



# Surviving cancer: early detection counts

There are estimated to be around 1 million Australians alive who have lived with, or are still living with cancer. It is estimated that in 2018, more than 141,000 people will be diagnosed with cancer and just under 50,000 people will die from cancer. Cancer causes around 3 in every 10 deaths in Australia.

Despite the huge impact that cancer has on a person's health, the chances of surviving a diagnosis have improved markedly over the past 3 decades. This fact sheet outlines these improvements, and how diagnosing cancer at earlier stages increases the chance of people surviving for at least 5 years after diagnosis.

## Survival rates have improved over time

Between 1986 and 1990, people diagnosed with cancer had a 50% likelihood, on average, of surviving for at least 5 years after their diagnosis. Between 2011 and 2015, this had improved to 69%.

While survival rates have improved overall, some cancers have much lower 5-year survival (based on 2011 to 2015 results), such as acute myeloid leukaemia (28%), cancer of the brain (22%), oesophagus (22%), gallbladder (20%), liver (18%), lung (17%) and pancreas (9.8%), and mesothelioma (6.1%). This group of cancers is expected to account for around 1 in 5 of all cancers diagnosed in 2018 and 2 in 5 cancer deaths over the same period.

## Earlier stage at diagnosis increases chance of survival

### What does stage at diagnosis mean?

Cancer stage at diagnosis refers to the extent or spread of cancer at the time of diagnosis—the higher the number (between I and IV), the further the cancer has spread. The stage at diagnosis and subsequent treatment outcomes are important determinants of cancer survival.

In order to better understand the impact that stage at diagnosis has on cancer survival in Australia, Cancer Australia worked in collaboration with all state and territory population-based cancer registries and the AIHW to coordinate the collection of national information on stage at diagnosis of the 5 most commonly diagnosed cancers. State and territory cancer registries provided data to AIHW on the stage at diagnosis of colorectal cancer, melanoma of the skin and cancers of the breast, prostate and lung in 2011 for inclusion in the Australian Cancer Database. Using these new data, 5-year relative survival has been calculated by stage at diagnosis nationally for these cancers for the first time. This analysis quantifies the higher chance of surviving for at least 5 years after diagnosis of these cancers when diagnosed at earlier stages (Figure 1).

### Quick facts

5-year survival rates for those diagnosed with cancer in 2011

Cancer	Early stage (I)	Late stage (IV)
Prostate	100%	36%
Breast	100%	32%
Skin (melanoma)	99%	26%
Colorectal	99%	13%
Lung	68%	3%

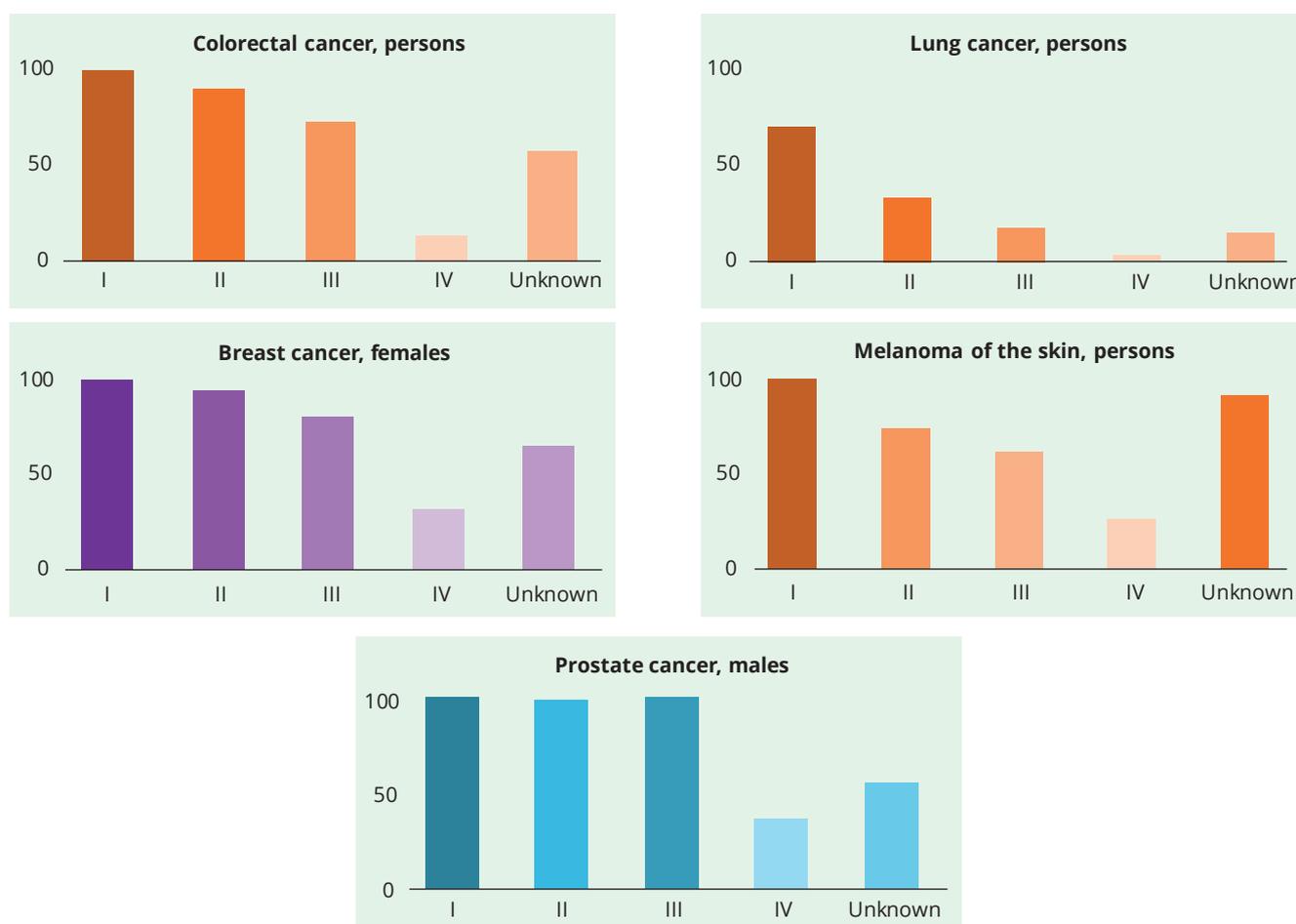
The most pronounced differences were for colorectal cancer, where a person diagnosed at stage I (early stage) had a 99% chance of surviving 5 years but only a 13% chance when diagnosed at stage IV (late stage); and lung cancer, where a person diagnosed at stage I had a 68% chance of surviving 5 years but only a 3% chance when diagnosed at stage IV.

## At what stage are cancers diagnosed?

The stage at which cancers were diagnosed in 2011 varied across the 5 cancers (for those where cancer stage was recorded). For:

- melanoma of the skin, around 4 in 5 cases were diagnosed at stage I
- breast and prostate cancers, more than 4 in 5 were diagnosed at either stage I or II
- colorectal cancers, the proportion diagnosed were more evenly distributed across the 4 stages (25% stage I, 28% stage II, 27% stage III and 20% stage IV)
- lung cancers, early detection was less common—less than 1 in 5 (16%) were diagnosed in stage I and nearly 3 in 5 (59%) were diagnosed at stage IV.

Figure 1: 5-year relative survival, by stage of diagnosis (per cent)



## Find out more

The AIHW website has a comprehensive range of cancer data at [www.aihw.gov.au/cancer](http://www.aihw.gov.au/cancer) where users can explore statistics, and access data tables on more than 40 types of cancer in Australia dating back to 1982. A recent AIHW report also found that people whose cancer was diagnosed through a national cancer screening program (for breast, cervical or colorectal cancer) had a lower risk of dying from the cancer than people who had never been screened before diagnosis (see [Analysis of cancer outcomes and screening behaviour for national cancer screening programs in Australia](#)).