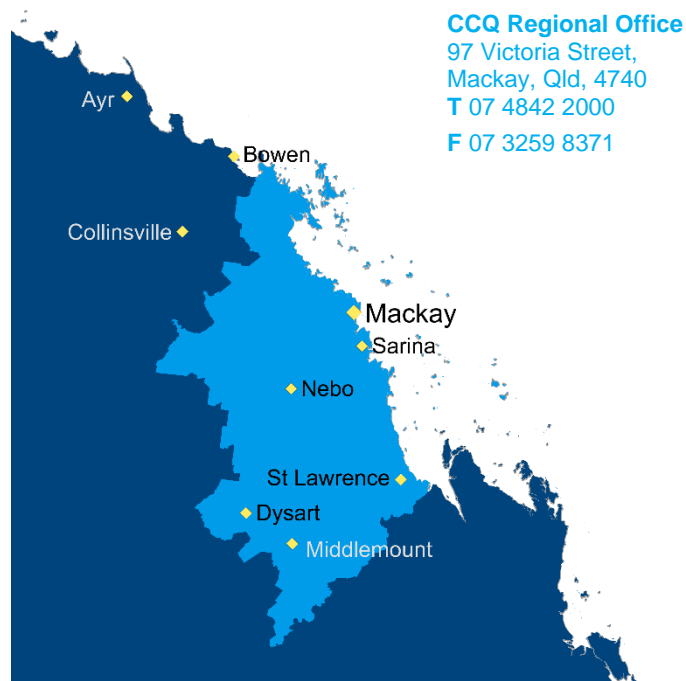


## Cancer in Mackay

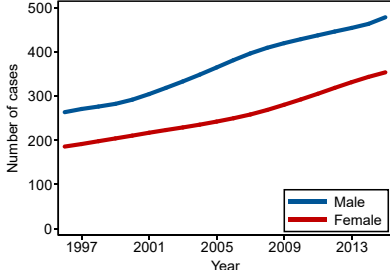
The CCQ region of Mackay covers almost 41,300 km<sup>2</sup>, or 2% of Queensland. In 2015 it had a population of almost 164,698, which was 3.5% of Queensland's total population.

The major population centre is Mackay, with significant industries of the region including sugar cane farming, tourism and mining.

The nearest radiation treatment centres are located in Mackay (opened in 2018), Rockhampton and Townsville. The CCQ Regional Office for the Mackay region is located in Mackay.



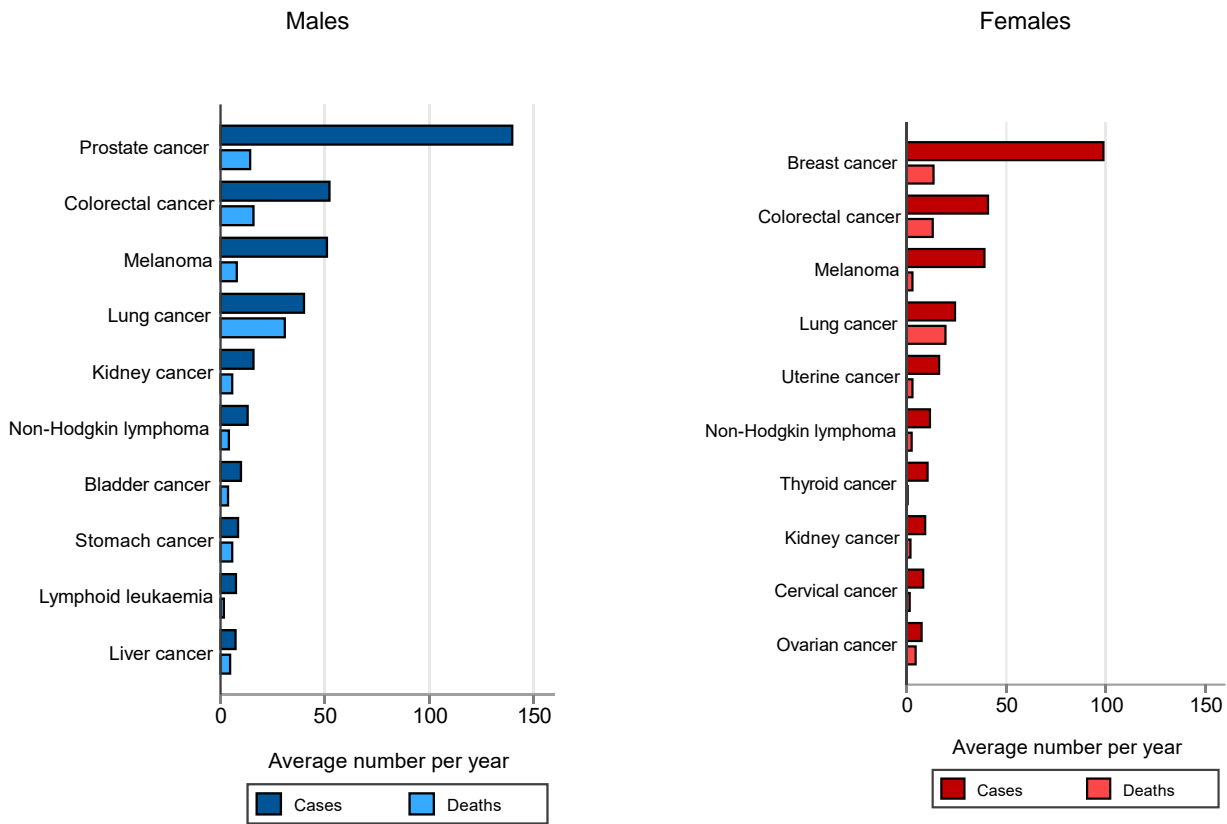
Region Characteristics (2015 data unless otherwise specified)	Mackay	Queensland
<b>Per cent of population who ...</b>		
... are female	47.3%	50.2%
... are aged 50 years and over	22.3%	22.8%
... are Indigenous	4.9%	4.4%
... speak another language at home (2011 data)	4.6%	10.0%
... live in remote areas	0.0%	2.6%
... live within 2 hours drive of radiation treatment	0.0%	89.2%
... live more than 6 hours drive from radiation treatment	0.0%	1.7%
... live in disadvantaged areas	2.7%	18.0%
... live in affluent areas	14.8%	19.8%

All Cancers*	Male	Female	Persons <sup>1</sup>	Number diagnosed by year
Number of new cases per year:	450	331	781	
Chance of diagnosis by age 80:	1 in 2.1	1 in 2.8	1 in 2.4	
Median age at diagnosis:	65 yrs	61 yrs	63 yrs	
Five-year relative survival:	72%	73%	73%	
Number of deaths per year:	137	98	235	
Percent deaths before age 80:	72%	67%	70%	

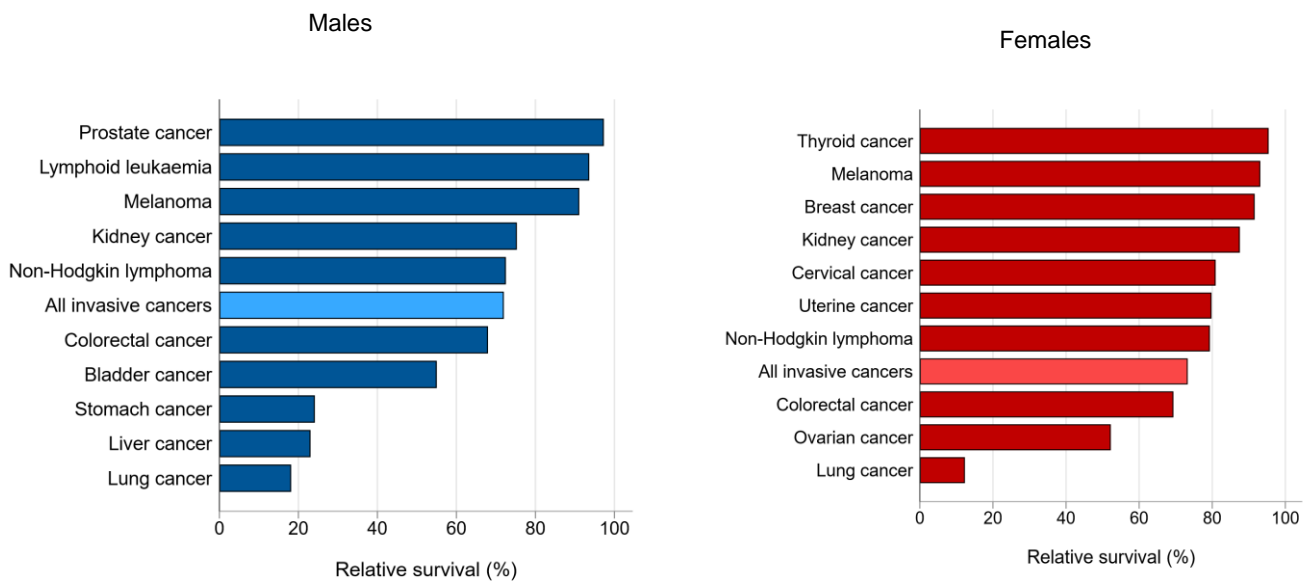
\*See notes on page 4 for more details

- Persons data may not equal the sum of males and females due to rounding.
- Cancers with a lifetime risk above 1 in 5 have the value provided to one decimal point.

**The 10 most common cancers diagnosed in Mackay by sex, 2011-2015**



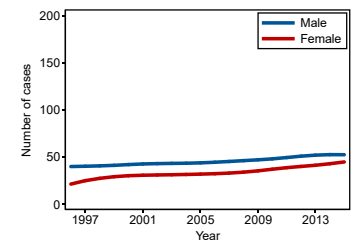
**Five-year relative survival in Mackay by type of cancer and sex, 2011-2015**



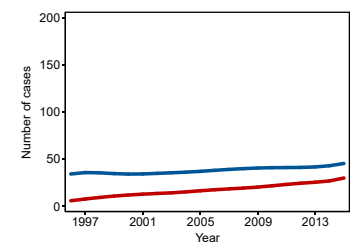
Note: Relative survival calculated using the period method, for persons aged 0-89 years at diagnosis. Data are for "at risk" cases in the period 2011-2015.

**Facts about the most common cancers**
**Colorectal Cancer**

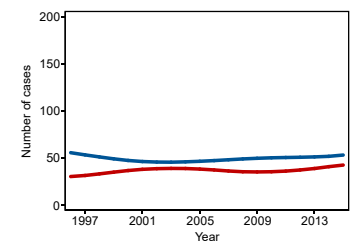

	Male	Female	Persons <sup>1</sup>
Number of new cases per year:	52	41	93
Chance of diagnosis by age 80:	1 in 15	1 in 19	1 in 16
Median age at diagnosis:	66 yrs	66 yrs	66 yrs
Five-year relative survival:	68%	69%	69%
Number of deaths per year:	16	13	29
Percent deaths before age 80:	70%	54%	63%


**Lung Cancer**

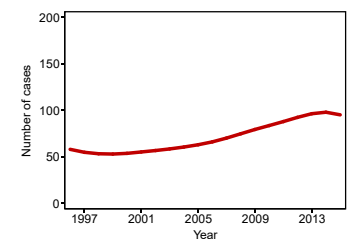

	Male	Female	Persons <sup>1</sup>
Number of new cases per year:	40	24	64
Chance of diagnosis by age 80:	1 in 17	1 in 27	1 in 21
Median age at diagnosis:	68 yrs	66 yrs	68 yrs
Five-year relative survival:	18%	12%	16%
Number of deaths per year:	31	19	50
Percent deaths before age 80:	79%	82%	80%


**Melanoma**

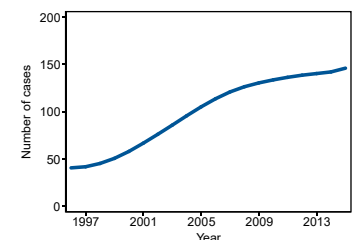

	Male	Female	Persons <sup>1</sup>
Number of new cases per year:	51	39	90
Chance of diagnosis by age 85:	1 in 16	1 in 23	1 in 19
Median age at diagnosis:	60 yrs	52 yrs	56 yrs
Five-year relative survival:	91%	93%	92%
Number of deaths per year:	8	**	**
Percent deaths before age 80:	79%	71%	77%


**Female Breast Cancer**


	Female
Number of new cases per year:	99
Chance of diagnosis by age 80:	1 in 8
Median age at diagnosis:	58 yrs
Five-year relative survival:	92%
Number of deaths per year:	13
Percent deaths before age 80:	78%


**Prostate Cancer**


	Male
Number of new cases per year:	140
Chance of diagnosis by age 80:	1 in 5
Median age at diagnosis:	65 yrs
Five-year relative survival:	97%
Number of deaths per year:	14
Percent deaths before age 80:	41%



See notes on page 4 for more details. Cancers with a lifetime risk above 1 in 5 have the value provided to one decimal point.

1. Persons data may not equal the sum of males and females due to rounding.

**More details on the top 10 cancers diagnosed**

Type of cancer	Incidence <sup>a</sup>		Five-year relative survival <sup>c</sup> (%)	Mortality <sup>a</sup>	
	Average number per year	Annual rate <sup>b</sup> (per 100,000)		Average number per year	Annual rate <sup>b</sup> (per 100,000)
<b>Males</b>					
All invasive cancers	450	600 [574,626]	72 [70,74]	137	209 [193,226]
Prostate cancer	140	180 [166,194]	97 [94,100]	14	26 [20,32]
Colorectal cancer	52	73 [64,83]	68 [60,75]	16	25 [19,31]
Melanoma	51	65 [57,73]	91 [85,95]	8	12 [8,16]
Lung cancer	40	57 [49,66]	18 [13,24]	31	46 [38,54]
Kidney cancer	16	20 [16,26]	75 [61,86]	6	8 [5,12]
Non-Hodgkin lymphoma	13	17 [13,21]	73 [59,83]	**	**
Bladder cancer	10	15 [11,20]	55 [37,72]	**	**
Stomach cancer	8	12 [8,16]	24 [11,41]	6	8 [5,12]
Lymphoid leukaemia	7	9 [6,13]	94 [76,103]	**	**
Liver cancer	7	9 [6,13]	23 [9,41]	**	**
<b>Females</b>					
All invasive cancers	331	456 [434,479]	73 [71,76]	98	142 [130,156]
Breast cancer	99	134 [122,146]	92 [88,95]	13	19 [15,24]
Colorectal cancer	41	58 [50,66]	69 [61,77]	13	19 [15,24]
Melanoma	39	53 [46,61]	93 [87,97]	**	**
Lung cancer	24	34 [28,41]	12 [7,19]	19	28 [23,34]
Uterine cancer	16	23 [18,28]	80 [67,89]	**	**
Non-Hodgkin lymphoma	12	16 [12,21]	79 [64,90]	**	**
Thyroid cancer	10	13 [10,18]	95 [84,100]	**	**
Kidney cancer	9	13 [9,17]	88 [67,99]	**	**
Cervical cancer	8	11 [8,15]	81 [64,91]	**	**
Ovarian cancer	7	10 [7,14]	52 [35,68]	**	**
<b>Persons<sup>d</sup></b>					
All invasive cancers	781	526 [510,544]	73 [71,74]	235	174 [164,184]
Prostate cancer	140	n.a.	97 [94,100]	14	n.a.
Female breast cancer	99	n.a.	92 [88,95]	13	n.a.
Colorectal cancer	93	65 [59,72]	69 [63,74]	29	22 [18,26]
Melanoma	90	59 [53,65]	92 [88,95]	**	**
Lung cancer	64	45 [40,50]	16 [12,20]	50	36 [32,41]
Kidney cancer	25	17 [14,20]	79 [68,88]	**	**
Non-Hodgkin lymphoma	25	17 [14,20]	75 [65,84]	6	5 [3,7]
Uterine cancer	16	n.a.	80 [67,89]	**	**
Thyroid cancer	15	9 [7,12]	97 [88,100]	**	**
Bladder cancer	13	10 [8,13]	55 [40,68]	**	**

**Notes:**

- Incidence and mortality data are averaged over the 5 year period from 2011-2015.
- Incidence and mortality rates have been directly age-standardised to the 2001 Australian Standard population, with 95% confidence intervals shown in brackets.
- Five-year relative survival calculated using the period method, for persons aged 0-89 years at diagnosis, with 95% confidence intervals shown in brackets. Estimates are for "at risk" cases in the period 2011-2015
- Persons data may not equal the sum of males and females due to rounding.

**Symbols:**

\*\* Incidence or mortality counts that averaged less than five per year (and the corresponding rates) have been suppressed to protect confidentiality. Counts and rates for persons have also been suppressed when necessary.

n.a. = not applicable (rates for persons not applicable for sex-specific cancers).

#### Methodology

1. All cancer data are sourced from the Queensland Cancer Register. The access and use of these data for reporting purposes is subject to strict confidentiality and privacy constraints.
2. Census and population data were obtained from the Australian Bureau of Statistics.
3. Population death data used in relative survival calculations were obtained from the Australian Coordinating Registry of Births, Deaths and Marriages.
4. All calculations were performed using Stata v14.2.
5. Trend lines for incidence numbers have been smoothed using the 'Lowess' method.
6. Remote areas are defined by the Remoteness Areas 2011 classification (combines Remote and Very Remote).
7. Travelling times to radiation treatment are calculated using spatial and road network software, and are approximate based on the shortest road distances at the recommended speed limits.
8. 'Affluent areas' are the 20% of most advantaged Statistical Areas 2 (SA2s) and 'Disadvantaged areas' are the 20% of most disadvantaged SA2s as defined by the 2011 SEIFA Index of Advantage and Disadvantage obtained from the Australian Bureau of Statistics.
9. Relative survival compares overall survival among those diagnosed with cancer to the expected survival of the general population, taking into account age, sex and year of diagnosis.

**Disclaimer:** The information in this publication should not be used as a substitute for advice from a properly qualified medical professional who can advise you about your own individual medical needs. It is not intended to constitute medical advice and is provided for general information purposes only. Information on cancer, including the diagnosis, treatment and prevention of cancer, is constantly being updated and revised by medical professionals and the research community.

Cancer Council Queensland does not warrant that the information in this publication is correct, up to date or complete nor that it is suitable for any particular purpose. Your use of the information in this publication is at your own risk. To the fullest extent permitted by law, Cancer Council Queensland does not accept any liability for any reliance placed on information that is not correct, complete or up to date, or that is not suited to the purpose for which it was relied upon. If any warranty or guarantee cannot by law be excluded, then, to the extent permitted by law, Cancer Council Queensland's liability for such warranty or guarantee is limited, at Cancer Council Queensland's option, to supplying the information or materials again or paying the cost of having the information or materials supplied again.