	3	0.4	3	0.4	6	0.4	0	0.0	0	0.0	0	0.0
30–34	6	0.8	6	0.8	12	0.8	0	0.0	0	0.0	0	0.0
35–39	11	1.6	6	0.9	17	1.2	1	0.1	0	0.0	1	0.1
40–44	17	2.6	8	1.2	25	1.9	0	0.0	1	0.2	1	0.1
45–49	43	7.0	17	2.9	60	4.9	3	0.5	1	0.2	4	0.3
50–54	62	13.1	20	4.4	82	8.8	5	1.1	2	0.4	7	0.8
55–59	138	35.0	27	7.0	165	21.2	26	6.6	5	1.3	31	4.0
60–64	210	59.1	60	16.8	270	37.9	43	12.1	13	3.6	56	7.9
65–69	269	80.9	77	21.7	346	50.4	67	20.2	24	6.8	91	13.2
70–74	334	126.6	103	32.5	437	75.2	89	33.7	35	11.0	124	21.3
75–79	286	175.2	106	46.5	392	100.2	97	59.4	45	19.8	142	36.3
80–84	220	223.3	67	40.1	287	108.0	90	91.3	36	21.5	126	47.4
85 and over	166	311.6	91	71.4	257	142.2	87	163.3	54	42.4	141	78.0
Total	**1,772**		**595**		**2,367**		**509**		**216**		**725**	
Rates per 100,000 with 95 per cent confidence intervals												
Crude rate	19.9		6.6		13.3		5.7		2.4		4.1	
Conf. interval	19.0 – 20.9		6.1 – 7.2		12.7 – 13.8		5.2 – 6.2		2.1 – 2.7		3.8 – 4.4	
AS Rate (A)	22.1		5.7		12.7		6.7		1.9		3.9	
Conf. interval	21.0 – 23.1		5.2 – 6.2		12.2 – 13.3		6.1 – 7.3		1.7 – 2.2		3.6 – 4.1	
AS Rate (W)	14.6		3.9		8.7		4.0		1.2		2.4	
Conf. interval	13.9 – 15.4		3.6 – 4.3		8.3 – 9.1		3.6 – 4.4		1.0 – 1.4		2.2 – 2.5	
Lifetime risk (0–74)	1 in 61		1 in 225		1 in 99		1 in 269		1 in 852		1 in 419	
PYLL (0–74)							2,008		623		2,630	
Per cent of all cancers	4.2		1.8		3.1		2.7		1.5		2.2	

Average annual numbers and rates by State and Territory 1990–1994

	Incidence						*Mortality*					
	Males		Females		Persons		Males		Females		Persons	
	Number	AS Rate	Number	AS Rate	Number	AS Rate	Number	AS Rate	Number	AS Rate	Number	AS Rate
NSW	491	18.2	167	4.7	658	10.5	179	7.1	79	2.1	257	4.1
Vic	569	28.7	188	7.2	757	16.4	128	6.9	59	2.1	187	4.0
Qld*	228	17.4	85	5.4	313	10.8	83	6.8	40	2.4	123	4.2
WA	91	14.1	28	3.3	119	8.0	42	6.7	13	1.6	55	3.7
SA	117	16.7	40	4.2	158	9.5	45	6.7	25	2.5	70	4.2
Tas	60	27.6	16	5.9	76	15.4	14	6.9	6	2.1	20	4.1
ACT	11	15.2	4	3.8	15	8.5	8	11.1	3	3.0	11	6.4
NT	5	17.8	2	6.1	7	12.1	2	9.6	1	6.2	3	7.7

Note: AS Rates use Australian 1991 Population standard (A) unless World Standard Population (W) indicated. All rates expressed per 100,000.

* Data for Queensland are preliminary only. National incidence estimates have been constructed using modelled Queensland data.

Source: Cancer in Australia 1991–1994 (with Projections to 1999) , Australian Institute of Health and Welfare, 1998.

Table 27: Cancer of the kidney and other and unspecified urinary organs (ICD 189)

Australia 1994

	Incidence						*Mortality*					
	Males		Females		Persons		Males		Females		Persons	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Age group												
0–4	10	1.5	7	1.1	17	1.3	2	0.3	1	0.2	3	0.2
5–9	5	0.8	10	1.6	15	1.2	2	0.3	0	0.0	2	0.2
10–14	2	0.3	0	0.0	2	0.2	0	0.0	1	0.2	1	0.1
15–19	0	0.0	0	0.0	0	0.0	0	0.0	1	0.2	1	0.1
20–24	2	0.3	2	0.3	4	0.3	1	0.1	0	0.0	1	0.1
25–29	4	0.6	5	0.7	9	0.7	1	0.1	0	0.0	1	0.1
30–34	7	1.0	8	1.1	15	1.0	0	0.0	4	0.5	4	0.3
35–39	21	3.0	6	0.9	27	1.9	6	0.9	1	0.1	7	0.5
40–44	40	6.1	25	3.8	65	4.9	13	2.0	5	0.8	18	1.4
45–49	52	8.4	26	4.4	78	6.4	15	2.4	6	1.0	21	1.7
50–54	74	15.6	34	7.5	108	11.6	29	6.1	11	2.4	40	4.3
55–59	97	24.6	62	16.1	159	20.4	48	12.2	30	7.8	78	10.0
60–64	136	38.3	71	19.9	207	29.1	61	17.2	26	7.3	87	12.2
65–69	177	53.2	97	27.4	274	39.9	73	22.0	47	13.3	120	17.5
70–74	192	72.8	112	35.3	304	52.3	84	31.8	56	17.6	140	24.1
75–79	112	68.6	90	39.5	202	51.7	62	38.0	56	24.6	118	30.2
80–84	71	72.1	68	40.7	139	52.3	40	40.6	54	32.3	94	35.4
85 and over	34	63.8	38	29.8	72	39.8	27	50.7	21	16.5	48	26.6
Total	**1,036**		**661**		**1,697**		**464**		**320**		**784**	
Rates per 100,000 with 95 per cent confidence intervals												
Crude rate	11.7		7.4		9.5		5.2		3.6		4.4	
Conf. interval	10.9 – 12.4		6.8 – 7.9		9.1 – 10.0		4.7 – 5.7		3.2 – 4.0		4.1 – 4.7	
AS Rate (A)	12.2		6.7		9.2		5.6		3.1		4.2	
Conf. interval	11.5 – 13.0		6.2 – 7.2		8.8 – 9.7		5.1 – 6.1		2.8 – 3.5		3.9 – 4.5	
AS Rate (W)	9.2		5.1		7.0		4.0		2.2		3.0	
Conf. interval	8.6 – 9.7		4.7 – 5.5		6.7 – 7.4		3.6 – 4.4		1.9 – 2.4		2.8 – 3.2	
Lifetime risk (0–74)	1 in 89		1 in 167		1 in 117		1 in 210		1 in 390		1 in 276	
PYLL (0–74)							4,453		2,318		6,770	
Per cent of all cancers	2.4		2.0		2.2		2.4		2.2		2.3	

Average annual numbers and rates by State and Territory 1990–1994

	Incidence						*Mortality*					
	Males		Females		Persons		Males		Females		Persons	
	Number	AS Rate	Number	AS Rate	Number	AS Rate	Number	AS Rate	Number	AS Rate	Number	AS Rate
NSW	386	13.6	276	8.2	662	10.6	145	5.3	120	3.4	264	4.2
Vic	248	12.0	165	6.6	413	9.0	120	5.9	77	3.0	197	4.3
Qld*	194	13.9	115	8.4	309	11.1	73	5.4	56	3.5	129	4.4
WA	76	10.7	50	6.0	126	8.3	28	4.1	22	2.6	50	3.3
SA	87	11.9	61	7.0	148	9.2	39	5.5	31	3.3	70	4.3
Tas	31	14.1	15	5.5	45	9.2	13	5.9	7	2.7	20	4.1
ACT	12	13.2	5	4.9	17	8.7	5	4.9	4	3.6	8	4.3
NT	2	6.2	2	4.9	4	5.5	1	3.4	0	1.2	1	2.4

Note: AS Rates use Australian 1991 Population standard (A) unless World Standard Population (W) indicated. All rates expressed per 100,000.

* Data for Queensland are preliminary only. National incidence estimates have been constructed using modelled Queensland data.

Source: Cancer in Australia 1991–1994 (with Projections to 1999) , Australian Institute of Health and Welfare, 1998.

Table 28: Cancer of the brain (ICD 191)

Australia 1994

	Incidence						*Mortality*					
	Males		Females		Persons		Males		Females		Persons	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Age group												
0–4	20	3.0	15	2.4	35	2.7	6	0.9	6	0.9	12	0.9
5–9	17	2.6	17	2.7	34	2.7	9	1.4	5	0.8	14	1.1
10–14	17	2.6	15	2.4	32	2.5	8	1.2	7	1.1	15	1.2
15–19	17	2.6	11	1.8	28	2.2	2	0.3	4	0.6	6	0.5
20–24	11	1.5	15	2.1	26	1.8	5	0.7	3	0.4	8	0.6
25–29	28	4.1	13	1.9	41	3.0	11	1.6	5	0.7	16	1.2
30–34	20	2.7	13	1.8	33	2.2	13	1.8	10	1.4	23	1.6
35–39	37	5.3	17	2.4	54	3.9	28	4.0	17	2.4	45	3.2
40–44	39	5.9	23	3.5	62	4.7	21	3.2	21	3.2	42	3.2
45–49	36	5.8	31	5.2	67	5.5	29	4.7	31	5.2	60	4.9
50–54	54	11.4	30	6.6	84	9.1	52	11.0	25	5.5	77	8.3
55–59	60	15.2	45	11.7	105	13.5	52	13.2	30	7.8	82	10.5
60–64	75	21.1	45	12.6	120	16.8	71	20.0	40	11.2	111	15.6
65–69	79	23.8	74	20.9	153	22.3	75	22.6	64	18.1	139	20.2
70–74	75	28.4	48	15.1	123	21.2	85	32.2	67	21.1	152	26.2
75–79	37	22.7	45	19.8	82	21.0	45	27.6	49	21.5	94	24.0
80–84	27	27.4	28	16.7	55	20.7	30	30.4	31	18.5	61	23.0
85 and over	21	39.4	14	11.0	35	19.4	13	24.4	16	12.5	29	16.0
Total	**670**		**499**		**1,169**		**555**		**431**		**986**	

Rates per 100,000 with 95 per cent confidence intervals

Crude rate	7.5	5.6	6.5	6.2	4.8	5.5
Conf. interval	7.0 – 8.1	5.1 – 6.1	6.2 – 6.9	5.7 – 6.8	4.4 – 5.3	5.2 – 5.9
AS Rate (A)	7.8	5.3	6.4	6.4	4.4	5.4
Conf. interval	7.2 – 8.4	4.8 – 5.8	6.1 – 6.8	5.9 – 7.0	4.0 – 4.9	5.0 – 5.7
AS Rate (W)	6.6	4.6	5.5	5.1	3.5	4.3
Conf. interval	6.1 – 7.1	4.2 – 5.0	5.2 – 5.9	4.7 – 5.6	3.2 – 3.9	4.0 – 4.6
Lifetime risk (0–74)	1 in 147	1 in 215	1 in 176	1 in 169	1 in 249	1 in 202
PYLL (0–74)				9,268	6,668	15,935
Per cent of all cancers	1.6	1.5	1.5	2.9	3.0	2.9

Average annual numbers and rates by State and Territory 1990–1994

	Incidence						*Mortality*					
	Males		Females		Persons		Males		Females		Persons	
	Number	AS Rate	Number	AS Rate	Number	AS Rate	Number	AS Rate	Number	AS Rate	Number	AS Rate
NSW	219	7.5	174	5.4	393	6.4	178	6.2	134	4.1	312	5.1
Vic	172	8.1	130	5.5	302	6.7	145	6.9	106	4.4	251	5.5
Qld*	125	8.7	99	6.5	225	7.5	89	6.2	69	4.5	158	5.3
WA	58	7.5	44	5.5	102	6.5	46	6.1	36	4.5	82	5.3
SA	58	7.8	48	6.0	106	6.9	47	6.4	40	4.8	87	5.6
Tas	19	8.4	16	6.2	35	7.2	15	6.6	12	4.8	27	5.7
ACT	8	6.8	7	5.5	15	6.2	8	7.2	7	5.7	14	6.4
NT	4	7.3	2	2.9	6	5.3	2	5.0	1	3.1	3	4.3

Note: AS Rates use Australian 1991 Population standard (A) unless World Standard Population (W) indicated. All rates expressed per 100,000.

* Data for Queensland are preliminary only. National incidence estimates have been constructed using modelled Queensland data.

Source: Cancer in Australia 1991–1994 (with Projections to 1999) , Australian Institute of Health and Welfare, 1998.

Table 29: Cancer of an unknown primary site (ICD 195—199)

Australia 1994

	Incidence						*Mortality*					
	Males		Females		Persons		Males		Females		Persons	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Age group												
0–4	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
5–9	1	0.2	0	0.0	1	0.1	0	0.0	1	0.2	1	0.1
10–14	1	0.2	0	0.0	1	0.1	0	0.0	0	0.0	0	0.0
15–19	1	0.2	0	0.0	1	0.1	0	0.0	0	0.0	0	0.0
20–24	3	0.4	1	0.1	4	0.3	1	0.1	1	0.1	2	0.1
25–29	6	0.9	2	0.3	8	0.6	3	0.4	1	0.1	4	0.3
30–34	13	1.8	9	1.2	22	1.5	8	1.1	1	0.1	9	0.6
35–39	13	1.9	17	2.4	30	2.2	7	1.0	13	1.9	20	1.4
40–44	31	4.7	26	4.0	57	4.3	29	4.4	12	1.8	41	3.1
45–49	65	10.5	44	7.4	109	9.0	32	5.2	29	4.9	61	5.0
50–54	73	15.4	57	12.6	130	14.0	53	11.2	28	6.2	81	8.7
55–59	92	23.4	68	17.6	160	20.5	67	17.0	48	12.4	115	14.8
60–64	190	53.5	103	28.9	293	41.1	129	36.3	76	21.3	205	28.8
65–69	254	76.4	167	47.1	421	61.3	183	55.0	111	31.3	294	42.8
70–74	281	106.5	200	63.0	481	82.8	214	81.1	152	47.9	366	63.0
75–79	197	120.7	176	77.3	373	95.4	180	110.2	130	57.1	310	79.3
80–84	198	200.9	208	124.4	406	152.8	150	152.2	168	100.5	318	119.7
85 and over	128	240.2	228	178.8	356	196.9	108	202.7	186	145.9	294	162.6
Total	**1,547**		**1,306**		**2,853**		**1,164**		**957**		**2,121**	
Rates per 100,000 with 95 per cent confidence intervals												
Crude rate	17.4		14.6		16.0		13.1		10.7		11.9	
Conf. interval	16.5 – 18.3		13.8 – 15.4		15.4 – 16.6		12.3 – 13.8		10.0 – 11.3		11.4 – 12.4	
AS Rate (A)	19.0		12.3		15.3		14.5		8.9		11.3	
Conf. interval	18.1 – 20.0		11.6 – 13.0		14.7 – 15.8		13.6 – 15.3		8.3 – 9.5		10.9 – 11.8	
AS Rate (W)	13.0		8.4		10.5		9.6		5.9		7.6	
Conf. interval	12.3 – 13.6		7.9 – 8.9		10.1 – 10.9		9.0 – 10.2		5.5 – 6.3		7.2 – 7.9	
Lifetime risk (0–74)	1 in 68		1 in 109		1 in 85		1 in 94		1 in 156		1 in 119	
PYLL (0–74)							8,505		5,518		14,023	
Per cent of all cancers	3.6		4.0		3.8		6.1		6.7		6.3	

Average annual numbers and rates by State and Territory 1990–1994

	Incidence						*Mortality*					
	Males		Females		Persons		Males		Females		Persons	
	Number	AS Rate	Number	AS Rate	Number	AS Rate	Number	AS Rate	Number	AS Rate	Number	AS Rate
NSW	570	21.1	505	14.1	1,075	17.1	392	14.7	367	10.1	759	12.1
Vic	391	19.7	360	13.6	751	16.3	268	13.7	247	9.2	515	11.1
Qld*	282	21.2	216	13.2	499	16.8	182	13.9	154	9.4	336	11.4
WA	154	23.1	132	15.5	286	19.0	89	13.6	78	9.2	167	11.2
SA	111	15.6	115	12.1	226	13.7	93	13.2	97	10.2	190	11.5
Tas	50	23.6	39	13.8	89	18.0	40	18.8	33	11.6	73	14.7
ACT	14	17.1	12	11.5	26	14.0	9	11.8	9	9.0	18	10.2
NT	10	23.2	8	23.1	18	23.6	4	12.5	4	14.1	8	13.3

Note: AS Rates use Australian 1991 Population standard (A) unless World Standard Population (W) indicated. All rates expressed per 100,000.

* Data for Queensland are preliminary only. National incidence estimates have been constructed using modelled Queensland data.

Source: Cancer in Australia 1991–1994 (with Projections to 1999) , Australian Institute of Health and Welfare, 1998.

Table 30: Non-Hodgkin's lymphoma (ICD 200 + 202)

Australia 1994

	Incidence						*Mortality*					
	Males		Females		Persons		Males		Females		Persons	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Age group												
0–4	10	1.5	2	0.3	12	0.9	3	0.5	0	0.0	3	0.2
5–9	12	1.8	3	0.5	15	1.2	3	0.5	0	0.0	3	0.2
10–14	4	0.6	5	0.8	9	0.7	3	0.5	0	0.0	3	0.2
15–19	9	1.4	6	1.0	15	1.2	2	0.3	0	0.0	2	0.2
20–24	13	1.8	11	1.6	24	1.7	6	0.8	6	0.8	12	0.8
25–29	25	3.7	13	1.9	38	2.8	13	1.9	6	0.9	19	1.4
30–34	38	5.2	21	2.9	59	4.0	17	2.3	5	0.7	22	1.5
35–39	62	8.9	42	6.0	104	7.5	28	4.0	6	0.9	34	2.4
40–44	79	12.0	41	6.2	120	9.1	23	3.5	17	2.6	40	3.0
45–49	110	17.8	63	10.6	173	14.3	35	5.7	13	2.2	48	4.0
50–54	138	29.1	81	17.9	219	23.6	40	8.4	18	4.0	58	6.3
55–59	126	32.0	91	23.6	217	27.8	70	17.8	39	10.1	109	14.0
60–64	128	36.0	123	34.5	251	35.2	67	18.9	46	12.9	113	15.9
65–69	205	61.7	143	40.3	348	50.7	107	32.2	84	23.7	191	27.8
70–74	191	72.4	180	56.7	371	63.8	117	44.4	106	33.4	223	38.4
75–79	157	96.2	164	72.0	321	82.1	118	72.3	119	52.2	237	60.6
80–84	105	106.6	142	84.9	247	93.0	86	87.3	96	57.4	182	68.5
85 and over	56	105.1	86	67.4	142	78.5	52	97.6	78	61.2	130	71.9
Total	**1,468**		**1,217**		**2,685**		**790**		**639**		**1,429**	
Rates per 100,000 with 95 per cent confidence intervals												
Crude rate	16.5		13.6		15.0		8.9		7.1		8.0	
Conf. interval	15.7 – 17.4		12.8 – 14.3		14.5 – 15.6		8.3 – 9.5		6.6 – 7.7		7.6 – 8.4	
AS Rate (A)	17.2		12.2		14.5		9.6		6.1		7.7	
Conf. interval	16.4 – 18.1		11.5 – 12.9		14.0 – 15.1		8.9 – 10.3		5.7 – 6.6		7.3 – 8.1	
AS Rate (W)	13.1		9.1		11.0		6.7		4.1		5.3	
Conf. interval	12.4 – 13.8		8.6 – 9.7		10.6 – 11.5		6.2 – 7.2		3.8 – 4.5		5.0 – 5.6	
Lifetime risk (0–74)	1 in 70		1 in 98		1 in 82		1 in 142		1 in 218		1 in 172	
PYLL (0–74)							9,195		4,505		13,700	
Per cent of all cancers	3.4		3.7		3.6		4.1		4.5		4.3	

Average annual numbers and rates by State and Territory 1990–1994

	Incidence						*Mortality*					
	Males		Females		Persons		Males		Females		Persons	
	Number	AS Rate	Number	AS Rate	Number	AS Rate	Number	AS Rate	Number	AS Rate	Number	AS Rate
NSW	525	18.6	401	11.9	926	14.9	255	9.3	210	5.9	465	7.4
Vic	395	19.0	310	12.5	706	15.5	190	9.4	164	6.3	354	7.7
Qld*	256	18.4	204	12.9	460	15.4	106	8.0	86	5.3	193	6.5
WA	111	15.9	93	11.4	205	13.3	55	8.2	47	5.6	101	6.7
SA	126	17.5	105	12.0	231	14.4	61	8.6	59	6.5	121	7.4
Tas	41	18.3	32	12.5	73	15.0	20	9.2	15	5.5	34	7.0
ACT	20	18.7	17	15.4	37	17.0	11	12.2	9	8.3	19	10.1
NT	5	8.9	4	8.0	9	8.6	1	3.5	1	3.3	2	3.5

Note: AS Rates use Australian 1991 Population standard (A) unless World Standard Population (W) indicated. All rates expressed per 100,000.

* Data for Queensland are preliminary only. National incidence estimates have been constructed using modelled Queensland data.

Source: Cancer in Australia 1991–1994 (with Projections to 1999) , Australian Institute of Health and Welfare, 1998.

Table 31: Leukaemias (ICD 204—208)

Australia 1994

	Incidence						*Mortality*					
	Males		Females		Persons		Males		Females		Persons	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Age group												
0–4	53	8.0	52	8.2	105	8.1	9	1.4	6	0.9	15	1.2
5–9	29	4.4	26	4.2	55	4.3	16	2.4	6	1.0	22	1.7
10–14	14	2.1	10	1.6	24	1.9	17	2.6	4	0.6	21	1.6
15–19	29	4.4	16	2.6	45	3.5	11	1.7	10	1.6	21	1.6
20–24	12	1.6	12	1.7	24	1.7	9	1.2	10	1.4	19	1.3
25–29	23	3.4	14	2.1	37	2.7	17	2.5	10	1.5	27	2.0
30–34	21	2.9	13	1.8	34	2.3	12	1.6	6	0.8	18	1.2
35–39	21	3.0	16	2.3	37	2.7	13	1.9	7	1.0	20	1.4
40–44	24	3.6	14	2.1	38	2.9	11	1.7	14	2.1	25	1.9
45–49	33	5.4	32	5.4	65	5.4	16	2.6	19	3.2	35	2.9
50–54	49	10.3	42	9.3	91	9.8	32	6.7	17	3.8	49	5.3
55–59	61	15.5	45	11.7	106	13.6	32	8.1	21	5.4	53	6.8
60–64	99	27.9	62	17.4	161	22.6	70	19.7	42	11.8	112	15.7
65–69	121	36.4	77	21.7	198	28.8	77	23.2	52	14.7	129	18.8
70–74	134	50.8	99	31.2	233	40.1	107	40.6	63	19.9	170	29.3
75–79	124	75.9	95	41.7	219	56.0	102	62.5	76	33.4	178	45.5
80–84	95	96.4	114	68.2	209	78.7	87	88.3	83	49.7	170	64.0
85 and over	87	163.3	96	75.3	183	101.2	79	148.3	91	71.4	170	94.0
Total	**1,029**		**835**		**1,864**		**717**		**537**		**1,254**	
Rates per 100,000 with 95 per cent confidence intervals												
Crude rate	11.6		9.3		10.4		8.1		6.0		7.0	
Conf. interval	10.9 – 12.3		8.7 – 9.9		10.0 – 10.9		7.5 – 8.7		5.5 – 6.5		6.6 – 7.4	
AS Rate (A)	12.6		8.3		10.1		9.0		5.2		6.8	
Conf. interval	11.8 – 13.3		7.7 – 8.9		9.7 – 10.6		8.3 – 9.6		4.7 – 5.6		6.4 – 7.1	
AS Rate (W)	9.7		6.8		8.1		6.3		3.7		4.9	
Conf. interval	9.1 – 10.3		6.3 – 7.3		7.7 – 8.5		5.8 – 6.8		3.4 – 4.1		4.6 – 5.2	
Lifetime risk (0–74)	1 in 112		1 in 163		1 in 134		1 in 170		1 in 288		1 in 216	
PYLL (0–74)							9,503		5,983		15,485	
Per cent of all cancers	2.4		2.5		2.5		3.7		3.8		3.7	

Average annual numbers and rates by State and Territory 1990–1994

	Incidence						*Mortality*					
	Males		Females		Persons		Males		Females		Persons	
	Number	AS Rate	Number	AS Rate	Number	AS Rate	Number	AS Rate	Number	AS Rate	Number	AS Rate
NSW	366	13.2	269	7.9	634	10.3	223	8.3	175	5.0	398	6.4
Vic	270	13.4	197	7.7	467	10.2	168	8.5	142	5.5	310	6.7
Qld*	219	16.2	163	10.2	382	12.8	124	9.6	89	5.4	213	7.2
WA	84	12.1	60	7.2	144	9.3	53	8.0	44	5.2	97	6.4
SA	121	17.0	89	10.2	210	13.2	64	9.1	45	5.0	109	6.8
Tas	29	13.5	21	8.0	50	10.3	12	5.7	14	5.0	26	5.3
ACT	14	14.3	10	9.0	25	11.4	9	11.1	6	5.4	15	7.8
NT	3	4.5	2	4.9	5	4.9	2	4.0	1	4.3	3	4.4

Note: AS Rates use Australian 1991 Population standard (A) unless World Standard Population (W) indicated. All rates expressed per 100,000.

* Data for Queensland are preliminary only. National incidence estimates have been constructed using modelled Queensland data.

Source: Cancer in Australia 1991–1994 (with Projections to 1999) , Australian Institute of Health and Welfare, 1998.

Table 32: Alcohol-related cancers

Australia 1994

	Incidence						*Mortality*					
	Males		Females		Persons		Males		Females		Persons	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Age group												
0–4	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
5–9	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
10–14	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
15–19	0	0.1	0	0.1	1	0.1	0	0.0	0	0.0	0	0.0
20–24	1	0.1	1	0.1	1	0.1	0	0.0	0	0.0	0	0.0
25–29	0	0.1	2	0.3	2	0.2	0	0.1	0	0.0	1	0.0
30–34	5	0.7	4	0.5	9	0.6	1	0.2	0	0.1	2	0.1
35–39	5	0.7	9	1.3	14	1.0	3	0.4	2	0.3	5	0.4
40–44	12	1.9	25	3.7	37	2.8	6	1.0	6	0.8	12	0.9
45–49	24	3.8	35	5.9	59	4.9	12	2.0	8	1.3	20	1.6
50–54	45	9.4	38	8.4	83	8.9	23	4.9	9	2.0	32	3.5
55–59	48	12.2	37	9.5	85	10.9	24	6.0	10	2.7	34	4.4
60–64	67	18.9	41	11.4	108	15.1	39	11.0	12	3.4	51	7.2
65–69	64	19.2	47	13.3	111	16.1	43	12.9	15	4.3	58	8.5
70–74	42	15.9	44	13.8	85	14.7	30	11.2	18	5.8	48	8.3
75–79	15	9.2	12	5.1	27	6.8	11	7.0	7	3.2	19	4.8
80–84	4	3.7	8	4.9	12	4.4	4	4.1	6	3.5	10	3.7
85 and over	2	4.1	6	4.6	8	4.5	3	4.8	6	4.6	8	4.7
Total	**334**		**307**		**641**		**200**		**100**		**300**	
Rates per 100,000 with 95 per cent confidence intervals												
Crude rate	3.8		3.4		3.6		2.2		1.1		1.7	
Conf. interval	3.4 – 4.2		3.0 – 3.8		3.3 – 3.9		1.9 – 2.6		0.9 – 1.3		1.5 – 1.9	
AS Rate (A)	3.8		3.2		3.5		2.3		1.0		1.6	
Conf. interval	3.4 – 4.2		2.9 – 3.6		3.2 – 3.8		2.0 – 2.6		0.8 – 1.2		1.5 – 1.8	
AS Rate (W)	3.2		2.8		3.0		1.9		0.8		1.3	
Conf. interval	2.8 – 3.5		2.4 – 3.1		2.7 – 3.2		1.6 – 2.1		0.6 – 1.0		1.2 – 1.5	
Lifetime risk (0–74)	1 in 242		1 in 294		1 in 266		1 in 404		1 in 965		1 in 575	
PYLL (0–74)							2,547		1,203		3,750	
Per cent of all cancers	0.8		0.9		0.8		1.0		0.7		0.9	

Average annual numbers and rates by State and Territory 1990–1994

	Incidence						*Mortality*					
	Males		Females		Persons		Males		Females		Persons	
	Number	AS Rate	Number	AS Rate	Number	AS Rate	Number	AS Rate	Number	AS Rate	Number	AS Rate
NSW	121	4.1	93	2.9	215	3.5	68	2.3	32	1.0	100	1.6
Vic	87	4.0	69	2.9	156	3.4	56	2.6	27	1.1	83	1.8
Qld	61	4.3	44	2.9	105	3.7	34	2.4	15	1.0	49	1.7
WA	30	4.0	24	3.0	53	3.4	17	2.3	8	1.0	25	1.6
SA	24	3.2	23	2.8	47	3.0	15	1.9	8	0.9	23	1.4
Tas	9	3.8	7	2.8	16	3.3	6	2.7	3	1.0	9	1.8
ACT	4	3.3	4	2.9	7	3.1	2	2.5	1	1.2	4	1.8
NT	4	7.4	1	2.3	5	5.1	2	4.8	0	1.1	3	3.2

Note: AS Rates use Australian 1991 Population standard (A) unless World Standard Population (W) indicated. All rates expressed per 100,000.

Note: Cancers attributable to alcohol are oropharynx, oesophagus, liver, larynx and female breast cancer.

* Data for Queensland are preliminary only. National incidence estimates have been constructed using modelled Queensland data.

Source: Cancer in Australia 1991–1994 (with Projections to 1999) , Australian Institute of Health and Welfare, 1998.

Table 33:Smoking-related cancers

Australia 1994

	Incidence						*Mortality*					
	Males		Females		Persons		Males		Females		Persons	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Age group												
0–4	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
5–9	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
10–14	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
15–19	7	1.1	3	0.5	10	0.8	1	0.2	0	0.0	1	0.1
20–24	26	3.5	10	1.4	36	2.5	1	0.2	1	0.1	2	0.2
25–29	44	6.5	18	2.6	62	4.6	3	0.5	3	0.4	6	0.4
30–34	83	11.2	44	5.9	126	8.6	8	1.1	5	0.6	13	0.9
35–39	97	13.9	59	8.4	155	11.1	31	4.5	15	2.1	46	3.3
40–44	134	20.3	74	11.3	208	15.8	61	9.3	27	4.1	88	6.7
45–49	275	44.5	132	22.2	407	33.5	128	20.8	66	11.0	194	16.0
50–54	393	82.8	161	35.5	554	59.7	249	52.4	105	23.3	354	38.2
55–59	646	164.1	184	47.7	830	106.5	420	106.6	138	35.7	558	71.6
60–64	996	280.3	261	73.2	1,257	176.5	687	193.4	184	51.5	871	122.3
65–69	1,327	399.2	375	105.7	1,702	247.7	1,024	308.1	283	79.7	1,307	190.2
70–74	1,375	521.2	414	130.5	1,789	307.9	1,109	420.3	340	107.0	1,448	249.2
75–79	947	580.0	307	134.8	1,254	320.7	786	481.6	267	117.1	1,053	269.3
80–84	571	579.5	156	93.1	727	273.5	478	485.3	134	80.2	612	230.4
85 and over	326	612.5	95	74.6	421	233.1	309	579.3	90	70.2	398	220.2
Total	**7,247**		**2,292**		**9,539**		**5,297**		**1,655**		**6,952**	
Rates per 100,000 with 95 per cent confidence intervals												
Crude rate	81.5		25.6		53.4		59.6		18.5		38.9	
Conf. interval	79.7 – 83.4		24.5 – 26.6		52.4 – 54.5		58.0 – 61.2		17.6 – 19.4		38.0 – 39.9	
AS Rate (A)	86.9		23.4		51.9		64.5		16.6		37.7	
Conf. interval	84.9 – 89.0		22.4 – 24.4		50.8 – 52.9		62.7 – 66.2		15.8 – 17.4		36.8 – 38.6	
AS Rate (W)	62.4		17.8		38.4		44.6		12.2		27.0	
Conf. interval	60.9 – 63.8		17.0 – 18.6		37.6 – 39.2		43.4 – 45.9		11.6 – 12.9		26.3 – 27.6	
Lifetime risk (0–74)	1 in 13		1 in 45		1 in 21		1 in 18		1 in 64		1 in 29	
PYLL (0–74)							39,319		13,660		52,979	
Per cent of all cancers	17.0		7.0		12.6		27.7		11.6		20.8	

Average annual numbers and rates by State and Territory 1990–1994

	Incidence						*Mortality*					
	Males		Females		Persons		Males		Females		Persons	
	Number	AS Rate	Number	AS Rate	Number	AS Rate	Number	AS Rate	Number	AS Rate	Number	AS Rate
NSW	2,498	88.5	797	23.9	3,295	52.8	1,770	64.0	546	16.0	2,316	36.9
Vic	1,874	91.6	594	24.1	2,468	54.1	1,327	65.7	428	17.2	1,755	38.4
Qld	1,208	88.4	343	22.6	1,551	53.1	856	63.9	235	15.1	1,091	37.1
WA	610	89.0	201	25.1	810	54.0	425	63.4	138	17.3	563	37.9
SA	656	90.3	199	22.9	855	52.7	460	63.7	134	15.1	594	36.3
Tas	218	98.3	66	25.6	283	58.0	144	65.7	49	19.0	193	39.4
ACT	66	74.7	24	22.2	90	45.3	54	65.6	18	16.9	72	38.1
NT	37	95.5	13	35.8	50	67.4	29	85.3	11	33.3	40	60.3

Note: AS Rates use Australian 1991 Population standard (A) unless World Standard Population (W) indicated. All rates expressed per 100,000.

Note: Cancers attributable to smoking are oropharynx, oesophagus, stomach, anus, pancreas, larynx, lung, uterus, cervix, vulva, penis, bladder, renal parenchyma and renal pelvis.

* Data for Queensland are preliminary only. National incidence estimates have been constructed using modelled Queensland data.

Source: Cancer in Australia 1991–1994 (with Projections to 1999) , Australian Institute of Health and Welfare, 1998.

Appendixes

Appendix A: International Classification of Diseases—Ninth Revision—cancer site—codes and combinations

Buccal cavity	
Lip	140
Tongue	141
Salivary glands	142
Gum	143
Floor of mouth	144
Other and unspecified parts of mouth	145
Pharynx	
Oropharynx	146
Nasopharynx	147
Hypopharynx	148
Other sites within the lip, oral cavity and pharynx	149
Head and neck	141–149
Digestive organs and peritoneum	
Oesophagus	150
Stomach	151
Small intestine	152
Colon	153
Rectum	154
Colorectal	153–154
Liver and intrahepatic bile ducts	155
Gallbladder and extrahepatic bile ducts	156
Pancreas	157
Retroperitoneum and peritoneum	158
Unspecified digestive organs	159
Respiratory system	
Nasal cavities, middle ear and accessory sinuses	160
Larynx	161
Trachea, bronchus and lung	162
Pleura	163
Respiratory systems, ill-defined and other intrathoracic organs	164–165
Bone, connective tissue, skin and breast	
Bone and articular cartilage	170
Connective and other soft tissue	171
Melanoma	172
Non-melanocytic skin cancer (NMSC)	173
Breast	174–175
Genitourinary organs	
Cervix	180
Placenta	181
Corpus uteri	179+182
Ovary and other uterine adnexae	183
Other and unspecified female genital organs	184
Prostate	185
Testis	186
Penis and other male genital organs	187
Bladder	188
Kidney, ureter and urethra	189
Gynaecological cancers	179–180, 182–184
Other and unspecified organs	
Eye	190
Brain	191
Other and unspecified parts of the nervous system (NS)	192
Thyroid gland	193
Other endocrine glands	194
Unknown primary site	195–199
Lymphatic and haematopoietic tissue	
Non-Hodgkin's lymphomas (NHL)	200+202
Lymphosarcoma and reticulosarcoma	200
Hodgkin's disease	201
Other neoplasms of lymphoid and histiocytic tissue	202
Lymphomas	200–202
Multiple myeloma and immunoproliferative neoplasms	203
Lymphatic leukaemia	204
Acute lymphatic leukaemia	204.0
Chronic lymphatic leukaemia	204.1
Myeloid leukaemia	205
Acute myeloid leukaemia	205.0
Chronic myeloid leukaemia	205.1
Monocytic leukaemia	206
Other and unspecified leukaemias	207–208
Leukaemias	204–208
Smoking-related cancers	140, 141, 143–151, 154.3–154.4, 157, 161, 162, 180, 179+182, 184.4, 186, 188, 189.0, 189.1
Alcohol-related cancers	141, 143–146, 148–149, 150, 155, 161, 174

Note: Abbreviated versions of these names may be used in this report.

Source: World Health Organization (1977)

Appendix B: Methods

This section describes the methods employed to calculate the estimates presented in the tables in the body of this publication. The calculations in the example below are applicable to both incidence and mortality.

Example table

Trachea, bronchus and lung cancer incidence (ICD 162)– males

Age group	No. of cases	1994 Aust. population*	Age-specific rate per 100,000	Australian 1991 population standard**	Expected number of cases
	column 1	column 2	column 3	column 4	column 5
0–4	1	665,924	0.15	1,271,703	1.9
5–9	0	656,615	0.00	1,272,208	0.0
10–14	0	656,986	0.00	1,241,619	0.0
15–19	1	654,545	0.15	1,364,074	2.1
20–24	2	730,369	0.27	1,396,764	3.8
25–29	4	682,587	0.59	1,399,663	8.2
30–34	10	734,852	1.36	1,425,735	19.4
35–39	22	695,369	3.16	1,328,387	42.0
40–44	42	658,926	6.37	1,294,271	82.5
45–49	121	616,612	19.62	1,029,145	202.0
50–54	225	474,792	47.39	846,934	401.4
55–59	410	393,886	104.09	725,950	755.6
60–64	703	355,250	197.89	736,868	1458.2
65–69	1,009	332,441	303.51	671,390	2037.8
70–74	1,116	263,810	423.03	510,755	2160.7
75–79	794	163,279	486.28	384,495	1869.7
80–84	483	98,542	490.15	229,828	1126.5
85+	253	53,281	474.84	154,247	732.4
Total	**5,196**	**8,888,066**	**58.5**	**17,284,036**	**63.09**

* Australian Bureau of Statistics (1997c).

** Australian Bureau of Statistics (1993).

Crude rates—all age groups

A crude incidence rate is defined as the number of new cases of cancer divided by the population at risk in a specified time period. A crude mortality rate substitutes deaths for new cases in this calculation. Both are conventionally expressed as annual rates per l00,000 population and may be calculated for males, females or persons, or for subsets of the population (e.g. see age-specific rates). The total rate calculated in this way without adjustment for age or other factors is known as the 'crude rate'.

The crude rate is calculated by dividing the total number of cases across all age groups by the total population e.g.

$$\text{Crude incidence rate for lung cancer} = \frac{\text{Column 1 total}}{\text{Column 2 total}} \times 100{,}000$$

$$= \frac{5{,}195}{8{,}884{,}781} \times 100{,}000$$

$$= 58.5 \text{ per } 100{,}000$$

Age-specific rates

Age-specific rates are calculated by dividing the number of cases occurring in each specified age group by the corresponding population in the same age group expressed as a rate per l00,000 population. This rate may be calculated for particular age and sex groupings, e.g.

$$\text{Age-specific lung cancer incidence rates in males aged 75–79} = \frac{\text{Column 1 for this age}}{\text{Column 2 for this age}} \times 100{,}000$$

$$= \frac{794}{163{,}279} \times 100{,}000$$

$$= 486.3 \text{ per } 100{,}000$$

Age-standardised rates (AS Rate)

Rates are adjusted for age to facilitate comparisons between populations which have different age structures, e.g. between youthful and ageing communities. There are two different methods commonly used to adjust for age. In this publication we use direct standardisation in which age-specific rates are multiplied against a constant population (the Australian 1991 Population Standard or the World Standard Population). This effectively removes the influence of age structure on the summary rate which is described as the age-standardised rate. The method may be used for both incidence and mortality calculations. The method used for this calculation comprises three steps which can be followed by reference to the example table on the previous page.

Step 1 Calculate the age-specific rate (as shown above) for each age group (column 3).

Step 2 Calculate the expected number of cases in each 5-year age group by multiplying the age-specific rates (column 3) by the corresponding standard population (column 4) and dividing by 100,000, giving you the expected number of cases.

Step 3 Sum the expected number of cases in each age group to give the age-standardised rate (total column 5). If the standard population is not the World Standard Population then divide this sum by the total of the standard population and multiply by 100,000.

Confidence intervals (CI)

The age-standardised and crude incidence and mortality rates presented in the body of this report also show 95% confidence intervals. These confidence intervals indicate the variation that might be expected in such estimates purely by chance. The confidence intervals are calculated using the methods presented in Holman et al. (1987).

A relatively simple approximation of the confidence limits that readers might use when examining State and Territory age-standardised rates is as set out below.

$$\text{CI approximation} = \text{AS Rate} \pm 1.96 \times \frac{\text{AS Rate}}{\sqrt{\text{Number of cases}}}$$

Lifetime risk and cumulative rate

Lifetime risk is a measure which approximates the risk of contracting a particular cancer in a lifetime if the risks at the time of estimation remained throughout life. It is based on a mathematical relationship with the cumulative rate and is calculated in this publication for ages 0–74. Cumulative rate is a directly standardised rate calculated by summing age-specific rates from equal age groups, e.g. 5–9, 10–14 years. An example is provided below.

$$\text{Cumulative rate} = \frac{5 \times (\text{Sum of the age-specific rates}) \times 100}{100{,}000}$$

$$= \frac{5 \times 1107.6 \times 100}{100{,}000}$$

$$= 5.54\%$$

The factor of 5 is used to indicate the 5 years of life in each age group and the factor of 100 is used to present the result as a percentage. As age-specific rates are presented per 100,000 population (column 3), the result is divided by 100,000 to return the age-specific rates to a division of cases by population. Cumulative risk is related to cumulative rate by the expression:

$$\text{Cumulative risk} = \left(1 - e^{-rate/100}\right)$$

where rate is expressed as a percentage.

Lifetime risk is expressed as a '1 in n' proportion by taking the inverse of the above formula:

$$n = \frac{1}{\left(1 - e^{-rate/100}\right)}$$

For lung cancer in men, the cumulative rate was 5.54% (see previous page), therefore:

$$n = \frac{1}{\left(1 - e^{-5.54/100}\right)}$$

$$= 18.56$$

That is, for men, the lifetime risk (0–74 years) of developing lung cancer is 1 in 19, providing they remain at risk for the whole period and the 1994 age-specific rates apply throughout their lives. Note that no account has been taken of specific cancer risk factors, e.g. the risk for men who smoke would be higher than that for those who have never smoked.

Per cent of all cancers

The 'per cent of all cancers' measure is the proportion of all causes accounted for by a particular cancer. The measure may be computed for cancer incidence or mortality. Using an incidence example, the measure is calculated by taking the number of new cases of a particular cancer, e.g. lung cancer, and dividing that by the total number of all new cancer cases and multiplying by 100 to express it as a percentage. This is undertaken for each sex and for total persons. Note that for this publication the incidence of non-melanocytic skin cancers is not included in total new cancer cases, although it is included in the parallel mortality calculations.

Sex ratio

This measure indicates the relative incidence or mortality between the sexes. It can be calculated on the basis of observed numbers, crude rates, age-standardised rates or cumulative rates per cent. In this publication it is calculated using the age-standardised rates where the male rate is divided by the female rate for each cancer. Ratios greater than 1 indicate an excess in males while ratios less than 1 indicate an excess in females.

It is preferable to use either the age-standardised rates or the cumulative rate as these both adjust for age variations between male and female populations. In addition, the use of cumulative rate per cent discounts the occurrence of cancer in people aged over 75. This gives more emphasis, therefore, to early cancer diagnosis or death, and diminishes the impact of variable diagnostic investigation of the elderly.

Person-years of life lost

Person-years of life lost is a concept which attempts to measure the number of years of life lost per annum due to death as a result of a specific cause, e.g. lung cancer, given life expectancies at specific ages. Age groups 0–4 up to 70–74 were used for the calculations, as deaths before age 75 are regarded as premature for both men and women. The method used in this publication for the calculation of person-years of life lost is an aggregation of years between age at death and 75 for each person for each cancer, e.g. a person dying at age 50 contributes 25 years to the person-years of life lost measure.

Projections of incidence and mortality

The most up-to-date cancer incidence and mortality estimates are often required for policy debate, research, and service planning and provision. The most recent national cancer incidence data are for 1994 while the most recent mortality data are for 1996. To meet the need for more timely data, projections of incidence (1995–1999) and mortality (1997–1999) have been made for selected cancers (Tables 4 and 5). Users should refer to the next section for information about the reliability of projections.

The projection model applied to the majority of cancers in this report uses the last 5 years of known data as a base (1991–1994 incidence, 1992–1996 mortality). For selected cancers, projections of numbers of new cases, deaths and age-standardised rates were derived using a series of linear models. Specifically, least squares methodology (i.e. linear regression) was used to fit straight lines through each of the age- and sex-specific incidence (1990–1994) and mortality rates (1992–1996) and extrapolated to 1999. To derive the number of cases and deaths, each of the extrapolated rates were multiplied by age- and sex-specific Australian population estimates and projections (ABS 1997c; 1996). These cases were totalled and rounded to the nearest 10 to form the final estimates. The age- and sex-specific rates were used to derive age-standardised rates, using the methods described in this Appendix.

For cancers of the prostate and breast, and all cancers combined, further adjustments were applied. Recent incidence data from some States and Territories (1995–1996), show that current trends in prostate cancer are substantially different from the trends observed during the early 1990s. For prostate cancer, these changes are due to the rapid increase in detection through an increased use of PSA assays and then a rapid fall as testing rates subsided. In order to produce robust national incidence projections for this cancer (1995–1999) it was necessary to take account of the latest State and Territory data in the projection methodology. Data for Victoria, Western Australia, South Australia and Tasmania were available for prostate cancer for 1995 and 1996. Breast cancer incidence data for the same 2 years were also available for the same States, with the addition of New South Wales and the Australian Capital Territory. By using these additional semi-national data, the timeliness for the projection base was improved. This, in effect, allowed for breast (1994–1996) and prostate (1993–1996) cancer incidence projections to be based on the latest data.

As breast cancer and prostate cancer represent the most common cancers for females and males respectively, adjustments in their projections were also made for the 'all cancers' incidence projection. For males this was achieved by using least squares methodology to fit straight lines through each of the age-specific incidence rates for 'all cancers', excluding prostate cancer, for 1990–1994 and then extrapolating to 1999. The age-specific projected numbers of new cases for 1995–1999 were then derived from the extrapolated rates and added to the age-specific projected numbers of cases of prostate cancer for 1995–1999 to give age-specific total numbers of projected cases for 'all cancers' for each year. To derive projected rates for males for 'all cancers' for 1995–1999, the age-specific projected numbers of cases were divided by the appropriate age-specific Australian population estimates and projections (ABS 1997c; 1996). Similarly, the 'all cancers' incidence projections for females were adjusted for breast cancer.

Reliability of cancer projections

Projections of data are inherently risky as they are based on assumptions of past and current knowledge and forecasts of potential effects, which might change their patterns in the future. For some cancers the incidence and mortality trends are relatively stable over time and so projections may be reasonably reliable. However, there are other cancers for which

projections are more difficult to undertake due to rapidly changing patterns as a result of improved / increased cancer screening and subsequent detection; introduction of new or increased use of diagnostic techniques; the impact of primary prevention campaigns; and changed cancer reporting practices. Some of these effects are temporal while others act within population groups. It is impossible to model all of these effects accurately, and therefore it is usual that a more simplistic model is adopted, as is the case in this publication.

The cancers known to be influenced significantly by these factors are those subject to population-based screening– i.e cancers of the breast, cervix and prostate, while colorectal cancer screening trials are underway. There are other cancers which are at slightly less risk of these effects but do have noticeable impact on the rates, e.g. bladder cancer is at increased risk of detection as a result of ultrasound of the prostate and brain cancer as a result of increased stroke investigation, both of which are difficult to adjust for. Melanoma rates are also subject to some variability due to the impact, particularly at younger ages, of sun-safe behaviour campaigns. The end result of these effects are projections subject to some variability which increases as the projection period lengthens. This variability is minimised by projecting over a short term, using the latest available and partial data, adjusting (where possible) for shifts in any of these known effects, and limiting projections to the most common cancers.

The projections in *Cancer in Australia 1989–1990 (with Projections to 1995)* (Jelfs et al. 1996) give some guide as to the reliability of the projection methodology and may assist in interpreting the projections in this publication. In a comparison of the 1994 rates and numbers of new cases and deaths in this publication and the projections for the same year it was found that most projections for individual and 'all cancers' were conservative, i.e. that the projection was below that of the reported incidence and mortality by approximately 5%. Further, the mortality rates were generally more accurate than the incidence rates. Differences for the most common cancers in males (prostate, lung and colorectal) were on average within 3% of the 1994 result. For females, the most common cancers (breast, colorectal and melanoma) were on average 7% different. This slightly larger difference in females is mainly attributable to an underestimate of breast cancer incidence, and is probably as a result of increasing screening and detection rates, a situation which has been accounted for in the current methodology. A few outliers in the projections (>10% variation) were found for cancers of the stomach, uterus and bladder, the latter one a result of the effects discussed earlier, while the change in the rate of incidence in stomach and uterine cancers was not anticipated. In essence, the projections give a guide to the likely direction of the incidence and mortality rates and the resulting new cases and deaths.

Estimating Queensland incidence data 1991–1994

Age- and sex-specific incidence data for each State and Territory are needed to produce national incidence data. However, age- and sex-specific incidence data were not available for Queensland for each of the years 1991 to 1994. To account for this, the national incidence data include pro-rated estimates for Queensland for each of the years 1991 to 1994. With the exception of breast and prostate cancers, the Queensland estimates of cancer incidence for each of the years 1991 to 1994 were derived from the 1990 Queensland incidence rates. This was achieved by applying the age-, sex- and cancer-specific incidence rates for Queensland 1990 to the age- and sex-specific populations for Queensland for 1991, 1992, 1993 and 1994. It should be noted that this method assumes no change in the Queensland incidence rate over time. For breast and prostate cancers, incidence rates were calculated for Australia excluding Queensland for each of the years 1991 to 1994 and then applied to the relevant

Queensland population to estimate the numbers of cases that would result from these rates. This process was used to compensate for the rapid change in breast and prostate cancers since 1990. A comparison of preliminary Queensland data for the total period 1991–1994 with the pro-rated Queensland estimates suggested that the pro-rated Queensland estimates for single years used in the national estimates were conservative. Consequently, the national estimates may be conservative and on revision of the Queensland data in June 1998 the national estimates might have to be revised upward.

Appendix C: Australian population data

Australian estimated resident population 1991 and 1992

	1991			1992		
Age	**Males**	**Females**	**Total**	**Males**	**Females**	**Total**
0–4	652,302	619,401	1,271,703	658,815	625,874	1,284,689
5–9	652,418	619,790	1,272,208	656,280	623,582	1,279,862
10–14	638,311	603,308	1,241,619	642,968	608,818	1,251,786
15–19	698,773	665,301	1,364,074	677,905	644,866	1,322,771
20–24	707,124	689,640	1,396,764	724,673	705,723	1,430,396
25–29	702,728	696,935	1,399,663	693,415	689,366	1,382,781
30–34	713,784	711,951	1,425,735	726,120	725,058	1,451,178
35–39	664,228	664,159	1,328,387	675,692	677,393	1,353,085
40–44	655,138	639,133	1,294,271	653,430	641,704	1,295,134
45–49	526,498	502,647	1,029,145	561,873	538,571	1,100,444
50–54	433,762	413,172	846,934	446,142	424,231	870,373
55–59	367,302	358,648	725,950	374,152	366,394	740,546
60–64	366,779	370,089	736,868	362,708	365,270	727,978
65–69	320,142	351,248	671,390	324,968	352,955	677,923
70–74	228,494	282,261	510,755	239,233	292,552	531,785
75–79	158,993	225,502	384,495	162,065	229,080	391,145
80–84	84,413	145,415	229,828	88,362	151,445	239,807
85+	44,220	110,027	154,247	47,346	115,635	162,981
Total	**8,615,409**	**8,668,627**	**17,284,036**	**8,716,147**	**8,778517**	**17,494,664**

Source: Australian Bureau of Statistics (1993, 1997c).

Australian estimated resident population 1993 and 1994

	1993			1994		
Age	**Males**	**Females**	**Total**	**Males**	**Females**	**Total**
0–4	662,989	629,533	1,292,522	665,924	632,113	1,298,037
5–9	655,296	624,009	1,279,305	656,615	625,299	1,281,914
10–14	650,114	615,585	1,265,699	656,986	623,100	1,280,086
15–19	663,084	630,561	1,293,645	654,545	622,141	1,276,686
20–24	731,231	711,570	1,442,801	730,369	709,416	1,439,785
25–29	684,773	680,550	1,365,323	682,587	679,267	1,361,854
30–34	731,046	730,758	1,461,804	734,852	734,576	1,469,428
35–39	685,516	688,104	1,373,620	695,369	697,863	1,393,232
40–44	653,353	647,168	1,300,521	658,926	657,074	1,316,000
45–49	595,735	572,943	1,168,678	616,612	595,931	1,212,543
50–54	455,905	433,984	889,889	474,792	453,055	927,847
55–59	383,554	375,744	759,298	393,886	385,655	779,541
60–64	358,027	359,603	717,630	355,250	356,935	712,185
65–69	329,861	355,355	685,216	332,441	354,471	686,912
70–74	250,579	303,540	554,119	263,810	317,302	581,112
75–79	163,304	230,030	393,334	163,279	227,799	391,078
80–84	93,199	158,295	251,494	98,542	167,169	265,711
85+	50,349	121,846	172,195	53,281	127,506	180,787
Total	**8,797,915**	**8,869,178**	**17,667,093**	**8,888,066**	**8,966,672**	**17,854,738**

Source: Australian Bureau of Statistics (1997c).

Australian estimated resident population 1995 and 1996

	1995			1996		
Age	**Males**	**Females**	**Total**	**Males**	**Females**	**Total**
0–4	666,703	632,821	1,299524	665,611	631,438	1,297,049
5–9	662,592	630,089	1,292681	669,251	636,798	1,306,049
10–14	664,089	631,824	1,295913	670,227	637,990	1,308,217
15–19	650,877	618,363	1,269240	655,345	623,774	1,279,119
20–24	725,107	704,414	1,429521	708,906	687,960	1,396,866
25–29	691,428	687,335	1,378763	710,454	707,561	1,418,015
30–34	730,523	731,083	1,461606	720,725	723,796	1,444,521
35–39	710,843	712,394	1,423237	726,660	729,327	1,455,987
40–44	665,597	667,664	1,333261	676,137	678,946	1,355,083
45–49	635,263	616,566	1,251829	654,234	639,704	1,293,938
50–54	496,254	475,987	972241	517,520	497,412	1,014,932
55–59	406,724	395,514	802238	419,859	407,540	827,399
60–64	353,505	356,786	710291	353,827	356,656	710,483
65–69	335,187	354,188	689375	337,445	354,740	692,185
70–74	270,031	322,964	592995	276,105	327,017	603,122
75–79	169,506	233,400	402906	179,593	243,799	423,392
80–84	102,606	172,430	275036	105,855	176,603	282,458
85+	56,769	134,332	191101	60,301	141,598	201,899
Total	**8,993,604**	**9,078,154**	**18,071758**	**9,108,341**	**9,202,659**	**18,311,000**

Source: Australian Bureau of Statistics (1997c).

Projections of Australian estimated resident population 1997 and 1998

	1997			1998		
Age	**Males**	**Females**	**Total**	**Males**	**Females**	**Total**
0–4	670,775	637,128	1,307,903	675,392	641,387	1,316,779
5–9	671,249	637,983	1,309,232	676,181	642,218	1,318,399
10–14	669,627	636,012	1,305,639	670,085	637,725	1,307,810
15–19	660,885	626,227	1,287,112	668,164	632,476	1,300,640
20–24	705,407	678,492	1,383,899	692,221	666,323	1,358,544
25–29	742,449	733,817	1,476,266	755,883	745,144	1,501,027
30–34	710,976	715,355	1,426,331	706,299	710,547	1,416,846
35–39	736,816	740,863	1,477,679	744,915	749,540	1,494,455
40–44	679,205	683,624	1,362,829	689,627	695,430	1,385,057
45–49	655,059	644,560	1,299,619	656,402	651,120	1,307,522
50–54	556,439	536,476	1,092,915	591,227	572,052	1,163,279
55–59	437,630	421,113	858,743	448,206	430,981	879,187
60–64	357,757	358,993	716,750	368,442	369,274	737,716
65–69	333,546	351,152	684,698	329,129	344,973	674,102
70–74	282,215	328,152	610,367	288,275	332,149	620,424
75–79	189,214	257,290	446,504	198,819	267,335	466,154
80–84	109,641	180,961	290,602	111,187	183,037	294,224
85+	63,690	146,817	210,507	67,612	153,894	221,506
Total	**9,232,580**	**9,315,015**	**18,547,595**	**9,338,066**	**9,425,605**	**18,763,671**

Source: Australian Bureau of Statistics (1996 Series A, 1997c).

Projections of Australian estimated resident population 1999

	1999		
Age	**Males**	**Females**	**Total**
0–4	679,804	645,576	1,325,380
5–9	679,113	644,896	1,324,009
10–14	672,000	639,780	1,311,780
15–19	674,511	638,642	1,313,153
20–24	682,945	656,999	1,339,944
25–29	760,476	747,101	1,507,577
30–34	705,403	711,089	1,416,492
35–39	750,683	755,226	1,505,909
40–44	700,210	706,366	1,406,576
45–49	658,883	658,370	1,317,253
50–54	614,830	597,902	1,212,732
55–59	466,265	449,058	915,323
60–64	380,764	380,501	761,265
65–69	326,042	341,191	667,233
70–74	291,921	332,956	624,877
75–79	209,826	278,529	488,355
80–84	112,498	183,570	296,068
85+	72,029	162,303	234,332
Total	**9,438,203**	**9,530,055**	**18,968,258**

Source: Australian Bureau of Statistics (1996 Series A).

Australian Standard Population* and World Standard Population**

	Australian Standard Population (1991)	World Standard Population
Age		
0–4	1,271,703	12,000
5–9	1,272,208	10,000
10–14	1,241,619	9,000
15–19	1,364,074	9,000
20–24	1,396,764	8,000
25–29	1,399,663	8,000
30–34	1,425,735	6,000
35–39	1,328,387	6,000
40–44	1,294,271	6,000
45–49	1,029,145	6,000
50–54	846,934	5,000
55–59	725,950	4,000
60–64	736,868	4,000
65–69	671,390	3,000
70–74	510,755	2,000
75–79	384,495	1,000
80–84	229,828	500
85+	154,247	500
Total	**17,284,036**	**100,000**

* Australian Bureau of Statistics (1993).

** Doll & Smith (1982).

Appendix D: Cancer registration in Australia

The table below provides information about cancer registration in Australia. Each State and Territory operates its own registry. Generally, operational guidelines for each of the registries are similar and coincide with the objectives of the International Association of Cancer Registries. Although some registries operate under different coding systems for site, morphology and other variables, the bulk of information is directly comparable and has been reconciled for this publication. The reporting sources of the registries vary according to the local conditions and those bodies named in the legislation. Every attempt is made to report all cancer cases, although not every case will be identified. Cancer registries are dependent upon their reporting sources. Variation in reporting of cancers by age, sex, type, geographical location, country of birth or other variables does occur and may have effects on the final statistics. Occasionally, delays in reporting some case information may extend over several years but this has a minimal effect on the final reported data. In order to minimise the effects on the final reported registration, multiple reporting sources are used to compile case information where possible. Case information is exchanged between registries where there is cause for suspicion of duplicate registration. Further information regarding registry coding practices may be obtained by contacting the Registrar in each State or Territory.

States and Territories	NSW	Vic	Qld	WA	SA	Tas	ACT	NT
Total population (1994)	6,055,714	4,486,749	3,185,318	1,702,564	1,466,127	472,884	301,263	173,976
Per cent of Australian population	33.9	25.1	17.8	9.5	8.2	2.6	1.7	1.0
Per cent of population older than age 65	12.4	12.2	11.1	10.2	13.6	12.4	6.9	2.9
No. new cancers (1994)	26,373	19,721	12,059**	6,948	6,862	2,265	879	240
First year of population registration	1972	1982	1982	1982	1977	1978	1972	1981
Year of legislation	1972	1982	1982	1982	1977	1992	1994	1991
Funding source	Pvte–Govt	Pvte–Govt	Govt	Govt	Govt	Pvte–Govt	Govt	Govt
ICD site coding	ICD-9	ICD-9	ICD-9	ICD-9	ICD-9	ICD-9	ICD-9	ICD-9
Morphology coding	SNOMED-II	ICD-0-2	ICD-0-2	ICD-0-2	SNOMED-II	ICD-0-2	SNOMED-II	SNOMED-II
Reporting sources								
Public hospitals	Yes	Yes	Yes	No*	Yes	Yes	Yes	Yes
Private hospitals	Yes	Yes	Yes	No*	Yes	Yes	Yes	No
Repatriation hospitals	Yes	Yes	Yes	No*	Yes	Yes	Yes	No
Pathology laboratories	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Radiotherapy units	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
Nursing homes	Yes	No	Yes	No	No	No*	Yes	No
Registrar of Births, Deaths and Marriages	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Doctors	No*	No*	No*	No*	No*	No*	No*	No*

* Data are provided on special request only.

** Data for Queensland are based on modelled estimates.

Appendix E: Tables on disk

Data tables for all cancer sites for the years 1991 to 1994 are included on the disk accompanying this report. These tables contain age-specific, crude, and age-standardised incidence and mortality rates for males, females and persons for each cancer site. A complete list of the tables in each file is presented below. The four Excel files containing these data are named Publication tables 1991, Publication tables 1992, Publication tables 1993 and Publication tables 1994.

Specific cancer sites may be found by searching the file. For example, use the find command, under the edit menu in Excel, to search for *brain*. The search will take you to the first incidence of the word *brain*. Select 'find next' to move to the next table with specific information on brain cancer.

Table number	Cancer description	ICD code
Table 1	All cancers (excluding NMSC)	140–208
Table 2	Lip	140
Table 3	Tongue	141
Table 4	Salivary gland	142
Table 5	Gum	143
Table 6	Floor of mouth	144
Table 7	Other mouth	145
Table 8	Oropharynx	146
Table 9	Nasopharynx	147
Table 10	Hypopharynx	148
Table 11	Other lip, oral cavity and pharynx	149
Table 12	Head and neck	141–149
Table 13	Oesophagus	150
Table 14	Stomach	151
Table 15	Small intestine	152
Table 16	Colon	153
Table 17	Rectum	154
Table 18	Colorectal	153–154
Table 19	Liver	155
Table 20	Gallbladder	156
Table 21	Pancreas	157
Table 22	Peritoneum	158
Table 23	Other digestive organs	159
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Table 25	Larynx	161
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Table 29	Bone	170
Table 30	Connective tissue	171
Table 31	Skin—melanoma	172
Table 32	Skin—non-melanocytic (NMSC)	173
Table 33	Breast	174–175
Table 34	Cervix	180
Table 35	Placenta	181
Table 36	Uterus	179+182
Table 37	Ovary	183
Table 38	Other female genital organs	184
Table 39	Gynaecological	#
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State and Territory Cancer Registries contact list

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Anti-Cancer Council of Victoria
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Registrar: Ms Kathryn Whitfield
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Queensland Department of Health
GPO Box 48
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Registrar: Dr Mai Tran

Glossary

AACR: Australasian Association of Cancer Registries

ABS: Australian Bureau of Statistics

ACT: Australian Capital Territory– a land-locked Territory of Australia situated within the State of New South Wales on the eastern seaboard with a population of 301,263 (1994). Its capital city is Canberra, which is also Australia's capital city.

AIHW: Australian Institute of Health and Welfare

AS Rate: age-standardised rate

Cancer (malignant neoplasm): a term used to describe one of several diseases which result when the process of cell division, by which tissues normally grow and renew themselves, becomes uncontrolled and leads to the development of malignant cells. These cancer cells multiply in an uncoordinated way, independently of normal growth control mechanisms, to form a tumour. This tumour may expand locally by invasion or systemically by metastasis via the lymphatic or vascular systems. If left untreated most malignant tumours will eventually result in death. (See What is cancer? page 1.)

Cancer death: a death where the underlying cause is indicated as cancer. Persons with cancer dying of other causes are not counted in the death statistics in this publication.

Epidemiology: the quantitative study of the distribution and determinants of health-related states and events in populations, and the application of this study to the control of health problems.

IACR: International Association of Cancer Registries

ICD-9: International Classification of Disease– a coding system used to identify the primary site of the malignancy. This classification is in its ninth revision.

Incidence: see **new cancer case**

Mortality: see **cancer death**

NCSCH: National Cancer Statistics Clearing House

New cancer case: a person who has a new cancer diagnosed for the first time. One person may have more than one cancer and therefore may be counted twice in incidence statistics if it is decided that the two cancers are not of the same origin. This decision is based on a series of principles set out in more detail in a publication by Jensen et al. (1991).

NSW: New South Wales– a State of Australia on the eastern seaboard which has the largest capital city in Australia, Sydney, and a population of 6,055,714 (1994).

NT: Northern Territory– a Territory in the north of Australia with a population of 173,976 (1994) and Darwin as its capital city.

PYLL: person-years of life lost

Qld: Queensland– a State in the north-east of Australia with a population of 3,185,318 (1994) and Brisbane as its capital city.

SA: South Australia– a State in the southern part of Australia with a population of 1,466,127 (1994) and Adelaide as its capital city.

SNOMED: Systematised Nomenclature of Medicine

Tas: Tasmania– an island State in the south-east of Australia with a population of 472,884 (1994) and Hobart as its capital city.

Vic: Victoria– a State in the south-east of Australia with a population of 4,486,749 (1994) and Melbourne as its capital city.

WA: Western Australia– the largest State in Australia, located in the west with a population of 1,702,564 (1994) and Perth as its capital city.

WHO: World Health Organization

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