

4 Most common cancers in South Australia

There are many types of cancer, varying by site of origin (primary site) and by tumour type (histology). This section describes the patterns of the most common invasive cancers by primary site in South Australia for 2004, examining them by using measures of incidence (new cases) and mortality (deaths) by both sex and age groups.

This section should be read in conjunction with Tables 4.1, 4.2 and 4.3 for the ten most common cancers, and Appendix 1 for other cancer sites.

4.1 Incidence

Males

Prostate cancer is the most commonly reported cancer in males, accounting for 29.2% of all cancers, increasing significantly as a percentage of all cancers since 2003. Colorectal cancer (13.9%), lung cancer (10.7%) and melanoma (8.4%) are ranked second to fourth in frequency, followed by non-Hodgkin's lymphomas (4.1%) and cancers of the kidney (3.3%), unknown primary site (3.0%), bladder (2.9%), stomach (2.3%) and lymphoid leukaemias (2.2%) (Figure 4.1 and Table 4.1).

Figure 4.1: Most common cancers in South Australia 2004 - Males

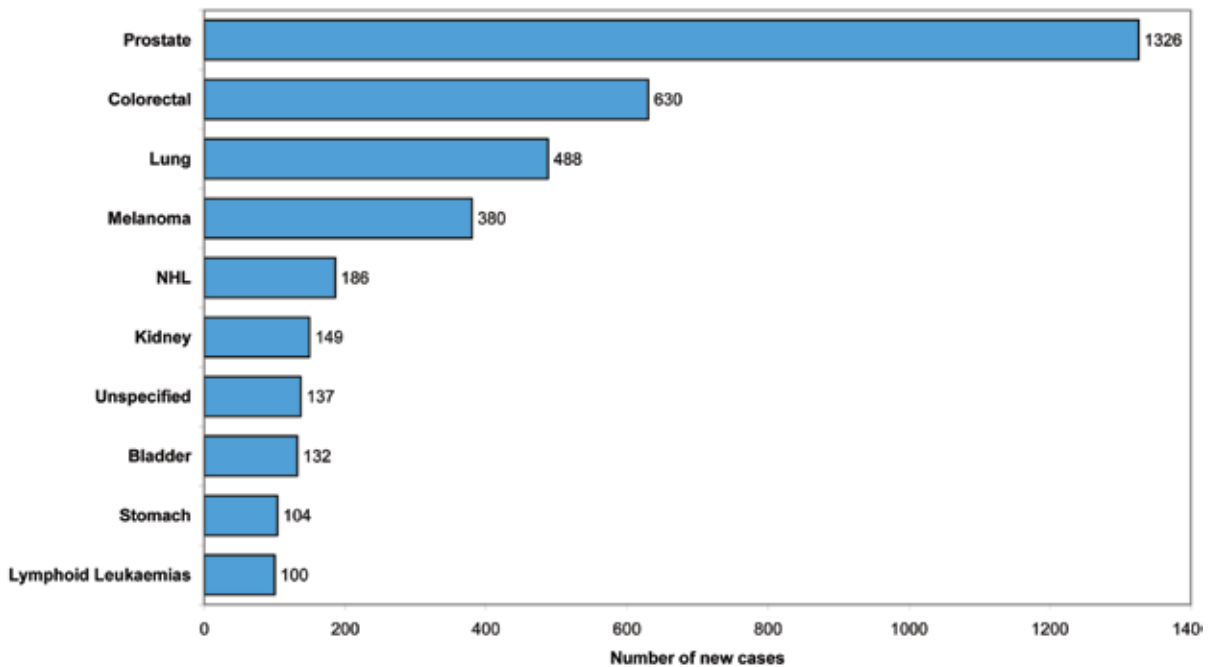


Table 4.1: Most common cancers in South Australia 2004 - Males

| Site name | Incidence | | | | Mortality | | | |
|---------------------|-----------|-------|---------------|---------------|-----------|-------|---------------|---------------|
| | New cases | Rate | Lifetime risk | % all Cancers | Deaths | Rate | Lifetime risk | % all Cancers |
| Prostate | 1326 | 161.4 | 1 in 8 | 29.2 | 218 | 28.4 | 1 in 106 | 12.0 |
| Colorectal | 630 | 77.8 | 1 in 17 | 13.9 | 254 | 31.7 | 1 in 51 | 14.0 |
| Lung | 488 | 60.3 | 1 in 23 | 10.7 | 404 | 50.1 | 1 in 30 | 22.2 |
| Melanoma | 380 | 47.1 | 1 in 28 | 8.4 | 43 | 5.4 | 1 in 273 | 2.4 |
| NHL | 186 | 23.1 | 1 in 64 | 4.1 | 68 | 8.8 | 1 in 233 | 3.7 |
| Kidney | 149 | 18.2 | 1 in 68 | 3.3 | 65 | 8.0 | 1 in 178 | 3.6 |
| Unspecified | 137 | 17.1 | 1 in 91 | 3.0 | 111 | 13.9 | 1 in 117 | 6.1 |
| Bladder | 132 | 16.6 | 1 in 126 | 2.9 | 61 | 8.0 | 1 in 308 | 3.4 |
| Stomach | 104 | 12.8 | 1 in 117 | 2.3 | 85 | 10.7 | 1 in 164 | 4.7 |
| Lymphoid Leukaemias | 100 | 12.5 | 1 in 131 | 2.2 | 30 | 3.9 | 1 in 646 | 1.7 |
| All Cancers | 4540 | 560.5 | 1 in 3 | 100.0 | 1818 | 228.4 | 1 in 8 | 100.0 |

Notes: See Appendix 1 for naming and coding conventions. Rates are expressed per 100,000 and standardised to the Australian 2001 population.

Lifetime risk is calculated to age 75.

Females

Breast cancer remains the most commonly reported cancer in females, accounting for 28.4% of all cancers. Breast cancer incidence continues to increase in absolute numbers, and remain stable as a percentage of all female cancers. Colorectal cancer (14.9%), melanoma (8%) and lung cancer (8%) are ranked second to fourth in frequency, followed by cancers of the uterus (4.7%) and non-Hodgkin’s lymphomas (4.7%), unknown primary site (3.4%), pancreas (2.9%), ovary (2.5%) and kidney (2.4%) (Figure 4.2 and Table 4.2).

Figure 4.2: Most common cancers in South Australia 2004 - Females

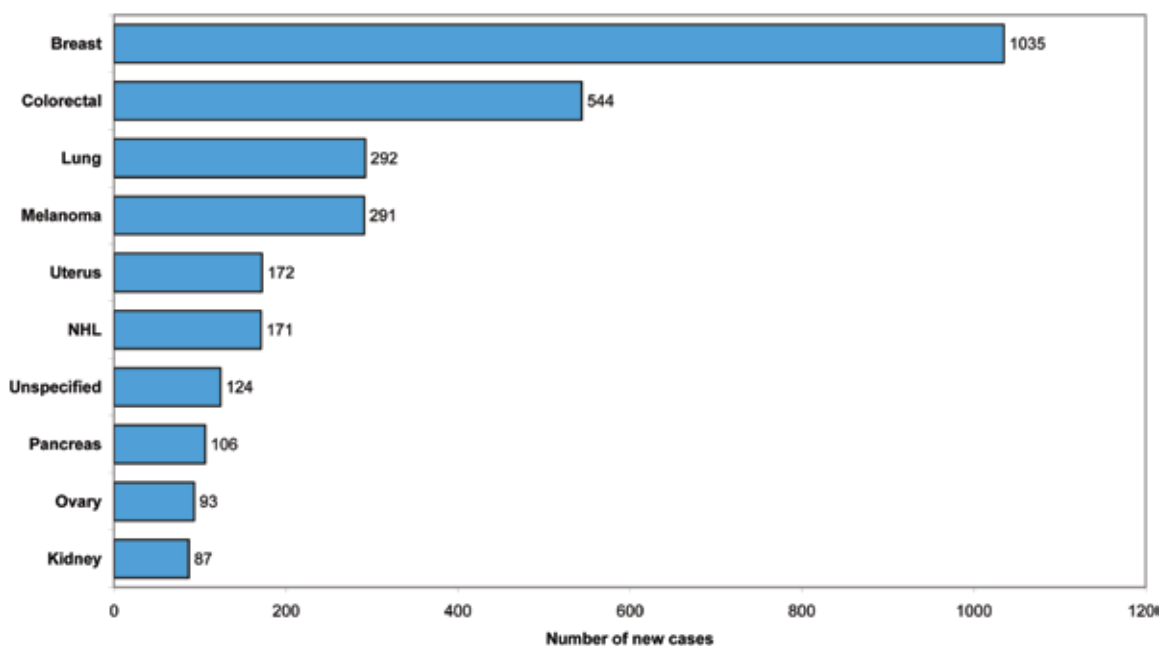


Table 4.2: Most common cancers in South Australia 2004 – Females

| Site name | Incidence | | | | Mortality | | | |
|-------------|-----------|-------|---------------|---------------|-----------|-------|---------------|---------------|
| | New cases | Rate | Lifetime risk | % all Cancers | Deaths | Rate | Lifetime risk | % all Cancers |
| Breast | 1035 | 115.2 | 1 in 11 | 28.4 | 219 | 22.3 | 1 in 62 | 15.3 |
| Colorectal | 544 | 54.3 | 1 in 26 | 14.9 | 220 | 20.6 | 1 in 81 | 15.4 |
| Lung | 292 | 30.1 | 1 in 42 | 8.0 | 238 | 23.9 | 1 in 57 | 16.6 |
| Melanoma | 291 | 32.8 | 1 in 40 | 8.0 | 28 | 2.7 | 1 in 567 | 2.0 |
| Uterus | 172 | 18.7 | 1 in 60 | 4.7 | 23 | 2.3 | 1 in 599 | 1.6 |
| NHL | 171 | 17.6 | 1 in 77 | 4.7 | 61 | 5.5 | 1 in 349 | 4.3 |
| Unspecified | 124 | 11.8 | 1 in 138 | 3.4 | 109 | 10.4 | 1 in 154 | 7.6 |
| Pancreas | 106 | 10.3 | 1 in 141 | 2.9 | 88 | 8.3 | 1 in 197 | 6.1 |
| Ovary | 93 | 9.8 | 1 in 120 | 2.5 | 63 | 6.2 | 1 in 233 | 4.4 |
| Kidney | 87 | 9.2 | 1 in 125 | 2.4 | 30 | 2.9 | 1 in 640 | 2.1 |
| All Cancers | 3650 | 387.6 | 1 in 4 | 100.0 | 1431 | 139.2 | 1 in 11 | 100.0 |

Notes: See Appendix 1 for naming and coding conventions. Rates are expressed per 100,000 and standardised to the Australian 2001 population.

Lifetime risk is calculated to age 75.

Persons

Prostate cancer has overtaken colorectal cancer as the most common cancer for persons for 2004. Prostate cancer represented 16.2% and colorectal cancer 14.3% of all registrable cancers. Other common cancers include female breast (12.6%), lung (9.5%) and melanoma (8.2%). Together these five cancers account for 61% of all registrable cancers in this state. The relative frequency of these five cancers is similar to national data, with the exception of prostate cancer being more common in SA than breast cancer and lung cancer being more common than melanoma, whereas nationally the reverse is true (Table 4.3). South Australia has historically had slightly higher rates of prostate cancer than most other states, whereas melanomas tend to be less frequent in South Australia than in some of the eastern states.

4.2 Mortality

Males

Lung cancer remains the leading cause of cancer death in South Australian males (22.2%). This statistic continues to demonstrate the ongoing effect of high rates of smoking in Australia in the 1970s and 1980s. This is followed by colorectal cancer, cancer of the prostate and unknown primary site, stomach and non-Hodgkin's lymphomas (Table 4.1).

Females

Lung cancer is the most common cause of cancer death in females in South Australia, accounting for 16.6% of all deaths. This highlights the increasing importance of lung cancer as a cause of death of women in South Australia. Other leading cancers are those of the colon and rectum, breast, unknown primary site, pancreas, ovary and non-Hodgkin's lymphomas (Table 4.2).

Persons

For South Australians the most common cause of cancer death in 2004 was lung cancer with 642 deaths. Other notable cancer causes of death were colorectal cancer (474), unknown primary site (220), female breast (219), prostate (218) and pancreas (173) (Table 4.3).

Table 4.3: Most common cancers in South Australia 2004 – Persons

| Site name | Incidence | | | | Mortality | | | |
|---------------|-----------|-------|---------------|---------------|-----------|-------|---------------|---------------|
| | New cases | Rate | Lifetime risk | % all Cancers | Deaths | Rate | Lifetime risk | % all Cancers |
| Prostate | 1326 | 73.6 | 1 in 16 | 16.2 | 218 | 11.3 | 1 in 219 | 6.7 |
| Colorectal | 1174 | 65.2 | 1 in 20 | 14.3 | 474 | 25.7 | 1 in 63 | 14.6 |
| Female breast | 1035 | 60.2 | 1 in 21 | 12.6 | 219 | 12.1 | 1 in 120 | 6.7 |
| Lung | 780 | 43.2 | 1 in 30 | 9.5 | 642 | 35.1 | 1 in 39 | 19.8 |
| Melanoma | 671 | 39.3 | 1 in 33 | 8.2 | 71 | 4.0 | 1 in 372 | 2.2 |
| NHL | 357 | 20.2 | 1 in 70 | 4.4 | 129 | 6.9 | 1 in 279 | 4.0 |
| Unspecified | 261 | 14.1 | 1 in 110 | 3.2 | 220 | 11.9 | 1 in 134 | 6.8 |
| Kidney | 236 | 13.4 | 1 in 89 | 2.9 | 95 | 5.3 | 1 in 282 | 2.9 |
| Pancreas | 195 | 10.8 | 1 in 126 | 2.4 | 173 | 9.4 | 1 in 156 | 5.3 |
| Bladder | 182 | 9.6 | 1 in 204 | 2.2 | 83 | 4.4 | 1 in 461 | 2.6 |
| All Cancers | 8190 | 462.8 | 1 in 3 | 100.0 | 3249 | 176.6 | 1 in 9 | 100.0 |

Notes: See Appendix 1 for naming and coding conventions. Rates are expressed per 100,000 and standardised to the Australian 2001 population.

Lifetime risk is calculated to age 75.

4.3 Most common cancers by age

Cancer is predominantly a disease of the elderly in South Australia with 61% of cancers occurring in the 65+ age group. The relatively few cancers which do occur in the 0-14 and 15-44 age groups account for 7.9% of all cancers (648 cases).

In people aged 0-14, leukaemias (19 cases), lymphomas (5 cases) and cancers of the central nervous system (9 cases) accounted for 65% of all cancers.

For people in the 15-44 age group, female breast (133 cases), melanoma (123), testes (39), non-Hodgkin's lymphomas (34) and thyroid (30) were the most commonly reported cancer sites. Cancers such as testicular cancer and thyroid cancer in particular were relatively more common than they were in older age groups. Cancer deaths were very rare in the 0-14 age group, but in the 15-44 age group deaths were largely confined to the commonly diagnosed sites of melanoma, female breast and non-Hodgkin's lymphoma.

In the 65-85+ age group it is the most common cancers overall that predominate, with prostate (947 cases), colorectal (841), lung (577) and female breast (401) being the most commonly diagnosed cancers. Cancer sites which have a marked increase in incidence with age include all of the previously mentioned cancers except female breast, bladder and stomach.

4.4 Age and sex differences

Cancer occurs more commonly in males than females in South Australia. This disparity is true across a broad range of cancer sites with breast being the one major exception. The age-standardised incidence rate for 2004 for all invasive cancers combined was 559.2 cases per 100,000 for males and 387.0 cases per 100,000 for females, resulting in an age-adjusted male-female ratio of 1.4.

The age breakdown of new cancer diagnoses for 2004 was 0-14 (0.6% of all cancers), 15-44 (7.9%), 45-64 (31.2%) and 65+ (60.9%). The age breakdown of cancer deaths was even more biased towards the older age groups, with the 65+ age group accounting for 74.8% of all cancer deaths. The predominance of deaths in the 65+ age group was slightly greater in females (75.5%) than males (74.2%).

For many of the most common cancers the age-sex-specific incidence and mortality rates are similar for both sexes. However, melanoma and lung are two interesting exceptions. Melanoma is much more common amongst older (65+) men than older women. This is also true of lung cancer where cancer incidence peaks at 390-480/100,000 in the 70-85+ age groups for males, but only 180-190/100,000 for females.

4.5 Risks of cancer

The lifetime risks of cancer shown in Tables 4.1, 4.2 and 4.3 confirm the importance of prostate, colorectal, female breast and lung cancers together with melanoma as the greatest cancer risks for the South Australian population. These risks also confirm the greater risk for men of being diagnosed with cancer relative to women, and the greater risk of death from cancer.