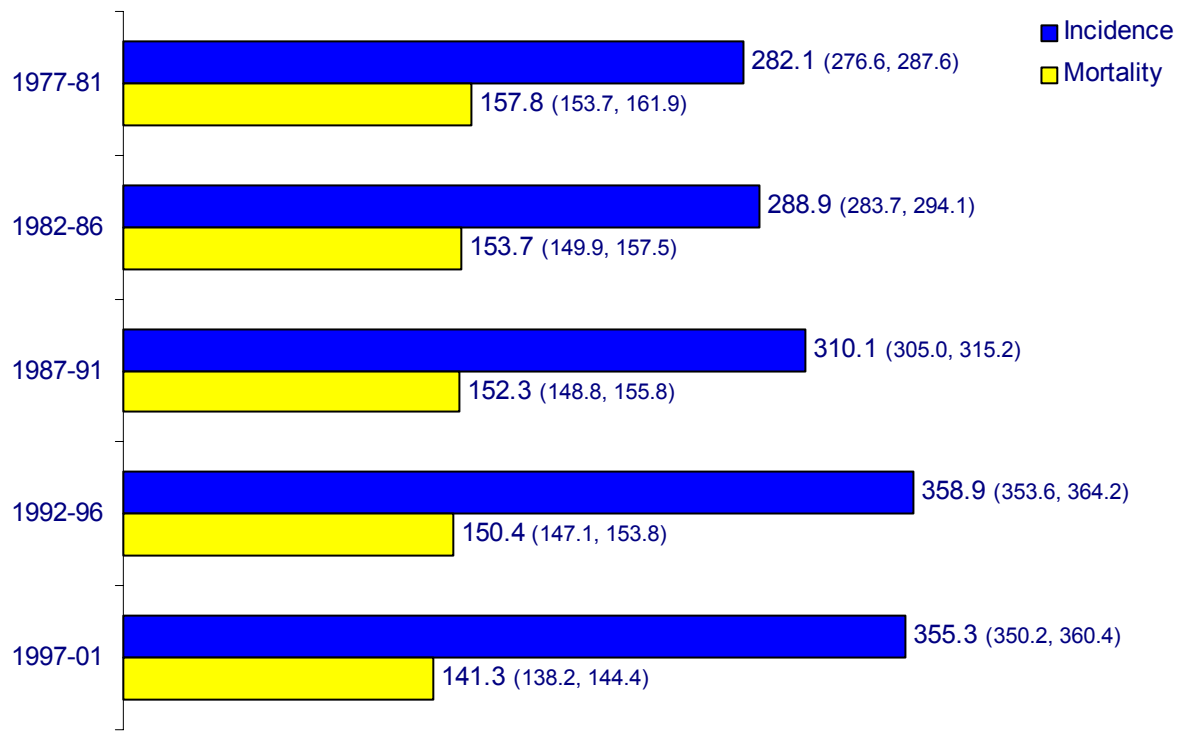


Annual incidence and mortality rates for cancer in South Australia in 1977-2001 for calendar-year groupings per 100,000 (age-standardized to World Population)

Cancer site: **All sites**

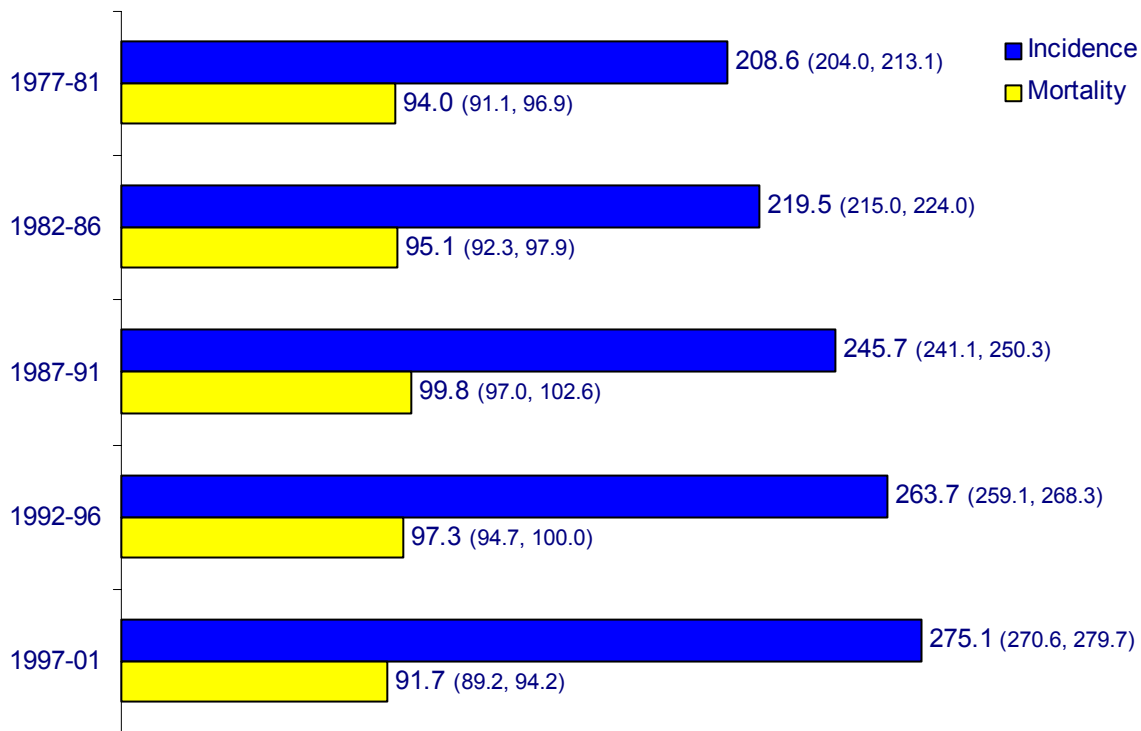
Males Incidence (95% confidence limits)



Annual incidence and mortality rates for cancer in South Australia in 1977-2001 for calendar-year groupings per 100,000 (age-standardized to World Population)

Cancer site: **All sites**

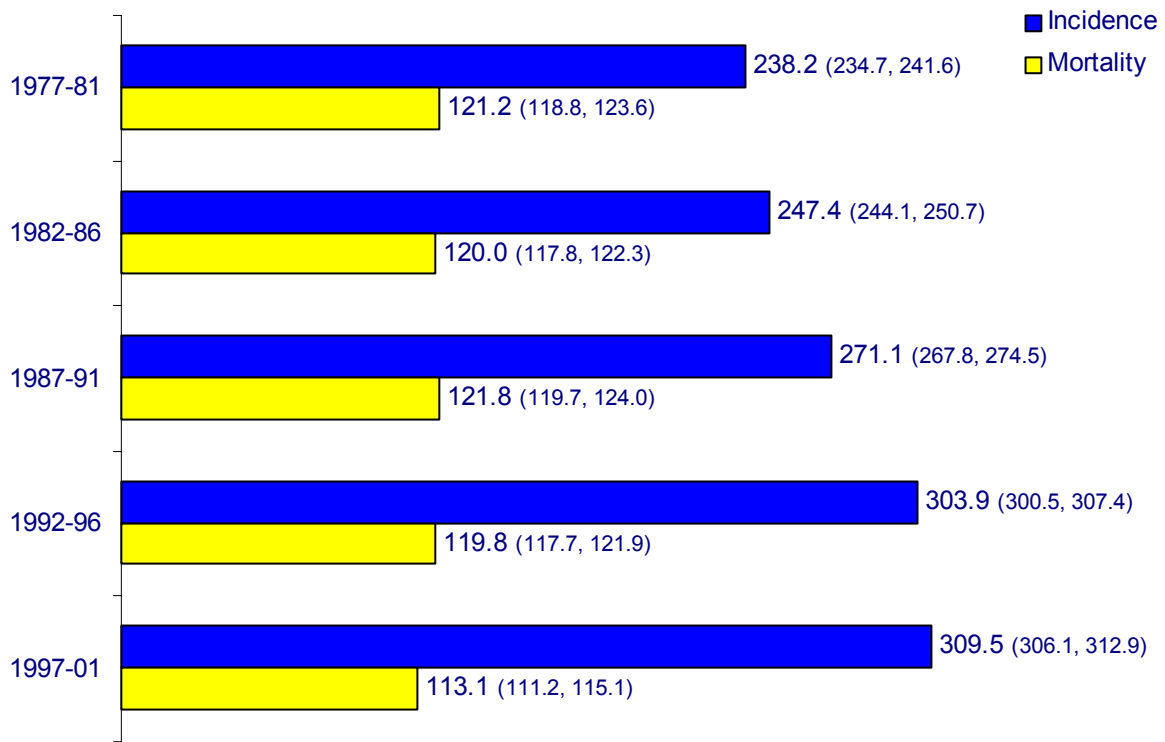
Females Incidence (95% confidence limits)



Annual incidence and mortality rates for cancer in South Australia in 1977-2001 for calendar-year groupings per 100,000 (age-standardized to World Population)

Cancer site: **All sites**

Both Incidence (95% confidence limits)



ALL SITES

- South Australia and Australia and New Zealand collectively had a higher cancer incidence during 1993-97 than most other regions of the world, although not as high as Germany. In general, incidence rates were highest in economically developed populations predominantly of European extraction. A greater than two fold variation was apparent by region, which would be largely due to differences in tobacco smoking over past decades, diet, exercise levels, and body weight. Fair skinned populations with a high sun exposure had high rates of skin cancer.
- Within South Australia, residents born overseas had a cancer incidence about 8% lower than the Australian born during 1977-2000. Residents born in Asia, Southern Europe, Eastern Europe, and the United Kingdom/Ireland were among those with lower incidence rates.
 - Cancers contributing to lower rates in overseas residents included:
 - **lip cancers and melanomas of the skin** – due to lower lifelong sun exposure and for some, protection from darker skin colouring.
 - **prostate cancer** – potentially due to lower exposure to screening tests (PSA tests) and possibly lower intakes of typical western diets characterised by a high fat content, as may be found in meat and dairy products, and a low vegetable content.
 - **large-bowel cancers** – potentially due to better diets (eg, more vegetables) and greater exercise levels.
 - **oesophageal**, and in some instances, **mouth and throat cancers** – potentially due to lower alcohol intakes and better diets, and among Asians and Southern Europeans, lower historic levels of tobacco smoking.
 - Other miscellaneous cancers, as indicated in the relevant cancer sections. For example, **female breast cancer** was relatively uncommon in residents born in Southern and Eastern Europe, possibly due to histories of earlier child rearing. Meanwhile, **kidney cancers** had a lower incidence in residents born in the United Kingdom/Ireland, Southern Europe and Asia. Risk factors for kidney cancers include tobacco smoking, historic long-term exposures to phenacetin for pain relief, and possibly excess weight and diets with a high fat content.
- Within South Australia during 1977-2001, a higher cancer incidence presented in males in lower than upper socio-economic residential areas, whereas a reverse trend suggested for females. The low socio-economic predominance among males was largely due to excesses in low socio-economic areas of cancers of the lip, buccal cavity (minus lip), throat, oesophagus, stomach, gallbladder, larynx and lung. By comparison, the upper socio-economic tendency in females was affected by upper socio-economic gradients for cancers of the breast, colon and skin (melanoma).

- The incidence of cancer in males and females was about 5% higher in Adelaide than in country regions of the State during 1977-2001. Cancers contributing to this elevation included those arising in the stomach, colon, liver, lung, pleura (mesotheliomas), bladder, kidney and thyroid, plus non-Hodgkin's lymphomas and multiple myeloma. In contrast, cancers of the lip and pharynx (excluding the nasopharynx) were more common in country regions. Incidence rates for all cancers collectively did not vary appreciably by region within Adelaide, but differences were evident in the country. Generally regions with comparatively large urban centres, such as Whyalla, Pirie, Lincoln and the Murray Mallee, had incidence rates broadly similar to Adelaide rates, whereas relatively low rates applied to the Far North, Barossa, Mt Lofty Ranges and West Coast.
- Between 1977-81 and 1997-2001, the incidence of diagnosed cancers increased by approximately 26% in males and 32% in females. Almost 60% of the increase for males was due to an increased detection of prostate lesions, largely due to increases in prostate specific antigen (PSA) testing, whereas other increases applied to skin (melanoma) and large bowel (colon/rectum) cancers. Meanwhile, approximately half the increase for females was due to an increased detection of breast cancers, largely resulting from mammography screening, whereas around 80% was a combined effect of an increase for breast, skin (melanoma), large-bowel (colon/rectum), and lung cancers.
- **Between 1977-81 and 1997-2001, the mortality rate from cancer decreased by about 11% in males, mostly due to a decrease for lung cancer and (less so) stomach cancer. Meanwhile, the rate was relatively stable between 1977-81 and 1992-96 in females. This was followed by a decrease of about 6% in 1997-2001, about half of which was due to a decline for breast cancer.**