Cancer in Australia statistics

All cancers in Australia

The following material has been sourced from the Australian Institute of Health and Welfare

Cancer is a diverse group of several hundred diseases in which some of the body’s cells become abnormal and begin to multiply out of control. The abnormal cells can invade and damage the tissue around them, and spread to other parts of the body, causing further damage and eventually death.

All cancers combined incorporates ICD-10 cancer codes C00–C97 (Malignant neoplasms of specific sites), D45 (Polycythaemia), D46 (Myelodysplastic syndromes), and D47.1, D47.3, D47.4 and D47.5 (Myeloproliferative diseases); but excludes basal cell carcinoma (BCC) and squamous cell carcinoma (SCC) of the skin. BCC and SCC, the most common skin cancers, are not notifiable diseases in Australia and are not reported in the Australian Cancer Database.

Estimated number of new cancer cases diagnosed in 2018

138,321 = 74,644 males + 63,676 females

Estimated number of deaths from cancer in 2018

48,586 = 27,552 males + 21,034 females

Chance of surviving at least 5 years (2009–2013)
68%

People living with cancer at the end of 2012 (diagnosed in the 5 year period 2008 to 2012)

410,530

New cases of cancer in Australia

In 2013, there were 124,465 new cases of cancer diagnosed in Australia (68,936 males and 55,529 females). In 2018, it is estimated that 138,321 new cases of cancer will be diagnosed in Australia (74,644 males and 63,676 females).

In 2013, the age–standardised incidence rate was 483 new cases per 100,000 persons (562 for males and 416 for females). In 2017, it is estimated that the age–standardised incidence rate will be 470 cases per 100,000 persons (526 for males and 423 for females). The incidence rate of all cancers combined will generally increase with age for both males and females (Figure 1).

In 2017, it is estimated that the risk of an individual being diagnosed with cancer by their 85th birthday will be 1 in 2 (1 in 2 males and 1 in 2 females).

The number of new cases of cancer diagnosed increased from 47,440 (25,420 males and 22,020 females) in 1982 to 124,465 in 2013. Over the same period, the age–standardised incidence rate increased from 383 new cases per 100,000 persons (472 for males and 328 for females) in 1982 to 483 cases per 100,000 persons in 2013 (Figure 2).

<table>
<thead>
<tr>
<th>Cancer type</th>
<th>New cases 2017</th>
<th>% of all new cancers 2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Breast</td>
<td>17,730</td>
<td></td>
</tr>
<tr>
<td>Breast (among females)</td>
<td>17,586</td>
<td></td>
</tr>
<tr>
<td>Colorectal (bowel)</td>
<td>16,682</td>
<td></td>
</tr>
<tr>
<td>Prostate (among males)</td>
<td>16,665</td>
<td></td>
</tr>
<tr>
<td>Melanoma</td>
<td>13,941</td>
<td></td>
</tr>
<tr>
<td>Lung</td>
<td>12,434</td>
<td></td>
</tr>
</tbody>
</table>

Deaths from cancer

In 2014, there were 44,171 deaths from cancer in Australia (24,718 males and 19,453 females). In 2018, it is estimated that this will increase to 48,586 deaths (27,552 males and 21,034 females).

In 2014, the age–standardised mortality rate was 162 deaths per 100,000 persons (200 for males and 132 for females). In 2017, it is estimated that the age–standardised mortality rate will be 161 deaths per 100,000 persons (200 for males and 129 for females). The mortality rate for all cancers combined will generally increase with age for both males and females (Figure 1).

In 2017, the risk of an individual dying from cancer by their 85th birthday will be 1 in 5 (1 in 4 males and 1 in 6 females).

The number of deaths from cancer increased from 17,032 (9,541 males and 7,491 females) in 1968 to 44,171 in 2014. Over the same period, the age–standardised mortality rate decreased from 199 deaths per 100,000 persons in 1968 (258 for males and 159 for females) to 162 deaths per 100,000 persons in 2014 (Figure 2).

Estimated most common cancers deaths in 2017
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#### Published on Cancer Australia (https://canceraustralia.gov.au)

<table>
<thead>
<tr>
<th>Cancer type</th>
<th>Number of deaths 2017</th>
<th>% of all cancer deaths 2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lung</td>
<td>9,021</td>
<td>18.9</td>
</tr>
<tr>
<td>Colorectal (bowel)</td>
<td>4,114</td>
<td>8.6</td>
</tr>
<tr>
<td>Prostate (among males)</td>
<td>3,452</td>
<td>12.7</td>
</tr>
<tr>
<td>Breast</td>
<td>3,114</td>
<td>6.5</td>
</tr>
<tr>
<td>Breast (among females)</td>
<td>3,087</td>
<td>14.9</td>
</tr>
<tr>
<td>Pancreatic</td>
<td>2,915</td>
<td>6.1</td>
</tr>
</tbody>
</table>

**Figure 1: Estimated age-specific incidence and mortality rates for all cancers combined, by sex, 2017**

**Figure 2: Age-standardised incidence rates for all cancers combined 1982–2013 and age-standardised mortality rates for all cancers combined 1968–2014, by sex**

*Source: AIHW [1].*
Survival from cancer

In 2009–2013, individuals diagnosed with cancer had a 68% chance (68% for males and 69% for females) of surviving for 5 years compared to their counterparts in the general Australian population.

Between 1984–1988 and 2009–2013, 5-year relative survival from cancer improved from 48% to 68%.

**Figure 3: 5-year relative survival from all cancers combined, by sex, 1984-1988 to 2009-2013**

Source: AIHW [1].

Survivorship population

The survivorship population is measured using prevalence data. Prevalence refers to the number of
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people alive who have previously been diagnosed with cancer.

The prevalence for 1, 5 and 31 years given below are the number of people living with cancer at the end of 2012 who had been diagnosed in the preceding 1, 5 and 31 years respectively.

At the end of 2012, there were 106,340 people living who had been diagnosed with cancer that year, 410,530 people who had been diagnosed with cancer in the previous 5 years (from 2008 to 2012) and 994,605 people living had been diagnosed with cancer in the previous 31 years (from 1982 to 2012).

Data notes

International Statistical Classification of Diseases and Related Health Problems Version 10 (ICD–10)

Cancer is classified by the International Statistical Classification of Diseases and Related Health Problems Version 10 (ICD–10). This is a statistical classification, published by the World Health Organization, in which each morbid condition is assigned a unique code according to established criteria.

Estimations

Future estimations for incidence and mortality are a mathematical extrapolation of past trends. They assume that the most recent trends will continue into the future, and are intended to illustrate future changes that might reasonably be expected to occur if the stated assumptions continue to apply over the estimated period. Actual future cancer incidence and mortality rates may vary from these estimations. For instance, new screening programs may increase the detection of new cancer cases; new vaccination programs may decrease the risk of developing cancer; and improvements in treatment options may decrease mortality rates.

Incidence

Cancer incidence indicates the number of new cancers diagnosed during a specified time period (usually one year).

The 2013 national incidence counts include estimates for NSW because the actual data were not available. Note that actual data for the Australian Capital Territory do not include cases identified from death certificates.

The 2017 estimates are based on 2004–2013 incidence data. Due to rounding of these estimates, male and female incidence may not sum to person incidence.

Mortality

Cancer mortality refers to the number of deaths occurring during a specified time period (usually one year) for which the underlying cause of death is cancer.

The 2017 estimates are based on mortality data up to 2013. Joinpoint analysis was used on the longest time series of age-standardised rates available to determine the starting year of the most recent trend.

Prevalence

Prevalence of cancer refers to the number of people alive with a prior diagnosis of cancer at a given time. It is distinct from incidence, which is the number of new cancers diagnosed within a given
period of time. The longest period for which it is possible to calculate prevalence using the available national data (from 1982 to 2012) is currently 31 years so this is used to provide an estimate of the ‘total’ prevalence of cancer as at the end of 2012, noting that people diagnosed with cancer before 1982 aren’t included.

**Age standardised rates**

Incidence and mortality rates expressed per 100,000 population are age-standardised to the Australian population as at 30 June 2001.

**References**
