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Cancer in Australia

In brief 2019

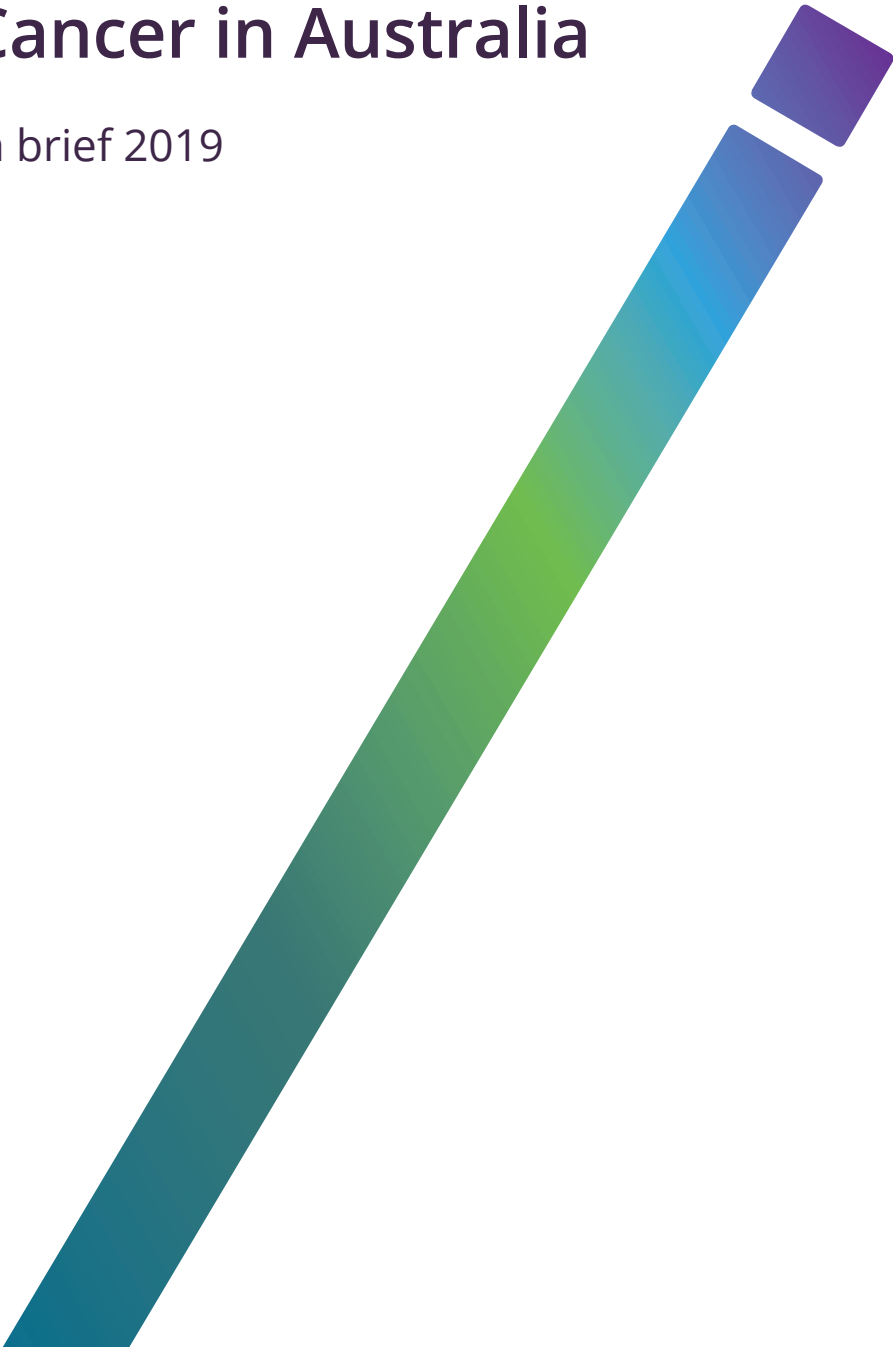


*Australasian Association
of Cancer Registries*



Cancer in Australia

In brief 2019



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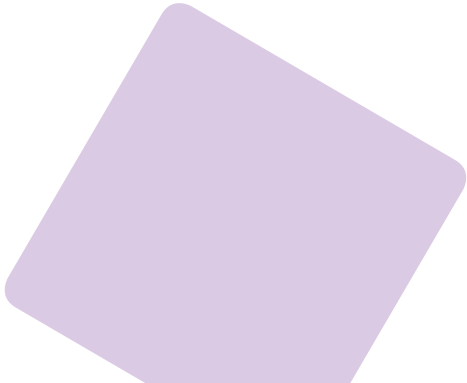
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Introduction

Cancer is a major cause of illness in Australia and has a substantial social and economic impact on individuals, families and the community. In 2019, it is estimated that 144,713 people will be diagnosed with cancer and 49,896 people will die from cancer.

This booklet presents key findings from *Cancer in Australia 2019*, the 19th in a series published by the Australian Institute of Health and Welfare (AIHW) which provides the latest cancer screening, incidence, hospital, survival, mortality and burden of disease statistics. The full report and comprehensive online tables are available to download free at <https://www.aihw.gov.au/cancer-publications>.

What is cancer?

Cancer is a term used for diseases in which abnormal cells divide without control and can invade nearby tissues. Cancer cells can also spread to other parts of the body through the blood and lymph systems. Cancers can develop from most cell types and are distinguished from one another by the location in the body where the disease began (for example, lung) or by the cell type involved (known as histology).

Terminology used in this report

Incidence rate: the number of new cancers diagnosed per 100,000 people during a year. All incidence rates in this report are age standardised to the 2001 Australian Standard Population, except for rates by age groups, which are age specific.

Hospitalisation (or separation): an episode of care that either begins with admission and ends with discharge, transfer or death, or is defined by a change in care type, such as from acute care to rehabilitation.

Mortality rate: the number of deaths per 100,000 people for which the underlying cause was cancer. All mortality rates in this report are age standardised to the 2001 Australian Standard Population, except for rates by age groups, which are age specific.

Prevalence: the number of people alive who have previously been diagnosed with cancer within the referenced time frame e.g. 5 years for 5-year prevalence.

Relative survival: the average survival experience. It compares the survival of people diagnosed with cancer with that experienced by people in the general population of equivalent age and sex in the same calendar year.



Risk factors

A risk factor is any factor associated with an increased likelihood of a person developing a health disorder or health condition, such as cancer. Understanding what causes cancer is essential in developing processes and policies to successfully prevent, detect and treat the disease. For most cancers the causes are not fully understood. However, some factors that place individuals at a greater risk for cancer are outlined here.

Type of risk factor	Examples	Cancer site
Behavioural Risks Risk factors that individuals have the most ability to modify	diet, physical inactivity, tobacco smoking, unsafe sex, illicit drug use, alcohol use	Bladder, breast, cervix, colorectal, head and neck, kidney, leukaemia, liver, lung, oesophagus, pancreatic, prostate, stomach, uterus
Biomedical Risks Associated with biology or medicine	overweight and obesity, diabetes	Bladder, breast, colorectal, gallbladder, kidney, leukaemia, liver, lung, multiple myeloma, non-Hodgkin lymphoma, ovary, oesophagus, pancreas, thyroid, uterus
Environmental Risks Associated with exposure to certain substances or energies	sun exposure, occupational exposures, air pollution	Breast, colorectal, head and neck, leukaemia, lung, melanoma of the skin, mesothelioma, non-melanoma of the skin, ovary

Source: Australian Burden of Disease Study 2015 (forthcoming).

Summary of exposure to selected risk factors by proportion (%) of participants, by sex and age, 2017–18

Age group	Overweight and obesity			
	Men—Overweight	Women—Overweight	Men—Obese	Women—Obese
18–24	35.0	26.0	18.1	13.5
25–34	42.2	26.0	24.6	22.9
35–44	45.4	30.7	32.0	29.6
45–54	43.0	30.7	40.6	34.5
55–64	42.2	28.4	41.6	38.1
65–74	40.9	34.4	42.2	38.7
75–84	44.0	33.3	33.2	38.6
85+	46.2	38.0	16.0	22.8
Total	42.0	29.6	32.5	30.2

Source: ABS 2018.

Age group	Excessive alcohol consumption		Smoking			
	Men	Women	Men—Never	Women—Never	Men—Daily	Women—Daily
18–24	14.7	6.1	69.6	81.5	17.5	10.4
25–34	22.7	7.1	56.2	70.0	19.0	10.6
35–44	23.9	10.7	47.6	61.7	19.6	12.4
45–54	27.5	10.2	45.0	55.5	19.3	14.7
55–64	28.8	9.9	38.8	53.2	16.5	13.8
65–74	27.3	9.1	34.4	57.8	9.9	7.5
75–84	18.9	7.1	35.1	64.5	5.8	4.6
85+	10.7	2.5	38.0	74.7	2.2	1.7
Total	23.7	8.8	47.9	63.2	16.5	11.1

Source: ABS 2018.

Proportion who did not meet the recommended minimum serves of fruit and vegetables each day, by sex and age, 2017–18

Age group	Men			Women		
	Fruit	Vegetables	Fruit and Vegetables	Fruit	Vegetables	Fruit and Vegetables
18–24	54.4	96.5	96.8	52.9	94.7	96.4
25–34	60.5	97.0	98.7	49.2	89.9	93.8
35–44	57.8	96.8	97.8	48.4	90.2	93.4
45–54	54.0	96.5	97.3	45.7	89.0	93.0
55–64	50.4	97.1	98.0	39.7	85.7	88.8
65–74	45.6	93.4	95.7	32.3	84.4	87.8
75–84	39.6	87.4	90.2	32.4	89.4	90.7
85+	#35.6	#94.2	#93.5	38.6	93.7	95.7
Total	53.4	96.0	97.1	44.2	89.1	92.3

Has a high margin of error and should be used with caution

Source: ABS 2018.

Prevalence of insufficient physical activity in persons aged 18 and over, 2014–15

Age group	Men	Women	Persons
18–24	45.4	50.7	48.0
25–34	43.9	49.0	46.5
35–44	53.3	53.6	53.4
45–54	56.8	56.2	56.6
55–64	54.0	59.7	56.5
65+	73.5	76.9	75.0
All persons (18+)	n.p.	n.p.	56.4

n.p. not published because of small numbers, confidentiality or other concerns about the quality of the data

Source: AIHW 2017.

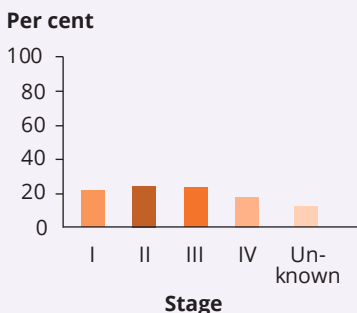
Stage at diagnosis

Cancer stage at diagnosis refers to the extent or spread of cancer at the time of diagnosis. The stage at diagnosis and subsequent treatment options are important determinants of cancer survival. They can also reflect the extent to which improvements in survival are a result of earlier detection or more treatment options. The higher the number (between I and IV), the further the cancer has spread and the 'later' the cancer stage at diagnosis. Stage data was collected for 5 cancers in 2011 as part of a pilot initiative for the 5 most common cancers.

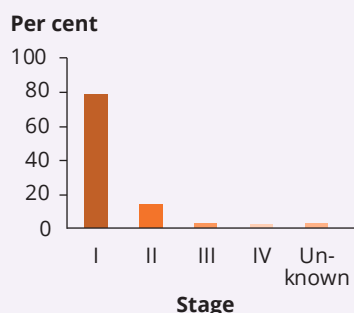
The stage at diagnosis differed between cancer types. Illustrated below are incidence by stage for the selected cancers.

At what stage were cancers diagnosed?

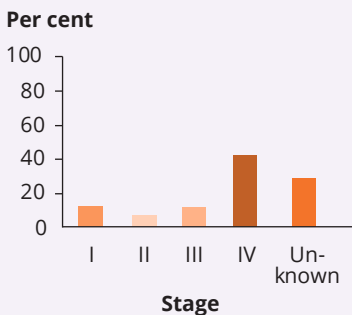
Colorectal cancer (persons)



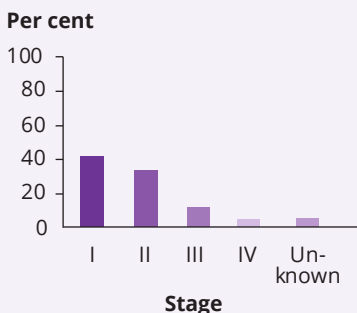
Melanoma of the skin (persons)



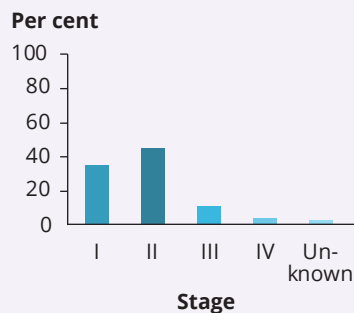
Lung cancer (persons)



Breast cancer (females)



Prostate cancer (males)



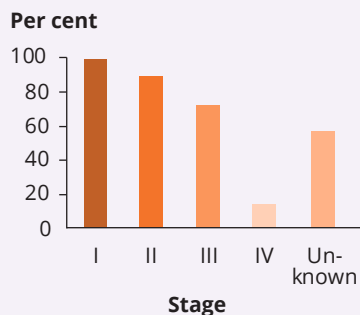
Source: AIHW Australian Cancer Database (ACD) 2014.



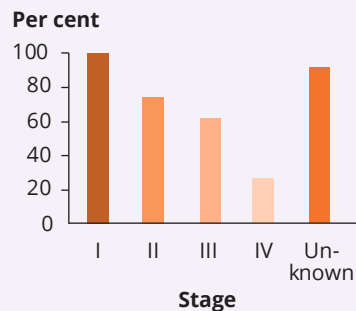
Illustrated below are 5-year relative survival rates by stage. Survival decreased by stage: those with an earlier stage cancer at diagnosis (stages I or II) had greater survival than those diagnosed with later stage (stages III or IV) cancer.

What were the 5-year survival rates for the different stages of diagnosis?

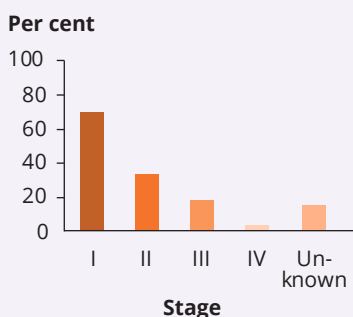
Colorectal cancer (persons)



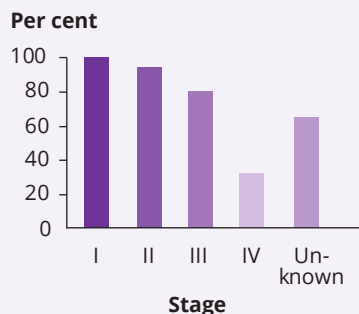
Melanoma of the skin (persons)



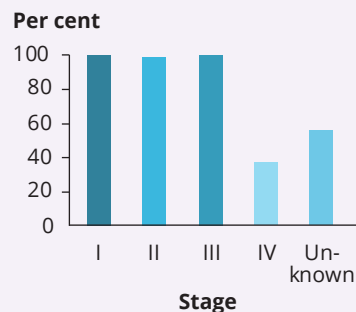
Lung cancer (persons)



Breast cancer (females)



Prostate cancer (males)



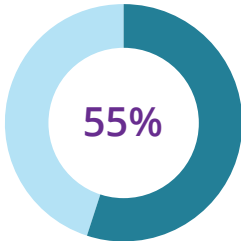
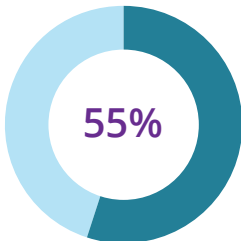
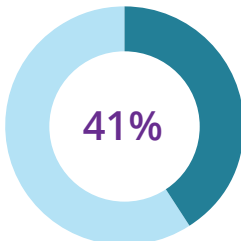
Source: ACD 2014.

Find out more: Chapter 3 in *Cancer in Australia 2019*.

Screening and surveillance

Population-based cancer screening is organised, systematic and integrated testing for signs of cancer or pre-cancerous conditions in asymptomatic populations. Programs target specific populations and/or age groups where evidence shows screening to be most effective.

Population screening programs and surveillance for cancer in high-risk individuals aims to reduce illness and death through early detection of cancer or pre-cancerous abnormalities.

Program	Participation 2015–2016	Abnormalities detected
BreastScreen		
<p>Target: Women aged 50–74. Service available for all women aged 40 and over.</p>	 <p>55%</p>	<ul style="list-style-type: none"> • 84 invasive breast cancers per 10,000 women for first-time screen in 2016 • 55 invasive breast cancers per 10,000 women for subsequent screen in 2016.
National Cervical Screening Program		
<p>Target: Women aged 25–74; prior to December 2017 women aged 20–69 (participation rate presented is for 20–69 year olds).</p>	 <p>55%</p>	<ul style="list-style-type: none"> • 7 high-grade abnormalities (pre cancerous) detected for every 1,000 women screened.
National Bowel Cancer Screening Program		
<p>Target: People aged 50–74.</p>	 <p>41%</p>	<ul style="list-style-type: none"> • Of participants who had a diagnostic assessment, 1 in 26 were diagnosed with a confirmed or suspected cancer and approximately 1 in 8 were diagnosed with an adenoma.

Surveillance, detection and monitoring

Cancer surveillance, detection and monitoring also occur outside national programs and may be Medicare subsidised or funded privately. Information is provided for the most commonly diagnosed cancer in females (breast cancer) and males (prostate cancer).

Breast imaging can be used to investigate breast symptoms, for surveillance of women at high risk of developing breast cancer or who have a personal history of breast cancers.

Prostate-specific antigen (PSA) is a protein produced within the prostate and is quantifiable by a blood test (PSA test). PSA levels in the blood naturally increase with age, and a PSA level that is higher than normal for that age can be an indicator of risk of prostate cancer.

Medicare-subsidised breast imaging services (breast ultrasounds, mammograms, breast magnetic resonance imaging—MRI) and PSA testing, 2017

	Number of patients	Number of services	Services per patient	Benefit per patient (\$)
All breast imaging services (females only)^(a)	629,234	1,047,078	1.7	152.16
Breast ultrasounds	577,958	638,404	1.1	108.13
Mammograms	392,648	403,930	1.0	76.55
Breast MRI	4,640	4,744	1.0	687.40
PSA testing (males only)	1,355,803	1,669,345	1.2	23.15

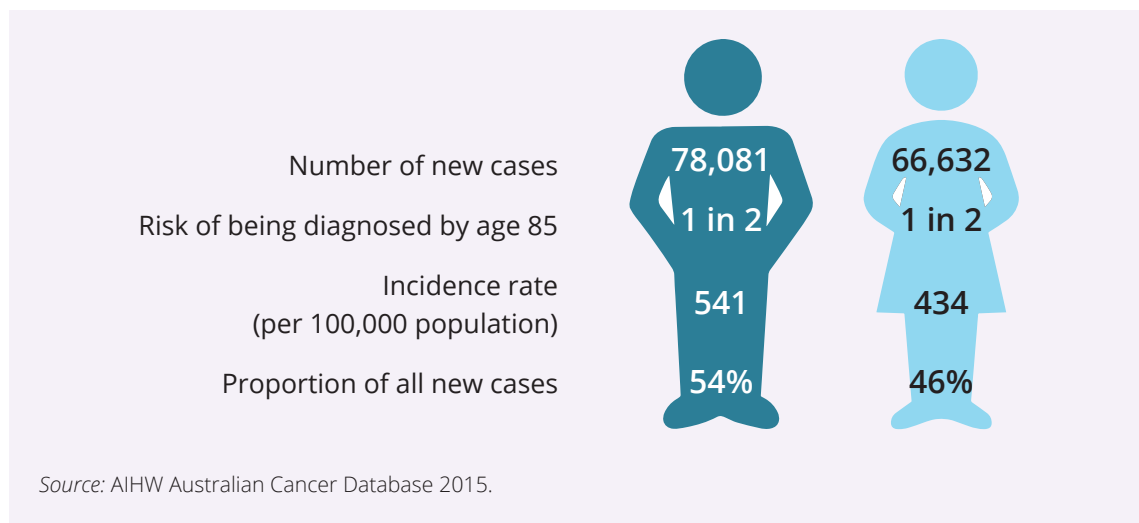
(a) Breast imaging services include ultrasound, mammograms and magnetic resonance imaging (MRI). A patient may undergo investigations through multiple breast imaging services.

Source: AIHW Medicare Benefits Schedule (MBS) claims data.

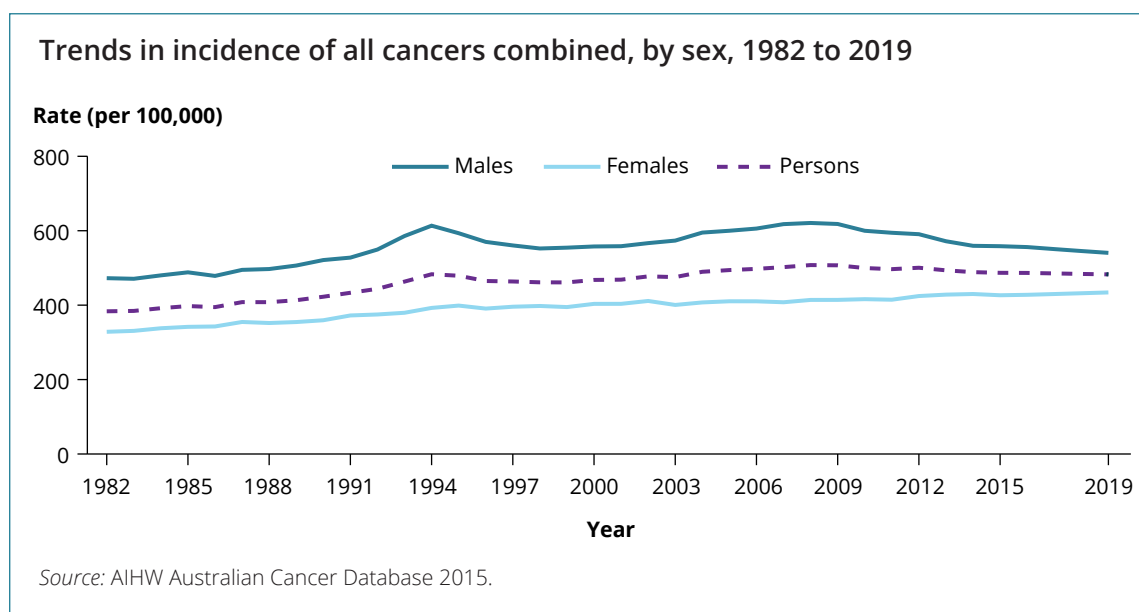
Find out more: Chapter 4 in *Cancer in Australia 2019*.

Number of new cases

In 2019, it is estimated that over 144,700 new cases of cancer will be diagnosed in Australia (excluding basal and squamous cell carcinoma of the skin). That is equivalent to approximately 1 new case every 4 minutes.



The age-standardised rate of new cancer cases increased between 1982 and 2008, before a projected decrease to 2019. The decrease has mainly been observed in males. The trend in the rate for males is strongly influenced by changes in the incidence rate of prostate cancer, the most common cancer in males.



In 2019, prostate cancer is projected to be the most commonly diagnosed cancer for males and breast cancer is projected to be the most commonly diagnosed cancer for females.

Estimated 10 most commonly diagnosed cancers, by sex, 2019

	Males	Females	
Prostate	19,508	19,371	Breast
Colorectal	9,069	7,329	Colorectal
Melanoma of the skin	8,899	6,330	Melanoma of the skin
Lung	7,184	5,633	Lung
Head and neck (with lip)	3,807	3,115	Uterus
Lymphoma	3,647	2,776	Lymphoma
Leukaemia	2,609	2,645	Thyroid
Kidney	2,539	1,710	Pancreas
Bladder	2,447	1,642	Leukaemia
Liver	1,907	1,510	Ovary

Source: AIHW Australian Cancer Database 2015.

Young people tend to be diagnosed with different types of cancers than older people. Leukaemia, lymphoma and brain cancer are common cancers among people aged 0–24, while prostate, breast and colorectal cancers, and melanoma of the skin are common in people aged 25 and over.

Estimated three most commonly diagnosed cancers, by age group, 2019

Aged 0–24		Aged 25–49		Aged 50–64		Aged 65 and over	
All cancers	1,805	All cancers	16,715	All cancers	39,909	All cancers	86,283
Leukaemia	360	Breast	3,890	Breast	6,764	Prostate	12,582
Lymphoma	271	Melanoma	2,602	Prostate	6,389	Colorectal	11,051
Brain	146	Colorectal	1,447	Melanoma	4,251	Lung	9,516

Source: AIHW Australian Cancer Database 2015.

Find out more: Chapter 5 in *Cancer in Australia 2019*.

Treatment

There were over 1.2 million cancer-related hospitalisations in 2016–17, accounting for approximately 1 in 9 hospitalisations in Australia.

This includes:



- 466,157 hospitalisations where cancer was the principal diagnosis
- 762,748 hospitalisations where cancer was an additional diagnosis and/or the principal diagnosis was a cancer-related service.

In 2016–17, non-melanoma skin cancer (NMSC) was the most common cancer type recorded as a principal diagnosis for both males and females.

Five most common cancers recorded as a principal diagnosis, by sex, 2016–17



	Males	Females	
Non-melanoma skin cancer (69,367)	26%	23%	Non-melanoma skin cancer (45,870)
Prostate cancer (39,099)	15%	14%	Breast cancer (26,953)
Secondary site (22,551)	8.4%	11%	Secondary site (21,885)
Colorectal cancer (16,249)	6.0%	6.9%	Colorectal cancer (13,597)
Leukaemia (13,956)	5.2%	4.9%	Lymphoma (9,632)
Total hospitalisations with a principal diagnosis of cancer (269,993)	100%	100%	Total hospitalisations with a principal diagnosis of cancer (196,163)

Source: AIHW National Hospital Morbidity Database.



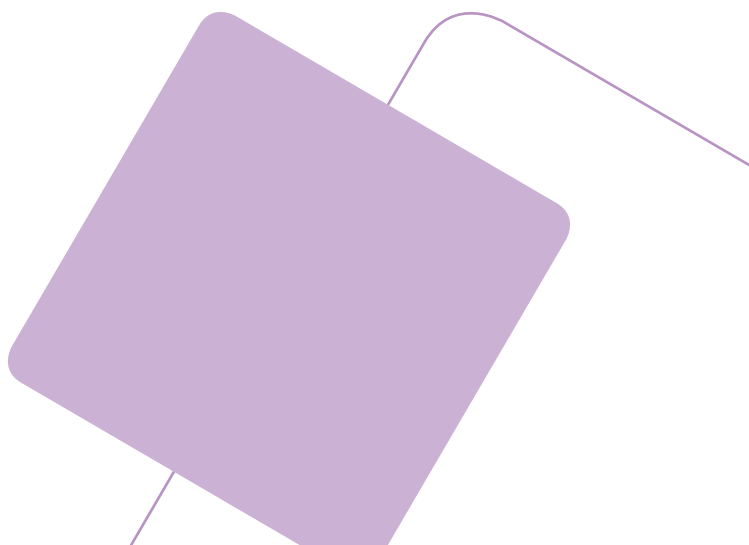
In 2016–17, there were 684,498 pharmacotherapy (chemotherapy) procedures performed. There were more chemotherapy procedures performed on females (361,216 compared with 323,274 for males). For these procedures, cancer of secondary site was the most common additional diagnosis, followed by breast cancer.

Five most common additional diagnoses for hospitalisations for chemotherapy , by sex, 2016–17



	Males	Females	
Secondary site (113,632)	30.8%	33.9%	Secondary site (152,344)
Colorectal cancer (47,021)	12.8%	27.4%	Breast cancer (122,927)
Lung cancer (27,935)	7.6%	7.4%	Colorectal cancer (33,139)
Multiple myeloma (26,032)	7.1%	4.6%	Lung cancer (20,786)
Lymphoma (22,635)	6.1%	4.2%	Ovarian cancer (19,018)
Total (368,635)	100%	100%	Total (449,026)

Source: AIHW National Hospital Morbidity Database.







Radiotherapy services are measured using the AIHW MBS claims database for Medicare subsidised radiotherapy services and the National Radiotherapy Waiting Times Database. In 2017 there were about 2.2 million Medicare subsidised radiotherapy services, and about 63,500 courses of radiotherapy were administered in 2016–17.

About 31,000 radiotherapy courses were administered to males and 32,500 courses to females. Around one-quarter of radiotherapy courses for males were for prostate cancer and almost half of all radiotherapy courses for females were for breast cancer.

Five most common cancers for which radiotherapy was provided, by sex, 2016–17

	 Males	 Females	
Prostate cancer (7,993)	26%	44%	Breast cancer (14,376)
Lung cancer (4,254)	14%	12%	Lung cancer (3,782)
Head and neck (with lip) cancer (2,475)	8.0%	3.5%	Colorectal cancer (1,124)
Colorectal cancer (1,805)	5.8%	2.8%	Uterine cancer (907)
Lymphoma (1,041)	3.4%	2.5%	Head and neck (with lip) cancer (823)
Total (30,978)	100%	100%	Total (32,538) 100%

Source: National Radiotherapy Waiting Times Database.

Find out more: Chapter 6 in *Cancer in Australia 2019*.



Survival

In 2011–2015, people diagnosed with cancer had a 69% chance of surviving for at least 5 years compared with their counterparts in the general population.

Of the 10 most commonly diagnosed cancers, 5-year survival was:

- highest for prostate cancer and melanoma of the skin and lowest for liver cancer and lung cancer, for males
- highest for thyroid cancer, melanoma of the skin and breast cancer and lowest for pancreatic cancer and lung cancer, for females.

Five-year relative survival for the 10 most commonly diagnosed cancers, by sex, 2011–2015

	Males	Females	
Prostate	95%	91%	Breast
Colorectal	70%	70%	Colorectal
Melanoma of the skin	89%	94%	Melanoma of the skin
Lung	15%	21%	Lung
Head and neck cancer	70%	83%	Uterus
Lymphoma	75%	77%	Lymphoma
Leukaemia	63%	98%	Thyroid
Kidney	77%	9.9%	Pancreas
Bladder	56%	61%	Leukaemia
Liver	19%	46%	Ovary

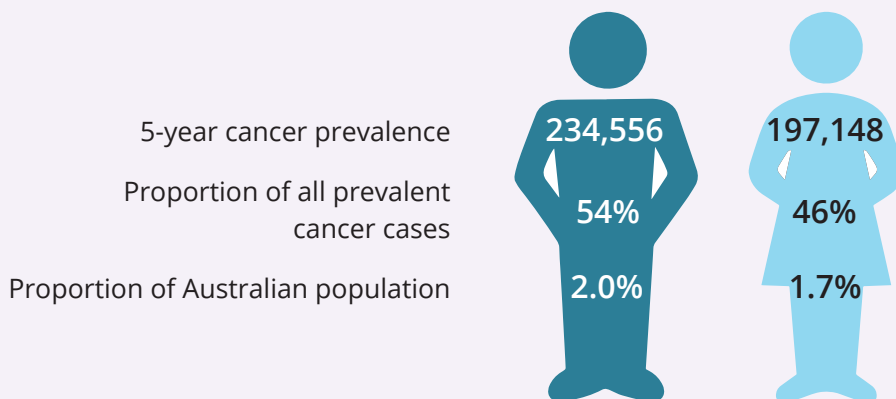
Source: AIHW Australian Cancer Database 2015.

Cancer survival has increased between 1986–1990 and 2011–2015. However, despite survival improving for most cancers, there has been little improvement for some cancers. Bladder cancer had a decrease in survival, while lip cancer, cancer of the larynx, cancer of other digestive organs and mesothelioma had little or no change.

Survivorship population

Cancer survivorship is measured using prevalence data. At the end of 2014, 431,704 people were alive who had been diagnosed with cancer in the previous 5 years (representing 1.8% of the Australian population) and 1,082,511 people were alive who had been diagnosed with cancer in the previous 33 years (4.6% of the Australian population).

Five-year prevalence of all cancers combined, by sex, as at end of 2014



Source: AIHW Australian Cancer Database 2015.

At the end of 2014, among males, prostate cancer had the highest 5-year prevalence; among females, breast cancer had the highest 5-year prevalence.

Five most prevalent cancers (5-year prevalence), by sex, at the end of 2014

	Males	Females	
Prostate	90,354	71,394	Breast
Melanoma of the skin	31,598	24,453	Colorectal
Colorectal	29,593	23,530	Melanoma of the skin
Non-Hodgkin lymphoma	10,405	10,454	Uterine
Lung	9,411	9,092	Thyroid

Source: AIHW Australian Cancer Database 2015.

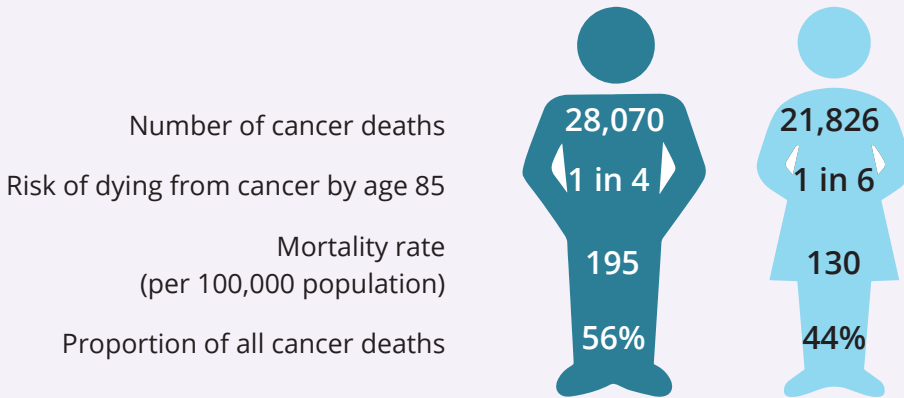
Find out more: Chapter 7 in *Cancer in Australia 2019*.



Deaths

In 2019, it is estimated that 49,896 people will die from cancer in Australia, an average of 137 deaths every day. In 2016, cancer was the leading cause of death in Australia, accounting for about 3 of every 10 deaths registered.

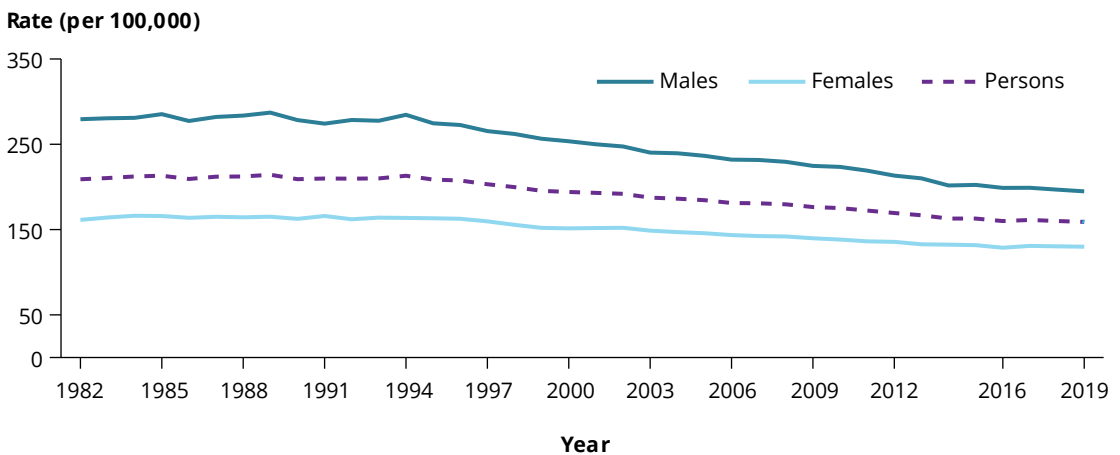
Estimated mortality of all cancers combined, by sex, 2019



Source: AIHW National Mortality Database.

Between 1982 and 2019, after adjusting for age structure it was found that the mortality rate decreased. The decrease was observed for both males and females.

Trends in mortality for all cancers combined, by sex, 1982 to 2019



Source: AIHW National Mortality Database.

In 2019, lung cancer is estimated to be the leading cause of cancer death in males and females.

Estimated 10 most common causes of death from cancer, by sex, 2019

	Males	Females	
Lung	5,179	3,855	Lung
Prostate	3,306	3,058	Breast
Colorectal	3,009	2,588	Colorectal
Pancreas	1,590	1,460	Pancreas
Liver	1,436	1,173	Unknown primary site
Unknown primary site	1,258	1,046	Ovary
Melanoma of the skin	1,190	850	Leukaemia
Leukaemia	1,189	725	Liver
Oesophagus	1,087	676	Lymphoma
Lymphoma	956	617	Brain

Source: AIHW National Mortality Database.

Cancer deaths increase with age. Approximately 78% of all cancer deaths occur in those aged 65 and over. However, cancer affects people of all ages and is a leading cause of death across all age groups.

Estimated 3 most common causes of cancer death, by age group, 2019

Aged 0–24		Aged 25–49		Aged 50–64		Aged 65 and over	
All cancers	199	All cancers	2,242	All cancers	8,743	All cancers	38,713
Brain	52	Colorectal	307	Lung	1,743	Lung	7,051
Leukaemia	39	Breast	295	Colorectal	861	Colorectal	4,425
Bone	22	Lung	239	Breast	741	Prostate	3,097

Source: AIHW National Mortality Database.

Find out more: Chapter 8 in *Cancer in Australia 2019*.

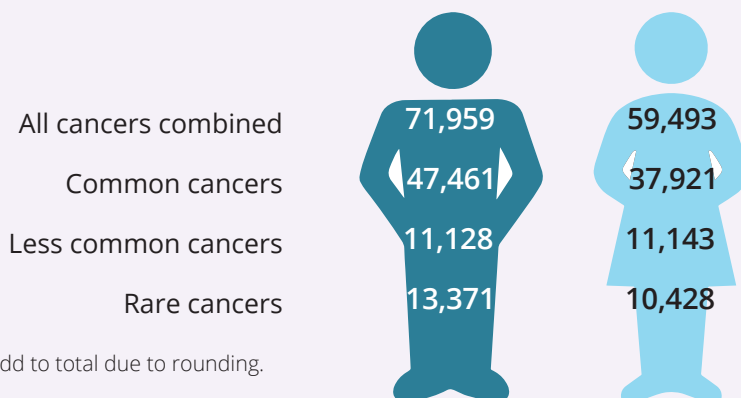
Rare and less common cancers

In this report, a rare cancer has been defined as having an incidence rate of less than 6 cases per 100,000 persons and a less common cancer as having an incidence rate between 6 and 12 cases per 100,000 persons. Rare cancers include bone cancer, mesothelioma, eye cancer and cancer of the nose and sinuses. Stomach cancer, liver cancer, bladder cancer, pancreatic cancer and brain cancer are among the group of less common cancers.

In 2015, around 1 in 3 people diagnosed with cancer were diagnosed with a rare or less common cancer; for the same year these cancers accounted for just under 1 in 2 cancer-related deaths.

Cancers with an incidence rate greater than 12 cases per 100,000 persons have been defined as common cancers and include breast cancer, prostate cancer, colorectal cancer, melanoma of the skin and lung cancer.

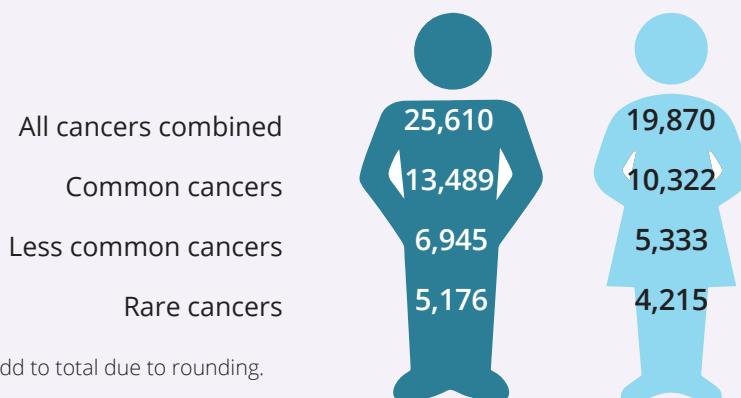
Incidence by cancer rarity and sex, Australia, 2015



Note: Numbers may not add to total due to rounding.

Source: ACD 2015.

Mortality by cancer rarity and sex, Australia, 2015



Note: Numbers may not add to total due to rounding.

Source: AIHW ACD 2015.

Find out more: Chapters 5 and 8 in *Cancer in Australia 2019*.

Aboriginal and Torres Strait Islander people

New cancer cases

Between 2010 and 2014, an average of 1,696 cases of cancer were diagnosed among Indigenous Australians each year—this is around 1.5% of all cancer cases diagnosed in that period.

Of the selected cancers, prostate cancer was the most commonly diagnosed cancer for male Indigenous Australians (154 cases per year) while breast cancer was the most common for female Indigenous Australians (197 per year), both similar to the general Australian population. Lung cancer was the second most commonly diagnosed cancer for both sexes for Indigenous Australians (128 per year for males and 114 per year for females), and overall the most commonly diagnosed cancer for Indigenous Australians.

Incidence for selected cancers for Aboriginal and Torres Strait Islander people, by sex, 2010–2014

	Males	Females	
Prostate	771	984	Breast
Lung	640	571	Lung
Colorectal	451	389	Colorectal
Head and neck (with lip)	402	259	Uterine
Melanoma of the skin	190	177	Cervical
Liver	190	139	Melanoma of the skin
Non-Hodgkin lymphoma	148	134	Head and neck (with lip)
Cancer of unknown primary site	130	124	Pancreatic
Pancreatic	119	122	Cancer of unknown primary site
Kidney	100	111	Non-Hodgkin lymphoma

Note: Data is for NSW, Vic, QLD, WA and NT.

Source: AIHW ACD 2015.

Find out more: Chapter 9 in *Cancer in Australia 2019*.



Deaths

Between 2012 and 2016, there was an average of 583 cancer-related deaths for Indigenous Australians each year—this is around 1.8% of all deaths due to cancer in that period.

Of the selected cancers, lung cancer was the most common cause of cancer-related deaths in both male and female Indigenous Australians (83 deaths per year for males and 73 deaths per year for females). For male Indigenous Australians, the second most common cause of cancer-related deaths was head and neck (with lip) cancer (31 deaths per year) followed by liver cancer (24 deaths per year) and colorectal cancer (22 deaths per year). For female Indigenous Australians, the second most common cause of cancer-related deaths was breast cancer (35 deaths per year) followed by colorectal cancer (20 deaths per year) and cancer of unknown primary site (19 deaths per year).

Mortality for selected cancers for Aboriginal and Torres Strait Islander people, by sex, 2012–2016

	Males	Females	
Lung	417	363	Lung
Head and neck (with lip)	155	176	Breast
Liver	119	101	Colorectal
Colorectal	112	97	Cancer of unknown primary site
Cancer of unknown primary site	98	83	Liver
Pancreatic	81	77	Pancreatic
Prostate	81	61	Cervical
Bladder	32	49	Head and neck (with lip)
Non-Hodgkin lymphoma	32	34	Uterine
Kidney	26	20	Non-Hodgkin lymphoma

Note: Data is for NSW, QLD, WA, SA and NT.

Source: AIHW National Mortality Database.

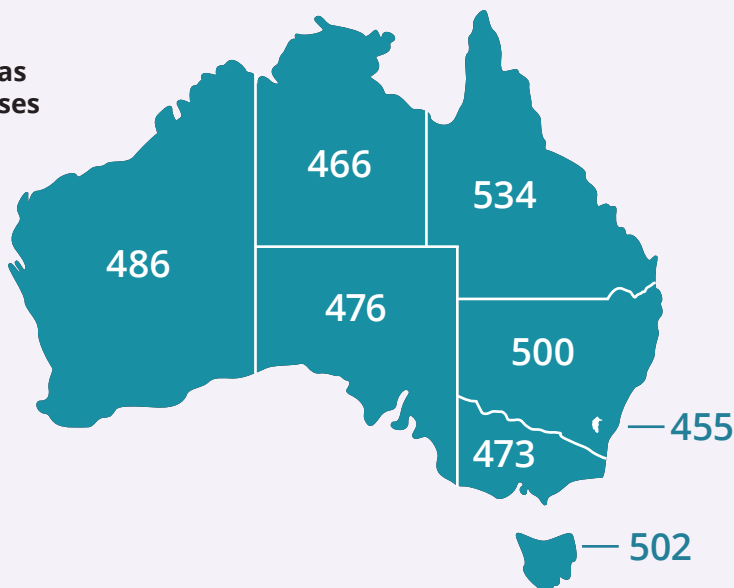
Find out more: Chapter 9 in *Cancer in Australia 2019*.

States and territories

New cancer cases

Between 2010 and 2014, the highest incidence rates for all cancers combined were in Queensland, followed by Tasmania.

Rates shown as number of cases per 100,000



The jurisdictions where age-standardised incidence rates for selected cancers were highest:

Northern Territory



- Cancer of unknown primary site
- Cervical cancer
- Head and neck cancer (with lip)
- Liver cancer
- Lung cancer
- Pancreatic cancer
- Uterine cancer

Queensland



Melanoma of the skin

New South Wales



Prostate cancer

Tasmania



Colorectal cancer
Kidney cancer

South Australia



Non-Hodgkin lymphoma

Victoria



Bladder cancer

Australian Capital Territory



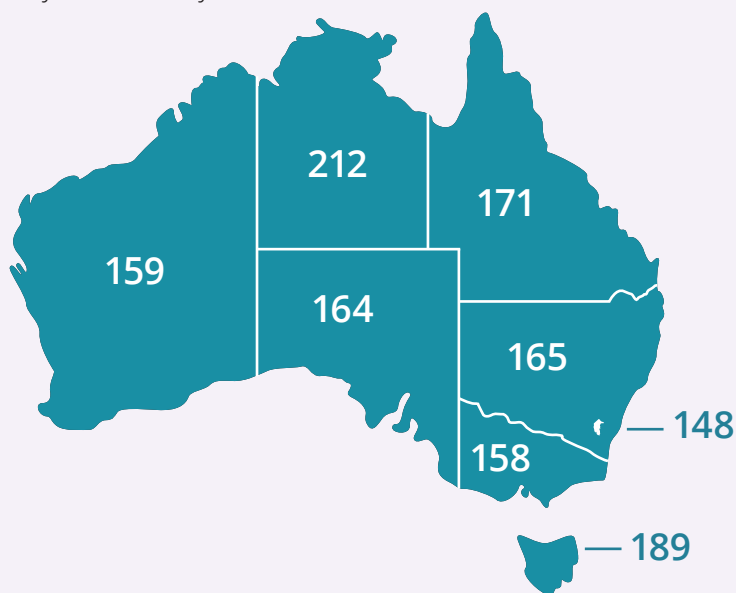
Breast cancer

Source: AIHW ACD 2015.

Deaths

Between 2012 and 2016, the mortality rate for all cancers combined was highest in the Northern Territory, followed by Tasmania.

Rates shown as number of cases per 100,000



The jurisdictions where age-standardised mortality rates for selected cancers were highest:

Northern Territory



- Bladder cancer
- Breast cancer
- Cancer of unknown primary site
- Cervical cancer
- Head and neck cancer (with lip)
- Liver cancer
- Lung cancer
- Uterine cancer

Tasmania



- Colorectal cancer
- Kidney cancer (with South Australia)
- Non-Hodgkin lymphoma
- Pancreatic cancer

South Australia



- Kidney cancer (with Tasmania)

Queensland



- Melanoma of the skin
- Prostate cancer

Source: AIHW National Mortality Database.


Find out more: Chapter 9 in *Cancer in Australia 2019*.

Remoteness

New cases

Between 2010 and 2014, the age-standardised incidence rate of all cancers combined was highest in *Inner regional* areas and lowest in *Very remote* areas. The pattern varied by cancer type.

All cancers combined and selected cancers, by remoteness area, age-standardised incidence rate (per 100,000), 2010–2014




Compared with <i>Very remote</i> areas, people in <i>Inner regional</i> areas are:	Major cities	Inner regional	Outer regional	Remote	Very remote
All cancers combined					
15% more likely to be diagnosed	488	513	510	490	445
Prostate					
43% more likely to be diagnosed	162	165	161	140	116
Breast					
27% more likely to be diagnosed	124	121	117	113	95
Colorectal					
31% more likely to be diagnosed	57	63	66	62	49
Melanoma of the skin					
80% more likely to be diagnosed	46	60	55	46	33
Lung					
24% less likely to be diagnosed	42	45	47	51	59
Non-Hodgkin lymphoma					
41% more likely to be diagnosed	20	19	17	15	13
Uterine					
21% less likely to be diagnosed	19	19	19	18	24
Head and neck with lip					
35% less likely to be diagnosed	16	19	22	25	30
Liver					
50% as likely to be diagnosed	7.5	5.7	6.6	7.4	11.3
Cervical					
26% less likely to be diagnosed	6.8	7.4	8.7	11	10

Source: AIHW ACD 2015.

Deaths

Between 2012 and 2016, the age-standardised mortality rate for all cancers combined was highest in Very remote areas and lowest in Major cities. The pattern varied by cancer type.

All cancers combined and selected cancers, by remoteness area, age-standardised mortality rate (per 100,000), 2012–2016



Compared with <i>Major cities</i> , people in <i>Very remote</i> areas are:	Major cities	Inner regional	Outer regional	Remote	Very remote
All cancers combined					
24% more likely to die from	157	176	180	176	195
Prostate					
20% more likely to die from	24	30	30	27	29
Breast					
14% more likely to die from	20	21	20	18	23
Colorectal					
similar in rates of mortality	18	21	23	20	18
Melanoma of the skin					
35% less likely to die from	5.1	6.7	6.0	5.2	3.3
Lung					
45% more likely to die from	29	33	35	38	42
Non-Hodgkin lymphoma					
8% less likely to die from	5.3	5.7	5.2	3.9	4.9
Uterine					
16% more likely to die from	3.2	3.3	3.8	2.8	3.7
Head and neck with lip					
283% more likely to die from	3.5	4.1	5.2	6.6	13
Liver					
72% more likely to die from	6.5	5.7	6.2	6.6	11
Cervical					
106% more likely to die from	1.7	1.8	2.3	2.1	3.5

Source: AIHW National Mortality Database.

Find out more: Chapter 9 in *Cancer in Australia 2019*.

Socioeconomic areas

New cancer cases

Between 2010 and 2014, the age-standardised incidence rate of all cancers combined was highest for those in the 2 lowest socioeconomic areas and lowest for those in the 2 highest socioeconomic areas. The pattern varied by cancer type.

All cancers combined and selected cancers, by socioeconomic area, age-standardised rate (per 100,000), 2010–2014



Compared with highest area, people in lowest area are:	1 (lowest)	2	3	4	5 (highest)
All cancers combined					
5% more likely to be diagnosed	509	503	492	483	485
Prostate					
17% less likely to be diagnosed	149	160	160	163	180
Breast					
17% less likely to be diagnosed	113	118	121	125	135
Colorectal					
19% more likely to be diagnosed	63	62	59	57	53
Melanoma of the skin					
15% less likely to be diagnosed	46	50	51	48	54
Lung					
72% more likely to be diagnosed	54	48	43	38	32
Non-Hodgkin lymphoma					
6% less likely to be diagnosed	19	19	19	20	20
Uterine					
18% more likely to be diagnosed	20	19	19	18	17
Head and neck with lip					
57% more likely to be diagnosed	22	19	17	15	14
Liver					
58% more likely to be diagnosed	9.0	7.3	6.5	6.7	5.7
Cervical					
52% more likely to be diagnosed	9.1	7.9	6.5	6.3	6.0

Source: AIHW ACD 2015.

Deaths

Between 2012 and 2016, the age-standardised mortality rate for all cancers combined was highest among those living in the lowest socioeconomic areas and lowest among those living in the highest socioeconomic areas. The pattern varied by cancer type.

All cancers combined and selected cancers, by socioeconomic area, age-standardised rate (per 100,000), 2012–2016



Compared with highest area, people in lowest area are:	1 (lowest)	2	3	4	5 (highest)
All cancers combined					
37% more likely to die from	188	176	164	153	137
Prostate					
23% more likely to die from	29	28	26	24	23
Breast					
11% more likely to die from	21	21	20	20	19
Colorectal					
36% more likely to die from	22	21	19	18	16
Melanoma of the skin					
12% more likely to die from	5.8	5.8	5.5	5.2	5.2
Lung					
85% more likely to die from	39	35	31	26	21
Non-Hodgkin lymphoma					
17% more likely to die from	5.6	5.7	5.5	5.2	4.8
Uterine					
25% more likely to die from	3.5	3.6	3.4	3.0	2.8
Head and neck with lip					
112% more likely to die from	5.5	4.4	3.6	3.1	2.6
Liver					
61% more likely to die from	7.9	6.7	6.1	5.7	4.9
Cervical					
136% more likely to die from	2.6	2.0	1.7	1.4	1.1

Source: AIHW National Mortality Database.

Find out more: Chapter 9 in *Cancer in Australia 2019*.




References

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Australian Institute of Health and Welfare (AIHW) 2019. Cancer in Australia 2019. Cancer series no. 119. Cat. No. CAN 123. Canberra: AIHW.

AIHW 2017. Risk factors to health. Canberra: AIHW. Viewed 15 February 2019, <<https://www.aihw.gov.au/reports/risk-factors/risk-factors-to-health/data>>.



In 2019, the rate of new cancer cases in Australia is expected to reach 483 new cases per 100,000 people, while cancer-related deaths are expected to decrease to 159 per 100,000 people. From 1982 to 2019, thyroid cancer and liver cancer incidence rates increased more than for any other cancer. Although liver cancer survival has improved since 1982, with the increasing liver cancer incidence rate, liver cancer mortality rates also increased more than those for any other cancer.

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