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Health Indicators 2025

Snapshot series IV: Cancer incidence, mortality and screening

Metro South Health and Logan, Redland and southern Brisbane LGAs

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Health indicators 2025: Snapshot series IV. Cancer incidence, mortality and screening

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Cancer indicators at a glance

MSH cancer mortality

- MSH average annual mortality age standardised rate (ASR) is significantly lower than Queensland for all cancer, lung, melanoma and other urological cancers
- Average annual mortality ASR significantly lower in females than males
- Six cancer type with highest annual deaths: lung, hepatobiliary, colorectal, haematological, prostate and female breast
- Lung cancer mortality rate trending downwards in males but steady in females
- Highest mortality ASRs in Browns Plains and Springwood – Kingston SA3s: both significantly higher than Qld rate

Logan LGA cancer mortality

- Logan LGA average annual mortality ASR significantly higher than Queensland for all cancer, lung and hepatobiliary cancers
- Average annual ASR significantly lower in females than males
- Six cancer type with highest annual deaths: lung, hepatobiliary, colorectal, haematological, prostate and female breast
- Lung cancer mortality rates complex but increased in males from 2017 to 2022 and in females from 2019 to 2022

MSH cancer incidence

- MSH average annual incidence ASR significantly lower than Qld for all cancer, prostate, melanoma, colorectal and head & neck cancers
- Average annual incidence ASR significantly lower in females than males
- Six cancer type with highest annual new cases: prostate, female breast, haematological, melanoma, colorectal and lung
- Incidence rates for melanoma and colorectal cancer trending downwards
- Incidence rate for prostate cancer trending upwards
- Highest incidence ASRs in Wynnum – Manly and Beaudesert SA3s but not significantly higher than Qld rate

Logan LGA cancer incidence

- Logan LGA average annual incidence ASR statistically similar to Qld but significantly higher than QLD for lung and hepatobiliary cancers
- Average annual incidence ASR significantly lower in females than males
- Six cancer type with highest annual new cases: prostate, female breast, haematological, lung, colorectal cancers and melanoma
- Incidence rates for melanoma and colorectal cancer trending downwards
- Incidence rate for prostate cancer trending upwards

MSH cancer screening

- 38% participation in National Bowel Cancer Screening Program (Qld = 39%)
- Participation higher in women and older residents
- 49% participation in BreastScreen Qld program (Qld = 51%)
- Participation highest in women 65-69 years (52%)
- 73% coverage in National Cervical Screening Program (Qld = 73%)
- Coverage highest in women 25-29 years (84%)
- Beenleigh and Browns Plains SA3s have lowest participation/coverage rates in the screening programs along with Brisbane Inner for BreastScreen Qld

Logan LGA cancer screening

- 32% participation in National Bowel Cancer Screening Program (Qld = 39%)
- Participation higher in women and older residents
- 46% participation in BreastScreen Qld program (Qld = 51%)
- Participation highest in women 65-69 years (51%)
- 65% coverage in National Cervical Screening Program (Qld = 73%)
- Coverage highest in women 25-29 years (74%)

Cancer indicators at a glance (cont'd)

Redland LGA cancer mortality

- Redland LGA average annual mortality ASR significantly lower than Queensland for all cancer and lung cancer
- Average annual mortality ASR significantly lower in females than males
- Six cancer type with highest annual deaths: lung, colorectal, hepatobiliary, haematological, prostate and female breast
- Lung cancer mortality rate trending downwards in males but no consistent trend in females

Southern Brisbane LGA cancer mortality

- Southern Brisbane LGA average annual mortality ASR significantly lower than Queensland for all cancer, lung, colorectal, other urological, melanoma and head & neck cancers
- Average annual mortality ASR significantly lower in females than males
- Six cancer type with highest annual deaths: lung, hepatobiliary, colorectal, haematological, prostate and female breast

Redland LGA cancer incidence

- Redland LGA average annual incidence ASR statistically similar to Qld but significantly higher than QLD for 'other invasive cancers'
- Average annual incidence ASR significantly lower in females than males
- Six cancer type with highest annual new cases: prostate, melanoma, female breast, haematological, colorectal and lung cancers
- Incidence rates for colorectal cancer trending downwards
- Incidence rate for prostate cancer trending upwards

Southern Brisbane LGA cancer incidence

- Southern Brisbane LGA average annual incidence ASR significantly lower than Qld for all cancer but significantly higher than QLD for endocrine cancer
- Average annual incidence ASR significantly lower in females than males
- Six cancer type with highest annual new cases: prostate, female breast, haematological, melanoma, colorectal and lung cancers
- Incidence rates for melanoma, colorectal and kidney cancers trending downwards
- Incidence rate for prostate cancer trending upwards

Redland LGA cancer screening

- 41% participation in National Bowel Cancer Screening Program (Qld = 39%)
- Participation higher in women and older residents
- 52% participation in BreastScreen Qld program (Qld = 51%)
- Participation highest in women 65-69 years (55%)
- 76% coverage in National Cervical Screening Program (Qld = 73%)
- Coverage highest in women 45-49 years (78%)

Southern Bris. LGA cancer screening

- 37% participation in National Bowel Cancer Screening Program (Qld = 39%)
- Participation higher in women and older residents
- 49% participation in BreastScreen Qld program (Qld = 51%)
- Participation highest in women 60-69 years (51%)
- 77% coverage in National Cervical Screening Program (Qld = 73%)
- Coverage highest in women 25-29 years (85%)

Table of Contents

Introduction

The Metro South Health (MSH) *Health indicators report series* is a compendium report compiled on an approximately biennial basis and covering a wide range of health indicators and population statistics for the residents of the MSH area. The report is produced as a series of separate snapshot reports each covering specific indicators/topic areas. The aims of the report series are to examine the current and multi-year trends in various aspects of health status of people living in the geographical area covered by MSH.

Separate data is presented for MSH and the sub-regions of Logan, Redland and southern Brisbane (south of the Brisbane River) local government areas (LGAs) owing to the substantial differences in population characteristics and therefore potentially the health outcomes of the residents of these areas.

MSH is one of 16 Hospital and Health Services (HHS) in Queensland and serves an estimated population of over 1.3 million people, representing 23 per cent of Queensland's population. The HHS's catchment spans 3,856 square kilometres and covers the area from the Brisbane River in the north to Redland City in the east, south to Logan City and the eastern portion of the Scenic Rim to the border of New South Wales. A detailed profile of the population of MSH can be found in the Snapshot Series Report[1].

This sub-report provides an overview of cancer incidence, mortality and screening indicators separately for the residents of MSH, Logan, Redland and southern Brisbane LGA areas. Incidence and mortality data are sourced from the Queensland Health Oncology analysis system (OASys)[2].

Cancer is a diverse group of diseases in which abnormal cells multiply out of control and can spread to other parts of the body (metastasise) through the blood and lymphatic systems. There are over 100 known different types of cancer and most are named after the organ or type of cell in which they start. In Queensland as at 2022, the one in every 1.8 men and one in every 2.3 women are expected to develop cancer by age 85[3]. In 2023 cancer (malignant + benign neoplasms) was the leading broad cause of death in Queensland and was responsible for 30% of deaths overall[4].

For most cancers, the causes are not fully understood. However factors that place individuals at a greater risk of particular cancers can be categorised as behavioural, biomedical and environmental risks[5]. Behavioural risk factors include those that are modifiable by changes in individual behaviour such as diet, tobacco smoking, alcohol consumption and physical inactivity[5]. Biomedical risk factors are bodily states that have an impact on an individual's risk of disease and include high blood plasma glucose (including diabetes) and overweight and obesity[5]. The risk of developing some cancers is associated with exposure to certain environmental substances, pollutants or energies. For example, the risk of developing skin cancer increases with increasing exposure to solar ultraviolet radiation[5].

A large proportion (42%) of the cancer burden in Australia is attributable to the joint effect of risk factors, and of these, tobacco use has the greatest impact, being responsible for one-fifth of the cancer burden in 2018[5].

Metro South Health

Geographical area

Metro South Health (MSH) is situated in the south-east corner of Queensland, covering 3,856 square kilometres from the Brisbane River in the north to Redland City in the east, and through Logan City and Scenic Rim Regional Council to the border of New South Wales in the south-west.

Under the Australian Statistical Geography Standard (ASGS) 2021 classification MSH is subdivided into 20 Statistical Area 3's (SA3s) and 68 SA2s which broadly represent suburbs or groupings of suburbs. It encompasses the local government areas (LGAs) of Brisbane (south of the Brisbane River only), Logan, Redland and part of Scenic Rim, specifically the Statistical Area Level 2 (SA2) of Beaudesert (Figure 1).

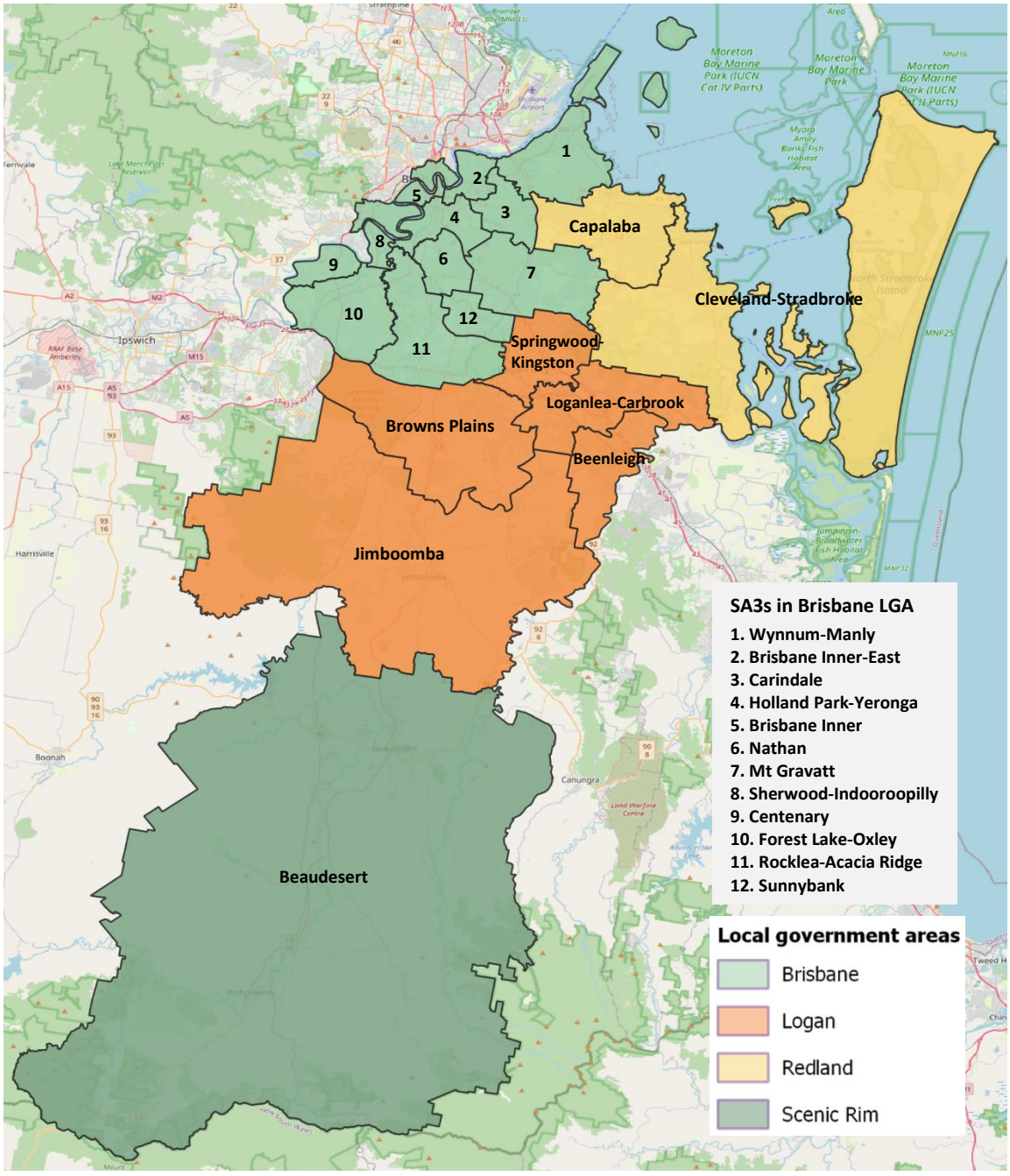


Figure 1: Map of Metro South Health showing local government areas within the MSH boundary and 2021 SA3 boundaries and names

MSH encompasses 20 Statistical Area 3s (SA3s). Five SA3s (Beenleigh, Browns Plains, Jimboomba, Loganlea – Carbrook and Springwood – Kingston) comprise the entirety of the Logan LGA. One SA3 (Beaudesert) is contained within but represents only the central part of the Scenic Rim LGA.

Ten Metro South SA3s (Brisbane Inner-East, Carindale, Centenary, Forest Lake – Oxley, Holland Park – Yeronga, Mt Gravatt, Nathan, Rocklea – Acacia Ridge, Sunnybank and Wynnum – Manly) are contained entirely within Brisbane LGA, south of the Brisbane River. A further two Brisbane LGA SA3s (Brisbane Inner and Sherwood – Indooroopilly) are partly contained within MSH but also include areas across the Brisbane River border with Metro North Hospital and Health Service (MNHHS). Where data are presented in this report for these two SA3s, only the data pertaining to the MSH residents of the SA3 (south of the Brisbane River) are included. This has the effect that the population sizes reported for these part-SA3s are considerably smaller than for other SA3s.

The final two SA3s within MSH (Capalaba and Cleveland – Stradbroke) are largely contained within Redland LGA. Capalaba SA3 includes the SA2 of Gumdale which is within Brisbane LGA.

All cancers

Mortality

On average there were 1,876 deaths per year from all cancers among MSH residents in 2018 to 2022. Six types of cancer (lung, colorectal, hepatobiliary, haematological, prostate and female breast) together accounted for over two thirds (69%) of all cancer deaths in MSH in this period (Table 1). Lung cancer alone accounted for over one in five (21%) cancer deaths in MSH in this period.

The age standardised mortality rates of lung, melanoma and other urological (non-prostate) cancers were significantly lower in MSH than in Queensland over this reporting period (Table 1). The mortality rates of all other major cancer types in MSH were statistically similar to the Queensland rates.

In 2018 to 2022, the average annual age standardised mortality rate for all cancers (combined) in MSH (148 new cases per 100,000 persons) was significantly lower than the Queensland rate (156 new cases per 100,000 persons) (Table 1). The current MSH mortality rate was significantly lower than the rate reported for 2011 to 2015 of 168 new cases per 100,000 persons[6].

In 2018 to 2022, the average annual age standardised mortality rate for all cancers (combined) in MSH males was significantly lower than the Queensland male rate, while the rates for females were not significantly different (Table 2). The MSH and Queensland mortality rates in males were significantly and substantially higher than the corresponding rates in females (Table 2).

Table 1: Mortality numbers and age standardised mortality rates by site of cancer, Metro South Health and Queensland, 2018 to 2022[2]

Site	Number of deaths, 2018-2022		Average annual age standardised rate per 100,000 persons (95% confidence interval)		Statistically significant difference
	MSH	QLD	MSH	QLD	MSH–QLD*
Lung	1,975	10,639	30.9 (29.5 – 32.3)	33.4 (32.7 – 34.0)	↓
Hepatobiliary	1,165	5,693	18.2 (17.2 – 19.3)	17.9 (17.5 – 18.4)	—
Colorectal	1,087	5,682	17.1 (16.1 – 18.1)	18.1 (17.6 – 18.6)	—
Haematological	961	5,143	15.2 (14.3 – 16.2)	16.3 (15.8 – 16.7)	—
Prostate	682	3,730	24.8 (23.0 – 26.7)	26.1 (25.2 – 26.9)	—
Breast (female)	605	3,023	17.9 (16.5 – 19.4)	18.7 (18.1 – 19.4)	—
Upper gastrointestinal	502	2,736	7.9 (7.2 – 8.6)	8.6 (8.3 – 9.0)	—
Gynaecological	454	2,121	13.3 (12.1 – 14.5)	13.0 (12.4 – 13.5)	—
Other urological	439	2,600	6.9 (6.3 – 7.6)	8.2 (7.9 – 8.5)	↓
Melanoma	311	1,842	4.9 (4.3 – 5.4)	5.9 (5.6 – 6.2)	↓
CNS and Brain	310	1,613	5.0 (4.4 – 5.6)	5.3 (5.1 – 5.6)	—
Head and neck	252	1,484	3.9 (3.5 – 4.4)	4.7 (4.4 – 4.9)	—
Bone and soft tissue	118	523	1.9 (1.6 – 2.3)	1.8 (1.6 – 1.9)	—
Endocrine	40	206	Not calculated#	0.7 (0.6 – 0.8)	Not calculated#
Breast (male)	6	22	Not calculated#	Not calculated#	Not calculated#
Other invasive cancers	84	443	1.3 (1.0 – 1.6)	1.4 (1.3 – 1.5)	—
Unknown primary	390	2,080	6.0 (5.5 – 6.7)	6.5 (6.2 – 6.8)	—
TOTAL	**9,381**	**49,580**	**147.5 (144.5 – 150.5)**	**157.2 (155.8 – 158.5)**	↓

* ↑ MSH statistically significantly higher than Queensland; ↓ MSH statistically significantly lower than Queensland; — no statistically significant difference between MSH and Queensland

I# Rate not calculated because total number of deaths, 2018 to 2022, less than 50

Source: Queensland Health. Oncology Analysis System (OASys). Queensland Cancer Control Analysis Team[2]

Table 2: All cancer average annual age specific and all-ages age-standardised mortality rates by age group and sex, MSH and Queensland, 2018-2022[2]

Age group (years)	Average annual age specific and all-ages age-standardised mortality rate (95% confidence interval)			
	Male		Female	
	MSH rate/100,000	QLD rate/100,000	MSH rate/100,000	QLD rate/100,000
0 – 14	3.5	2.2	2.3	1.6
15 – 24	3.6	3.8	1.8	1.8
25 – 39	10.4	10.1	13.2	12.5
40 – 64	118.8	142.8	98.3	114.9
65+	1,052.4	1,126.1	725.9	740.7
All ages	**179.1 (174.3 – 184.1)**	**192.6 (190.4 – 194.9)**	**121.9 (118.3 – 125.6)**	**127.3 (125.6 – 129.0)**

Source: Queensland Health. Oncology Analysis System (OASys). Queensland Cancer Control Analysis Team[2]

The statistical area 3s (SA3s) with the highest all persons mortality rates were Browns Plains and Springwood – Kingston which both had rates significantly higher than the Queensland rate (Appendix 1: Table 1). There were eight SA3s with all persons rates significantly lower than the Queensland rate: Sunnybank, Sherwood – Indooroopilly, Centenary, Mt Gravatt, Nathan, Holland Park – Yeronga, Carindale and Cleveland – Stradbroke (Appendix 1: Table 1).

Incidence

On average there were 6,540 new (incident) cases of cancer per year among MSH residents in the five-year period 2018 to 2022. The six most common types of newly diagnosed cancer in MSH (prostate, female breast, melanoma, haematological, colorectal and lung; Table 3) together accounted for 71% of all new cases.

For this period, the average annual age standardised incidence rate for all cancers (combined) in MSH (516 new cases per 100,000 persons) was significantly lower than the Queensland rate (544 new cases per 100,000 persons) (Table 3). The current MSH rate was the same as the rate reported for 2011 to 2015[6].

The incidence rates of prostate cancer, colorectal cancer and melanoma (two of the three most common newly diagnosed cancers in both MSH and Queensland) along with head and neck cancer were significantly lower in MSH than in Queensland in the current reported period (Table 3). The only major cancer with a significantly higher age standardised incidence rate in MSH compared with Queensland was endocrine cancer (Table 3).

In 2018 to 2022, the average annual age standardised incidence rate for all cancers (combined) in MSH males was significantly lower than the Queensland male rate. The rates for females were similarly significantly different (Table 4). The MSH and Queensland incidence rates in males were significantly and substantially higher than the corresponding rates in females (Table 4).

Table 3: Newly diagnosed cancer cases (incidence) and age standardised incidence rates by site of cancer, Metro South Health and Queensland, 2018 to 2022[2]

Site	Number of new cases, 2018-2022		Average annual age standardised rate per 100,000 persons (95% confidence interval)		Statistically significant difference
	MSH	QLD	MSH	QLD	MSH–QLD*
Prostate	4,949	27,645	159.7 (155.3 – 164.2)	177.0 (175.0 – 179.1)	↓
Breast (female only)	4,149	18,991	128.0 (124.2 – 132.0)	125.5 (123.8 – 127.3)	–
Haematological	3,798	18,779	60.0 (58.1 – 61.9)	61.5 (60.6 – 62.4)	–
Melanoma	3,773	21,409	60.0 (58.1 – 61.9)	72.2 (71.3 – 73.2)	↓
Colorectal	3,240	16,632	51.3 (49.6 – 53.1)	54.7 (53.9 – 55.6)	↓
Lung	3,184	15,929	49.6 (47.9 – 51.4)	50.1 (49.3 – 50.9)	–
Sunnybank, Other urological	1,763	9,013	28.0 (26.7 – 29.4)	30.0 (29.3 – 30.6)	–
Hepatobiliary	1,596	7,460	25.0 (23.8 – 26.2)	23.7 (23.2 – 24.2)	–
Gynaecological	1,460	6,739	44.5 (42.3 – 46.9)	44.4 (43.4 – 45.5)	–
Upper gastrointestinal	1,062	5,264	16.7 (15.7 – 17.8)	16.9 (16.5 – 17.4)	–
Endocrine	1,050	4,323	17.2 (16.2 – 18.2)	15.6 (15.1 – 16.1)	↑
Head and neck	1,007	5,533	15.8 (14.9 – 16.8)	18.1 (17.6 – 18.6)	↓
CNS and Brain	435	2,064	7.0 (6.4 – 7.7)	7.1 (6.8 – 7.5)	–
Bone and soft tissue	287	1,271	4.7 (4.1 – 5.2)	4.5 (4.2 – 4.7)	–
Breast (male only)	36	172	Not calculated#	1.1 (1.0 – 1.3)	Not calculated#
Other invasive cancers	405	2,171	6.4 (5.8 – 7.0)	7.0 (6.7 – 7.3)	–
Unknown primary	506	2,776	7.9 (7.2 – 8.6)	8.8 (8.5 – 9.1)	–
TOTAL	**32,700**	**166,171**	**515.5 (510.0 – 521.1)**	**543.7 (541.1 – 546.3)**	↓

* ↑ MSH statistically significantly higher than Queensland; ↓ MSH statistically significantly lower than Queensland; – no statistically significant difference between MSH and Queensland

\# Rate not calculated because total number of new cases, 2018 to 2022, less than 50

Source: Queensland Health. Oncology Analysis System (OASys). Queensland Cancer Control Analysis Team[2]

Table 4: All cancer average annual age specific and all-ages age-standardised incidence rates by age group and sex, MSH and Queensland, 2018-2022[2]

Age group (years)	Average annual age specific and all-ages age-standardised incidence rate (95% confidence interval)			
	Male		Female	
	MSH rate/100,000	QLD rate/100,000	MSH rate/100,000	QLD rate/100,000
0 – 14	16.7	17.7	16.0	15.0
15 – 24	32.5	34.2	32.0	35.4
25 – 39	87.4	98.5	148.3	153.0
40 – 64	663.1	749.3	644.7	677.0
65+	2,912.6	3,077.9	1,748.3	1,800.3
All ages	**592.7 (584.0 – 601.5)**	**631.5 (627.5 – 635.6)**	**451.4 (444.2 – 458.6)**	**465.3 (461.9 – 468.7)**

Source: Queensland Health. Oncology Analysis System (OASys). Queensland Cancer Control Analysis Team[2]

The SA3s with the highest all persons incidence rates were Wynnum – Manly and Beaudesert but neither of these were significantly higher than the Queensland rate (Appendix 1: Table 2). There were eight SA3s with all persons incidence rates significantly lower than the Queensland rate: Sunnybank, Rocklea – Acacia Ridge, Mt Gravatt, Brisbane Inner, Forest Lake - Oxley, Carindale, Centenary and Holland Park - Yeronga (Appendix 1: Table 2).

Prostate cancer

Prostate cancer is the result of abnormal cell growth in the prostate, a gland in the male reproductive system. It can be a slow growing cancer, and the majority of men with low grade prostate cancer live for many years without symptoms. However high grade prostate cancer can spread quickly and can be life threatening[7].

Prostate cancer is the most commonly diagnosed cancer in Australia (excluding non-melanoma skin cancers)[8,9]. One in five men in Queensland are at risk of developing prostate cancer by the age of 85. The risk increases with age, with at least 83% of Australian cases diagnosed in men aged of 60 years and over[7,9].

In Australia in 2022, there were 3,799 deaths caused by prostate cancer[8]. Age standardised mortality rates have decreased over time from a peak of 44 deaths per 100,000 males in 1994 to 24 deaths per 100,000 males in 2022[8]. This decline is expected to continue[8].

The Australian age standardised incidence of prostate cancer increased from 80 new cases per 100,000 males in 1982 to 198 per 100,000 in 2009, largely due to increases in the numbers of men presenting for testing[8]. Since peaking in 2009, rates decreased to 152 per 100,000 in 2020[8].

Mortality

There was an average of 136 deaths per year from prostate cancer among MSH males in the five years from 2018 to 2022. This represented 7.3% of all cancer deaths in MSH in this period. There was no significant difference in age standardised prostate cancer mortality rate between MSH and Queensland in this period (Table 1, page 10).

Incidence

On average there were 990 new cases of prostate cancer per year among MSH males in the five years from 2018 to 2022. This represented 15% of all new cases of cancer in MSH over this period, making prostate cancer the most common newly diagnosed cancer in MSH.

In 2018 to 2022, the MSH average annual prostate cancer age standardised incidence rate of 140 new cases per 100,000 males was significantly lower than the Queensland rate of 160 new cases per 100,000 males (Table 3, page 11). The current MSH rate statistically similar to that reported for 2011 to 2015 of 146 new cases (95% CI: 142 – 151) per 100,000 males[6].

Annual age standardised rates of prostate cancer trended slightly downwards in both MSH and Queensland until 2016 after which they both trended upwards, with a substantial increase reported in 2022 (Figure 2).

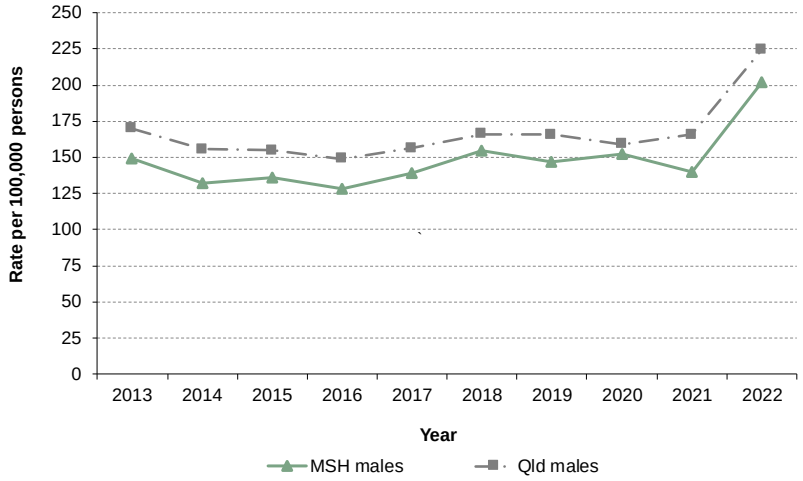


Figure 2: Prostate cancer age standardised incidence rates, Metro South Health and Queensland, 2013 to 2022

In 2018 to 2022, prostate cancer incidence rates were negligible in men under the age of 35 years. From the age of about 45 years rates increased sharply, peaking in the 65 to 74 years age group before declining in older age groups (Figure 3).

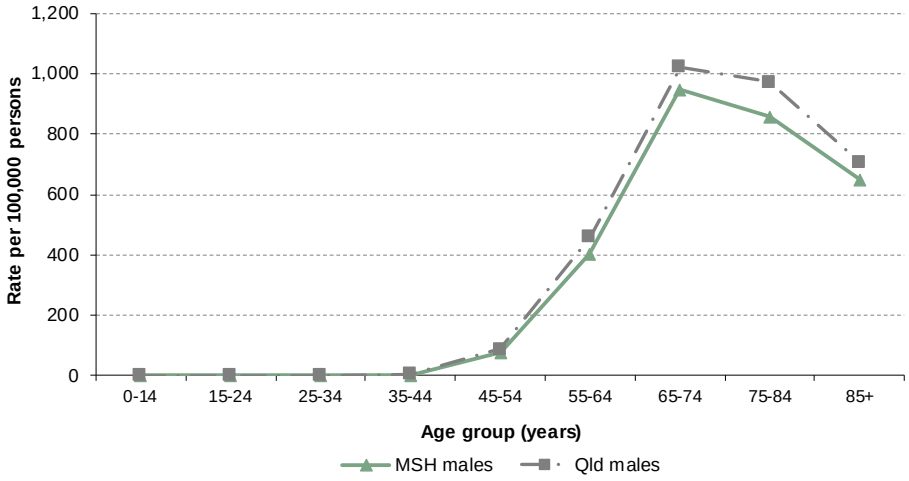


Figure 3: Prostate cancer age specific incidence rates, Metro South Health and Queensland, 2018 to 2022

Melanoma

Melanoma arises in cells in the skin called melanocytes. Melanocytes produce melanin that gives colour to the skin. Skin cancer (both melanoma and non-melanoma skin cancers) accounts for the largest number of cancers diagnosed in Australia every year[10]. Queensland has the highest age standardised mortality rates for melanoma in Australia[10].

In Australia in 2022, there were 1,411 deaths caused by melanoma[8]. After remaining relatively consistent for the 30 years to 2015, Australian melanoma mortality rates dropped slightly from 2016 onwards[8].

The Australian age standardised incidence rate for melanoma doubled between 1982 and 2017 to 54 cases per 100,000 persons but fell to 49 new cases per 100,000 persons in 2020[8]. Australian rates increased in all age groups except those aged less than 40 years. Incidence rates in persons aged 20 to 39 years peaked in the late 1980s and in the late 1990s in persons aged under 20 years[8].

Mortality

On average there were 62 deaths per year from melanoma among MSH residents in the five years from 2018 to 2022. This represented 3.3% of all cancer deaths in MSH in this period. The age standardised melanoma mortality rate in MSH (4.9 deaths per 100,000 persons) was significantly lower than the Queensland rate (5.9 deaths per 100,000) over this period (Table 1, page 10).

Incidence

On average there were 755 new cases of melanoma per year among MSH residents in the five years from 2018 to 2022. This represented almost 12% of all new cases of cancer in MSH in this period, making melanoma the fourth most common newly diagnosed cancer in MSH.

In 2018 to 2022, the MSH average annual melanoma age standardised incidence rate of 60 new cases per 100,000 persons was significantly lower than the Queensland rate of 72 new cases per 100,000 persons (Table 3, page 11). The current MSH rate was significantly lower than that reported for 2011 to 2015 of 66 new cases (95% CI: 64 – 68) per 100,000 males[6].

Between 2010 and 2019 annual melanoma age standardised incidence rates in MSH trended downwards from 70 to fewer than 60 new cases per 100,000 persons (Figure 4). This same pattern was recorded in Queensland (Figure 4) where the reduction was from approaching 80 to fewer than 70 new cases per 100,000 persons over this period.

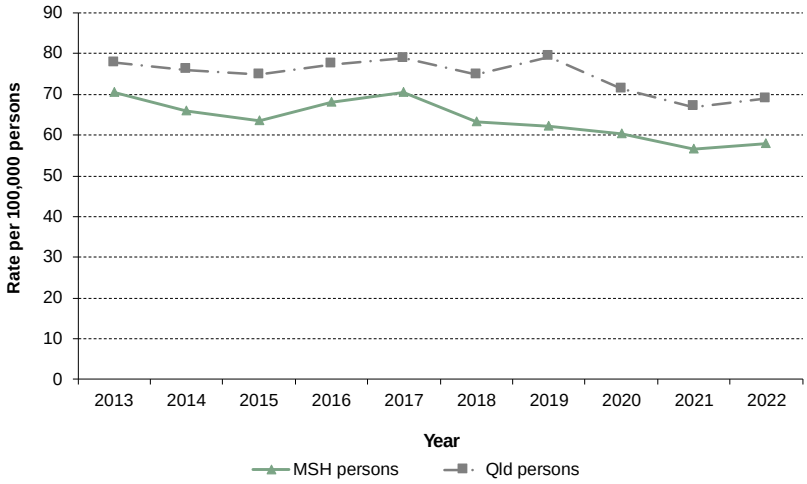


Figure 4: Melanoma age standardised incidence rates, Metro South Health and Queensland, 2013 to 2022

In 2018 to 2022, melanoma incidence rates were negligible in people under the age of 15 years, but then increased with increasing age, to a peak in the 85 years and over age group (Figure 5).

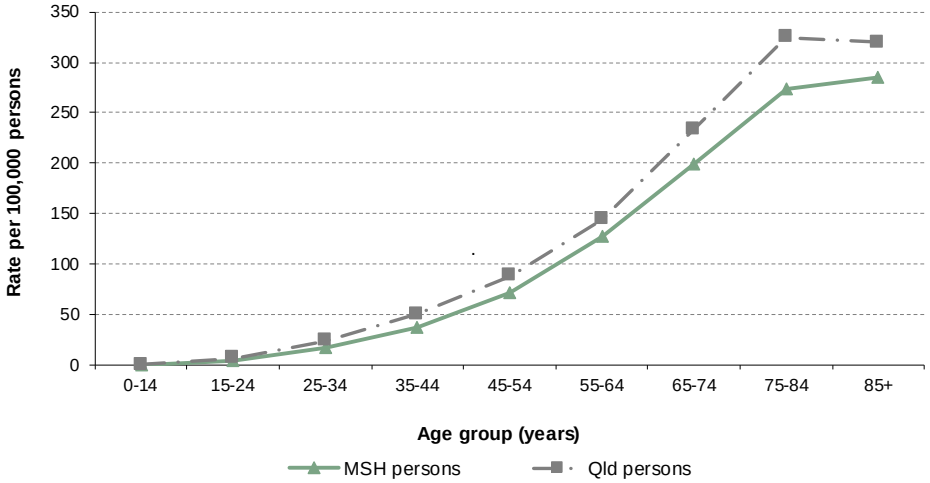


Figure 5: Melanoma age specific incidence rates, Metro South Health and Queensland, 2018 – 2022

Breast cancer

Breast cancer is a major cause of illness and death for Australian women. Although much less common, males can also develop the disease[11]. Not all breast cancer is invasive, and these benign tumours are not life-threatening. However when abnormal cells in the breast tissue multiply and form invasive tumours, these tumours can spread to other parts of the body through the lymphatic or vascular systems and if not treated the cancer may be fatal[11].

In Australia in 2019, there were 3,169 deaths from breast cancer (29 males and 3,140 females)[8]. In females the age standardised mortality rate was 18 per 100,000 females[8]. While counts of deaths have increased, mortality rates for breast cancer in Australia have steadily declined since the mid-1990s[8].

Between 1982 and 2020 age standardised breast cancer incidence rates in Australia increased from 81 to 119 new cases per 100,000 females[8]. The increase in incidence rate was due in part to the introduction of the national breast cancer screening program[12]. Age specific incidence rates increased with increasing age, reaching a peak in the 70 to 74 years age group at 419 new cases per 100,000 females in 2020[8].

Mortality

On average there were 121 deaths per year from breast cancer among MSH females in the five years from 2018 to 2022. This represented 6.4% of all cancer deaths in MSH in this period. The majority of these deaths (87%) were in the 50 years and over age group, with women aged 55 to 79 years accounting for over half (54%) of all breast cancer deaths. In this period there was around one death per year among MSH males.

There was no significant difference in average annual female breast cancer age-standardised mortality rate between MSH and Queensland over the 2018 to 2022 period (Table 1, page 10).

Incidence

On average there were 830 new cases of breast cancer per year among MSH women in the five-years from 2018 to 2022. This represented almost 13% of all new MSH cases of cancer in this period making breast the second most common newly diagnosed cancer in MSH. By comparison, on average over this period there were seven new cases of breast cancer per year among MSH men.

In 2018 to 2022, the MSH average annual female breast cancer age standardised incidence rate of 128 new cases per 100,000 females was statistically similar to the Queensland rate (Table 3, page 11). The current MSH rate was very similar to that reported for 2011 to 2015 of 127 new cases (95% CI: 123 – 132) per 100,000 females[6].

Between 2013 and 2022 annual female breast cancer incidence rates in both MSH and Queensland were relatively steady with the rate in MSH almost always between 120 and 130 new cases per 100,000 persons (Figure 6).

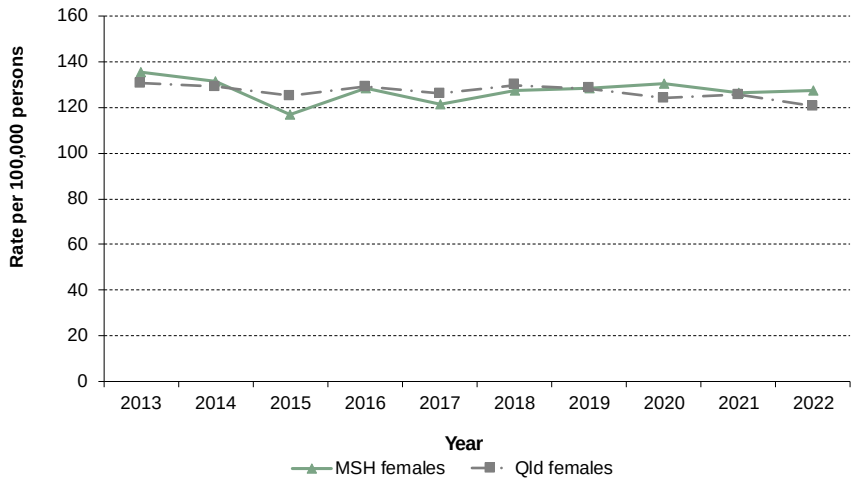


Figure 6: Breast cancer age standardised incidence rates, Metro South Health and Queensland, 2013 to 2022

In 2018 to 2022, breast cancer incidence rates were negligible in women under the age of 25 years. Incidence rates increased with increasing age, but declined in women aged 75 years and over (Figure 7).

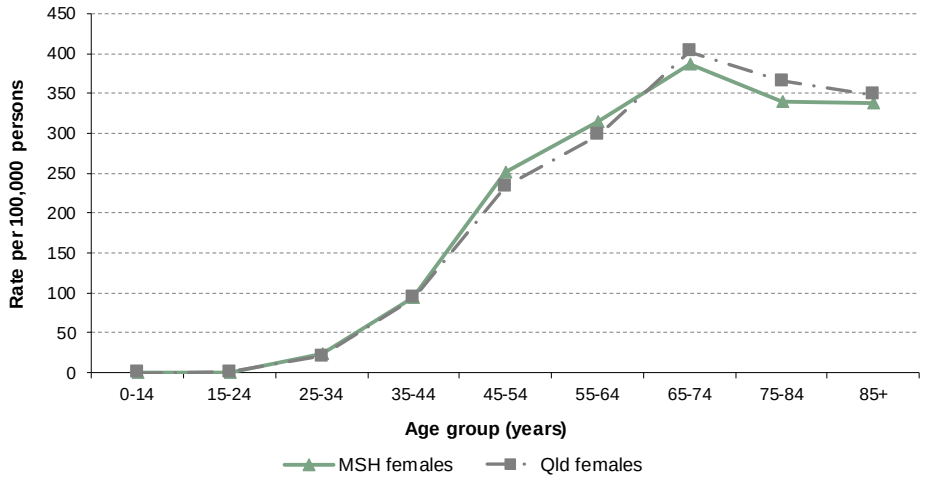


Figure 7: Breast cancer age specific incidence rates, Metro South Health and Queensland, 2018 to 2022*

Colorectal cancer

Colorectal (bowel) cancer begins in the mucosa or inner lining of the colon or rectum. It usually develops from a small benign growth called an adenoma (polyp). Polyps usually remain benign but some can become malignant and spread to other parts of the body[12]. Bowel cancer is the third most common cancer in Australia and is most common in people over 50 years but can occur at any age[12].

In Australia in 2019, there were 5,276 deaths caused by colorectal cancer[8]. Age standardised mortality rates for colorectal cancer peaked at 33 deaths per 100,000 persons in 1985 and since that time have more than halved to 15.3 deaths per 100,000 in 2022[8].

The number of new cases of colorectal cancer in Australia per year doubled between 1982 and 2007 from almost 7,000 to around 14,500 cases. From 2007 to 2020 the number of new cases remained between 14,500 and 15,500 per year, with the age standardised incidence rate trending down from 65 to 47 new cases per 100,000 persons[8].

Mortality

On average there were 217 deaths per year from colorectal cancer among MSH residents in the five-years from 2018 to 2022. This represented 12% of all cancer deaths in MSH in this period. The MSH age standardised colorectal cancer mortality rate was statistically similar to the Queensland rate over this period (Table 1, page 10).

Incidence

On average there were 648 new cases of colorectal cancer per year among MSH residents in the five years from 2018 to 2022. This represented 10% of all new cases of cancer in MSH in this period.

In 2018 to 2022, the MSH average annual colorectal cancer age standardised incidence rate of 51 new cases per 100,000 persons was statistically similar to the Queensland rate (Table 3, page 11). The current MSH rate was significantly lower than that reported for 2011 to 2015 of 58 new cases (95% CI: 56 – 60) per 100,000 persons[4].

Between 2013 and 2022 colorectal cancer incidence rates in both MSH and Queensland trended downwards from around 60 to fewer than 50 new cases per 100,000 persons in MSH (Figure 8).

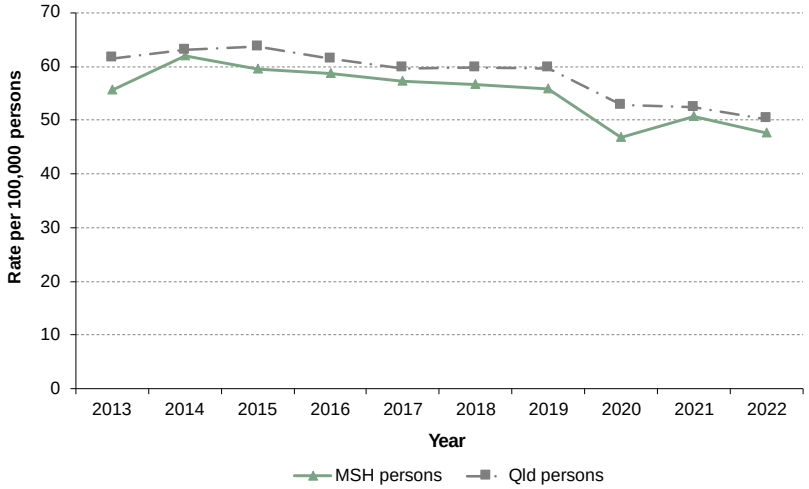


Figure 8: Colorectal cancer age standardised incidence rates, Metro South Health and Queensland, 2013 to 2022

In 2018 to 2022, colorectal cancer incidence rates were negligible in people under the age of 15 years. Rates increased with increasing age, to a peak in the 85 years and over age group (Figure 9).

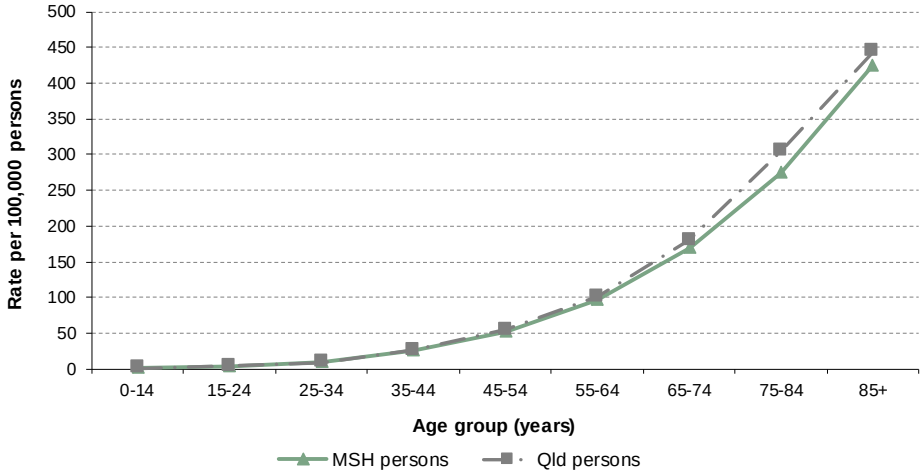


Figure 9: Colorectal cancer age specific incidence rates, Metro South Health and Queensland, 2018 to 2022

Haematological cancer

Haematological cancers – the main ones being lymphoma, leukaemia and myeloma – are cancers arising from abnormal blood, bone marrow or lymph node cells[13]. Unlike most other forms of cancer, cancers of the blood do not form a solid tumour. Lymphomas affect the lymphatic system, leukaemias are cancers of the white blood cells which begin in the bone marrow and myeloma is a cancer that develops from plasma cells[13]. Lymphomas are the most common form of haematological cancer in Australia with around 90% being non-Hodgkin lymphomas[14].

In Australia in 2022 there were 1,782 deaths caused by non-Hodgkin lymphoma and 74 deaths caused by Hodgkin lymphoma[8]. Australian age standardised mortality rates for non-Hodgkin lymphoma decreased from a peak of 8.9 per 100,000 persons in 1997 to 5.1 per 100,000 in 2022[8].

In 2020, 6,948 Australians were diagnosed with lymphoma (6,184 cases of non-Hodgkin lymphoma and 764 cases of Hodgkin lymphoma)[8]. Between 1982 and 2020 the age standardised incidence rate of non-Hodgkin lymphoma increased from 11 to 20 new cases per 100,000 persons[8].

In Australia in 2022 there were 2,085 deaths due to all types of leukaemia[8]. The type responsible for the highest number (1,157 deaths = 55%) was acute myeloid leukaemia[8]. Australian age standardised mortality rates for leukaemia trended downwards from a peak of 8.3 deaths per 100,000 persons in 1980 to 6.1 per 100,000 in 2022[8].

In 2017, the majority of new leukaemia cases in Australia were chronic lymphocytic leukaemia (1,861 cases) and acute myeloid leukaemia (1,165 cases)[8]. Between 1982 and 2020 the age standardised incidence rate for leukaemia remained between 12.8 and 15.6 new cases per 100,000 persons[8].

In 2022 1,107 deaths were recorded from multiple myeloma in Australia[8]. Multiple myeloma age standardised mortality rates increased from 1.9 deaths per 100,000 persons in 1972 to a peak of 3.8 deaths per 100,000 in 1994. Between 1994 and 2019 rates trended generally downwards, reaching 3.2 deaths per 100,000 in 2022[8]. The Australian age standardised incidence rate for multiple myeloma increased from 4.6 per 100,000 persons in 1982 to 7.0 per 100,000 in 2020[8].

Mortality

On average there were 192 deaths per year from haematological cancer among MSH residents in the five years from 2018 to 2022. This represented just over 10% of all cancer deaths in MSH in this period.

The age standardised haematological cancer mortality rate in MSH was statistically similar to the Queensland rate over this period (Table 1, page 10).

Incidence

There was an average of 760 new cases per year of haematological cancer among MSH residents in the five years from 2018 to 2022. This represented almost 12% of all new cases of cancer in MSH in this period.

In 2018 to 2022, the MSH average annual haematological cancer age standardised incidence rate of 60 new cases per 100,000 persons was statistically similar to the Queensland rate (Table 3, page 11). The current MSH rate was significantly higher than that reported for 2011 to 2015 of 56 new cases (95% CI: 54 – 58) per 100,000 persons[6].

Between 2013 and 2022 haematological cancer rates in both MSH and Queensland showed no consistent trend, remaining between 55 to 65 new cases per 100,000 persons (Figure 10).

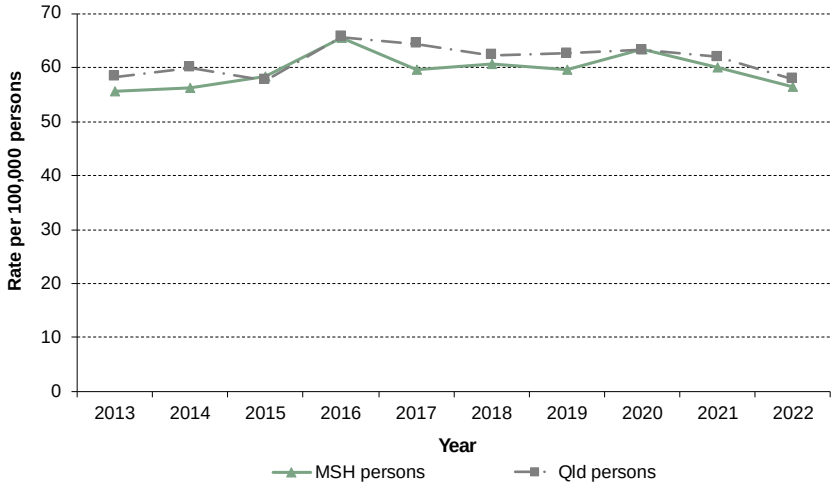


Figure 10: Haematological cancer age standardised incidence rates, Metro South Health and Queensland, 2013 to 2022

In 2018 to 2022, haematological cancer incidence rates were low for people under the age of 35 years. Rates increased with age, with the sharpest rises occurring between the ages of approximately 64 and 84 years (Figure 11).

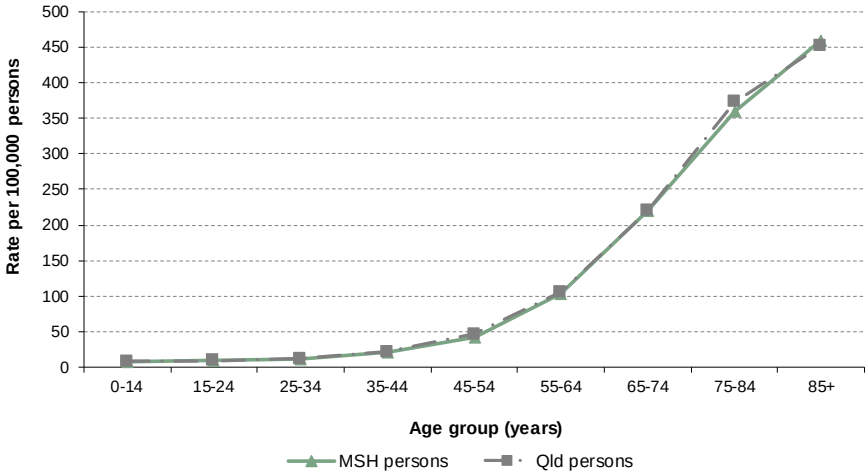


Figure 11: Haematological cancer age specific incidence rates, Metro South Health and Queensland, 2018 to 2022

Lung cancer

Lung cancer is a malignant tumour starting in the tissues of one or both lungs and is the leading cause of cancer death in Australia. The prognosis for those diagnosed with lung cancer is poor and has improved only marginally over the past three decades. Tobacco smoking is a major cause of lung cancer, and tobacco control is essential for effective lung cancer prevention[15].

In Australia in 2022, there were 9,048 deaths from lung cancer and it accounted for more deaths than any other cancer[8]. Age standardised lung cancer mortality rates decreased from a peak in 1989 of 43 deaths per 100,000 persons to 27 deaths per 100,000 in 2022[8].

Between 1982 and 2020, the age standardised incidence rate of lung cancer among Australian males decreased by 45% from 85 to 47 cases per 100,000 persons[8]. However, over the same period the age

standardised incidence rate among females doubled from 18 to 37 cases per 100,000 persons[8]. The difference in pattern between the sexes reflects historical differences in smoking behaviour[15].The occurrence of lung cancer is strongly related to age, with the majority of new cancers (93% in 2020) diagnosed in people aged 55 years and older [8,15].

Mortality

On average there were 395 deaths per year from lung cancer among MSH residents in the five years from 2018 to 2022. This represented 21% of all cancer deaths in MSH in this period, with males accounting for 58% of these deaths. The age standardised lung cancer mortality rate in MSH was significantly lower than the Queensland rate over this period (Table 1, page 10).

Between 2002 and 2022 lung cancer annual mortality rates in MSH fell in males from over 50 deaths per 100,000 males in 2002-2007 to 40 deaths per 100,000 persons in 2022. In contrast, over the same period mortality rates in females remained consistently between 20 and 30 deaths per 100,000 females (Figure 12).

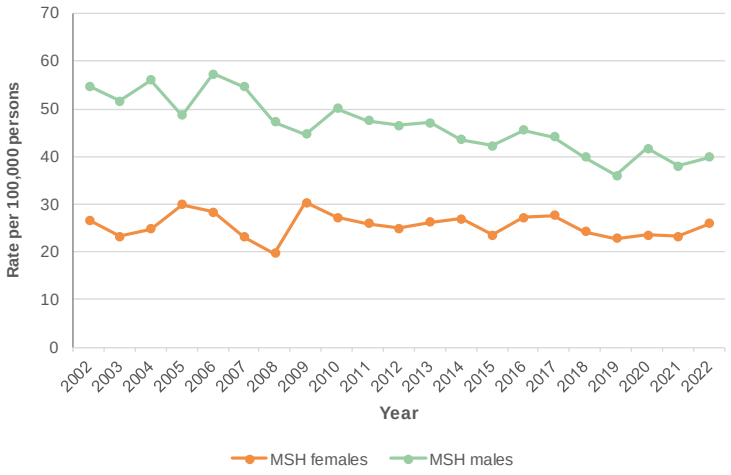


Figure 12: Lung cancer age standardised mortality rates by sex, Metro South Health, 2002 to 2022

Incidence

On average there were 637 new cases of lung cancer per year among MSH residents in the five years from 2018 to 2022. This represented almost 10% of all new cases of cancer in MSH in this five-year period.

In 2018 to 2022, the MSH average annual lung cancer age standardised incidence rate of 50 new cases per 100,000 persons was statistically similar to the Queensland rate (Table 3, page 11). The MSH rate for the current period was significantly lower than that reported for 2011 to 2015 of 45 new cases (95% CI: 43 – 47) per 100,000 persons[6].

Between 2013 and 2022 lung cancer rates in both MSH and Queensland recorded no consistent trend. In MSH the rate remained generally around 50 new cases per 100,000 persons per year between 2016 and 2022 (Figure 13).

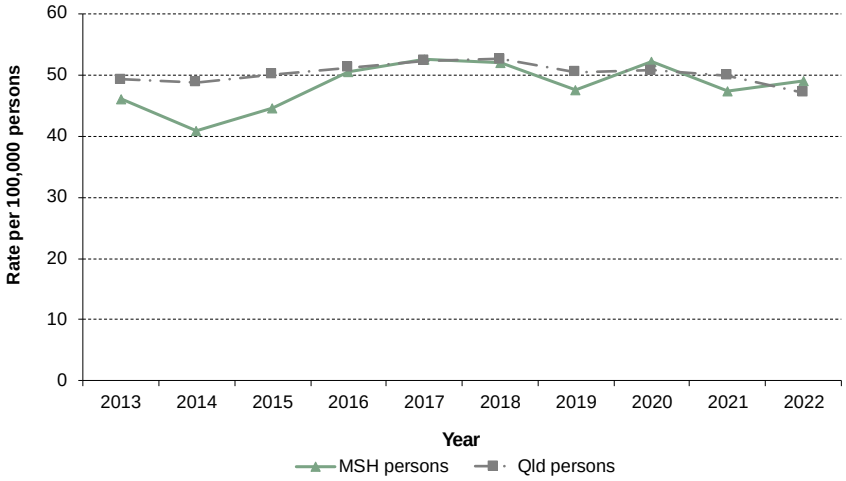


Figure 13: Lung cancer age standardised incidence rates, Metro South Health and Queensland, 2013 to 2022

In 2018 to 2022, lung cancer incidence rates were negligible in persons under the age of 35 years. Rates increased steadily with increasing age, peaking in the 75 to 84 years age group in Qld and in the 85 years and over age group in MSH (Figure 14).

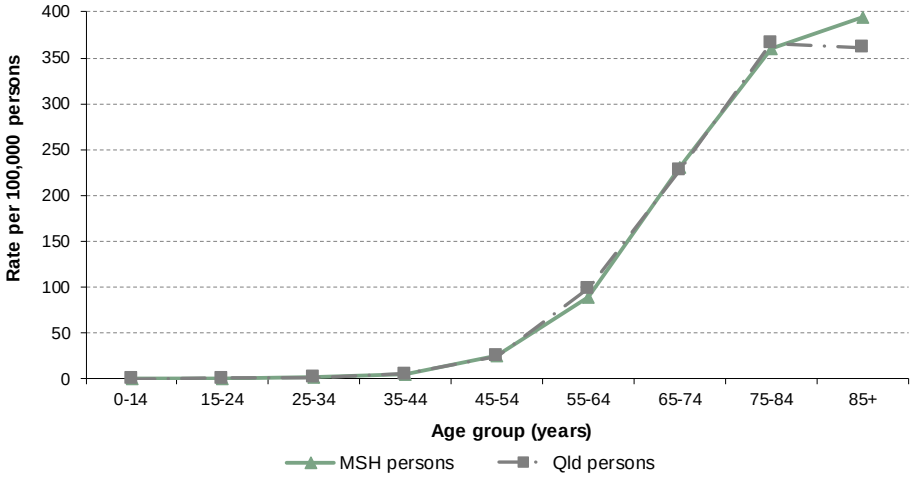


Figure 14: Lung cancer age specific incidence rates, Metro South Health and Queensland, 2018 to 2022

Hepatobiliary cancers: liver cancer

The most common cancers of the hepatobiliary system are liver and pancreatic cancer. Primary liver cancer is a malignant tumour that starts in the liver and it is almost three times more common in men than in women in Australia[16]. The rate of primary liver cancer in Australia has doubled since 1999, possibly due to increasing rates of obesity, type 2 diabetes, hepatitis B and C infections and an ageing population[16].

In Australia in 2022 there were 2,336 deaths caused by liver cancer[8]. Australian age standardised mortality rates increased from 1.4 per 100,000 persons in 1971 to 7.0 per 100,000 in 2018 and have remained at that level in the years since[8].

Between 1982 and 2017 the annual number of new cases of liver cancer in Australia increased more than ten-fold from 228 to 2,582 cases in 2020[8]. Over this period the age standardised incidence rate for liver cancer increased from 1.8 to 8.2 new cases per 100,000 persons[8].

Mortality

On average there were 70 deaths per year from liver cancer among MSH residents in the five years from 2018 to 2022. This represented 3.7% of all cancer deaths in MSH in this period.

The age standardised liver cancer mortality rate in MSH (5.4 deaths per 100,000 persons) was statistically similar to the Queensland rate (5.1 deaths per 100,000 persons) over this period.

Incidence

On average there were 107 new cases per year of liver cancer among MSH residents in the five years from 2018 to 2022. This represented 1.6% of all new cases of cancer in MSH in this period.

In 2018 to 2022, the MSH average annual liver cancer age standardised incidence rate of 8.3 new cases (95% CI: 7.6 – 9.0) per 100,000 persons was statistically similar to the Queensland rate of 7.5 new cases (95% CI: 7.2 – 7.8) per 100,000 persons. The MSH rate for the current period was significantly higher than that reported for 2011 to 2015 of 6.6 new cases (95% CI: 5.9 – 7.3) per 100,000 persons.

Between 2010 and 2019 liver cancer rates in both MSH and Queensland showed no consistent trend but remained consistently below ten new cases per 100,000 (Figure 15).

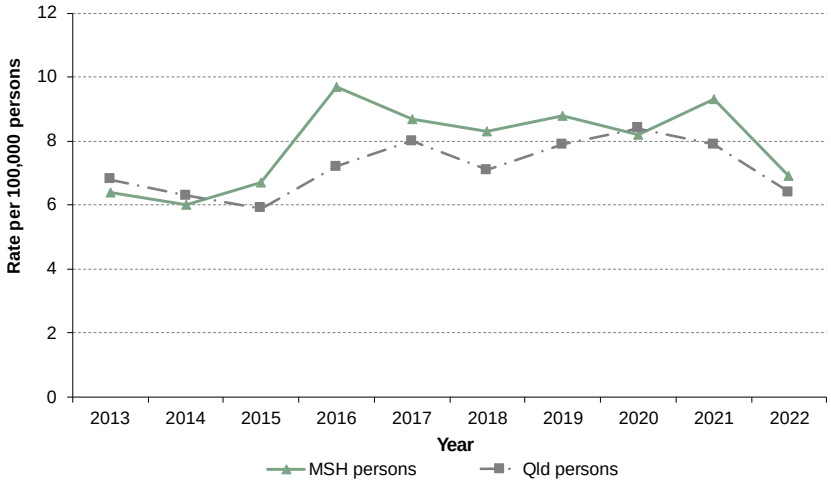


Figure 15: Liver cancer age standardised incidence rates, Metro South Health and Queensland, 2013 to 2022

In 2018 to 2022, liver cancer incidence rates were negligible in people under the age of 35 years. Rates increased with age, peaking in the 85 years and older group (Figure 16).

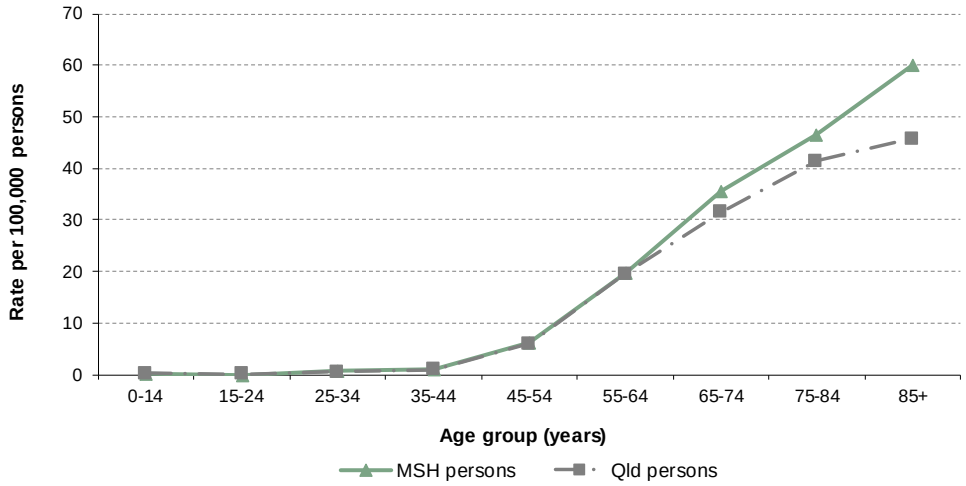


Figure 16: Liver cancer age specific incidence rates, Metro South Health and Queensland, 2018 to 2022

Hepatobiliary cancers: pancreatic cancer

Pancreatic cancer is caused by the uncontrolled growth of abnormal cells within the pancreas, a small gland located between the stomach and the spine which produces hormones such as insulin and digestive enzymes[17]. In its early stages, pancreatic cancer rarely causes obvious symptoms, with symptoms often not occurring until the cancer has spread or is large enough to affect nearby organs[17]. The causes of pancreatic cancer are not known but risk factors include tobacco smoking, obesity, ageing, high alcohol consumption and long-term diabetes or pancreatitis[17].

In Australia in 2022 there were 3,687 deaths due to pancreatic cancer[8]. Between 1971 and 2019 the number of Australian deaths to pancreatic cancer increased but age standardised mortality rates were very stable at between 9.1 and 10.8 deaths per 100,000 persons[8].

Between 1982 and 2002 the Australian annual age standardised incidence rate for pancreatic cancer remained consistently between 9.6 and 10.3 new cases per 100,000 persons[8]. However after 2002 the rate trended upwards, reaching 12.5 cases per 100,000 persons in 2020[8].

Mortality

On average there were 129 deaths per year from pancreatic cancer among MSH residents in the five years from 2018 to 2022. This represented 6.9% of all cancer deaths in MSH in this period.

The age standardised pancreatic cancer mortality rate in MSH (10.1 deaths per 100,000 persons) was statistically similar to the Queensland rate (10.2 deaths per 100,000 persons) over this period.

Incidence

On average there were 165 new cases per year of pancreatic cancer among MSH residents in the five years from 2018 to 2022. This represented 2.5% of all new cases of cancer in MSH in this period.

In 2018 to 2022, the MSH average annual pancreatic cancer age standardised incidence rate of 12.9 new cases (95% CI: 12.1 – 13.8) per 100,000 persons was statistically similar to the Queensland rate of 12.5 new cases (95% CI: 12.1 – 12.9) per 100,000 persons. The current MSH rate was statistically similar to that reported for 2011 to 2015 of 11.8 new cases (95% CI: 10.9 – 12.8) per 100,000 persons.

Between 2013 and 2022 pancreatic cancer rates in both MSH and Queensland trended slightly upwards from around 10 new cases to around 12 new cases per 100,000 persons (Figure 17).

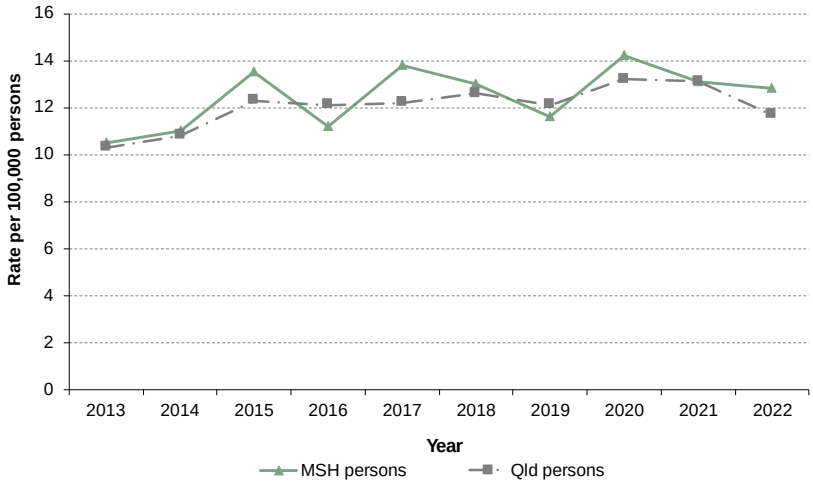


Figure 17: Pancreatic cancer age standardised incidence rates, Metro South Health and Queensland, 2013 to 2022

In 2018 to 2022, pancreatic cancer incidence rates were negligible in people under the age of 35 years but increased with age (Figure 18).

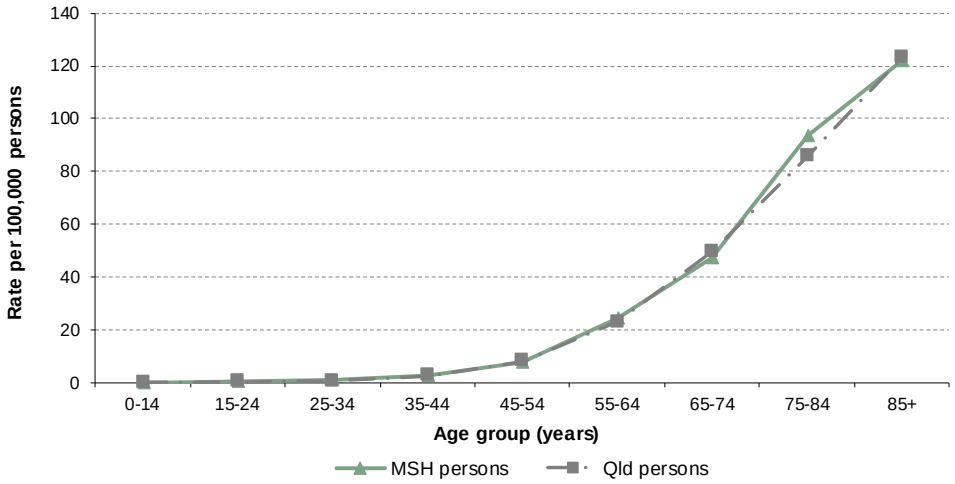


Figure 18: Pancreatic cancer age specific incidence rates, Metro South Health and Queensland, 2018 to 2022

Kidney cancer

The most common type of kidney cancer is renal cell carcinoma which accounts for about 90% of all cases. Usually only one kidney is affected. Kidney cancer is twice as common in men as in women, with most cases occurring in people over the age of 50[18]. Most cases have no symptoms and many are diagnosed when seeking treatment for an unrelated condition[18]. The causes of kidney cancer are unknown but risk factors include tobacco smoking, obesity, high blood pressure, kidney failure and family history[18].

In Australia in 2022 there were 1,030 deaths due to kidney cancer[8]. Australian annual age standardised mortality rates for kidney cancer peaked in 1991 at 4.7 deaths per 100,000 persons and since then have fallen to 3.0 deaths per 100,000 persons in 2022[8].

Between 1982 and 2017 the Australian annual age standardised incidence rate for kidney cancer more than doubled from 6.2 to 13.8 cases per 100,000 persons[8].

Mortality

On average there were 27 deaths per year from kidney cancer among MSH residents in the five years from 2017 to 2022. This represented 1.4% of all cancer deaths in MSH in this period.

The age standardised kidney cancer mortality rate in MSH (2.1 deaths per 100,000 persons) was significantly lower than the Queensland rate (2.8 deaths per 100,000 persons) over this period.

Incidence

On average there were 164 new cases per year of kidney cancer among MSH residents in the five years from 2018 to 2022. This represented 2.5% of all new cases of cancer in MSH in this period.

In 2018 to 2022, the MSH average annual kidney cancer age standardised incidence rate of 12.9 new cases (95% CI: 12.1 – 13.8) per 100,000 persons which was statistically similar to the Queensland rate of 14.1 new cases (95% CI: 13.7 – 14.5) per 100,000 persons. The current MSH rate was statistically similar to that reported for 2011 to 2015 of 14.1 new cases (95% CI: 13.1 – 15.1) per 100,000 persons.

Between 2013 and 2022 MSH kidney cancer incidence rates trended slightly downwards from almost 16 new cases per 100,000 persons in 2014 to 11 new cases per 100,000 in 2022 (Figure 19).

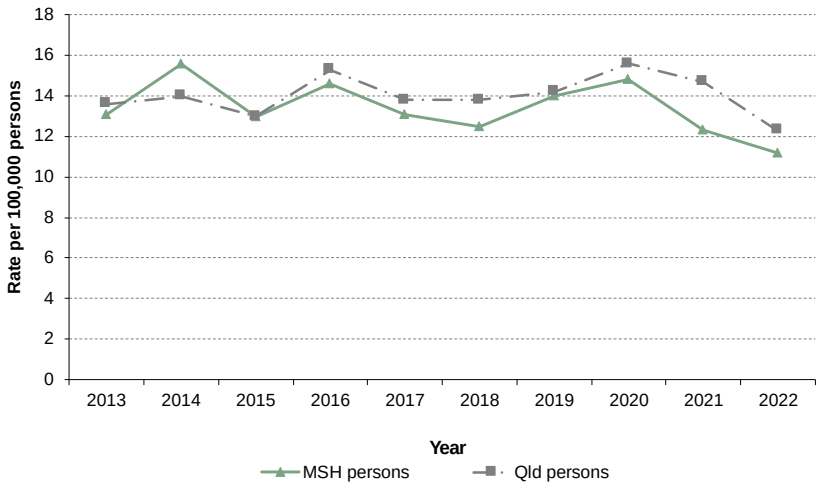


Figure 19: Kidney cancer age standardised incidence rates, Metro South Health and Queensland, 2013 to 2022

In 2018 to 2022, kidney cancer incidence rates were extremely low in people under the age of 25 years. Rates increased with age, peaking in persons aged 65 to 74 years in MSH and 75 to 84 years in Queensland (Figure 20).

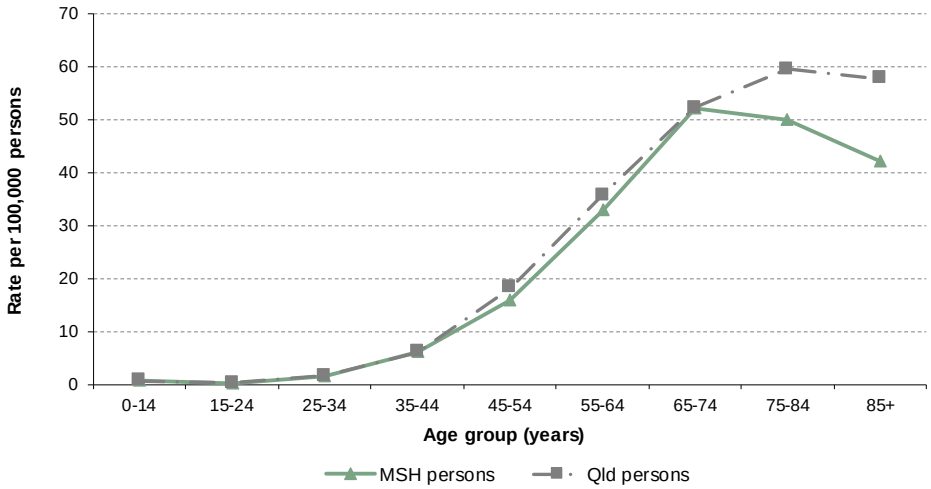


Figure 20: Kidney cancer age specific incidence rates, Metro South Health and Queensland, 2018 to 2022

Cervical cancer

Cervical cancer is a growth of abnormal cells in the lining of the uterine cervix. Usually cervical cancer takes many years to develop and is preceded by abnormal changes in cervical cells[19]. The primary cause of cervical cancer is the human papillomavirus (HPV) with the primary prevention in Australia through vaccination against HPV via the National HPV Vaccination Program to prevent women being infected with cancer-causing HPV types[20]. Secondary prevention is through cervical screening through the National Cervical Screening Program (NCSP) to detect and treat abnormalities while they are in the precancerous stage[20].

Worldwide, cervical cancer is the fourth most common cancer affecting women[20]. However, the disease burden of cervical cancer is not evenly distributed across nations, as it accounts for less than 2% of all female cancers in Austlalia[20]. Diagnoses of cervical cancer in Australia have significantly reduced since the NCSP was introduced in the 1990s. The introduction of the national HPV vaccination program in 2007 and improvements to the screening program in 2017 are expected to further reduce cervical cancer rates[19].

In Australia in 2022, there were 269 cervical cancer deaths[8]. Age standardised mortality rates have decreased over time from 7.2 deaths per 100,000 females in 1973 to 1.8 deaths per 100,000 in 2022[8].

Between 1982 and 2002 Australian age standardised cervical cancer incidence rates halved from 14 to seven new cases per 100,000 females[8]. Between 2002 and 2020 incidence rates remained extremely stable at around seven new cases per 100,000 females[8].

Mortality

On average there were 13 deaths per year from cervical cancer among MSH females in the five years from 2018 to 2022. Just over half (51%) of these deaths were women in the 50 to 74 years age group.

Incidence

On average there were 55 new cases of cervical cancer per year among MSH females in the five years from 2018 to 2022.

In 2018 to 2022, the MSH average annual cervical cancer age standardised incidence rate of 9.0 new cases (95% CI: 7.9 – 10.1) per 100,000 females was statistically similar to the Queensland rate of 9.1 new cases (95% CI: 8.6 – 9.6) per 100,000 females. The current MSH rate was statistically similar to that reported for 2011 to 2015 of 7.8 new cases (95% CI: 5.7 – 10.3) per 100,000 females[6].

In Queensland between 2013 and 2022 cervical cancer incidence rates exhibited no consistent trend but remained consistently between eight and ten new cases per 100,000 females. The number of new cases per year in MSH LGA was too small for accurate annual age standardised rates to be calculated.

In 2018 to 2022, cervical cancer age specific incidence rates were negligible in women under the age of 25 years. Incidence rates were highest in the age group 30 to 54 years and then generally decreased with increasing age. It is important to note however, that numbers in each age group were relatively small making interpretation difficult

Cancer screening

The health burden of some cancers can be reduced by the implementation of organised, population based screening programs. Such programs involve the systematic use of a test to identify individuals who are not showing any symptoms of the disease. Screening programs are based on the understanding that the earlier most cancers, or their precursors, are detected, the greater the likelihood of a better outcome for the individual concerned[21]. Currently in Australia colorectal, breast and cervical cancers have met the criteria for approved population based screening programs.

Colorectal cancer screening

The National Bowel Cancer Screening Program (NBCSP) commenced in Queensland in 2006, providing free bowel screening to people turning 55 and 65 years. Those turning 50 and 60 years were included from July 2008 and 2013 respectively. Biennial screening for those aged 50 to 74 years has been in place since 2020[22]. It has been found that NBCSP invitees (and participants) who had been diagnosed with bowel cancer had a lower risk of dying from the disease and were more likely to have less advanced bowel cancers when diagnosed than non-invitees[22]. These findings show that the national program is meeting its goal of reducing bowel cancer morbidity and mortality.

In 2022-23 the overall NBCSP participation rate in MSH was 37.7%, lower than the Queensland rate of 38.8% and the Australian rate of 41.7%[23]. Data covering the age/sex breakdown for MSH for the period since the program expansion in 2015 are not available, however these data have been published for Queensland[23] and are presented in Figure 21. Queensland participation rates were higher in females than in males in all age groups (Figure 21) and participation rates increased with increasing age in both sexes.

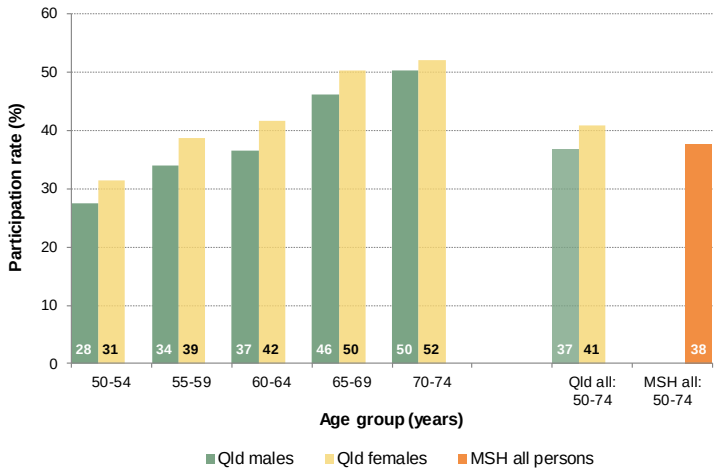


Figure 21: Crude participation rates in the National Bowel Cancer Screening Program by age and sex, Queensland and Metro South Health all persons 50-74 years, 2022-23

Between 2014-15 and 2022-23 NBCSP participation rates in MSH were consistently lower than the rates in Queensland (Figure 22). Rates in both MSH and Queensland increased gradually from 2014-15 to a peak in 2018-19. In 2019-20, the first timepoint impacted by the COVID-19 pandemic, rates in MSH dropped slightly and this was followed by a sharper drop in 2020-21. In 2022-23 the first increase in rates since the pandemic was reported (Figure 22).

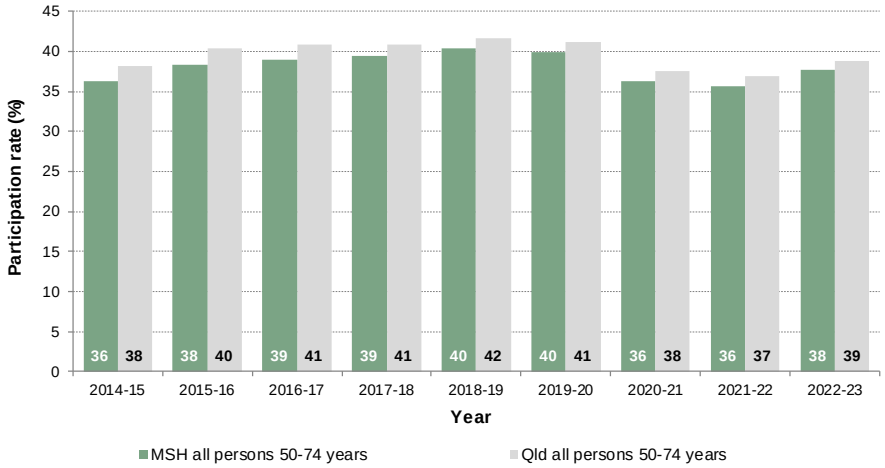
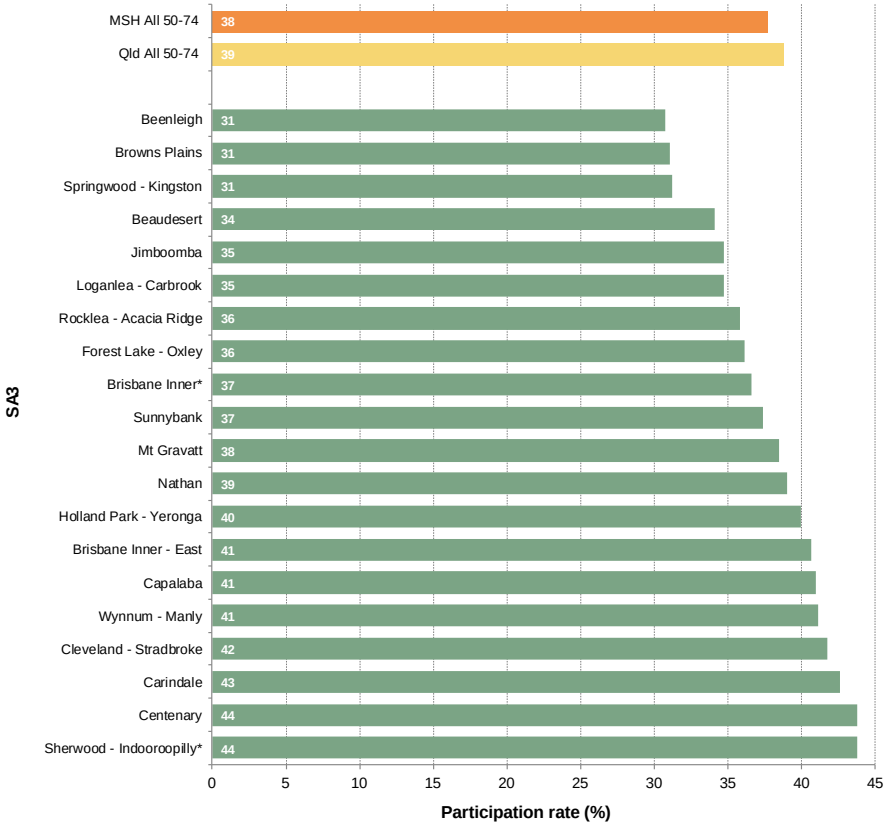


Figure 22: Crude all persons 50 to 74 years participation rates in the National Bowel Cancer Screening Program, Queensland and Metro South Health, 2014-15 to 2022-23

The COVID-19 pandemic affected people's access to and use of health services such as cancer screening programs[24]. The impact varied both between and within states and across the different screening programs. In 2020 on an Australia-wide basis, no clear patterns directly correlating with the COVID-19 pandemic were evident in the data although the number of test kits returned did rise around the time that restrictions first started to ease[24]. In Queensland the number of kits returned was lowest in comparison with previous years in March, April and August of 2020[24] which were months with generally higher levels of restrictions.

In 2022-23 the lowest participation rates (below 32%) were reported in the Logan LGA SA3s of Beenleigh, Browns Plains and Springwood – Kingston while the highest rates were reported in the Brisbane River-adjacent SA3s of Sherwood – Indooroopilly and Centenary (Figure 23).



* SA3 only partly within the MSH region. Data for residents of the entire SA3 are included

Figure 23: Crude all persons 50 to 74 years participation rates in the National Bowel Cancer Screening Program by SA3, Queensland and Metro South Health, 2022-23

Breast cancer screening

The BreastScreen Queensland Program currently recommends women aged 50 to 74 years be screened every two years[25]. Prior to July 2013, the target age group range for this service was women aged 50 to 69 years with data for the current target group available from 2014-15 onwards. Women aged 40 to 49 years and 75 years and over are also able to access free BreastScreen Queensland services but are not actively targeted[25].

In 2021-22 the overall BreastScreen Queensland participation rate for women within the target group range (50 to 74 years) was 49%, lower than the Queensland rate of 51% (Figure 24). Within the target age group, participation increased with increasing age, peaking in the 65 to 69 years group at 52% in MSH and 55% in Queensland (Figure 24). MSH participation rates were lower than the equivalent Queensland rates in all age groups within the target range. Data for women aged other than 50 to 74 years were not available for MSH at the time of publication, however in Queensland the rates for these age groups were significantly lower than for the target group (Figure 24).

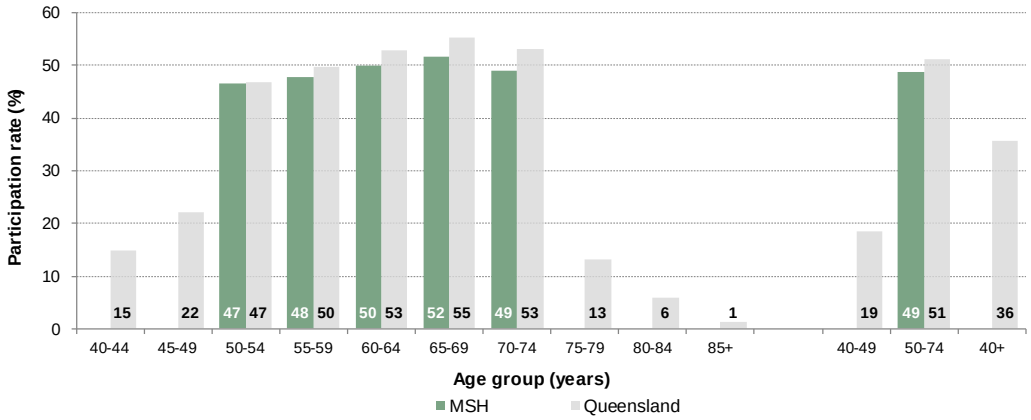
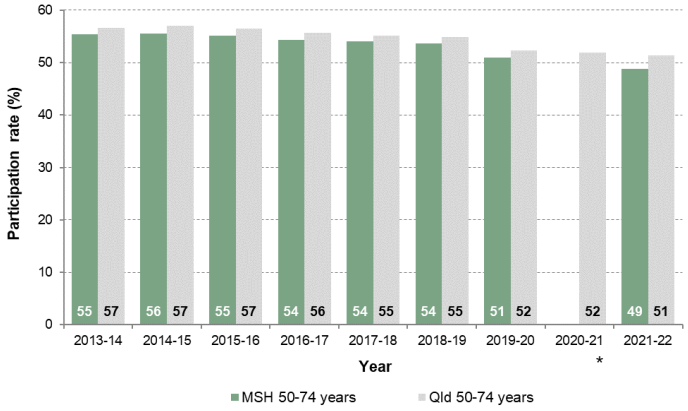


Figure 24: Crude participation rates in the BreastScreen Queensland screening program by age group, Metro South Health and Queensland, 2021-22

Between 2014-15 and 2019-20 BreastScreen Queensland participation rates in MSH were consistently lower than Queensland rates (Figure 25). Rates in both MSH and Queensland trended downwards over this period (Figure 25). The sharpest decrease was seen in 2019-20, the first year of the COVID-19 pandemic.

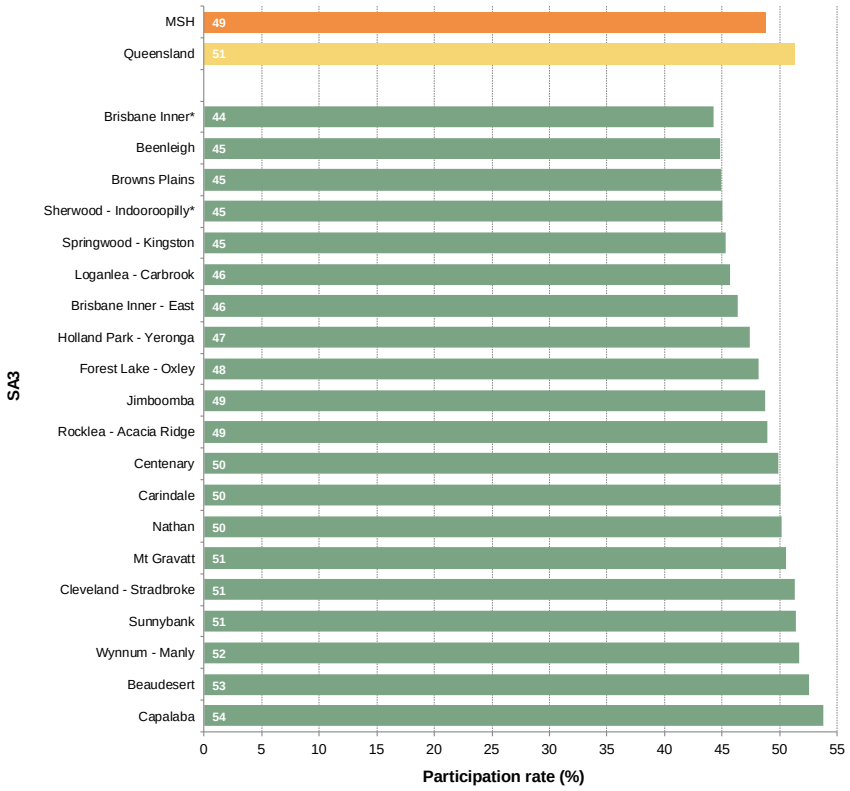


* Data not available at time of publication

Figure 25: Crude participation rates in the BreastScreen Queensland program, females 50 to 74 years, Metro South Health and Queensland, 2013-14 to 2021-22

The number of screening mammograms performed through BreastScreen Australia significantly declined in March 2020 as the COVID-19 pandemic worsened and restrictions were put in place from 25 March which included a suspension of all BreastScreen services[24]. As restrictions were eased and the suspension lifted, the number of screening mammograms increased through May and June. In July to September, Queensland conducted more mammograms than were conducted during the same period in 2018[24]. Younger women were found to be slower to return to screening after the restrictions were lifted[24].

In 2021-22 the lowest BreastScreen Queensland participation rates (below 46%) were reported in a range of SA3s from inner Brisbane LGA (Brisbane Inner, Sherwood – Indooroopilly) and Logan LGA (Beenleigh, Browns Plains, Springwood – Kingston). The highest rates (above 50%) were reported in bayside areas (Capalaba, Wynnum – Manly, Cleveland – Stradbroke SA3s) along with Beaudesert, Sunnybank and Mt Gravatt SA3s (Figure 26).



* SA3 only partly within the MSH region. Data for residents of the entire SA3 are included

Figure 26: Crude all persons 50 to 74 years participation rates in the BreastScreen Queensland Program by SA3, Queensland and Metro South Health 2021-22

Cervical cancer screening

Cervical cancer is one of the most preventable cancers with just over 90% cancers occurring in women who have either never been screened or who are lapsed screening program participants[26]. On 1 December 2017 the National Cervical Screening Program (NCSP) commenced, introducing a five-yearly cervical screening test (human papillomavirus [HPV] test) to replace the previously recommended two-yearly Pap test[26]. The new test is more accurate than the previous Pap test and is conducted every five rather than every two years[26]. The age at which screening starts was increased from 20 to 25 years.

There are two measures of participation in the NCSP – participation and coverage. Participation is restricted to only screening HPV tests while coverage includes all HPV and liquid-based cytology (LBC) tests performed for any reason and is a better indication of overall participation in cervical screening[27]. Therefore this report presents NCSP coverage rather than participation data.

Because the program operates on a five-year cycle, coverage data are collated over five-year periods. The data presented in this report cover the period 2019 to 2023.

In 2019-23 the MSH coverage rate among those in the 25 to 74 years target group was 73.3%. This was marginally higher than the Queensland coverage rate of 73.0% (Figure 27) but lower than the MSH 2018-22 rate of 77.6%.

In 2019-23 in both MSH and Queensland cervical screening program coverage rates were highest (over 80%) in the 25 to 29 years age group. Rates in those aged 30 to 64 years in MSH ranged from 72 to 78%. Rates fell with increasing age in those over 50 years, with the lowest coverage in those aged 70 to 74 years (45%) (Figure 27).

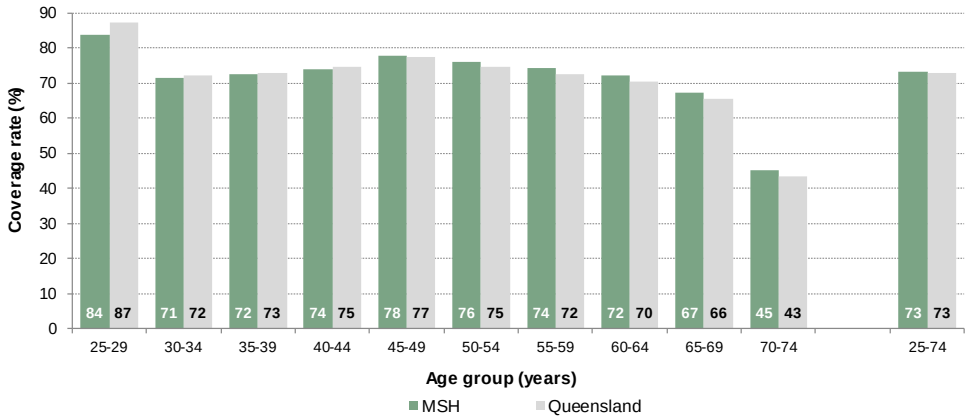
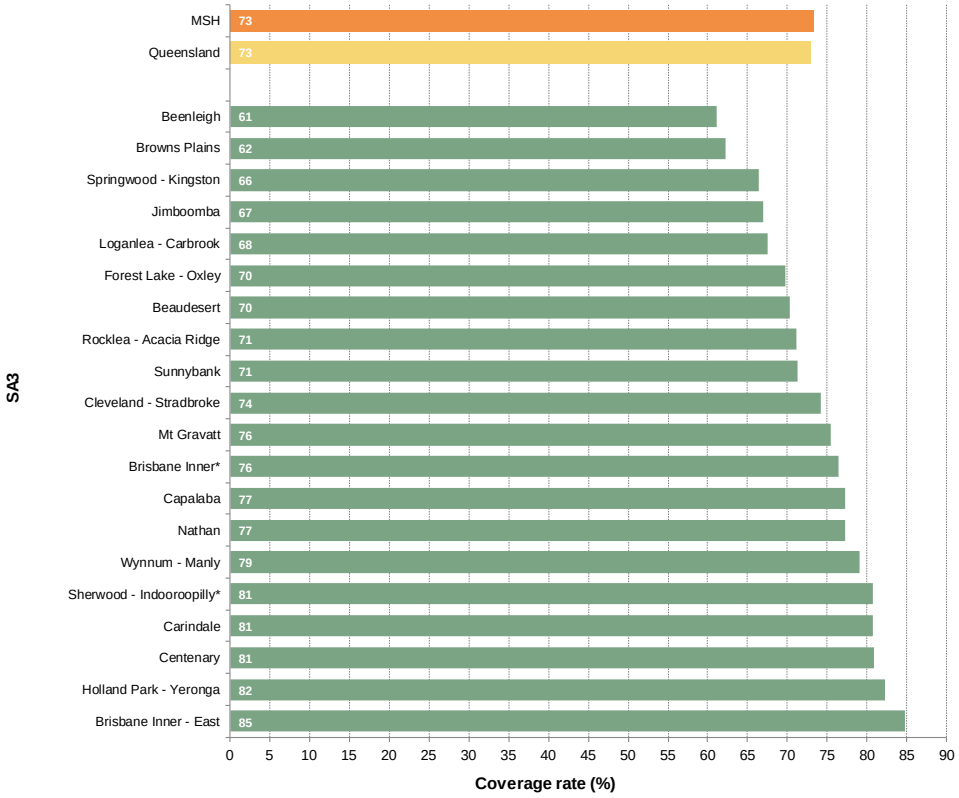


Figure 27: Crude participation rates in the National Cervical Screening Program by age group, Metro South Health and Queensland, 2019-2023

Prior to the change in the NCSP in 2018, participation in the previous screening program had fallen in both Queensland and MSH, from a peak of around 60% in 2007-08 to rates of around 53% in 2015-16[6]. This decline was consistent with national findings that participation was showing a downward trend[26].

It is not possible to present time series data for the current cervical screening program because its relatively recent introduction precludes the calculation of more than two timepoints of data.

In 2019-23 the lowest NCSP coverage rates (below 60%) were reported from the five SA3s covering the Logan LGA area (Beenleigh, Browns Plains, Springwood – Kingston, Jimboomba, Loganlea – Carbrook). The highest rates (above 80%) were largely reported in inner-Brisbane areas (Brisbane Inner East, Holland Park – Yeronga, Centenary, Carindale, Sherwood – Indooroopilly SA3s) (Figure 28).



* SA3 only partly within the MSH region. Data for residents of the entire SA3 are included

Figure 28: Crude 25 to 74 years coverage rates in the National Cervical Screening Program by SA3, Queensland and Metro South Health 2019-23

Logan Local Government Area

All cancers

Mortality

On average there were 543 deaths per year from all cancers among Logan LGA residents in the five years from 2018 to 2022. Six types of cancer (lung, hepatobiliary, colorectal, haematological, prostate and female breast) together accounted for over two thirds (70%) of all Logan LGA cancer deaths between 2018 and 2022 (Table 5). Lung cancer alone accounted for almost one in four (23%) cancer deaths in Logan LGA in this period.

The average annual age standardised mortality rate for all cancers was significantly higher in Logan LGA (167 deaths per 100,000 persons) than in Queensland (157 deaths per 100,000 persons) between 2018 and 2022 (Table 5). This difference was driven by lung and hepatobiliary cancers which were the only major cancer-types with rates significantly higher in Logan LGA (Table 5). The mortality rates of all other groupings of cancer by site were statistically similar in Logan LGA and Queensland in 2018 to 2022 (Table 5).

The all cancer Logan LGA mortality rate for 2018 to 2022 was significantly lower than the rate reported for 2011 to 2015 of 189 deaths per 100,000 persons[28].

Table 5: Mortality numbers and age standardised mortality rates by site of cancer, Logan LGA and Queensland, 2018 to 2022[2]

Site	Number of deaths, 2018-2022		Average annual age standardised rate per 100,000 persons (95% confidence interval)		Statistically significant difference LGA–QLD*
	Logan LGA	QLD	Logan LGA	QLD	
Lung	628	10,639	37.7 (34.8 – 40.7)	33.4 (32.7 – 34.0)	↑
Hepatobiliary	360	5,693	21.6 (19.5 – 23.9)	17.9 (17.5 – 18.4)	↑
Colorectal	309	5,682	19.4 (17.3 – 21.6)	18.1 (17.6 – 18.6)	—
Haematological	258	5,143	16.3 (14.4 – 18.3)	16.3 (15.8 – 16.7)	—
Prostate	191	3,730	27.5 (23.8 – 31.6)	26.1 (25.2 – 26.9)	—
Breast (female)	161	3,023	18.5 (15.8 – 21.5)	18.7 (18.1 – 19.4)	—
Gynaecological	132	2,121	15.1 (12.6 – 17.8)	13.0 (12.4 – 13.5)	—
Other urological	130	2,600	8.2 (6.8 – 9.7)	8.2 (7.9 – 8.5)	—
Upper gastrointestinal	129	2,736	7.8 (6.5 – 9.2)	8.6 (8.3 – 9.0)	—
CNS and Brain	83	1,613	4.8 (3.9 – 5.9)	5.3 (5.1 – 5.6)	—
Melanoma	79	1,842	4.9 (3.9 – 6.0)	5.9 (5.6 – 6.2)	—
Head and neck	74	1,484	4.4 (3.5 – 5.5)	4.7 (4.4 – 4.9)	—
Bone and soft tissue	32	523	Not calculated#	1.8 (1.6 – 1.9)	Not calculated#
Endocrine	10	206	Not calculated#	0.7 (0.6 – 0.8)	Not calculated#
Breast (male)	<5	22	Not calculated#	Not calculated#	Not calculated#
Other invasive cancers	18	443	Not calculated#	1.4 (1.3 – 1.5)	Not calculated#
Unknown primary	119	2,080	7.8 (6.5 – 9.3)	6.5 (6.2 – 6.8)	—
TOTAL	**2,714**	**49,580**	**166.9 (160.7 – 173.2)**	**157.2 (155.8 – 158.5)**	↑

* ↑ Logan LGA statistically significantly higher than Queensland; ↓ Logan LGA statistically significantly lower than Queensland; — no statistically significant difference between Logan LGA and Queensland

I# Rate not calculated because total number of deaths, 2018 to 2022, less than 50

Source: Queensland Health. Oncology Analysis System (OASys). Queensland Cancer Control Analysis Team[2]

In 2018 to 2022, the Logan LGA average annual male and female age standardised mortality rates for all cancers (combined) were statistically similar to the corresponding Queensland rates (Table 6). The Logan LGA and Queensland mortality rates in males were significantly and substantially higher than the corresponding rates in females (Table 6).

Table 6: All cancer average annual age specific and all-ages age-standardised mortality rates by age group and sex, Logan LGA and Queensland, 2018-2022[2]

Age group (years)	Average annual age specific and all-ages age-standardised mortality rate (95% confidence interval)			
	Male		Female	
	Logan LGA rate/100,000	QLD rate/100,000	Logan LGA rate/100,000	QLD rate/100,000
0 – 14	3.0	2.2	2.1	1.6
15 – 24	4.9	3.8	1.8	1.8
25 – 39	10.2	10.1	15.2	12.5
40 – 64	143.8	142.8	115.7	114.9
65+	1,123.5	1,126.1	738.1	740.7
All ages	**204.0 (193.9 – 214.3)**	**192.6 (190.4 – 194.9)**	**135.6 (127.9 – 143.4)**	**127.3 (125.6 – 129.0)**

Source: Queensland Health. Oncology Analysis System (OASys). Queensland Cancer Control Analysis Team[2]

Incidence

On average there were 1,811 new (incident) cases of cancer per year among Logan LGA residents in the five years from 2018 to 2022. The six most common types of newly diagnosed cancer in Logan LGA (prostate, female breast, haematological, lung, colorectal and melanoma (Table 7) together accounted for over two-thirds (68%) of all new cases.

In 2018 to 2022, the average annual age standardised incidence rate for all cancers (combined) in Logan LGA (533 new cases per 100,000 persons) was statistically similar to the Queensland rate (544 new cases per 100,000 persons) (Table 7). The current Logan LGA rate was slightly higher than the rate reported for 2011 to 2015 of 527 new cases per 100,000 persons[28].

The incidence rates of prostate cancer and melanoma were significantly lower in Logan LGA than in Queensland in 2018 to 2022 (Table 7). Lung and hepatobiliary cancers had significantly higher age standardised incidence rates in Logan LGA compared with Queensland (Table 7).

In 2018 to 2022, the average annual age standardised incidence rate for all cancers (combined) in Logan LGA males was significantly lower than the Queensland male rate. In contrast, the Logan LGA and Queensland rates for females statistically similar (Table 8). The Logan LGA and Queensland incidence rates in males were significantly and substantially higher than the corresponding rates in females (Table 8).

Table 7: Newly diagnosed cancer cases (incidence) and age standardised incidence rates by site of cancer, Logan LGA and Queensland, 2018 to 2022[2]

Site	Number of new cases, 2018-2022		Average annual age standardised rate per 100,000 persons (95% confidence interval)		Statistically significant difference LGA–QLD*
	Logan LGA	QLD	Logan LGA	QLD	
Prostate	1,244	27,645	146.2 (138.2 – 154.4)	177.0 (175.0 – 179.1)	↓
Breast (female only)	1,060	18,991	119.4 (112.3 – 126.7)	125.5 (123.8 – 127.3)	—
Haematological	1,017	18,779	60.3 (56.7 – 64.1)	61.5 (60.6 – 62.4)	—
Lung	991	15,929	58.8 (55.2 – 62.5)	50.1 (49.3 – 50.9)	↑
Colorectal	959	16,632	56.8 (53.3 – 60.5)	54.7 (53.9 – 55.6)	—
Melanoma	927	21,409	55.0 (51.5 – 58.6)	72.2 (71.3– 73.2)	↓
Other urological	557	9,013	33.2 (30.5 – 36.1)	30.0 (29.3 – 30.6)	—
Hepatobiliary	493	7,460	29.3 (26.8 – 31.9)	23.7 (23.2 – 24.2)	↑
Gynaecological	428	6,739	48.7 (44.2 – 53.4)	44.4 (43.4 – 45.5)	—
Upper gastrointestinal	318	5,264	18.8 (16.8 – 20.9)	16.9 (16.5 – 17.4)	—
Head and neck	306	5,533	17.8 (15.9 – 19.9)	18.1 (17.6 – 18.6)	—
Endocrine	275	4,323	16.3 (14.4 – 18.3)	15.6 (15.1 – 16.1)	—
CNS and Brain	128	2,064	7.5 (6.3 – 8.9)	7.1 (6.8 – 7.5)	—
Bone and soft tissue	76	1,271	4.5 (3.6 – 5.6)	4.5 (4.2 – 4.7)	—
Breast (male only)	10	172	Not calculated#	1.1 (1.0 – 1.3)	Not calculated#
Other invasive cancers	112	2,171	6.9 (5.7 – 8.2)	7.0 (6.7 – 7.3)	—
Unknown primary	156	2,776	10.0 (8.5 – 11.6)	8.8 (8.5 – 9.1)	—
TOTAL	**9,057**	**166,171**	**532.5 (521.6 – 543.5)**	**543.7 (541.1 – 546.3)**	—

* ↑ Logan LGA statistically significantly higher than Queensland; ↓ Logan LGA statistically significantly lower than Queensland; — no statistically significant difference between Logan LGA and Queensland

\# Rate not calculated because total number of new cases, 2018 to 2022, less than 50

Source: Queensland Health. Oncology Analysis System (OASys). Queensland Cancer Control Analysis Team[2]

Table 8: All cancer average annual age specific and all-ages age-standardised incidence rates by age group and sex, Logan LGA and Queensland, 2018-2022[2]

Age group (years)	Average annual age specific and all-ages age-standardised incidence rate (95% confidence interval)			
	Male		Female	
	Logan LGA rate/100,000	QLD rate/100,000	Logan LGA rate/100,000	QLD rate/100,000
0 – 14	20.4	17.7	15.7	15.0
15 – 24	31.3	34.2	29.8	35.4
25 – 39	100.9	98.5	152.2	153.0
40 – 64	682.4	749.3	668.2	677.0
65+	2,934.9	3,077.9	1,784.9	1,800.3
All ages	**609.2 (592.3 – 626.3)**	**631.5 (627.5 – 635.6)**	**466.5 (452.3 – 480.8)**	**465.3 (461.9 – 468.7)**

Source: Queensland Health. Oncology Analysis System (OASys). Queensland Cancer Control Analysis Team[2]

Prostate cancer

Mortality

On average there were 38 deaths per year from prostate cancer among Logan LGA males in the five years from 2018 to 2022. This represented 7.0% of all cancer deaths in Logan LGA in this period. There was no

significant difference in age standardised prostate cancer mortality rate between Logan LGA and Queensland in this period (Table 5, page 34).

Incidence

On average there were 249 new cases of prostate cancer per year among Logan LGA males between 2018 and 2022. This represented 14% of all new cases of cancer in Logan LGA in this five-year period, making prostate cancer the most common newly diagnosed cancer in Logan LGA (Table 7, page 36).

In 2018 to 2022, the Logan LGA average annual prostate cancer age standardised incidence rate of 146 new cases per 100,000 males was significantly lower than the Queensland rate of 177 new cases per 100,000 males (Table 7, page 36). The Logan LGA rate for the current period was statistically similar to that reported for 2011 to 2015 of 132 new cases (95% CI: 123 – 141) per 100,000 males[28].

Annual age standardised rates of prostate cancer trended slightly downwards in Queensland but were stable in Logan LGA until 2016 after which they both trended upwards, with a substantial increase reported in (Figure 29).

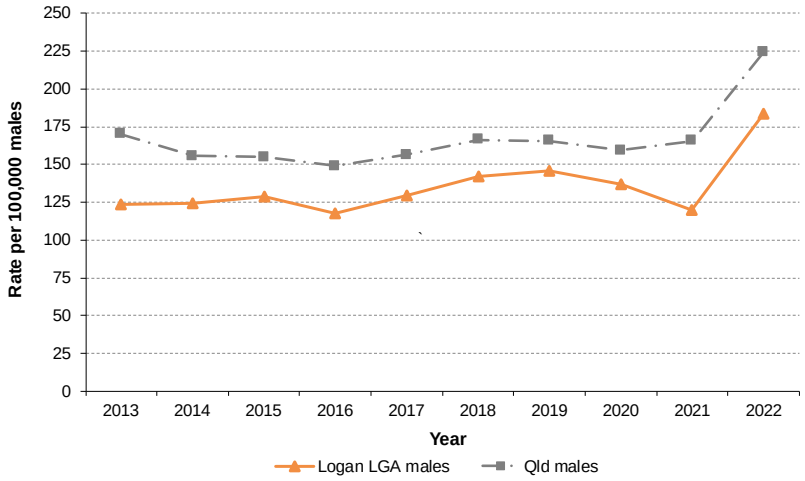


Figure 29: Prostate cancer age standardised incidence rates, Logan LGA and Queensland, 2013 to 2022

In 2018 to 2022, prostate cancer incidence rates were negligible in men under the age of 35 years. From the age of about 45 years rates increased sharply, peaking in the 65 to 74 years age group before declining somewhat in older age groups (Figure 30).

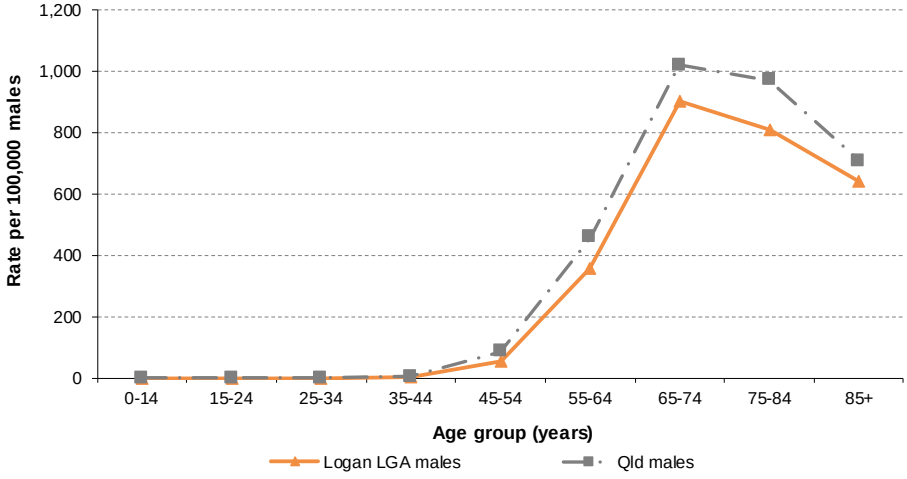


Figure 30: Prostate cancer age specific incidence rates, Logan LGA and Queensland, 2018 to 2022*

Melanoma

Mortality

On average there were 16 deaths per year from melanoma among Logan LGA residents between 2018 and 2022. This represented 2.9% of all cancer deaths in Logan LGA in this five-year period. The age standardised melanoma mortality rate in Logan LGA was statistically similar to the Queensland rate over this period (Table 5, page 34).

Incidence

On average there were 185 new cases of melanoma per year among Logan LGA residents between 2018 and 2022. This represented 10% of all new cases of cancer in Logan LGA in this five-year period, making melanoma the sixth most common newly diagnosed cancer in Logan LGA.

In 2018 to 2022, the Logan LGA average annual melanoma age standardised incidence rate of 55 new cases per 100,000 persons was significantly lower than the Queensland rate of 72 new cases per 100,000 persons (Table 7, page 36). The Logan LGA rate for the current period was significantly lower than that reported for 2011 to 2015 of 64 new cases (95% CI: 60 – 68) per 100,000 persons[28].

Between 2014 and 2019 annual melanoma age standardised incidence rates in Logan LGA trended downwards from 69 to 54 new cases per 100,000 persons (Figure 31). A similar pattern was recorded in Queensland (Figure 31) where the reduction was from approaching 80 to fewer than 70 new cases per 100,000 persons over this period.

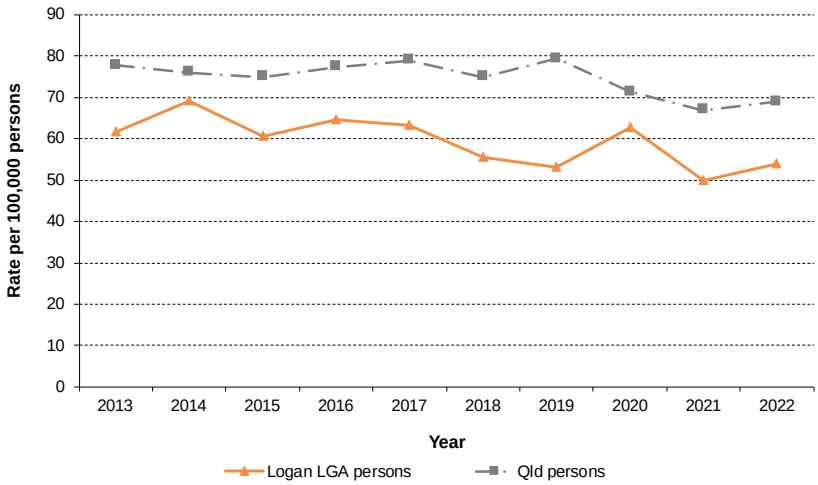


Figure 31: Melanoma age standardised incidence rates, Logan LGA and Queensland, 2013 to 2022

In 2018 to 2022, melanoma incidence rates were negligible in people under the age of 15 years, but then increased with increasing age (Figure 32). In Queensland the rate remained consistently high in persons aged 75 years and over, while in Logan LGA rates peaked in persons 75 to 84 years and decreased substantially in those 85 years and over (Figure 32).

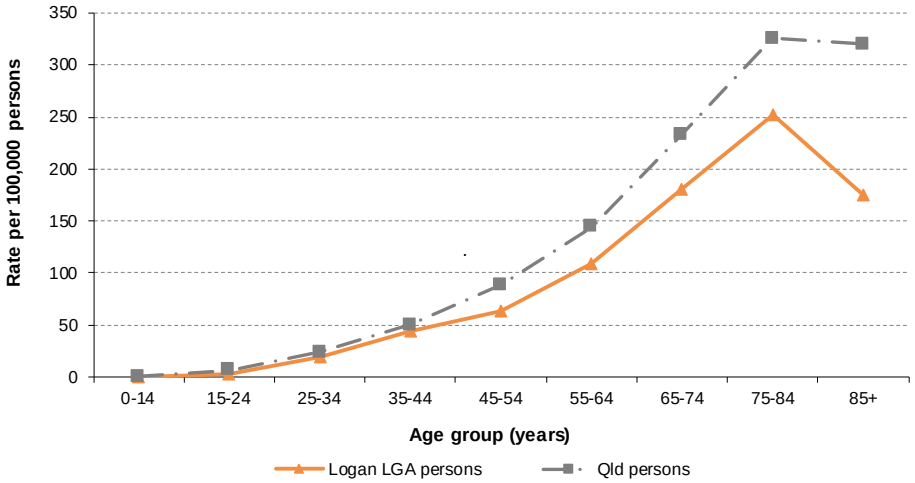


Figure 32: Melanoma age specific incidence rates, Logan LGA and Queensland, 2018 – 2022

Breast cancer

Mortality

On average there were 32 deaths per year from breast cancer among Logan LGA females between 2018 and 2022. This represented 5.9% of all cancer deaths in Logan LGA in this five-year period. The majority of these deaths (84%) were in the 50 years and over age group, with women aged 50 to 79 years accounting for two-thirds (67%) of all breast cancer deaths. In this period there was an average of less than one death per year among Logan LGA males.

There was no significant difference in average annual female breast cancer age-standardised mortality rate between Logan LGA and Queensland over the years 2018 to 2022 combined (Table 5, page 34).

Incidence

On average there were 212 new cases of breast cancer per year among Logan LGA women between 2018 and 2022. This represented almost 12% of all new cases of cancer in Logan LGA in this five-year period, making breast the second most common newly diagnosed cancer in this LGA. By comparison, on average there were fewer than five new cases of breast cancer per year among Logan LGA men over this period.

In 2018 to 2022, the Logan LGA average annual female breast cancer age standardised incidence rate of 119 new cases per 100,000 females was statistically similar to the Queensland rate (Table 7, page 36). The Logan LGA rate for the current period was almost the same as that reported for 2011 to 2015 of 120 new cases (95% CI: 112 – 128) per 100,000 females[28].

Between 2013 and 2022 the annual female breast cancer incidence rate in Logan LGA was relatively steady, remaining around 120 new cases per 100,000 females (Figure 33). However in Queensland the rate exhibited a small reduction from around 130 to 120 new cases per 100,000 (Figure 33).

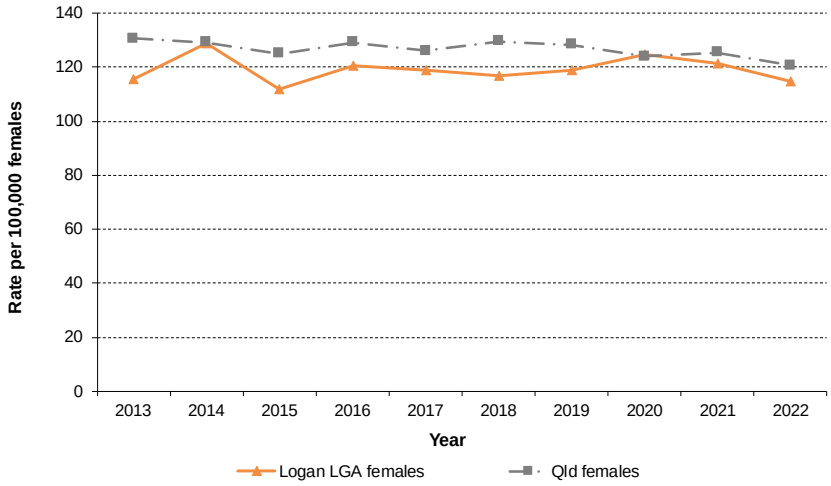


Figure 33: Breast cancer age standardised incidence rates, Logan LGA and Queensland, 2013 to 2022

In 2018 to 2022, breast cancer incidence rates were negligible in women under the age of 25 years. Incidence rates increased with increasing age, but were lower in women aged 75 years and over (Figure 34).

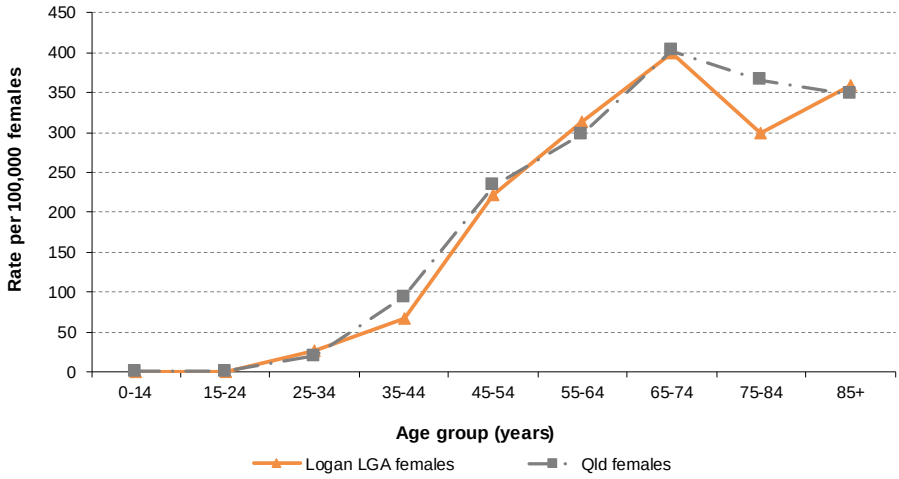


Figure 34: Breast cancer age specific incidence rates, Logan LGA and Queensland, 2018 to 2022

Colorectal cancer

Mortality

On average there were 62 deaths per year from colorectal cancer among Logan LGA residents between 2018 and 2022. This represented 11% of all cancer deaths in the LGA in this five-year period. The age standardised colorectal cancer mortality rate in Logan LGA was statistically similar to the Queensland rate over this period (Table 5, page 34).

Incidence

On average there were 192 new cases of colorectal cancer per year among Logan LGA residents between 2018 and 2022. This represented 11% of all new cases of cancer in Logan LGA in this five-year period, making colorectal the fifth most common newly diagnosed cancer in this LGA.

In 2018 to 2022, the Logan LGA average annual colorectal cancer age standardised incidence rate of 57 new cases per 100,000 persons was statistically similar to the Queensland rate (Table 7, page 36). The Logan

LGA rate for the current period was statistically similar to that reported for 2011 to 2015 of 61 new cases (95% CI: 57 – 66) per 100,000 persons[28].

Between 2013 and 2022 colorectal cancer incidence rates in both Logan LGA and Queensland trended downwards. In Logan LGA the decrease was from 65 to 53 new cases per 100,000 persons (Figure 35).

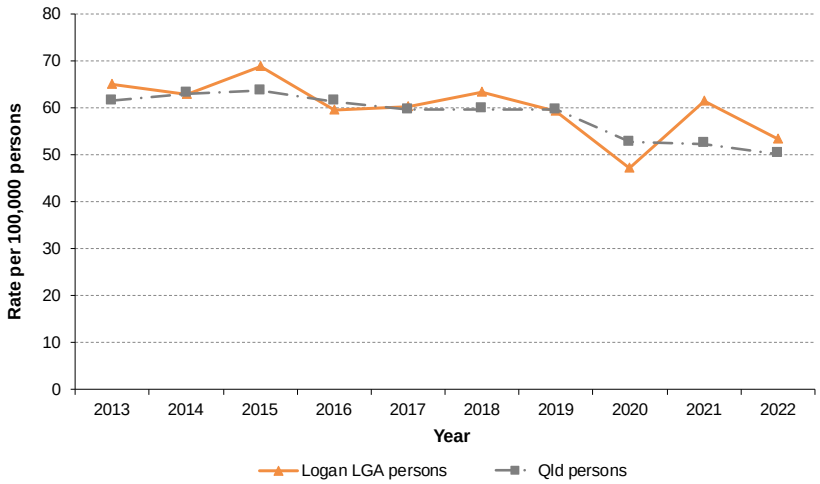


Figure 35: Colorectal cancer age standardised incidence rates, Logan LGA and Queensland, 2013 to 2022

In the years 2018 to 2022, colorectal cancer incidence rates were negligible in people under the age of 25 years. Rates increased with increasing age, to a peak in the 85 years and over age group (Figure 36).

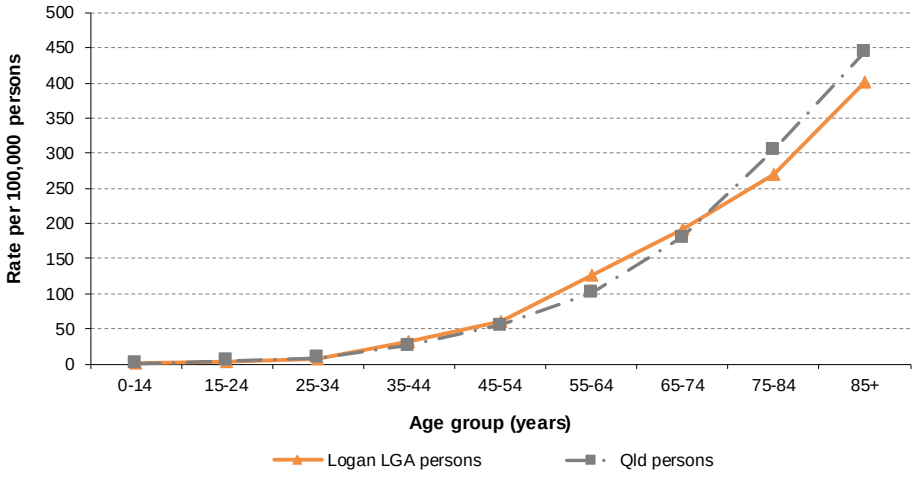


Figure 36: Colorectal cancer age specific incidence rates, Logan LGA and Queensland, 2018 to 2022

Haematological cancer

Mortality

On average there were 52 deaths per year from haematological cancer among Logan LGA residents between 2018 and 2022. This represented almost 10% of all cancer deaths in the LGA in this five-year period. The age standardised haematological cancer mortality rate in Logan LGA was significantly higher than the Queensland rate over this period (Table 5, page 34).

Incidence

On average there were 203 new cases per year of haematological cancer among Logan LGA residents between 2018 and 2022. This represented 11% of all new cases of cancer in Logan LGA in this five-year period making haematological the third most common newly diagnosed cancer type in this LGA.

In 2018 to 2022, the Logan LGA average annual haematological cancer age standardised incidence rate of 60 new cases per 100,000 persons was statistically similar to the Queensland rate (Table 7, page 36). The Logan LGA rate for the current period was statistically similar to that reported for 2011 to 2015 of 54 new cases (95% CI: 50 – 58) per 100,000 persons[28].

Between 2013 and 2022 haematological cancer rates in both Logan LGA and Queensland showed no consistent trend, ranging in Logan LGA from 51 to 69 new cases per 100,000 persons (Figure 37).

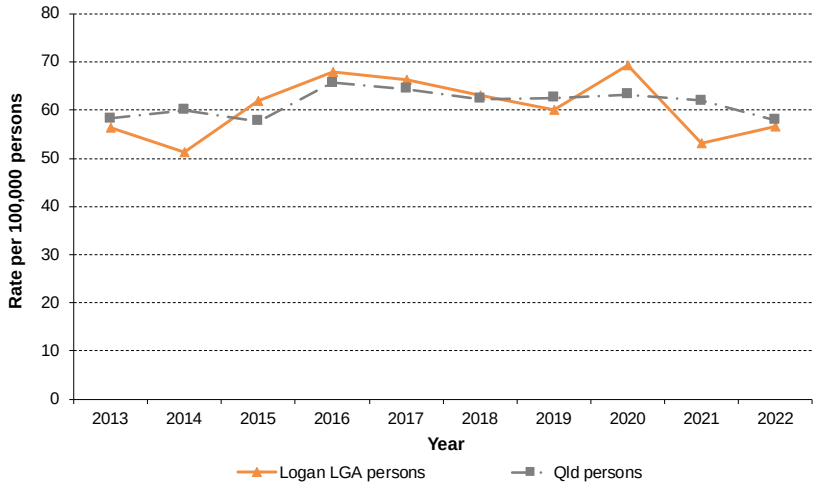


Figure 37: Haematological cancer age standardised incidence rates, Logan LGA and Queensland, 2013 to 2022

In 2018 to 2022, haematological cancer incidence rates were low for people under the age of 35 years. Rates then increased with age, with the sharpest rises occurring between the ages of approximately 64 and 84 years (Figure 38).

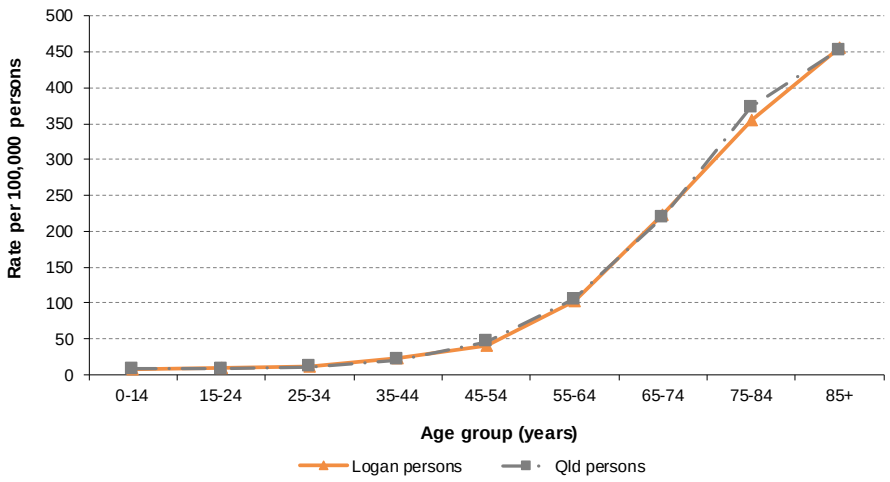


Figure 38: Haematological cancer age specific incidence rates, Logan LGA and Queensland, 2018 to 2022

Lung cancer

Mortality

On average there were 126 deaths per year from lung cancer among Logan LGA residents between 2018 and 2022. This represented 23% of all cancer deaths in the LGA in this five-year period. Males accounted for 59% of these deaths. The age standardised lung cancer mortality rate in Logan LGA was significantly higher than the Queensland rate over this period (Table 5, page 34).

Between 2002 and 2017, lung cancer annual mortality rates in Logan LGA generally trended downwards in males from a peak of 74 deaths per 100,000 males in 2010 to 42 deaths per 100,000 persons in 2017. However between 2017 and 2022 the rate in males increased to 56 deaths per 100,000 (Figure 39).

In contrast to males, over the same period mortality rates in females increased from around 20 deaths per 100,000 persons in 2002 to a peak in 2009 of over 40 deaths per 100,000. From 2010 onwards the trend in females was generally downwards until increases were recorded again in 2021 and 2022 (Figure 39).

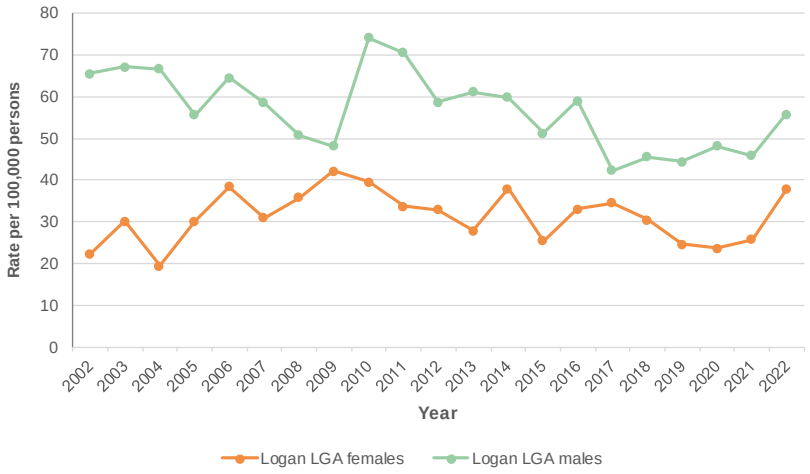


Figure 39: Lung cancer age standardised mortality rates by sex, Logan LGA, 2002 to 2022

Incidence

On average there were 198 new cases of lung cancer per year among Logan LGA residents between 2018 and 2022. This represented 11% of all new cases of cancer in Logan LGA in this five-year period making lung the fourth most common newly diagnosed cancer in this LGA.

In 2018 to 2022, the Logan LGA average annual lung cancer age standardised incidence rate of 59 new cases per 100,000 persons was significantly higher than the Queensland rate (Table 7, page 36). The Logan LGA rate for the current period was statistically similar to the rate reported for 2011 to 2015 of 55 new cases (95% CI: 51 – 59) per 100,000 persons[28].

Between 2013 and 2022, lung cancer incidence rates in Queensland were relatively stable at an average of around 50 new cases per 100,000 persons per year (Figure 40). In contrast, in Logan LGA rates showed no consistent trend, ranging between a low of 48 new cases per 100,000 persons in 2014 and 64 new cases per 100,000 persons in 2016 (Figure 40).

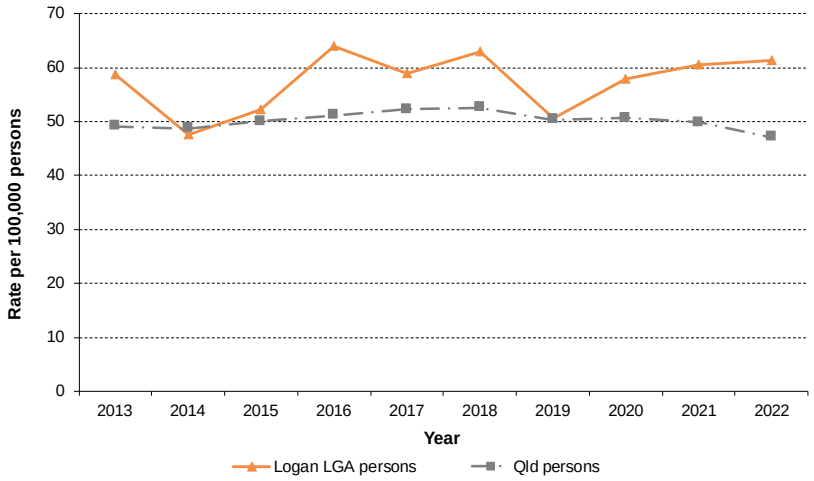


Figure 40: Lung cancer age standardised incidence rates, Logan LGA and Queensland, 2013 to 2022

In 2018 and 2022, lung cancer incidence rates were negligible in persons under the age of 35 years. Rates increased steadily with increasing age, peaking in the 85+ years group in Logan LGA and the 75+ years group in Queensland (Figure 41).

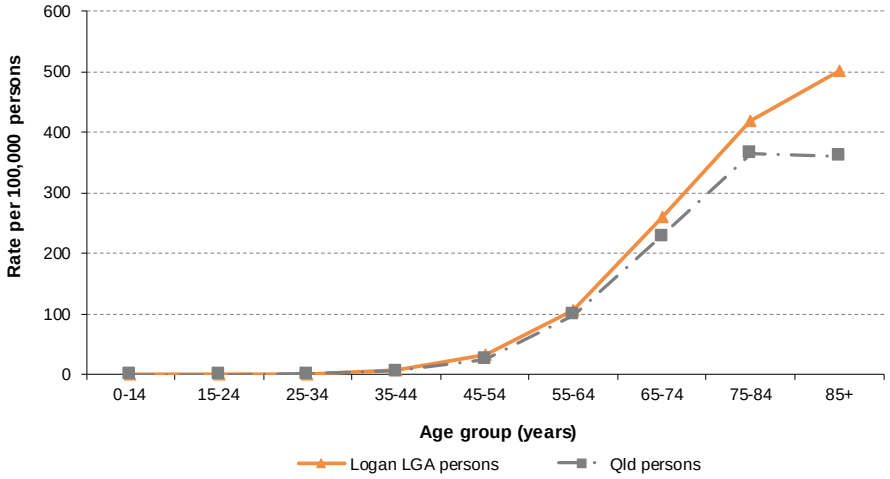


Figure 41: Lung cancer age specific incidence rates, Logan LGA and Queensland, 2018 to 2022

Hepatobiliary cancers: liver cancer

Mortality

On average there were 24 deaths per year from liver cancer among Logan LGA residents between 2018 and 2022. This represented 4.4% of all cancer deaths in Logan LGA in this five-year period. The 2018 to 2022 annual average age standardised liver cancer mortality rate in Logan LGA (7.0 deaths per 100,000 persons) was significantly higher than the Queensland rate (5.1 deaths per 100,000 persons) over this period.

Incidence

On average there were 35 new cases per year of liver cancer among Logan LGA residents between 2018 and 2022. This represented 1.9% of all new cases of cancer in Logan LGA in this five-year period.

For 2018 to 2022, the Logan LGA average annual liver cancer age standardised incidence rate of 10.1 new cases (95% CI: 8.6 – 11.6) per 100,000 persons was significantly higher than the Queensland rate of 7.5 new

cases (95% CI: 7.2 – 7.8) per 100,000 persons. The Logan LGA rate for the current period was significantly higher than that reported for 2011 to 2015 of 6.5 new cases (95% CI: 5.2 – 7.9) per 100,000 persons.

In Queensland between 2013 and 2022 liver cancer rates showed no consistent trend but remained consistently below 10 new cases per 100,000 persons The number of new cases per year in Logan LGA was too small for accurate annual age standardised rates to be calculated.

In 2018 to 2022, Logan LGA liver cancer age specific incidence rates were negligible in people under the age of 35 years. Rates increased with increasing age, peaking in the 85 years and over group in Logan LGA. It is important to note that numbers in each age group in Logan LGA were small making interpretation difficult.

Hepatobiliary cancers: pancreatic cancer

Mortality

On average there were 39 deaths per year from pancreatic cancer among Logan LGA residents between 2018 and 2022. This represented 7.2% of all cancer deaths in Logan LGA in this five-year period. The 2018 to 2022 annual average age standardised pancreatic cancer mortality rate in Logan LGA (11.9 deaths per 100,000 persons) was statistically similar to the Queensland rate (10.2 deaths per 100,000 persons) over this period.

Incidence

On average there were 52 new cases per year of pancreatic cancer among Logan LGA residents between 2018 and 2022. This represented 2.8% of all new cases of cancer in Logan LGA in this five-year period.

In 2018 to 2022, the Logan LGA average annual pancreatic cancer age standardised incidence rate of 15.5 new cases (95% CI: 13.6 – 17.4) per 100,000 persons was significantly higher than the Queensland rate of 12.5 new cases (95% CI: 12.1 – 12.9) per 100,000 persons. The Logan LGA rate for the current period was statistically similar to that reported for 2011 to 2015 of 12.6 new cases (95% CI: 10.7 – 14.6) per 100,000 persons.

In Queensland between 2013 and 2022 pancreatic cancer rates trended upwards slightly from around 10 to 12 new cases per 100,000 persons. The number of new cases per year in Logan LGA was too small for accurate annual age standardised rates to be calculated.

In 2018 to 2022, pancreatic cancer incidence rates were negligible in people under the age of 35 years. Rates then increased with age (Figure 42).

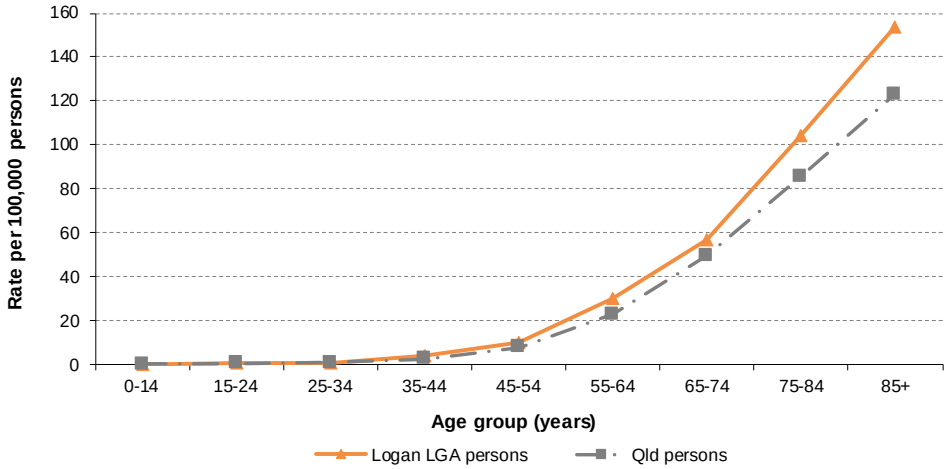


Figure 42: Pancreatic cancer age specific incidence rates, Logan LGA and Queensland, 2018 to 2022

Kidney cancer

Mortality

On average there were 7.6 deaths per year from kidney cancer among Logan LGA residents between 2018 and 2022. This represented 1.4% of all cancer deaths in Logan LGA in this five-year period. The total number of Logan LGA kidney cancer deaths from 2018 to 2022 was too small (<50) for an accurate annual average age standardised mortality rate to be calculated for this period.

Incidence

On average there were 57 new cases per year of kidney cancer among Logan LGA residents between 2018 and 2022. This represented 3.1% of all new cases of cancer in Logan LGA in this five-year period.

In 2018 to 2022, the Logan LGA average annual kidney cancer age standardised incidence rate of 16.4 new cases (95% CI: 14.5 – 18.3) per 100,000 persons was statistically similar to the Queensland rate of 14.1 new cases (95% CI: 13.7 – 14.5) per 100,000 persons. The rate for the current period was almost the same as that reported for 2011 to 2015 of 16.4 new cases (95% CI: 14.3 – 18.6) per 100,000 persons.

In Queensland between 2013 and 2022 kidney cancer incidence rates exhibited no consistent trend but remained consistently between 12 and 16 new cases per 100,000 persons. The number of new cases per year in Logan LGA was too small for accurate annual age standardised rates to be calculated.

In 2018 to 2022, kidney cancer incidence rates were negligible in people under the age of 25 years. Rates increased with age, peaking in Logan LGA in persons aged 85 years and over, while in Queensland rates remained relatively stable in persons aged 75 years and over (Figure 43).

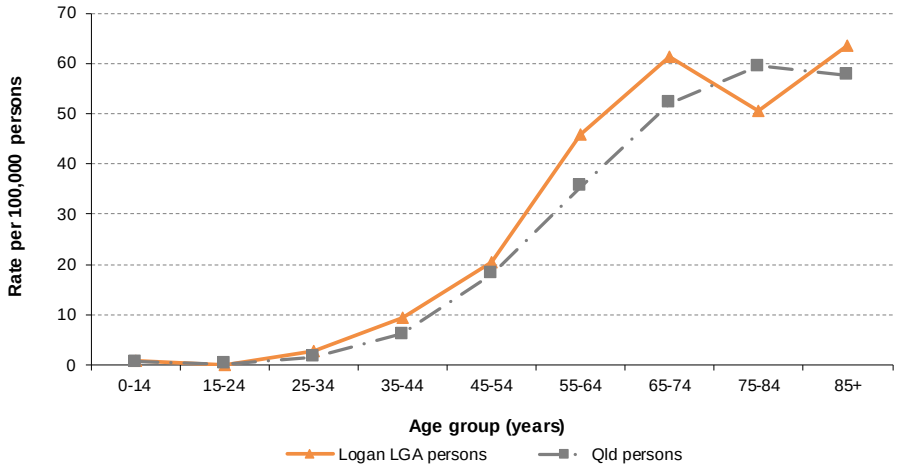


Figure 43: Kidney cancer age specific incidence rates, Logan LGA and Queensland, 2018 to 2022

Cervical cancer

Mortality

On average there were six deaths per year from cervical cancer among Logan LGA females in 2018 to 2022. The deaths were spread across all age groups over 30 years with over one-third (37%) aged 30 to 49 years. The total number of Logan LGA cervical cancer deaths from 2018 to 2022 was too small (<50) for an accurate annual average age standardised mortality rate to be calculated for this period.

Incidence

On average there were 19 new cases of cervical cancer per year among Logan LGA females between 2018 and 2022.

For 2018 to 2022, the average annual cervical cancer age standardised incidence rate in Logan LGA was 11.2 new cases (95% CI: 9.1 – 13.6) per 100,000 females which was statistically similar to the Queensland rate of 7.2 new cases (95% CI: 8.6 – 9.6) per 100,000 females. The Logan LGA rate for the current period was statistically similar to the rate reported for 2011 to 2015 of 11.5 new cases (95% CI: 9.2 – 14.2) per 100,000 females[28].

In Queensland between 2013 and 2022 cervical cancer incidence rates exhibited no consistent trend but remained consistently between eight and ten new cases per 100,000 females. The number of new cases per year in Logan LGA was too small for accurate annual age standardised rates to be calculated.

In 2018 to 2022, cervical cancer age specific incidence rates were negligible in women under the age of 25 years. Incidence rates were highest in the age group 35 to 54 years and then generally decreased with increasing age. It is important to note however, that numbers in each age group in Logan LGA were small making interpretation difficult.

Cancer screening

Colorectal cancer screening

In 2022-23 the overall National Bowel Cancer Screening Program (NBCSP) participation rate in Logan LGA was 32.4% which was lower than both the Queensland (38.8%) and Australian (41.7%) rates[23]. Data covering the age/sex breakdown for Logan LGA for the period since the program expansion in 2015 are not available, however these data have been published for Queensland[23] and are presented in Figure 44. Queensland participation rates were higher for females than for males in all age groups (Figure 44) and participation rates increased with increasing age in both sexes.

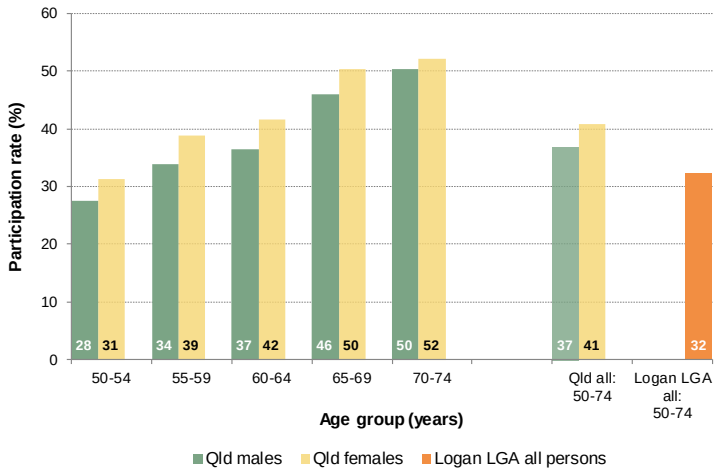


Figure 44: Crude participation rates in the National Bowel Cancer Screening Program by age and sex, Queensland and Logan LGA all persons 50-74 years, 2022-23

Between 2014-15 and 2022-23 NBCSP participation rates in Logan LGA were consistently lower than the rates in Queensland (Figure 45). Rates in Logan LGA increased between 2014-15 and 2016-17 but then were stable to 2019-20. In 2020-21, the first timepoint entirely impacted by the COVID-19 pandemic, rates in Logan LGA dropped to a level lower than that recorded in 2014-15. In 2022-23 the first increase in rates since the pandemic was reported (Figure 45).

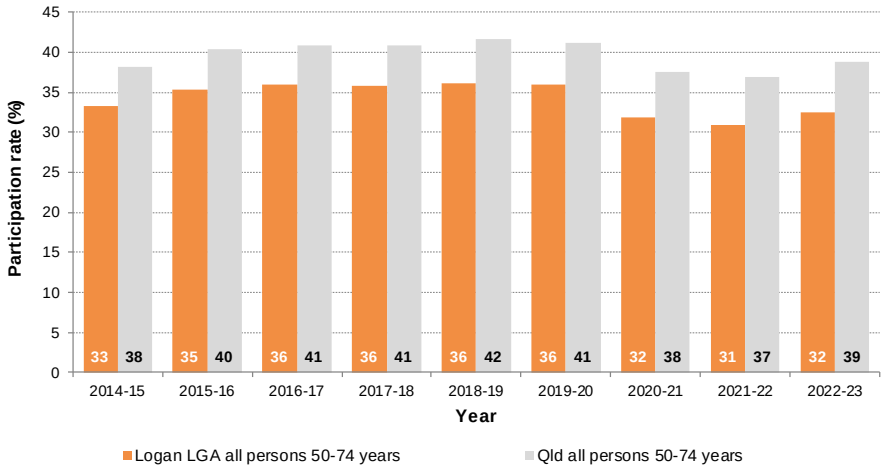


Figure 45: Crude all persons 50 to 74 years participation rates in the National Bowel Cancer Screening Program, Queensland and Logan LGA, 2014-15 to 2022-23

Breast cancer screening

At the time of publication of this report, breast cancer screening participation data were not published specifically for local government areas. The 2021-2022 the data presented in this section of the report are a compilation of data for the SA3s comprising Logan LGA. No times series data are presented for Logan LGA because of a lack of published data for some SA3s in past years. This means it is not possible to calculate reliable participation rate estimates for past years.

In 2021-22 within the targeted age group of 50 to 74 years, participation in the BreastScreen Queensland program was 46%. Participation increased with increasing age, peaking in the 65 to 69 years group at 51% in MSH and 55% in Queensland (Figure 46). Logan LGA participation rates were lower than the equivalent Queensland rates in all five-year age groups within the target age range (Figure 46).

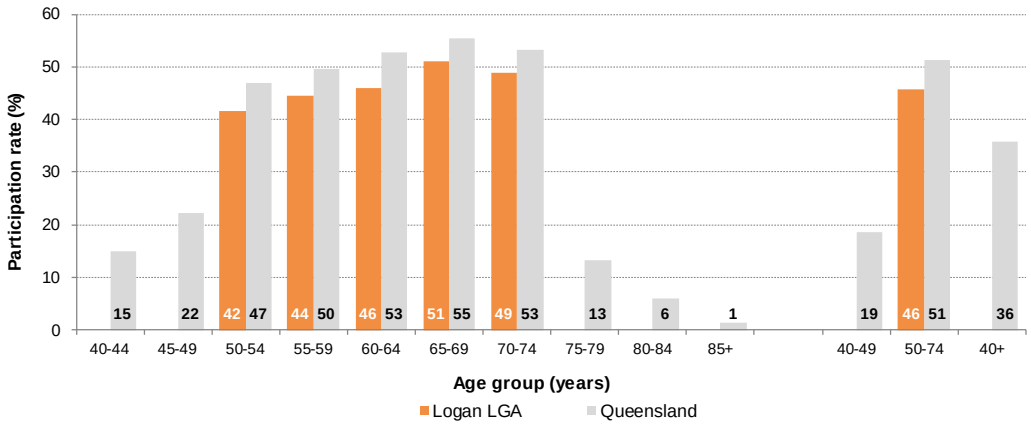


Figure 46: Crude participation rates in the BreastScreen Queensland screening program by age group, Logan LGA and Queensland, 2021-22

Cervical cancer screening

In 2019-23 the Logan LGA coverage rate among those in the 25 to 74 years target group was 64.9%. This was substantially lower than the Queensland coverage rate of 73.0% (Figure 47).

In 2019-23 both Logan LGA and Queensland cervical screening program coverage rates were highest (74% in Logan LGA) in the 25 to 29 years age group. Rates in those aged 30 to 64 years in Logan LGA ranged from 63 to 69%. Rates fell with increasing age in those over 50 years, with the lowest coverage in those aged 70 to 74 years (40%) (Figure 47).

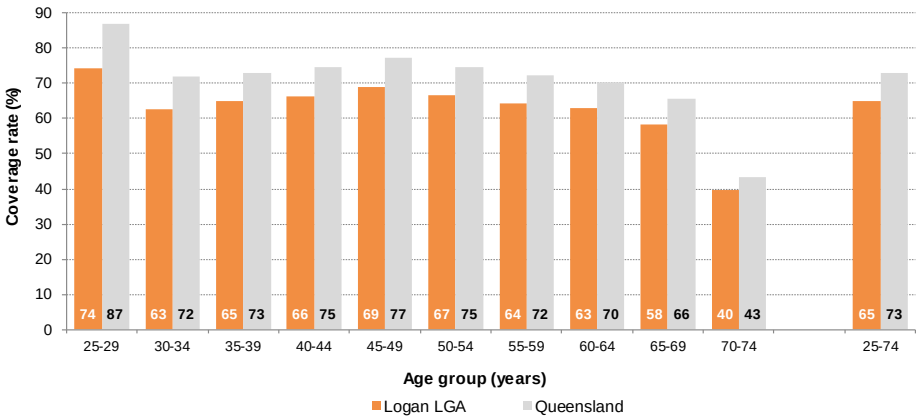


Figure 47: Crude participation rates in the National Cervical Screening Program by age group, Logan LGA and Queensland, 2019-2023

Redland Local Government Area

All cancers

Mortality

On average there were 338 deaths per year from all cancers among Redland LGA residents in the five years from 2018 to 2022. Six types of cancer (lung, colorectal, hepatobiliary, haematological, prostate and female breast) together accounted for two thirds (68%) of all cancer deaths in Redland LGA in 2018 to 2022 (Table 9). Lung cancer alone accounted for one in five (20%) cancer deaths in Redland LGA in this period.

The average annual age standardised mortality rate for all cancers in Redland LGA (144 deaths per 100,000 persons) was significantly lower than the Queensland rate (157 deaths per 100,000 persons) in 2018 to 2022 (Table 9). This difference was driven by lung cancer which was the only major cancer type with a rate significantly lower in Redland LGA (Table 9). The mortality rates of all other groupings of cancer by site were statistically similar in Redland LGA and Queensland in this period (Table 9).

The all cancer Redland LGA mortality rate for 2018 to 2022 was significantly lower than the rate reported for 2011 to 2015 of 168 deaths (95% CI: 160 – 177) per 100,000 persons[29].

Table 9: Mortality numbers and age standardised mortality rates by site of cancer, Redland LGA and Queensland, 2018 to 2022[2]

Site	Number of deaths, 2018-2022		Average annual age standardised rate per 100,000 persons (95% confidence interval)		Statistically significant difference LGA–QLD*
	Redland LGA	QLD	Redland LGA	QLD	
Lung	339	10,639	27.9 (25.1 – 31.0)	33.4 (32.7 – 34.0)	↓
Colorectal	204	5,682	17.5 (15.1 – 19.9)	18.1 (17.6 – 18.6)	—
Hepatobiliary	192	5,693	15.6 (13.5 – 17.9)	17.9 (17.5 – 18.4)	—
Haematological	171	5,143	14.8 (12.7 – 17.1)	16.3 (15.8 – 16.7)	—
Prostate	130	3,730	24.1 (20.1 – 28.4)	26.1 (25.2 – 26.9)	—
Breast (female)	109	3,023	18.3 (15.1 – 21.9)	18.7 (18.1 – 19.4)	—
Upper gastrointestinal	89	2,736	7.3 (5.9 – 8.9)	8.6 (8.3 – 9.0)	—
Gynaecological	79	2,121	13.0 (10.3 – 16.1)	13.0 (12.4 – 13.5)	—
Other urological	74	2,600	6.5 (5.1 – 8.0)	8.2 (7.9 – 8.5)	—
Melanoma	63	1,842	5.4 (4.1 – 6.8)	5.9 (5.6 – 6.2)	—
Head and neck	62	1,484	5.5 (4.2 – 6.9)	4.7 (4.4 – 4.9)	—
CNS and Brain	55	1,613	5.1 (3.8 – 6.5)	5.3 (5.1 – 5.6)	—
Bone and soft tissue	22	523	Not calculated#	1.8 (1.6 – 1.9)	Not calculated#
Endocrine	6	206	Not calculated#	0.7 (0.6 – 0.8)	Not calculated#
Breast (male)	<5	22	Not calculated#	Not calculated#	Not calculated#
Other invasive cancers	23	443	Not calculated#	1.4 (1.3 – 1.5)	Not calculated#
Unknown primary	72	2,080	5.9 (4.6 – 7.4)	6.5 (6.2 – 6.8)	—
TOTAL	**1,691**	**49,580**	**143.7 (136.9 – 150.6)**	**157.2 (155.8 – 158.5)**	↓

* ↑ Redland LGA statistically significantly higher than Queensland; ↓ Redland LGA statistically significantly lower than Queensland; — no statistically significant difference between Redland LGA and Queensland

I# Rate not calculated because total number of deaths, 2018 to 2022, less than 50

Source: Queensland Health. Oncology Analysis System (OASys). Queensland Cancer Control Analysis Team[2]

In 2018 to 2022, the average annual age standardised mortality rate for all cancers (combined) in Redland LGA males was significantly lower than the Queensland male rate, while the rates for females were not significantly different (Table 10). The Redland LGA and Queensland mortality rates in males were significantly and substantially higher than the corresponding rates in females (Table 10).

Table 10: All cancer average annual age specific and all-ages age-standardised mortality rates by age group and sex, Redland LGA and Queensland, 2018-2022[2]

Age group (years)	Average annual age specific and all-ages age-standardised mortality rate (95% confidence interval)			
	Male		Female	
	Redland LGA rate/100,000	QLD rate/100,000	Redland LGA rate/100,000	QLD rate/100,000
0 – 14	7.9	2.2	2.8	1.6
15 – 24	-	3.8	4.5	1.8
25 – 39	23.0	10.1	13.1	12.5
40 – 64	131.3	142.8	101.9	114.9
65+	1,027.8	1,126.1	691.6	740.7
All ages	**175.6 (164.6 – 186.9)**	**192.6 (190.4 – 194.9)**	**117.2 (108.9 – 125.8)**	**127.3 (125.6 – 129.0)**

Source: Queensland Health. Oncology Analysis System (OASys). Queensland Cancer Control Analysis Team[2]

Incidence

On average there were 1,186 new (incident) cases of cancer per year among Redland LGA residents in the five years from 2018 to 2022. The six most common types of newly diagnosed cancer in Redland (prostate, melanoma, female breast, haematological, colorectal and lung) (Table 11) together accounted for 72% of all new cases.

For this period, the average annual age standardised incidence rate for all cancers (combined) in Redland LGA (536 new cases per 100,000 persons) was not significantly different from the Queensland rate (545 new cases per 100,000 persons) (Table 11). The current Redland LGA incidence rate was not significantly different from the rate reported for 2011 to 2015 of 539 new cases per 100,000 persons[29].

The incidence rate of ‘other invasive cancers’ was significantly higher in Redland LGA than Queensland in 2018 to 2022, however all other cancer groupings by site were statistically similar in Redland LGA and Queensland (Table 11).

Table 11: Newly diagnosed cancer cases (incidence) and age standardised incidence rates by site of cancer, Redland LGA and Queensland, 2018 to 2022[2]

Site	Number of new cases, 2018-2022		Average annual age standardised rate per 100,000 persons (95% confidence interval)		Statistically significant difference LGA–QLD*
	Redland LGA	QLD	Redland LGA	QLD	
Prostate	944	27,645	165.2 (154.8 – 175.9)	177.0 (175.0 – 179.1)	—
Melanoma	823	21,409	77.1 (71.9 – 82.5)	72.2 (71.3– 73.2)	—
Breast (female only)	696	18,991	128.3 (118.9 – 138.0)	125.5 (123.8 – 127.3)	—
Haematological	648	18,779	57.7 (53.3 – 62.2)	61.5 (60.6 – 62.4)	—
Colorectal	598	16,632	55.0 (50.7 – 59.5)	54.7 (53.9 – 55.6)	—
Lung	561	15,929	46.6 (42.8 – 50.5)	50.1 (49.3 – 50.9)	—
Other urological	306	9,013	28.7 (25.5 – 32.0)	30.0 (29.3 – 30.6)	—
Hepatobiliary	284	7,460	24.3 (21.6 – 27.2)	23.7 (23.2 – 24.2)	—
Gynaecological	247	6,739	44.9 (39.5 – 50.7)	44.4 (43.4 – 45.5)	—
Head and neck	191	5,533	17.0 (14.7 – 19.5)	18.1 (17.6 – 18.6)	—
Upper gastrointestinal	167	5,264	14.5 (12.4 – 16.8)	16.9 (16.5 – 17.4)	—
Endocrine	145	4,323	16.3 (13.8 – 19.1)	15.6 (15.1 – 16.1)	—
CNS and Brain	64	2,064	6.5 (5.0 – 8.2)	7.1 (6.8 – 7.5)	—
Bone and soft tissue	48	1,271	Not calculated#	4.5 (4.2 – 4.7)	Not calculated#
Breast (male only)	8	172	Not calculated#	1.1 (1.0 – 1.3)	Not calculated#
Other invasive cancers	106	2,171	9.3 (7.6 – 11.2)	7.0 (6.7 – 7.3)	↑
Unknown primary	96	2,776	8.2 (6.6 – 9.9)	8.8 (8.5 – 9.1)	—
TOTAL	**5,932**	**166,171**	**535.5 (522.1 – 549.4)**	**543.7 (541.1 – 546.3)**	—

* ↑ Redland LGA statistically significantly higher than Queensland; ↓ Redland LGA statistically significantly lower than Queensland; — no statistically significant difference between Redland LGA and Queensland

\# Rate not calculated because total number of new cases, 2018 to 2022, less than 50

Source: Queensland Health. Oncology Analysis System (OASys). Queensland Cancer Control Analysis Team[2]

Table 12: All cancer average annual age specific and all-ages age-standardised incidence rates by age group and sex, Redland LGA and Queensland, 2018-2022[2]

Age group (years)	Average annual age specific and all-ages age-standardised incidence rate (95% confidence interval)			
	Male		Female	
	Redland LGA rate/100,000	QLD rate/100,000	Redland LGA rate/100,000	QLD rate/100,000
0 – 14	15.8	17.7	11.3	15.0
15 – 24	25.9	34.2	47.4	35.4
25 – 39	109.1	98.5	151.2	153.0
40 – 64	794.0	749.3	656.5	677.0
65+	3,064.5	3,077.9	1770.2	1,800.3
All ages	**632.6 (611.5 – 654.1)**	**631.5 (627.5 – 635.6)**	**451.7 (434.3 – 469.4)**	**465.3 (461.9 – 468.7)**

Source: Queensland Health. Oncology Analysis System (OASys). Queensland Cancer Control Analysis Team[2]

Prostate cancer

Mortality

On average there were 26 deaths per year from prostate cancer among Redland LGA males in 2018 to 2022. This represented 7.7% of all cancer deaths in Redland LGA in this period. There was no significant difference

in age standardised prostate cancer mortality rate between Redland LGA and Queensland in this period (Table 9, page 50).

Incidence

On average there were 189 new cases of prostate cancer per year among Redland LGA males between 2018 and 2022. This represented 16% of all new cases of cancer in Redland LGA in this five-year period, making prostate cancer the most common newly diagnosed cancer in Redland LGA (Table 11, page 52).

In 2018 to 2022, the Redland LGA average annual prostate cancer age standardised incidence rate of 165 new cases per 100,000 males was statistically similar to the Queensland rate of 177 new cases per 100,000 males (Table 11, page 52). The Redland LGA rate for the current period was statistically similar to that reported for 2011 to 2015 of 147 new cases (95% CI: 136 – 159) per 100,000 males[29].

Annual age standardised rates of prostate cancer trended slightly downwards in both Redland LGA and Queensland until 2016 after which they both trended upwards, with a substantial increase reported in 2022 (Figure 48).

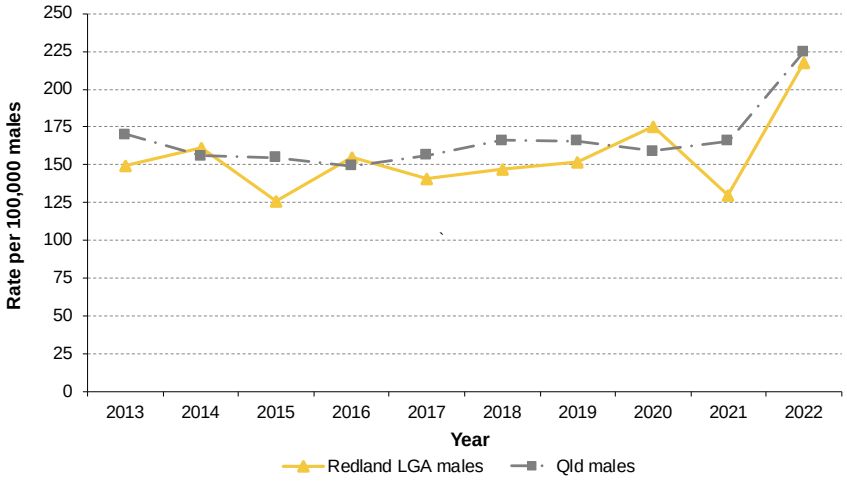


Figure 48: Prostate cancer age standardised incidence rates, Redland LGA and Queensland, 2013 to 2022

In 2018 to 2022, there were no new prostate cancer cases in men under 35 years and the incidence rate was minimal in men aged 35 to 44 years. From the age of about 45 years rates increased sharply, peaking in the 65 to 74 years age group before declining somewhat in older age groups (Figure 49).

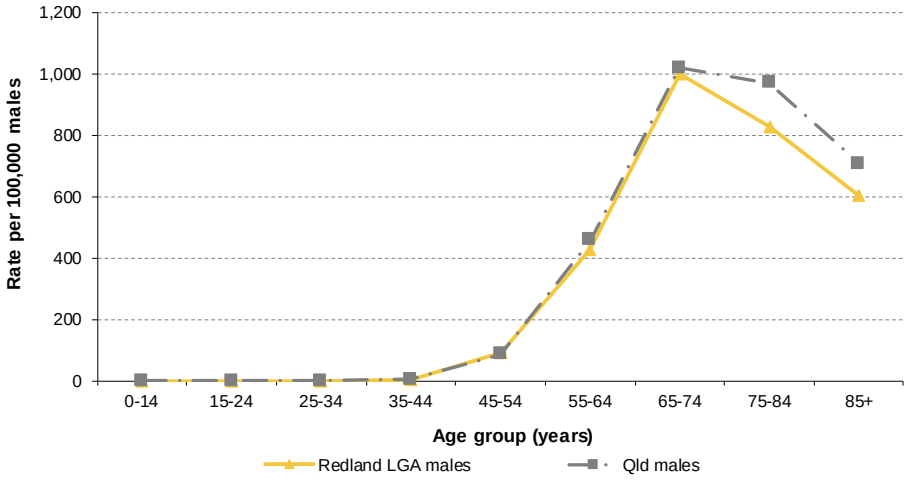


Figure 49: Prostate cancer age specific incidence rates, Redland LGA and Queensland, 2018 to 2022

Melanoma

Mortality

On average there were 13 deaths per year from melanoma among Redland LGA residents between 2018 and 2022. This represented 3.7% of all cancer deaths in Redland LGA in this five-year period. The age standardised melanoma mortality rate in Redland LGA was statistically similar to the Queensland rate over this period (Table 9, page 50).

Incidence

On average there were 165 new cases of melanoma per year among Redland LGA residents between 2018 and 2022. This represented 14% of all new cases of cancer in Redland LGA in this five-year period, making melanoma the second most common newly diagnosed cancer in Redland LGA.

In 2018 to 2022, the Redland LGA average annual melanoma age standardised incidence rate of 77 new cases per 100,000 persons was statistically similar to the Queensland rate of 72 new cases per 100,000 persons (Table 11, page 52). The Redland LGA rate for the current period was statistically similar to that reported for 2011 to 2015 of 83 new cases (95% CI: 77 – 89) per 100,000 persons[29].

Between 2014 and 2019 annual melanoma age standardised incidence rates in Redland LGA trended upwards from 78 to 96 new cases per 100,000 persons (Figure 50). A substantial drop was recorded in 2020 at the time of the COVID-19 pandemic with increases in the two subsequent years. In contrast, in Queensland and overall reduction in annual incidence rate was observed from 2013 to 2022 (Figure 50).

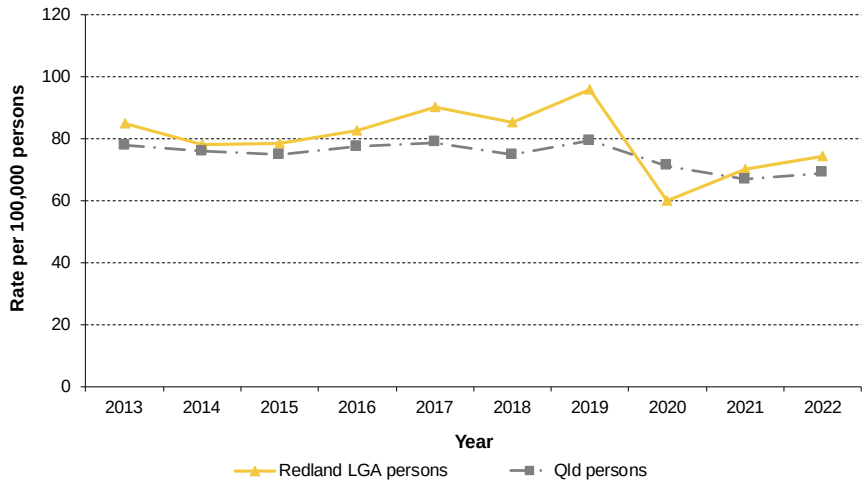


Figure 50: Melanoma age standardised incidence rates, Redland LGA and Queensland, 2013 to 2022

In 2018 to 2022, melanoma incidence rates were negligible in people under the age of 15 years, but then increased with increasing age (Figure 51). In Redland LGA the rate peaked in those aged 85 years and over while the Queensland the rate was consistent in in persons aged 75 years and over (Figure 51).

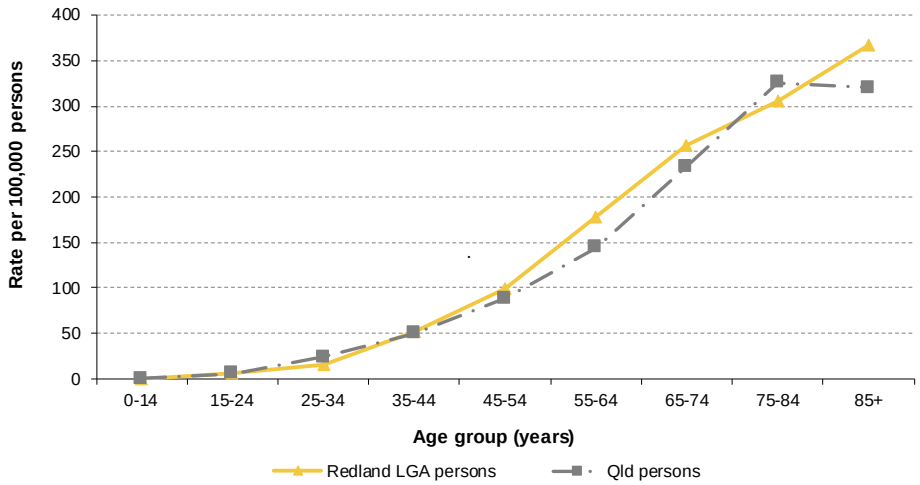


Figure 51: Melanoma age specific incidence rates, Redland LGA and Queensland, 2018 – 2022

Breast cancer

Mortality

On average there were 22 deaths per year from breast cancer among Redland LGA females between 2018 and 2022. This represented 6.4% of all cancer deaths in Redland LGA in this five-year period. The majority of these deaths (89%) were in the 50 years and over age group, with women aged 50 to 79 years accounting for 70%) of all breast cancer deaths. In this period there was an average of less than one death per year among Redland LGA males.

There was no significant difference in average annual female breast cancer age-standardised mortality rate between Redland LGA and Queensland over the years 2018 to 2022 combined (Table 9, page 50).

Incidence

On average there were 139 new cases of breast cancer per year among Redland LGA women between 2018 and 2022. This represented almost 12% of all new cases of cancer in Redland LGA in this five-year period, making breast the third most common newly diagnosed cancer in this LGA. By comparison, on average there were fewer than five new cases of breast cancer per year among Redland LGA men over this period.

In 2018 to 2022, the Redland LGA average annual female breast cancer age standardised incidence rate of 128 new cases per 100,000 females was statistically similar to the Queensland rate (Table 11, page 52). The Redland LGA rate for the current period was almost the same as that reported for 2011 to 2015 of 127 new cases (95% CI: 117 – 138) per 100,000 females[29].

Between 2013 and 2022 the annual female breast cancer incidence rate in Redland LGA was relatively steady, remaining around 130 new cases per 100,000 females (Figure 52). However in Queensland the rate exhibited a small reduction from around 130 to 120 new cases per 100,000 (Figure 52).

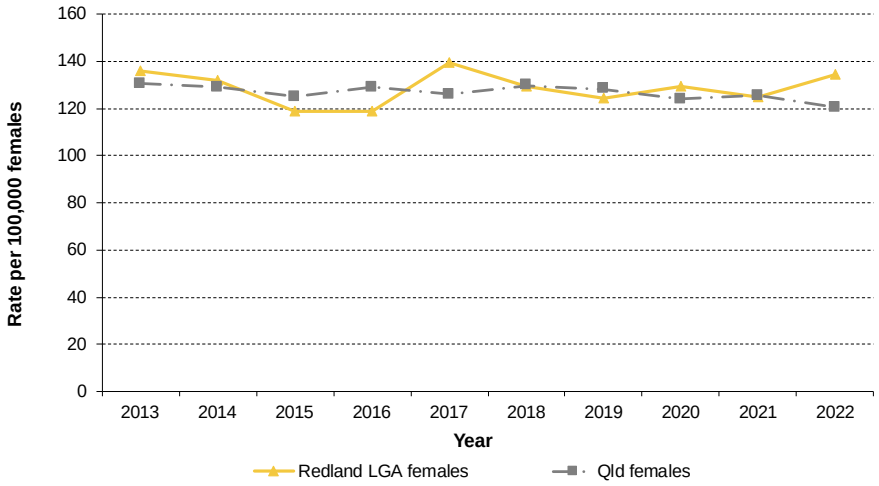


Figure 52: Breast cancer age standardised incidence rates, Redland LGA and Queensland, 2013 to 2022

In 2018 to 2022, breast cancer incidence rates were negligible in women under the age of 25 years. Incidence rates increased with increasing age, but decreased slightly in women aged 75 years and over (Figure 53).

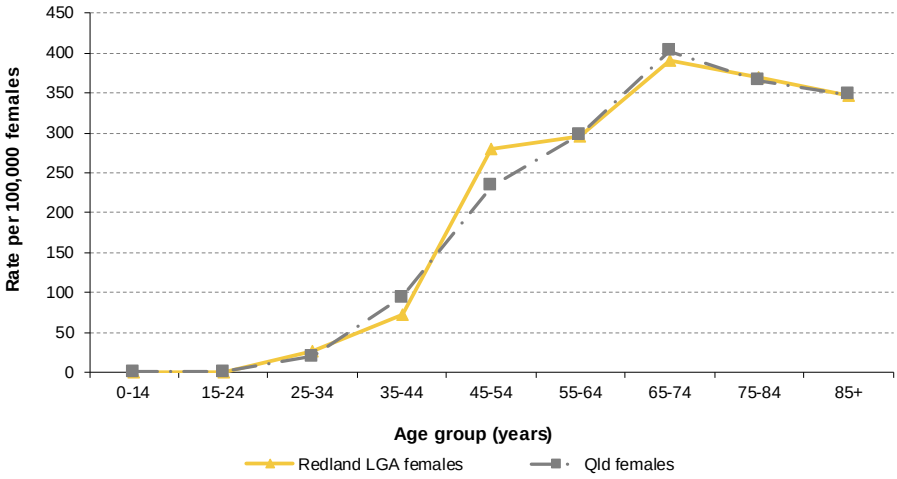


Figure 53: Breast cancer age specific incidence rates, Redland LGA and Queensland, 2018 to 2022

Colorectal cancer

Mortality

On average there were 41 deaths per year from colorectal cancer among Redland LGA residents between 2018 and 2022. This represented 12% of all cancer deaths in the LGA in this five-year period. The age standardised colorectal cancer mortality rate in Redland LGA was statistically similar to the Queensland rate over this period (Table 9, page 50).

Incidence

On average there were 120 new cases of colorectal cancer per year among Redland LGA residents between 2018 and 2022. This represented 10% of all new cases of cancer in Redland LGA in this five-year period, making colorectal the fifth most common newly diagnosed cancer in this LGA.

In 2018 to 2022, the Redland LGA average annual colorectal cancer age standardised incidence rate of 55 new cases per 100,000 persons was statistically similar to the Queensland rate (Table 11, page 52). The

Redland LGA rate for the current period was statistically similar to that reported for 2011 to 2015 of 62 new cases (95% CI: 57 – 68) per 100,000 persons[29].

Between 2014 and 2022 colorectal cancer incidence rates in both Redland LGA and Queensland trended downwards. In Redland LGA the decrease was from 67 to 56 new cases per 100,000 persons (Figure 54).

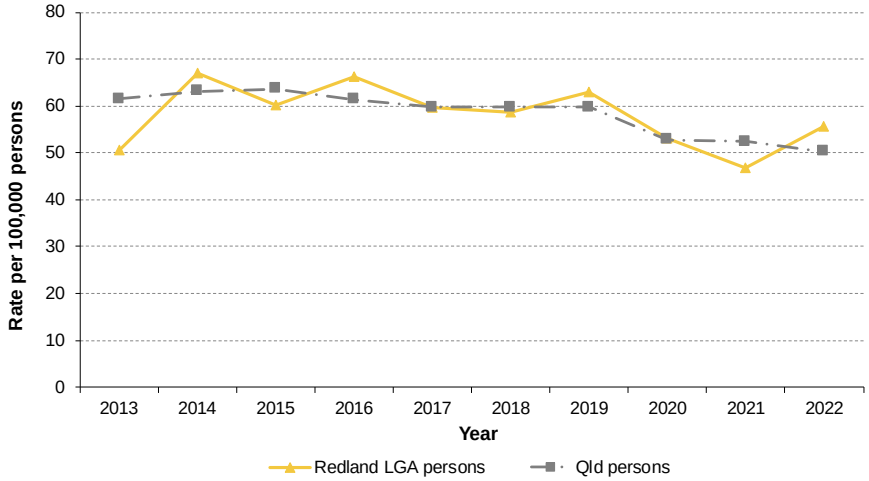


Figure 54: Colorectal cancer age standardised incidence rates, Redland LGA and Queensland, 2013 to 2022

In 2018 to 2022, colorectal cancer incidence rates were very low in people under the age of 25 years. Rates increased with increasing age, to a peak in the 85 years and over age group (Figure 55).

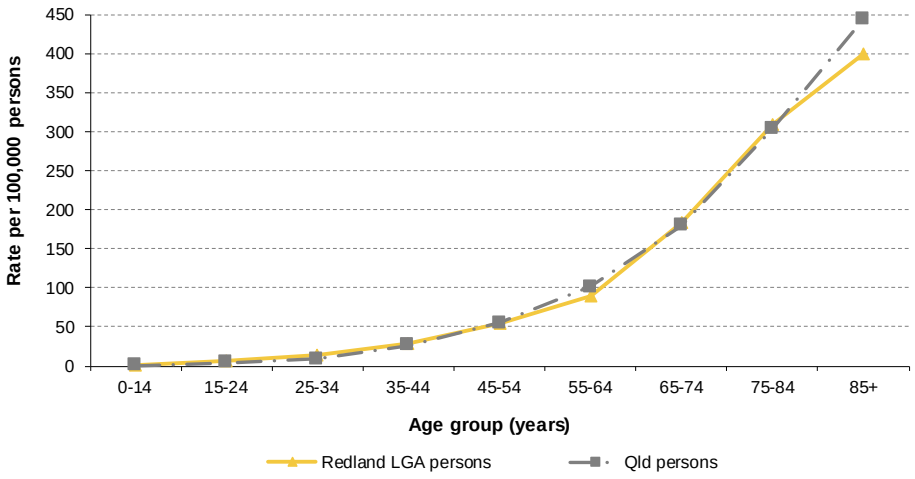


Figure 55: Colorectal cancer age specific incidence rates, Redland LGA and Queensland, 2018 to 2022

Haematological cancer

Mortality

On average there were 34 deaths per year from haematological cancer among Redland LGA residents between 2018 and 2022. This represented 10% of all cancer deaths in the LGA in this five-year period. The age standardised haematological cancer mortality rate in Redland LGA was statistically similar to the Queensland rate over this period (Table 9, page 50).

Incidence

On average there were 130 new cases per year of haematological cancer among Redland LGA residents between 2018 and 2022. This represented 11% of all new cases of cancer in Redland LGA in this five-year period making haematological the fourth most common newly diagnosed cancer type in this LGA.

In 2018 to 2022, the Redland LGA average annual haematological cancer age standardised incidence rate of 58 new cases per 100,000 persons was statistically similar to the Queensland rate (Table 11, page 52). The rate for the current period was almost the same as that reported for 2011 to 2015 of 58 new cases (95% CI: 53 – 63) per 100,000 persons[29].

Between 2013 and 2022 haematological cancer rates in both Redland LGA and Queensland showed no consistent trend, ranging in Redland LGA from 54 to 62 new cases per 100,000 persons (Figure 56).

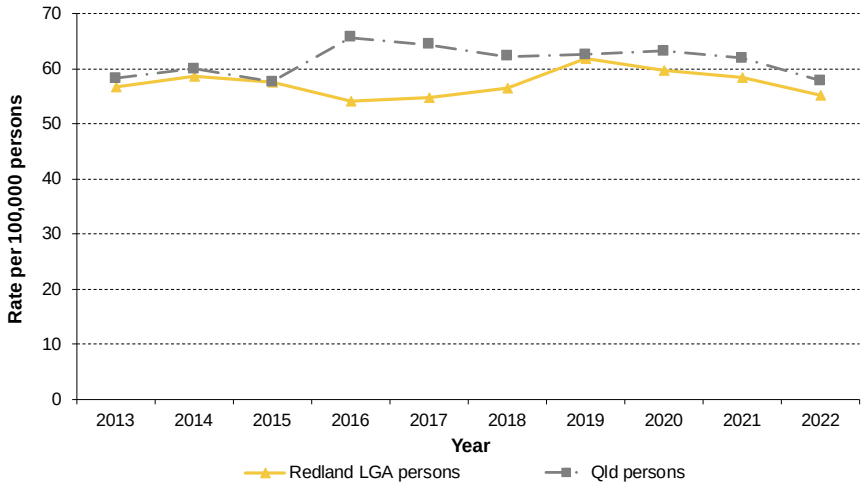


Figure 56: Haematological cancer age standardised incidence rates, Redland LGA and Queensland, 2013 to 2022

In 2018 to 2022, haematological cancer incidence rates were low for people under the age of 35 years. Rates then increased with age, with the sharpest rises occurring between the ages of approximately 64 and 84 years (Figure 57).

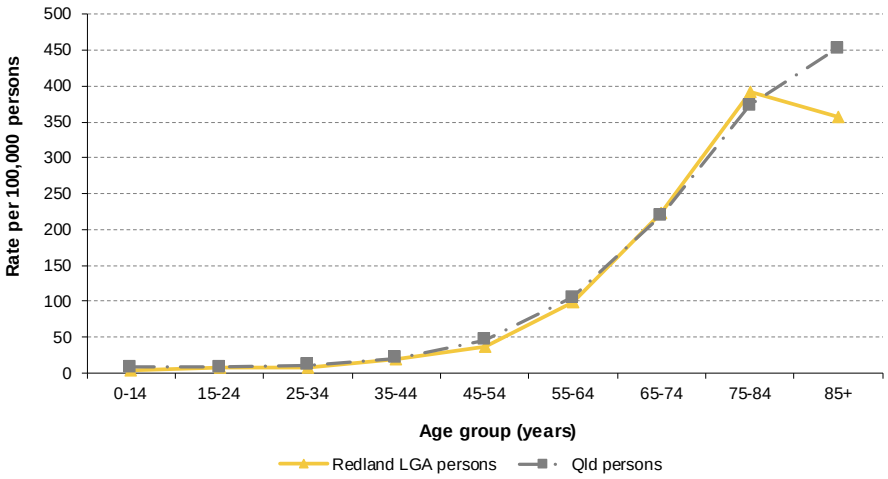


Figure 57: Haematological cancer age specific incidence rates, Redland LGA and Queensland, 2018 to 2022

Lung cancer

Mortality

On average there were 68 deaths per year from lung cancer among Redland LGA residents between 2018 and 2022. This represented one in five (20%) cancer deaths in the LGA in this five-year period. Males accounted for 58% of these deaths. The age standardised lung cancer mortality rate in Redland LGA was significantly lower than the Queensland rate over this period (Table 9, page 50).

Between 2002 and 2022 lung cancer annual mortality rates in Redland LGA males generally trended downwards from a peak of 61 deaths per 100,000 in 2007 to 34 deaths per 100,000 in 2022. However in females no consistent trend was observed (Figure 58). Between 2014 and 2022 the female rate remained between 20 and 31 deaths per 100,000 (Figure 58).

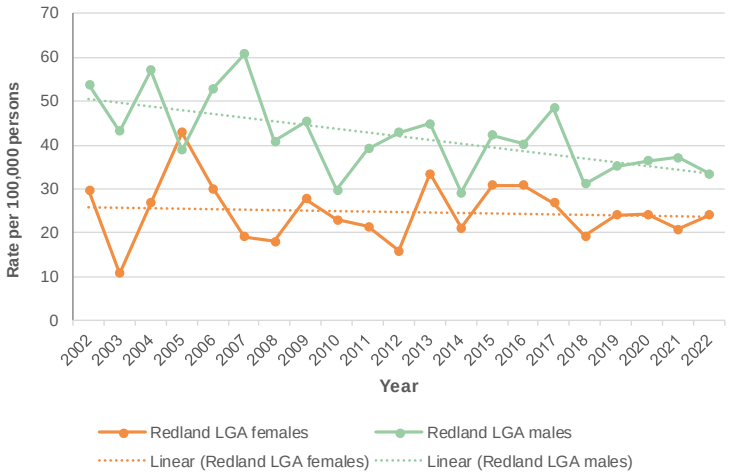


Figure 58: Lung cancer age standardised mortality rates by sex, Redland LGA, 2002 to 2022

Incidence

On average there were 112 new cases of lung cancer per year among Redland LGA residents between 2018 and 2022. This represented almost 10% of all new cases of cancer in Redland LGA in this five-year period making lung the sixth most common newly diagnosed cancer in this LGA.

In 2018 to 2022, the Redland LGA average annual lung cancer age standardised incidence rate of 47 new cases per 100,000 persons was statistically similar to the Queensland rate (Table 11, page 52). The rate for the current period was statistically similar to that reported for 2011 to 2015 of 44 new cases (95% CI: 40 – 48) per 100,000 persons[29].

Between 2013 and 2022, lung cancer incidence rates in Queensland were relatively stable at an average of around 50 new cases per 100,000 persons per year (Figure 59). In contrast, in Redland LGA rates increased from fewer than 40 to 55 new cases per 100,000 persons between 2014 and 2020 (Figure 59). The incidence rate fell sharply back to fewer than 40 cases in 2022 (Figure 59).

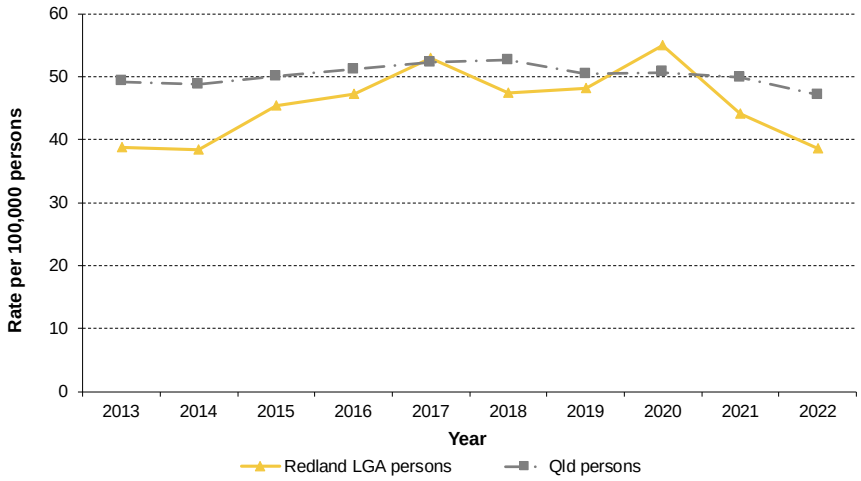


Figure 59: Lung cancer age standardised incidence rates, Redland LGA and Queensland, 2013 to 2022

In 2018 and 2022, lung cancer incidence rates were negligible in persons under the age of 35 years. Rates increased steadily with increasing age, peaking in the 85+ years group in Redland LGA and the 75+ years group in Queensland (Figure 60).

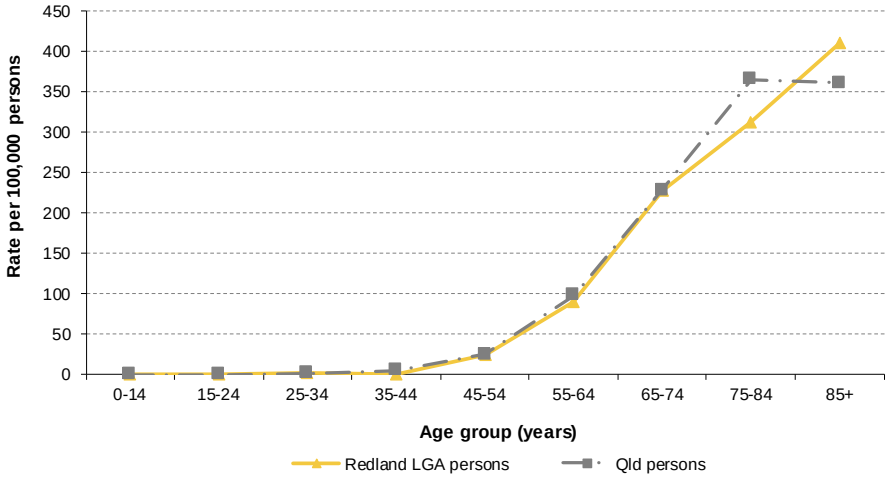


Figure 60: Lung cancer age specific incidence rates Redland LGA and Queensland, 2018 to 2022

Hepatobiliary cancers: liver cancer

Mortality

On average there were ten deaths per year from liver cancer among Redland LGA residents between 2018 and 2022. This represented 3.0% of all cancer deaths in Redland LGA in this five-year period. The 2018 to 2022 annual average age standardised liver cancer mortality rate in Redland LGA (4.0 deaths per 100,000 persons) was statistically similar to the Queensland rate (5.1 deaths per 100,000 persons) over this period.

Incidence

On average there were 17 new cases per year of liver cancer among Redland LGA residents between 2018 and 2022. This represented 1.4% of all new cases of cancer in Redland LGA in this five-year period.

In 2018 to 2022, the Redland LGA average annual liver cancer age standardised incidence rate of 6.9 new cases (95% CI: 5.5 – 8.5) per 100,000 persons was statistically similar to the Queensland rate of 7.5 new

cases (95% CI: 7.2 – 7.8) per 100,000 persons. The rate for the current period was statistically similar to that reported for 2011 to 2015 of 6.4 new cases (95% CI: 4.9 – 8.2) per 100,000 persons.

In Queensland between 2013 and 2022 liver cancer rates showed no consistent trend but remained consistently below 10 new cases per 100,000 persons The number of new cases per year in Redland LGA was too small for accurate annual age standardised rates to be calculated.

In 2018 to 2022, Redland LGA liver cancer age specific incidence rates were negligible in people under the age of 55 years. Rates increased with increasing age, peaking in the 75 years and over group in Redland LGA. It is important to note that numbers in each age group in Redland LGA were small making interpretation difficult.

Hepatobiliary cancers: pancreatic cancer

Mortality

On average there were 22 deaths per year from pancreatic cancer among Redland LGA residents between 2018 and 2022. This represented 6.6% of all cancer deaths in Redland LGA in this five-year period. The 2018 to 2022 annual average age standardised pancreatic cancer mortality rate in Redland LGA (9.1 deaths per 100,000 persons) was statistically similar to the Queensland rate (10.2 deaths per 100,000 persons) over this period.

Incidence

On average there were 30 new cases per year of pancreatic cancer among Redland LGA residents between 2018 and 2022. This represented 2.5% of all new cases of cancer in Redland LGA in this five-year period.

In 2018 to 2022, the Redland LGA average annual pancreatic cancer age standardised incidence rate of 13.0 new cases (95% CI: 11.0 – 15.1) per 100,000 persons was statistically similar to the Queensland rate of 12.5 new cases (95% CI: 12.1 – 12.9) per 100,000 persons. The Redland LGA rate for the current period was statistically similar to that reported for 2011 to 2015 of 12.2 new cases (95% CI: 10.1 – 14.6) per 100,000 persons.

In Queensland between 2013 and 2022 pancreatic cancer rates trended upwards slightly from around 10 to 12 new cases per 100,000 persons. The number of new cases per year in Redland LGA was too small for accurate annual age standardised rates to be calculated.

In 2018 to 2022, pancreatic cancer incidence rates were negligible in people under the age of 35 years. Rates then increased with age, peaking in those aged 85 years and over (Figure 61).

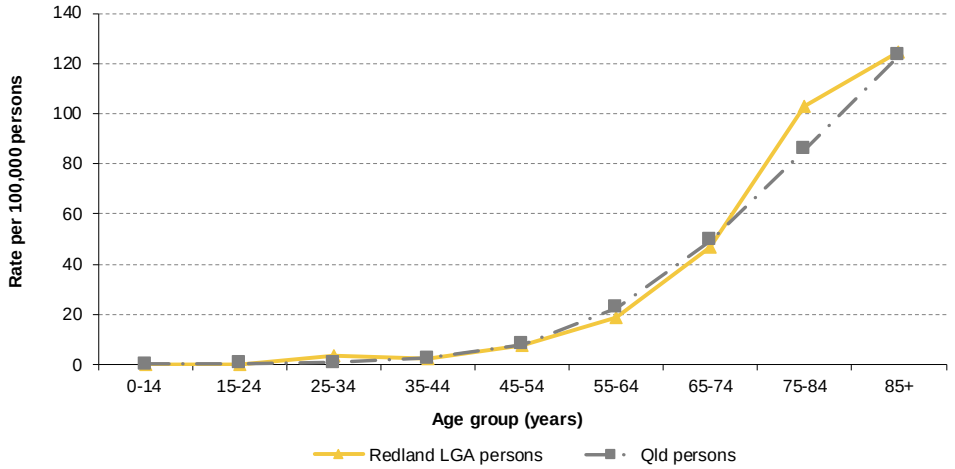


Figure 61: Pancreatic cancer age specific incidence rates, Redland LGA and Queensland, 2018 to 2022

Kidney cancer

Mortality

On average there were fewer than five deaths per year from kidney cancer among Redland LGA residents between 2018 and 2022, representing less than 2% of all cancer deaths in Redland LGA in this five-year period. The total number of Redland LGA kidney cancer deaths from 2018 to 2022 was too small (<50) for an accurate annual average age standardised mortality rate to be calculated for this period.

Incidence

On average there were 30 new cases per year of kidney cancer among Redland LGA residents between 2018 and 2022. This represented 2.5% of all new cases of cancer in Redland LGA in this five-year period.

In 2018 to 2022, the Redland LGA average annual kidney cancer age standardised incidence rate of 13.5 new cases (95% CI: 11.5 – 15.8) per 100,000 persons was statistically similar to the Queensland rate of 14.1 new cases (95% CI: 13.7 – 14.5) per 100,000 persons. The Redland LGA rate for the current period was also statistically similar to that reported for 2011 to 2015 of 12.9 new cases (95% CI: 10.7 – 15.4) per 100,000 persons.

In Queensland between 2013 and 2022 kidney cancer incidence rates exhibited no consistent trend but remained consistently between 12 and 16 new cases per 100,000 persons. The number of new cases per year in Redland LGA was too small for accurate annual age standardised rates to be calculated.

In 2018 to 2022, kidney cancer incidence rates were negligible in people under the age of 35 years. Rates increased with age, peaking in Redland LGA in persons aged 65 to 74 years, while in Queensland rates peaked in those aged 75 years and over (Figure 62).

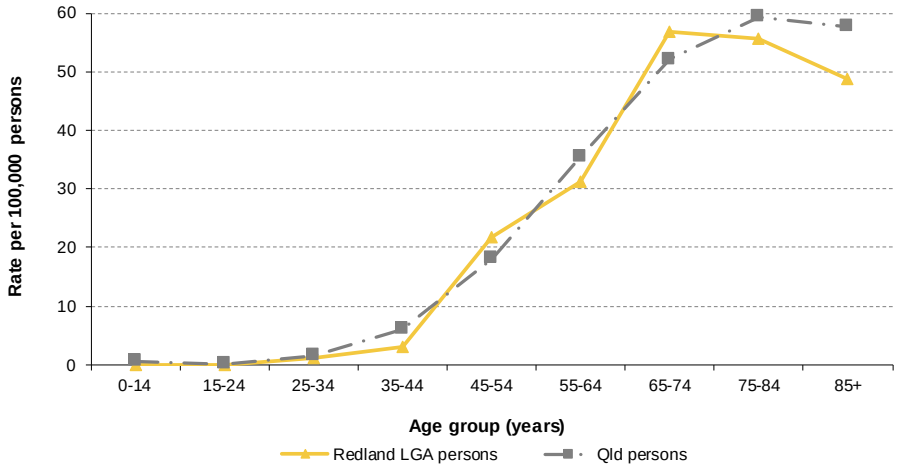


Figure 62: Kidney cancer age specific incidence rates, Redland LGA and Queensland, 2018 to 2022

Cervical cancer

Mortality

On average there were fewer than five deaths per year from cervical cancer among Redland LGA females in the five years from 2018 to 2022 representing less than 1% of all cancer deaths in Redland LGA in this five-year period. The deaths were spread across all age groups from 30 to 84 years. The total number of Redland LGA cervical cancer deaths from 2018 to 2022 was too small (<50) for an accurate annual average age standardised mortality rate to be calculated for this period.

Incidence

On average there were eight new cases of cervical cancer per year among Redland LGA females between 2018 and 2022, representing less than 1% of all new cancer cases in Redland LGA residents in this five year period. The new cases were spread across all age groups from 15 to 79 years, with 72% diagnosed between the ages of 30 and 59 years. The total number of new cases in Redland LGA was too low (<50) for an accurate annual average age standardised incidence rate to be calculated for this period.

Cancer screening

Colorectal cancer screening

In 2022-23 the overall National Bowel Cancer Screening Program (NBCSP) participation rate in Redland LGA was 41.4% which higher than the Queensland rate (38.8%) but lower than the Australian rate (41.7%)[23]. Data covering the age/sex breakdown for Redland LGA for the period since the program expansion in 2015 are not available, however these data have been published for Queensland[23] and are presented in Figure 63. Queensland participation rates were higher for females than for males in all age groups (Figure 63) and participation rates increased with increasing age in both sexes.

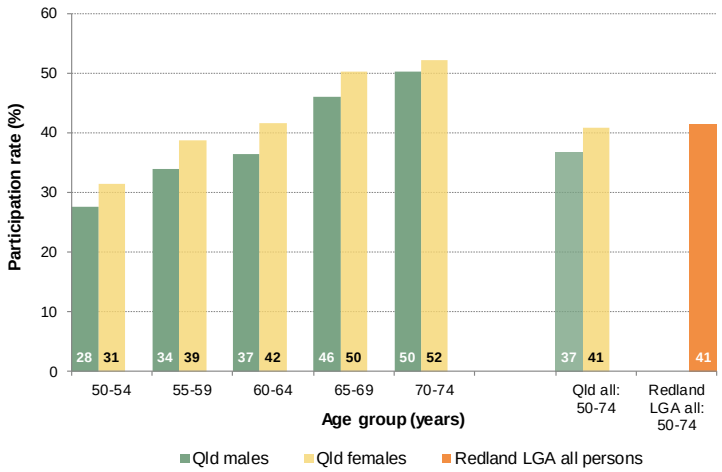


Figure 63: Crude participation rates in the National Bowel Cancer Screening Program by age and sex, Queensland, and Redland LGA all persons 50-74 years, 2022-23

Between 2014-15 and 2022-23 NBCSP participation rates in Redland LGA were consistently slightly higher than rates in Queensland (Figure 64). Rates in both Redland LGA and Queensland increased gradually from 2014-15 to a peak in 2018-19. In 2020-21, the first timepoint fully impacted by the COVID-19 pandemic, rates in Redland LGA dropped to the lowest level since 2014-15. In 2022-23 the first increase in rates since the pandemic was reported (Figure 64).

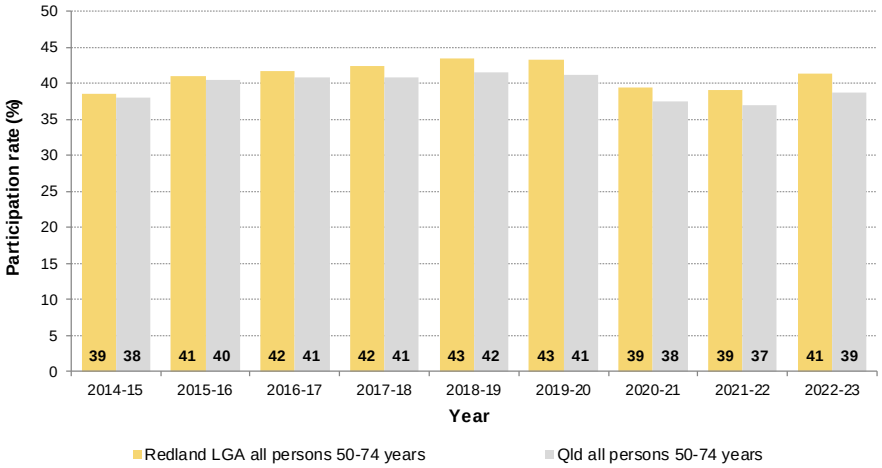


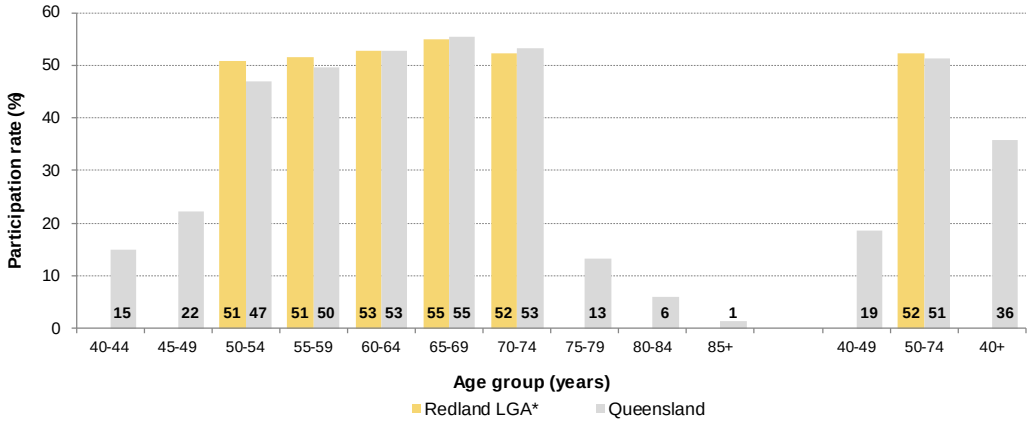
Figure 64: Crude all persons 50 to 74 years participation rates in the National Bowel Cancer Screening Program, Queensland and Redland LGA, 2014-15 to 2022-23

Breast cancer screening

At the time of publication of this report, breast cancer screening participation data were not published specifically for local government areas however some data were published at the Statistical Area 3 (SA3) level. For the purposes of this report an approximation to Redland LGA has been created comprising the SA3s of Cleveland – Stradbroke and Capalaba. This equates to the entire Redland LGA plus the SA2 of Belmont – Gumdale. Therefore the data presented are estimates rather than a true representation of Redland LGA data alone.

In 2021-22 within the targeted age group of 50 to 74 years, Redland LGA (approximation) participation in the BreastScreen Queensland program was 52%. Participation increased with increasing age, peaking in the 65 to 69 years group at 55% in Redland LGA (approximation) and 53% in Queensland (Figure 65). Redland

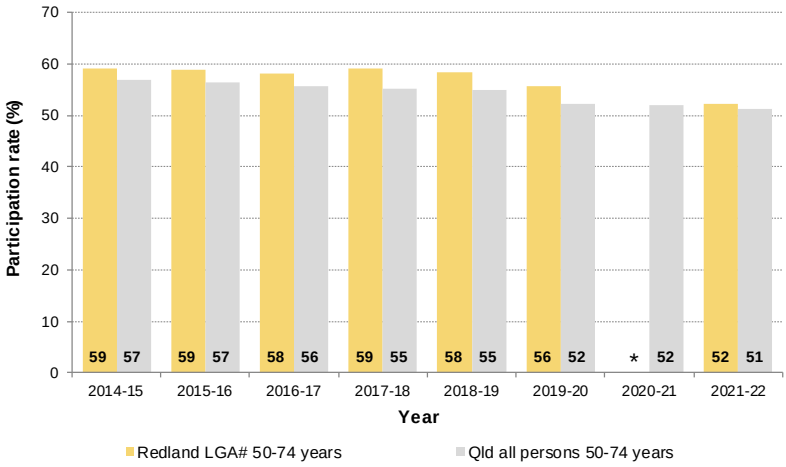
LGA (approximation) participation rates were equal to or higher than the equivalent Queensland rates in all age groups except those aged 70 to 74 years – the oldest group within the cohort.



* An approximation for Redland LGA comprising Redland LGA plus the Statistical Area 2 (SA2) of Belmont-Gumdale

Figure 65: Crude participation rates in the BreastScreen Queensland screening program by age group, Redland LGA (approximation) and Queensland, 2021-22

Between 2014-15 and 2019-20 BreastScreen Queensland participation rates in the area approximated to Redland LGA were consistently higher than the rates in Queensland (Figure 66). Rates in Queensland trended downwards over this period (Figure 66) while participation in Redland LGA (approximation) was more stable. In 2019-20, the first year of the COVID-19 pandemic both Queensland and Redland LGA (approximation) experienced a sharp decrease in participation (Figure 66).



An approximation for Redland LGA comprising Redland LGA plus the Statistical Area 2 (SA2) of Belmont-Gumdale

* Data not available for 2020-21

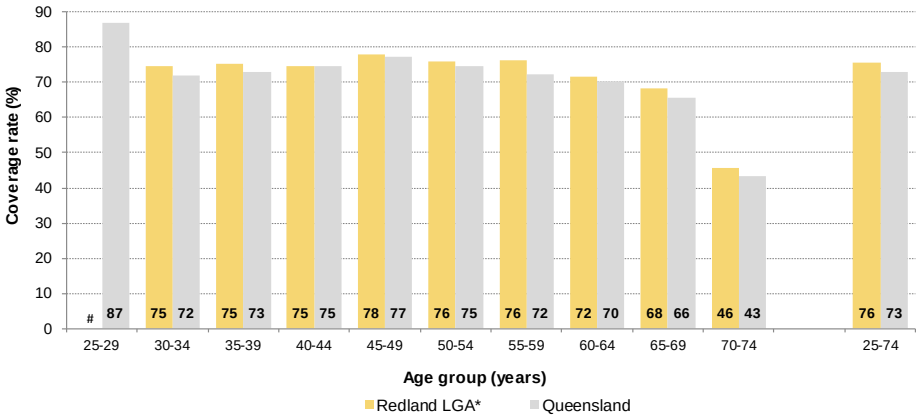
Figure 66: Crude participation rates in the BreastScreen Queensland screening program, all persons 50 to 74 years, Redland LGA* and Queensland, 2014-15 to 2019-20

Cervical cancer screening

At the time of publication of this report, cervical cancer screening participation data were not published specifically for local government areas however some data were published at the Statistical Area 3 (SA3) level. An approximation to Redland LGA has been created by combining coverage data for the SA3s of Cleveland – Stradbroke and Capalaba. This equates to the entire Redland LGA plus the SA2 of Belmont – Gumdale.

In 2019-23 the Redland LGA (approximation) coverage rate among those in the 25 to 74 years target group was 75.5%. This was higher than the Queensland coverage rate of 73.0% (Figure 67).

In 2019-23 Queensland cervical screening program coverage rates were highest (over 80%) in the 25 to 29 years age group (data not available for Redland LGA). In Redland LGA (approximation) rates in those aged 30 to 64 years in MSH ranged from 72 to 78%. Rates fell with increasing age in those over 45 years, with the lowest coverage in those aged 70 to 74 years (46%) (Figure 67).



* An approximation for Redland LGA comprising the LGA plus the SA2 area of Belmont-Gumdale

Data not available for publication

Figure 67: Crude participation rates in the National Cervical Screening Program by age group, Redland LGA* and Queensland, 2019-2023

Southern Brisbane Local Government Area

All cancers

Mortality

On average there were 957 deaths per year from all cancers among southern Brisbane LGA residents in the five years from 2018 to 2022. Six types of cancer (lung, hepatobiliary, colorectal, haematological, prostate and female breast) together accounted for over two-thirds (69%) of all southern Brisbane LGA cancer deaths between 2018 and 2022 (Table 13). Lung cancer alone accounted for one in five (20%) cancer deaths in southern Brisbane LGA in this period.

The average annual age standardised mortality rate for all cancers was significantly lower in southern Brisbane LGA (139 deaths per 100,000 persons) than in Queensland (157 deaths per 100,000 persons) between 2018 and 2022 (Table 13). This difference was driven primarily by lung and hepatobiliary cancers but also by other urological, melanoma and head and neck cancers, all of which had with rates significantly lower than in Queensland (Table 13). The mortality rates of all other groupings of cancer by site were statistically similar in southern Brisbane LGA and Queensland in this period (Table 13).

Table 13: Mortality numbers and age standardised mortality rates by site of cancer, southern Brisbane LGA and Queensland, 2018 to 2022[2]

Site	Number of deaths, 2018-2022		Average annual age standardised rate per 100,000 persons (95% confidence interval)		Statistically significant difference
	Sth Bris. LGA	QLD	Sth Brisbane LGA	QLD	LGA–QLD*
Lung	962	10,639	28.3 (26.5 – 30.1)	33.4 (32.7 – 34.0)	↓
Hepatobiliary	593	5,693	17.3 (15.9 – 18.7)	17.9 (17.5 – 18.4)	–
Colorectal	551	5,682	15.8 (14.5 – 17.2)	18.1 (17.6 – 18.6)	↓
Haematological	513	5,143	14.9 (13.7 – 16.2)	16.3 (15.8 – 16.7)	–
Prostate	340	3,730	23.2 (20.8 – 25.7)	26.1 (25.2 – 26.9)	–
Breast (female)	325	3,023	17.7 (15.8 – 19.6)	18.7 (18.1 – 19.4)	–
Upper gastrointestinal	275	2,736	8.0 (7.1 – 9.0)	8.6 (8.3 – 9.0)	–
Gynaecological	235	2,121	12.6 (11.1 – 14.3)	13.0 (12.4 – 13.5)	–
Other urological	224	2,600	6.4 (5.6 – 7.2)	8.2 (7.9 – 8.5)	↓
CNS and Brain	168	1,613	5.0 (4.3 – 5.8)	5.3 (5.1 – 5.6)	–
Melanoma	160	1,842	4.5 (3.8 – 5.2)	5.9 (5.6 – 6.2)	↓
Head and neck	111	1,484	3.2 (2.7 – 3.9)	4.7 (4.4 – 4.9)	↓
Bone and soft tissue	64	523	1.9 (1.5 – 2.4)	1.8 (1.6 – 1.9)	–
Endocrine	24	206	Not calculated#	0.7 (0.6 – 0.8)	Not calculated#
Breast (male)	<5	22	Not calculated#	Not calculated#	Not calculated#
Other invasive cancers	40	443	Not calculated#	1.4 (1.3 – 1.5)	Not calculated#
Unknown primary	194	2,080	5.5 (4.7 – 6.2)	6.5 (6.2 – 6.8)	–
TOTAL	**4,783**	**49,580**	**138.9 (135.0 – 142.9)**	**157.2 (155.8 – 158.5)**	↓

* ↑ LGA statistically significantly higher than Queensland; ↓ LGA statistically significantly lower than Queensland;
– no statistically significant difference between LGA and Queensland

I# Rate not calculated because total number of deaths, 2018 to 2022, less than 50

Source: Queensland Health. Oncology Analysis System (OASys). Queensland Cancer Control Analysis Team[2]

In 2018 to 2022, the average annual age standardised mortality rates for all cancers (combined) in southern Brisbane LGA males and females were significantly lower than the corresponding Queensland rates (Table 14). The southern Brisbane LGA and Queensland mortality rates in males were significantly and substantially higher than the corresponding rates in females (Table 14).

Table 14: All cancer average annual age specific and all-ages age-standardised mortality rates by age group and sex, southern Brisbane LGA and Queensland, 2018-2022[2]

Age group (years)	Average annual age specific and all-ages age-standardised mortality rate (95% confidence interval)			
	Male		Female	
	Sth Bris. LGA rate/100,000	QLD rate/100,000	Sth Bris. LGA rate/100,000	QLD rate/100,000
0 – 14	2.8	2.2	2.3	1.6
15 – 24	3.8	3.8	1.3	1.8
25 – 39	8.7	10.1	12.1	12.5
40 – 64	101.6	142.8	88.2	114.9
65+	1,019.5	1,126.1	731.9	740.7
All ages	**167.2 (160.8 – 173.8)**	**192.6 (190.4 – 194.9)**	**117.1 (112.3 – 122.0)**	**127.3 (125.6 – 129.0)**

Source: Queensland Health. Oncology Analysis System (OASys). Queensland Cancer Control Analysis Team[2]

Incidence

On average there were 3,421 new (incident) cases of cancer per year among southern Brisbane LGA residents in the five years from 2018 to 2022. The six most common types of newly diagnosed cancer in southern Brisbane LGA (prostate, female breast, haematological, melanoma, colorectal and lung) (Table 15) together accounted for 71% of all new cases.

In 2018 to 2022, the southern Brisbane LGA average annual age standardised incidence rate for all cancers (combined) (499 new cases per 100,000 persons) was significantly lower than the Queensland rate (544 new cases per 100,000 persons) (Table 15).

The incidence rates of prostate, melanoma, colorectal, lung, other urological, head and neck and other invasive cancers were significantly lower in southern Brisbane LGA than in Queensland in 2018 to 2022 (Table 15). Endocrine cancer had a significantly higher age standardised incidence rate compared with Queensland (Table 15).

Table 15: Newly diagnosed cancer cases (incidence) and age standardised incidence rates by site of cancer, southern Brisbane LGA and Queensland, 2018 to 2022[2]

Site	Number of new cases, 2018-2022		Average annual age standardised rate per 100,000 persons (95% confidence interval)		Statistically significant difference LGA–QLD*
	Sth Bris. LGA	QLD	Sth Brisbane LGA	QLD	
Prostate	2,666	27,645	165.2 (158.9 – 171.5)	177.0 (175.0 – 179.1)	↓
Breast (female only)	2,332	18,991	131.9 (126.6 – 137.4)	125.5 (123.8 – 127.3)	–
Haematological	2,063	18,779	60.3 (57.7 – 62.9)	61.5 (60.6 – 62.4)	–
Melanoma	1,932	21,409	56.4 (53.9 – 59.0)	72.2 (71.3– 73.2)	↓
Colorectal	1,628	16,632	47.3 (45.1 – 49.7)	54.7 (53.9 – 55.6)	↓
Lung	1,560	15,929	45.8 (43.5 – 48.1)	50.1 (49.3 – 50.9)	↓
Other urological	864	9,013	25.1 (23.4 – 26.8)	30.0 (29.3 – 30.6)	↓
Hepatobiliary	789	7,460	23.0 (21.4 – 24.6)	23.7 (23.2 – 24.2)	–
Gynaecological	765	6,739	42.5 (39.5 – 45.6)	44.4 (43.4 – 45.5)	–
Endocrine	620	4,323	18.1 (16.7 – 19.6)	15.6 (15.1 – 16.1)	↑
Upper gastrointestinal	558	5,264	16.4 (15.1 – 17.8)	16.9 (16.5 – 17.4)	–
Head and neck	491	5,533	14.4 (13.1 – 15.7)	18.1 (17.6 – 18.6)	↓
CNS and Brain	235	2,064	6.9 (6.1 – 7.8)	7.1 (6.8 – 7.5)	–
Bone and soft tissue	159	1,271	4.6 (3.9 – 5.4)	4.5 (4.2 – 4.7)	–
Breast (male only)	17	172	Not calculated#	1.1 (1.0 – 1.3)	Not calculated#
Other invasive cancers	177	2,171	5.1 (4.4 – 5.9)	7.0 (6.7 – 7.3)	↓
Unknown primary	248	2,776	7.0 (6.2 – 7.9)	8.8 (8.5 – 9.1)	↓
TOTAL	**17,104**	**166,171**	**499.4 (491.9 – 506.9)**	**543.7 (541.1 – 546.3)**	↓

* ↑ LGA statistically significantly higher than Queensland; ↓ LGA statistically significantly lower than Queensland;
– no statistically significant difference between LGA and Queensland

Rate not calculated because total number of new cases, 2018 to 2022, less than 50

Source: Queensland Health. Oncology Analysis System (OASys). Queensland Cancer Control Analysis Team[2]

In 2018 to 2022, the average annual age standardised incidence rates for all cancers (combined) in southern Brisbane LGA males and females were significantly lower than the corresponding Queensland rates (Table 16). The MSH and Queensland incidence rates in males were significantly and substantially higher than the corresponding rates in females (Table 16).

Table 16: All cancer average annual age specific and all-ages age-standardised incidence rates by age group and sex, southern Brisbane LGA and Queensland, 2018-2022[2]

Age group (years)	Average annual age specific and all-ages age-standardised incidence rate (95% confidence interval)			
	Male		Female	
	Sth Bris. LGA rate/100,000	QLD rate/100,000	Sth Bris. LGA rate/100,000	QLD rate/100,000
0 – 14	14.9	17.7	16.7	15.0
15 – 24	34.2	34.2	29.9	35.4
25 – 39	77.6	98.5	146.7	153.0
40 – 64	619.1	749.3	627.9	677.0
65+	2,831.0	3,077.9	1,715.8	1,800.3
All ages	**570.8 (559.1 – 582.6)**	**631.5 (627.5 – 635.6)**	**442.3 (432.7 – 452.1)**	**465.3 (461.9 – 468.7)**

Source: Queensland Health. Oncology Analysis System (OASys). Queensland Cancer Control Analysis Team[2]

Prostate cancer

Mortality

On average there were 68 deaths per year from prostate cancer among southern Brisbane LGA males in the five years from 2018 to 2022. This represented 7.0% of all cancer deaths in southern Brisbane LGA in this period. There was no significant difference in age standardised prostate cancer mortality rate between southern Brisbane LGA and Queensland in this period (Table 13, page 67).

Incidence

On average there were 533 new cases of prostate cancer per year among southern Brisbane LGA males between 2018 and 2022. This represented 16% of all new cases of cancer in southern Brisbane LGA in this five-year period, making prostate cancer the most common newly diagnosed cancer in southern Brisbane LGA (Table 15 page 69).

In 2018 to 2022, the southern Brisbane LGA average annual prostate cancer age standardised incidence rate of 165 new cases per 100,000 males was significantly lower than the Queensland rate of 177 new cases per 100,000 males (Table 15 page 69).

Between 2016 and 2022, annual age standardised rates of prostate cancer trended upwards in southern Brisbane LGA from 128 to 208 new cases per 100,000 males. A substantial increase was reported in 2022 (Figure 68).

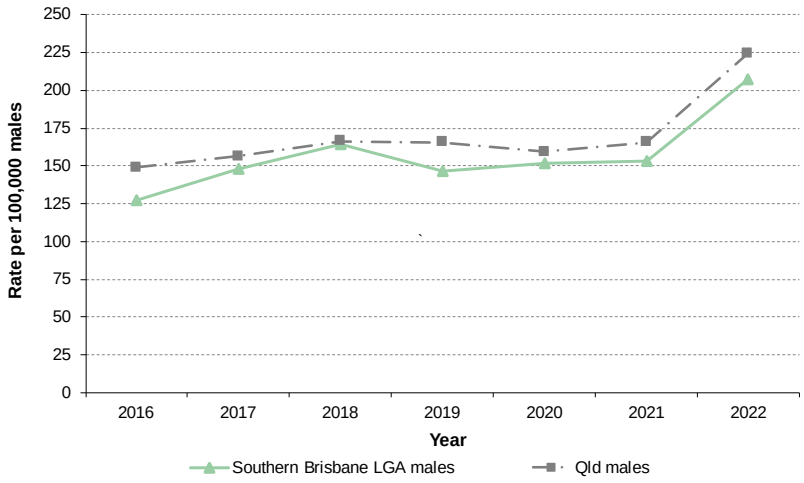


Figure 68: Prostate cancer age standardised incidence rates, southern Brisbane LGA and Queensland, 2016 to 2022

In 2018 to 2022, prostate cancer incidence rates were negligible in men under the age of 35 years. From the age of about 45 years rates increased sharply, peaking in the 65 to 74 years age group before declining in older age groups (Figure 69).

Figure 69: Prostate cancer age specific incidence rates, southern Brisbane LGA and Queensland, 2018 to 2022

Melanoma

Mortality

On average there were 32 deaths per year from melanoma among southern Brisbane LGA residents between 2018 and 2022. This represented 3.3% of all cancer deaths in southern Brisbane LGA in this five-year period. The age standardised melanoma mortality rate in southern Brisbane LGA was significantly lower than the Queensland rate over this period (Table 13, page 67).

Incidence

On average there were 386 new cases of melanoma per year among southern Brisbane LGA residents between 2018 and 2022. This represented 11% of all new cases of cancer in southern Brisbane LGA in this five-year period, making melanoma the fourth most common newly diagnosed cancer in southern Brisbane LGA.

In 2018 to 2022, the southern Brisbane LGA average annual melanoma age standardised incidence rate of 56 new cases per 100,000 persons was significantly lower than the Queensland rate of 72 new cases per 100,000 persons (Table 15 page 69).

Between 2016 and 2022 annual melanoma age standardised incidence rates in southern Brisbane LGA trended downwards from 65 to 55 new cases per 100,000 persons (Figure 70). A similar pattern was recorded in Queensland (Figure 70) where the reduction was from approaching 80 to fewer than 70 new cases per 100,000 persons over this period.

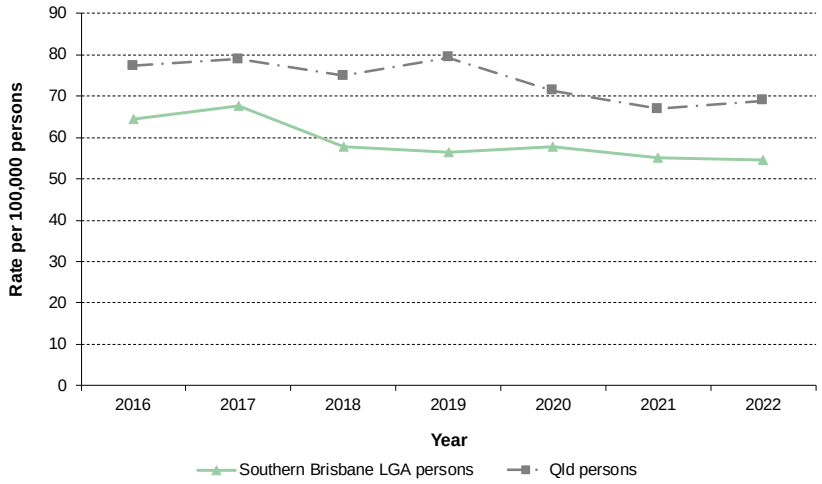


Figure 70: Melanoma age standardised incidence rates, southern Brisbane LGA and Queensland, 2016 to 2022

In 2018 to 2022, melanoma incidence rates were negligible in people under the age of 15 years, but then increased with increasing age (Figure 71).

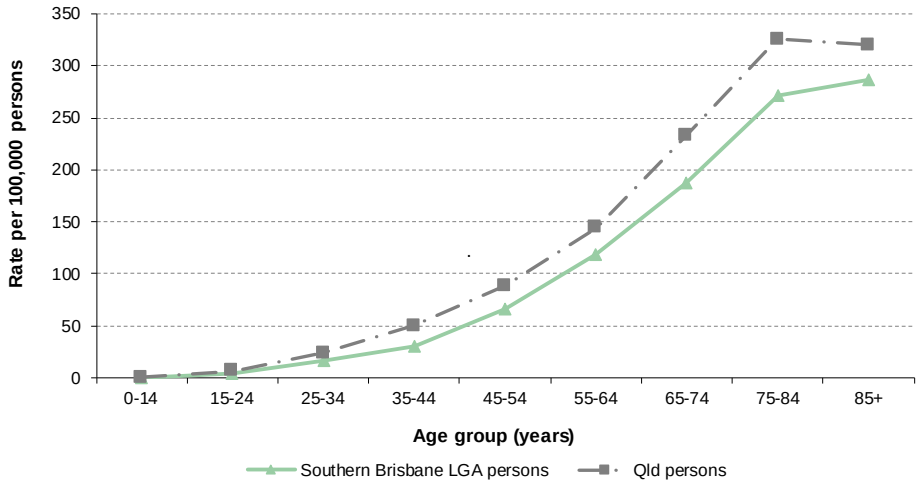


Figure 71: Melanoma age specific incidence rates, southern Brisbane LGA and Queensland, 2018 – 2022*

Breast cancer

Mortality

On average there were 65 deaths per year from breast cancer among southern Brisbane LGA females between 2018 and 2022. This represented 6.8% of all cancer deaths in southern Brisbane LGA in this five-year period. The majority of these deaths (85%) were in the 50 years and over age group, with women aged 50 to 79 years accounting for 60% of all breast cancer deaths. In this period there was an average of less than one death per year among southern Brisbane LGA males.

There was no significant difference in average annual female breast cancer age-standardised mortality rate between southern Brisbane LGA and Queensland over the years 2018 to 2022 combined (Table 13, page 67).

Incidence

On average there were 466 new cases of breast cancer per year among southern Brisbane LGA women between 2018 and 2022. This represented almost 14% of all new cases of cancer in southern Brisbane LGA in this five-year period, making breast the second most common newly diagnosed cancer in this LGA. By comparison, on average there were fewer than five new cases of breast cancer per year among southern Brisbane LGA men over this period.

In 2018 to 2022, the southern Brisbane LGA average annual female breast cancer age standardised incidence rate of 132 new cases per 100,000 females was statistically similar to the Queensland rate (Table 15 page 69).

Between 2016 and 2022 the annual female breast cancer incidence rate in southern Brisbane LGA was relatively steady, remaining around 130 new cases per 100,000 females (Figure 72). However in Queensland the rate exhibited a small reduction from around 130 to 120 new cases per 100,000 (Figure 72).

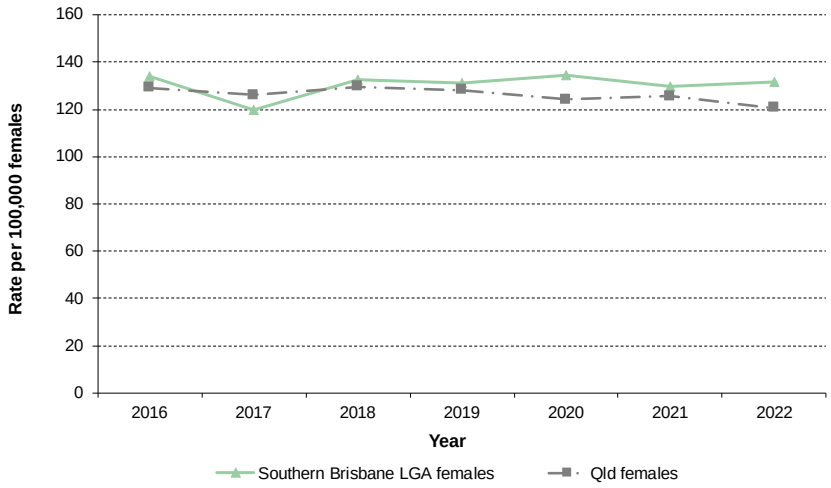


Figure 72: Breast cancer age standardised incidence rates, southern Brisbane LGA and Queensland, 2016 to 2022

In 2018 to 2022, breast cancer incidence rates were negligible in women under the age of 25 years. Rates increased with increasing age to a peak in the 65 to 74 years age group, and then declined in older age groups (Figure 73).

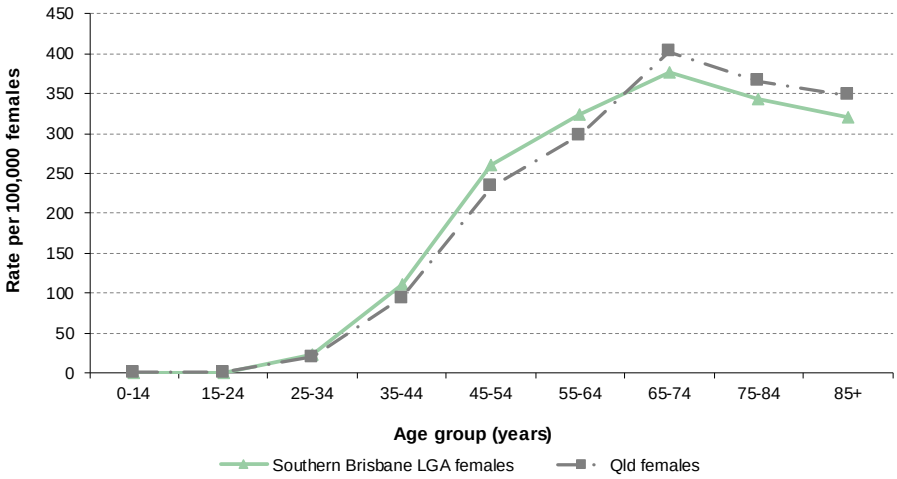


Figure 73: Breast cancer age specific incidence rates, southern Brisbane LGA and Queensland, 2018 to 2022*

Colorectal cancer

Mortality

On average there were 110 deaths per year from colorectal cancer among southern Brisbane LGA residents between 2018 and 2022. This represented 11% of all cancer deaths in the LGA in this five-year period. The age standardised colorectal cancer mortality rate in southern Brisbane LGA was significantly lower than the Queensland rate over this period (Table 13, page 67).

Incidence

On average there were 326 new cases of colorectal cancer per year among southern Brisbane LGA residents between 2018 and 2022. This represented 10% of all new cases of cancer in southern Brisbane LGA in this five-year period, making colorectal the fifth most common newly diagnosed cancer in this LGA.

In 2018 to 2022, the average annual colorectal cancer age standardised incidence rate in southern Brisbane LGA was 47 new cases per 100,000 persons which was significantly lower than the Queensland rate (Table 15 page 69).

Between 2016 and 2022 colorectal cancer incidence rates in southern Brisbane LGA trended downwards from 56 to 43 new cases per 100,000 persons (Figure 74).

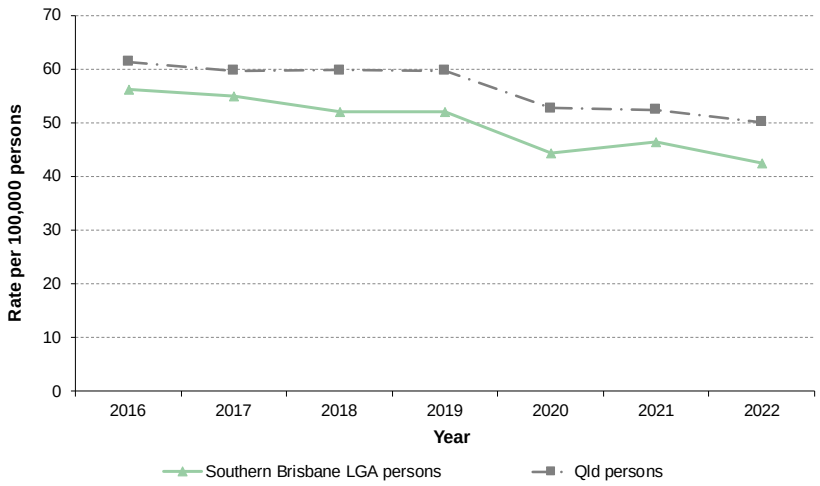


Figure 74: Colorectal cancer age standardised incidence rates, southern Brisbane LGA and Queensland, 2016 to 2022

In 2018 to 2022, colorectal cancer incidence rates were negligible in people under the age of 15 years. Rates increased with increasing age, peaking in the 85 years and over age group (Figure 75).

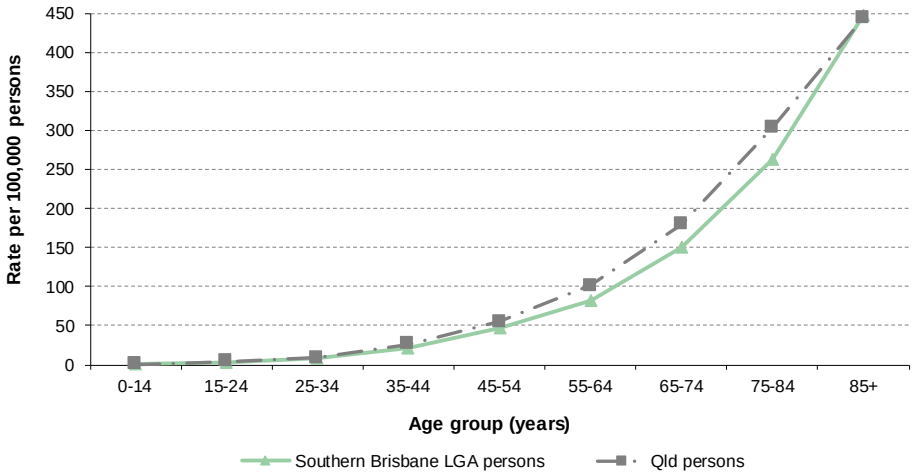


Figure 75: Colorectal cancer age specific incidence rates, southern Brisbane LGA and Queensland, 2018 to 2022

Haematological cancer

Mortality

On average there were 103 deaths per year from haematological cancer among southern Brisbane LGA residents between 2018 and 2022. This represented almost 11% of all cancer deaths in the LGA in this five-year period. The age standardised haematological cancer mortality rate in southern Brisbane LGA was statistically similar to the Queensland rate over this period (Table 13, page 67).

Incidence

On average there were 413 new cases per year of haematological cancer among southern Brisbane LGA residents between 2018 and 2022. This represented 12% of all new cases of cancer in southern Brisbane LGA in this five-year period making haematological the third most common newly diagnosed cancer type in this LGA.

In 2018 to 2022, the average annual haematological cancer age standardised incidence rate in southern Brisbane LGA of 60 new cases per 100,000 persons was statistically similar to the Queensland rate (Table 15 page 69).

Between 2016 and 2022 haematological cancer rates in southern Brisbane LGA showed no consistent trend, ranging from 57 to 68 new cases per 100,000 persons (Figure 76).

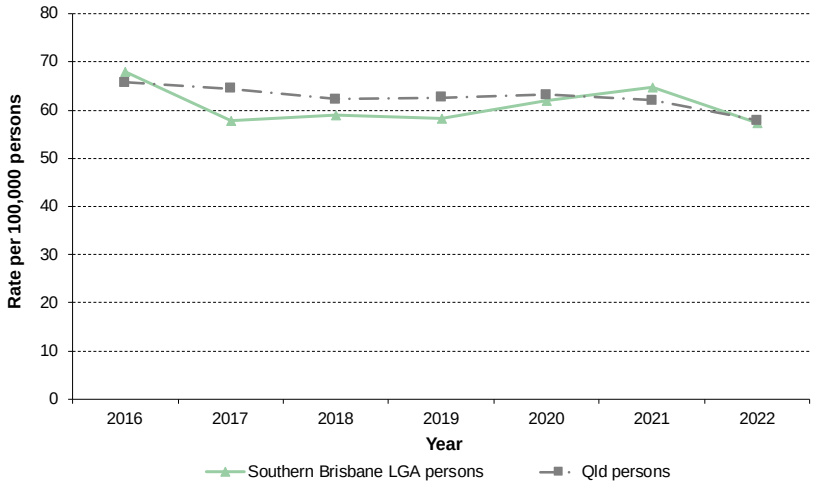


Figure 76: Haematological cancer age standardised incidence rates, southern Brisbane LGA and Queensland, 2016 to 2022

In 2018 to 2022, haematological cancer incidence rates were low for people under the age of 35 years. Rates then increased with age, peaking in those aged 85 years and over (Figure 77).

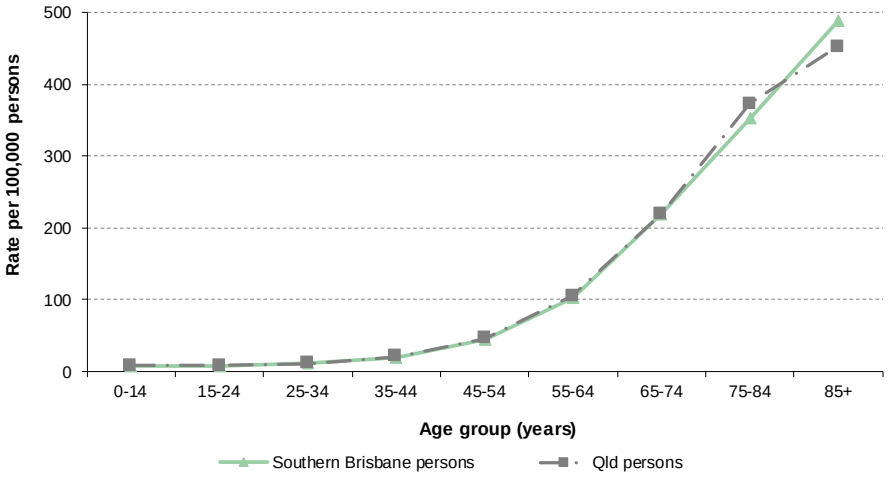


Figure 77: Haematological cancer age specific incidence rates, southern Brisbane LGA and Queensland, 2018 to 2022

Lung cancer

Mortality

On average there were 192 deaths per year from lung cancer among southern Brisbane LGA residents between 2018 and 2022. This represented one in five (20%) cancer deaths in the LGA in this five-year period. Males accounted for 58% of these deaths. The age standardised lung cancer mortality rate in southern Brisbane LGA was significantly lower than the Queensland rate over this period (Table 13, page 67).

Incidence

On average there were 312 new cases of lung cancer per year among southern Brisbane LGA residents between 2018 and 2022. This represented 9% of all new cases of cancer in southern Brisbane LGA in this five-year period making lung the sixth most common newly diagnosed cancer in this LGA.

In 2018 to 2022, the average annual lung cancer age standardised incidence rate in southern Brisbane LGA of 46 new cases per 100,000 persons was significantly lower than the Queensland rate (Table 15 page 69).

Between 2016 and 2022, lung cancer incidence rates in southern Brisbane LGA showed no consistent trend, ranging from 42 to 50 new cases per 100,000 persons (Figure 78).

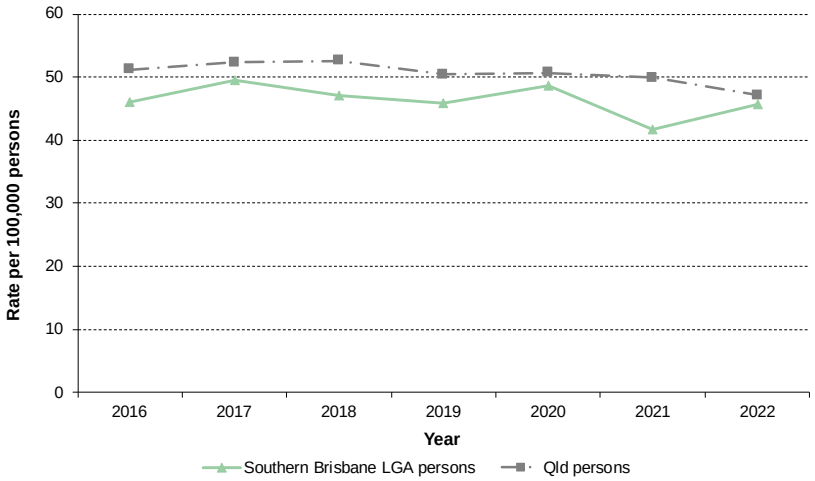


Figure 78: Lung cancer age standardised incidence rates, southern Brisbane LGA and Queensland, 2016 to 2022

In 2018 and 2022, lung cancer incidence rates were negligible in persons under the age of 35 years. Rates increased steadily with increasing age, peaking in the 85+ years group in southern Brisbane LGA and the 75 to 84 years group in Queensland (Figure 79).

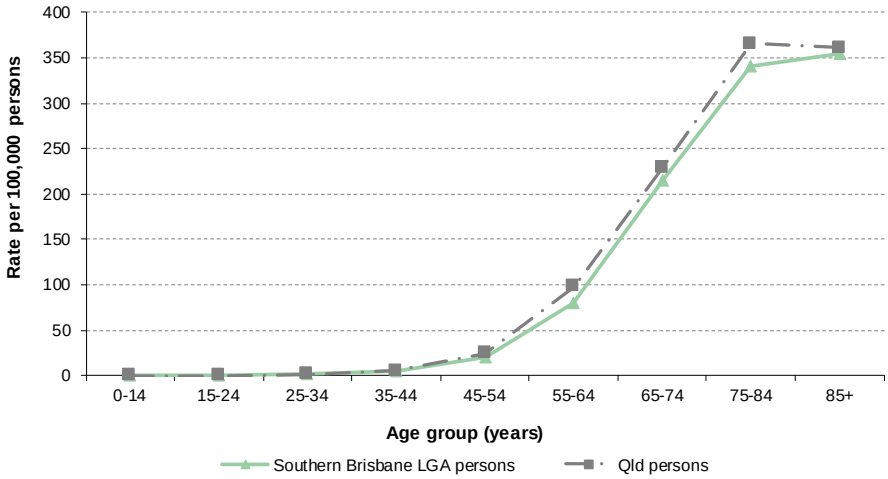


Figure 79: Lung cancer age specific incidence rates, southern Brisbane LGA and Queensland, 2018 to 2022

Hepatobiliary cancers: liver cancer

Mortality

On average there were 34 deaths per year from liver cancer among southern Brisbane LGA residents between 2018 and 2022. This represented 3.6% of all cancer deaths in southern Brisbane LGA in this five-year period. The 2018 to 2022 annual average age standardised liver cancer mortality rate in southern Brisbane LGA (5.0 deaths per 100,000 persons) was statistically similar to the Queensland rate (5.1 deaths per 100,000 persons) over this period.

Incidence

On average there were 54 new cases per year of liver cancer among southern Brisbane LGA residents between 2018 and 2022. This represented 1.6% of all new cases of cancer in southern Brisbane LGA in this five-year period.

For 2018 to 2022, the average annual liver cancer age standardised incidence rate in southern Brisbane LGA of 7.9 new cases (95% CI: 7.0 – 8.8) per 100,000 persons was statistically similar to the Queensland rate of 7.5 new cases (95% CI: 7.2 – 7.8) per 100,000 persons.

In Queensland between 2013 and 2022 liver cancer rates showed no consistent trend but remained consistently below 10 new cases per 100,000 persons The number of new cases per year in southern Brisbane LGA was too small for accurate annual age standardised rates to be calculated.

In 2018 to 2022, southern Brisbane LGA liver cancer age specific incidence rates were negligible in people under the age of 35 years. Rates increased with increasing age, peaking in the 85 years and over group in southern Brisbane LGA (Figure 80).

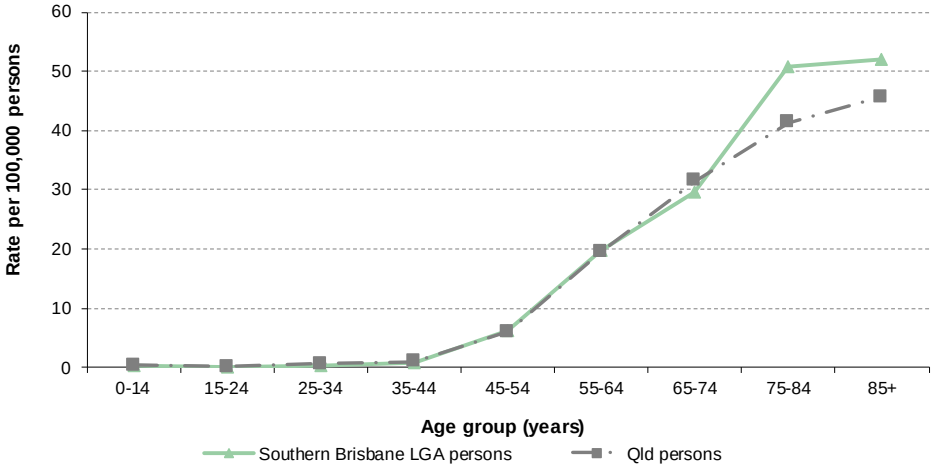


Figure 80: Liver cancer age specific incidence rates, southern Brisbane LGA and Queensland, 2018 to 2022

Hepatobiliary cancers: pancreatic cancer

Mortality

On average there were 66 deaths per year from pancreatic cancer among southern Brisbane LGA residents between 2018 and 2022. This represented 6.9% of all cancer deaths in southern Brisbane LGA in this five-year period. The 2018 to 2022 annual average age standardised pancreatic cancer mortality rate in southern Brisbane LGA (9.6 deaths per 100,000 persons) was statistically similar to the Queensland rate (10.2 deaths per 100,000 persons) over this period.

Incidence

On average there were 80 new cases per year of pancreatic cancer among southern Brisbane LGA residents between 2018 and 2022. This represented 2.3% of all new cases of cancer in southern Brisbane LGA in this five-year period.

In 2018 to 2022, the average annual pancreatic cancer age standardised incidence rate in southern Brisbane LGA of 11.7 new cases (95% CI: 10.6 – 12.98) per 100,000 persons was statistically similar to the Queensland rate of 12.5 new cases (95% CI: 12.1 – 12.9) per 100,000 persons

Between 2016 and 2022 pancreatic cancer rates showed no consistent trend, ranging from around 11 to 14 new cases per 100,000 persons (Figure 81).

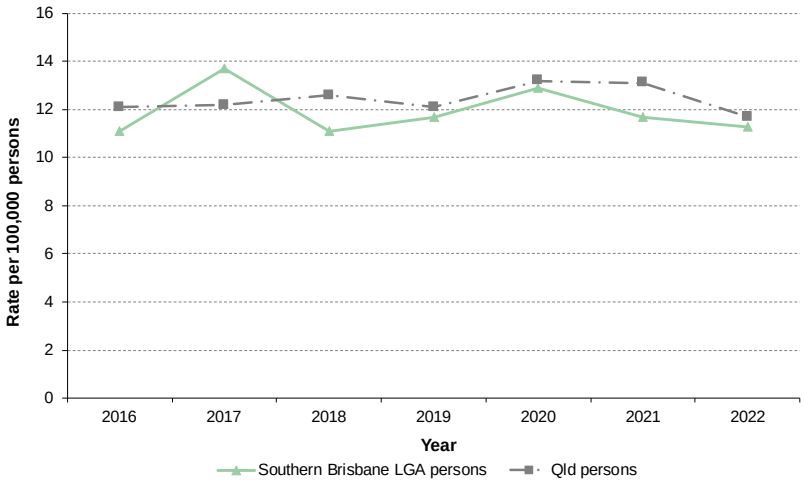


Figure 81: Pancreatic cancer age standardised incidence rates, southern Brisbane LGA and Queensland, 2016 to 2022

In 2018 to 2022, pancreatic cancer incidence rates were negligible in people under the age of 35 years. Rates then increased with age, peaking in those aged 85 years and over (Figure 82).

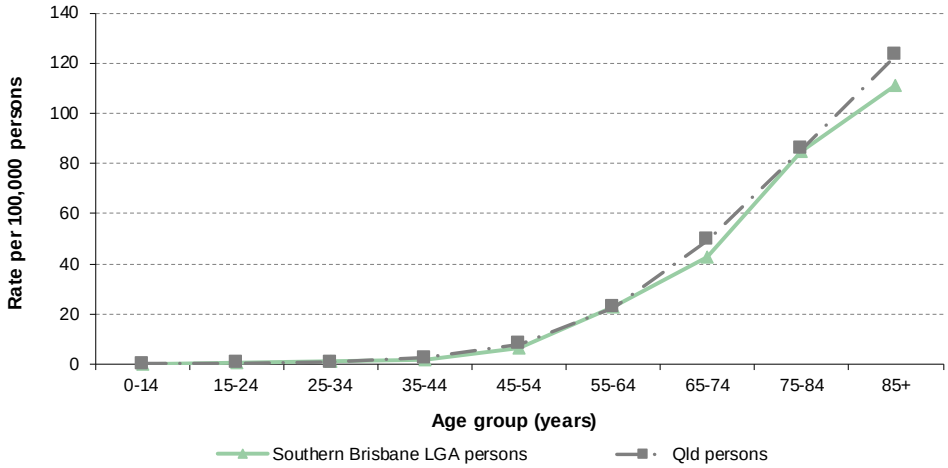


Figure 82: Pancreatic cancer age specific incidence rates, southern Brisbane LGA and Queensland, 2018 to 2022

Kidney cancer

Mortality

On average there were 14 deaths per year from kidney cancer among southern Brisbane LGA residents between 2018 and 2022. This represented 1.5% of all cancer deaths in southern Brisbane LGA in this five-year period. The 2018 to 2022 annual average age standardised kidney cancer mortality rate in southern

Brisbane LGA (2.0 deaths per 100,000 persons) was significantly lower than the Queensland rate (2.8 deaths per 100,000 persons) over this period.

Incidence

On average there were 75 new cases per year of kidney cancer among southern Brisbane LGA residents between 2018 and 2022. This represented 2.2% of all new cases of cancer in southern Brisbane LGA in this five-year period.

In 2018 to 2022, the average annual kidney cancer age standardised incidence rate in southern Brisbane LGA of 11.0 new cases (95% CI: 9.9 – 12.1) per 100,000 persons was significantly lower than the Queensland rate of 14.1 new cases (95% CI: 13.7 – 14.5) per 100,000 persons.

Between 2016 and 2022 kidney cancer rates trended downwards from 14 to 11 new cases per 100,000 persons (Figure 83).

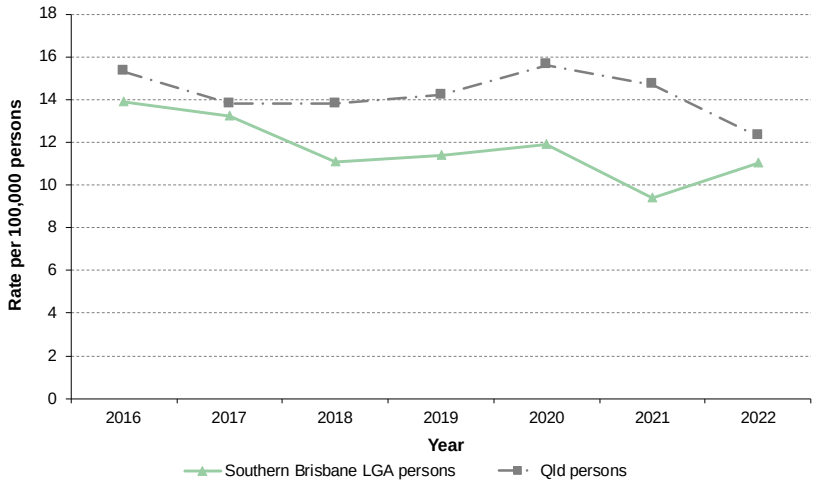


Figure 83: Kidney cancer age standardised incidence rates, southern Brisbane LGA and Queensland, 2016 to 2022

In 2018 to 2022, kidney cancer incidence rates were negligible in people under the age of 25 years. Rates increased with age, peaking in southern Brisbane LGA in persons aged 65 to 84 years, while in Queensland rates peaked in those aged 75 years and over (Figure 84).

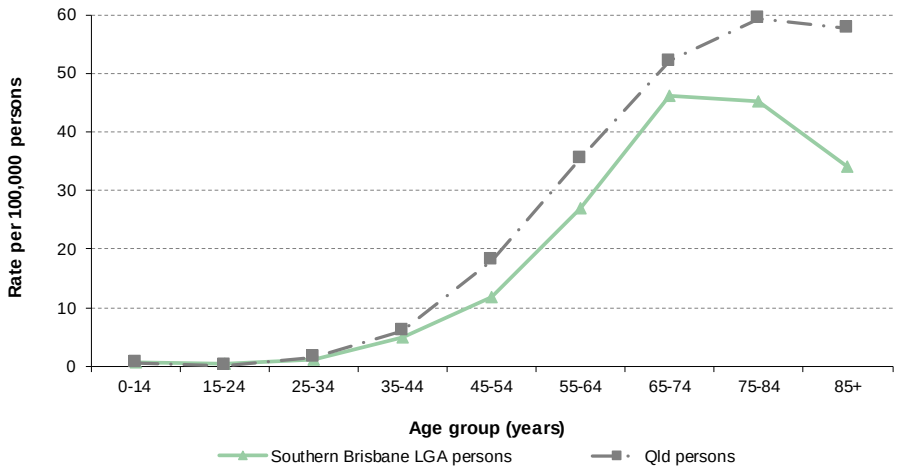


Figure 84: Kidney cancer age specific incidence rates, southern Brisbane LGA and Queensland, 2018 to 2022

Cervical cancer

Mortality

On average there were fewer than five deaths per year from cervical cancer among southern Brisbane LGA females in the five years from 2018 to 2022. The deaths were spread across all age groups over 30 years with 60% aged 60 to 79 years. The total number of southern Brisbane LGA cervical cancer deaths from 2018 to 2022 was too small (<50) for an accurate annual average age standardised mortality rate to be calculated for this period.

Incidence

On average there were 28 new cases of cervical cancer per year among southern Brisbane LGA females between 2018 and 2022.

For 2018 to 2022, the average annual cervical cancer age standardised incidence rate in southern Brisbane LGA of 7.8 new cases (95% CI: 6.6 – 9.2) per 100,000 females was statistically similar to the Queensland rate of 7.2 new cases (95% CI: 8.6 – 9.6) per 100,000 females

In Queensland between 2013 and 2022 cervical cancer incidence rates exhibited no consistent trend but remained consistently between eight and ten new cases per 100,000 females. The number of new cases per year in southern Brisbane LGA was too small for accurate annual age standardised rates to be calculated.

In 2018 to 2022, cervical cancer age specific incidence rates were negligible in women under the age of 25 years. Incidence rates were highest in the age group 35 to 54 years and then generally decreased with increasing age. It is important to note however, that numbers in each age group in southern Brisbane LGA were small making interpretation difficult.

Cancer screening

Colorectal cancer screening

In 2022-23 the overall National Bowel Cancer Screening Program (NBCSP) participation rate in southern Brisbane LGA was 37.3% which was lower than both the Queensland (38.8%) and Australian (41.7%) rates[23]. Data covering the age/sex breakdown for southern Brisbane LGA for the period since the program expansion in 2015 are not available, however these data have been published for Queensland[23] and are presented in Figure 85. Queensland participation rates were higher for females than for males in all age groups (Figure 85) and participation rates increased with increasing age in both sexes.

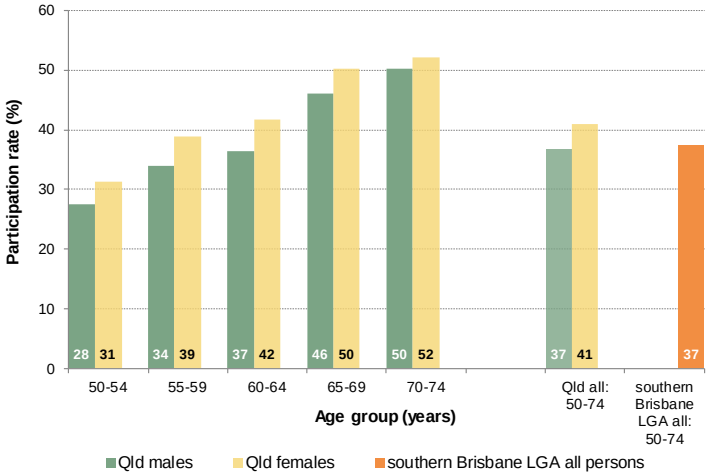


Figure 85: Crude participation rates in the National Bowel Cancer Screening Program by age and sex, Queensland and southern Brisbane LGA all persons 50-74 years, 2022-23

Between 2014-15 and 2018-19 NBCSP participation rates in southern Brisbane LGA were consistently lower than the rates in Queensland however from 2019-20 onwards they were the same to slightly higher than the Queensland rates (Figure 86). Rates in southern Brisbane LGA increased from 2014-15 to a peak in 2019-20. In 2020-21, during the COVID-19 pandemic, rates in southern Brisbane LGA fell for the first time and by 2021-22 were at the lowest level since 2014-15. In 2022-23 the first increase in rates since the pandemic was reported (Figure 86).

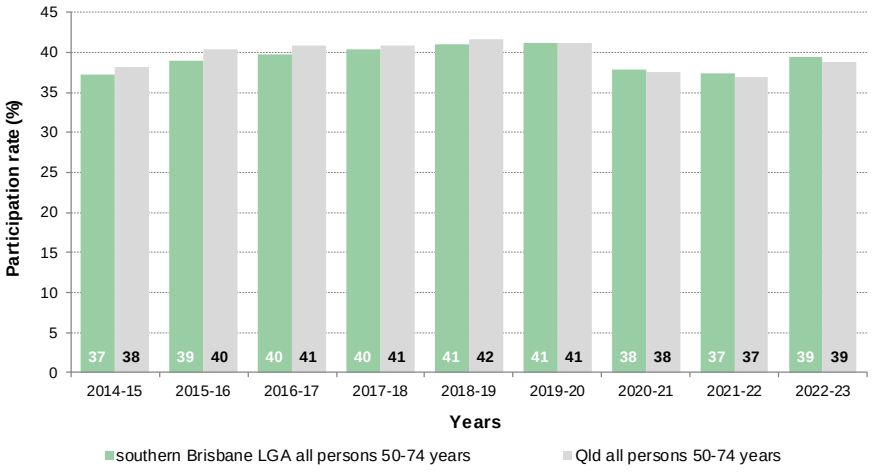


Figure 86: Crude all persons 50 to 74 years participation rates in the National Bowel Cancer Screening Program, Queensland and southern Brisbane LGA, 2014-15 to 2022-23

Breast cancer screening

At the time of publication of this report, breast cancer screening participation data were not published specifically for local government areas. The 2021-2022 the data presented in this section of the report are a compilation of data for the SA3s comprising southern Brisbane LGA. No times series data are presented for southern Brisbane LGA because of a lack of published data for some SA3s in past years. This means it is not possible to calculate reliable participation rate estimates for past years.

In 2021-22 within the targeted age group of 50 to 74 years, participation in the BreastScreen Queensland program in southern Brisbane LGA was 49%. Participation was highest in women aged 60 to 69 years (51%) but was below 49% in other age groups (Figure 87). Southern Brisbane LGA participation rates were lower

than the equivalent Queensland rates in all age groups except those aged 50 to 54 years – the youngest section of the cohort.

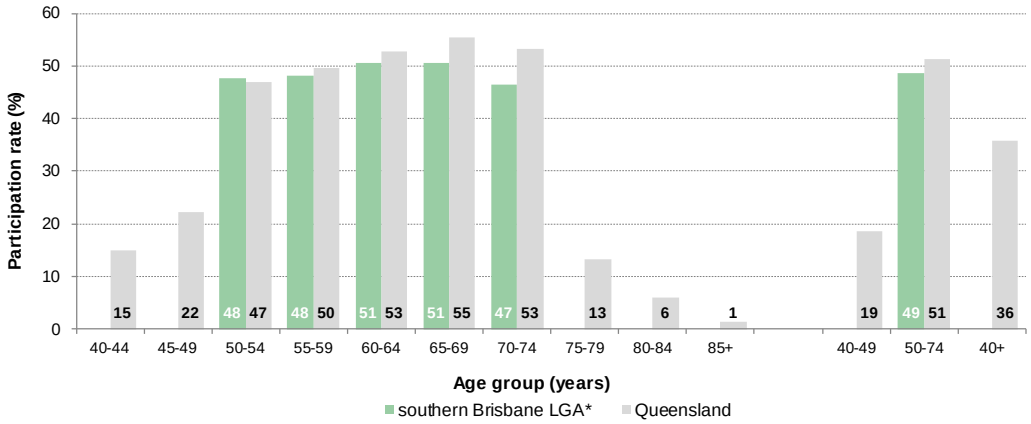


Figure 87: Crude participation rates in the BreastScreen Queensland screening program by age group, southern Brisbane LGA (approximation) and Queensland, 2021-22

Cervical cancer screening

At the time of publication of this report, cervical cancer screening participation data were not published specifically for local government areas however data were published at the SA3 and SA2 levels. A data for southern Brisbane LGA has been derived from that published for the SA3 and SA2 data published for this area.

In 2019-23 the southern Brisbane LGA coverage rate among those in the 25 to 74 years target group was 77.1%. This was higher than the Queensland coverage rate of 73.0% (Figure 88).

In 2019-23 both southern Brisbane LGA and Queensland, cervical screening program coverage rates were highest (over 85%) in the 25 to 29 years age group. Rates in those aged 30 to 64 years in southern Brisbane LGA ranged from 75 to 82%. Rates fell with increasing age in those over 44 years, with the lowest coverage in those aged 70 to 74 years (48%) (Figure 88).

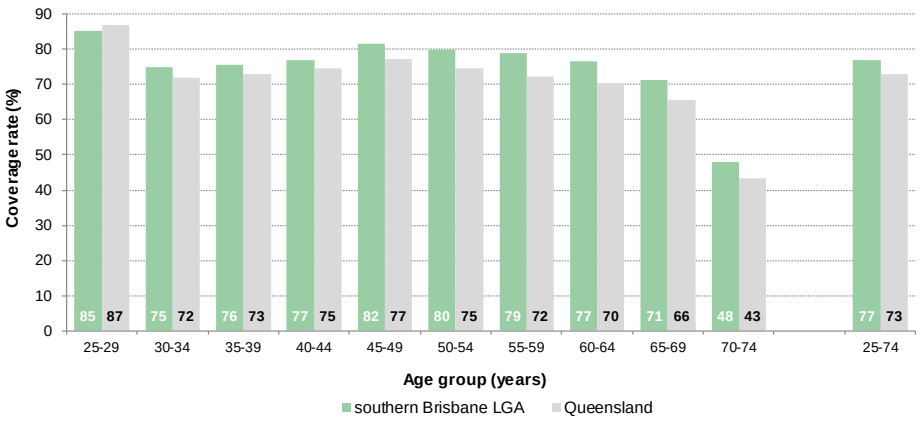


Figure 88: Crude participation rates in the National Cervical Screening Program by age group, southern Brisbane LGA and Queensland, 2019-2023

Comparison statistics

Table 17: Comparison of key characteristics, Metro South Health, Logan, Redland and southern Brisbane LGAs[2]

Characteristic	Metro South	Logan LGA	Redland LGA	southern Brisbane LGA	Queensland
All persons all cancer mortality rate*	**147.5**	**166.9**	**143.7**	**138.9**	**157.2**
Male all cancer mortality rate*	**179.1**	204.0	**175.6**	**167.2**	**192.6**
Female all cancer mortality rate*	121.9	135.6	117.2	**117.1**	**127.3**
Lung cancer mortality rate*	**30.9**	**37.7**	**27.9**	**28.3**	**33.4**
Hepatobiliary cancer mortality rate*	18.2	**21.6**	15.6	17.3	**17.9**
Colorectal cancer mortality rate*	17.1	19.4	17.5	**15.8**	**18.1**
Haematological cancer mortality rate*	15.2	16.3	14.8	14.9	**16.3**
Prostate cancer mortality rate*	24.8	27.5	24.1	23.2	**26.1**
Breast (female) cancer mortality rate*	17.9	18.5	18.3	17.7	**18.7**
All persons all cancer incidence rate*	**515.5**	532.5	535.5	**499.4**	**543.7**
Male all cancer incidence rate*	**592.7**	609.2	632.6	**570.8**	**631.5**
Female all cancer incidence rate*	**451.4**	466.5	451.7	**442.3**	**465.3**
Prostate cancer incidence rate*	**159.7**	**146.2**	165.2	**165.2**	**177.0**
Breast (female) cancer incidence rate*	128.0	119.4	128.3	131.9	**125.5**
Haematological cancer incidence rate*	60.0	60.3	57.7	60.3	**61.5**
Melanoma incidence rate*	**60.0**	**55.0**	77.1	**56.4**	**72.2**
Colorectal cancer incidence rate*	**51.3**	56.8	55.0	**47.3**	**54.7**
Lung cancer incidence rate*	49.6	**58.8**	46.6	**45.8**	**50.1**
National bowel cancer screening program participation rate (2022-23)	38%	32%	41%	37%	**39%**
BreastScreen Queensland participation rate (50-74 years; 2021-22)	49%	46%	52%	49%	**51%**
National cervical screening program coverage rate (25-74 years; 2019-23)	73%	65%	75.5%	77%	**73%**

Rates significantly higher than Queensland highlighted in **bold red**; rates significantly lower than Queensland highlighted in **bold blue**.

* Average annual age standardised rate per 100,000 persons, 2018-2022

Appendix 1: Indicators by SA3

Table 1: All cancer counts of deaths and annual average annual age-standardised mortality rates by statistical area 3 (SA3) and local government area (LGA), MSH, and Queensland, 2018-2022

Geographic region (SA3/LGA/HHS)	Total deaths (2018 – 2022)	Annual average age standardised mortality rate per 100,000 persons (95% confidence interval)	Significant difference from QLD#
Browns Plains	681	182.1 (168.7 – 196.1)	↑
Springwood – Kingston	703	173.4 (160.8 – 186.5)	↑
Beaudesert	193	168.0 (145.2 – 192.6)	—
Rocklea – Acacia Ridge	474	163.9 (149.5 – 179.0)	—
Wynnum – Manly	693	160.7 (149.0 – 172.9)	—
Beenleigh	418	160.0 (145.0 – 175.7)	—
Loganlea – Carbrook	576	159.1 (146.3 – 172.3)	—
Jimboomba	336	151.8 (136.1 – 168.5)	—
Forest Lake – Oxley	560	149.8 (137.7 – 162.5)	—
Brisbane Inner-East	256	146.8 (129.4 – 165.3)	—
Capalaba	688	145.7 (135.0 – 156.8)	—
Brisbane Inner*	245	144.2 (126.7 – 162.8)	—
Cleveland – Stradbroke	1,065	142.6 (134.2 – 151.3)	↓
Carindale	439	139.1 (126.4 – 152.4)	↓
Holland Park – Yeronga	521	138.3 (126.6 – 150.4)	↓
Nathan	295	137.0 (121.8 – 153.0)	↓
Mt Gravatt	549	124.2 (114.0 – 134.8)	↓
Centenary	244	115.2 (101.2 – 130.1)	↓
Sherwood – Indooroopilly*	133	112.5 (94.3 – 132.4)	↓
Sunnybank	310	112.4 (100.2 – 125.2)	↓
Logan LGA	2,714	166.9 (160.7 – 173.2)	↑
Redland LGA	1,691	143.7 (136.9 – 150.6)	↓
Southern Brisbane LGA	4,783	138.9 (135.0 – 142.9)	↓
Metro South	**9,381**	**147.5 (144.5 – 150.5)**	↓
Queensland	49,580	157.2 (155.8 – 158.5)	.

↑ Area statistically significantly higher than Queensland; ↓ Area statistically significantly lower than Queensland; — no statistically significant difference between Area and Queensland.

* SA3 only partly within the MSH region. Only residents of the MSH portion of the SA3 (south of Brisbane River) are included

Table 2: All cancer counts of new cases and annual average annual age-standardised incidence rates by statistical area 3 (SA3) and local government area (LGA), MSH, and Queensland, 2018-2022

Geographic region (SA3/LGA/HHS)	Total new cases (2018 – 2022)	Annual average age standardised incidence rate per 100,000 persons (95% confidence interval)	Significant difference from QLD[#]
Wynnum – Manly	2,383	567.1 (544.6 – 590.1)	—
Beaudesert	607	561.8 (518.0 – 607.3)	—
Brisbane Inner-East	1,103	554.3 (522.1 – 587.5)	—
Beenleigh	1,415	552.5 (524.1 – 581.7)	—
Capalaba	2,518	539.8 (518.9 – 561.1)	—
Springwood – Kingston	2,226	533.5 (511.6 – 555.9)	—
Cleveland – Stradbroke	3,643	532.7 (515.5 – 550.1)	—
Jimboomba	1,365	530.3 (502.5 – 558.8)	—
Browns Plains	2,171	528.3 (506.3 – 550.7)	—
Loganlea – Carbrook	1,880	523.3 (499.9 – 547.2)	—
Nathan	1,077	523.2 (492.4 – 554.9)	—
Holland Park – Yeronga	1,919	516.1 (493.3 – 539.5)	↓
Sherwood – Indooroopilly*	574	511.1 (470.2 – 553.7)	—
Centenary	1,047	506.3 (476.1 – 537.4)	↓
Carindale	1,524	504.8 (479.7 – 530.4)	↓
Forest Lake – Oxley	1,832	487.1 (465.1 – 509.7)	↓
Brisbane Inner*	893	476.0 (445.3 – 507.7)	↓
Mt Gravatt	1,964	469.6 (449.1 – 490.6)	↓
Rocklea – Acacia Ridge	1,397	457.3 (433.7 – 481.6)	↓
Sunnybank	1,158	427.3 (403.1 – 452.3)	↓
Logan LGA	9,057	532.5 (521.6 – 543.5)	—
Redland LGA	5,932	535.3 (522.1 – 549.4)	—
Southern Brisbane LGA	17,104	499.4 (491.9 – 506.9)	↓
Metro South	**32,700**	**515.5 (510.0 – 521.1)**	↓
Queensland	166,171	543.7 (541.1 – 546.3)	.

↑ Area statistically significantly higher than Queensland; ↓ Area statistically significantly lower than Queensland; — no statistically significant difference between Area and Queensland.

* SA3 only partly within the MSH region. Only residents of the MSH portion of the SA3 (south of Brisbane River) are included

Definitions

Age specific rate: A rate reported for a specific age group. Age specific rates are calculated by dividing the number of events (e.g. deaths) occurring in a specific age group by the corresponding population in the same age group.

Age standardised rate: Age standardisation is a method of adjusting the crude rate to eliminate the effect of differences in population age structures when comparing crude rates for different periods of time, different geographic areas and/or different population sub-groups. Adjustments are usually undertaken for each of the comparison populations against a standard population.
The standard population used for the data presented in this report is the final 30 June estimated resident total population of Australia for 2001. The direct method of calculation was used by applying the formula:

$$SR = (SUM (r_i * P_i)) / SUM P_i$$

Where:
SR is the age-standardised rate of the population being studied
r_i is the age group specific rate for age group i in the population being studied
P_i is the population of age group i in the standard population

Confidence intervals: Usually expressed as 95% CI, this means we can be 95% confident that the true value of interest lies within the confidence intervals given. We do not usually know what the true value is as we can only estimate it from observations taken from samples. For example, if the mortality rate is 3.1 per 100,000 (95% CI: 2.9-3.2), we can be 95% confident that the true rate will be between 2.9 and 3.2, and our best estimate is 3.1 per 100,000.

Crude rates: A crude rate is the number of events (deaths, hospitalisations, newly diagnosed cancer cases) from a specific cause over a specified period of time (usually per year) divided by the total population. For example, a crude hospital separation rate is defined as the number of persons who completed an episode of hospital care within a specified time divided by the total population.

Estimated resident populations (ERPs): These are the official estimates of the Australian population, which link people to a place of usual residence within Australia. The Australian Bureau of Statistics defines ‘usual residence’ as the place where each person has lived or intends to live for six months or more from the reference date for data collection.

Incidence: Incidence is the number of new cases of disease occurring within a specified time period divided by the population at risk. For example, if a population initially contains 100,000 non-diseased persons and 1,000 get the disease in a year, the incidence rate is 1,000 per 100,000 in that year (1%).

Population pyramid: A population pyramid represents the breakdown of the population by sex and age at a given point in time. It comprises two histograms, one for each sex (by convention, men on the left and women on the right) where the counts or percentage of the population are shown horizontally and the age groups vertically. The counts/percentages by sex and by age depend on interactions between fertility, mortality and migrations. The shape of the pyramid and its variations over the years depend primarily on variations in fertility but also in the other two factors.

P value: A p value is the probability that the effect observed within a study would have occurred by chance if, in reality, there was no true effect, By convention, a p value of 0.05 or less is usually considered ‘statistically significant’. That is, if the p value is less than 0.05, there is a less than one in 20 chance that the observed difference would have arisen by chance alone. When comparing rates between a Hospital and Health Service area and Queensland, if the p value is <0.01, this is often referred to ‘highly significant’ because the probability that the observed difference is due to chance alone is less than one in 100.

Statistical significance: A statistical test that provides us with information on whether an observed difference or association is unlikely to be due to chance alone (See P value). If it is unlikely to be due to chance alone it is deemed to be ‘statistically significant’. However, it is important to note that statistical significance does not necessarily mean that an observed effect or difference is ‘real’, because by chance alone one in 20 ‘significant’ findings will be spurious (where P=0.05). Also ‘statistical significance’ does not necessarily mean clinically significant. It is the size of the effect that determines the clinical or public health importance, not the presence of statistical significance alone.

List of figures

List of tables

References

1. Department of Health 2025. *Health Indicators 2025: Snapshot series I. Population profiles: Metro South Health, Logan LGA, Redland LGA, southern Brisbane LGA*. Brisbane.
2. Queensland Health 2024. Oncology analysis system (OASys). Cancer Alliance Queensland,Queensland Cancer Control Analysis Team: Brisbane. https://cancerallianceqld.health.qld.gov.au/applications/qool. Accessed 30 May, 2025
3. Queensland Cancer Statistics Online 2025. Viertel Cancer Research Centre, Cancer Council Queensland (https://cancerqld.org.au/research/qcsol). Based on data released by the Queensland Cancer Register (1982-2022; released September 2024). Accessed 20 June 2025.
4. Australian Bureau of Statistics 2023. *Causes of Death, Australia*. ABS. https://www.abs.gov.au/statistics/health/causes-death/causes-death-australia/latest-release. Accessed 24 June 2025.
5. Australian Institute of Health and Welfare 2021. *Cancer in Australia 2021.* Cancer series no. 133. Cat.no. CAN 144 Canberra: AIHW.
6. Department of Health 2022. *Health indicators 2022: Metro South Health*. Brisbane.
7. Prostate Cancer Foundation of Australia. *What you need to know about Prostate Cancer*. https://www.prostate.org.au/resources/ Accessed 2 June 2025.
8. Australian Institute of Health and Welfare 2024. Cancer data in Australia. Canberra: AIHW, Australian Government, 2024. https://www.aihw.gov.au/reports/cancer/cancer-data-in-australia/ Accessed 2 June 2025.
9. Cancer Council of Queensland. *Cancer Facts: Prostate Cancer*. https://publicfileshareprodst01.blob.core.windows.net/resources/21073_Research_factsheet_ProstateCancer_FA.pdf Accessed 2 June 2025.
10. Australian Institute of Health and Welfare 2016. *Skin cancer in Australia.* Cat. no. CAN 96. Canberra: AIHW.
11. Australian Institute of Health and Welfare & Cancer Australia 2012. *Breast cancer in Australia: an overview.* Cancer series no. 71. Cat. no. CAN 67 Canberra: AIHW.
12. Cancer Council Australia. Understanding bowel cancer: A guide for people with cancer, their friends and families 2025. Sydney. https://www.cancer.org.au/assets/pdf/understanding-bowel-cancer-booklet Accessed 2 June 2025.
13. Cancer Council Australia website 2017. Blood cancers. https://www.cancercouncil.com.au/blood-cancers/ Accessed 2 June 2025.
14. Cancer Council Australia website 2025. Lymphoma. https://www.cancer.org.au/about-cancer/types-of-cancer/lymphoma.html Accessed 3 June 2025.
15. Australian Institute of Health and Welfare & Cancer Australia 2011. *Lung cancer in Australia: an overview.* Cancer series no. 64. Cat. no. CAN 58 Canberra: AIHW.
16. Cancer Council Australia 2024. Understanding cancer in the liver: A guide for people affected by primary liver cancer or secondary cancer in the liver. Sydney. https://www.cancer.org.au/assets/pdf/understanding-liver-cancer-booklet Accessed 3 June 2025.
17. Cancer Council Australia 2024. Understanding pancreatic cancer: A guide for people with cancer, their friends and families. Sydney. https://www.cancer.org.au/assets/pdf/understanding-pancreatic-cancer-booklet Accessed 3 June 2025.
18. Cancer Council Australia 2024. Understanding kidney cancer: A guide for people with cancer, their friends and families. Sydney. https://www.cancer.org.au/assets/pdf/understanding-kidney-cancer-booklet Accessed 3 June 2025.
19. Cancer Council Australia website 2025. Cervical cancer. https://www.cancer.org.au/about-cancer/types-of-cancer/cervical-cancer.html Accessed 3 June 2025.

20. Australian Institute of Health and Welfare 2024. National cervical screening program monitoring report 2024. Cat. no. CAN 163. AIHW, Australian Government.

21. Queensland Health: Jardine A, Endo T, Bright M, Macleod SL, Harper C. 2010. *Risk factor impact on the burden of disease and injury in Queensland, 2007.* Queensland burden of disease and injury circular series 2, no. 6. Brisbane: Queensland Health.

22. Australian Institute of Health and Welfare 2024. *National Bowel Cancer Screening Program: monitoring report 2024*. Catalogue number CAN 160, AIHW, Australian Government.

23. Australian Institute of Health and Welfare. *Data tables: National Bowel Cancer Screening Program monitoring report 2024 supplementary tables*, Australian Government, 2024. https://www.aihw.gov.au/reports/cancer-screening/nbcsp-monitoring-2024/data Accessed 10 June 2025.

24. Australian Institute of Health and Welfare 2021. *Cancer screening and COVID-19 in Australia*. Cat. no. CAN 137. AIHW, Australian Government.

25. Queensland Health 2025. Breastscreen Queensland. https://www.breastscreen.qld.gov.au/who-is-eligible.asp Accessed 10 June 2025

26. Australian Institute of Health and Welfare 2019. Cervical screening in Australia 2019. Cancer series no. 123. Cat. no. CAN 124. Canberra.

27. Australian Institute of Health and Welfare 2024. National Cervical Screening Program monitoring report 2024, Cat. No. CAN 163, AIHW, Australian Government.

28. Department of Health 2018. Health indicators 2018: Logan local government area, Metro South Health. Brisbane.

30. Department of Health 2018. Health indicators 2018: Redland local government area, Metro South Health. Brisbane.