Treating people with cancer in Queensland and Victoria

National benchmarking starts here

Cancer care in public and private hospitals

2017-2021 1st edition





Acknowledgements

The *Treating people with cancer in Queensland and Victoria: National benchmarking starts here* report has been developed collaboratively by Cancer Alliance Queensland and Statewide and Specialist Programs, Department of Health Victoria, building on existing analysis and reporting from each state.

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The report was prepared by the following teams from each state:

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Foreword

I am pleased to support the release of this pivotal report, *Treating people with cancer in Queensland and Victoria:*National benchmarking starts here. The report is leading the nation in using a collaborate approach to data sharing and quality improvement methods and marks a significant milestone in our collective efforts to accelerate progress and deliver on the goals and objectives of the Australian Cancer Plan (Plan). The Plan is a once-in-a-generation reform opportunity that aims to improve outcomes and experiences for all Australians affected by cancer, no matter who they are or where they live.

It is well established that collecting, sharing, analysing and responding to data save lives. The Plan promotes better, ongoing use of data to evaluate performance and guide the evolution of Australia's cancer control system. To improve cancer outcomes in Australia over the next decade, we need to monitor performance, collaborate, and compare our efforts. This report provides baseline measurements for ongoing monitoring in this collaborative model for the first time.

Cancer Australia is leading the development of a National Cancer Data Framework to ensure that we focus our collective efforts on making sure important data is comprehensive, available, easily accessible and nationally consistent.

Implementation of the Plan is a shared responsibility requiring leadership and collaboration across the cancer control system with a wide range of partners. I commend the leadership demonstrated by Cancer Alliance Queensland, the Victorian Cancer Registry, Cancer Council Victoria and Statewide and Specialist Programs, Department of Health, Victoria in the development of this report. This collaboration demonstrates the mutual benefit of identifying areas of improvement for cancer services and is a genuine example of implementation of the Australian Cancer Plan.

It is essential to underscore the importance of insights provided by quality national data in facilitating conversations surrounding the impact of cancer, particularly from the perspectives of equity for Aboriginal and Torres Strait Islander people. By leveraging these insights, we can ensure that our efforts are targeted towards addressing the diverse needs of all Australians affected by cancer.

I encourage all States and Territories and other data custodians to participate in future benchmarking and contribute data to the next edition of this report. The ability to benchmark data through collaboration will drive improved assessment of service performance at a national level, cancer service delivery improvements, and better patient outcomes for all Australians, including priority population groups.

I look forward to continued progress and collaboration as we work towards achieving the ambitious objectives outlined in the Australian Cancer Plan.



Professor Dorothy Keefe PSM MD Chief Executive Officer Cancer Australia





Introduction

In Australia, cancer remains a significant health challenge, affecting many individuals and families each year. Despite improvements in survival rates, there are still disparities in outcomes across different segments of the population. Specifically, First Nations peoples, those in rural and remote areas, and those in socioeconomically disadvantaged areas often experience higher incidence and mortality rates, as well as lower survival rates.

Recognising the need for equity in cancer care, The Australian Cancer Plan has been introduced to enhance outcomes for all Australians, particularly those in groups facing the greatest challenges. This plan emphasises the importance of measuring population cancer outcomes, ensuring equitable access to services, delivering care close to home, and monitoring system performance to provide evidence-based multidisciplinary care.

To contribute to the goals of the Plan and expand upon existing reporting efforts in Queensland and Victoria, we are pleased to present the *Treating People with Cancer in Queensland and Victoria: National Benchmarking Starts Here* report. This report goes beyond traditional population-based reporting to compare statewide cancer treatment and survival data. By identifying areas for improvement and highlighting variations in cancer care between states, we aim to enhance patient care and align practices with clinical guidelines.

This report not only serves as a valuable resource for Queensland and Victoria but also sets a precedent for other Australian states to join in collaborative reporting efforts. By participating in this initiative, states can contribute to tracking healthcare performance, striving towards best practices, and ultimately improving outcomes for people with cancer nationwide.

We invite you to engage with the content of this report, discuss it with your colleagues and cancer teams, and reach out to us with feedback or interest in participation. Together, we can work towards a future where all Australians affected by cancer receive the highest quality of care and support.

Professor Euan Walpole Chair The Queensland Cancer Control Safety and Quality Partnership (The Partnership) Brisbane, Queensland.

Barry Curran
Director, Statewide and Specialist Programs
Operational Support and Improvement Policy
Hospitals and Health Services
Department of Health, Melbourne, Victoria.



About the report

Treating people with cancer in Queensland and Victoria: National benchmarking starts here reports on cancer services for each state. This first report builds on analysis already happening in both Queensland and Victoria and focuses on surgical indicators with surgical rates, time to first surgery, mortality and survival examined. These indicators directly affect people with cancer and their clinical outcomes, and measure service delivery for public and private facilities.

The primary audience for this report is clinicians, health care leaders, senior executives and the general public.

Where does the data come from?

Queensland data were obtained from the Queensland Oncology Repository and Victorian data from the Centre for Victorian Data Linkage Integrated Data Resource. Both resources involved linkage with multiple state-wide datasets which include demographics, diagnosis, treatment and death data.

The datasets were not combined, and the methodology and indicators were based on Queensland Cancer Quality Index: Indicators of safe quality cancer care. Cancer care in public and private hospital 2007-2021.

Although care has been taken to ensure the accuracy, completeness and reliability of the information provided these data are released for purposes of quality assurance and are to be used with appropriate caution. It is recommended that careful attention be paid to the contents of any data and if required please contact the authors for clarification.

Future directions

The *Treating people with cancer in Queensland and Victoria: National benchmarking starts here* report is the first attempt to use a collaborative approach to learn and develop datasets, methods and compare outcomes. The report provides baseline measurements for on-going monitoring. The suite of indicators and the cancers reported will be expanded inline with state and national priorities and as common cancer data is explored and becomes available.



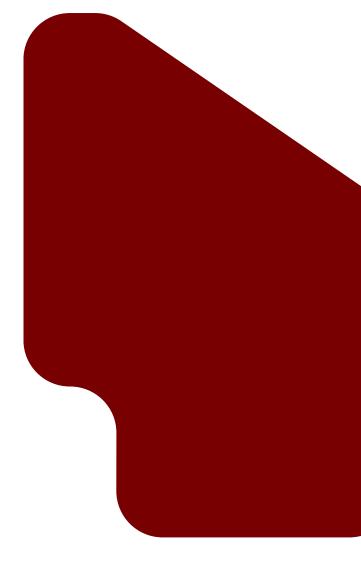
Incidence

2017-2021

Cancer Group	Cancer	Victoria	Queensland
Brain	Brain	2,363	1,899
Breast	Breast	23,046	18,426
Colorectal	Colon	12,042	10,106
	Rectal	5,692	4,303
Gynaecological	Ovarian	2,352	1,752
	Uterine	3,857	2,935
	Vagina/Vulva	523	489
Hepatobiliary	Liver	2,942	2,346
	Pancreatic	4,697	3,709
Lung	NSCLC	13,981	11,147
Prostate	Prostate	27,901	24,177
Upper GI	Oesophagogastric	5,220	4,064

1 | Effective

Achieving the best outcomes for Queenslanders and Victorians with cancer.

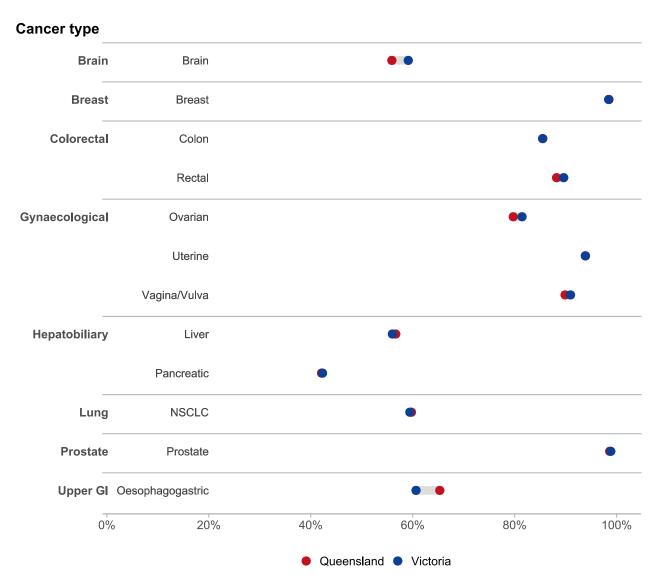




1.1 | Relative survival (one-year)

What percentage of people with cancer are living one year after diagnosis?

2017-2021



Relative survival was calculated using the Ederer II method, and the period approach was used. Relative survival was calculated for all persons aged 0-89 at diagnosis.

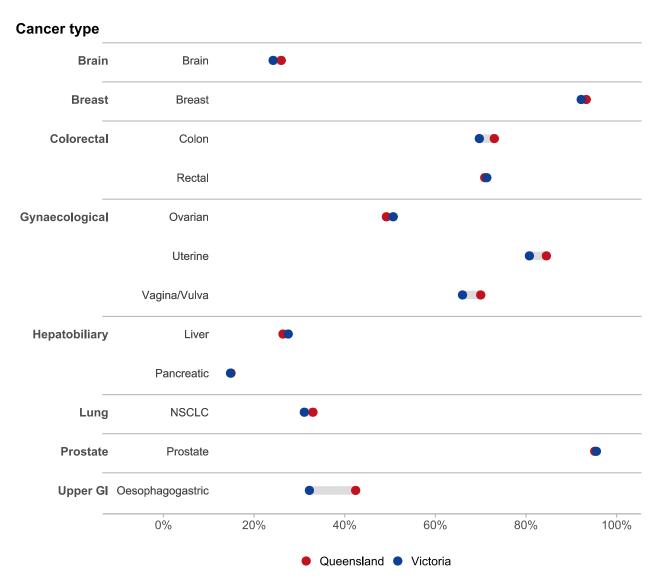
Refer to supplementary counts for further information.

One-year relative survival for each cancer is comparable across states.

1.2 | Relative survival (five-year)

What percentage of people with cancer are living five years after diagnosis?

2017-2021



Relative survival was calculated using the Ederer II method, and the period approach was used. Relative survival was calculated for all persons aged 0-89 at diagnosis.

Refer to supplementary counts for further information.

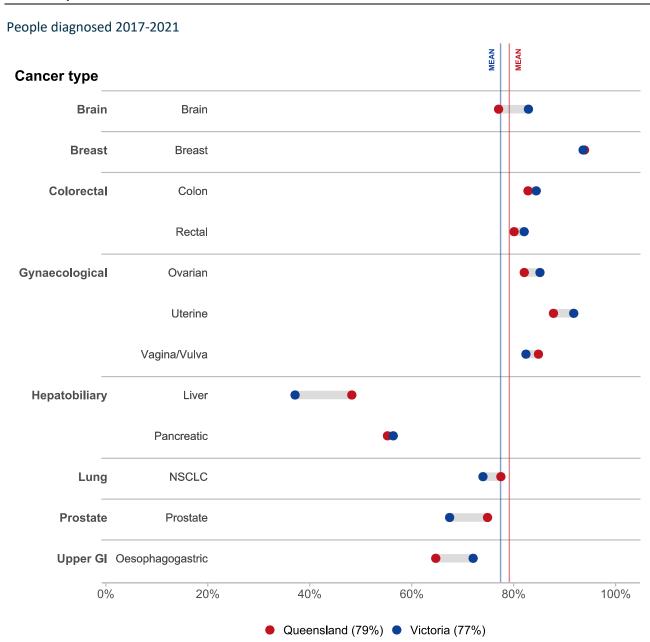
Five-year relative survival for each cancer is comparable across states.





1.3 | People with cancer receiving treatment

How many Queenslanders and Victorians with cancer received treatment?

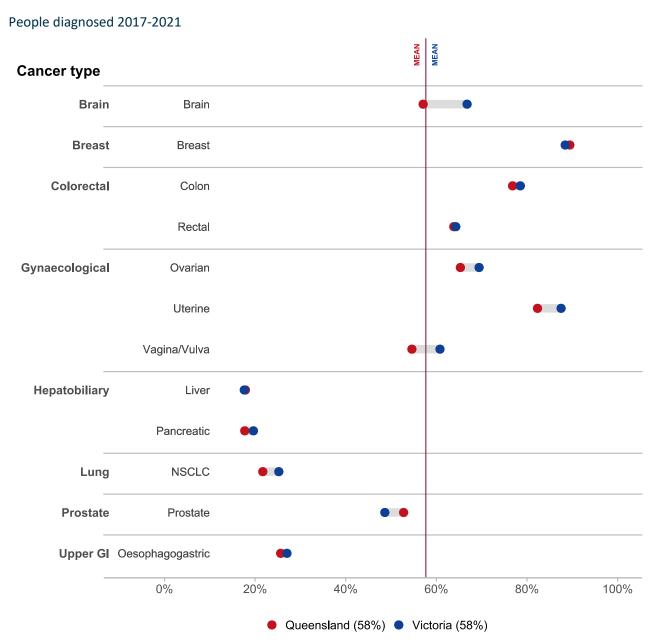


Refer to supplementary counts for further information.

Treatment rates are similar for high volume cancers. In Victoria fewer people with liver cancer received treatment compared with Queensland.

1.4 | People with cancer receiving surgery

How many Queenslanders and Victorians with cancer received surgery?



Refer to supplementary counts for further information.

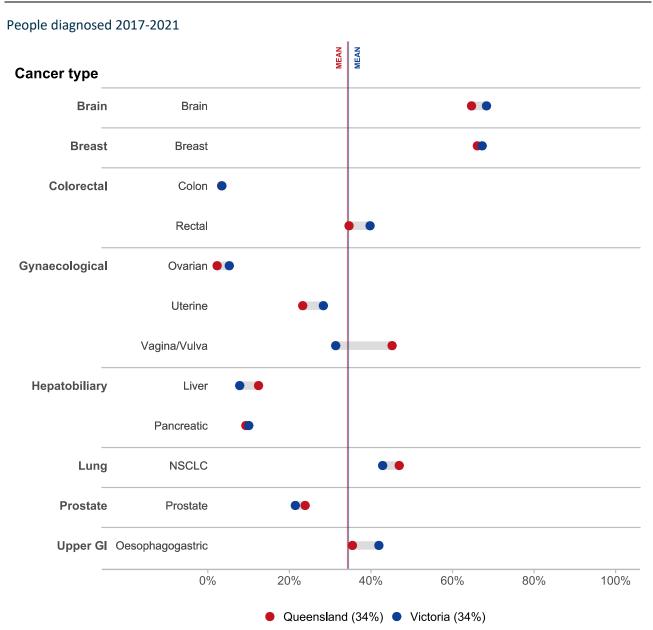
Surgical rates are similar between states with the largest variation for brain cancer.





1.5 | People with cancer receiving radiation therapy

How many Queenslanders and Victorians with cancer received radiation therapy (RT)?

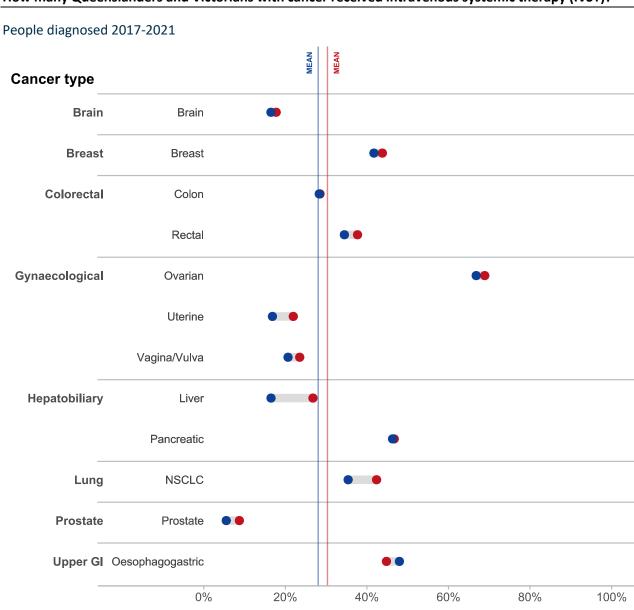


RT - external beam radiation therapy Refer to supplementary counts for further information.

External beam radiation therapy rates are similar across both states for high volume cancers.

1.6 | People with cancer receiving intravenous systemic therapy

How many Queenslanders and Victorians with cancer received intravenous systemic therapy (IVST)?



Refer to supplementary counts for further information.

Intravenous systemic therapy rates are slightly higher in Queensland across most cancers.

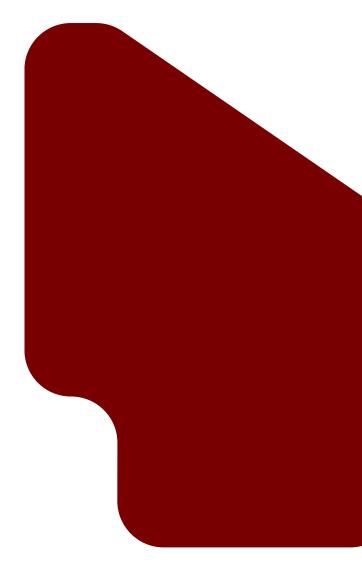
Queensland (30%) Victoria (28%)





2 | Safe

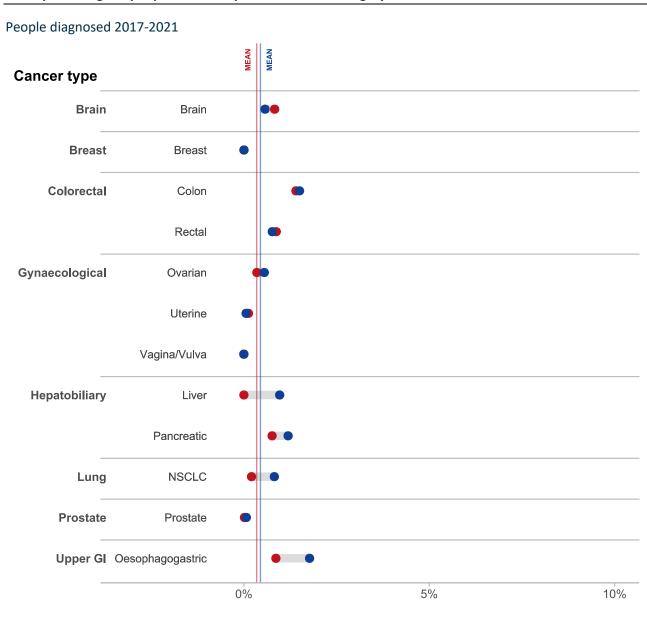
Avoiding and preventing adverse outcomes or injuries caused by healthcare management.





2.1 | In-Hospital mortality

What percentage of people die in hospital after cancer surgery?



Refer to supplementary counts for further information.

Surgical mortality is very low in both Queensland and Victoria.

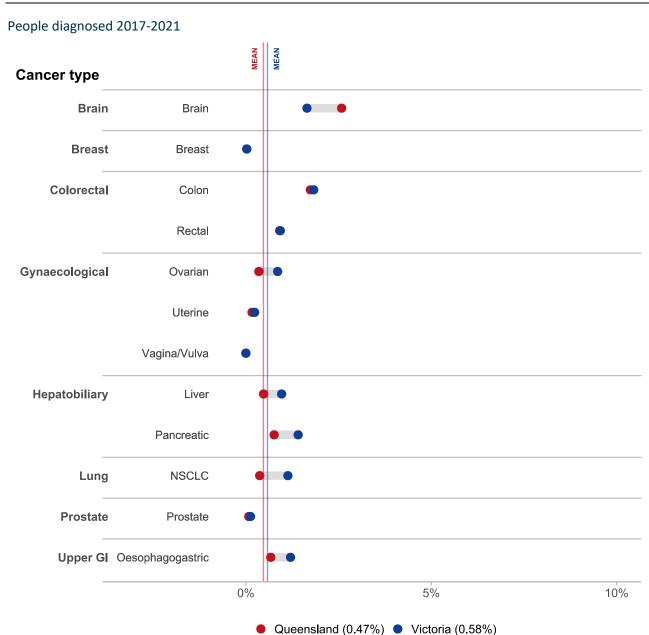
Queensland (0.35%) • Victoria (0.45%)





2.2 | 30-day mortality

What percentage of people die within 30 days of their cancer surgery?



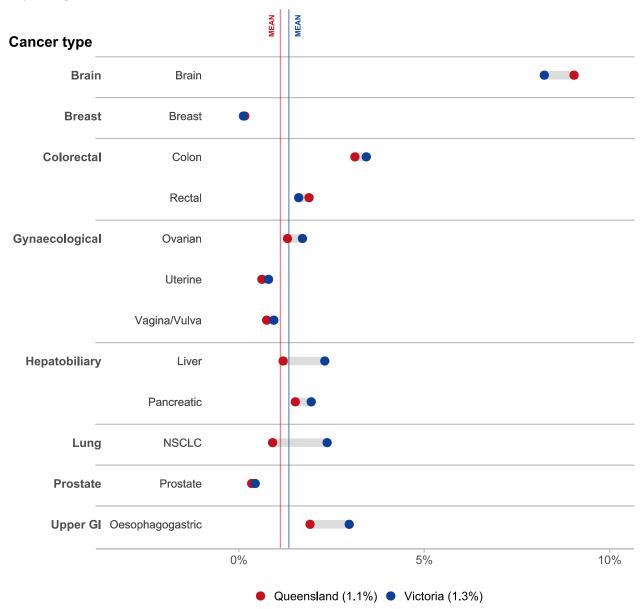
Refer to supplementary counts for further information.

30-day surgical mortality is similar across both states and is exceptionally low.

2.3 | 90-day mortality

What percentage of people die within 90 days of their cancer surgery?





Refer to supplementary counts for further information.

90-day surgical mortality is low across both states and similar for high volume cancers.

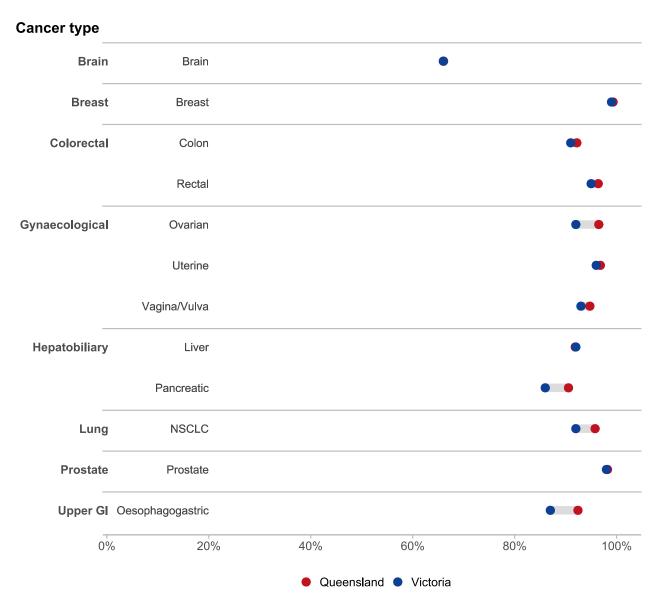




2.4 | One-year surgical survival (Kaplan-Meier)

What percentage of people are alive one year after cancer surgery?

People diagnosed 2017-2021



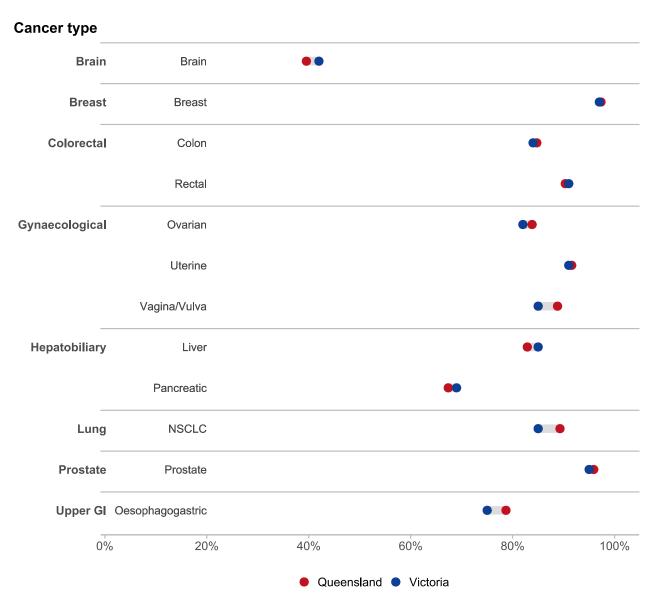
Refer to supplementary counts for further information.

There is little variation in one-year surgical survival across states.

2.5 | Two-year surgical survival (Kaplan-Meier)

What percentage of people are alive two years after cancer surgery?

People diagnosed 2017-2021



Refer to supplementary counts for further information.

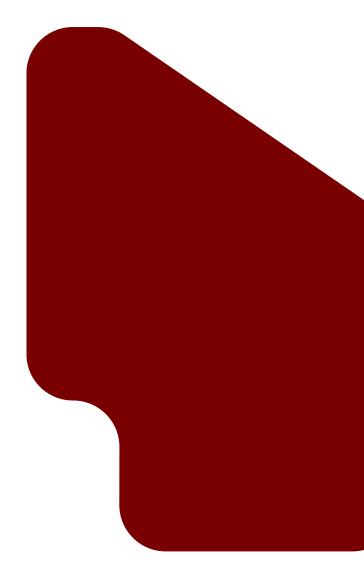
There is little variation in two-year surgical survival across states.





3 | Accessible

Making health services available in the most suitable setting in a reasonable time.





3.1 | Time to treatment

What percentage of people who attended public or private treatment facilities received first cancer treatment within 30 days of diagnosis?

People diagnosed 2017-2021 MEAN **Cancer type Brain** Brain **Breast Breast** Colorectal Colon Rectal **Gynaecological** Ovarian Uterine Vagina/Vulva Hepatobiliary Liver **Pancreatic** Lung **NSCLC Prostate Prostate** Upper GI Oesophagogastric 0% 20% 40% 60% 80% 100% Public Queensland (37%) Private Queensland (58%) Queensland (48%)

Refer to supplementary counts for further information.

Victoria (55%)

Around half of people diagnosed with cancer are receiving their first cancer treatment within 30 days of diagnosis. People receiving treatment in private facilities are more likely to receive treatment within 30 days compared with public facilities for both states.

Private Victoria (63%)

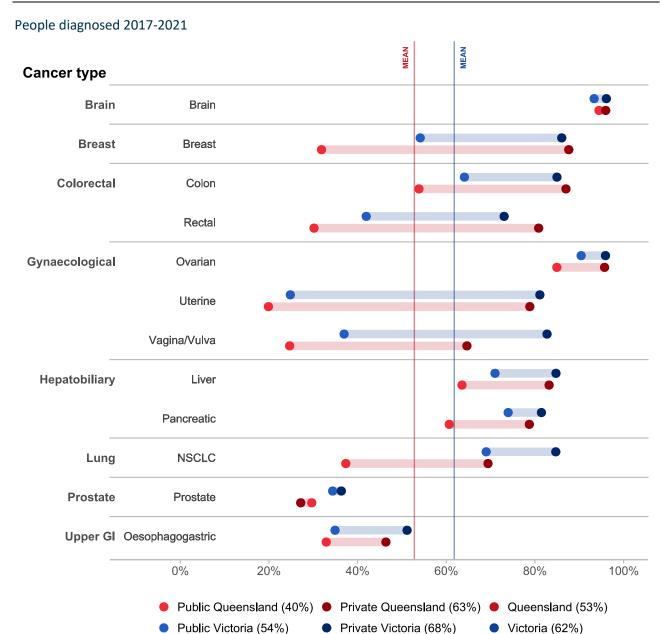




Public Victoria (47%)

3.2 | Time to surgery

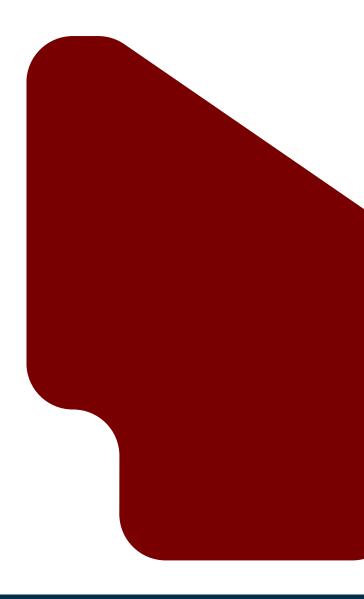
What percentage of people who attended public or private treatment facilities received surgery as the first cancer treatment within 30 days of diagnosis?



Refer to supplementary counts for further information.

In both states people with cancer receiving surgery as first treatment and attending private facilities are more likely to receive surgery within 30 days of diagnosis. For Queensland public facilities, rates of surgery within 30 days of diagnosis are lower than Victorian public facilities. Private facilities for each state have similar rates.

Supplementary counts





Indicators

1.1 | Relative survival (one-year)

What percentage of people with cancer are living one year after diagnosis?

(% of people who would have survived if cancer was the only cause of death)			
Cancer Group	Cancer	Victoria	Queensland
Brain	Brain	59%	56%
Breast	Breast	98%	99%
Colorectal	Colon	86%	85%
	Rectal	90%	88%
Gynaecological	Ovarian	81%	80%
	Uterine	94%	94%
	Vagina/Vulva	91%	90%
Hepatobiliary	Liver	56%	57%
	Pancreatic	42%	42%
Lung	NSCLC	59%	60%
Prostate	Prostate	99%	99%
Upper GI	Oesophagogastric	61%	65%

Relative survival was calculated using the Ederer II method, and the period approach was used. Relative survival was calculated for all persons aged 0-89 at diagnosis.

1.2 | Relative survival (five-year)

What percentage of people with cancer are living five years after diagnosis?

(% of people who would have survived if cancer was the only cause of death)			
Cancer Group	Cancer	Victoria	Queensland
Brain	Brain	24%	26%
Breast	Breast	92%	93%
Colorectal	Colon	70%	73%
	Rectal	71%	71%
Gynaecological	Ovarian	51%	49%
	Uterine	81%	85%
	Vagina/Vulva	66%	70%
Hepatobiliary	Liver	28%	26%
	Pancreatic	15%	15%
Lung	NSCLC	31%	33%
Prostate	Prostate	96%	95%
Upper GI	Oesophagogastric	32%	42%

Relative survival was calculated using the Ederer II method, and the period approach was used. Relative survival was calculated for all persons aged 0-89 at diagnosis.



1.3 | People with cancer receiving treatment

How many Queenslanders and Victorians with cancer received treatment?

n: Number of persons who received treatment (surgery, radiation therapy or IV systemic therapy) N: Number of persons diagnosed with [cancer of interest]

Cancer Group	Cancer	Victoria	Queensland
Brain	Postin	83%	77%
Drain	Brain	1,959/2,363	1,463/1,899
Breast	Breast	94%	94%
Breast	Breast	21,576/23,046	17,302/18,426
Colorectal	Colon	84%	83%
Joiorectal	Cololi	10,167/12,042	8,369/10,106
	Rectal	82%	80%
	Rectal	4,671/5,692	3,446/4,303
Cymanacalogical	Ovarian	85%	82%
Gynaecological	Ovarian	2,003/2,352	1,438/1,752
	Uterine	92%	88%
		3,540/3,857	2,577/2,935
	Vagina/Vulva	82%	85%
		431/523	415/489
Hepatobiliary	Liver	37%	48%
repatobilial y		1,092/2,942	1,132/2,346
	Pancreatic	56%	55%
	Palicieatic	2,648/4,697	2,049/3,709
LING	NSCLC	74%	77%
Lung	NSCLC	10,343/13,981	8,638/11,147
Prostate	Prostate	67%	75%
riusiale	riusiale	18,815/27,901	18,103/24,177
Unnor Cl	Occophagagastric	72%	65%
Upper GI	Oesophagogastric	3,761/5,220	2,630/4,064

Treatment received within -30 and 365 days of diagnosis.

1.4 | People with cancer receiving surgery

How many Queenslanders and Victorians with cancer received surgery?

n: Number of persons who received surgery

 ${\it N: Number of persons diagnosed with [cancer of interest]}$

Cancer Group	Cancer	Victoria	Queensland
Brain	Brain	67%	57%
Dialli	Diaili	1,578/2,363	1,084/1,899
Breast	Breast	88%	89%
Diedst	Breast	20,380/23,046	16,482/18,426
Colorectal	Colon	79%	77%
Loiorectai	Colon	9,457/12,042	7,763/10,106
	Rectal	64%	64%
	Rectal	3,659/5,692	2,747/4,303
Gynaecological	Ovarian	69%	65%
gynaecological	Ovarian	1,633/2,352	1,144/1,752
	Uterine	88%	82%
	Oternie	3,376/3,857	2,416/2,935
	Vagina/Vulva	61%	55%
		318/523	267/489
Hepatobiliary	Liver	18%	18%
тераторијагу		518/2,942	419/2,346
	Pancreatic	20%	18%
		922/4,697	657/3,709
una	NSCLC	25%	22%
.ung	NSCLC	3,528/13,981	2,418/11,147
) vocato to	Droctato	49%	53%
Prostate	Prostate	13,567/27,901	12,760/24,177
lana Cl	Occarbancantuia	27%	26%
Upper GI	Oesophagogastric	1,411/5,220	1,042/4,064

Surgery received within -30 and 365 days of diagnosis.





1.5 | People with cancer receiving radiation therapy

How many Queenslanders and Victorians with cancer received radiation therapy (RT)?

n: Number of persons who received radiation therapy (RT) N: Number of persons diagnosed with [cancer of interest]

Cancer Group	Cancer	Victoria	Queensland
Brain	Brain	68%	65%
Dialli	Didiii	1,615/2,363	1,228/1,899
Breast	Breast	67%	66%
oi east	Breast	15,506/23,046	12,179/18,426
Colorectal	Colon	3.5%	3.4%
olorectal	Colon	417/12,042	342/10,106
	Rectal	40%	35%
	Rectal	2,265/5,692	1,490/4,303
Symposological	Overion	5.3%	2.3%
Gynaecological	Ovarian	124/2,352	40/1,752
	Liberine	28%	23%
	Uterine	1,093/3,857	683/2,935
	Vagina/Vulva	31%	45%
		164/523	221/489
Hepatobiliary	Liver	7.8%	12%
iepatobiliary		230/2,942	292/2,346
	Pancreatic	10%	9.3%
		472/4,697	346/3,709
una	NSCLC	43%	47%
ung	INSCLC	5,994/13,981	5,232/11,147
rostate	Prostate	21%	24%
TUSIALE	riusiale	5,988/27,901	5,771/24,177
Innor GI	Occophagogastric	42%	35%
Upper GI	Oesophagogastric	2,190/5,220	1,441/4,064

RT - external beam radiation therapy

1.6 | People with cancer receiving intravenous systemic therapy

How many Queenslanders and Victorians with cancer received intravenous systemic therapy (IVST)?

n: Number of persons who received systemic therapy (IVST) N: Number of persons diagnosed with [cancer of interest]

Cancer Group	Cancer	Victoria	Queensland
Brain	Brain	16%	18%
Didili	DIdIII	389/2,363	337/1,899
Breast	Breast	42%	44%
breast	Breast	9,614/23,046	8,068/18,426
Colorectal	Colon	28%	28%
Colorectal	Colon	3,409/12,042	2,880/10,106
	Rectal	34%	38%
	Rectal	1,962/5,692	1,622/4,303
Synancological	Ovarian	67%	69%
iynaecological	Ovarian	1,571/2,352	1,207/1,752
	Uterine	17%	22%
	Oternie	649/3,857	644/2,935
	Vagina/Vulva	21%	24%
	Vagina/Vulva	108/523	115/489
Hepatobiliary	Liver	16%	27%
repatobilial y		485/2,942	628/2,346
	Pancreatic	46%	47%
	rancieatic	2,174/4,697	1,732/3,709
1100	NSCLC	35%	42%
.ung	NSCEC	4,948/13,981	4,723/11,147
Prostate	Prostate	5.5%	8.7%
-1031ate	riostate	1,536/27,901	2,109/24,177
Unner GI	Oosonhagogastric	48%	45%
Upper GI	Oesophagogastric	2,504/5,220	1,820/4,064

IVST received within -30 and 365 days of diagnosis.





RT received within -30 and 365 days of diagnosis.

2.1 | In-Hospital mortality

What percentage of people die in hospital after cancer surgery?

n: Number of persons who died in hospital during the surgical admission

N: Number of persons diagnosed with [cancer of interest] who received surgery

Cancer Group

Cancer Group	Cancer	Victoria	Queensland
Brain	Brain	0.6%	0.8%
Dialli	DIAIII	9/1,578	9/1,084
Breast	Breast	<0.1%	0%
Dieast	Diedst	1/20,380	0/16,482
Colorectal	Colon	1.5%	1.4%
Joiorectai	COIOII	142/9,457	109/7,763
	Poctal	0.8%	0.9%
	Rectal	28/3,659	24/2,747
Symposological	Ovarian	0.6%	0.3%
Gynaecological	Ovarian	9/1,633	4/1,144
	Uterine	<0.1%	0.1%
	Oterme	2/3,376	3/2,416
	Vagina/Vulva	0%	0%
		0/318	0/267
-lepatobiliary	Liver	1.0%	0%
repatobilial y	LIVEI	5/518	0/419
	Pancreatic	1.2%	0.8%
		11/922	5/657
ung	NSCLC	0.8%	0.2%
.ung	NOCLC	29/3,528	5/2,418
Prostata	Drostata	<0.1%	<0.1%
Prostate	Prostate	9/13,567	2/12,760
lana Cl	0	1.8%	0.9%
Upper GI	Oesophagogastric	25/1,411	9/1,042

Surgery received within -30 and 365 days of diagnosis.

2.2 | 30-day mortality

What percentage of people die within 30 days of their cancer surgery?

n: Number of persons who died ≤30 days after surgery

N: Number of persons diagnosed with [cancer of interest] who received surgery

Cancer Group	Cancer	Victoria	Queensland
Brain	Brain	1.6%	2.6%
DI dili	DI dili	26/1,578	28/1,084
Breast	Breast	<0.1%	<0.1%
Dieast	Diedst	5/20,380	4/16,482
Colorectal	Colon	1.8%	1.7%
Colorectal	COIOII	173/9,457	135/7,763
	Rectal	0.9%	0.9%
	Rectal	34/3,659	25/2,747
Gynagoological	Ovarian	0.9%	0.3%
Gynaecological	Ovarian	14/1,633	4/1,144
	Liberine	0.2%	0.2%
	Uterine	8/3,376	4/2,416
	Vagina (Vulva	0%	0%
	Vagina/Vulva	0/318	0/267
Hepatobiliary	Liver	1.0%	0.5%
перацовінаї у		5/518	2/419
	Pancreatic	1.4%	0.8%
		13/922	5/657
ung	NSCLC	1.1%	0.4%
Lung	INSCLC	40/3,528	9/2,418
Prostate	Prostate	0.1%	<0.1%
riustate	riostate	17/13,567	10/12,760
Unner GI	Occophagagastric	1.2%	0.7%
Upper GI	Oesophagogastric	17/1,411	7/1,042

Surgery received within -30 and 365 days of diagnosis.





2.3 | 90-day mortality

What percentage of people die within 90 days of their cancer surgery?

n: Number of persons who died ≤90 days after surgery

N: Number of persons diagnosed with [cancer of interest] who received surgery

Cancer Group	Cancer	Victoria	Queensland
Brain	Brain	8.2%	9.0%
Dialli	DI dili	130/1,578	98/1,084
Breast	Breast	0.1%	0.2%
Diedst	breast	25/20,380	26/16,482
Colorectal	Colon	3.4%	3.1%
Colorectal	Colon	325/9,457	243/7,763
	Rectal	1.6%	1.9%
	Rectal	59/3,659	52/2,747
Cymanalarian	Ovarian	1.7%	1.3%
Gynaecological	Ovarian	28/1,633	15/1,144
	Uterine	0.8%	0.6%
	Oternie	27/3,376	15/2,416
	Vagina Mulua	0.9%	0.7%
	Vagina/Vulva	3/318	2/267
Honotobilion.	Liver	2.3%	1.2%
Hepatobiliary		12/518	5/419
	Pancreatic	2.0%	1.5%
		18/922	10/657
l	NCCLC	2.4%	0.9%
Lung	NSCLC	84/3,528	22/2,418
Duastata	Ducatata	0.4%	0.3%
Prostate	Prostate	60/13,567	44/12,760
Haman Cl	O a a a b a a a a a a tui a	3.0%	1.9%
Upper GI	Oesophagogastric	42/1,411	20/1,042

Surgery received within -30 and 365 days of diagnosis.

2.4 | One-year surgical survival (Kaplan-Meier)

What percentage of people are alive one year after cancer surgery?

(Kaplan-Meier estimate of survival one year following cancer surgery)			
Cancer Group	Cancer	Victoria	Queensland
Brain	Brain	66%	66%
Breast	Breast	99%	99%
Colorectal	Colon	91%	92%
	Rectal	95%	96%
Gynaecological	Ovarian	92%	97%
	Uterine	96%	97%
	Vagina/Vulva	93%	95%
Hepatobiliary	Liver	92%	92%
	Pancreatic	86%	91%
Lung	NSCLC	92%	96%
Prostate	Prostate	98%	98%
Upper GI	Oesophagogastric	87%	92%

Surgery received within -30 and 365 days of diagnosis.



2.5 | Two-year surgical survival (Kaplan-Meier)

What percentage of people are alive two years after cancer surgery?

(Kaplan-Meier estimate	of survival two years following cancer su	rgery)	
Cancer Group	Cancer	Victoria	Queensland
Brain	Brain	42%	40%
Breast	Breast	97%	97%
Colorectal	Colon	84%	85%
	Rectal	91%	90%
Gynaecological	Ovarian	82%	84%
	Uterine	91%	92%
	Vagina/Vulva	85%	89%
Hepatobiliary	Liver	85%	83%
	Pancreatic	69%	67%
Lung	NSCLC	85%	89%
Prostate	Prostate	95%	96%
Upper GI	Oesophagogastric	75%	79%

Surgery received within -30 and 365 days of diagnosis.

3.1 | Time to treatment

What percentage of people who attended public or private treatment facilities received first cancer treatment within 30 days of diagnosis?

n: Number of persons who received treatment within 30 days of diagnosis

N: Number of persons diagnosed with [cancer of interest] who received first treatment (surgery, RT or IVST).

Cancer Group	Cancer	Victoria Public	Victoria Private	Queensland Public	Queensland Private
Brain	Brain	84% 1,121/1,338	91% 564/621	83% 830/997	84% 391/466
Breast	Breast	54% 5,957/11,048	85% 8,936/10,528	33% 2,773/8,292	86% 7,726/9,010
Colorectal	Colon	62% 3,654/5,914	83 % 3,535/4,253	53% 2,475/4,699	86% 3,142/3,670
	Rectal	32% 863/2,681	60% 1,203/1,990	25% 449/1,798	61% 1,004/1,648
Gynaecological	Ovarian	73% 870/1,192	90% 727/811	71% 560/785	90% 587/653
	Uterine	26% 499/1,897	80% 1,321/1,643	20% 277/1,372	76% 917/1,205
	Vagina/Vulva	33% 100/307	78% 97/124	20 % 46/230	50% 93/185
Hepatobiliary	Liver	50% 392/791	68% 205/301	36% 303/853	67% 186/279
	Pancreatic	50% 729/1,462	72% 853/1,186	46% 504/1,088	76% 733/961
Lung	NSCLC	52% 3,587/6,852	68% 2,390/3,491	36% 1,783/4,967	59% 2,167/3,671
Prostate	Prostate	23% 1,569/6,695	31% 3,749/12,120	24% 1,379/5,770	23 % 2,811/12,333
Upper GI	Oesophagogastric	31% 744/2,419	54% 726/1,342	30% 418/1,381	56% 704/1,249

Treatment received within -30 and 365 days of diagnosis.





3.2 | Time to surgery

What percentage of people who attended public or private treatment facilities received surgery as the first cancer treatment within 30 days of diagnosis?

n: Number of persons who received surgery within 30 days of diagnosis

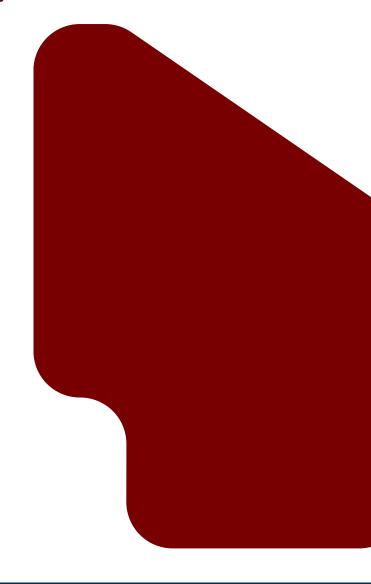
N: Number of persons diagnosed with [cancer of interest] who received surgery, and surgery was the first treatment

Cancer Group	Cancer	Victoria Public	Victoria Private	Queensland Public	Queensland Private
Brain	Brain	93% 981/1,051	96% 494/514	94% 731/774	96% 285/297
Breast	Breast	54% 4,608/8,515	86% 7,779/9,041	32 % 2,120/6,657	88% 6,805/7,766
Colorectal	Colon	64% 3,410/5,321	85% 3,323/3,911	54% 2,278/4,232	87% 2,951/3,392
	Rectal	42% 496/1,183	73% 729/998	30% 269/892	81% 679/840
Gynaecological	Ovarian	90% 566/626	96% 516/538	85% 310/365	96% 312/326
	Uterine	25% 427/1,721	81% 1,292/1,593	20% 249/1,253	79% 883/1,120
	Vagina/Vulva	37% 75/203	83% 91/110	25% 36/146	65% 75/116
Hepatobiliary	Liver	71% 274/386	85% 100/118	64% 169/266	83% 99/119
	Pancreatic	74% 318/430	81% 290/356	61% 165/272	79% 174/221
Lung	NSCLC	69% 1,324/1,919	85% 1,273/1,503	37% 511/1,369	69% 683/984
Prostate	Prostate	34% 1,330/3,871	36% 3,474/9,565	30% 973/3,282	27 % 2,522/9,289
Upper GI	Oesophagogastric	35% 134/384	51% 111/217	33% 78/237	46% 96/207

Surgery received within -30 and 365 days of diagnosis.



Demographic information





Treating people with cancer in Queensland and Victoria 2017-2021

Brain cancer

What are the characteristics of Queenslanders and Victorians who received treatment?

		Victoria								Queensland							
		Incidence			Had Surgery or RT No known Surgery or IVST or RT or IVST			Incidence			Had Surgery or RT or IVST		No known Surgery or RT or IVST				
	N	Column %	ASR per 100,000 people	N	%	N	%	N	Column %	ASR per 100,000 people	N	%	N	%			
Total	2,363	100%	7	1,959	83%	404	17%	1,899	100%	7	1,463	77%	436	23%			
Sex																	
Female Male	983 1,380	42% 58%	5 8	796 1,163	81% 84%	187 217	19% 16%	771 1,128	41% 59%	5 8	581 882	75% 78%	190 246	25% 22%			
Age at diagnosis																	
Median	63			61		74		62			60		74				
Mean	59			57		68		58			55		68				
Age group at diagnosis																	
<50 50-59 60-69 70-79 80+ Remoteness of residence a Major City Inner Regional Outer Regional Remote & Very Remote Socioeconomic status Affluent	631 355 556 522 299 at diagnosis 1,703 560 99 1	27% 15% 23% 22% 13% 72% 24% 4% <1%	3 9 17 23 23 6 7 6 3	565 325 498 423 148 1,417 460 81 1	90% 92% 90% 81% 49% 83% 82% 82% 100%	66 30 58 99 151 286 100 18	10% 8% 10% 19% 51% 17% 18% 18%	519 328 416 410 226 1,283 419 165 32	27% 17% 22% 22% 12% 68% 22% 9% 2%	3 10 16 23 24 7 7 6 6	444 280 363 311 65 992 325 123 23	86% 85% 87% 76% 29% 77% 78% 75% 72%	75 48 53 99 161 291 94 42 9	14% 15% 13% 24% 71% 23% 22% 25% 28%			
Middle Disadvantaged First Nations status	1,500 311	64% 13%	7 6	1,257 241	84% 77%	243 70	16% 23%	1,257 397	66% 21%	7 6	963 299	77% 75%	294 98	23% 25%			
First Nations peoples Non First Nations peoples Comorbidity	14 2,349	1% 99%	7 7	11 1,948	79% 83%	3 401	21% 17%	48 1,851	3% 97%	5 7	36 1,427	75% 77%	12 424	25% 23%			
0	1,106	47%		941	85%	165	15%	992	52%		771	78%	221	22%			
1	690	29%		576	83%	114	17%	544	29%		426	78%	118	22%			
2+	567	24%		442	78%	125	22%	363	19%		266	73%	97	27%			

Age-specific rates per 100,000 people have been calculated for each age group.

A small number of patients have unknown comorbidities and have been rolled into the 0 comorbidity group.







Breast cancer

What are the characteristics of Queenslanders and Victorians who received treatment?

	Victoria								Queensland						
		Inciden	ce	Had Surgery or RT or IVST		No known Surgery or RT or IVST		Incidence			Had Surgery or RT or IVST		No known Surgery or RT or IVST		
	N	Column %	ASR per 100,000 people	N	%	N	%	N	Column %	ASR per 100,000 people	N	%	N	%	
Total	23,046	100%	123	21,576	94%	1,470	6%	18,426	100%	125	17,302	94%	1,124	6%	
Sex															
Female	23,046	100%	123	21,576	94%	1,470	6%	18,426	100%	125	17,302	94%	1,124	6%	
Age at diagnosis															
Median	62			61		80		62			61		80		
Mean	62			61		76		62			61		76		
Age group at diagnosis															
<50	4,830	21%	45	4,718	98%	112	2%	3,820	21%	45	3,750	98%	70	2%	
50-59	5,218	22%	262	5,084	97%	134	3%	4,200	23%	260	4,094	97%	106	3%	
60-69	5,945	26%	351	5,744	97%	201	3%	4,842	26%	356	4,677	97%	165	3%	
70-79	4,544	20%	388	4,274	94%	270	6%	3,734	20%	399	3,516	94%	218	6%	
80+	2,509	11%	328	1,756	70%	753	30%	1,830	10%	344	1,265	69%	565	31%	
Remoteness of residence a	t diagnosis														
Major City	16,855	73%	122	15,808	94%	1,047	6%	12,496	68%	129	11,726	94%	770	6%	
Inner Regional	5,068	22%	127	4,744	94%	324	6%	3,762	20%	115	3,553	94%	209	6%	
Outer Regional	1,109	5%	121	1,015	92%	94	8%	1,846	10%	122	1,721	93%	125	7%	
Remote & Very Remote	14	<1%	113	9	64%	5	36%	322	2%	118	302	94%	20	6%	
Socioeconomic status															
Affluent	6,087	26%	134	5,752	94%	335	6%	2,333	13%	132	2,227	95%	106	5%	
Middle	14,051	61%	121	13,157	94%	894	6%	12,069	65%	126	11,316	94%	753	6%	
Disadvantaged	2,908	13%	113	2,667	92%	241	8%	4,024	22%	119	3,759	93%	265	7%	
First Nations status															
First Nations peoples	111	<1%	126	105	95%	6	5%	403	2%	115	378	94%	25	6%	
Non First Nations peoples	22,935	99%	123	21,471	94%	1,464	6%	18,023	98%	126	16,924	94%	1,099	6%	
Comorbidity															
0	15,931	69%		15,086	95%	845	5%	14,807	80%		14,027	95%	780	5%	
1	4,880	21%		4,611	94%	269	6%	2,355	13%		2,191	93%	164	7%	
2+	2,235	10%		1,879	84%	356	16%	1,264	7%		1,084	86%	180	14%	

Invasive only, Female only

Age-specific rates per 100,000 people have been calculated for each age group.

A small number of patients have unknown comorbidities and have been rolled into the 0 comorbidity group.





Treating people with cancer in Queensland and Victoria 2017-2021

Colon cancer

What are the characteristics of Queenslanders and Victorians who received treatment?

			\	/ictoria				Queensland							
		Inciden	ce	Had Surgery or RT or IVST		No known Surgery or RT or IVST		Incidence			Had Surgery or RT or IVST		No known Surgery or RT or IVST		
	N	Column %	ASR per 100,000 people	N	%	N	%	N	Column %	ASR per 100,000 people	N	%	N	%	
Total	12,042	100%	31	10,167	84%	1,875	16%	10,106	100%	34	8,369	83%	1,737	17%	
Sex															
Female Male	5,882 6,160	49% 51%	28 35	4,944 5,223	84% 85%	938 937	16% 15%	4,863 5,243	48% 52%	31 37	4,022 4,347	83% 83%	841 896	17% 17%	
Age at diagnosis															
Median	72			71		79		72			70		80		
Mean	71			69		77		70			69		77		
Age group at diagnosis															
<50 <50 50-59 60-69 70-79 80+ Remoteness of residence a Major City Inner Regional Outer Regional Remote & Very Remote Socioeconomic status Affluent Middle Disadvantaged	939 1,476 2,578 3,576 3,473 t diagnosis 8,269 3,011 757 5	8% 12% 21% 30% 29% 69% 25% 6% <1%	4 37 79 162 261 30 35 36 13	880 1,314 2,286 3,146 2,541 7,049 2,495 619 4 2,274 6,398 1,495	94% 89% 89% 88% 73% 85% 83% 82% 80%	59 162 292 430 932 1,220 516 138 1	6% 11% 11% 12% 27% 15% 17% 18% 20%	855 1,216 2,203 2,959 2,873 6,325 2,583 1,025 173 984 6,377 2,745	8% 12% 22% 29% 28% 63% 26% 10% 2%	5 38 83 164 307 33 37 32 31	796 1,067 1,970 2,571 1,965 5,239 2,131 855 144 845 5,301 2,223	93% 88% 89% 87% 68% 83% 83% 83% 83% 83% 84%	1,086 452 170 29	7% 12% 11% 13% 32% 17% 17% 17% 17% 19%	
First Nations status	2,012	2370				01/	27,0		27,0		_,	0270	522	2370	
First Nations peoples Non First Nations peoples Comorbidity	81 11,961	1% 99%	55 31	74 10,093	91% 84%	7 1,868	9% 16%	207 9,899	2% 98%	38 35	166 8,203	80% 83%	41 1,696	20% 17%	
0	5,613	47%		4,882	87%	731	13%	6,097	60%		5,147	84%	950	16%	
1	3,252	27%		2,743	84%	509	16%	2,113	21%		1,741	82%	372	18%	
2+	3,177	26%		2,542	80%	635	20%	1,896	19%		1,481	78%	415	22%	

Age-specific rates per 100,000 people have been calculated for each age group.

A small number of patients have unknown comorbidities and have been rolled into the 0 comorbidity group.







Rectal cancer

What are the characteristics of Queenslanders and Victorians who received treatment?

			\	/ictoria				Queensland							
		Inciden	ce	Had Surgery or RT or IVST		No known Surgery or RT or IVST		Incidence			Had Surgery or RT or IVST		No known Surgery or RT or IVST		
	N	Column %	ASR per 100,000 people	N	%	N	%	N	Column %	ASR per 100,000 people	N	%	N	%	
Total	5,692	100%	15	4,671	82%	1,021	18%	4,303	100%	15	3,446	80%	857	20%	
Sex															
Female Male	2,121 3,571	37% 63%	11 20	1,727 2,944	81% 82%	394 627	19% 18%	1,537 2,766	36% 64%	10 19	1,213 2,233	79% 81%	324 533	21% 19%	
Age at diagnosis															
Median	67			66		73		66			65		72		
Mean	66			65		72		66			64		71		
Age group at diagnosis															
<50 50-59 60-69 70-79 80+ Remoteness of residence at Major City Inner Regional Outer Regional Remote & Very Remote Socioeconomic status Affluent Middle Disadvantaged	678 1,093 1,433 1,404 1,084 at diagnosis 3,911 1,403 371 7 1,237 3,601 854	12% 19% 25% 25% 19% 69% 25% 6% <1%	3 28 44 63 81 14 17 20 17	617 950 1,234 1,127 743 3,265 1,112 289 5	91% 87% 86% 80% 69% 83% 79% 78% 71%	61 143 199 277 341 646 291 82 2	9% 13% 14% 20% 31% 17% 21% 22% 29%	558 810 1,172 1,052 711 2,663 1,034 500 106	13% 19% 27% 24% 17% 62% 24% 12% 2%	3 25 44 58 76 14 16 15 18	493 699 997 804 453 2,143 828 390 85	88% 86% 85% 76% 64% 80% 78% 80% 82% 81% 78%	65 111 175 248 258 520 206 110 21	12% 14% 15% 24% 36% 20% 20% 22% 20%	
First Nations status															
First Nations peoples Non First Nations peoples Comorbidity	36 5,656	1% 99%	22 15	32 4,639	89% 82%	4 1,017	11% 18%	134 4,169	3% 97%	21 15	101 3,345	75% 80%	33 824	25% 20%	
0	3,073	54%		2,575	84%	498	16%	2,782	65%		2,247	81%	535	19%	
1	1,392	24%		1,139	82%	253	18%	833	19%		677	81%	156	19%	
2+	1,227	22%		957	78%	270	22%	688	16%		522	76%	166	24%	

Age-specific rates per 100,000 people have been calculated for each age group.

A small number of patients have unknown comorbidities and have been rolled into the 0 comorbidity group.





Treating people with cancer in Queensland and Victoria 2017-2021

Gynaecological cancer

What are the characteristics of Queenslanders and Victorians who received treatment?

			V	'ictoria						Qu	eensland			
		Inciden	ce	_	ery or RT VST		n Surgery or IVST		Inciden	ce	_	ery or RT VST		n Surgery or IVST
	N	Column %	ASR per 100,000 people	N	%	N	%	N	Column %	ASR per 100,000 people	N	%	N	%
Total	6732	100%	35	5974	89%	758	11%	5,176	100%	34	4,430	86%	746	14%
Sex														
Female	6732	100%	35	5974	89%	758	11%	5,176	100%	34	4,430	86%	746	14%
Age at diagnosis														
Median	65			65		72		66			65		73	
Mean	64			64		69		65			64		70	
Age group at diagnosis														
<50	897	13%	8	770	86%	127	14%	706	14%	8	597	85%	109	15%
50-59	1420	21%	70	1327	93%	93	7%	1,019	20%	62	929	91%	90	9%
60-69	1889	28%	112	1771	94%	118	6%	1,482	29%	109	1,358	92%	124	8%
70-79	1592	24%	137	1440	90%	152	10%	1,240	24%	134	1,100	89%	140	11%
80+	934	14%	123	666	71%	268	29%	729	14%	137	446	61%	283	39%
Remoteness of residence a	t diagnosis													
Major City	4962	74%	35	4427	89%	535	11%	3,410	66%	34	2,943	86%	467	14%
Inner Regional	1428	21%	34	1261	88%	167	12%	1,145	22%	33	956	83%	189	17%
Outer Regional	340	5%	35	284	84%	56	16%	518	10%	33	442	85%	76	15%
Remote & Very Remote	2	<1%	12	2	100%			103	2%	38	89	86%	14	14%
Socioeconomic status														
Affluent	1540	23%	32	1409	91%	131	9%	517	10%	29	465	90%	52	10%
Middle	4197	62%	35	3691	88%	506	12%	3,336	64%	34	2,876	86%	460	14%
Disadvantaged	995	15%	38	874	88%	121	12%	1,323	26%	38	1,089	82%	234	18%
First Nations status														
First Nations peoples	44	1%	47	37	84%	7	16%	188	4%	55	157	84%	31	16%
Non First Nations peoples	6688	99%	35	5937	89%	751	11%	4,988	96%	33	4,273	86%	715	14%
Comorbidity														
0	3855	57%		3504	91%	351	9%	3,544	68%		3,122	88%	422	12%
1	1626	24%		1435	88%	191	12%	921	18%		753	82%	168	18%
2+	1251	19%		1035	83%	216	17%	711	14%		555	78%	156	22%

Age-specific rates per 100,000 people have been calculated for each age group.

A small number of patients have unknown comorbidities and have been rolled into the 0 comorbidity group.







Liver cancer

What are the characteristics of Queenslanders and Victorians who received treatment?

			V	/ictoria						Qu	eensland			
		Inciden	се	Had Surg or I	ery or RT VST	No know or RT			Inciden	ce	_	ery or RT VST	No know	
	N	Column %	ASR per 100,000 people	N	%	N	%	N	Column %	ASR per 100,000 people	N	%	N	%
Total	2,942	100%	8	1,092	37%	1,850	63%	2,346	100%	8	1,132	48%	1,214	52%
Sex														
Female Male	774 2,168	26% 74%	4 12	324 768	42% 35%	450 1,400	58% 65%	631 1,715	27% 73%	4 12	305 827	48% 48%	326 888	52% 52%
Age at diagnosis														
Median	69			66		71		68			66		70	
Mean	68			65		70		68			65		70	
Age group at diagnosis														
<50	178	6%	1	92	52%	86	48%	124	5%	1	78	63%	46	37%
50-59	494	17%	12	202	41%	292	59%	438	19%	13	234	53%	204	47%
60-69	866	29%	27	366	42%	500	58%	726	31%	27	403	56%	323	44%
70-79	796	27%	36	321	40%	475	60%	676	29%	37	335	50%	341	50%
80+	608	21%	46	111	18%	497	82%	382	16%	41	82	21%	300	79%
Remoteness of residence a	t diagnosis													
Major City	2,177	74%	8	830	38%	1,347	62%	1,507	64%	8	775	51%	732	49%
Inner Regional	628	21%	7	213	34%	415	66%	493	21%	7	206	42%	287	58%
Outer Regional	133	5%	6	47	35%	86	65%	290	12%	9	131	45%	159	55%
Remote & Very Remote	4	<1%	16	2	50%	2	50%	56	2%	10	20	36%	36	64%
Socioeconomic status														
Affluent	520	18%	6	234	45%	286	55%	193	8%	6	103	53%	90	47%
Middle	1,829	62%	8	648	35%	1,181	65%	1,448	62%	7	725	50%	723	50%
Disadvantaged	593	20%	11	210	35%	383	65%	704	30%	10	303	43%	401	57%
First Nations status														
First Nations peoples	37	1%	20	9	24%	28	76%	135	6%	21	47	35%	88	65%
Non First Nations peoples	2,905	99%	8	1,083	37%	1,822	63%	2,211	94%	7	1,085	49%	1,126	51%
Comorbidity														
0	476	16%		219	46%	257	54%	457	19%		235	51%	222	49%
1	748	26%		354	47%	394	53%	598	25%		318	53%	280	47%
2+	1,718	58%		519	30%	1,199	70%	1,291	55%		579	45%	712	55%

Age-specific rates per 100,000 people have been calculated for each age group.

A small number of patients have unknown comorbidities and have been rolled into the 0 comorbidity group.





Treating people with cancer in Queensland and Victoria 2017-2021

Pancreatic cancer

What are the characteristics of Queenslanders and Victorians who received treatment?

	N	Incidenc	ce	Had Surg										
	N			or I	ery or RT VST	No know or RT o			Incidenc	ce	Had Surg or I	-	No know or RT o	
		Column %	ASR per 100,000 people	N	%	N	%	N	Column %	ASR per 100,000 people	N	%	N	%
Total	4,697	100%	12	2,648	56%	2,049	44%	3,709	100%	12	2,049	55%	1,660	45%
Sex														
Female Male	2,248 2,449	48% 52%	11 14	1,211 1,437	54% 59%	1,037 1,012	46% 41%	1,734 1,975	47% 53%	11 14	909 1,140	52% 58%	825 835	48% 42%
Age at diagnosis														
Median	73			69		79		72			68		78	
Mean	71			67		77		71			66		76	
Age group at diagnosis														
<50	250	5%	1	189	76%	61	24%	215	6%	1	161	75%	54	25%
50-59	520	11%	13	406	78%	114	22%	449	12%	14	328	73%	121	27%
60-69	1,096	23%	33	790	72%	306	28%	938	25%	35	673	72%	265	28%
70-79	1,535	33%	70	964	63%	571	37%	1,191	32%	66	695	58%	496	42%
80+	1,296	28%	97	299	23%	997	77%	916	25%	98	192	21%	724	79%
Remoteness of residence at	diagnosis													
Major City	3,441	73%	12	1,988	58%	1,453	42%	2,380	64%	12	1,351	57%	1,029	43%
Inner Regional	999	21%	11	538	54%	461	46%	867	23%	12	488	56%	379	44%
Outer Regional	253	6%	12	121	48%	132	52%	399	11%	12	180	45%	219	55%
Remote & Very Remote	4	<1%	10	1	25%	3	75%	63	2%	11	30	48%	33	52%
Socioeconomic status														
Affluent	1,054	22%	11	645	61%	409	39%	386	10%	12	262	68%	124	32%
Middle	2,902	62%	12	1,625	56%	1,277	44%	2,321	63%	12	1,272	55%	1,049	45%
Disadvantaged	741	16%	14	378	51%	363	49%	1,002	27%	14	515	51%	487	49%
First Nations status								,						
First Nations peoples	22	<1%	14	11	50%	11	50%	132	4%	23	75	57%	57	43%
Non First Nations peoples Comorbidity	4,675	99%	12	2,637	56%	2,038	44%	3,577	96%	12	1,974	55%	1,603	45%
0	1,626	35%		1,013	62%	613	38%	1,666	45%		932	56%	734	44%
1	1,354	29%		766	57%	588	43%	945	25%		539	57%	406	43%
2+	1,717	36%		869	51%	848	49%	1,098	30%		578	53%	520	47%

Age-specific rates per 100,000 people have been calculated for each age group.

A small number of patients have unknown comorbidities and have been rolled into the 0 comorbidity group.







Non-small cell lung cancer

What are the characteristics of Queenslanders and Victorians who received treatment?

			\	/ictoria						Qu	eensland			
		Inciden	ce	Had Surg or I	ery or RT VST	No know or RT			Inciden	ce	Had Surg or I	-	No know	
	N	Column %	ASR per 100,000 people	N	%	N	%	N	Column %	ASR per 100,000 people	N	%	N	%
Total	13,981	100%	36	10,343	74%	3,638	26%	11,147	100%	36	8,638	77%	2,509	23%
Sex														
Female Male	6,388 7,593	46% 54%	31 42	4,689 5,654	73% 74%	1,699 1,939	27% 26%	4,869 6,278	44% 56%	31 43	3,804 4,834	78% 77%	1,065 1,444	22% 23%
Age at diagnosis														
Median	72			71		78		71			70		76	
Mean	71			70		76		70			69		74	
Age group at diagnosis														
<50 50-59 60-69 70-79 80+ Remoteness of residence a Major City Inner Regional Outer Regional Remote & Very Remote Socioeconomic status	9,730 3,379 854 18	70% 24% 6% <1%	2 38 111 222 260 35 38 41 50	425 1,290 3,017 3,800 1,811 7,264 2,464 603 12	85% 84% 83% 78% 53% 75% 73% 71% 67%	76 238 609 1,101 1,614 2,466 915 251 6	15% 16% 17% 22% 47% 25% 27% 29% 33%	340 1,350 3,233 4,163 2,061 6,925 2,651 1,341 230	3% 12% 29% 37% 18% 62% 24% 12% 2%	2 41 121 230 223 35 37 40 40	279 1,155 2,753 3,300 1,151 5,493 2,012 965 168	82% 86% 85% 79% 56% 79% 76% 72% 73%	61 195 480 863 910 1,432 639 376 62	18% 14% 15% 21% 44% 21% 24% 28% 27%
Affluent Middle Disadvantaged First Nations status	2,636 8,899 2,446	19% 64% 17%	28 37 45	1,983 6,619 1,741	75% 74% 71%	653 2,280 705	25% 26% 29%	907 6,835 3,405	8% 61% 31%	27 35 46	718 5,323 2,597	79% 78% 76%	189 1,512 808	21% 22% 24%
First Nations peoples Non First Nations peoples Comorbidity	143 13,838	1% 99%	87 36	112 10,231	78% 74%	31 3,607	22% 26%	421 10,726	4% 96%	76 36	311 8,327	74% 78%	110 2,399	26% 22%
0	4,607	33%		3,622	79%	985	21%	5,066	45%		4,132	82%	934	18%
1	4,526	32%		3,483	77%	1,043	23%	3,289	30%		2,523	77%	766	23%
2+	4,848	35%		3,238	67%	1,610	33%	2,792	25%		1,983	71%	809	29%

Age-specific rates per 100,000 people have been calculated for each age group.

A small number of patients have unknown comorbidities and have been rolled into the 0 comorbidity group.





Treating people with cancer in Queensland and Victoria 2017-2021

Prostate cancer

What are the characteristics of Queenslanders and Victorians who received treatment?

			\	/ictoria				Queensland						
		Inciden	ce	Had Surg or I	-		n Surgery or IVST		Inciden	ce	Had Surg or I	-	No know	
	N	Column %	ASR per 100,000 people	N	%	N	%	N	Column %	ASR per 100,000 people	N	%	N	%
Total	27,901	100%	151	18,815	67%	9,086	33%	24,177	100%	160	18,103	75%	6,074	25%
Sex														
Male	27,901	100%	151	18,815	67%	9,086	33%	24,177	100%	160	18,103	75%	6,074	25%
Age at diagnosis														
Median	69			69		68		69			68		69	
Mean	69			69		69		69			68		70	
Age group at diagnosis														
<50	523	2%	5	308	59%	215	41%	417	2%	5	312	75%	105	25%
50-59	3,984	14%	200	2,484	62%	1,500	38%	3,369	14%	208	2,505	74%	864	26%
60-69	10,569	38%	669	7,174	68%	3,395	32%	9,260	38%	706	7,187	78%	2,073	22%
70-79	9,491	34%	893	6,853	72%	2,638	28%	8,503	35%	949	6,599	78%	1,904	22%
80+	3,334	12%	609	1,996	60%	1,338	40%	2,628	11%	663	1,500	57%	1,128	43%
Remoteness of residence a	t diagnosis													
Major City	19,302	69%	149	12,871	67%	6,431	33%	15,266	63%	163	11,374	75%	3,892	25%
Inner Regional	6,936	25%	156	4,817	69%	2,119	31%	5,697	24%	156	4,297	75%	1,400	25%
Outer Regional	1,637	6%	150	1,113	68%	524	32%	2,775	11%	157	2,109	76%	666	24%
Remote & Very Remote	26	<1%	127	14	54%	12	46%	439	2%	134	323	74%	116	26%
Socioeconomic status														
Affluent	7,494	27%	170	5,046	67%	2,448	33%	2,944	12%	178	2,199	75%	745	25%
Middle	17,233	62%	150	11,617	67%	5,616	33%	15,798	65%	162	11,878	75%	3,920	25%
Disadvantaged	3,174	11%	121	2,152	68%	1,022	32%	5,433	22%	145	4,024	74%	1,409	26%
First Nations status														
First Nations peoples	99	<1%	133	69	70%	30	30%	373	2%	147	273	73%	100	27%
Non First Nations peoples	27,802	100%	151	18,746	67%	9,056	33%	23,804	98%	159	17,830	75%	5,974	25%
Comorbidity														
0	18,322	66%		12,028	66%	6,294	34%	18,059	75%		13,489	75%	4,570	25%
1	6,128	22%		4,400	72%	1,728	28%	3,816	16%		2,894	76%	922	24%
2+	3,451	12%		2,387	69%	1,064	31%	2,302	10%		1,720	75%	582	25%

Age-specific rates per 100,000 people have been calculated for each age group.

A small number of patients have unknown comorbidities and have been rolled into the 0 comorbidity group.





Oesophagogastric cancer

What are the characteristics of Queenslanders and Victorians who received treatment?

			V	/ictoria						Qu	eensland			
		Inciden	ce	Had Surg or I	ery or RT VST	No know or RT	n Surgery or IVST		Inciden	ce	_	ery or RT VST	No know or RT (0 ,
	N	Column %	ASR per 100,000 people	N	%	N	%	N	Column %	ASR per 100,000 people	N	%	N	%
Total	5,220	100%	14	3,761	72%	1,459	28%	4,064	100%	13	2,630	65%	1,434	35%
Sex														
Female Male	1,741 3,479	33% 67%	8 19	1,136 2,625	65% 75%	605 854	35% 25%	1,281 2,783	32% 68%	8 19	738 1,892	58% 68%	543 891	42% 32%
Age at diagnosis														
Median	72			70		76		70			68		72	
Mean	71			69		74		69			67		71	
Age group at diagnosis														
<50	323	6%	1	254	79%	69	21%	290	7%	2	200	69%	90	31%
50-59	593	12%	15	478	81%	115	19%	608	15%	19	429	71%	179	29%
60-69	1,308	25%	40	1,041	80%	267	20%	1,134	28%	42	794	70%	340	30%
70-79	1,679	32%	76	1,259	75%	420	25%	1,235	30%	68	822	67%	413	33%
80+	1,317	25%	100	729	55%	588	45%	797	20%	86	385	48%	412	52%
Remoteness of residence a	t diagnosis													
Major City	3,607	69%	13	2,612	72%	995	28%	2,656	65%	14	1,722	65%	934	35%
Inner Regional	1,300	25%	15	927	71%	373	29%	910	22%	13	570	63%	340	37%
Outer Regional	306	6%	15	219	72%	87	28%	419	10%	13	280	67%	139	33%
Remote & Very Remote	7	<1%	19	3	43%	4	57%	79	2%	13	58	73%	21	27%
Socioeconomic status														
Affluent	1,042	20%	11	755	72%	287	28%	421	10%	12	275	65%	146	35%
Middle	3,282	63%	14	2,379	72%	903	28%	2,535	62%	13	1,664	66%	871	34%
Disadvantaged	896	17%	16	627	70%	269	30%	1,108	27%	15	691	62%	417	38%
First Nations status														
First Nations peoples	32	1%	21	24	75%	8	25%	130	3%	20	86	66%	44	34%
Non First Nations peoples	5,188	99%	13	3,737	72%	1,451	28%	3,934	97%	13	2,544	65%	1,390	35%
Comorbidity														
0	2,094	40%		1,551	74%	543	26%	2,209	54%		1,427	65%	782	35%
1	1,506	29%		1,104	73%	402	27%	964	24%		625	65%	339	35%
2+	1,620	31%		1,106	68%	514	32%	891	22%		578	65%	313	35%

Age-specific rates per 100,000 people have been calculated for each age group.

A small number of patients have unknown comorbidities and have been rolled into the 0 comorbidity group.





Glossary

Age at diagnosis

The age in years from date of birth to date of diagnosis

Age - median (years)

The age that divides a population into two halves: one older than the median, the other younger than the median.

Age - mean (years)

The average age of the cancer population from date of birth to date of diagnosis

Age-standardised incidence (ASR)

The number of new cases or deaths per 100,000 that would have occurred in a given population if the age distribution of that population was the same as that of the Australian population in 2001 and if the age-specific rates observed in the population of interest had prevailed. In international comparisons, the World Standard Population was used as the reference population.

Age-standardised rates are independent of the age-structure of the population of interest and are therefore useful in making comparisons between different populations and time periods.

Comorbidity

A clinical condition that has the potential to significantly affect a person with cancer's prognosis.

Comorbidity is derived from hospital admissions data following the Quan algorithm for classifying ICD-10 coded conditions, modified to exclude metastasis, which is represented by a separate and distinct metastasis dimension.

Comorbidity is limited to conditions coded in any admission episode between 12 months before and 12 months after the date of cancer diagnosis.

For any given cancer diagnosis, comorbidity is restricted to conditions other than the primary cancer. E.g. A rectum cancer can be a comorbidity to a colon cancer diagnosis and vice versa, if they are diagnosed within 12 months of each other.

Benign tumours are not considered comorbidities.

Co-morbidity list:						
AIDS	Acute myocardial infarction	Cancer				
Cerebrovascular disease	Congestive heart failure	Chronic obstructive pulmonary disease				
Dementia	Diabetes	Diabetes + complications				
Hemiplegia or Paraplegia	Mild liver disease	Moderate/severe liver disease				
Peptic ulcer	Peripheral vascular disease	Renal disease				
Rheumatoid disease						

Incidence (new cases)

The number of new cases of cancer diagnosed in a defined population during a specified time period.



First Nations peoples

First Nations peoples: First Nations peoples refers to the Aboriginal peoples and Torres Strait Islander peoples, their nations, societies, and language groups that have occupied these lands since time immemorial.

Non-First Nations peoples: A measure where a person does not identify as Aboriginal peoples and/or Torres Strait Islander peoples (First Nations peoples).

Intravenous systemic therapy

Person diagnosed with cancer and received IV systemic therapy (IVST) between -30 days and 365 days of diagnosis date. Includes chemotherapy, immunotherapy, hormone therapy delivered via intravenous, intramuscular, subcutaneous and intrathecal routes. Excludes oral chemotherapy.

Radiation therapy

Person diagnosed with cancer and received external beam radiation therapy (RT) between -30 days and 365 days of diagnosis date.

Relative survival (one- and five-year)

Relative survival is a net survival measure representing cancer survival in the absence of other causes of death.

Relative survival is defined as the ratio of the proportion of observed survivors in a cohort of people with cancer to the proportion of expected survivors in a comparable set of cancer free individuals.

Relative survival is calculated by dividing observed survival by expected survival, where the numerator and denominator have been matched for age, sex and calendar year.

Observed survival refers to the proportion of people alive for a given amount of time after a diagnosis of cancer; it is calculated from population-based cancer data. Expected survival refers to the proportion of people in the general population alive for a given amount of time and is calculated from life tables of the entire Australian population, assumed to be cancer free.

Changes to cancer incidence rates and the underlying life tables may lead to fluctuations in relative survival estimates. Accordingly, caution should be used when making comparisons to historically reported rates of relative survival.

Calculated using the Ederer II method, and the period approach was used. Relative survival was calculated for all persons aged 0-89 at diagnosis.

Remoteness

The relative remoteness of residence at time of diagnosis, derived from the Australian Standard Geographical Classification (ASGC). In this report, remoteness is classified into three groups based on the original ASGC grouping.

ASGC classifications	Modified ASGC classification
Major City	Metropolitan
Inner Regional	Regional
Outer Regional	Regional
Remote	Rural and Remote
Very Remote	Rural and Remote

Sex

Refers to the biological and physiological characteristics that define men and women.





Socioeconomic status

Socioeconomic status is based on the Socio-Economic Indexes for Areas (SEIFA), a census-based measure of social and economic well-being developed by the Australian Bureau of Statistics (ABS) and aggregated at the level of Statistical Area Level 2 (SA2).

The ABS use SEIFA scores to rank regions into ten groups or deciles numbered one to ten, with one being the most disadvantaged and ten being the most affluent group. This ranking is useful at the national level, but the number of people in each decile often becomes too small for meaningful comparisons when applied to a subset of the population. For this reason, this document further aggregates SEIFA deciles into 3 socioeconomic groups.

SEIFA Group	Decile	Percentage of population (approximate)
Disadvantaged	1-2	20%
Middle	3-8	60%
Affluent	9-10	20%

Surgical facilities

Private - All hospitals that are not recognised as public health hospitals.

Public – All hospitals that are recognised as public health hospitals.

Surgery/Major Resection

Refer to ICD10-AM procedures.

Surgical Mortality

30-day mortality - the percentage of people that die within 30 days following their last cancer surgery. **90-day mortality** - the percentage of people that die within 90 days following their last cancer surgery. **In-Hospital mortality** - the percentage of people that die in hospital following their last cancer surgery.

Surgical survival

One-year survival - All-cause survival: the Kaplan-Meier estimate of survival for people undergoing cancer surgery one year after their first cancer surgery.

Two-year survival - All-cause survival: the Kaplan-Meier estimate of survival for people undergoing cancer surgery two years after their first cancer surgery.

Time to first cancer surgery

Time between cancer diagnosis and first cancer surgery if cancer surgery is the first treatment.

Time to first treatment

Time between cancer diagnosis and first cancer surgery or radiation therapy or intravenous systemic therapy.



Appendix

Methods

Cohort

Inclusions	Exclusions
Queensland and Victorian residents who were diagnosed with certain cancer types between January 01, 2017 and December 31, 2021.	People diagnosed with cancer from death certificate.
Cancer site and morphology codes defining each subgroup are outlined in the section below.	





Included cancers and surgeries

Brain cancer

Site codes

ICD10-AM code	Description
C70	Meninges
C71	Brain

Procedure codes

ICD10-AM procedure code	Procedure description
3964000	Removal of lesion involving anterior cranial fossa
3964200	Removal of lesion involving anterior cranial fossa with clearance of paranasal sinus extension
3964600	Removal of lesion involving anterior cranial fossa with radical clearance of paranasal sinus and orbital fossa extensions
3965000	Removal of lesion involving middle cranial and infratemporal fossae
3970601	Decompression of intracranial tumour via osteoplastic craniotomy
3970900	Removal of lesion of cerebrum
3970901	Removal of lesion of brain stem
3970902	Removal of lesion of cerebellum
3971200	Removal of lesion of cerebral meninges
3971203	Removal of intraventricular lesion
3971204	Removal of other intracranial lesion
4031200	Removal of spinal intradural lesion
4070302	Partial lobectomy of brain
4157500	Removal of lesion of cerebellopontine angle
9003200	Removal of lesion involving post cranial fossa

Breast cancer

Site codes

ICD10-AM code	Description
C50	Breast
Notes: Invasive on	nly, Female only

ICD10-AM procedure code	Procedure description	
3153600	Localisation of lesion of breast	
3150000	Excision of lesion of breast	
3151500	Re - excision of lesion of breast	
3151800	Total mastectomy (unilateral)	
3151801	Total mastectomy (bilateral)	
3152400	Subcutaneous mastectomy (unilateral)	
3152401	Subcutaneous mastectomy (bilateral)	
4552001	Reduction mammoplasty with nipple repositioning, bilateral	
4552002	Reduction mammoplasty with reconstruction of nipple, unilateral	
4552003	Reduction mammoplasty with reconstruction of nipple, bilateral	
4552200	Reduction mammoplasty, unilateral	
4552201	Reduction mammoplasty, bilateral	





Colorectal cancer

Site codes

ICD10-AM code Description	
C18	Colon
C19	Rectosigmoid
C20	Rectum
C218	Overlapping lesion of rectum, anus and anal canal
	-

Notes: Exclusions:

 $Morphologies\ 80413,\ 80703,\ 80713,\ 80723,\ 80833,\ 82403,\ 82413,\ 82433,\ 82493,\ 81233\ excluded\ from\ C18,\ C19,\ C20\ primary\ sites.$

All morphologies except adenocarcinomas excluded from C218

ICD10-AM procedure code	Procedure description	ICD10-AM procedure code	Procedure description
3203000	Rectosigmoidectomy with formation of stoma (Hartmanns)	3200403	Laparoscopic extended right hemicolectomy with formation of stoma
3203001	Laparoscopic rectosigmoidectomy with formation of stoma (Hartmanns)	3200600	Left hemicolectomy with anastomosis
3203900 3202600	Abdominoperineal proctectomy Ultra low anterior resection of rectum	3200602 3200501	Laparoscopic left hemicolectomy with anastomosis Extended right hemicolectomy with anastomosis
3202800	Ultra low anterior resection of rectum with hand sutured coloanal anastomosis	3200503	Laparoscopic extended right hemicolectomy with anastomosis
3202500	Low anterior resection of rectum	3200301	Right hemicolectomy with anastomosis
9220800	Anterior resection of rectum, level unspecified	3200303	Laparoscopic right hemicolectomy with anastomosis
3202400	High anterior resection of rectum	3200300	Limited excision of large intestine with anastomosis
3056500	$\label{lem:Resection of small intestine with formation of stoma} \\$	3200302	Laparoscopic limited excision of large intestine with anastomosis
3200900	Total colectomy with ileostomy	3201200	Total colectomy with ileorectal anastomosis
3200901	Laparoscopic total colectomy with ileostomy	3201201	Laparoscopic total colectomy with ileorectal anastomosis
3200601	Left hemicolectomy with formation of stoma	3200500	Subtotal colectomy with anastomosis
3200603	Laparoscopic left hemicolectomy with formation of stoma	3200502	Laparoscopic subtotal colectomy with anastomosis
3200400	Subtotal colectomy with formation of stoma	3051503	Ileocolic resection with anastomosis
3200402	Laparoscopic subtotal colectomy with formation of stoma	3051504	Laparoscopic ileocolic resection with anastomosis
3051505	Ileocolic resection with formation of stoma	3056600	Resection of small intestine with anastomosis
3051506	Laparoscopic ileocolic resection with formation of stoma	3205101	Total proctocolectomy with ileo-anal anastomosis and formation of temporary ileostomy
3200000	Limited excision of large intestine with formation of stoma	3201500	Total proctocolectomy with ileostomy
3200002	Laparoscopic limited excision of large intestine with formation of stoma	3205100	Total proctocolectomy with ileo-anal anastomosis
3200001	Right hemicolectomy with formation of stoma	9045000	Anterior pelvic exenteration
3200003	Laparoscopic right hemicolectomy with formation of stoma	9045001	Posterior pelvic exenteration
3200401	Extended right hemicolectomy with formation of stoma	9045002	Total pelvic exenteration





Gynaecological cancer

Site codes

ICD10-AM code Description		
C51	Vulva	
52	Vagina	
C54-C55	Uterine	
C56-C57	Ovary	

Procedure codes

ICD10-AM procedure code	Procedure description	ICD10-AM procedure code	Procedure description
Vulvar cancer surg	ery		
3553000	Subtotal amputation of clitoris	3553601	Vulvectomy, unilateral
3553001	Total amputation of clitoris	3553602	Vulvectomy, bilateral
3553600	Hemivulvectomy	3554800	Radical vulvectomy
Vaginal cancer sur	gery		
3556000	Partial vaginectomy	3556100	Radical vaginectomy
3556001	Complete vaginectomy		
Uterine cancer sur	gery		
3565300	Subtotal abdominal hysterectomy	3565305	Laparoscopic subtotal abdominal hysterectomy
3565301	Total abdominal hysterectomy	3565307	Laparoscopic total abdominal hysterectomy
3565700	Vaginal hysterectomy	3566702	Laparoscopic radical abdominal hysterectomy
3566700	Radical abdominal hysterectomy	3566703	Laparoscopically assisted radical vaginal hysterectomy
3566701	Radical vaginal hysterectomy	3575000	Laparoscopically assisted vaginal hysterectomy
Ovarian cancer sur	gery		
3565300	Subtotal abdominal hysterectomy	3563801	Laparoscopic partial oophorectomy
3565301	Total abdominal hysterectomy	3563802	Laparoscopic oophorectomy, unilateral
3565700	Vaginal hysterectomy	3563803	Laparoscopic oophorectomy, bilateral
3566700	Radical abdominal hysterectomy	3563804	Laparoscopic ovarian cystectomy, unilateral
3566701	Radical vaginal hysterectomy	3563805	Laparoscopic ovarian cystectomy, bilateral
3571304	Ovarian cystectomy, unilateral	3563807	Laparoscopic partial salpingectomy, unilateral
3571305	Wedge resection of ovary	3563808	Laparoscopic partial salpingectomy, bilateral
3571306	Partial oophorectomy	3563809	Laparoscopic salpingectomy, unilateral
3571307	Oophorectomy, unilateral	3563810	Laparoscopic salpingectomy, bilateral
3571308	Partial salpingectomy, unilateral	3563811	Laparoscopic salpingo-oophorectomy, unilateral
3571309	Salpingectomy, unilateral	3563812	Laparoscopic salpingo-oophorectomy, bilateral
3571311	Salpingo-oophorectomy, unilateral	3565305	Laparoscopic subtotal abdominal hysterectomy
3571700	Ovarian cystectomy, bilateral	3565307	Laparoscopic total abdominal hysterectomy
3571701	Oophorectomy, bilateral	3566702	Laparoscopic radical abdominal hysterectomy
3571702	Partial salpingectomy, bilateral	3566703	Laparoscopically assisted radical vaginal hysterectomy
3571703	Salpingectomy, bilateral	3575000	Laparoscopically assisted vaginal hysterectomy
3571704	Salpingo-oophorectomy, bilateral	9618901	Laparoscopic omentectomy
9045001	Posterior pelvic exenteration	9032800	Excision of lesion of peritoneal tissue
9045002	Total pelvic exenteration	9032801	Excision of lesion of peritoneal tissue with intestinal resection
9618900	Omentectomy	9045000	Anterior pelvic exenteration
3563800	Laparoscopic wedge resection of ovary		

Notes: Surgical procedures are linked to the specific gynaecological cancer subsites.





Hepatobiliary cancer

Site codes

ICD10-AN	ICD10-AM code Description	
C25	Pancreas	
C22	Liver	

	10000010	
ICD10-AM procedure code	Procedure description	
Pancreatic cancer		
3058400	Pancreaticoduodenectomy with formation of stoma	
3059301	Pancreatectomy with splenectomy	
3058300	Distal pancreatectomy	
3059300	Pancreatectomy	
Liver cancer		
9031700	Transplantation of liver	
9625801	Laparoscopic procurement of liver for transplantation, living donor	
9625802	Procurement of liver for transplantation, living donor	
9625803	Procurement of liver for transplantation, cadaver	
3042100	Trisegmental resection of liver	
3041800	Lobectomy of liver	
3041500	Segmental resection of liver	
3041400	Excision of lesion of liver	





Non-small cell lung cancer

Site codes

ICD10-AM code	e Description
C33	Trachea
C34	Lung

Morphology codes

ICD10-AM	-	ICD10-AM	-
morphology	Morphology description	morphology	Morphology description
code		code	. 0, 1
80103	Carcinoma	81413	Scirrhous adenocarcinoma
80113	Epithelioma, malignant	81453	Carcinoma, diffuse type
80123	Large cell carcinoma	82003	Adenoid cystic carcinoma
80133	Large cell neuroendocrine carcinoma	82013	Cribriform carcinoma
80143	Large cell carcinoma with rhabdoid phenotype	82113	Tubular adenocarcinoma
80153	Glassy cell carcinoma	82303	Solid carcinoma
80203	Carcinoma, undifferentiated	82443	Mixed adenoneuroendocrine carcinoma
80213	Carcinoma, anaplastic	82453	Adenocarcinoid tumour
80223	Pleomorphic carcinoma	82463	Neuroendocrine carcinoma
80303	Giant cell and spindle cell carcinoma	82503	Bronchiolo-alveolar adenocarcinoma
80313	Giant cell carcinoma	82513	Alveolar adenocarcinoma
80323	Spindle cell carcinoma	82523	Bronchiolo-alveolar carcinoma, non-mucinous
80333	Pseudosarcomatous carcinoma	82533	Bronchiolo-alveolar carcinoma, mucinous
00242	Polygonal cell carcinoma	02542	Bronchiolo-alveolar carcinoma, mixed mucinous and
80343		82543	nonmucinous
80353	Carcinoma with osteoclast-like giant cells	82553	Adenocarcinoma with mixed subtypes
80463	Non-small cell carcinoma	82603	Papillary adenocarcinoma
80503	Papillary carcinoma	82633	Adenocarcinoma in tubulovillous adenoma
80513	Verrucous carcinoma	83103	Clear cell adenocarcinoma
80523	Papillary squamous cell carcinoma	83233	Mixed cell adenocarcinoma
80703	Squamous cell carcinoma	84303	Mucoepidermoid carcinoma
80713	Squamous cell carcinoma, keratinising	84403	Cystadenocarcinoma
80723	Squamous cell carcinoma, large cell, nonkeratinising	84703	Mucinous cystadenocarcinoma
80733	Squamous cell carcinoma, small cell, nonkeratinising	84803	Mucinous adenocarcinoma
80743	Squamous cell carcinoma, spindle cell	84813	Mucin-producing adenocarcinoma
80753	Squamous cell carcinoma, adenoid	84903	Signet ring cell carcinoma
80763	Squamous cell carcinoma, microinvasive	85503	Acinar cell carcinoma
80783	Squamous cell carcinoma with horn formation	85603	Adenosquamous carcinoma
80823	Lymphoepithelial carcinoma	85703	Adenocarcinoma with squamous metaplasia
80833	Basaloid squamous cell carcinoma	85713	Adenocarcinoma with cartilaginous and osseous metaplasia
80843	Squamous cell carcinoma, clear cell type	85723	Adenocarcinoma with spindle cell metaplasia
81233	Basaloid carcinoma	85733	Adenocarcinoma with apocrine metaplasia
81403	Adenocarcinoma	85743	Adenocarcinoma with neuroendocrine differentiation
81443	Adenocarcinoma, intestinal type	85763	Hepatoid adenocarcinoma

ICD10-AM procedure code	Procedure description	
3843802	Pneumonectomy	
3844101	Radical pneumonectomy	
3843801	Lobectomy of lung	
3844100	Radical lobectomy	
3843800	Segmental resection of lung	
3844000	Wedge resection of lung	
3844001	Radical wedge resection of lung	
9016900	Endoscopic wedge resection of lung	



Prostate cancer

Site codes

ICD10-AM cod	e Description
C61	Prostate

Procedure codes

ICD10-AM procedure code	Procedure description
3721100	Radical prostatectomy with bladder neck reconstruction and pelvic lymphadenopathy
3721101	Laparoscopic radical prostatectomy with bladder neck reconstruction and pelvic lymphadenectomy
3721000	Radical prostatectomy with bladder neck reconstruction
3721001	Laparoscopic radical prostatectomy with bladder neck reconstruction
3720900	Radical prostatectomy
3720901	Laparoscopic radical prostatectomy
3720003	Suprapubic prostatectomy
3720004	Retropubic prostatectomy
3720005	Other open prostatectomy
3720306	Other closed prostatectomy
3722403	Endoscopic resection of prostate

Upper gastrointestinal cancer

Site codes

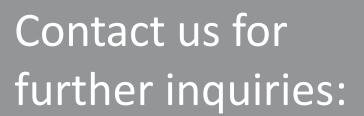
ICD10-AM code	Description
C15	Oesophagus
C16	Stomach

ICD10-AM procedure code	Procedure description
3051800	Partial distal gastrectomy with gastroduodenal anastomosis
3051801	Partial distal gastrectomy with gastrojejunal anastomosis
3051802	Partial proximal gastrectomy with oesophagogastric anastomosis
3052100	Total gastrectomy
3052300	Subtotal gastrectomy
3052400	Radical gastrectomy
3053500	Oesophagectomy by abdominal and transthoracic mobilisation, with thoracic oesophagogastric anastomosis
3053600	Oesophagectomy by abdominal and transthoracic mobilisation, with cervical oesophagogastric anastomosis
3053601	Oesophagectomy by abdominal and transthoracic mobilisation, with cervical oesophagostomy
3054100	Trans-hiatal oesophagectomy by abdominal and cervical mobilisation, with oesophagogastric anastomosis
3054101	Trans-hiatal oesophagectomy by abdominal and cervical mobilisation, with oesophagojejunal anastomosis
3054500	Oesophagectomy by abdominal and thoracic mobilisation with thoracic anastomosis, large intestine interposition and anastomosis
3054501	Oesophagectomy by abdominal and thoracic mobilisation with thoracic anastomosis using Roux-en-Y reconstruction
3055000	Oesophagectomy by abdominal and thoracic mobilisation with cervical anastomosis, large intestine interposition and anastomosis
3055001	Oesophagectomy by abdominal and thoracic mobilisation with cervical anastomosis using Roux-en-Y reconstruction
3055400	Oesophagectomy with reconstruction by free jejunal flap
3055401	Oesophagectomy with reconstruction by other free flap



References

- Cancer Australia, 2023. Australian Cancer Plan, Cancer Australia, Surry Hills, NSW. Australian Cancer Plan Cancer Australia
- 2. Queensland Government. *Queensland Cancer Quality Index: Indicators of safe quality cancer care. Cancer care in public and private hospital 2007-2021*. Queensland Health, Brisbane, 2023. queensland-cancer-quality-index-2007-2021.pdf.
- 3. Victorian Government. Department of Health and Human Services. *Victorian Cancer Quality Index 2008-2015*. October 2018. Victorian Cancer Quality Index 2008 2015.



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