

BreastScreen Australia
monitoring report 2004–2005

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the Australian Government Department of Health and Ageing
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Abbreviations

ABS	Australian Bureau of Statistics
ACT	Australian Capital Territory
AIHW	Australian Institute of Health and Welfare
ARIA	Accessibility/Remoteness Index for Australia
ASGC	Australian Standard Geographical Classification
ASR	age-standardised rate
ASR(A)	age-standardised rate, standardised to the Australian standard population
BSANAC	BreastScreen Australia National Advisory Committee
CD	(Census) Collection District
CI	confidence interval
DHAC	Department of Health and Aged Care (former name of DoHA)
DoHA	Australian Government Department of Health and Ageing
DCIS	ductal carcinoma in situ
ERP	estimated resident population
ICD	International Classification of Diseases
IRSD	Index of Relative Socio-economic Disadvantage
NBCC	National Breast Cancer Centre
NQMC	National Quality Management Committee
NSW	New South Wales
NT	Northern Territory
Qld	Queensland
RRMA	Rural, Remote and Metropolitan Areas classification
SA	South Australia
SLA	statistical local area
Tas	Tasmania
Vic	Victoria
WA	Western Australia
WHO	World Health Organization

Symbols

..	not applicable
≤	less than or equal to
<	less than
>	more than

Summary

This is the ninth national monitoring report for the BreastScreen Australia Program. It presents statistics on BreastScreen Australia screening activity and outcomes for 2004–2005, and trend data from 1996 onwards. A reporting interval of 2 years is used because it corresponds with the recommended interval between screens for asymptomatic women in the target age group (50–69 years). In 2004–2005, 1.6 million women were screened by the Program, with just over 1.2 million in the target age group (50–69 years), a participation rate of 56.2%.

The BreastScreen Australia Program commenced in 1991. It aims to reduce mortality and morbidity from breast cancer by actively recruiting and screening women aged 50–69 years, using mammography for early detection of the disease. Women aged 40–49 years and 70 years or over may also be screened.

This report shows a reduction in both mortality and morbidity associated with breast cancer. A comprehensive evaluation of the BreastScreen Australia Program is currently being undertaken by the Australian Department of Health and Ageing. This will assess the extent to which screening by the Program is contributing to falling mortality. Mortality has declined from 62 deaths per 100,000 women aged 50–69 years in 1996 to 52 deaths per 100,000 in 2005. There is evidence of reduced morbidity in the target age group (50–69 years) through early detection of small-diameter cancers and ductal carcinoma in situ (DCIS). This early detection can lead to reduced morbidity from radical treatment of advanced disease.

Of all new invasive breast cancers detected in 2004 in women aged 50–69 years in Australia, 46% were detected within the Program. This has improved since 1996, the first year of national statistics, when 40% of all new invasive breast cancers were Program-detected. The proportion of invasive breast cancers detected in the Program that were small-diameter was relatively unchanged, with 63.5% of cancers detected in 2004 and 63.1% in 2005 compared with 64.7% in 1996. In 2005, the Program detected 2,823 new cases of invasive breast cancer.

As well as small cancers, screening also aims to detect DCIS, a non-invasive cancerous condition restricted to the ducts. This condition may become invasive in some women if untreated. The DCIS detection rate for women in the target age group (50–69 years) has increased significantly from 9.1 cases per 10,000 women screened in 1996 to 11.5 cases per 10,000 women screened in 2005.

The Program also aims to minimise the number of interval cancers detected within 12 months of a screening episode. An interval cancer is an invasive breast cancer diagnosed after a screening episode that detected no cancer and before the next scheduled screening episode. The age-standardised rate of interval cancer between screening years 1998–2000 and 2001–2003 decreased from 8.0 per 10,000 screens to 7.0 per 10,000 screens for women aged 50–69 years during 0–12 months follow-up.

The Program has eight performance indicators presented in this report. Key points for each indicator are as follows.

Indicator 1 Participation

- In 2004–2005, of the 1.6 million women screened by the BreastScreen Australia Program, just over 1.2 million (74%) were in the target age group (50–69 years). This was an increase from 70% in the previous reporting period, 2003–2004.

- Participation among women in Australia aged 50–69 years increased from 51.4% in 1996–1997 to 57.1% in 2001–2002 and decreased to 56.2% in 2002–2003. In 2004–2005 this participation rate was unchanged at 56.2%.
- Across states and territories in 2004–2005, the age-standardised participation rate for women aged 50–69 years ranged from 41.5% in the Northern Territory to 61.9% in South Australia.
- In 2004–2005, participation by women aged 50–69 years living in the most socioeconomically advantaged areas of Australia was 56.7% compared with 54.6% by women living in the least advantaged areas. This difference is statistically significant.
- Participation by Aboriginal and Torres Strait Islander women (35.8%) was significantly lower than for non-Indigenous women (55.9%). However, participation by Aboriginal and Torres Strait Islander women has increased significantly from 31.8% in 1999–2000, the period of first reporting.
- Participation by women whose main language spoken at home was not English (43.1%) was significantly lower than participation by women whose main language spoken at home was English (58.6%).

Indicator 2 Detection of all-size and small invasive breast cancers

- In 2005, BreastScreen Australia detected 3,680 invasive breast cancers, of which 2,823 were in women aged 50–69 years.
- The age-standardised invasive breast cancer detection rate for women aged 50–69 years attending the Program for the first time increased from 56 cancers detected per 10,000 women screened in 1996 to 74 per 10,000 women in 2005. For women screened who had previously attended the Program the detection rate increased from 35 cancers detected per 10,000 women screened in 1996 to 41 per 10,000 women in 2005. Both changes were statistically significant.
- In 2005, BreastScreen Australia detected 2,308 small-diameter breast cancers, 1,780 of which occurred in women aged 50–69 years.
- In 2005, 52.1% of invasive breast cancers detected in women aged 50–69 years attending their first screening round were small-diameter cancers. For women attending who had previously been screened, 65.2% of cancers detected were small-diameter.
- For women aged 50–69 years attending their first screening round, the age-standardised rate of small-diameter invasive cancer detection was 37.8 per 10,000 women screened in 2005. This was significantly higher than the rate of 26.7 per 10,000 for women who attended in subsequent screening rounds.

Indicator 3a Interval cancer rate

An interval cancer is an invasive breast cancer that is diagnosed after a screening episode that detected no cancer and before the next scheduled screening episode. The recommended screening interval of 2 years must have elapsed for interval cancer data to be available, so the most current interval cancer data are for women screened in 2003.

- There were 4,515 interval cancers detected over the 24 months following a negative screening episode for women screened in the 3-year period of 2001–2003. Of these, 3,156 were in women aged 50–69 years.

- For women aged 50–69 years attending their first screening round in 2001–2003, the age-standardised interval cancer rate was 9.2 interval cancers per 10,000 women-years over the 24 months following a negative screening episode.
- For women aged 50–69 years attending subsequent screening rounds in 2001–2003, the age-standardised interval cancer rate was 9.6 interval cancers per 10,000 women-years over the 24 months following a negative screening episode.

Indicator 3b Program sensitivity

Program sensitivity is the proportion of invasive breast cancers that are detected within the BreastScreen Australia Program out of all invasive breast cancers (interval cancers plus screen-detected cancers) diagnosed in program-screened women in the 2-year screening interval.

- For women screened over the period of 2001–2003, there were 11,304 screen-detected cancers and 4,515 interval cancers in women aged 40 years or over, and 7,943 screen-detected cancers and 3,156 interval cancers in women in the target age group (50–69 years).
- Program sensitivity has been improving for women aged 50–69 years. The sensitivity rate for women 24 months after their first screen was 74.8% during index years 1998–2000 and 79.2% during index years 2001–2003. These were significantly higher than the rates of 66.6% and 71.0% recorded during index years 1998–2000 and 2001–2003, respectively, for women attending subsequent screening rounds.

Indicator 4 Detection of ductal carcinoma in situ

Ductal carcinoma in situ (DCIS) is a disease that involves changes in the cells in the lining of the ducts of the breast. Although the changes are like those seen in breast cancer, DCIS has not spread beyond the ducts.

- In 2005, of the 925 cases of DCIS detected in women participating in the BreastScreen Australia Program, 725 were in women aged 50–69 years. The age-standardised detection rate for DCIS for women in this age group attending for their first screening round was 14.5 per 10,000 women screened. For women attending for their second or subsequent screening rounds in 2005, the rate decreased to 11.0 per 10,000 women screened.
- The DCIS detection rate for women aged 50–69 years over all screening rounds increased significantly from 9.1 DCIS cases per 10,000 women screened in 1996 to 11.5 cases per 10,000 women screened in 2005.

Indicator 5 Recall to assessment

The recall to assessment indicator measures the rate of women who are recalled for assessment following attendance for a routine screening at a BreastScreen Australia service. In most cases, the recall is made because a woman's screening mammogram shows signs that there may be breast cancer.

Women attending the Program for the first time have a significantly higher all-size cancer detection rate than those who have previously been screened. This is reflected in a higher recall to assessment rate for women who attend for their first screening round compared with those who attend for a subsequent round.

- In 2005, the proportion of women aged 50–69 years recalled for assessment was significantly higher for women being screened for the first time compared with women who had previously been screened. While 9.8% of women attending their first round of screening were recalled for further testing, only 4.0% of women attending for a subsequent round of screening were recalled.
- Recall to assessment rates have increased over time. The proportion of women aged 50–69 years attending their first screening round who were recalled for assessment increased significantly from 5.8% in 1996 to 9.8% in 2005. The proportion recalled for assessment who attended subsequent screening rounds also increased significantly from 3.2% in 1996 to 4.0% in 2005.

Indicator 6 Rescreening

The rescreen indicator measures the proportion of women who return for screening in the Program within the recommended screening interval. The interval between screens is an important factor influencing the level of detection of cancers within the Program. Intervals that are too long may allow tumours to grow to the point where symptoms become evident, thus eliminating the advantage of screening. The recommended interval of 27 months includes an additional 3 months to allow for potential delays in screening availability and data transfer. Although the BreastScreen Australia target age group is 50–69 years, only women aged 50–67 years are reported for the rescreen indicator.

- The age-standardised rescreen rate for women attending a BreastScreen Australia service in 2002 for the first time was 61.6%. The rescreen rate increased significantly to 70.3% for women attending for their second screen and to 80.7% for women attending for a third or subsequent screen.

Indicator 7a Incidence of breast cancer

- In 2004, there were 12,126 new cases of invasive breast cancer diagnosed. Of these, 694 (5.7%) were in women younger than 40 years, 2,234 (18.4%) in women aged 40–49 years, 6,031 (49.7%) in women aged 50–69 years and 3,167 (26.1%) in women aged 70 years or over.
- The breast cancer incidence rate for women in all age groups rose from 109.1 per 100,000 women in 1996 to 112.8 per 100,000 in 2004. The increase was not statistically significant.
- The breast cancer incidence rate for women aged 50–69 years increased significantly from 269.0 per 100,000 women in 1996 to 288.8 per 100,000 in 2004.
- The age of women with the highest incidence of breast cancer has been increasing. In 1999, the highest breast cancer incidence rate was in women aged 60–64 years (324.0 new cases per 100,000 women). In 2003 and 2004, the incidence peak shifted to the 65–69 year age group with 330.5 and 334.1 new cases per 100,000 women, respectively.
- In 1995–1999 and 2000–2004, the age-standardised breast cancer incidence rate for women of all ages was significantly lower in outer regional areas (103.5 and 106.4 new cases per 100,000 women, respectively), remote areas (96.9 and 99.1 new cases per 100,000 women, respectively) and very remote areas (89.6 and 88.3 new cases per 100,000 women, respectively) compared with major cities (114.5 and 116.7 new cases per 100,000 women, respectively).

Indicator 7b**Incidence of ductal carcinoma in situ**

- In 2004, there were 1,542 new cases of DCIS diagnosed in women of all ages. Of these, 939 (60.9%) were in women aged 50–69 years. In comparison, in 1996, there were 890 new cases of DCIS diagnosed in women of all ages, 487 (54.7%) of which were in women aged 50–69 years.
- The age-standardised DCIS incidence rate for women of all ages increased significantly from 10.2 new cases per 100,000 women in 1996 to 14.4 per 100,000 in 2004.
- The rate for women aged 50–69 years also increased significantly, from 30.1 per 100,000 women in 1996 to 45.1 per 100,000 in 2004.

Indicator 8**Mortality**

- Breast cancer was the most common cause of cancer mortality in women in Australia in 2005, with 2,719 deaths. Of these, 1,117 deaths (41.1%) occurred in women aged 50–69 years.
- The age-standardised breast cancer mortality rate in women of all ages declined significantly from 28.1 per 100,000 women in 1996 to 23.7 per 100,000 in 2005.
- The rate for women aged 50–69 years also declined significantly, from 61.5 per 100,000 women in 1996 to 51.8 per 100,000 in 2005.
- By geographic regions, mortality rates in 2001–2005 for women aged 50–69 years were similar for women in major cities (53.4 deaths per 100,000 women), inner regional areas (52.3) and outer regional areas (53.0). The rates in remote areas (50.2) and very remote areas (44.9) were lower, but these were not statistically significant because of the small number of deaths in these areas.
- Mortality for non-Indigenous women aged 50–69 years decreased significantly from 67.2 per 100,000 women in 1996–2000 to 51.8 deaths per 100,000 women in 2001–2005.
- For Aboriginal and Torres Strait Islander women, in Queensland, Western Australia, South Australia and the Northern Territory the mortality rate decreased from 55.7 to 45.4 deaths per 100,000 women between these periods. This change was not statistically significant.

Summary table

The following table provides a comparison of national data for all indicators for the target age group (50–69 years). The latest reporting period is compared with the previous reporting period and with the reporting period from 5 years ago, as well as with the Program performance objectives.

The performance objectives listed in the following table are National Accreditation Standards agreed by the Department of Health and Ageing and BreastScreen Australia state and territory programs for individual screening services (NQMC 2004).

One-year to 5-year comparison table for national data for all indicators for the target age group (50–69 years)

Indicator	Objective ^(e)	Latest reporting period		Previous non-overlapping reporting period		5 years ago	
		Year	Rate	Year	Rate	Year	Rate
Participation in 24-month period (%)	70.0 ^(b)	2004–2005	56.2	2002–2003	56.2	1999–2000	55.9
Detection rate of small invasive cancers (≤ 15 mm) ^(c)	≥ 25						
First screening round		2005	37.8	2004	45.2	2000	38.5
Subsequent screening rounds		2005	26.7	2004	27.6	2000	28.6
Interval cancer rate^(c)							
First screening round 0–12 months following a negative screening episode	< 7.5	Index years 2001, 2002 and 2003	6.9	Index years 1998, 1999 and 2000*	7.2	..	..
Subsequent screening rounds 0–12 months following a negative screening episode	< 7.5	Index years 2001, 2002 and 2003	7.0	Index years 1998, 1999 and 2000*	8.0	..	..
Program sensitivity (screen detected cancers)^(c)							
First screening round 0–12 months following a negative screening episode	..	Index years 2001, 2002 and 2003	90.4	Index years 1998, 1999 and 2000*	89.3	..	..
Subsequent screening rounds 0–12 months following a negative screening episode	..	Index years 2001, 200 and 2003	85.8	Index years 1998, 1999 and 2000*	83.0	..	..
Detection of ductal carcinoma in situ (DCIS)^(c)							
First screening round	≥ 12	2005	14.5	2004	20.3	2000	13.7
Subsequent screening rounds	≥ 7	2005	11.0	2004	10.5	2000	10.4
Recall to assessment^(d)							
First screening round	< 10	2005	9.8	2004	9.9	2000	8.2
Subsequent screening rounds	< 5	2005	4.0	2004	4.0	2000	4.1

(continued)

(continued) One-year to 5-year comparison table for national data for all indicators for the target age group (50–69 years)

Indicator	Objective ^(e)	Latest reporting period		Previous non-overlapping reporting period		5 years ago	
		Year	Rate	Year	Rate	Year	Rate
Rescreening for age group 50–67 years^{(a)(e)}							
First screening round	≥75	Index year 2003	60.5	Index year 2002	61.6	..	..
Second screening round	≥90	Index year 2003	69.5	Index year 2002	70.3	..	..
Third and subsequent screening rounds	≥90	Index year 2003	80.1	Index year 2002	80.7	..	..
Incidence of breast cancer^(f)	..	2004	288.8	2003	285.6	1999	286.9
Incidence of ductal carcinoma in situ (DCIS)^(g)	..	2000–2004	43.9	..	..	1995–1999	34.0
Mortality from breast cancer^(h)	..	2005	51.8	2004	51.1	2000	52.5

(a) Performance objective of the BreastScreen Australia Program as set out in the National Accreditation Standards (NQMC 2004). Although these objectives were developed for individual screening services rather than for the national program as a whole, they do provide an indication of the national program's performance.

(b) Target formally agreed by the former BreastScreen National Advisory Committee.

(c) Rates are the number of women with small invasive cancers detected per 10,000 women screened and age-standardised to the population of women attending a BreastScreen Australia service in 1998.

(d) Rates are the number of women recalled for assessment as a percentage of women screened and age-standardised to the population of women attending a BreastScreen Australia service in 1998.

(e) Before index year 2000, data for the 50–69 years age group were reported. Although the BreastScreen Australia target age group is 50–69 years, only women aged 50–67 years are reported for the rescreen indicator. This is because women aged 68–69 years in the index year were outside the target age group 27 months after their index screen and, therefore, were not expected to return for screening.

(f) Rates are the number of new cases of breast cancer per 100,000 women and age-standardised to the Australian population at 30 June 2001.

(g) Rates are the number of DCIS detected per 100,000 women and age-standardised to the Australian population at 30 June 2001.

(h) Rates are the number of deaths from breast cancer per 100,000 women and age-standardised to the Australian population at 30 June 2001.

⁽ⁱ⁾Data for the index years 1998, 1999 and 2000 (0–12 months) which were originally supplied for the *BreastScreen Australia monitoring reports 2001–2002, 2002–2003 and 2003–2004*, respectively, were re-used in this report.

Indicator 1 Participation

Participation rate

The participation rate is the percentage of women in the population screened through the BreastScreen Australia Program in a 24-month period, by 5-year age groups for women aged 40 years or over, and for the target age group (50–69 years).

The participation indicator

The participation rate is a population-based indicator that measures the proportion of the eligible population attending the screening program within the recommended screening interval. All women who are Australian citizens and those with permanent residency status are eligible for breast screening. A high proportion of attendance for screening by women in the target age group (50–69 years) is needed to maximise reductions in mortality from breast cancer (DHS 1994). The indicator also provides information to assist in assessing the effectiveness of the program's communication and education strategies, and can be used to assess whether the target age group (50–69 years) is well represented in the screening population.

The focus of this report is on women who have had a mammogram in the BreastScreen Australia Program. However, other mammography for screening and diagnosis (that is, investigating breast cancer symptoms) is conducted outside the program. Therefore, the results presented in this report are an underestimation of all screening on a national basis. This chapter reports on the participation rates for the BreastScreen Australia Program for 2004–2005 and presents trends from 1996 onwards.

One of the objectives of the BreastScreen Australia Program is 'To achieve, after five years, a 70 per cent participation in the National Program by women in the target group (50–69)...' (BSANAC & DHAC 2000). The age-standardised national participation rate for women in the target group in 2004–2005 was 56.2%.

Table 1.1: Age-standardised participation rates for women in the target age group (50–69 years), 1996–1997 to 2004–2005

Year of screening	Objective ^(a)	Rate (per cent)	95% CI
1996–1997	70.0	51.4	51.3–51.6
1997–1998		54.6	54.5–54.7
1998–1999		55.7	55.5–55.8
1999–2000		55.9	55.8–56.0
2000–2001		56.9	56.8–57.0
2001–2002		57.1	57.0–57.2
2002–2003		56.2	56.1–56.3
2003–2004		55.7	55.6–55.8
2004–2005		56.2	56.1–56.3

(a) Performance objective of the BreastScreen Australia Program as set out in the National Accreditation Standards (NQMC 2004).

Note: Rates are the number of women screened as a percentage of the eligible female population calculated as the average of the Australian Bureau of Statistics estimated resident population and age-standardised to the Australian population at 30 June 2001.

Source: AIHW analysis of BreastScreen Australia data.

Another BreastScreen Australia participation objective is ‘To achieve patterns of participation in the Program which are representative of the socioeconomic, ethnic and cultural profiles of the target population’ (BSANAC & DHAC 2000). This chapter reports national participation rates by region, socioeconomic status, Indigenous status and main language spoken at home. The following are key points on each of these variables.

Regional areas

- In 2004–2005, participation of women aged 50–69 years was significantly higher in outer regional (59.5%), inner regional (58.0%), and remote (57.8%) areas than in major cities (54.7%) and in very remote areas (45.9%).
- The lower participation rates in major cities may reflect greater access to, and use of, private radiology services. Participation in rural areas is encouraged through fixed mammography units in larger towns and the use of mobile mammography units in other areas. Lower participation in very remote areas may be due to unavailability of BreastScreen Australia services in some remote areas of the Northern Territory and to lower participation by Aboriginal and Torres Strait Islander women in very remote areas.

Socioeconomic status

- In 2004–2005, women aged 50–69 years living in the fifth quintile, which corresponds to the lowest level of socioeconomic status, participation rate in BreastScreen Australia (54.6%) was significantly below the national average of 56.2% and significantly lower than the rate (55.2%) achieved in 1999–2000. This contrasted with increasing participation since 1999–2000 of women living in the first and second quintiles, which corresponds to the highest socioeconomic status.
- Women aged 50–69 years in 2004–2005 living in the second most socioeconomically disadvantaged quintile also had participation significantly below that achieved by women living in the three most socioeconomically advantaged quintiles.

Aboriginal and Torres Strait Islander women

- In 2004–2005, the age-standardised participation rate for Aboriginal and Torres Strait Islander women aged 50–69 years (35.8%) was much lower than the non-Indigenous rate (55.9%). However, the rate for Aboriginal and Torres Strait Islander women increased significantly from 31.8% in 1999–2000 to 35.8% in 2004–2005.

Main language spoken at home

- Similarly, the age-standardised participation rate in 2004–2005 among women aged 50–69 years whose main language spoken at home was not English was significantly lower (43.1%) than the rate for women whose main language spoken at home was English (58.6%).

These results should, however, be treated with caution because of data issues. These include that women who did not state whether they were Indigenous or did not state the main language spoken at home may have been included in non-Indigenous and English-speaking totals in some states and territories.

Participation by states and territories

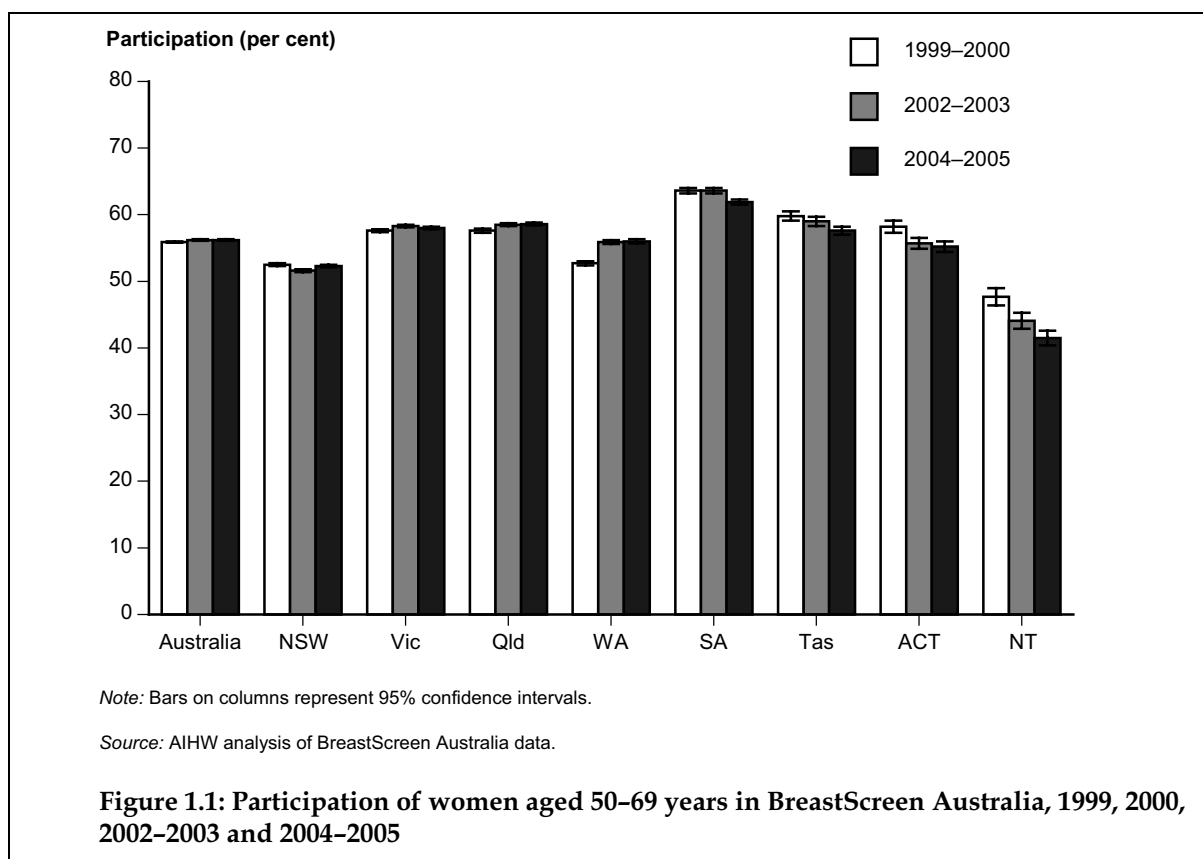


Table 1.2: Participation of women aged 50–69 years in BreastScreen Australia, 1999–2000, 2002–2003 and 2004–2005

	Australia	NSW	Vic	Qld	WA	SA	Tas	ACT	NT
	(per cent)								
2004–2005	56.2	52.3*	58.0	58.6#	56.0#	61.9*#	57.6*#	55.2#	41.5*#
95% CI	56.1–56.3	52.2–52.5	57.8–58.2	58.4–58.9	55.7–56.3	61.5–62.3	56.9–58.2	54.4–56.0	40.4–42.5
2002–2003	56.2	51.6	58.3	58.5	55.9	63.6	59.0	55.7	44.1
95% CI	56.1–56.3	51.4–51.8	58.1–58.5	58.2–58.7	55.5–56.2	63.2–64.0	58.3–59.6	54.9–56.5	42.9–45.2
1999–2000	55.9	52.5	57.6	57.6	52.7	63.6	59.8	58.2	47.7
95% CI	55.8–56.0	52.3–52.7	57.4–57.9	57.4–57.9	52.4–53.1	63.2–64.0	59.1–60.5	57.3–59.1	46.3–49.0

* Significantly different from the 2002–2003 rate.

Significantly different from the 1999–2000 rate.

Notes

1. Rates are the number of women screened as a percentage of the eligible female population calculated as the average of the Australian Bureau of Statistics estimated resident population and age-standardised to the Australian population at 30 June 2001.
2. Periods cover 1 January 1999 to 31 December 2000, 1 January 2002 to 31 December 2003 and 1 January 2004 to 31 December 2005.

- Of the 1,614,871 women screened during 2004–2005 as part of the BreastScreen Australia Program, 1,188,720 (74%) were in the target age group (50–69 years).
- In 2004–2005, 56.2% of women in the target age group (50–69 years) attended a BreastScreen Australia service.

- In 2004–2005, across states and territories, the age-standardised participation rate for women in the target age group (50–69 years) ranged from 41.5% in the Northern Territory to 61.9% in South Australia. It should be noted that BreastScreen Australia services are not provided in some remote areas of the Northern Territory and this may lower the participation rate for this jurisdiction.
- Queensland and Western Australia were jurisdictions with a statistically significant increase in participation for women in the target age group (50–69 years) between 1999–2000 and 2004–2005. In New South Wales, South Australia, Tasmania, Australian Capital Territory and the Northern Territory, the participation rate declined between 1999–2000 and 2004–2005 and except for New South Wales the decrease was statistically significant.

For more information, see tables 1 and 2 in Appendix A. Tables with data other than for the latest reporting period can be found on the AIHW's website at <www.aihw.gov.au>.

Participation over the years

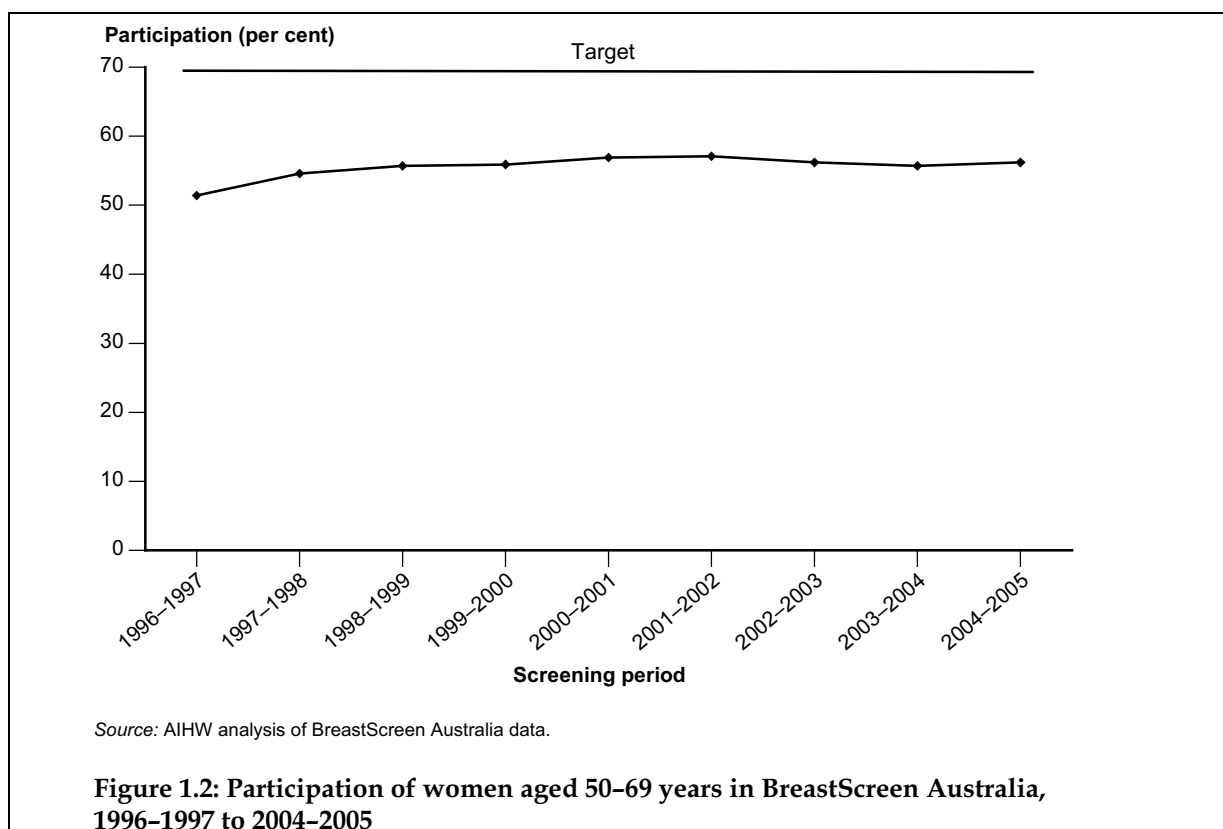


Table 1.3: Participation of women aged 50-69 years in BreastScreen Australia, 1996-1997 to 2004-2005

	1996-1997	1997-1998	1998-1999	1999-2000	2000-2001	2001-2002	2002-2003	2003-2004	2004-2005
	(per cent)								
Rate	51.4	54.6	55.7	55.9	56.9	57.1	56.2	55.7	56.2*
95% CI	51.3-51.6	54.5-54.7	55.5-55.8	55.8-56.0	56.8-57.0	57.0-57.2	56.1-56.3	55.6-55.8	56.1-56.3

* Significantly different from the 1996-1997, 1997-1998, 1998-1999, 2000-2001, 2001-2002 and 2003-2004 rates.

Notes

1. Rates are the number of women screened as a percentage of the eligible female population calculated as the average of the Australian Bureau of Statistics estimated resident population and age-standardised to the Australian population at 30 June 2001.
2. Periods cover 1 January 1996 to 31 December 1997, 1 January 1997 to 31 December 1998, 1 January 1998 to 31 December 1999, 1 January 1999 to 31 December 2000, 1 January 2000 to 31 December 2001, 1 January 2001 to 31 December 2002, 1 January 2002 to 31 December 2003, 1 January 2003 to 31 December 2004 and 1 January 2004 to 31 December 2005.

- Participation in BreastScreen Australia among women in the target age group (50-69 years) increased from 51.4% in 1996-1997 to 57.1% in 2001-2002, falling to 56.2% in 2004-2005. The fall in 2004-2005 was statistically significant.

For more information, see tables 1 and 2 in Appendix A. Tables with data other than for the latest reporting period can be found on the AIHW's website at <www.aihw.gov.au>.

Participation by region

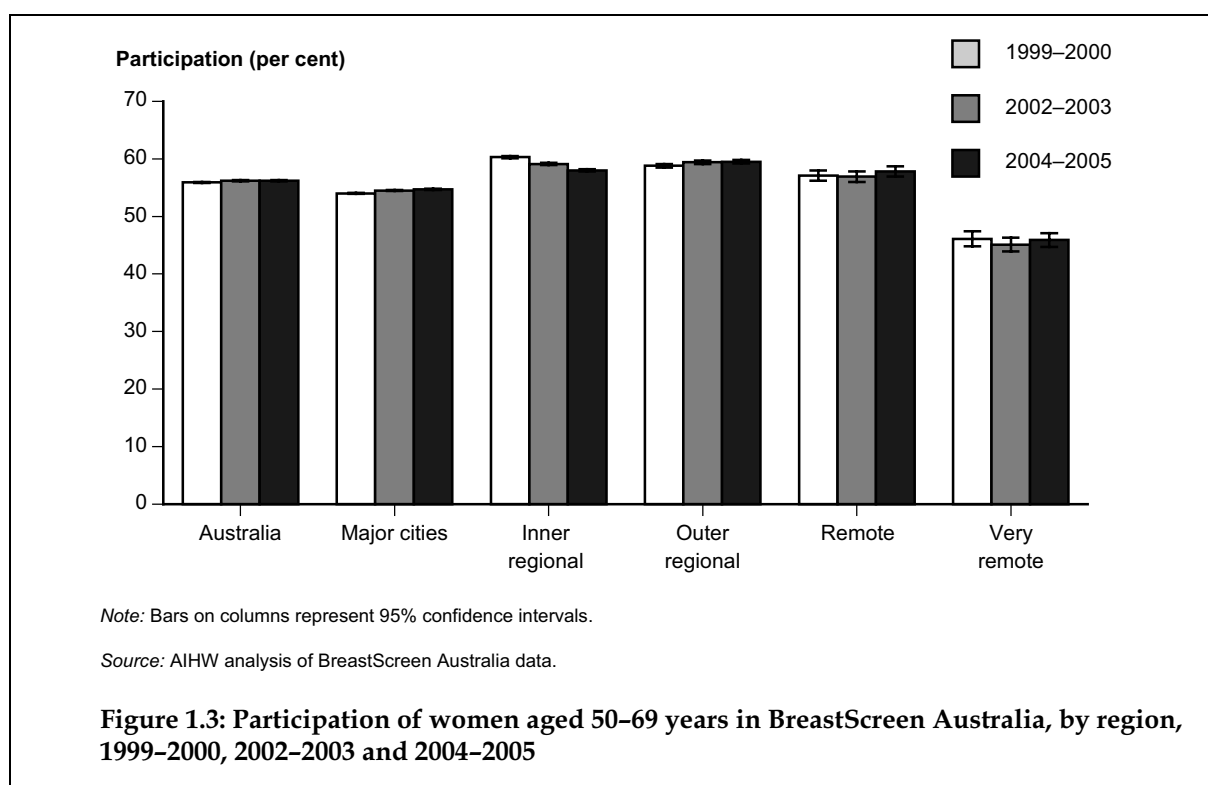


Table 1.4: Participation of women aged 50–69 years in BreastScreen Australia, by region, 1999–2000, 2002–2003 and 2004–2005

	Australia	Major cities	Inner regional	Outer regional	Remote	Very remote
	(per cent)					
2004–2005	56.2 [#]	54.7 [#]	58.0 ^{*#}	59.5 [#]	57.8	45.9
95% CI	56.1–56.3	54.6–54.9	57.8–58.2	59.2–59.8	56.9–58.7	44.7–47.1
2002–2003	56.2	54.5	59.1	59.4	56.9	45.1
95% CI	56.1–56.3	54.4–54.7	58.8–59.3	59.1–59.8	56.1–57.8	43.9–46.3
1999–2000	55.9	54.0	60.3	58.8	57.1	46.1
95% CI	55.8–56.0	53.9–54.2	60.1–60.5	58.5–59.1	56.1–58.0	44.8–47.5

* Significantly different from the 2002–2003 rate.

[#] Significantly different from the 1999–2000 rate.

Notes

1. Rates are the number of women screened as a percentage of the eligible female population calculated as the average of the Australian Bureau of Statistics estimated resident population and age-standardised to the Australian population at 30 June 2001.
2. Periods cover 1 January 1999 to 31 December 2000, 1 January 2002 to 31 December 2003 and 1 January 2004 to 31 December 2005.
3. The Australian Standard Geographical Classification was used to create the above categories (ABS 2001).

- Participation in BreastScreen Australia varied significantly among regions in 1999–2000, 2002–2003 and 2004–2005.
- In 2004–2005, the age-standardised participation rates were lower than the national rate (56.2%) for women in the target age group (50–69 years) in major cities (54.7%) and very

remote areas (45.9%). Higher rates than the national rate were in the inner regional, outer regional and remote areas (58.0%, 59.5% and 57.8%, respectively).

For more information, see Table 3 in Appendix A. Tables with data other than for the latest reporting period can be found on the AIHW's website at <www.aihw.gov.au>.

Participation by socioeconomic status

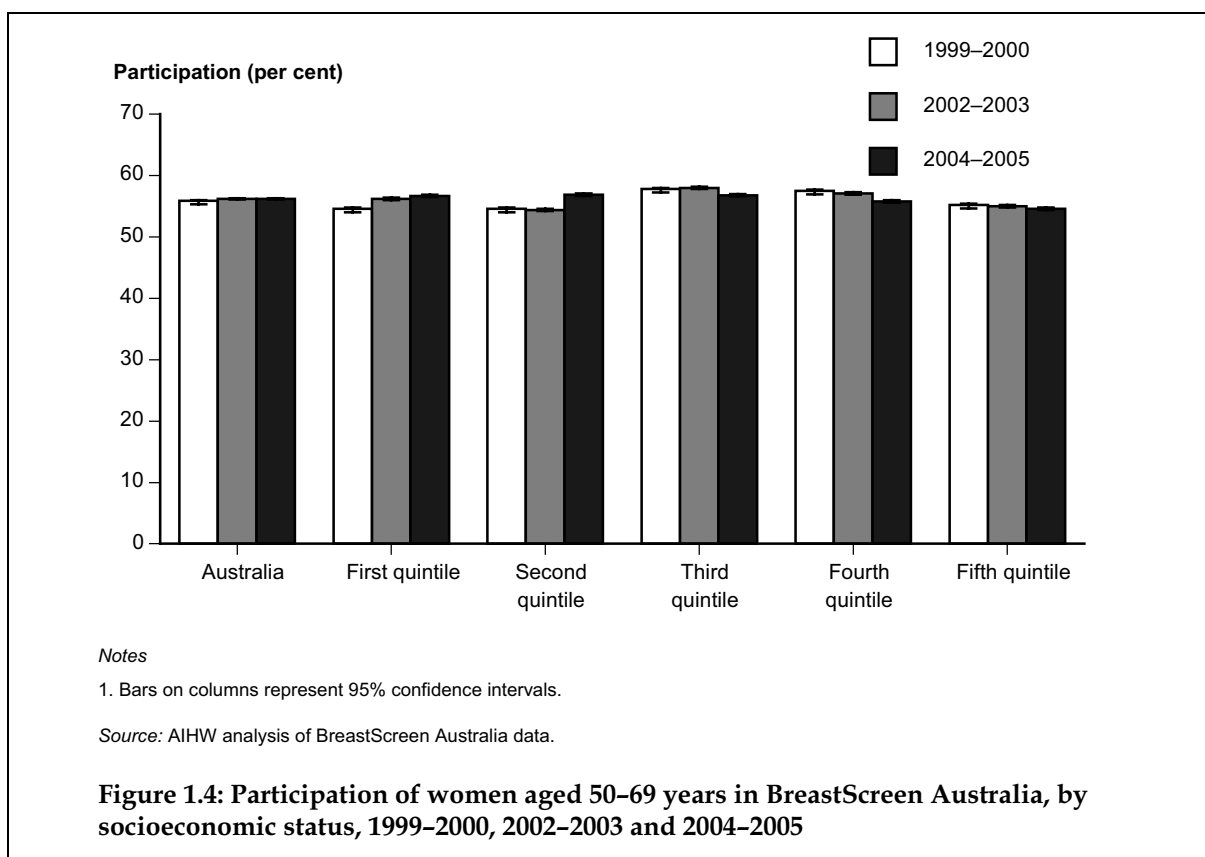


Table 1.5: Participation of women aged 50–69 years in BreastScreen Australia, by socioeconomic status, 1999–2000, 2002–2003 and 2004–2005

	Australia	First quintile	Second quintile	Third quintile	Fourth quintile	Fifth quintile
	(per cent)					
2004–2005	56.2 [#]	56.7 [#]	56.9 ^{*#}	56.8 ^{*#}	55.8 ^{*#}	54.6 [#]
95% CI	56.1–56.3	56.5–56.9	56.6–57.1	56.5–57.0	55.6–56.1	54.4–54.8
2002–2003	56.2	56.2	54.4	58.0	57.1	55.0
95% CI	56.1–56.3	56.0–56.5	54.2–54.6	57.7–58.2	56.8–57.3	54.8–55.2
1999–2000	55.9	54.6	54.6	57.8	57.5	55.2
95% CI	55.8–56.0	54.3–54.8	54.3–54.8	57.5–58.0	57.2–57.7	55.0–55.4

* Significantly different from the 2002–2003 rate.

Significantly different from the 1999–2000 rate.

Notes

1. Rates are the number of women screened as a percentage of the eligible female population calculated as the average of the Australian Bureau of Statistics estimated resident population and age-standardised to the Australian population at 30 June 2001.
2. Periods cover 1 January 1999 to 31 December 2000, 1 January 2002 to 31 December 2003 and 1 January 2004 to 31 December 2005.
3. The first quintile corresponds to the highest socioeconomic status and the fifth to the lowest socioeconomic status.

- In 2004–2005, women aged 50–69 years living in the most socioeconomically disadvantaged areas of Australia had a 54.6% participation in BreastScreen Australia, significantly below the national average of 56.2%.

- Between the years 1999–2000 and 2004–2005, there were significant increases in participation for women living in areas in the two most advantaged quintiles.

For more information, see Table 4 in Appendix A. Tables with data other than for the latest reporting period can be found on the AIHW's website at <www.aihw.gov.au>.

Participation by Indigenous status

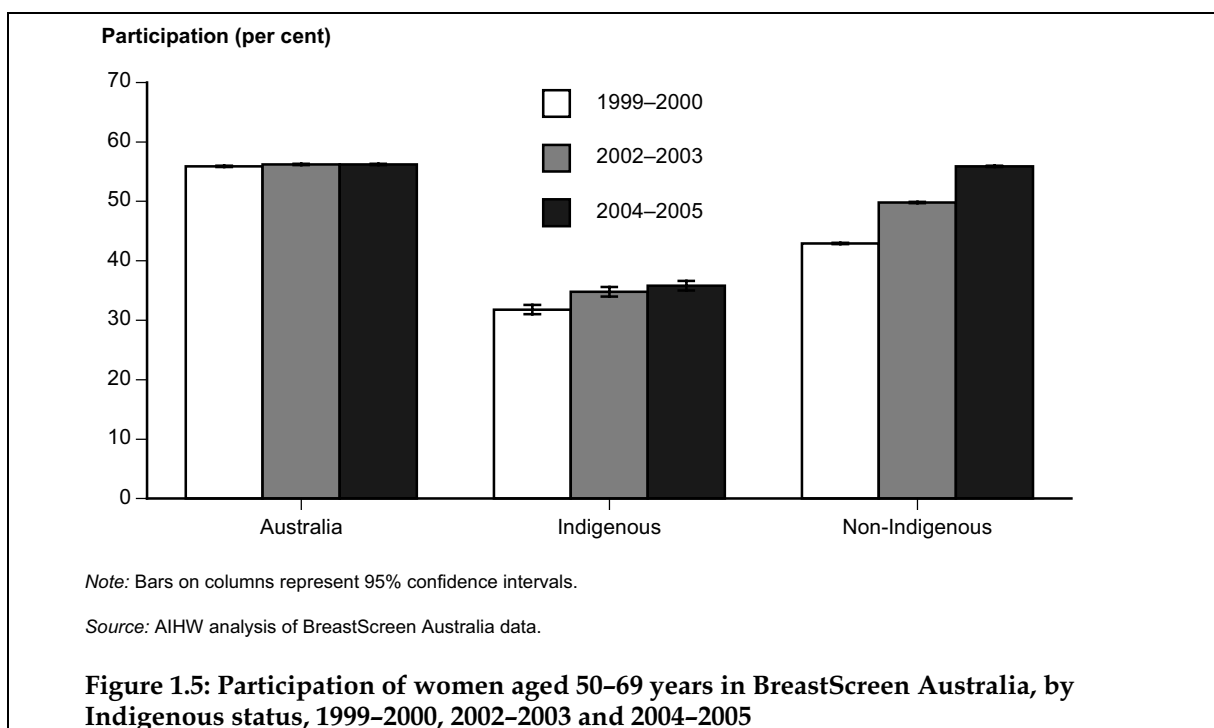


Table 1.6: Participation of women aged 50-69 years in BreastScreen Australia, by Indigenous status, 1999-2000, 2002-2003 and 2004-2005

	Australia	Indigenous	Non-Indigenous
	(per cent)		
2004-2005	56.2 [#]	35.8 [#]	55.9 [#]
95% CI	56.1-56.3	35.0-36.6	55.8-56.0
2002-2003	56.2	34.8	49.8
95% CI	56.1-56.3	34.1-35.7	49.7-49.9
1999-2000	55.9	31.8	42.9
95% CI	55.8-56.0	31.0-32.6	42.9-43.0

* Significantly different from the 2002-2003 rate.

Significantly different from the 1999-2000 rate.

Notes

1. Rates are the number of women screened as a percentage of the eligible female population calculated as the average of the Australian Bureau of Statistics estimated resident population and age-standardised to the Australian population at 30 June 2001.
2. Periods cover 1 January 1999 to 31 December 2000, 1 January 2002 to 31 December 2003 and 1 January 2004 to 31 December 2005.
3. 'Australia' includes all states and territories of Australia. 'Indigenous' and 'Non-Indigenous' includes Queensland, Western Australia, South Australia, and the Northern Territory.

- In 2004-2005, the age-standardised participation rate for Aboriginal and Torres Strait Islander women (35.8%) was much lower than the rate for non-Indigenous women (55.9%) but the rate for Aboriginal and Torres Strait Islander women increased significantly from 31.8% in 1999-2000 to 35.8% in 2004-2005.

Note:

In 2005, 1.1% of the Australian female population aged 50–69 years were Aboriginal and Torres Strait Islander women. This estimate is based on the Indigenous population projections 2001–2009 (ABS 2004).

Of the 1,614,871 women aged 40 years or over participating in screening through the BreastScreen Australia Program in 2004–2005, 12,580 (0.8%) who identified themselves as Aboriginal or Torres Strait Islander (0.7% in 1999–2000 and 0.7% in 2002–2003). In 2004–2005, 8,271 Aboriginal and Torres Strait Islander women aged 50–69 years were screened. While 11,898 women aged 40 years or over in 2004–2005 were classified as not stating their Indigenous status, the true figure is likely to be higher because BreastScreen New South Wales classified these women as non-Indigenous (see Appendix B for coding of Indigenous status). The comparison of participation rates between Aboriginal and Torres Strait Islander and non-Indigenous women should therefore be treated with caution.

For more information, see Table 5 in Appendix A. Tables with data other than for the latest reporting period can be found on the AIHW's website at <www.aihw.gov.au>.

Participation by main language spoken at home

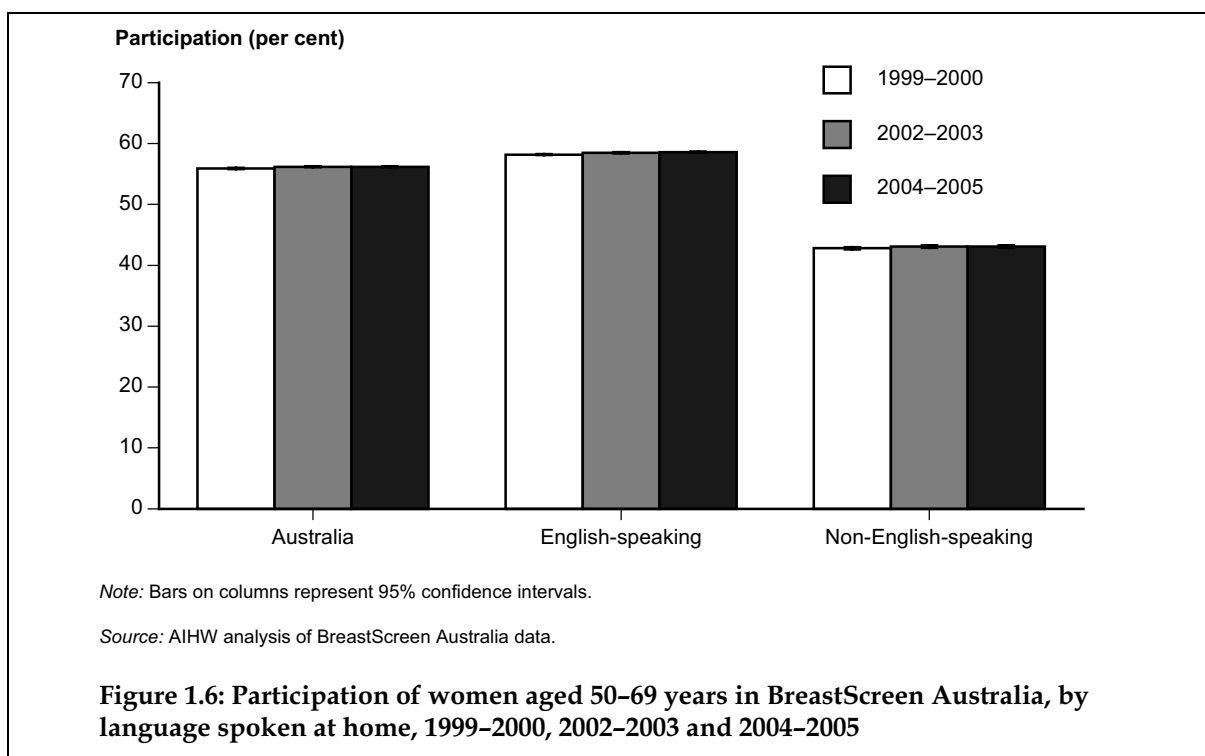


Table 1.7: Participation of women aged 50–69 years in BreastScreen Australia, by main language spoken at home, 1999–2000, 2002–2003 and 2004–2005

	Australia	English-speaking	Non-English-speaking
	(per cent)		
2004–2005	56.2*	58.6*	43.1
95% CI	56.1–56.3	58.5–58.7	42.9–43.4
2002–2003	56.2	58.5	43.1
95% CI	56.1–56.3	58.4–58.6	42.8–43.3
1999–2000	55.9	58.2	42.8
95% CI	55.8–56.0	58.1–58.3	42.6–43.0

* Significantly different from the 1999–2000 rate.

Notes

1. Rates are the number of women screened as a percentage of the eligible female population calculated as the average of the Australian Bureau of Statistics estimated resident population and age-standardised to the Australian population at 30 June 2001.
2. Periods cover 1 January 1999 to 31 December 2000, 1 January 2002 to 31 December 2003 and 1 January 2004 to 31 December 2005.
3. Women who were recorded as not stating their language spoken at home are included in the analysis for all women but excluded from the analysis by language.

- In 2004–2005, there was a much lower age-standardised participation rate for women in the target age group (50–69 years) who identified as not having English as their main language at home (43.1%) than for English-speaking women (58.6%). The same applied for the periods 1999–2000 and 2002–2003.

Note:

Of the 1,614,871 women aged 40 years or over participating in screening through the BreastScreen Australia Program in 2004–2005, 204,538 (12.7%) identified as not having English as their main language spoken at home (12.2% in 1999–2000 and 12.5% in 2002–2003). In 2004–2005, there were 153,447 women screened aged 50–69 years whose main language spoken at home was not English. While 5,801 women aged 40 years or over in 2004–2005 were classified as not stating the language they spoke at home, the true figure may be higher as some jurisdictions did not use the 'not-stated' category. Women in these jurisdictions who did not state the language they spoke at home were allocated to one of the other two categories (Appendix B). Participation rates between English-speaking and non-English-speaking women should therefore be treated with caution.

For more information, see Table 6 in Appendix A. Tables with data other than for the latest reporting period can be found on the AIHW's website at <www.aihw.gov.au>.

Age distribution of women screened



Table 1.8: Age distribution of women aged 40 years or over screened by BreastScreen Australia, 1999–2000, 2002–2003 and 2004–2005

	Age group (years)		
	40–49	50–69	70+
	(per cent)		
2004–2005	15.2*#	73.6*#	11.2*#
95% CI	15.1–15.3	73.5–73.7	11.1–11.2
2002–2003	17.4	69.1	13.5
95% CI	17.3–17.4	69.0–69.2	13.5–13.6
1999–2000	19.0	67.6	13.4
95% CI	18.9–19.1	67.5–67.7	13.3–13.4

* Significantly different from the 2002–2003 rate.

Significantly different from the 1999–2000 rate.

Notes

1. Rates are the number of women screened as a percentage of all women aged 40 years or over screened by BreastScreen Australia.
2. Periods cover 1 January 1999 to 31 December 2000, 1 January 2002 to 31 December 2003 and 1 January 2004 to 31 December 2005.
3. Some states and territories have a policy of not screening outside the target age range.

- Of women participating in the BreastScreen Australia Program in 2004–2005, 73.6% were in the target age group (50–69 years). Of all women screened, 15.2% were aged 40–49 years, and 11.2% were aged 70 years or over.

- The proportion of women screened in the target age group (50–69 years) increased significantly from 67.6% in 1999–2000 to 73.6% in 2004–2005. In the 70 years or over age group there was a significant decrease from 13.4% to 11.2% between 1999–2000 and 2004–2005.
- In the 40–49 years age group, the proportion of women screened decreased significantly from 19.0% in 1999–2000 to 15.2% in 2004–2005.

Indicator 2 Detection of all-size and small invasive cancers

A screen-detected breast cancer is a cancer that is histopathologically confirmed as a breast cancer before the completion of an episode of screening at BreastScreen Australia.

All-size and small invasive cancer detection rate

The detection rate for small invasive cancers is the number of women with small diameter (≤ 15 mm) invasive breast cancers per 10,000 women screened, by 5-year age groups for women aged 40 years or over, and for the target age group (50–69 years). Detection rates for all invasive cancers are also provided by screening round (that is, first round and subsequent rounds), 5-year age groups and for the target age group (50–69 years).

The all-size and small invasive cancer detection indicator

The small invasive cancer detection indicator measures the rate of women with invasive breast cancers that are 15 mm or less in size detected at a BreastScreen Australia service. This is expressed as the number of women with small invasive cancers detected for every 10,000 women screened.

A greater rate of detection of small cancers within the BreastScreen Australia Program increases the likelihood that the desired reductions in morbidity and mortality from breast cancer will be achieved. One of BreastScreen Australia's aims is to maximise the early detection of breast cancers (BSANAC & DHAC 2000). Finding breast cancer early often means that the cancer is small, can be more effectively treated and is less likely to have spread to other parts of the body. As a result, women who have cancers detected early may suffer less morbidity from breast cancer (Day 1991).

The National Accreditation Standards for the detection of all-size and small (≤ 15 mm) invasive breast cancers require that:

- ≥ 50 per 10,000 women aged 50–69 years who attend for their first screen are diagnosed with invasive breast cancer.
- ≥ 35 per 10,000 women aged 50–69 years who attend for their second or subsequent screen are diagnosed with invasive breast cancer.
- ≥ 25 per 10,000 women aged 50–69 years who attend for screening are diagnosed with small (≤ 15 mm) invasive breast cancer.

All-size invasive breast cancer detection by states and territories first screening round

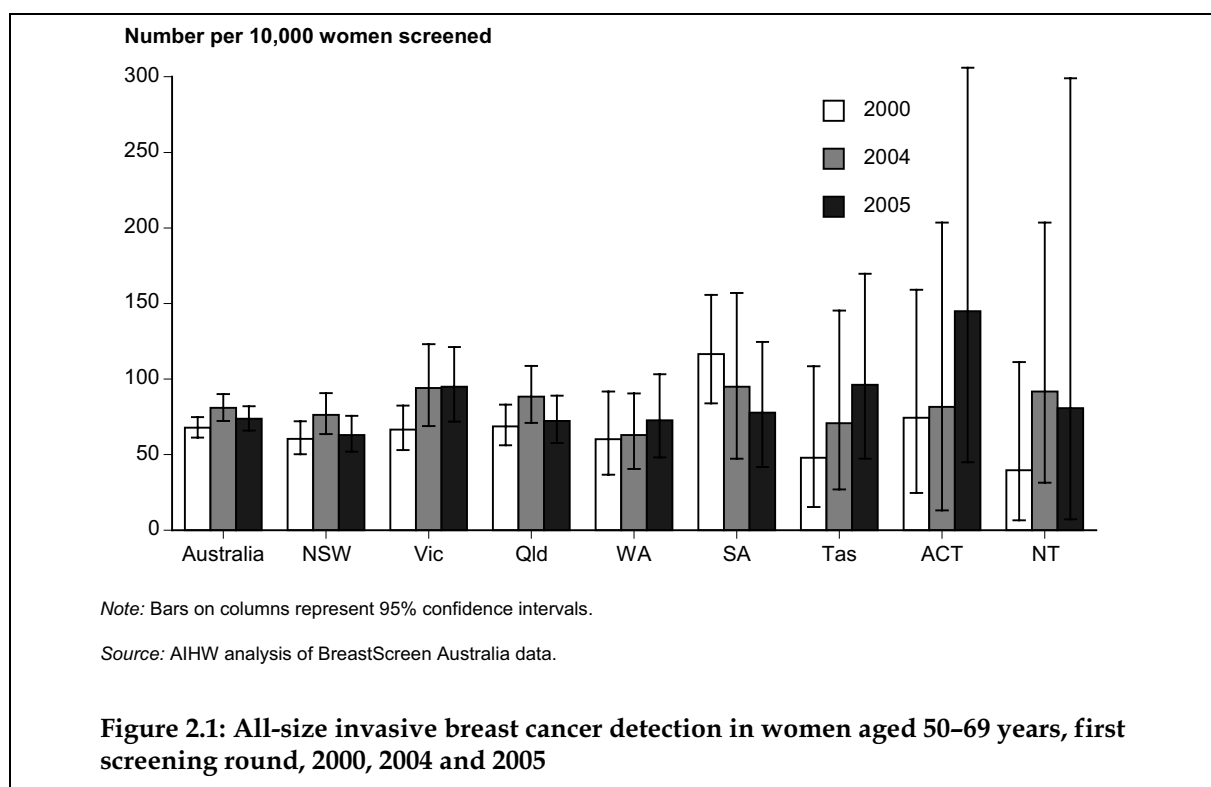


Table 2.1: All-size invasive breast cancer detection in women aged 50–69 years, first screening round, 2000, 2004 and 2005

	Australia	NSW	Vic	Qld	WA	SA	Tas	ACT	NT
2005 rate	73.8	63.1	94.9	72.3	72.8	77.8	96.3	145.0	80.7
95% CI	66.0–82.1	52.1–75.6	72.0–121.3	57.8–89.0	48.1–103.3	41.7–124.5	47.2–169.6	45.1–306.0	7.2–299.0
2004 rate	81.0	76.4	94.2	88.5	62.9	95.0	70.8	81.7	91.7
95% CI	72.3–90.2	63.6–90.8	69.0–123.1	71.0–108.7	40.6–90.5	47.3–157.0	27.1–145.5	13.1–203.5	31.5–203.6
2000 rate	67.8	60.5	66.7	68.8	60.3	116.5	48.0	74.4	39.8
95% CI	61.2–74.8	50.3–72.1	53.1–82.5	56.2–83.1	36.6–91.6	83.9–155.8	15.4–108.5	24.7–159.2	6.5–111.3

Note: Rates are the number of women with invasive cancers detected per 10,000 women screened and age-standardised to the population of women attending a BreastScreen Australia service in 1998.

- In 2005, the age-standardised invasive breast cancer detection rate for women attending a BreastScreen Australia service for the first time was 73.8 per 10,000 women screened.
- Across the states and territories, New South Wales had the lowest age-standardised detection rate, at 63.1 per 10,000 women screened, and the Australian Capital Territory had the highest rate, at 145.0 per 10,000 women screened, but this difference was not statistically significant.

For more information, see tables 11–14 in Appendix A. Tables with data other than for the latest reporting period can be found on the AIHW's website at <www.aihw.gov.au>.

All-size invasive breast cancer detection by states and territories, subsequent screening rounds

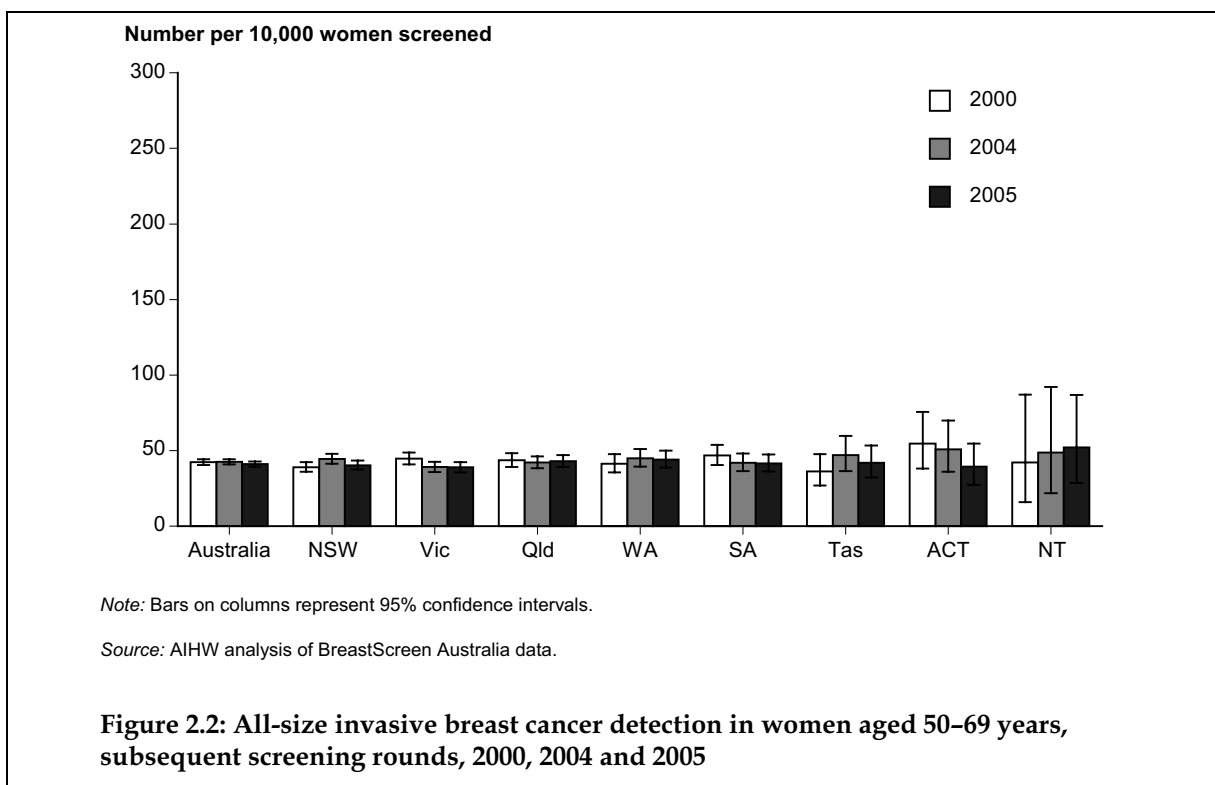


Table 2.2: All-size invasive breast cancer detection in women aged 50-69 years, subsequent screening rounds, 2000, 2004 and 2005

	Australia	NSW	Vic	Qld	WA	SA	Tas	ACT	NT
2005 rate	41.2	40.4	39.0	43.0	44.2	41.6	41.9	39.5	52.1
95% CI	39.5-42.9	37.5-43.4	35.7-42.5	39.3-47.1	38.8-50.1	36.1-47.6	32.2-53.5	27.5-54.8	28.5-86.7
2004 rate	42.6	44.6	39.2	42.2	44.9	42.1	47.1	50.9	48.8
95% CI	40.9-44.4	41.4-48.0	35.9-42.7	38.5-46.3	39.4-51.0	36.6-48.2	36.5-59.8	35.9-69.9	21.9-92.1
2000 rate	42.5	39.1	44.8	43.7	41.4	46.8	36.3	54.6	42.2
95% CI	40.6-44.4	36.0-42.4	41.0-48.8	39.3-48.4	35.6-47.8	40.5-53.7	27.0-47.7	38.1-75.6	15.9-87.1

Note: Rates are the number of women with invasive cancers detected per 10,000 women screened and age-standardised to the population of women attending a BreastScreen Australia service in 1998.

- In 2005, the age-standardised invasive cancer detection rate for women in the target age group (50-69 years) attending a BreastScreen Australia service for their second or subsequent screen was 41.2 per 10,000 women screened. This is significantly lower than the detection rate for first round attendances (73.8 per 10,000 women screened).
- In 2005, the detection rate for all women aged 40 years or over attending for their second or subsequent screen was 40.1 per 10,000 women screened. This is lower than the rate for women in the target age group (50-69 years) (41.2 per 10,000 women screened), although the difference is not statistically significant.

- Across the states and territories, the age-standardised invasive cancer detection rate for women in the target age group (50–69 years) in 2005 ranged from 39.0 per 10,000 women screened in Victoria to 52.1 per 10,000 women screened in Northern Territory.
- The decrease in the detection rate of all invasive cancers for Australia from 42.5 in 2000 to 41.2 in 2005 was not statistically significant.

For more information, see tables 11–14 in Appendix A. Tables with data other than for the latest reporting period can be found on the AIHW's website at <www.aihw.gov.au>.

All-size invasive breast cancer detection, first and subsequent screening rounds

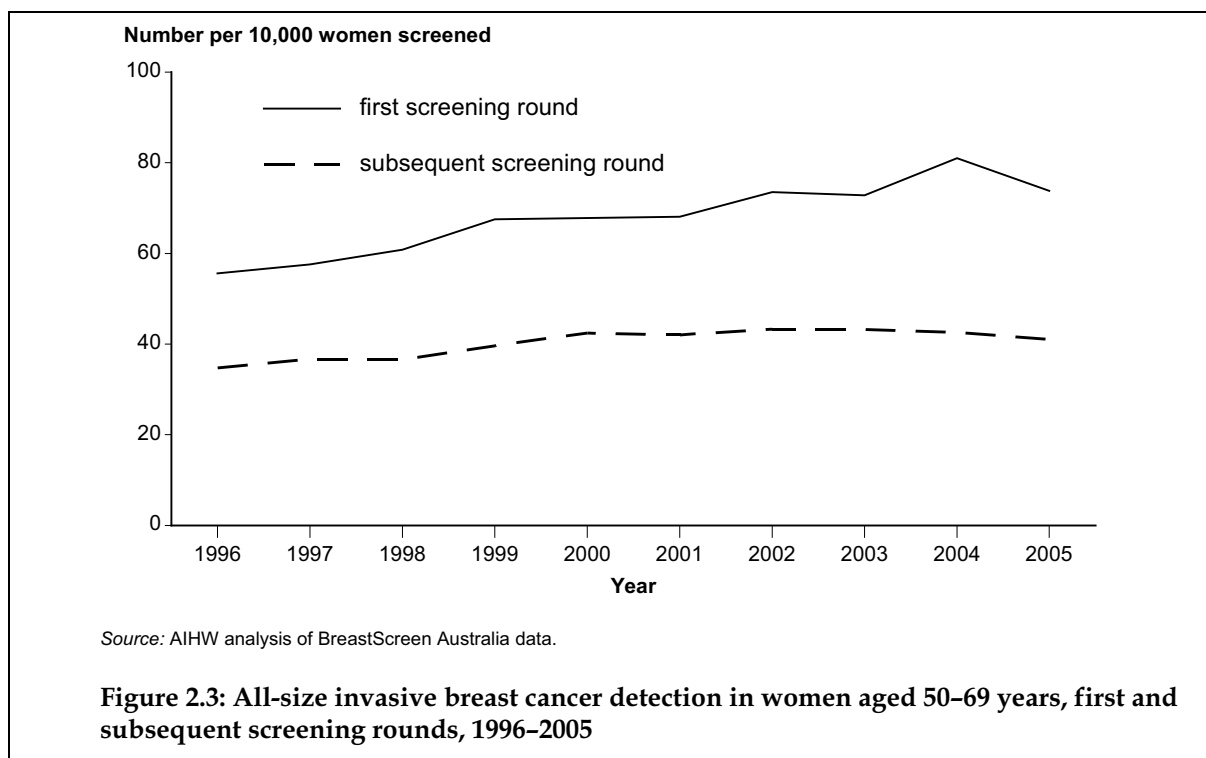


Table 2.3: All-size invasive breast cancer detection in women aged 50–69 years, first and subsequent screening rounds, 1996–2005

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
First screening round										
Rate	55.6*	57.6*	60.8*	67.5*	67.8*	68.1*	73.5*	72.8*	81.0*	73.8*
95% CI	52.0–59.5	53.2–62.3	56.0–66.0	61.3–74.0	61.2–74.8	61.7–74.9	66.3–81.3	65.0–81.2	72.3–90.2	66.0–82.1
Subsequent screening rounds										
Rate	34.8	36.7	36.6	39.6	42.5	42.1	43.3	43.3	42.6	41.2
95% CI	32.6–37.2	34.6–38.8	34.7–38.6	37.8–41.6	40.6–44.4	40.3–43.9	41.5–45.2	41.6–45.2	40.9–44.4	39.5–42.9

* Statistically different from subsequent rounds.

Note: Rates are the number of women with small invasive cancers detected per 10,000 women screened and age-standardised to the population of women attending a BreastScreen Australia service in 1998.

- The detection rate of all invasive breast cancers in the first screening round was significantly higher than it was for subsequent screening rounds for all years 1996–2005.
- The rate of detection of all invasive breast cancers in the first screening round increased significantly from 55.6 in 1996 to 73.8 per 10,000 women screened in 2005. The detection rate also rose significantly in subsequent screening rounds, from 34.8 per 10,000 women screened in 1996 to 41.2 per 10,000 women screened in 2005.

For more information, see tables 11–14 in Appendix A. Tables with data other than for the latest reporting period can be found on the AIHW's website at <www.aihw.gov.au>.

Table 2.4 shows the detection rate of small-diameter invasive breast cancers achieved by the BreastScreen Australia Program in 2000, 2004 and 2005. In 2000, 2004 and 2005, more than 25 small-diameter (≤ 15 mm) cancers per 10,000 women screened were found for all screening rounds and age groups.

Table 2.4: Small (≤ 15 mm) invasive breast cancer detection per 10,000 women, first and subsequent rounds, 2000, 2004 and 2005

	Objective ^(a)	2000	2004	2005
First screening round				
Rate for women aged 50–69 years	≥ 25	38.5	45.2	37.8
95% CI		33.6–43.8	38.9–52.2	32.4–43.8
Rate for women aged 40 years or over	..	37.9	40.4	39.0
95% CI		33.9–42.3	35.3–46.0	33.6–44.8
Subsequent screening rounds				
Rate for women aged 50–69 years	..	28.6	27.6	26.7
95% CI		27.1–30.2	26.2–29.0	25.4–28.1
Rate for women aged 40 years or over	..	27.0	27.0	25.8
95% CI		25.7–28.2	25.8–28.3	24.6–27.0

(a) Performance objective for BreastScreen services as set out in the National Accreditation Standards (NQM 2004).

Note: Rates are the number of women with small invasive cancers detected per 10,000 women screened and age-standardised to the population of women attending a BreastScreen Australia service in 1998.

Table 2.5 below shows the percentage of all invasive cancers detected that were small-diameter (≤ 15 mm), by screening round, for women screened in 2000, 2004 and 2005.

Table 2.5: Percentage of small (≤ 15 mm) invasive cancers detected, first and subsequent rounds, 2000, 2004 and 2005

	2000	2004	2005
	(per cent)		
First screening round			
Women aged 50–69 years	56.9	56.3	52.1
Women aged 40 years or over	55.0	52.6	52.5
Subsequent screening rounds			
Women aged 50–69 years	67.5	64.9	65.2
Women aged 40 years or over	67.6	65.6	65.1

Source: AIHW analysis of BreastScreen Australia data.

- A higher proportion of women attending the program for the first time have tumours larger than 15 mm compared with those who have been screened previously. This shows that mammography was successful at detecting the majority of large cancers in the first round and most of the remaining cases have not had time to develop into large cancers in the 2 years before the second round.

Small invasive breast cancer detection by states and territories, first screening round

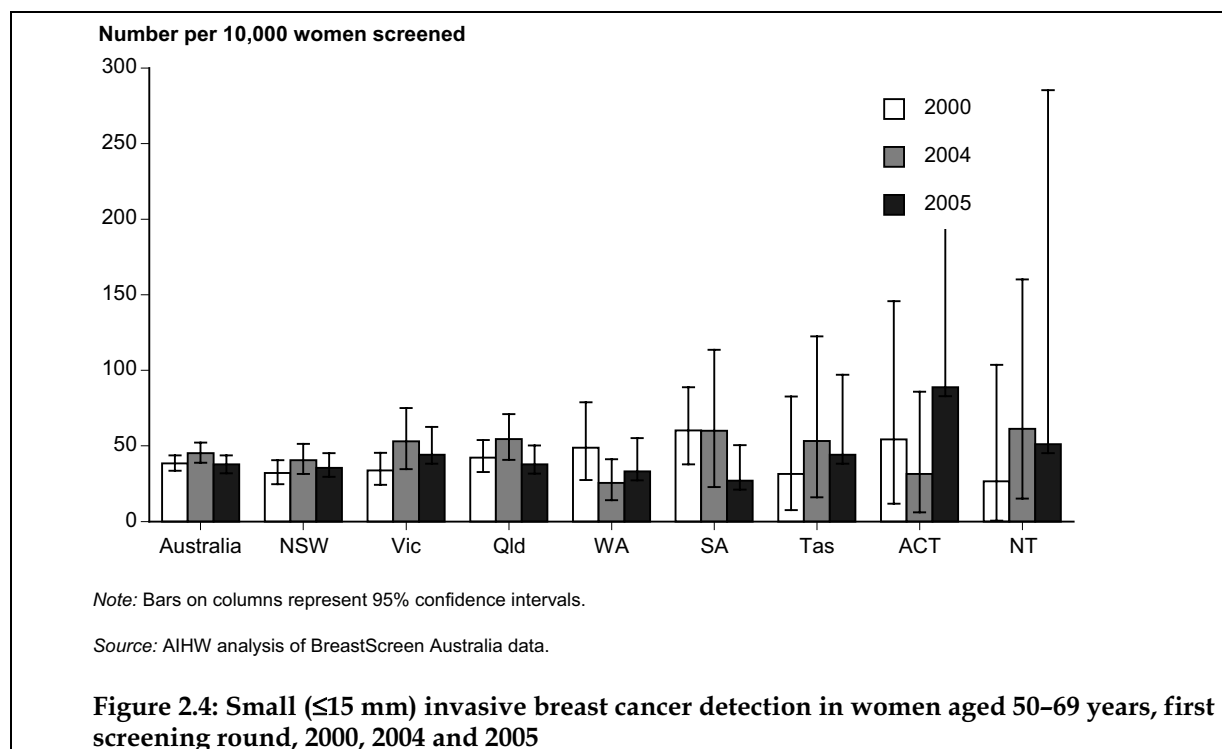


Table 2.6: Small (≤ 15 mm) invasive breast cancer detection in women aged 50–69 years, first screening round, 2000, 2004 and 2005

	Australia	NSW	Vic	Qld	WA	SA	Tas	ACT	NT
2005 rate	37.8	35.5	44.2	37.7	33.2	27.0	44.2	88.9	51.2
95% CI	32.4–43.8	27.4–45.0	29.2–62.6	27.5–50.3	17.2–55.2	11.1–50.4	14.4–97.0	15.3–225.7	1.3–285.4
2004 rate	45.2	40.6	53.0	54.5	25.6	60.0	53.2	31.4	61.2
95% CI	38.9–52.2	31.5–51.3	34.6–75.1	40.8–71.0	14.0–41.2	22.8–113.5	16.0–122.6	6.1–85.9	15.0–160.1
2000 rate	38.5	32.0	33.8	42.3	48.9	60.3	31.4	54.4	26.5
95% CI	33.6–43.8	24.7–40.6	24.3–45.4	32.7–53.9	27.5–78.9	37.9–88.9	7.5–82.6	11.9–145.8	0.5–103.6

Note: Rates are the number of women with small invasive cancers detected per 10,000 women screened and age-standardised to the population of women attending a BreastScreen Australia service in 1998.

- In 2005, the age-standardised detection rate for small invasive cancers in women in the target age group (50–69 years) attending for their first screening round ranged from 27.0 to 88.9 per 10,000 women screened across the states and territories. The small numbers of cases contributed to the wide variations in the rates.
- In 2005, small-diameter invasive cancers were found in 362 women aged 40 years or over attending a BreastScreen Australia service for their first screen. Of these women, 244 were in the target age group (50–69 years). The age-standardised detection rate was 37.8 per 10,000 women screened for women in the target age group (50–69 years) and 39.0 per 10,000 women screened for all women aged 40 years or over. The detection rate for small-diameter invasive cancers for women in the target age group (50–69 years) decreased from 38.5 per 10,000 women screened in 2000 to 37.8 in 2005. The decrease was not statistically significant.

For more information, see tables 7-10 in Appendix A. Tables with data other than for the latest reporting period can be found on the AIHW's website at <www.aihw.gov.au>.

Small invasive breast cancer detection by states and territories, subsequent screening rounds

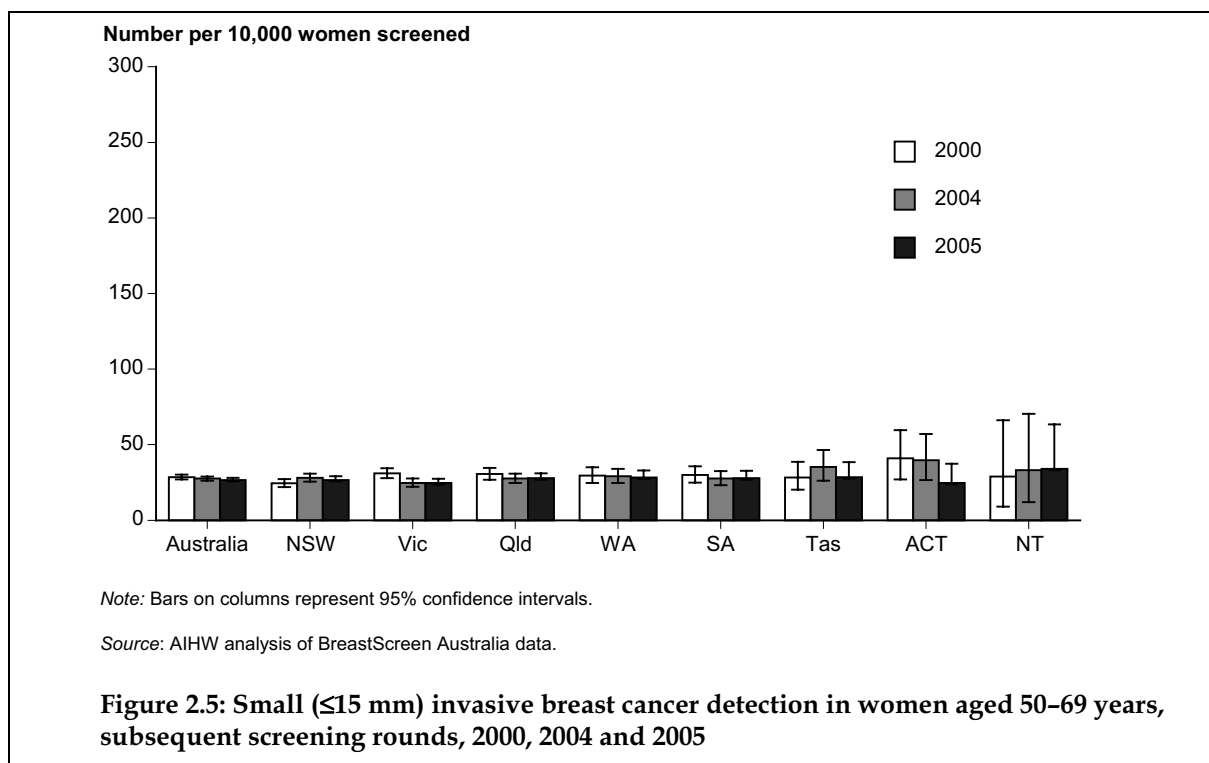


Table 2.7: Small (≤ 15 mm) invasive breast cancer detection in women aged 50–69 years, subsequent screening rounds, 2000, 2004 and 2005

	Australia	NSW	Vic	Qld	WA	SA	Tas	ACT	NT
2005 rate	26.7	26.6	24.6	27.8	28.2	27.8	28.6	24.7	34.1
95% CI	25.4–28.1	24.3–29.1	22.0–27.3	24.8–31.1	23.9–33.1	23.4–32.8	20.7–38.5	15.5–37.4	15.9–63.3
2004 rate	27.6	28.1	24.8	27.6	29.2	27.6	35.2	39.8	33.1
95% CI	26.2–29.0	25.6–30.8	22.2–27.7	24.5–30.9	24.8–34.1	23.2–32.6	26.1–46.4	26.6–57.2	12.0–70.5
2000 rate	28.6	24.5	31.0	30.6	29.5	29.9	28.4	41.0	29.0
95% CI	27.1–30.2	22.0–27.1	27.9–34.4	27.0–34.7	24.7–35.0	25.0–35.6	20.3–38.7	27.0–59.6	9.1–66.1

Note: Rates are the number of women with small invasive cancers detected per 10,000 women screened and age-standardised to the population of women attending a BreastScreen Australia service in 1998.

- In 2005, small-diameter invasive cancers were found in 1,946 women aged 40 years or over attending a BreastScreen Australia service for their second or subsequent screen. Of these women, 1,536 were in the target age group (50–69 years). The age-standardised detection rate was 26.7 per 10,000 women screened for women in the target age group (50–69 years) and 25.8 per 10,000 women for all women aged 40 years or over. In both age categories, the small-diameter cancer detection rates for Australia for women attending their second or subsequent screen were significantly lower than the rates for women attending their first screen.

For more information, see tables 7–10 in Appendix A. Tables with data other than for the latest reporting period can be found on the AIHW's website at <www.aihw.gov.au>.

Small invasive breast cancer detection, first and subsequent screening rounds

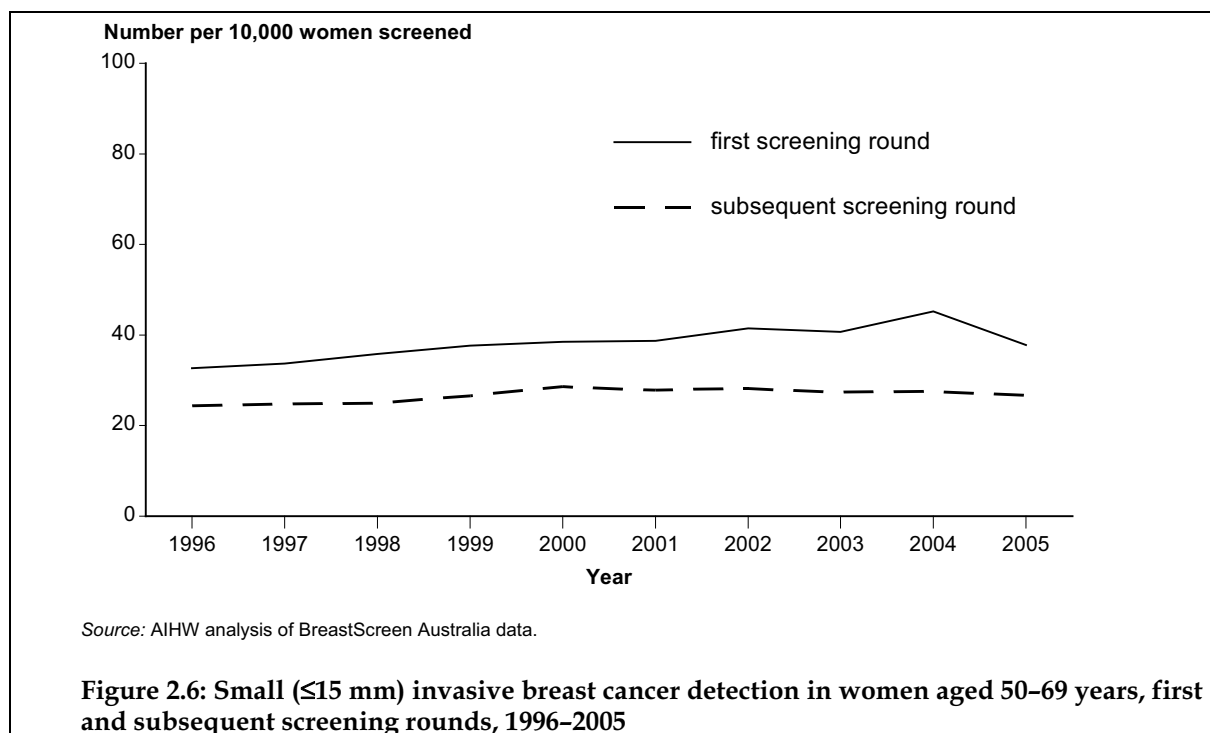


Table 2.8: Small (≤ 15 mm) invasive breast cancer detection in women aged 50–69 years, first and subsequent screening rounds, 1996–2005

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
First screening round										
Rate	32.6*	33.7*	35.8*	37.7*	38.5*	38.7*	41.5*	40.7*	45.2*	37.8*
95% CI	29.8–35.6	30.4–37.3	32.1–39.8	33.1–42.6	33.6–43.8	34.0–43.9	36.0–47.5	34.8–47.1	38.9–52.2	32.4–43.8
Subsequent screening rounds										
Rate	24.4	24.8	24.9	26.6	28.6	27.8	28.2	27.4	27.6	26.7
95% CI	22.5–26.3	23.1–26.5	23.4–26.5	25.1–28.2	27.1–30.2	26.4–29.4	26.8–29.7	26.0–28.8	26.2–29.0	25.4–28.1

* Significantly different from subsequent screening rounds.

Note: Rates are the number of women with small invasive cancers detected per 10,000 women screened and age-standardised to the population of women attending a BreastScreen Australia service in 1998.

- Detection of small invasive breast cancers in women aged 50–69 years increased significantly from 1996 to 2004 in the first screening round, from 32.6 to 45.2 per 10,000 women screened. In 2005, the rate decreased to 37.8 per 10,000. In subsequent screening rounds, the increase from 24.4 in 1996 to 26.7 in 2005 per 10,000 was not significant.

For more information, see tables 7–10 in Appendix A. Tables with data other than for the latest reporting period can be found on the AIHW's website at <www.aihw.gov.au>.

Small invasive breast cancer detection by age, 2005

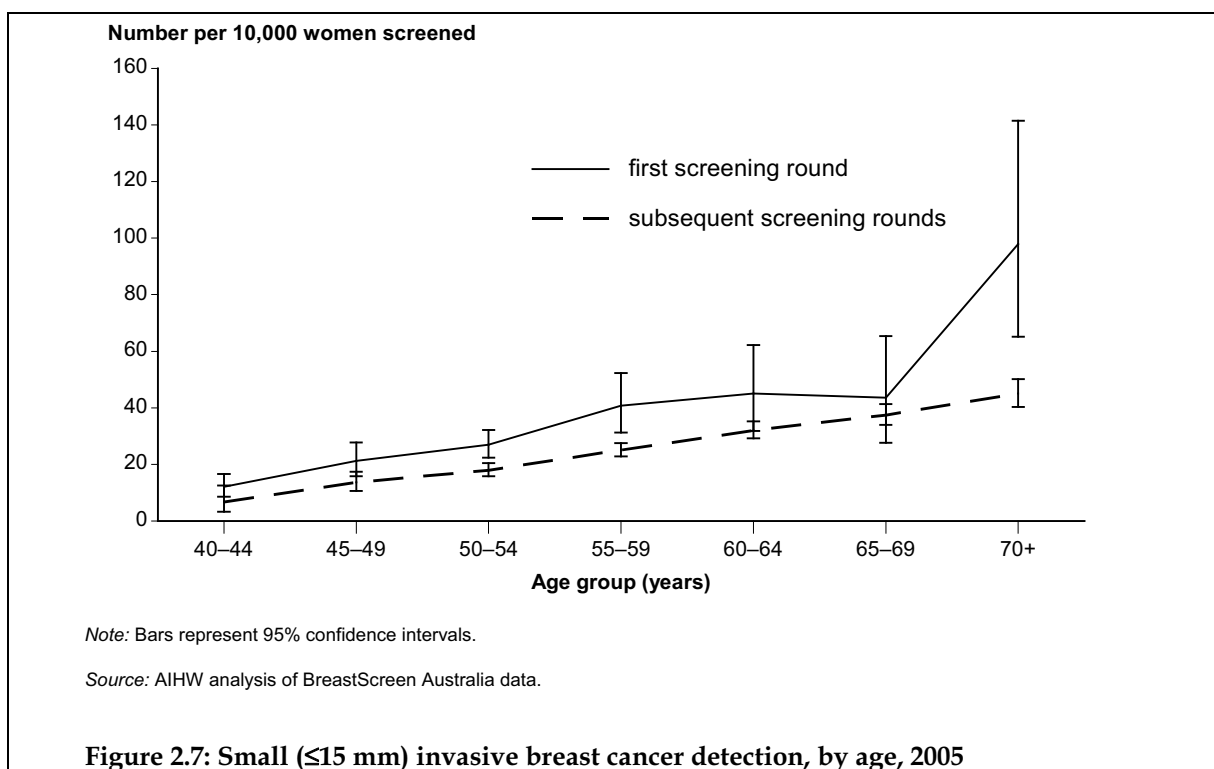


Table 2.9: Small (≤ 15 mm) invasive breast cancer detection, by age, 2005

	Age group (years)						
	40-44	45-49	50-54	55-59	60-64	65-69	70+
First screening round							
Rate	12.1	21.2	27.0*	40.8*	45.1	43.6	97.9*
95% CI	8.5-16.6	15.9-27.8	22.4-32.3	31.3-52.4	31.7-62.1	27.6-65.4	65.1-141.5
Subsequent screening rounds							
Rate	6.8	13.7	18.0	25.1	32.1	37.5	45.0
95% CI	3.3-12.5	10.6-17.5	15.8-20.3	22.8-27.6	29.2-35.2	34.0-41.2	40.3-50.1

* Significantly different from subsequent screening rounds.

Note: Rates are the number of women with small invasive cancers detected per 10,000 women screened.

- The rate of detection of small-diameter (≤ 15 mm) invasive cancers increased with age. This reflects rising incidence of breast cancer with age (Table 44). The detection rate for women aged 40-44 years making a first round attendance at a BreastScreen Australia service in 2005 was 12.1 per 10,000 women screened. This rate increased to 97.9 per 10,000 women screened for women aged 70 years or over. A similar pattern occurred for women making a second or subsequent round attendance from 6.8 to 45.0 per 10,000 women screened.

For more information, see tables 7-10 in Appendix A. Tables with data other than for the latest reporting period can be found on the AIHW's website at <www.aihw.gov.au>.

Small invasive breast cancer detection by age, 2004

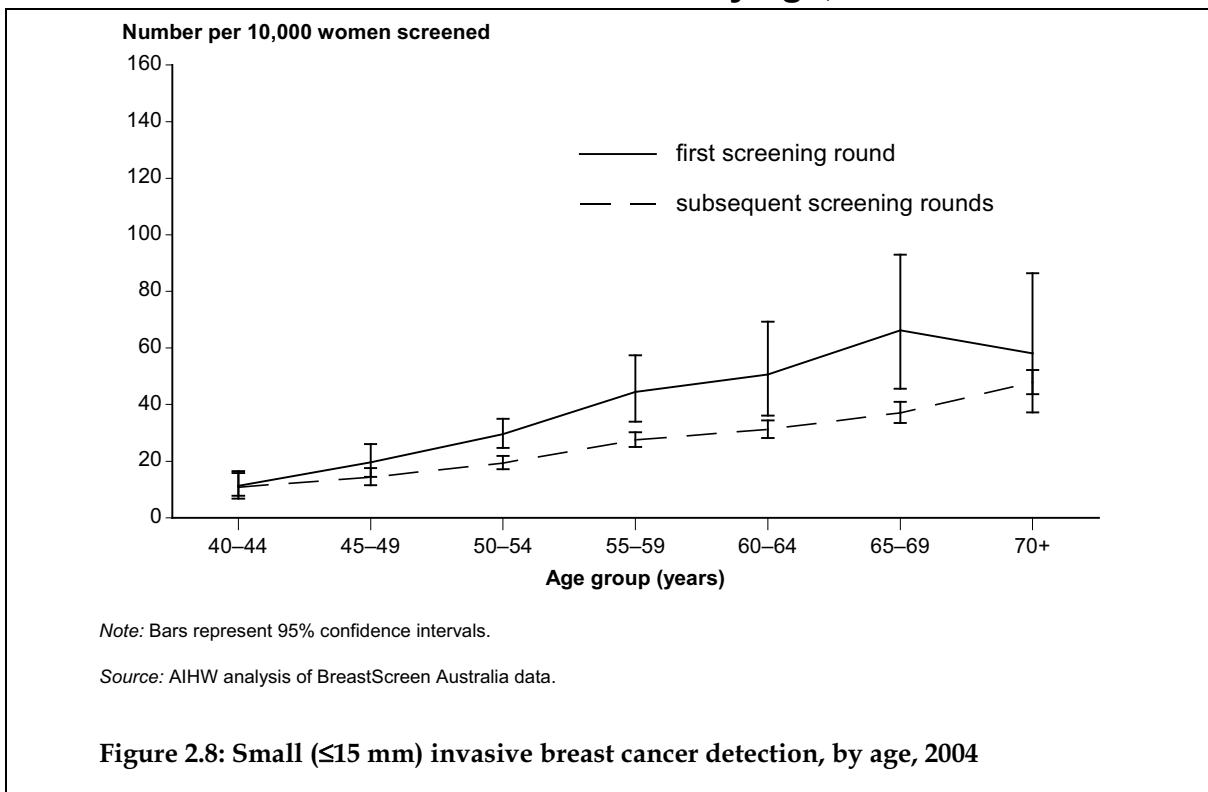


Table 2.10: Small (≤ 15 mm) invasive breast cancer detection, by age, 2004

	Age group (years)						
	40-44	45-49	50-54	55-59	60-64	65-69	70+
First screening round							
Rate	11.3	19.6	29.5*	44.5*	50.7*	66.2*	58.1
95% CI	7.8-15.8	14.5-26.0	24.6-35.0	33.9-57.5	36.0-69.3	45.6-93.0	37.2-86.5
Subsequent screening rounds							
Rate	10.8	14.3	19.4	27.5	31.2	37.1	47.8
95% CI	6.7-16.5	11.5-17.6	17.2-21.9	25.0-30.2	28.2-34.4	33.5-41.0	43.7-52.2

* Significantly different from subsequent screening rounds.

Note: Rates are the number of women with small invasive cancers detected per 10,000 women screened.

- In 2004, the rate of detection of small (≤ 15 mm) invasive cancers was not significantly different to the rate in 2005 (Table 2.9) for each age group and each screening round.

Small invasive breast cancer detection by age, 2000

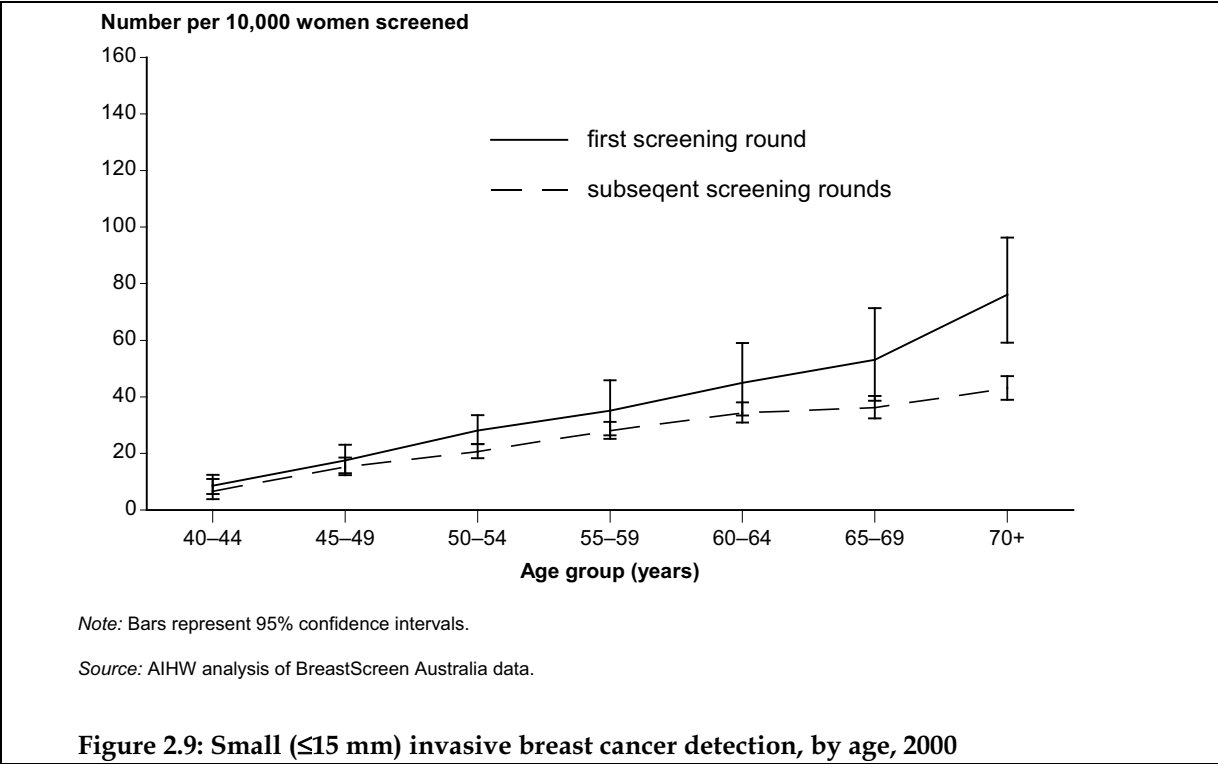


Table 2.11: Small (≤15 mm) invasive breast cancer detection, by age, 2000

	Age group (years)						
	40-44	45-49	50-54	55-59	60-64	65-69	70+
First screening round							
Rate	8.6	17.5	28.1	35.1	44.9	53.1	76.1*
95% CI	5.7-12.5	13.0-22.9	23.3-33.5	26.4-45.8	33.4-59.0	38.6-71.3	59.2-96.3
Subsequent screening rounds							
Rate	6.7	15.2	20.7	28.1	34.3	36.2	43.0
95% CI	3.7-11.0	12.3-18.5	18.3-23.3	25.3-31.2	30.9-38.0	32.4-40.3	39.0-47.3

* Significantly different from subsequent screening rounds.

Note: Rates are the number of women with small invasive cancers detected per 10,000 women screened.

- In 2000, the detection rates of small (≤15 mm) invasive cancers by age were mostly lower than the rates in 2005 (Table 2.9) and 2004 (Table 2.10) but not statistically significant.

Indicator 3 Sensitivity

Introduction

The ability of mammographic screening in the target age group (50–69 years) to successfully detect invasive breast cancer in the women screened can be assessed by considering the relative numbers of:

1. invasive breast cancers detected at screening episodes
2. invasive breast cancers diagnosed 0–12 months after a screening episode detected no cancer
3. invasive breast cancers diagnosed 13–24 months after a screening episode detected no cancer.

The goal of the Program is to have a high proportion of these cancers in category 1 and a low proportion in categories 2 and 3. This is especially important for category 2, as a breast cancer detected 0–12 months after a negative screen is much more likely to represent a failure of the screening process to detect a cancer than if detected after 13–24 months. However, aggressive breast cancers in some women can emerge in the period between scheduled screening episodes and grow very rapidly, and therefore not represent any failure in detection.

Indicator 3 measures the numbers and rates of the category 2 and 3 cancers (known as interval cancers) and measures cancers in category 1 as a percentage of total cancers found in screened women (sensitivity).

3a Interval cancer rate

The interval cancer rate is the rate of invasive breast cancers detected during an interval between two screening rounds per 10,000 women-years. It is stratified by 10-year age groups for women aged 40 years or over, and, for the target age group (50–69 years), time since screen (0–12 months, 13–24 months and 0–24 months) and screening round (first or subsequent).

Interval cancer rate indicator

An interval cancer is an invasive breast cancer that is diagnosed after a screening episode that detected no cancer and before the next scheduled screening episode. The interval cancer rate is expressed per 10,000 women-years at risk. It measures how effective the BreastScreen Australia Program is at detecting the presence of breast cancer in well women. A low-interval cancer rate is one measure of the effectiveness of the screening process.

The National Accreditation Standards for the detection of interval breast cancers require:

- < 7.5 interval cancers per 10,000 women aged 50–69 years who attend for screening less than 12 months following a negative screening episode

- the number per 10,000 women aged 50–69 years who attend for screening and who are diagnosed with an invasive interval breast cancer in the period 12–24 months following a negative screening episode.

Table 3.1: Interval cancer rate for women aged 40 years or over and 50–69 years, screened during index years 1998, 1999, 2000 and 2001, 2002, 2003, first and subsequent rounds, 0–12 months follow-up

	Objective ^(a)	Index years 1998, 1999 and 2000*	Index years 2001, 2002 and 2003
First screening round 0–12 months			
Rate for women aged 50–69 years	<7.5	7.2	6.9
95% CI		6.2–8.3	5.7–8.2
Rate for women aged 40 years or over	..	7.2	6.9
95% CI		6.4–8.0	5.9–7.9
Subsequent screening rounds 0–12 months			
Rate for women aged 50–69 years	<7.5	8.0	7.0
95% CI		7.5–8.5	6.6–7.4
Rate for women aged 40 years or over	..	7.8	7.2
95% CI		7.4–8.3	6.8–7.6
First screening round 13–24 months			
Rate for women aged 50–69 years	..	14.3	11.7
95% CI		12.9–15.9	10.1–13.4
Rate for women aged 40 years or over	..	13.4	11.5
95% CI		12.2–14.5	10.3–12.8
Subsequent screening rounds 13–24 months			
Rate for women aged 50–69 years	..	13.7	12.5
95% CI		13.0–14.4	11.9–13.1
Rate for women aged 40 years or over	..	13.1	12.2
95% CI		12.5–13.7	11.7–12.8

(a) National Accreditation Standards Performance Objective 2.4 is to minimise the number of invasive interval cancers and ensure that all invasive interval cancers are reviewed and investigated. For interval cancers diagnosed between 0 and 12 months, the objective is <7.5 per 10,000 women for women aged 50–69 years.

Note: Data for the index years 1998, 1999 and 2000 (0–12 months and 13–24 months) which were originally supplied for the *BreastScreen Australia monitoring reports 2001–2002, 2002–2003 and 2003–2004*, respectively, were re-used in this report.

- Table 3.1 shows the detection rate for interval cancers during index years 1998–2000 and 2001–2003. The objective of detecting less than 7.5 interval cancers per 10,000 women in the target age group (50–69 years) over the 12 months following a negative screening episode was achieved in 2001–2003 for women attending for all screening rounds and in 1998–2000 for women attending for their first screening round.

3b. Program sensitivity

The program sensitivity rate is the percentage of women with invasive breast cancer among all program-screened women diagnosed with invasive breast cancer during the screening interval (screen-detected and interval cancers). It is stratified by 10-year age groups for women aged 40 years or over, and, for the target age group (50–69 years), time since screen (0–12 months and 0–24 months) and screening round (first or subsequent).

The sensitivity indicator

Program sensitivity measures the ability of the program to detect invasive breast cancers in women attending for screening. It is the proportion of invasive breast cancers that are detected within the BreastScreen Australia Program out of all invasive breast cancers (interval cancers plus screen-detected cancers) diagnosed in program-screened women in the screening interval.

A high sensitivity indicates that few cancers in women screened are missed by the screening program. For example, in Table 3.2, in 2001–2003 there was program sensitivity of 79% in 24 months follow-up of women aged 50–69 years in the first screening round, indicating that 21% of cancers diagnosed during the screening interval were not detected by screening. For subsequent screening rounds, the program sensitivity for women aged 50–69 years in this time period was 71%, indicating that 29% of cancers were not detected by screening.

There are no National Accreditation Standards for the sensitivity indicator.

The following table shows the program sensitivity for invasive breast cancers during index years 1998–2000 and 2001–2003 (see Glossary for the definition of ‘index years’).

Table 3.2: Program sensitivity for women aged 40 years or over and 50–69 years, screened during index years 1998, 1999, 2000 and 2001, 2002, 2003, first and subsequent rounds, 0–24 months follow-up

	Index years 1998, 1999 and 2000	Index years 2001, 2002 and 2003
	(per cent)	
First screening round 0–24 months		
Rate for women aged 50–69 years	74.8	79.2
95% CI	71.2–78.5	75.0–83.6
Rate for women aged 40 years or over	73.2	77.7
95% CI	70.4–76.1	74.4–81.1
Subsequent screening rounds 0–24 months		
Rate for women aged 50–69 years	66.6	71.0
95% CI	64.7–68.4	69.3–72.8
Rate for women aged 40 years or over	64.9	68.2
95% CI	63.2–66.5	66.7–69.8

Note: Data for the index years 1998, 1999 and 2000 (0–12 months and 13–24 months) which were originally supplied for the *BreastScreen Australia monitoring reports 2001–2002, 2002–2003 and 2003–2004*, respectively, were re-used in this report.

In this chapter, data for the index years are combined. This aggregation improves the stability of rates.

In principle, screening should be done only with women who have no breast cancer symptoms. Those with symptoms should be referred for diagnostic follow-up. However, in practice this is not always practical, so the data presented here include both symptomatic and asymptomatic women. Both interval cancers and sensitivity rates in each state and territory are affected by the policy of management of symptomatic clients in that jurisdiction. For example, in New South Wales, women are not recalled to assessment on the basis of symptom status. Those women with a negative screen but who have symptoms are referred for diagnostic follow-up outside the BreastScreen Australia Program. However, those who have a cancer diagnosis will be counted as interval cancers – leading to a higher apparent interval cancer rate. Other states that do recall on the basis of symptoms may have lower apparent interval cancer rates. This affects the comparability of this indicator between jurisdictions.

Indicator 3a Interval cancer rate

Interval cancer rate by states and territories, first screening round, 0–12 months follow-up

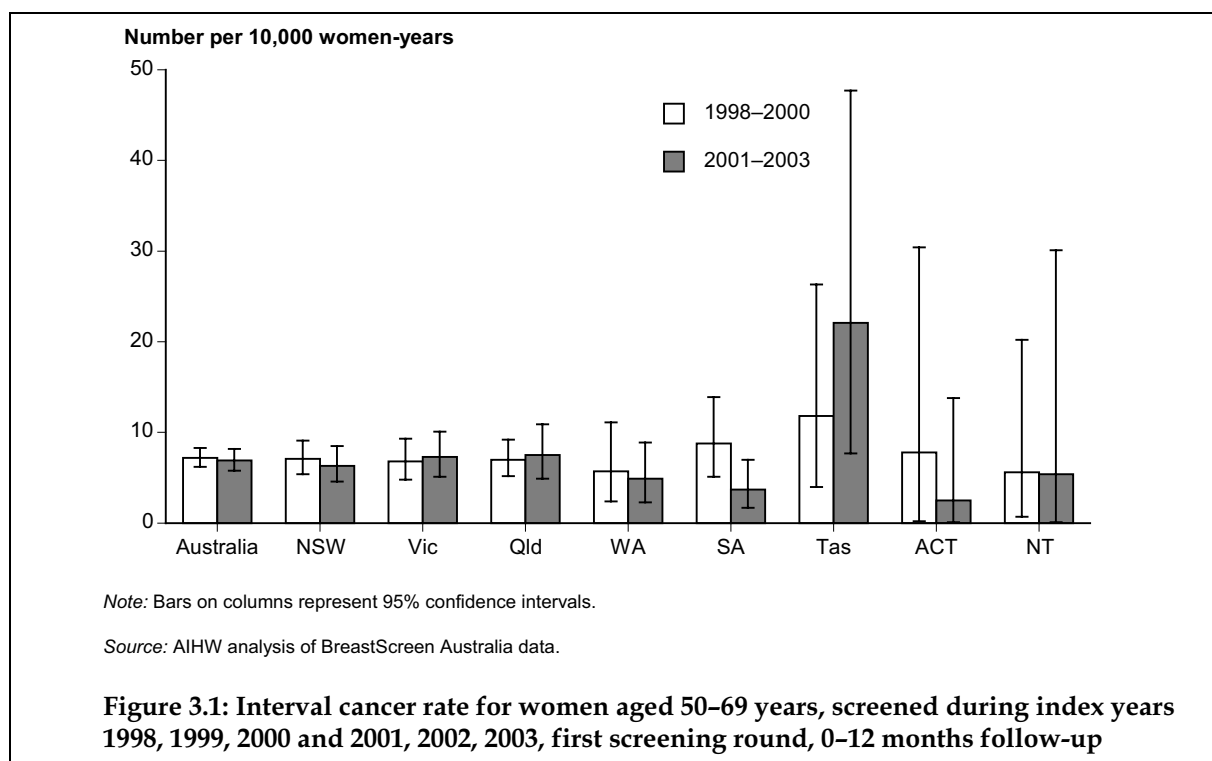


Table 3.3: Interval cancer rate for women aged 50–69 years, screened during index years 1998, 1999, 2000 and 2001, 2002, 2003, first screening round, 0–12 months follow-up

	Australia	NSW	Vic	Qld	WA	SA	Tas	ACT	NT
Index years 2001–2003									
Rate	6.9	6.3	7.3	7.5	4.9	3.7	22.1	2.5	5.4
95% CI	5.7–8.2	4.6–8.5	5.0–10.0	4.9–10.9	2.3–8.9	1.7–6.9	7.7–47.7	0.1–13.8	0.1–30.1
Index years 1998–2000									
Rate	7.2	7.1	6.8	7.0	5.7	8.8	11.8	7.8	5.6
95% CI	6.2–8.3	5.4–9.1	4.8–9.3	5.2–9.2	2.4–11.0	5.1–14.0	4.0–26.3	0.2–30.4	0.7–20.1

Notes

1. Rates are the number of interval cancers detected per 10,000 women-years and age-standardised to the population of women attending a BreastScreen Australia service in 1998.
2. The data include both symptomatic and asymptomatic women.
3. None of the rates were significantly different from the all-Australia rate.
4. Data for the index years 1998, 1999 and 2000 (0–12 months and 13–24 months) which were originally supplied for the *BreastScreen Australia monitoring reports 2001–2002, 2002–2003 and 2003–2004*, respectively, were re-used in this report.

- The age-standardised detection rate of interval cancers for Australia for women aged 50–69 years 0–12 months after their first screen decreased between the index years

1998–2000 and 2001–2003 from 7.2 per 10,000 women to 6.9 per 10,000. However, the decrease was not statistically significant.

For more information, see tables 15–20 in Appendix A. Tables with data other than for the latest reporting period can be found on the AIHW's website at <www.aihw.gov.au>.

Interval cancer rate by states and territories, first screening round, 13–24 months follow-up

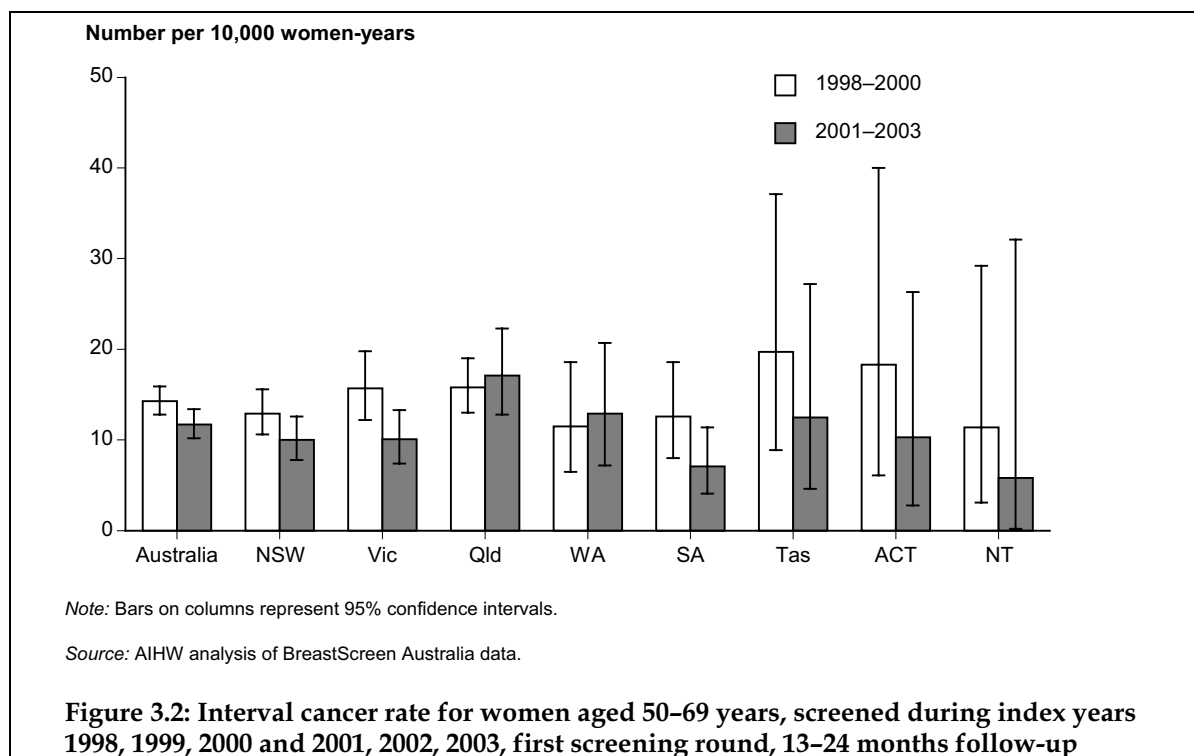


Table 3.4: Interval cancer rate for women aged 50–69 years, screened during index years 1998, 1999, 2000 and 2001, 2002, 2003, first screening round, 13–24 months follow-up

	Australia	NSW	Vic	Qld	WA	SA	Tas	ACT	NT
Index years 2001–2003									
Rate	11.7	10.0	10.1	17.1	12.9	7.1	12.5	10.3	5.8
95% CI	10.1–13.4	7.8–12.6	7.4–13.3	12.9–22.3	7.2–20.6	4.1–11.4	4.6–27.1	2.8–26.3	0.1–32.0
Index years 1998–2000									
Rate	14.3	12.9	15.7	15.8	11.5	12.6	19.7	18.3	11.4
95% CI	12.9–15.9	10.6–15.6	12.2–19.8	12.9–19.0	6.5–18.7	8.0–18.5	8.9–37.2	6.0–40.0	3.1–29.1

Notes

1. Rates are the number of interval cancers detected per 10,000 women-years and age-standardised to the population of women attending a BreastScreen Australia service in 1998.
 2. The data include both symptomatic and asymptomatic women.
 3. None of the rates was significantly different from the all-Australia rate.
 4. Data for the index years 1998, 1999 and 2000 (0–12 months and 13–24 months) which were originally supplied for the *BreastScreen Australia monitoring reports 2001–2002, 2002–2003 and 2003–2004*, respectively, were re-used in this report.
- The age-standardised detection rate of interval cancers for Australia for women aged 50–69 years 13–24 months after their first screen decreased between the index years 1998–2000 and 2001–2003 from 14.3 per 10,000 women to 11.7 per 10,000. However, the decrease was not statistically significant.

For more information, see tables 15–20 in Appendix A. Tables with data other than for the latest reporting period can be found on the AIHW's website at <www.aihw.gov.au>.

Interval cancer rate by states and territories, first screening round, 0–24 months follow-up

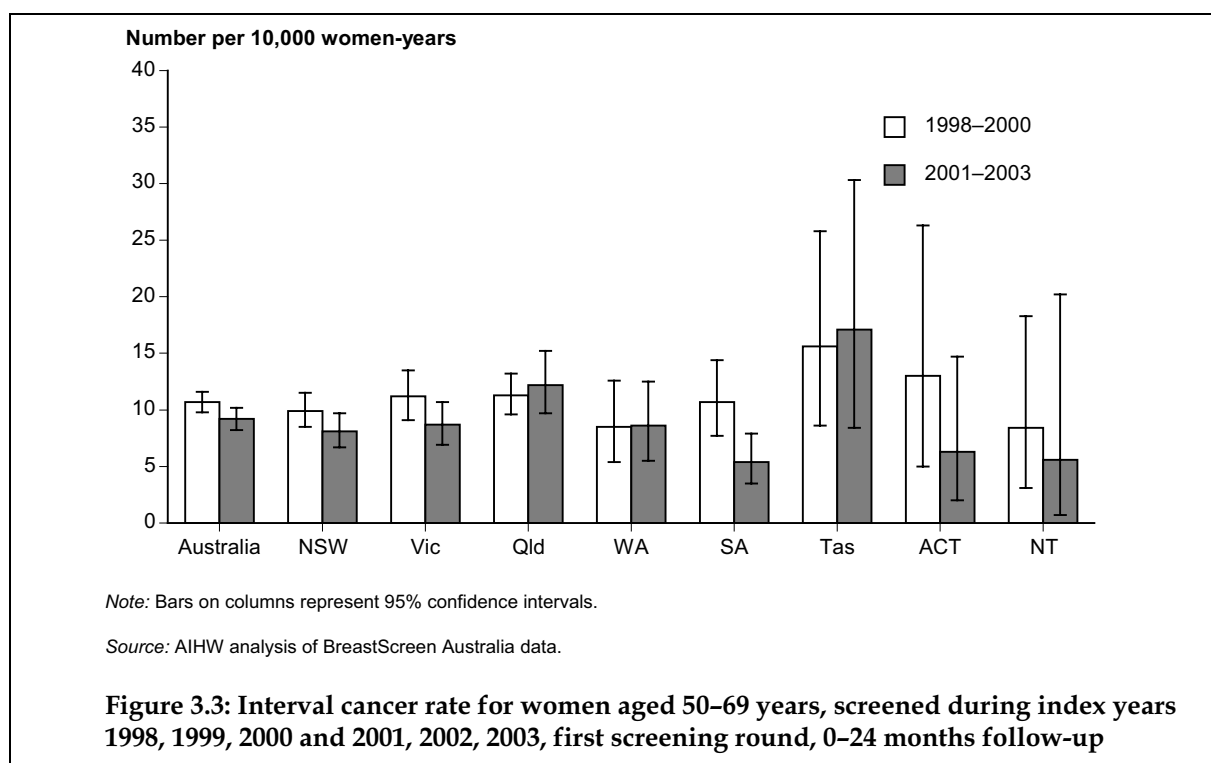


Table 3.5: Interval cancer rate for women aged 50–69 years, screened during index years 1998, 1999, 2000 and 2001, 2002, 2003, first screening round, 0–24 months follow-up

	Australia	NSW	Vic	Qld	WA	SA	Tas	ACT	NT
Index years 2001–2003									
Rate	9.2	8.1	8.7	12.2	8.6	5.4	17.1	6.3	5.6
95% CI	8.3–10.3	6.7–9.7	6.9–10.7	9.7–15.2	5.5–12.5	3.5–7.8	8.4–30.3	2.0–14.7	0.7–20.1
Index years 1998–2000									
Rate	10.7	9.9	11.2	11.3	8.5	10.7	15.6	13.0	8.4
95% CI	9.8–11.6	8.5–11.5	9.2–13.5	9.6–13.2	5.4–12.6	7.6–14.4	8.6–25.9	5.0–26.3	3.1–18.4

Notes

1. Rates are the number of interval cancers detected per 10,000 women-years and age-standardised to the population of women attending a BreastScreen Australia service in 1998.
 2. The data include both symptomatic and asymptomatic women.
 3. None of the rates was significantly different from the all-Australia rate.
 4. Data for the index years 1998, 1999 and 2000 (0–12 months and 13–24 months) which were originally supplied for the *BreastScreen Australia monitoring reports 2001–2002, 2002–2003 and 2003–2004*, respectively, were re-used in this report.
- The age-standardised detection rate of interval cancers for Australia decreased from 10.7 per 10,000 women-years for women aged 50–69 years 0–24 months after their first screen during index years 1998–2000 to 9.2 per 10,000 women-years for women screened in index years 2001–2003. The decrease was not statistically significant.

For more information, see tables 15–20 in Appendix A. Tables with data other than for the latest reporting period can be found on the AIHW's website at <www.aihw.gov.au>.

Interval cancer rate by states and territories, subsequent screening rounds, 0–12 months follow-up

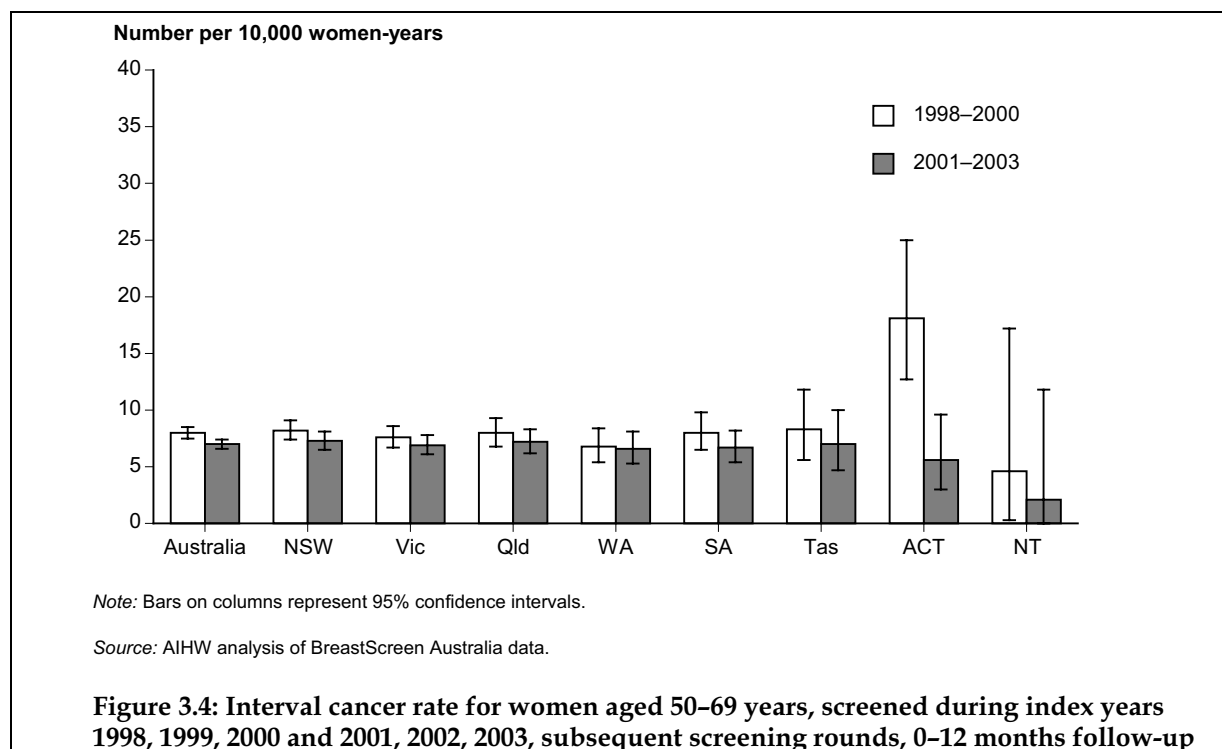


Table 3.6: Interval cancer rate for women aged 50–69 years, screened during index years 1998, 1999, 2000 and 2001, 2002, 2003, subsequent screening rounds, 0–12 months follow-up

	Australia	NSW	Vic	Qld	WA	SA	Tas	ACT	NT
Index years 2001–2003									
Rate	7.0 [#]	7.3	6.9	7.2	6.6	6.7	7.0	5.6 [#]	2.1
95% CI	6.6–7.4	6.5–8.1	6.1–7.8	6.2–8.2	5.3–8.1	5.4–8.2	4.7–10.0	3.0–9.6	0.1–11.8
Index years 1998–2000									
Rate	8.0	8.2	7.6	8.0	6.8	8.0	8.3	18.1	4.6
95% CI	7.5–8.5	7.3–9.1	6.7–8.6	6.8–9.4	5.4–8.4	6.5–9.8	5.6–11.7	12.7–25.0	0.4–17.3

[#] Significantly different from the 1998–2000 rate.

Notes

1. Rates are the number of interval cancers detected per 10,000 women-years and age-standardised to the population of women attending a BreastScreen Australia service in 1998.
2. The data include both symptomatic and asymptomatic women.
3. None of the rates was significantly different from the all-Australia rate.
4. Data for the index years 1998, 1999 and 2000 (0–12 months and 13–24 months) which were originally supplied for the *BreastScreen Australia monitoring reports 2001–2002, 2002–2003 and 2003–2004*, respectively, were re-used in this report.

- Between index years 1998–2000 and 2001–2003, there was a significant decrease in the age-standardised rate of interval cancers from 8.0 per 10,000 women-years to 7.0 per 10,000 women-years for women aged 50–69 years during 0–12 months follow-up.
- For index years 2001–2003, the age-standardised rate of interval cancers for women aged 50–69 years for 0–12 months follow-up increased slightly between the first and the

subsequent rounds from 6.9 to 7.0 per 10,000 women-years. This increase was not significant.

For more information, see tables 15–20 in Appendix A. Tables with data other than for the latest reporting period can be found on the AIHW's website at <www.aihw.gov.au>.

Interval cancer rate by states and territories, subsequent screening rounds, 13–24 months follow-up

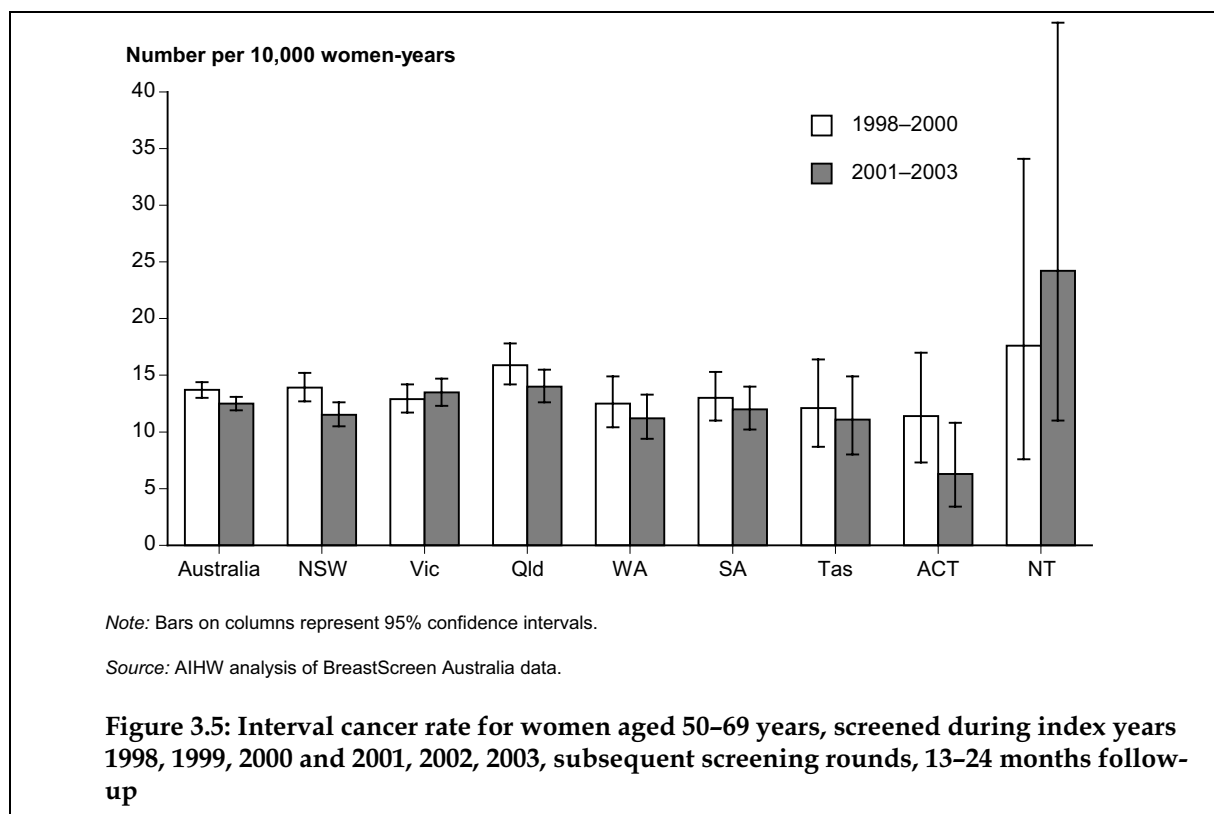


Table 3.7: Interval cancer rate for women aged 50–69 years, screened during index years 1998, 1999, 2000 and 2001, 2002, 2003, subsequent screening rounds, 13–24 months follow-up

	Australia	NSW	Vic	Qld	WA	SA	Tas	ACT	NT
Index years 2001–2003									
Rate	12.5	11.5 [#]	13.5	14.0	11.2	12.0	11.1	6.3	24.2
95% CI	11.9–13.1	10.5–12.6	12.3–14.7	12.6–15.4	9.3–13.3	10.2–14.0	8.0–14.9	3.3–10.8	10.9–46.1
Index years 1998–2000									
Rate	13.7	13.9	12.9	15.9	12.5	13.0	12.1	11.4	17.6
95% CI	13.0–14.4	12.7–15.1	11.7–14.2	14.2–17.8	10.5–14.9	11.0–15.3	8.7–16.4	7.3–17.1	7.6–34.1

[#] Significantly different from the 1998–2000 rate.

Notes

1. Rates are the number of interval cancers detected per 10,000 women-years and age-standardised to the population of women attending a BreastScreen Australia service in 1998.
2. The data include both symptomatic and asymptomatic women.
3. None of the rates was significantly different from the all-Australia rate.
4. Data for the index years 1998, 1999 and 2000 (0–12 months and 13–24 months) which were originally supplied for the *BreastScreen Australia monitoring reports 2001–2002, 2002–2003 and 2003–2004*, respectively, were re-used in this report.

- Between index years 1998–2000 and 2001–2003, there was a significant decrease in the age-standardised rate of interval cancers from 13.7 per 10,000 women-years to 12.5 per 10,000 women-years for women aged 50–69 years during 13–24 months follow-up.

For more information, see tables 15–20 in Appendix A. Tables with data other than for the latest reporting period can be found on the AIHW's website at <www.aihw.gov.au>.

Interval cancer rate by states and territories, subsequent screening rounds, 0–24 months follow-up

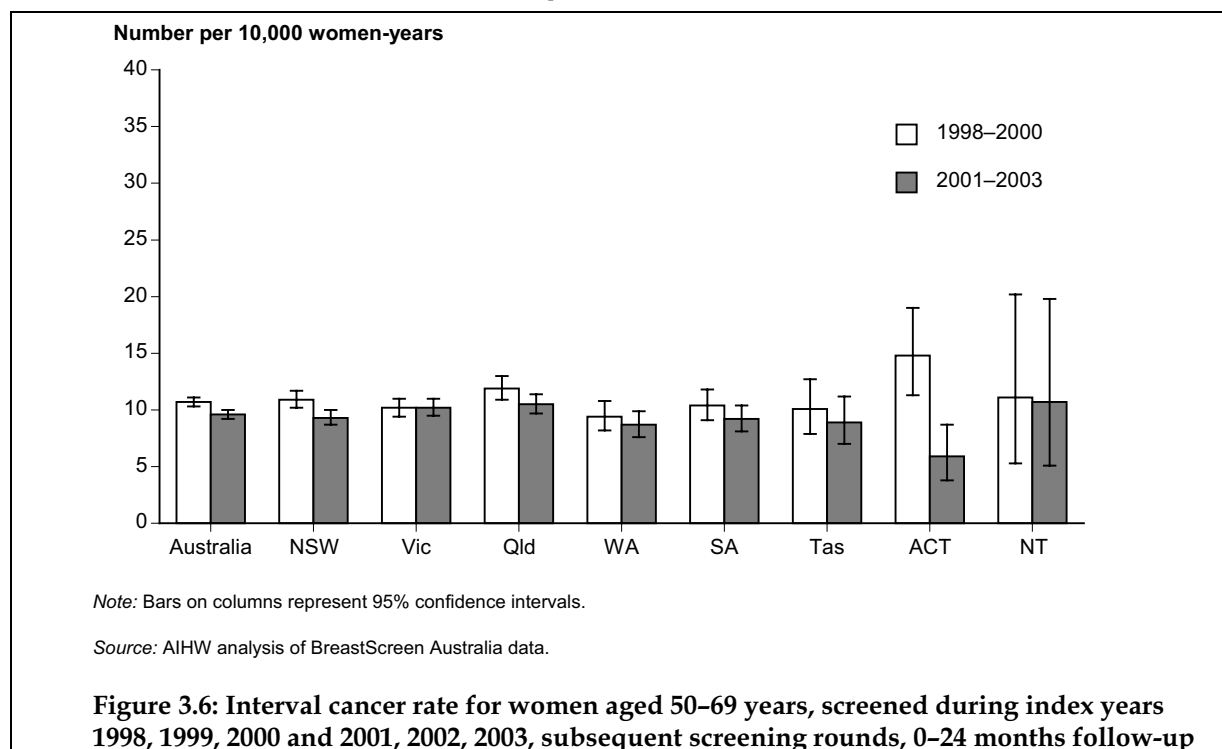


Table 3.8: Interval cancer rate for women aged 50–69 years, screened during index years 1998, 1999, 2000 and 2001, 2002, 2003, subsequent screening rounds, 0–24 months follow-up

	Australia	NSW	Vic	Qld	WA	SA	Tas	ACT	NT
Index years 2001–2003									
Rate	9.6 [#]	9.3 [#]	10.2	10.5	8.7	9.2	8.9	5.9 [#]	10.7
95% CI	9.3–10.0	8.6–9.9	9.5–10.9	9.6–11.4	7.6–9.9	8.1–10.5	7.0–11.2	3.9–8.7	5.1–19.8
Index years 1998–2000									
Rate	10.7	10.9	10.2	11.9	9.4	10.4	10.1	14.8	11.1
95% CI	10.3–11.2	10.2–11.6	9.5–11.1	10.9–13.0	8.2–10.8	9.2–11.8	7.9–12.8	11.3–19.0	5.3–20.2

[#] Significantly different from the 1998–2000 rate.

Notes

1. Rates are the number of interval cancers detected per 10,000 women-years and age-standardised to the population of women attending a BreastScreen Australia service in 1998.
2. The data include both symptomatic and asymptomatic women.
3. None of the rates was significantly different from the all-Australia rate.
4. Data for the index years 1998, 1999 and 2000 (0–12 months and 13–24 months) which were originally supplied for the *BreastScreen Australia monitoring reports 2001–2002, 2002–2003 and 2003–2004*, respectively, were re-used in this report.

- The age-standardised rate of interval cancers for women aged 50–69 years with 0–24 months of follow-up after their subsequent screening rounds decreased significantly from 10.7 per 10,000 women-years in index years 1998–2000 to 9.6 per 10,000 women-years in index years 2001–2003.

For more information, see tables 15–20 in Appendix A. Tables with data other than for the latest reporting period can be found on the AIHW's website at <www.aihw.gov.au>.

Indicator 3b Program sensitivity

Program sensitivity by states and territories, first screening round, 0–12 months follow-up

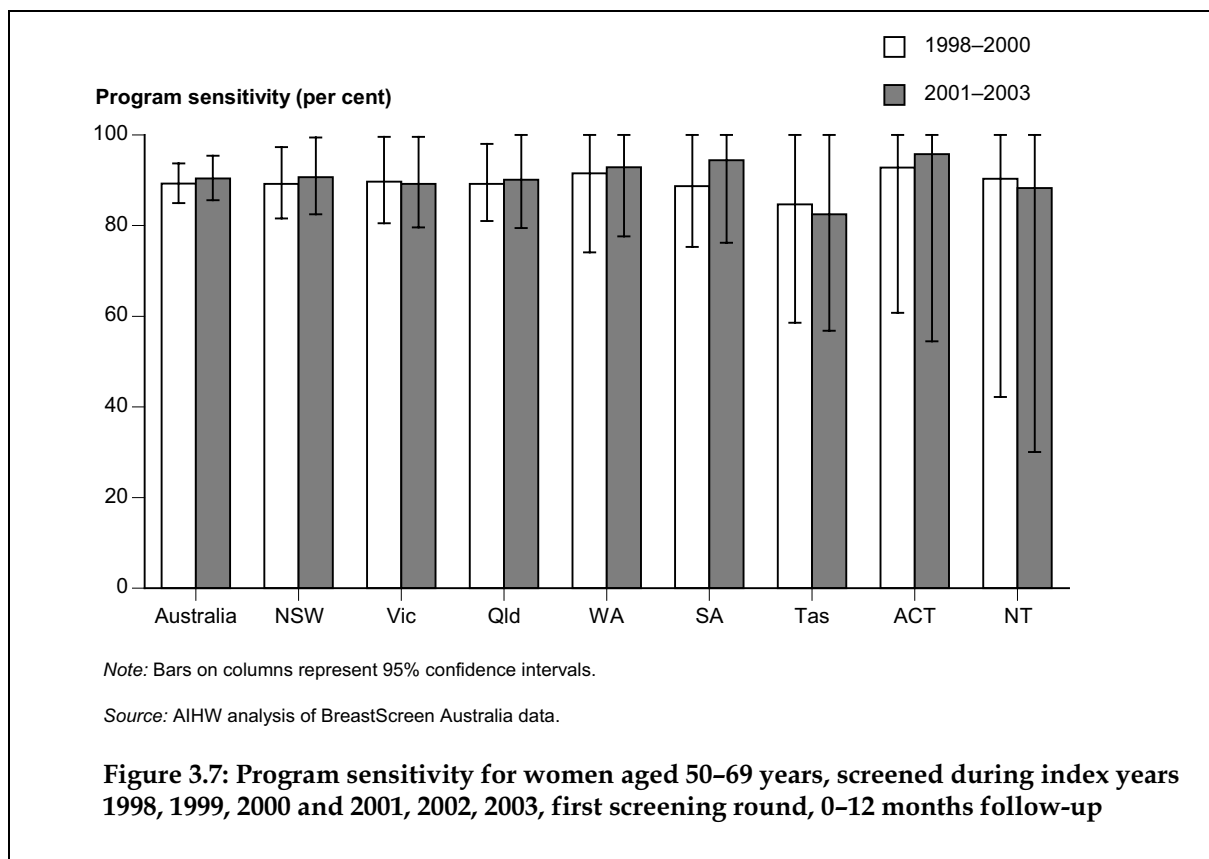


Table 3.9: Program sensitivity for women aged 50–69 years, screened during index years 1998, 1999, 2000 and 2001, 2002, 2003, first screening round, 0–12 months follow-up

	Australia	NSW	Vic	Qld	WA	SA	Tas	ACT	NT
	(percent)								
Index years 2001–2003									
Rate	90.4	90.7	89.2	90.1	92.9	94.4	82.5	95.8	88.3
95% CI	85.6–95.4	82.6–99.4	79.6–99.5	79.5–100.0	77.6–100.0	76.2–100.0	56.8–100.0	54.5–100.0	30.1–100.0
Index years 1998–2000									
Rate	89.3	89.2	89.7	89.2	91.5	88.7	84.7	92.8	90.3
95% CI	85.0–93.7	81.6–97.3	80.5–99.6	81.1–98.0	74.1–100.0	75.4–100.0	58.5–100.0	60.8–100.0	42.2–100.0

Notes

1. Rates are the number of screen-detected cancers as a percentage of all cancers (screen-detected and interval cancers) and age-standardised to the population of women attending a BreastScreen Australia service in 1998.
2. The data include both symptomatic and asymptomatic women.
3. None of the rates was significantly different from the all-Australia rate.
4. Data for the index years 1998, 1999 and 2000 (0–12 months and 0–24 months) which were originally supplied for the *BreastScreen Australia monitoring reports 2001–2002, 2002–2003 and 2003–2004*, respectively, were re-used in this report.

- The age-standardised program sensitivity rate for women in the target age group (50–69 years) 0–12 months after their first screen was 90.4% for index years 2001–2003 compared with 89.3% for index years 1998–2000. The increase was not statistically significant.

For more information, see tables 21–24 in Appendix A. Tables with data other than for the latest reporting period can be found on the AIHW's website at <www.aihw.gov.au>.

Program sensitivity by states and territories, first screening round, 0–24 months follow-up

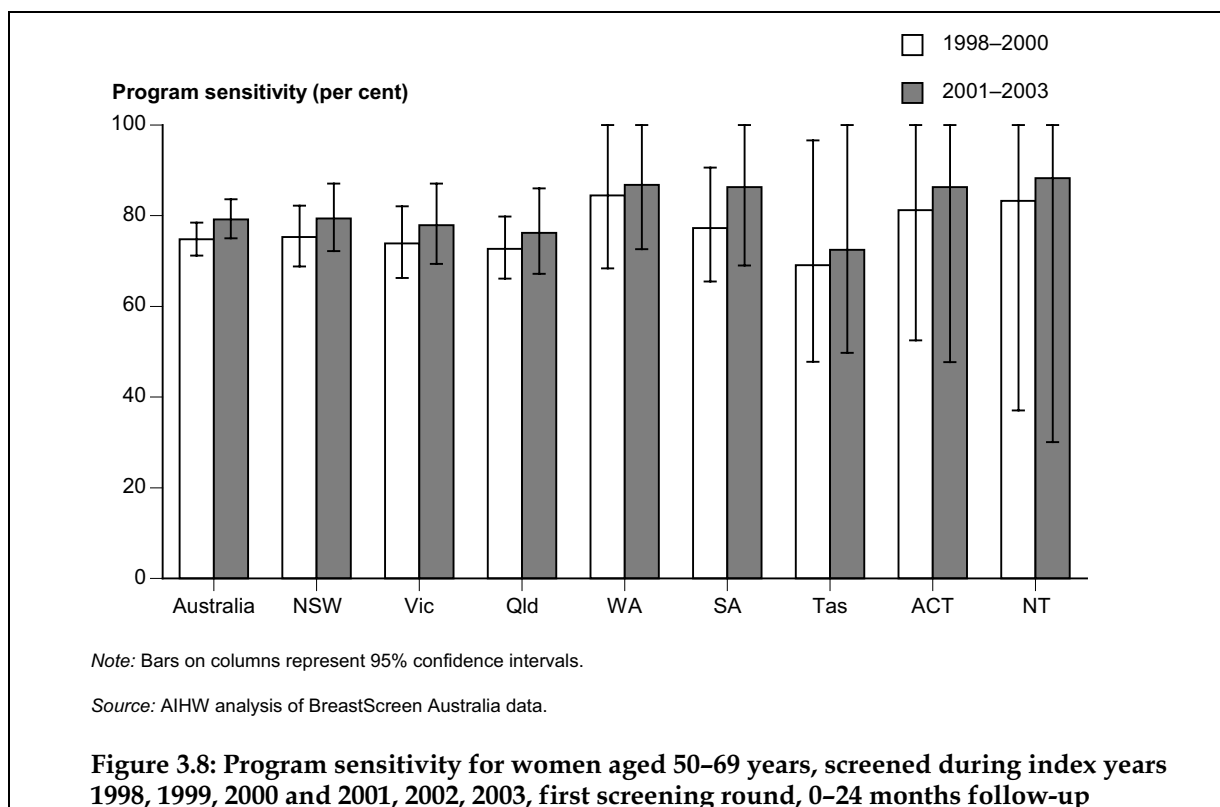


Table 3.10: Program sensitivity for women aged 50–69 years, screened during index years 1998, 1999, 2000 and 2001, 2002, 2003, first screening round, 0–24 months follow-up

	Australia	NSW	Vic	Qld	WA	SA	Tas	ACT	NT
	(per cent)								
Index years 2001–2003									
Rate	79.2	79.4	77.9	76.2	86.8	86.3	72.5	86.3	88.3
95% CI	75.0–83.6	72.2–87.1	69.4–87.0	67.3–86.0	72.6–100.0	69.1–100.0	49.8–100.0	47.6–100.0	30.1–100.0
Index years 1998–2000									
Rate	74.8	75.3	73.9	72.7	84.5	77.3	69.1	81.2	83.3
95% CI	71.2–78.5	68.8–82.2	66.3–82.1	66.0–79.8	68.4–100.0	65.5–90.6	47.8–96.6	52.5–100.0	37.1–100.0

Notes

1. Rates are the number of screen-detected cancers as a percentage of all cancers (screen-detected and interval cancers) and age-standardised to the population of women attending a BreastScreen Australia service in 1998.
 2. The data include both symptomatic and asymptomatic women.
 3. Data for the index years 1998, 1999 and 2000 (0–12 months and 0–24 months) which were originally supplied for the *BreastScreen Australia monitoring reports 2001–2002, 2002–2003 and 2003–2004*, respectively, were re-used in this report.
- The age-standardised program sensitivity rate for women aged 50–69 years 0–24 months after their first screen increased from 74.8% in 1998–2000 to 79.2% in 2001–2003. The increase was not significant.

For more information, see tables 21–24 in Appendix A. Tables with data other than for the latest reporting period can be found on the AIHW's website at <www.aihw.gov.au>.

Program sensitivity by states and territories, subsequent screening rounds, 0–12 months follow-up

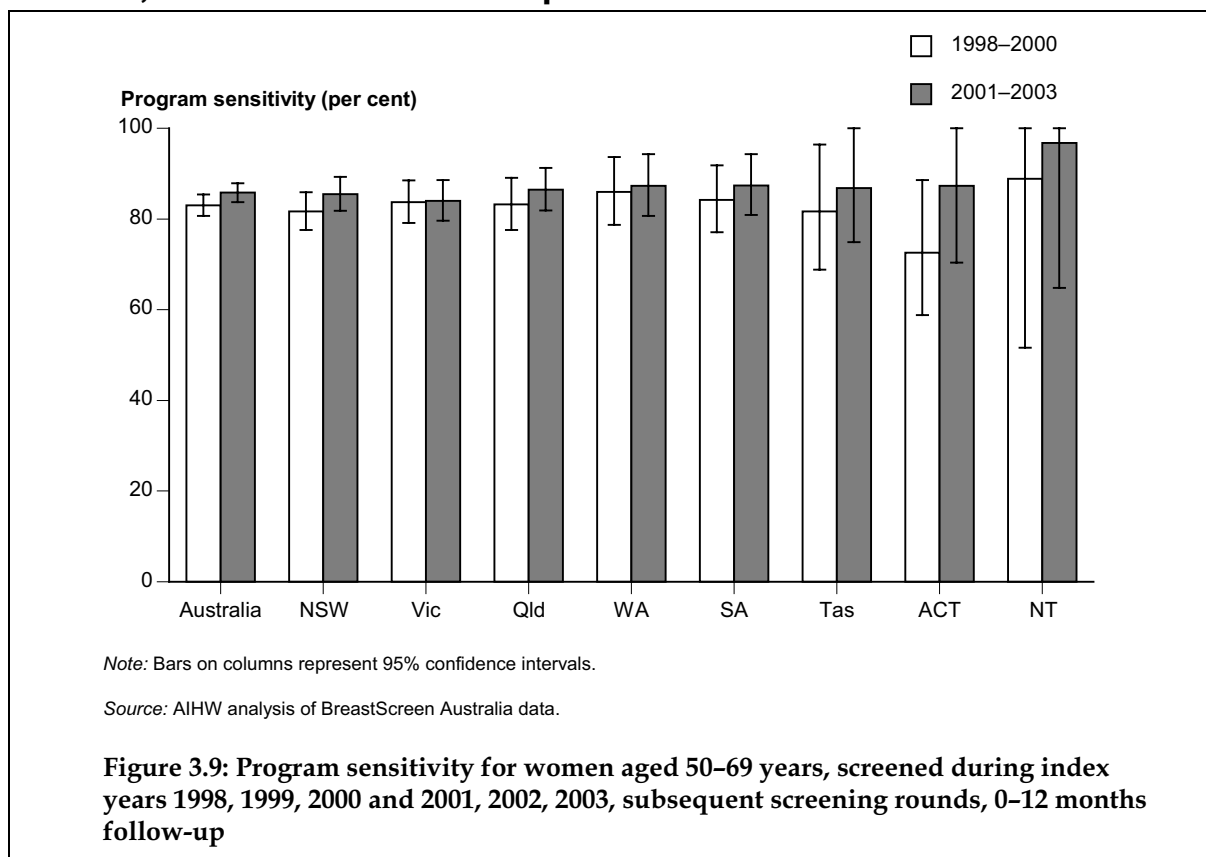


Table 3.11: Program sensitivity for women aged 50–69 years, screened during index years 1998, 1999, 2000 and 2001, 2002, 2003, subsequent screening rounds, 0–12 months follow-up

	Australia	NSW	Vic	Qld	WA	SA	Tas	ACT	NT
(per cent)									
Index years 2001–2003									
Rate	85.8	85.5	84.0	86.5	87.3	87.4	86.8	87.3	96.8
95% CI	83.7–88.0	81.7–89.3	79.6–88.5	81.9–91.2	80.7–94.3	80.9–94.2	74.9–100.0	70.5–100.0	64.8–100.0
Index years 1998–2000									
Rate	83.0	81.7	83.7	83.2	86.0	84.2	81.7	72.6	88.9
95% CI	80.7–85.3	77.6–85.9	79.1–88.4	77.6–89.1	78.8–93.8	77.0–91.8	68.8–96.4	58.8–88.6	51.6–100.0

Notes

1. Rates are the number of screen-detected cancers as a percentage of all cancers (screen-detected and interval cancers) and age-standardised to the population of women attending a BreastScreen Australia service in 1998.
2. The data include both symptomatic and asymptomatic women.
3. None of the rates was significantly different from the all-Australia rate.
4. Data for the index years 1998, 1999 and 2000 (0–12 months and 0–24 months) which were originally supplied for the *BreastScreen Australia monitoring reports 2001–2002, 2002–2003 and 2003–2004*, respectively, were re-used in this report.

- The program sensitivity rate between the index years 1998–2000 and 2001–2003 for women aged 50–69 years 0–12 months after their second or subsequent screens increased from 83.0% to 85.8%. The increase was not statistically significant.

For more information, see tables 21–24 in Appendix A. Tables with data other than for the latest reporting period can be found on the AIHW's website at <www.aihw.gov.au>.

Program sensitivity by states and territories, subsequent screening rounds, 0–24 months follow-up

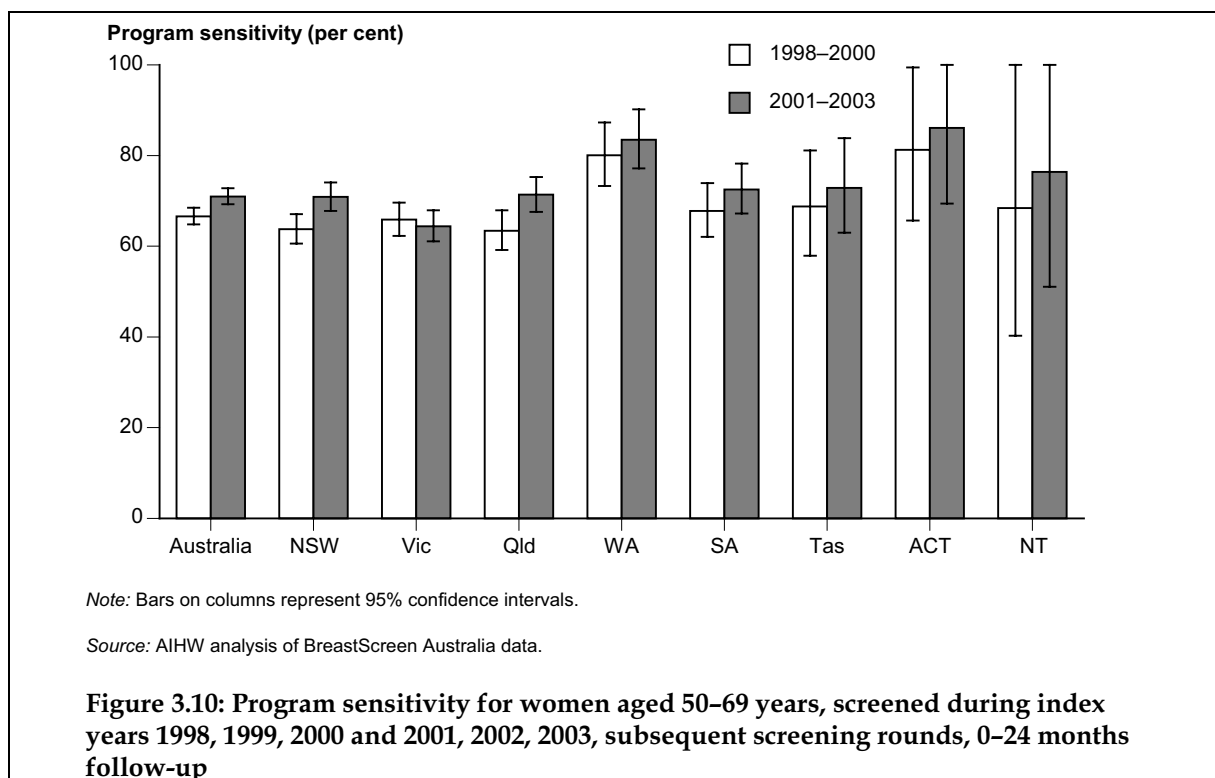


Table 3.12: Program sensitivity for women aged 50–69 years, screened during index years 1998, 1999, 2000 and 2001, 2002, 2003, subsequent screening rounds, 0–24 months follow-up

	Australia	NSW	Vic	Qld	WA	SA	Tas	ACT	NT
(per cent)									
Index years 2001–2003									
Rate	71.0 [#]	70.9 [#]	64.4	71.4	83.5	72.5	72.9	86.1	76.4
95% CI	69.3–72.8	67.8–74.0	61.1–67.9	67.7–75.4	77.2–90.2	67.1–78.1	62.9–83.9	69.4–100.0	51.2–100.0
Index years 1998–2000									
Rate	66.6	63.8	65.9	63.4	80.1	67.8	68.8	81.3	68.4
95% CI	64.7–68.4	60.7–67.1	62.3–69.6	59.1–67.8	73.3–87.3	62.1–74.0	58.0–81.1	65.7–99.5	40.3–100.0

[#] Significantly different from the 1998–2000 rate.

Notes

- Rates are the number of screen-detected cancers as a percentage of all cancers (screen-detected and interval cancers) and age-standardised to the population of women attending a BreastScreen Australia service in 1998.
 - The data include both symptomatic and asymptomatic women.
 - Data for the index years 1998, 1999 and 2000 (0–12 months and 0–24 months) which were originally supplied for the *BreastScreen Australia monitoring reports 2001–2002, 2002–2003 and 2003–2004*, respectively, were re-used in this report.
- The program sensitivity rate for Australia between the index years 1998–2000 and 2001–2003 for women in the target age group (50–69 years) 0–24 months after their second or subsequent screen increased from 66.6% to 71.0%. This increase was statistically significant.

For more information, see tables 21–24 in Appendix A. Tables with data other than for the latest reporting period can be found on the AIHW's website at <www.aihw.gov.au>.

Indicator 4 Detection of ductal carcinoma in situ

Ductal carcinoma in situ detection rate

The ductal carcinoma in situ (DCIS) detection rate is the rate of women with DCIS per 10,000 women screened, by 10-year age groups for women aged 40 years or over, and for the target age group (50–69 years).

The DCIS detection indicator

DCIS is a disease that involves changes in the cells in the lining of the ducts of the breast. Although the changes are like those seen in breast cancer, DCIS has not spread beyond the ducts and therefore is not an invasive cancer (NBCC et al. 2000). The natural history of DCIS is still not well understood, although women with the condition are at increased risk of subsequent development of invasive breast cancer (O’Shaughnessy 2000).

The DCIS indicator measures the rate of DCIS diagnosed in women attending a BreastScreen Australia service. This is expressed as the number of women with DCIS detected for every 10,000 women screened.

The National Accreditation Standards for the detection of DCIS require that:

- ≥ 12 per 10,000 women aged 50–69 years who attend for their first screen are diagnosed with DCIS
- ≥ 7 per 10,000 women aged 50–69 years who attend for their second or subsequent screen are diagnosed with DCIS.

The following table illustrates the detection of DCIS in 2000, 2004 and 2005. The objectives of detecting at least 12 DCIS lesions per 10,000 women attending for their first screening round and at least 7 DCIS lesions per 10,000 women attending for their second and subsequent rounds were achieved for women in all age categories.

Table 4.1: Ductal carcinoma in situ detection rate in women aged 40 years or over and 50–69 years, 2000, 2004 and 2005

	Objective ^(a)	2000	2004	2005
First screening round				
Rate for women aged 50–69 years	≥12	13.7	20.3 [#]	14.5
95% CI		11.0–16.8	16.2–24.9	11.4–18.1
Rate for women aged 40 years or over	..	14.0	18.1	15.9
95% CI		11.8–16.5	14.9–21.8	12.6–19.7
Subsequent screening rounds				
Rate for women aged 50–69 years	≥7	10.4	10.5	11.0
95% CI		9.5–11.4	9.7–11.4	10.2–11.9
Rate for women aged 40 years or over	..	9.9	10.3	10.3
95% CI		9.1–10.7	9.5–11.0	9.6–11.1

[#] Significantly different from subsequent screening rounds.

(a) Performance objective for BreastScreen services as set out in the National Accreditation Standards (NQM 2004).

- In 2005, BreastScreen Australia detected 925 cases of DCIS in women aged 40 years or over, 165 cases in the first screening round, and 760 cases in subsequent screening rounds.
- In women aged 50–69 years, there were 725 cases of DCIS detected in 2005, 104 cases in the first screening round, and 621 cases in subsequent screening rounds.
- For women aged 50–69 years, the detection rate in the first screening round was 14.5 per 10,000 women screened, and in subsequent screening rounds 11.0 per 10,000 women screened in 2005. Although the detection rates rose slightly between 2000 and 2005, the increases were not significant.

Ductal carcinoma in situ detection, all screening rounds

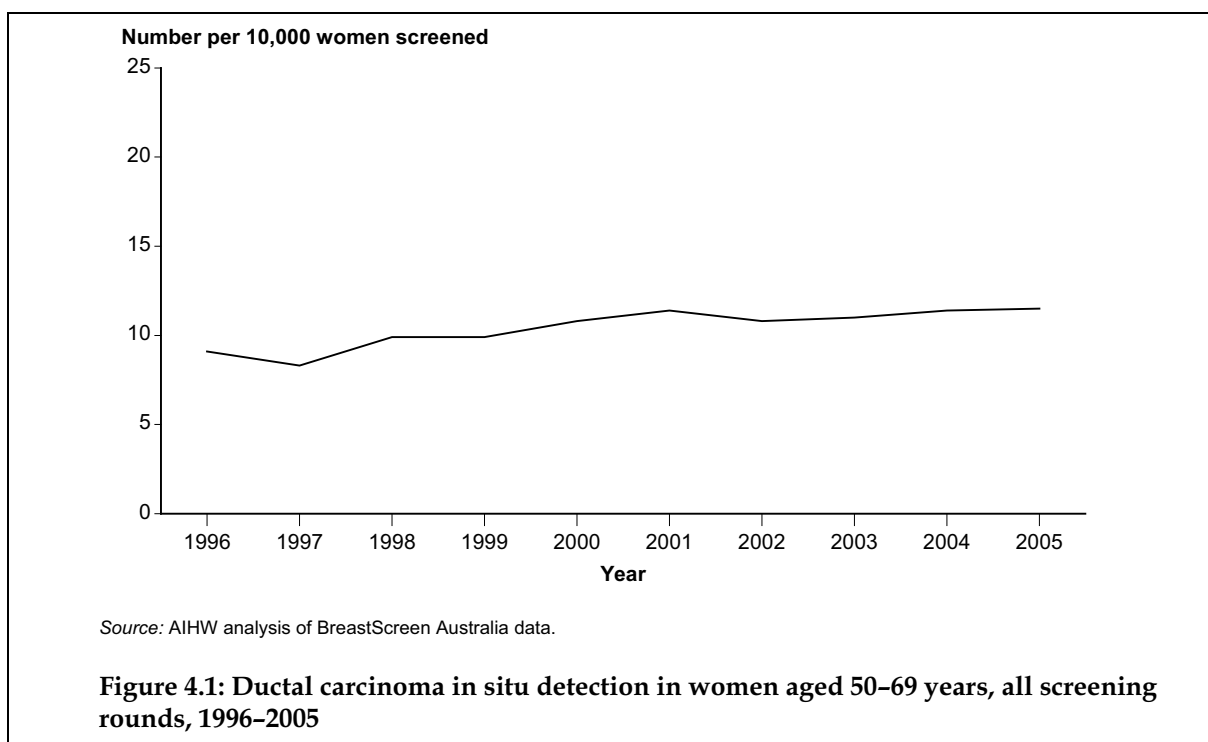


Table 4.2: Ductal carcinoma in situ detection in women aged 50–69 years, all screening rounds, 1996–2005

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Rate	9.1	8.3	9.9	9.9	10.8	11.4	10.8	11.0	11.4	11.5*
95% CI	8.2–10.1	7.5–9.1	9.0–10.8	9.1–10.8	9.9–11.7	10.5–12.3	9.9–11.6	10.2–11.9	10.5–12.3	10.7–12.3

* Statistically different from the 1996 and 1997 rate.

Note: Rates are the number of cases of DCIS per 10,000 women screened and age-standardised to the population of women attending a BreastScreen Australia service in 1998.

- The number of DCIS cases detected in women aged 50–69 years increased from 376 in 1996 to 725 DCIS cases in 2005 for all screening rounds.
- The age-standardised rate of DCIS detection for women in the target age group (50–69 years) has remained relatively constant since 1996, at between 9 and 11 cases detected per 10,000 women screened, over all screening rounds.

For more information, see tables 25–28 in Appendix A. Tables with data other than for the latest reporting period can be found on the AIHW's website at <www.aihw.gov.au>.

Ductal carcinoma in situ detection by states and territories, first screening round

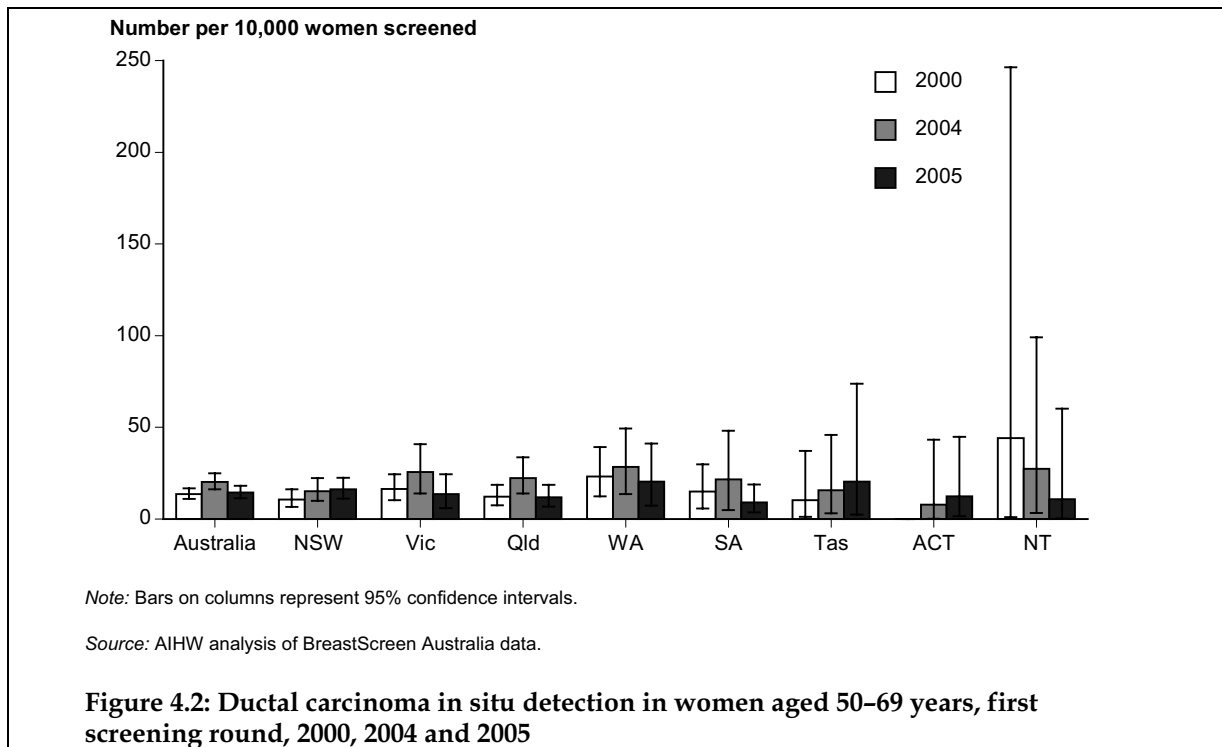


Table 4.3: Ductal carcinoma in situ detection in women aged 50–69 years, first screening round, 2000, 2004 and 2005

	Australia	NSW	Vic	Qld	WA	SA	Tas	ACT	NT
2005 rate	14.5	16.2	13.7	11.8	20.5	9.1	20.4	12.4	10.8
95% CI	11.4–18.1	11.2–22.4	6.0–24.5	6.8–18.6	7.4–41.2	3.7–18.8	2.5–73.8	1.5–44.8	0.3–60.2
2004 rate	20.3	15.2	25.7	22.3	28.4	21.7	15.7	7.8	27.4
95% CI	16.2–24.9	9.9–22.3	13.9–40.9	14.0–33.6	13.7–49.4	4.9–48.2	3.2–45.9	0.2–43.3	3.3–99.1
2000 rate	13.7	10.7	16.4	12.2	23.3	15.1	10.3	..	44.2
95% CI	11.0–16.8	6.7–16.2	10.3–24.4	7.5–18.6	12.4–39.3	5.8–29.8	1.2–37.1	..	1.1–246.4

Note: Rates are the number of cases of DCIS per 10,000 women screened and age-standardised to the population of women attending a BreastScreen Australia service in 1998.

- DCIS was detected in 165 women attending for their first screening round in 2005, including 104 cases in women aged 50–69 years. The age-standardised DCIS detection rate was 14.5 per 10,000 women screened for women aged 50–69 years, and 15.9 per 10,000 for women aged 40 years or over.
- The national age-standardised detection rate of DCIS increased from 13.7 in 2000 to 14.5 in 2005 but the increase was not statistically significant.

For more information, see tables 25–28 in Appendix A. Tables with data other than for the latest reporting period can be found on the AIHW's website at <www.aihw.gov.au>.

Ductal carcinoma in situ detection by states and territories, second or subsequent screening rounds

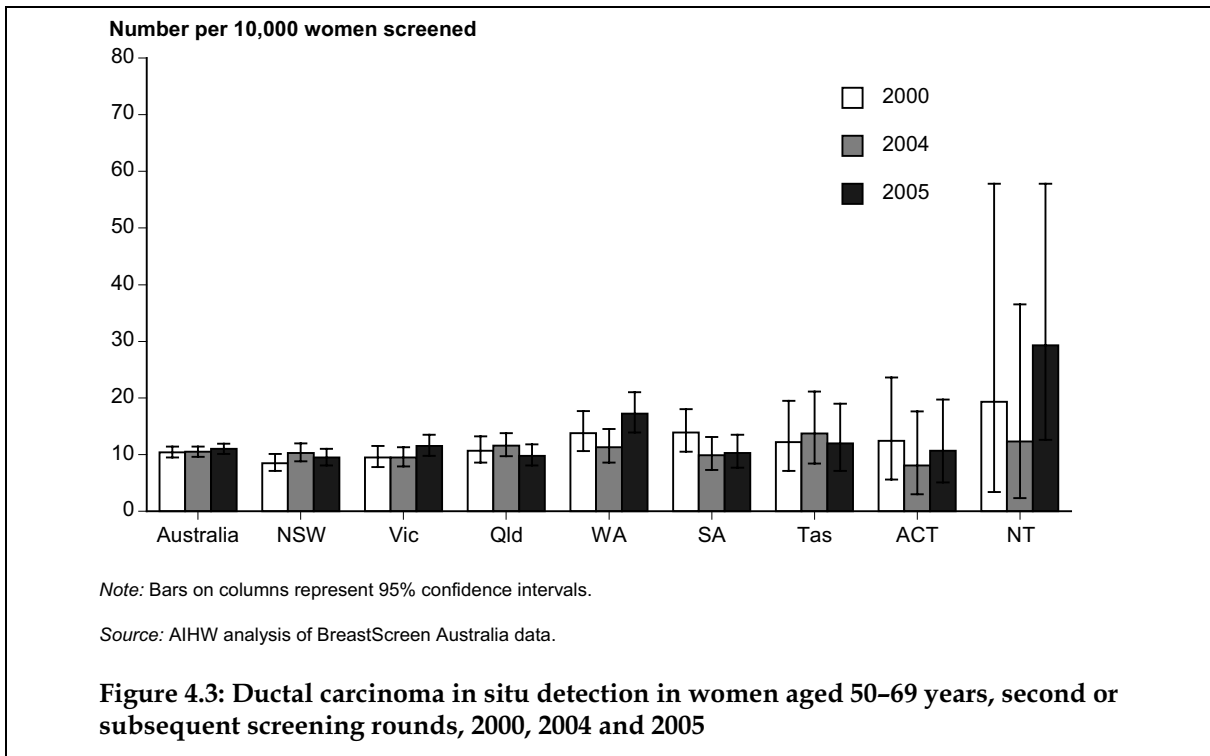


Table 4.4: Ductal carcinoma in situ detection in women aged 50–69 years, second or subsequent screening rounds, 2000, 2004 and 2005

	Australia	NSW	Vic	Qld	WA	SA	Tas	ACT	NT
2005 rate	11.0	9.5	11.5	9.8	17.2	10.3	12.0	10.7	29.3
95% CI	10.2–11.9	8.1–11.0	9.8–13.5	8.1–11.8	13.9–21.1	7.7–13.5	7.1–19.0	5.1–19.6	12.6–57.8
2004 rate	10.5	10.3	9.5	11.6	11.3	9.9	13.7	8.1	12.3
95% CI	9.7–11.4	8.8–12.0	7.9–11.3	9.7–13.8	8.7–14.6	7.4–13.1	8.3–21.1	3.0–17.6	2.3–36.5
2000 rate	10.4	8.5	9.5	10.7	13.8	13.9	12.2	12.4	19.3
95% CI	9.5–11.4	7.1–10.1	7.8–11.4	8.6–13.2	10.6–17.7	10.6–18.0	7.1–19.6	5.6–23.6	3.4–57.8

Note: Rates are the number of cases of DCIS per 10,000 women screened and age-standardised to the population of women attending a BreastScreen Australia service in 1998.

- DCIS was detected in 760 women aged 40 years or over attending for their second or subsequent screening rounds in 2005, including 621 cases in women aged 50–69 years. The age-standardised DCIS detection rate was 11.0 per 10,000 women screened for women aged 50–69 years, and 10.3 per 10,000 for women aged 40 years or over.
- The national age-standardised detection rate of DCIS in 2005 (11.0 cases per 10,000 women) was not significantly different to the rate in 2000 at 10.4 cases per 10,000 women.

For more information, see tables 25–28 in Appendix A. Tables with data other than for the latest reporting period can be found on the AIHW's website at <www.aihw.gov.au>.

Indicator 5 Recall to assessment

Recall to assessment rate

The recall to assessment rate is the proportion of all women screened in a given calendar year who were recalled for assessment, by 5-year age groups for women aged 40 years or over, and for the target age group (50–69 years).

The recall to assessment indicator

The recall to assessment indicator measures the rate of women who are recalled for assessment following attendance for a routine screening at a BreastScreen Australia service. In most cases, the recall is made because a woman's screening mammogram shows signs that there may be breast cancer. During assessment, a woman might undergo further tests, such as additional mammography, physical examination, ultrasound and, if required, a fine needle aspiration or a biopsy.

BreastScreen Australia aims to maximise the number of cancers detected – in particular, the number of small cancers – while minimising the number of unnecessary investigations. Most women recalled to assessment are found not to have breast cancer (BreastScreen South Australia 2005; BreastScreen Queensland 2005).

Women attending the program for the first time have a higher all-size cancer detection rate than those who have previously been screened. This is reflected in a higher recall to assessment rate for women who attend for their first screening round compared with those who attend for a subsequent round.

The National Accreditation Standards for recall to assessment require that:

- <10% of women aged 50–69 years who attend for their first screen are recalled for assessment.
- <5% of women aged 50–69 years who attend for their second or subsequent screen are recalled for assessment.

The following table shows the recall rates for 2000, 2004 and 2005. The objectives of recalling less than 10% of women aged 50–69 years attending for their first screening round and less than 5% of women attending for their second or subsequent screening rounds were achieved in each of the 3 years.

Table 5.1: Age-standardised recall to assessment rates for women aged 40 years or over and 50–69 years, mammographic reasons, 2000, 2004 and 2005

	Objective ^(a)	2000	2004	2005
(per cent)				
First screening round				
Rate for women aged 50–69 years	<10	8.2	9.9	9.8 [#]
95% CI		8.0–8.5	9.6–10.1	9.6–10.1
Rate for women aged 40 years or over	..	8.1	9.7	9.8
95% CI		7.9–8.3	9.5–9.9	9.5–10.0
Subsequent screening rounds				
Rate for women aged 50–69 years	<5	4.1	4.0	4.0
95% CI		4.0–4.1	4.0–4.1	3.9–4.0
Rate for women aged 40 years or over	..	4.1	4.3	4.2
95% CI		4.0–4.1	4.2–4.3	4.1–4.2

[#] Significantly different from subsequent screening rounds.

(a) Performance objective for BreastScreen services as set out in the National Accreditation Standards (NQMC 2004).

Source: AIHW analysis of BreastScreen Australia data.

- The age-standardised recall to assessment rate for women in the target age group (50–69 years) attending for their first screening round increased significantly from 8.2% in 2000 to 9.8% in 2005. The age-standardised recall rate for women aged 40 years or over attending for their first screening round also increased significantly from 8.1% in 2000 to 9.8% in 2005.
- The age-standardised recall to assessment rate for women aged 50–69 years attending for subsequent screening rounds remained stable at 4.1% in 2000, 4.3% in 2004 and 4.2% in 2005.

Recall to assessment rate by states and territories, mammographic reasons, first screening rounds

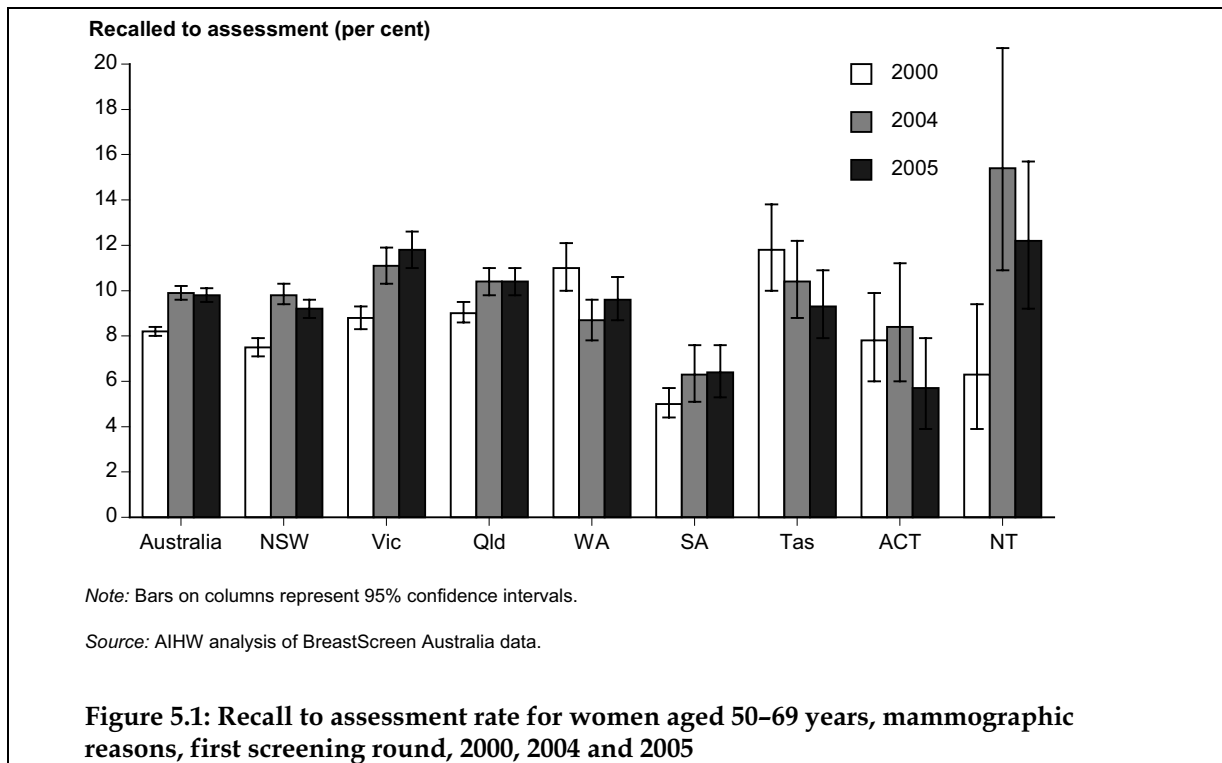


Table 5.2: Recall to assessment rate for women aged 50–69 years, mammographic reasons, first screening round, 2000, 2004 and 2005

	Australia	NSW	Vic	Qld	WA	SA	Tas	ACT	NT
	(per cent)								
2005 rate	9.8 [#]	9.2 [#]	11.8 [#]	10.4 [#]	9.6	6.4	9.3	5.7	12.2
95% CI	9.6–10.1	8.8–9.6	11.1–12.6	9.8–11.0	8.7–10.6	5.3–7.6	7.8–10.9	3.9–7.9	9.2–15.7
2004 rate	9.9	9.8	11.1	10.4	8.7	6.3	10.4	8.4	15.4
95% CI	9.6–10.1	9.3–10.2	10.4–11.9	9.8–11.0	7.9–9.6	5.2–7.6	8.7–12.2	6.0–11.2	10.9–20.8
2000 rate	8.2	7.5	8.8	9.0	11.0	5.0	11.8	7.8	6.3
95% CI	8.0–8.5	7.1–7.8	8.3–9.2	8.5–9.4	10.0–12.0	4.4–5.7	10.0–13.9	6.0–10.0	3.9–9.4

[#] Statistically different from the 2000 rate.

Note: Rates are the number of women recalled for assessment as a percentage of women screened and age-standardised to the population of women attending a BreastScreen Australia service in 1998.

- In 2005, 9.8% (age-standardised) of women aged 50–69 years attending for their first screen were recalled for assessment due to an abnormal mammogram result. This was a significant increase on the proportion recalled in 2000 of 8.2%. Similar increases also occurred in New South Wales, Victoria and Queensland. In other states and territories the changes between 2000 and 2005 were not significant, mainly due to the number of cases being too small to measure significant change.

For more information, see tables 29–36 in Appendix A. Tables with data other than for the latest reporting period can be found on the AIHW's website at <www.aihw.gov.au>.

Recall to assessment rate by states and territories, mammographic reasons, subsequent screening rounds

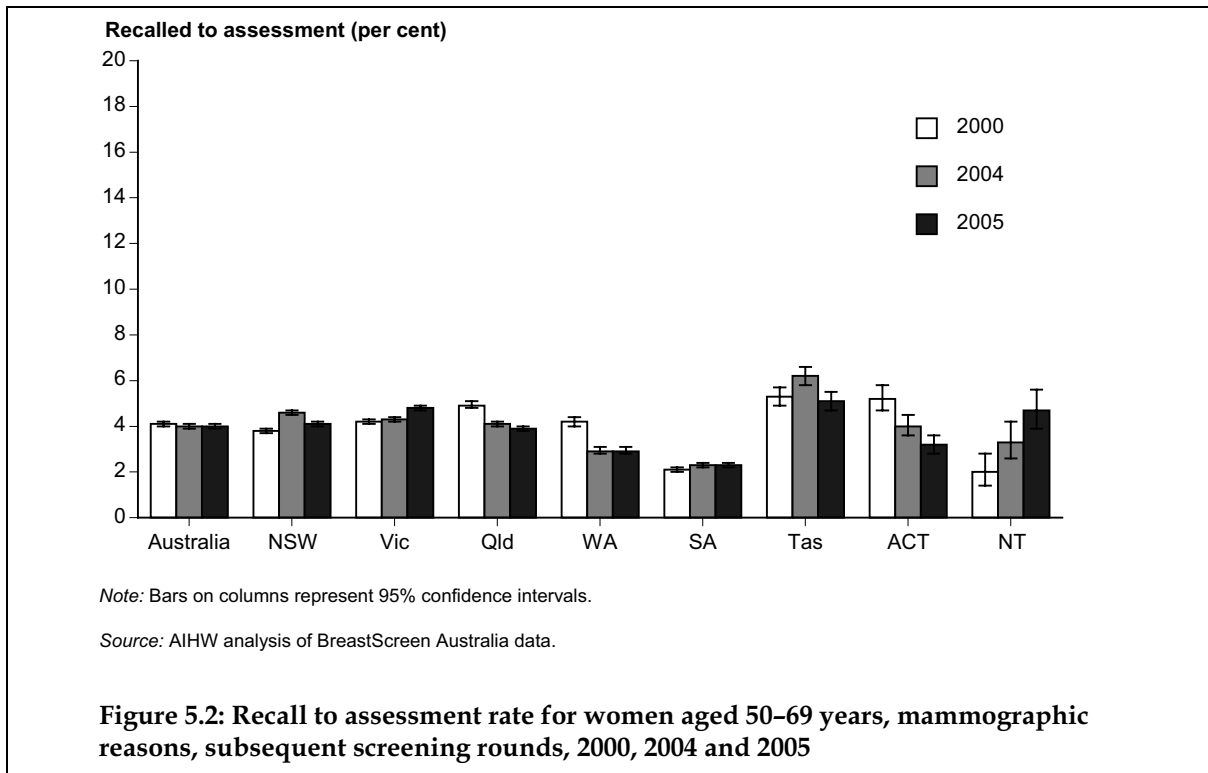


Table 5.3: Recall to assessment rate for women aged 50–69 years, mammographic reasons, subsequent screening rounds, 2000, 2004 and 2005

	Australia	NSW	Vic	Qld	WA	SA	Tas	ACT	NT
	(per cent)								
2005 rate	4.0	4.1* [#]	4.8* [#]	3.9 [#]	2.9 [#]	2.3	5.1*	3.2 [#]	4.7 [#]
95% CI	3.9–4.0	4.0–4.2	4.6–4.9	3.8–4.0	2.8–3.1	2.2–2.5	4.7–5.5	2.9–3.6	3.9–5.6
2004 rate	4.0	4.6	4.3	4.1	2.9	2.3	6.2	4.0	3.3
95% CI	4.0–4.1	4.4–4.7	4.2–4.4	4.0–4.2	2.7–3.0	2.2–2.4	5.8–6.6	3.5–4.5	2.5–4.2
2000 rate	4.1	3.8	4.2	4.9	4.2	2.1	5.3	5.2	2.0
95% CI	4.0–4.1	3.7–3.9	4.1–4.3	4.7–5.0	4.1–4.4	2.0–2.3	4.9–5.7	4.7–5.8	1.4–2.7

* Statistically different from the 2004 rate.

[#] Statistically different from the 2000 rate.

Note: Rates are the number of women recalled for assessment as a percentage of women screened and age-standardised to the population of women attending a BreastScreen Australia service in 1998.

- Of women aged 50–69 years who were screened for a second or subsequent time in 2005, 4.0% (age-standardised) were recalled for assessment due to an abnormal mammogram result. This was less than half the rate for women attending for their first screen (9.8%).

For more information, see tables 29–36 in Appendix A. Tables with data other than for the latest reporting period can be found on the AIHW's website at <www.aihw.gov.au>.

Recall to assessment trends, mammographic reasons, first and subsequent screening rounds

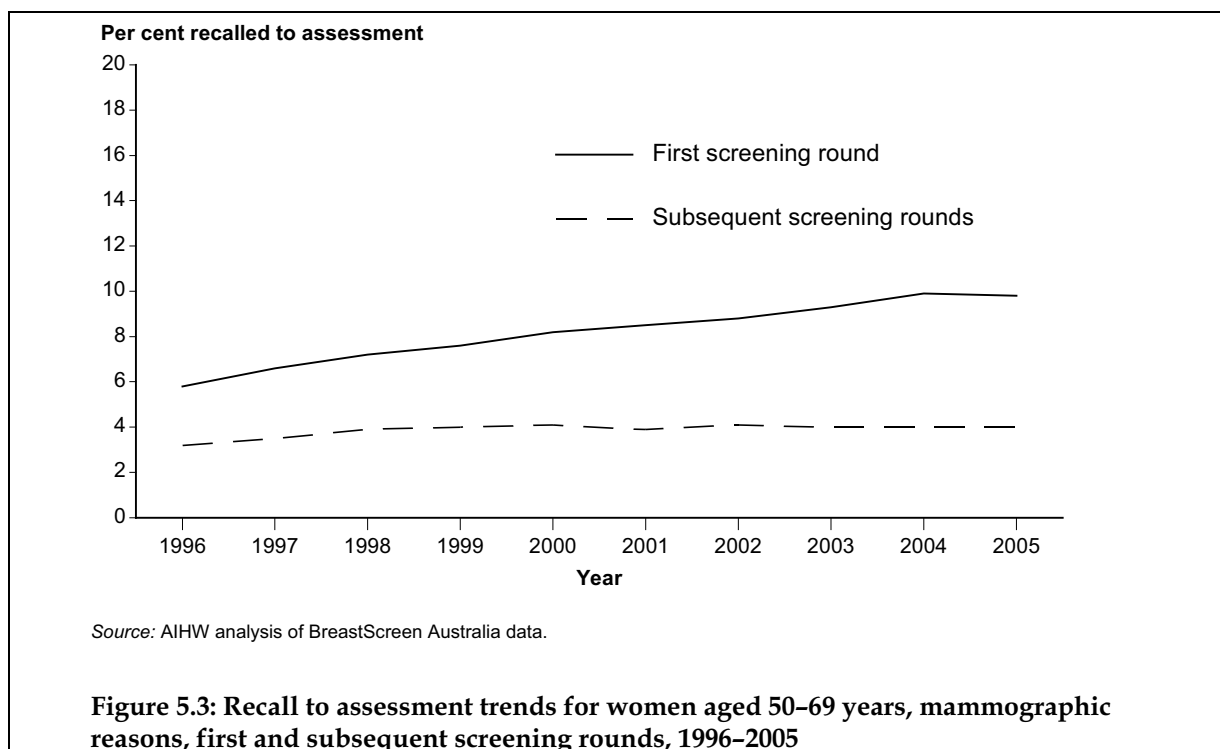


Table 5.4: Recall to assessment trends for women aged 50–69 years, mammographic reasons, first and subsequent screening rounds, 1996–2005

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
	(per cent)									
First screening round										
Rate	5.8*	6.6*	7.2*	7.6*	8.2*	8.5*	8.8*	9.3*	9.9*	9.8*
95% CI	5.7–5.9	6.4–6.7	7.1–7.4	7.4–7.8	8.0–8.5	8.3–8.7	8.6–9.0	9.1–9.6	9.6–10.1	9.6–10.1
Subsequent screening rounds										
Rate	3.2	3.5	3.9	4.0	4.1	3.9	4.1	4.0	4.0	4.0
95% CI	3.1–3.3	3.4–3.6	3.9–4.0	3.9–4.1	4.0–4.1	3.9–4.0	4.0–4.1	4.0–4.1	4.0–4.1	3.9–4.0

* Statistically significant from subsequent rounds.

Note: Rates are the number of women recalled for assessment as a percentage of women screened and age-standardised to the population of women attending a BreastScreen Australia service in 1998.

- There was an increase in the age-standardised rate for women recalled for assessment for mammographic reasons after their first screening round between 1996 and 2005, from 5.8% to 9.8%.
- The age-standardised recall rate for women attending for their second or subsequent screen was relatively stable between 1998 and 2005, oscillating between 3.9% and 4.1%.

For more information, see tables 29–36 in Appendix A. Tables with data other than for the latest reporting period can be found on the AIHW's website at <www.aihw.gov.au>.

Indicator 6 Rescreening

Rescreen rate

The rescreen rate is the proportion of all women screened in a given year whose screening outcome was a recommendation to return for screening in 2 years and who returned for a screen within 27 months. This rate is reported by 5-year age groups for women aged 40 years or over, and for the target age group (50–67 years). Although the BreastScreen Australia target age group is 50–69 years, only women aged 50–67 years are reported for the rescreen indicator. This is because women aged 68–69 years in the index year were outside the target age group 27 months after their index screen.

The rescreen indicator

The rescreen indicator measures the proportion of women who return for screening in the program within the recommended screening interval. The interval between screens is an important factor influencing the level of detection of cancers within the program. Intervals that are too long may allow tumours to grow to the point where symptoms become evident, thus eliminating the advantage of screening. A high rescreen rate is also important for maintaining the participation rate. The anticipated reductions in mortality can be achieved only if a high proportion of women in the target age group attend for screening every 2 years. By having a mammogram every 2 years, a woman can reduce her chance of dying from breast cancer by up to 40% (Duffy et al. 1991; Fletcher et al. 1993; Feig 1998). The recommended interval of 27 months includes another 3 months to allow for potential delays in screening availability and data transfer.

Women in the target age group are re-invited biennially. Some states and territories have a policy of re-inviting a proportion of women annually, for example, women with a strong family history of breast cancer. The data for this indicator include women who are recommended for annual screening as well as those screened biennially.

The proportion of women who returned for screening within the recommended screening interval increased with the number of screens a woman had previously attended. The rescreen rate is greater for women who have attended for two previous screens than for women who have been screened only once before, and greater still for women who have previously attended three or more screening episodes (Table 6.1).

One of the objectives of the BreastScreen Australia Program is 'To rescreen all women in the Program at 2-yearly intervals' (BSANAC & DHAC 2000).

The National Accreditation Standards for rescreen require that:

- ≥75% of women aged 50–67 years who attend for their first screening round within the program are rescreened within 27 months.
- ≥90% of women aged 50–67 years who attend for their second and subsequent screen are rescreened within 27 months of their previous screening episode.

The following table shows the rescreen rates for 2002 and 2003 for women aged 50–67 years. Although the BreastScreen Australia target age group is 50–69 years, only women aged

50–67 years are reported for the rescreen indicator. This is because women aged 68–69 years in the index year were outside the target age group 27 months after their index screen.

The objectives of rescreening at least 75% of women in the age group 50–67 attending for their first screening round and at least 90% of women attending for their second or subsequent screening rounds were not achieved in 2002 and 2003. The age-standardised rescreen rate for women aged 50–67 years attending for their first screening round declined from 61.6% in 2002 to 60.5% in 2003, but this decline was not significant. The age-standardised rescreen rate for women aged 40 years or over attending for their first screening round also declined from 56.6% in 2002 to 52.1% in 2003. The rescreen rates for women aged 50–67 years participating in their second or subsequent rounds were higher than the rescreen rates achieved by women participating in their first screening round but they did not reach the objective of at least 90%.

Table 6.1: Age-standardised rescreen rates for women aged 40 years or over and 50–67 years, screened during 2002 and 2003

	Objective ^(a)	2002	2003
(per cent)			
First screening round			
Rate for women aged 50–67 years	≥75	61.6	60.5
95% CI		60.9–62.2	59.8–61.2
Rate for women aged 40 years or over	..	56.6	52.1
95% CI		56.1–57.1	51.6–52.6
Second screening round			
Rate for women aged 50–67 years	≥90	70.3	69.5
95% CI		69.7–71.0	68.8–70.1
Rate for women aged 40 years or over	..	65.9	61.0
95% CI		65.4–66.4	60.5–61.4
Subsequent screening rounds			
Rate for women aged 50–67 years	≥90	80.7	80.1
95% CI		80.4–81.0	79.8–80.4
Rate for women aged 40 years or over	..	76.4	70.9
95% CI		76.1–76.7	70.7–71.2

(a) Performance objective for BreastScreen services as set out in the National Accreditation Standards (NQM 2004).

Rescreen rate by states and territories, first screening round

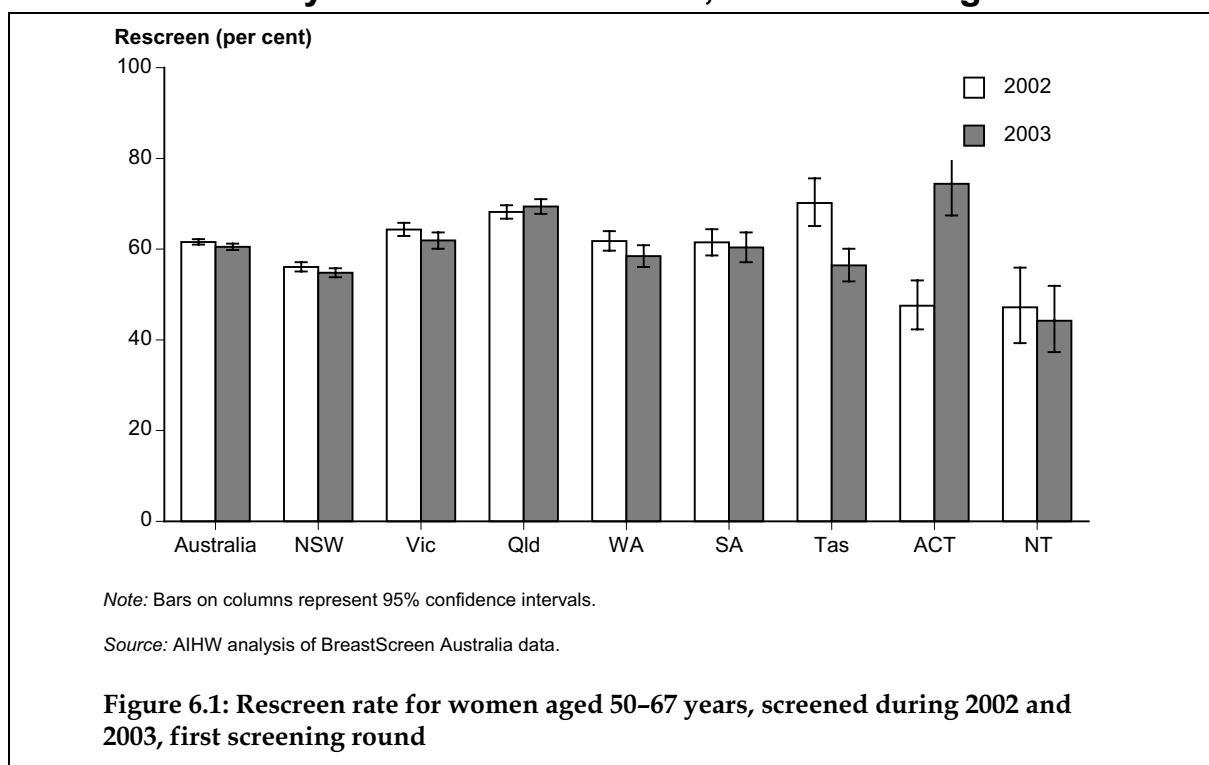


Table 6.2: Rescreen rate for women aged 50–67 years, screened during 2002 and 2003, first screening round

	Australia	NSW	Vic	Qld	WA	SA	Tas	ACT	NT
	(per cent)								
2003 rate	60.5	54.8	61.9	69.4	58.5	60.4	56.4*	74.4*	44.2
95% CI	59.8–61.2	53.7–55.8	60.1–63.7	67.8–71.0	56.1–61.0	57.2–63.8	52.9–60.1	67.5–81.9	37.2–51.8
2002 rate	61.6	56.1	64.3	68.2	61.8	61.5	70.2	47.5	47.2
95% CI	60.9–62.2	55.1–57.1	62.9–65.8	66.7–69.7	59.6–64.0	58.6–64.4	65.1–75.6	42.3–53.1	39.2–55.9

* Statistically different from the 2002 rate.

Note: Rates are the number of women attending for rescreening as a percentage of women screened and age-standardised to the population of women attending a BreastScreen Australia service in 1998.

- The age-standardised national rescreen rate for women aged 50–67 years returning for screening within 27 months of attending a BreastScreen Australia service in 2003 for the first time was 60.5%, a reduction from 61.6% in 2002, but this was not statistically significant. Of all women aged 40 years or over screened in 2003, 52.1% returned for screening, a fall from 56.6% in 2002. This decrease was statistically significant.

For more information, see tables 37–42 in Appendix A. Tables with data other than for the latest reporting period can be found on the AIHW's website at <www.aihw.gov.au>.

Rescreen rate by states and territories, second screening round

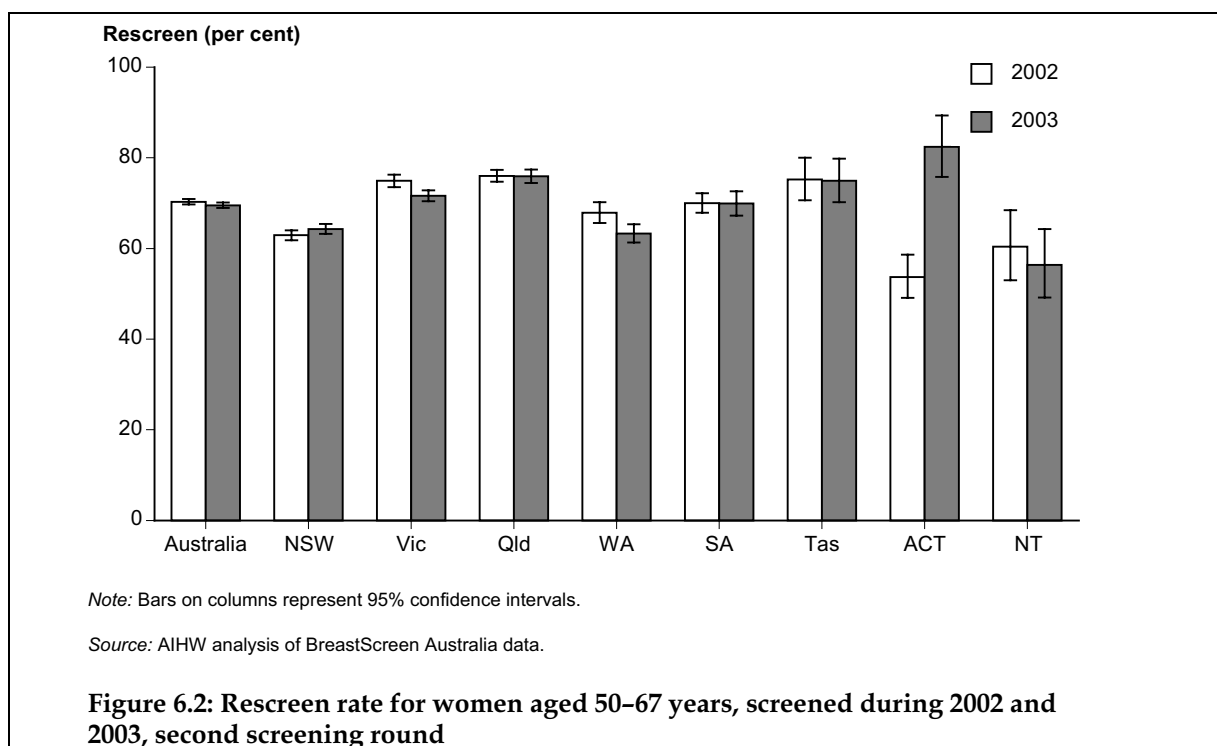


Table 6.3: Rescreen rate for women aged 50–67 years, screened during 2002 and 2003, second screening round

	Australia	NSW	Vic	Qld	WA	SA	Tas	ACT	NT
	(per cent)								
2003 rate	69.5*	64.3*	71.6*	75.9*	63.3*	69.9*	74.9*	82.4	56.4
95% CI	68.8–70.1	63.3–65.4	70.5–72.9	74.4–77.4	61.3–65.4	67.2–72.7	70.3–79.8	75.8–89.4	49.2–64.3
2002 rate	70.3	62.9	74.9	76.0	67.9	70.0	75.2	53.7	60.4
95% CI	69.7–71.0	61.8–63.9	73.6–76.3	74.7–77.3	65.6–70.2	67.8–72.2	70.6–80.0	49.1–58.6	53.0–68.4

* Statistically significant increase between first and second screening round (first round is on previous page).

Note: Rates are the number of women attending for rescreening as a percentage of women screened and age-standardised to the population of women attending a BreastScreen Australia service in 1998.

- The age-standardised national rescreen rate for women aged 50–67 years returning for screening a second time within 27 months of attending a BreastScreen Australia service in 2003 was 69.5%. This is higher than the rate for women attending for their first visit (60.5%).
- There was a decline in the age-standardised rescreen rates for women attending a screening service for their second round from 70.3% in 2002 to 69.5% in 2003. This was not statistically significant.

For more information, see tables 37–42 in Appendix A. Tables with data other than for the latest reporting period can be found on the AIHW's website at <www.aihw.gov.au>.

Rescreen rate by states and territories third and subsequent screening rounds

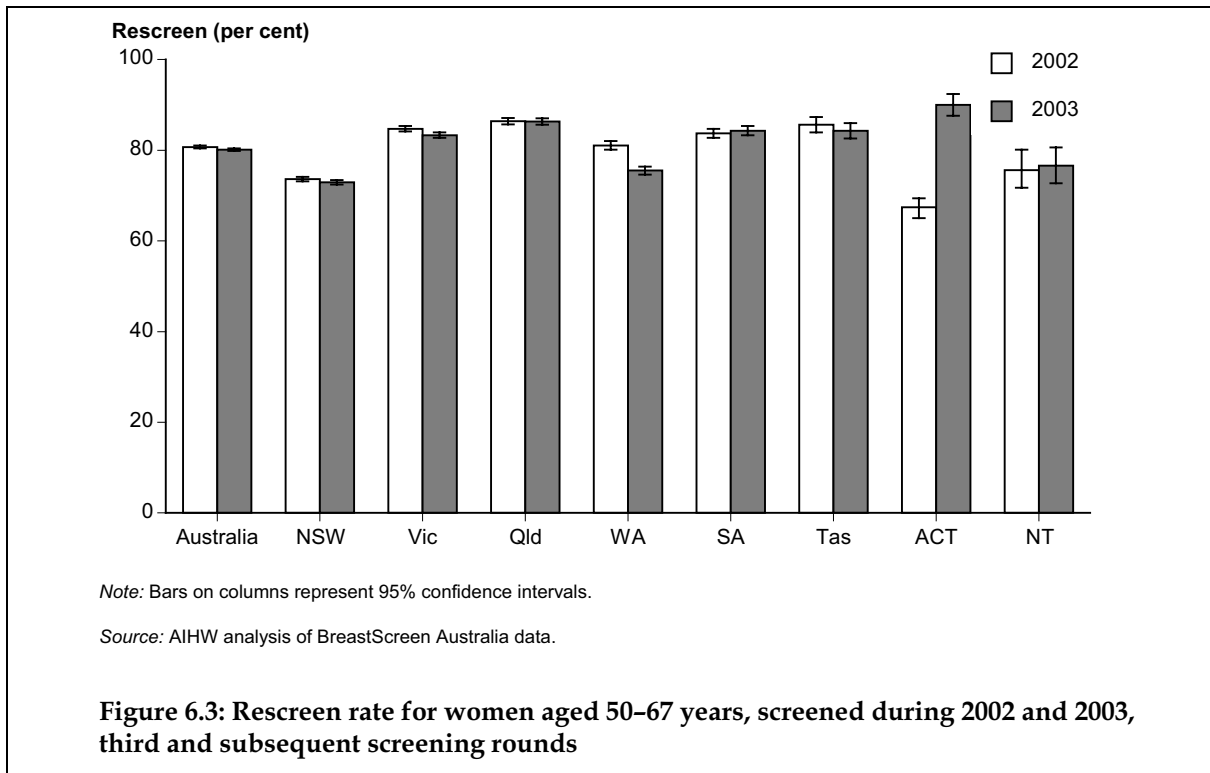


Table 6.4: Rescreen rate for women aged 50–67 years, screened during 2002 and 2003, third and subsequent screening rounds

	Australia	NSW	Vic	Qld	WA	SA	Tas	ACT	NT
	(per cent)								
2003 rate	80.1	72.9	83.3	86.3	75.5*	84.3	84.3	90.0*	76.6
95% CI	79.8–80.4	72.4–73.4	82.7–84.0	85.6–86.9	74.6–76.4	83.3–85.3	82.6–86.0	87.6–92.4	72.7–80.6
2002 rate	80.7	73.6	84.7	86.4	81.0	83.7	85.6	67.4	75.6
95% CI	80.4–81.0	73.1–74.1	84.1–85.4	85.7–87.1	80.1–82.0	82.8–84.7	83.9–87.3	65.4–69.4	71.4–80.1

* Statistically different from the 2002 rate.

Note: Rates are the number of women attending for rescreening as a percentage of women screened and age-standardised to the population of women attending a BreastScreen Australia service in 1998.

- The age-standardised national rescreen rate for women aged 50–67 years returning for screening for their third or subsequent visit within 27 months of attending a BreastScreen Australia service in 2003 was 80.1%. This is much higher than the rates for women attending for their first or second visits (60.5% and 69.5%, respectively).
- The age-standardised national rescreen rate for the third and subsequent screening rounds declined from 80.7% in 2002 to 80.1% in 2003. This was not statistically significant.

For more information, see tables 37–42 in Appendix A. Tables with data other than for the latest reporting period can be found on the AIHW's website at <www.aihw.gov.au>.

Indicator 7 Incidence

7a Incidence of breast cancer

The incidence of breast cancer is calculated per 100,000 women in a 12-month period, by 5-year age groups for women of all ages, and for the target age group (50–69 years).

7b Incidence of ductal carcinoma in situ

The incidence of DCIS is calculated per 100,000 women in a 5-year period, by 10-year age groups for women of all ages, and for the target age group (50–69 years).

The incidence indicator

Registration of cancer cases is required by law in each of the states and territories. The data are collected by state and territory cancer registries and compiled in a national database, the National Cancer Statistics Clearing House, which is held by the AIHW. The data include clinical and demographic information about people with newly diagnosed cancer. The incidence indicator measures the number of new cases of breast cancer in the community each year. It does not distinguish between screen-detected cancers and cancers detected by other methods.

Incidence data provide information about the underlying level of breast cancer in the Australian community. This knowledge can be used to assist in developing policies on breast cancer screening. For example, looking at the trends in breast cancer incidence in different age groups helps to establish the ages at which women are most at risk of developing breast cancer. Incidence data can also be used to set performance standards for breast cancer detection.

This chapter reports the rates of breast cancer to 2004, the latest national data available, and on breast cancer incidence by state and territory, and by geographical region.

Similarly, data on the incidence of DCIS provide information about the underlying level of the condition among Australian women. Data are required to build more knowledge about DCIS, which was rarely detected before screening was introduced. Since the introduction of screening mammography, the detection of DCIS has increased (NBCC et al. 2000). More information is given on DCIS in the chapter headed Indicator 4.

Table 7.1: Incidence of breast cancer per 100,000 women in women aged 50–69 years and all women, 1999, 2003 and 2004

	1999	2003	2004
Rate for women aged 50–69 years	286.9	285.6	288.8
95% CI	279.1–294.9	278.3–293.0	281.6–296.2
Rate for all women	111.2	112.2	112.8
95% CI	109.1–113.4	110.2–114.3	110.8–114.8

Note: Rates are the number of breast cancers detected per 100,000 women and age-standardised to the Australian population at 30 June 2001.

- The incidence of breast cancer for women aged 50–69 years decreased slightly from 286.9 new cases per 100,000 women in 1999 to 285.6 new cases per 100,000 in 2003 and rose to 288.8 new cases per 100,000 in 2004. These changes were not statistically significant.
- The incidence of breast cancer in the total female population increased from 111.2 new cases per 100,000 women in 1999 to 117.2 per 100,000 in 2001 and 2002 before decreasing to 112.2 per 100,000 in 2003 and rising slightly to 112.8 per 100,000 in 2004.

Table 7.2: Incidence of ductal carcinoma in situ per 100,000 in women aged 50–69 years and all women, 1995–1999 and 2000–2004

	1995–1999	2000–2004
Rate for women aged 50–69 years	34.0	43.9
95% CI	32.7–35.3	42.6–45.2
Rate for all women	11.3	14.0
95% CI	11.0–11.6	13.6–14.3

Notes

1. Rates are the number of breast cancers detected per 100,000 women and age-standardised to the Australian population at 30 June 2001.
 2. Comparisons between time periods should be treated with caution because of overlapping periods.
- Incidence of DCIS increased from 34.0 cases per 100,000 women in the target age group (50–69 years) in 1995–1999 to 43.9 cases per 100,000 women in 2000–2004. Similarly, the DCIS incidence rate for all women increased from 11.3 cases per 100,000 women in 1995–1999 to 14.0 cases per 100,000 women in 2000–2004.

Indicator 7a Incidence of breast cancer

Incidence of breast cancer

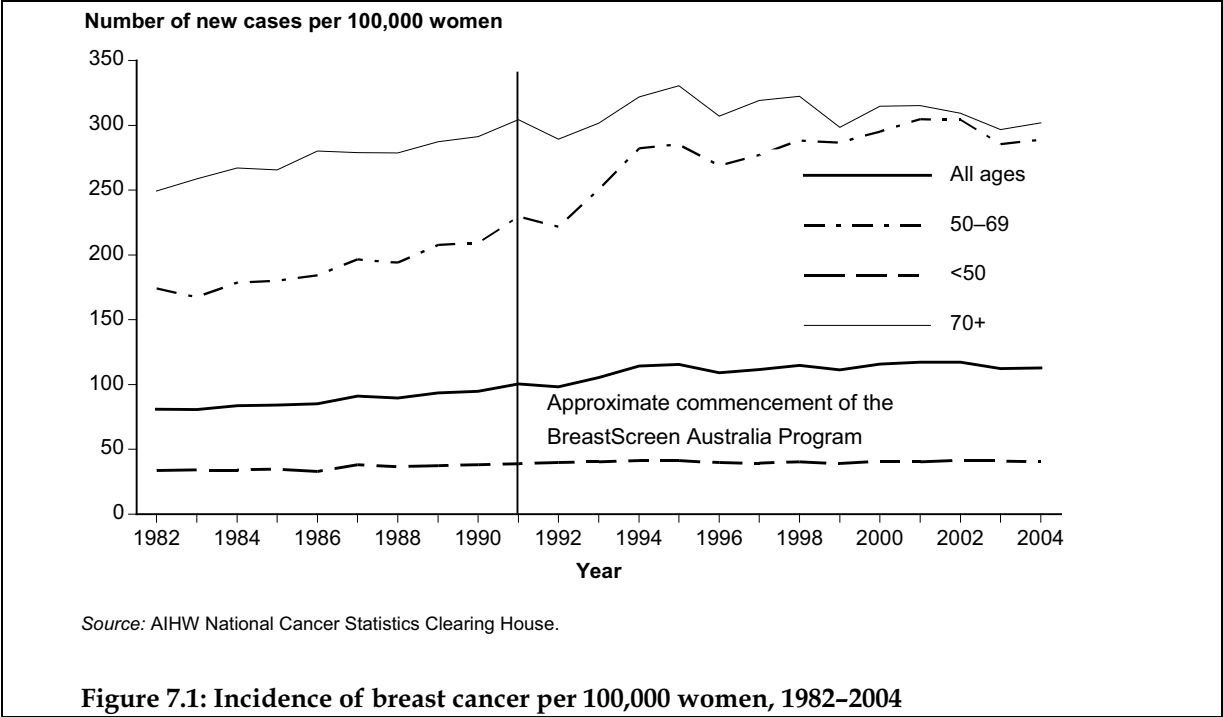


Table 7.3: Incidence of breast cancer per 100,000 women, 1982–2004

Year of diagnosis	Age group (years)			
	All ages	<50	50–69	70+
1982	80.8	33.8	174.2	249.3
1983	80.7	34.3	167.5	258.7
1984	83.5	34.0	178.6	267.0
1985	84.2	34.7	180.1	265.7
1986	85.2	33.1	184.4	280.2
1987	91.1	38.2	196.8	278.9
1988	89.5	36.6	194.3	278.7
1989	93.4	37.4	207.9	287.4
1990	94.6	38.1	209.3	291.3
1991	100.4	38.9	229.8	304.4
1992	98.2	39.9	221.9	289.4
1993	105.3	40.4	250.7	301.7
1994	114.1	41.3	282.4	322.0
1995	115.5	41.5	285.3	330.5
1996	109.1	40.0	269.0	307.0
1997	111.4	39.5	277.1	319.2
1998	114.6	40.4	288.5	322.3
1999	111.2	39.1	286.9	298.4
2000	115.6	40.9	295.1	314.8
2001	117.2	40.4	304.9	315.3
2002	117.2	41.3	304.4	309.2
2003	112.2	41.1	285.6	296.7
2004	112.8	40.4	288.8	301.9

Note: Rates are the number of breast cancers detected per 100,000 women and age-standardised to the Australian population at 30 June 2001.

- With some fluctuations, there was a significant increase over the period 1990–2004 in the age-standardised breast cancer incidence rates for women in the target age group (50–69 years). Incidence increased in this group from 209.3 new cancers per 100,000 women in 1990 to 288.8 per 100,000 women in 2004, although there was a peak of 304.9 new breast cancers per 100,000 women in 2001.
- From 1994 onwards, the incidence rate was relatively constant among women aged less than 50 years, and aged 70 years and over.

For more information, see tables 43–48 in Appendix A. Tables with data other than for the latest reporting period can be found on the AIHW's website at <www.aihw.gov.au>.

Incidence of breast cancer by states and territories

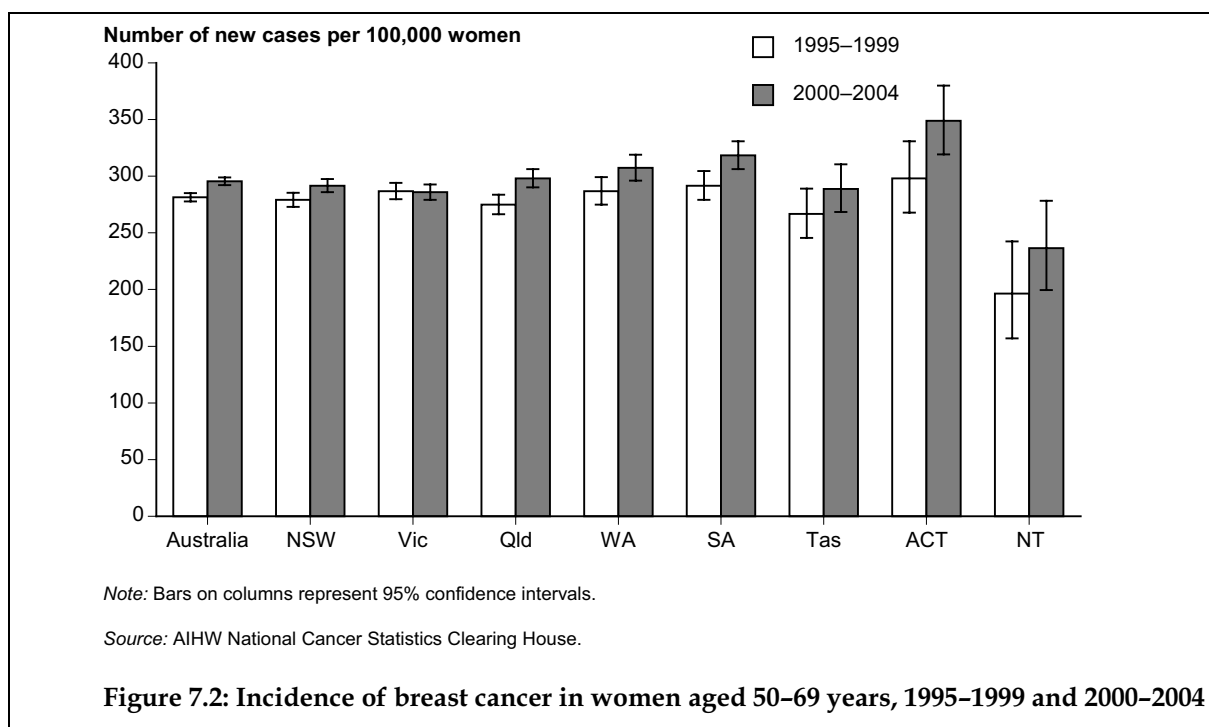


Table 7.4: Incidence of breast cancer in women aged 50–69 years, 1995–1999 and 2000–2004

	Australia	NSW	Vic	Qld	WA	SA	Tas	ACT	NT
Rate									
2000–2004	295.5 [#]	291.6 [#]	285.9	298.1 [#]	307.3	318.3 ^{*#}	288.8	348.7 [*]	236.6 [*]
95% CI	292.2–299.0	285.8–297.5	279.2–292.6	290.3–306.1	296.2–318.8	306.2–330.8	268.4–310.4	319.3–380.0	199.5–278.4
Rate									
1995–1999	281.4	279.0	286.8	274.9	286.8	291.6	266.6	298.0	196.4 [*]
95% CI	277.9–285.1	273.0–285.2	279.7–294.1	266.5–283.5	274.9–299.0	279.2–304.4	245.5–289.1	267.8–330.7	157.0–242.4

* Significantly different from the Australian rate.

Significantly different from the 1995–1999 rate.

Note: Rates are the number of breast cancers detected per 100,000 women and age-standardised to the Australian population at 30 June 2001.

- The national age-standardised incidence rate for 2000–2004 was 295.5 new cancers per 100,000 women. Across the states and territories, incidence rates ranged from 236.6 new cancers per 100,000 women in the Northern Territory to 348.7 new cases per 100,000 women in the Australian Capital Territory. The rates for South Australia and the Australian Capital Territory (318.3 and 348.7 per 100,000 women respectively) were statistically significantly higher than the national rate of 295.5 cases per 100,000 women.
- In 1995–1999, the age-standardised breast cancer incidence rate in the Northern Territory (196.4 new cases per 100,000 women) was lower than the national rate (281.4 per 100,000 women). While the rate increased in 2000–2004 (236.6 per 100,000 women), it remained significantly lower than the national rate (295.5 per 100,000).
- Between 1995–1999 and 2000–2004, there was a significant increase in age-standardised incidence rates in New South Wales, Queensland and South Australia.

For more information, see tables 43–48 in Appendix A. Tables with data other than for the latest reporting period can be found on the AIHW's website at <www.aihw.gov.au>.

Age-specific incidence rates for breast cancer

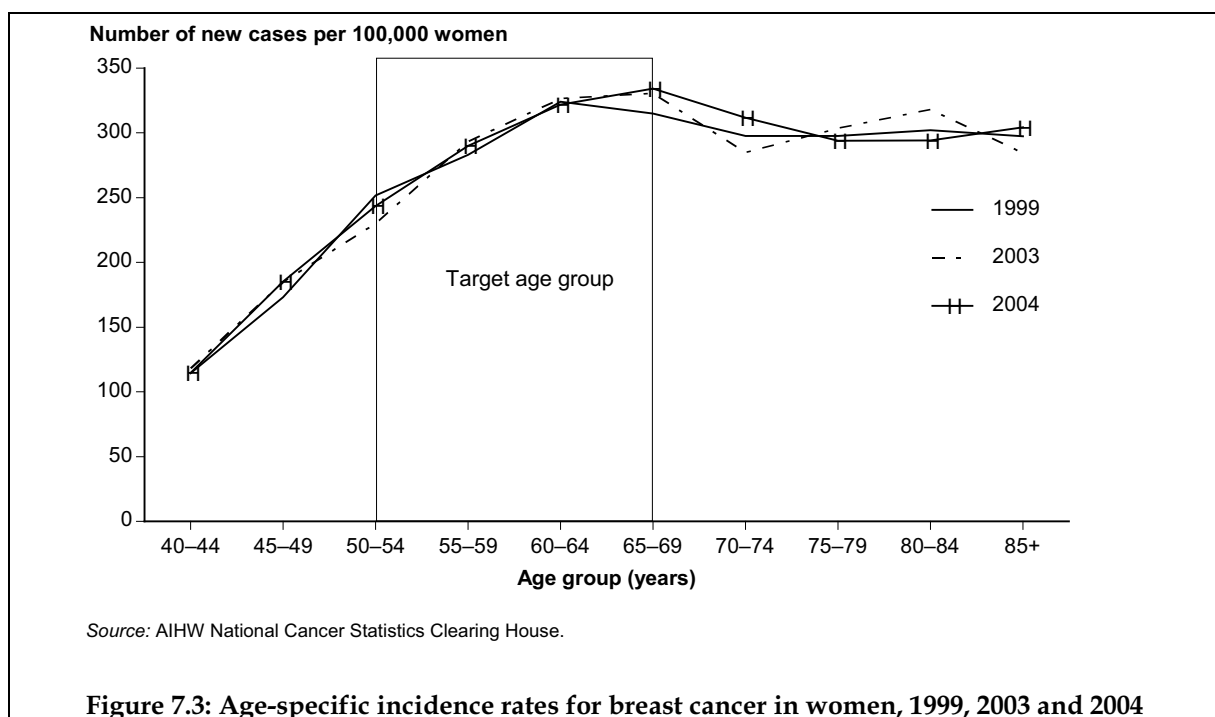


Table 7.5: Age-specific incidence rates for breast cancer in women, 1999, 2003 and 2004

	Age group (years)									
	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80-84	85+
2004 rate	114.6	185.3	243.4	289.9	321.7	334.1	311.6	293.8	294.1	304.2
2003 rate	118.3	185.0	230.1	293.5	326.5	330.5	285.1	303.5	318.1	284.6
1999 rate	114.4	173.2	251.7	283.0	324.0	314.9	297.6	297.6	302.1	297.4

Note: Rates are the number of breast cancers detected per 100,000 women.

- In 1999, the highest breast cancer incidence rate was in the 60-64 age group (324.0 new cases per 100,000 women). In 2003 and 2004, the incidence peak shifted to the 65-69 age group with 330.5 and 334.1 cases per 100,000 women, respectively.

For more information, see tables 43-48 in Appendix A. Tables with data other than for the latest reporting period can be found on the AIHW's website at <www.aihw.gov.au>.

Incidence of breast cancer by region

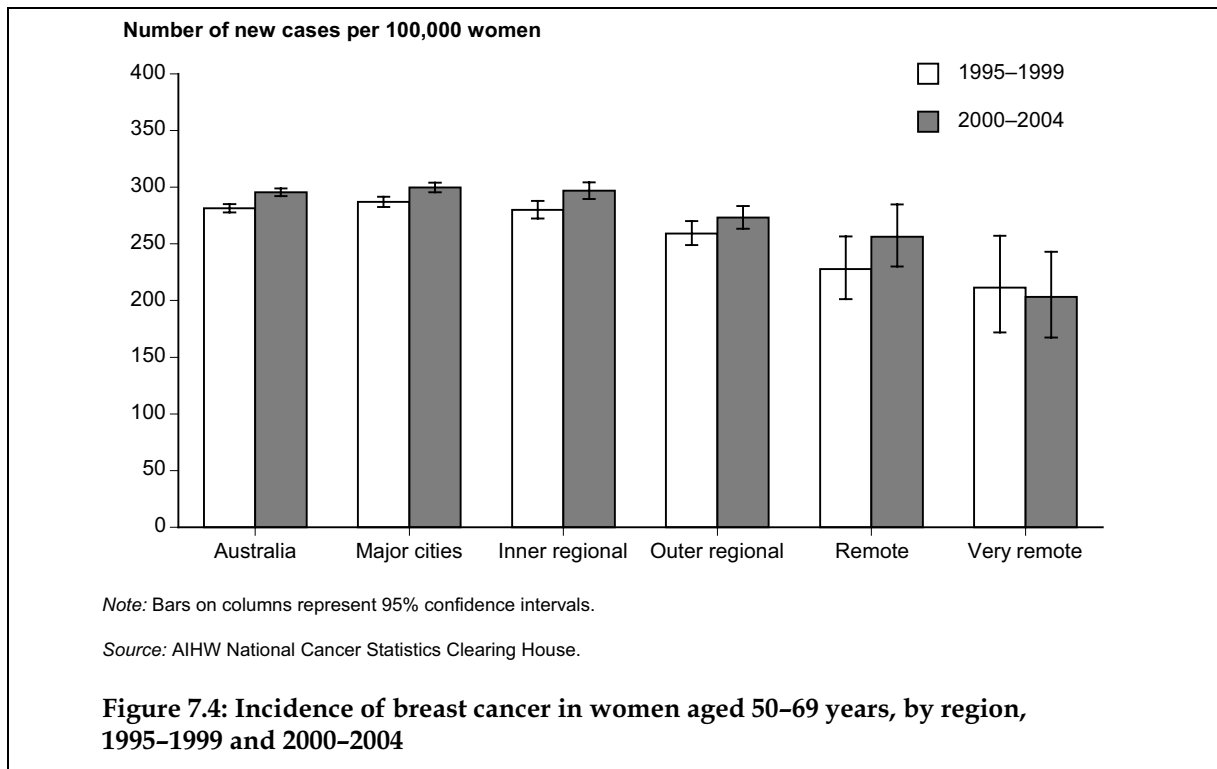


Table 7.6: Incidence of breast cancer in women aged 50-69 years, by region, 1995-1999 and 2000-2004

	Australia	Major cities	Inner regional	Outer regional	Remote	Very remote
2000-2004 rate	295.5 [#]	299.6 [#]	296.9 [#]	273.2*	256.2*	203.1*
95% CI	292.2-299.0	295.4-303.9	289.7-304.2	263.3-283.5	229.9-284.7	167.3-242.9
1995-1999 rate	281.4	287.1	280.1	259.2*	227.8*	211.5*
95% CI	277.9-285.1	282.6-291.6	272.4-287.9	248.8-270.0	201.1-256.6	172.0-257.2

* Significantly different from the Australian rate.

[#] Significantly different from the 1995-1999 rate.

Note: Rates are the number of breast cancers detected per 100,000 women and age-standardised to the Australian population at 30 June 2001.

- In 1995-1999 and 2000-2004, the age-standardised breast cancer incidence rate was significantly lower in outer regional, remote and very remote areas than the national rate.
- Between 1995-1999 and 2000-2004, there was a significant increase in the age-standardised breast cancer incidence rate in major cities and inner regional areas.

For more information, see tables 43-48 in Appendix A. Tables with data other than for the latest reporting period can be found on the AIHW's website at <www.aihw.gov.au>.

Indicator 7b Incidence of ductal carcinoma in situ

Incidence of ductal carcinoma in situ by states and territories

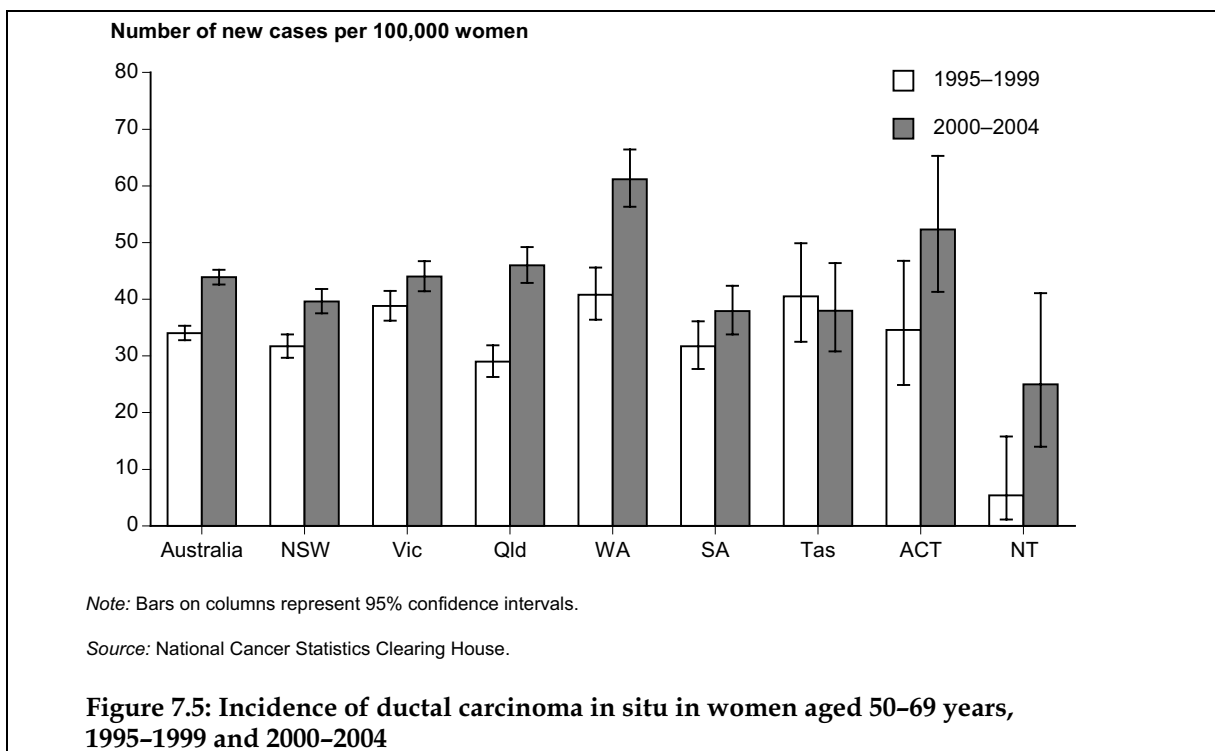


Table 7.7: Incidence of ductal carcinoma in situ in women aged 50-69 years, 1995-1999 and 2000-2004

	Australia	NSW	Vic	Qld	WA	SA	Tas	ACT	NT
Rate 2000-2004	43.9 [#]	39.6 [#]	44.0	46.0 [#]	61.2 ^{#*}	37.9 [*]	38.0	52.3	25.0 [*]
95% CI	42.6-45.2	37.5-41.8	41.4-46.8	43.0-49.2	56.3-66.4	33.8-42.4	30.8-46.4	41.3-65.3	13.9-41.0
Rate 1995-1999	34.0	31.7	38.8	29.0	40.8	31.7	40.5	34.6	5.4
95% CI	32.7-35.3	29.7-33.8	36.2-41.6	26.3-31.9	36.4-45.6	27.7-36.1	32.5-49.8	24.9-46.8	1.1-15.9

* Significantly different from the Australian rate.

[#] Significantly different from the 1995-1999 rate.

Note: Rates are the number of DCIS detected per 100,000 women and age-standardised to the Australian population at 30 June 2001.

- For the period 2000-2004, the national age-standardised incidence rate of DCIS for women aged 50-69 years was 43.9 per 100,000 women, a statistically significant increase on the rate for 1995-1999 of 34.0 per 100,000 women.

For more information, see tables 49-52 in Appendix A. Tables with data other than for the latest reporting period can be found on the AIHW's website at <www.aihw.gov.au>.

Incidence of ductal carcinoma in situ over the years

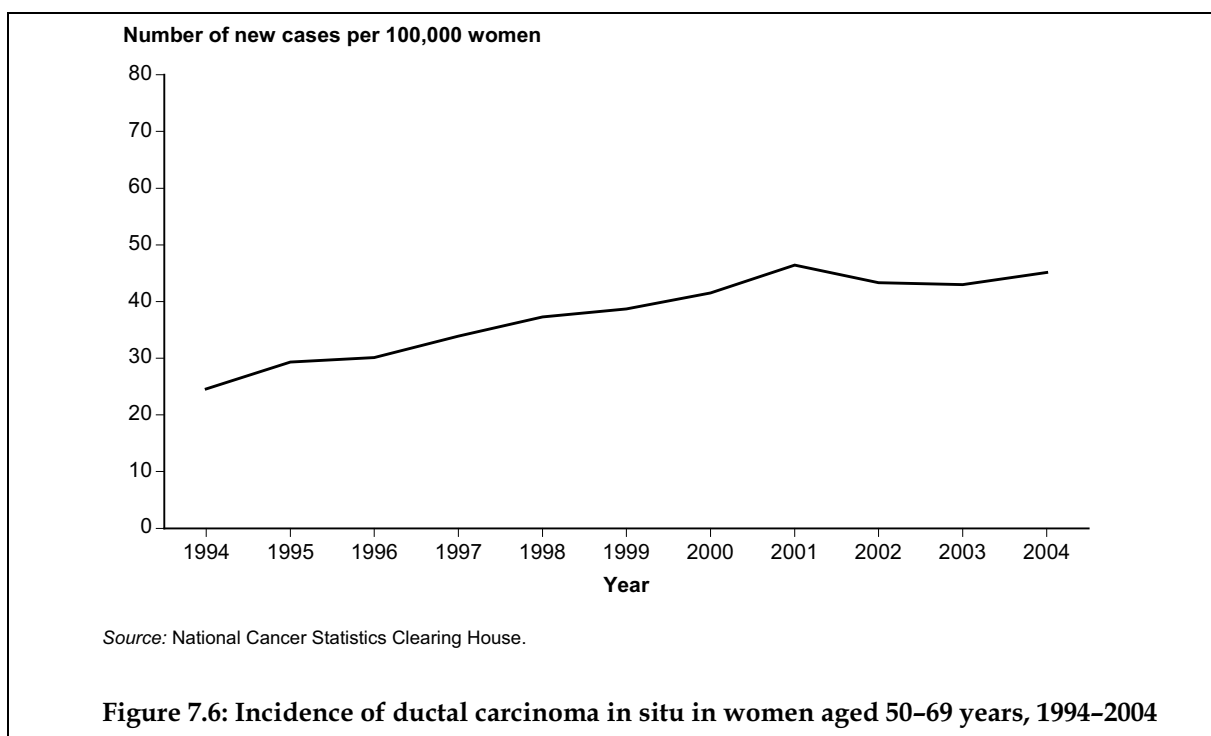


Table 7.8: Incidence of ductal carcinoma in situ in women aged 50–69 years, 1994–2004

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Rate	24.6*	29.3*	30.1*	33.9*	37.3*	38.7*	41.5	46.4	43.3	43.0	45.1
95% CI	22.2– 27.3	26.7– 32.1	27.4– 32.9	31.2– 36.9	34.4– 40.2	35.8– 41.7	38.6– 44.6	43.4– 49.5	40.4– 46.3	40.2– 45.9	42.3– 48.1

* Significantly different from the 2004 rate.

Note: Rates are the number of DCIS detected per 100,000 women and age-standardised to the Australian population at 30 June 2001.

- Age-standardised DCIS incidence increased steadily and significantly from 24.6 per 100,000 women in 1994 to 46.4 per 100,000 in 2001, before falling to 43.3 and 43.0 per 100,000 in 2002 and 2003, respectively, and increasing to 45.1 per 100,000 in 2004.

For more information, see tables 49–52 in Appendix A. Tables with data other than for the latest reporting period can be found on the AIHW's website at <www.aihw.gov.au>.

Indicator 8 Mortality

Mortality rate

The mortality rate from breast cancer is calculated per 100,000 women in a 12-month period, by 5-year age groups for women of all ages, and for the target age group (50–69 years).

The mortality indicator

Mortality statistics are one of the most comprehensively collected national data sets. Registration of death is a legal requirement in Australia and, as a result, compliance is virtually complete. Registration of deaths is the responsibility of the Registrar of Births, Deaths and Marriages in each state and territory. The registrars provide the mortality data to the Australian Bureau of Statistics (ABS) for coding the cause of death and compilation into national statistics. The AIHW also holds these data in a national mortality database. The data presented here are from the AIHW National Mortality Database and are based on the year of registration of the death. Note that about 5% of deaths are not registered until the year following the death (ABS 2002).

Breast cancer is the most common cause of cancer death in Australian women. The number of deaths from breast cancer in recent years has remained fairly stable, with 2,463 women dying from the disease in 1991 and 2,719 women in 2005. However, over this period, the rates of death caused by breast cancer have steadily fallen. The death rate from breast cancer for women aged 50–69 years decreased significantly from 61.5 deaths per 100,000 women in 1996 to 51.8 deaths per 100,000 in 2005. Similarly, mortality rates also decreased significantly for all women from 28.1 deaths per 100,000 in 1996 to 23.7 deaths per 100,000 women in 2005.

The mortality rates presented in this chapter are for the total female population of Australia, not only for those women who participated in the BreastScreen Australia Program.

This chapter shows the trend in breast cancer mortality from 1982–2005, the latest national data available, and on breast cancer mortality by state and territory, by age, by region and by Indigenous status.

Some changes have been made to the coding and processing of mortality data. These are described in Appendix B.

Table 8.1: Number of deaths from breast cancer per 100,000 women in women aged 50–69 years and all women, 1996 and 2005

	1996	2005
Rate for women aged 50–69 years	61.5	51.8
95% CI	57.8–65.5	48.8–54.9
Rate for all women	28.1	23.7
95% CI	27.0–29.2	22.8–24.6

Notes

1. Rates are the number of deaths from breast cancer per 100,000 women and age-standardised to the Australian population at 30 June 2001.
2. Comparisons between time periods should be treated with caution because of overlapping periods.

Source: AIHW National Mortality Database.

Table 8.2: Number of deaths from breast cancer per 100,000 women in women aged 50–69 years, 2001–2005, by region

	Australia	Major cities	Inner regional	Outer regional	Remote	Very remote
Rate 2001–2005	53.0	53.4	52.3	53.0	50.2	44.9
95% CI	51.6–54.4	51.6–55.2	49.4–55.4	48.8–57.6	38.9–63.3	28.6–66.5

Notes

1. Rates are the number of deaths from breast cancer per 100,000 women and age-standardised to the Australian population at 30 June 2001.
2. AIHW mortality data by the Australian Standard Geographical Classification remoteness categories are available from 1997 only; therefore, there is no comparable non-overlapping 5-year period before 2001–2005.

Source: AIHW National Mortality Database.

- For women aged 50–69 years, mortality rates in 2001–2005 were highest in major cities and in outer regional areas with 53.4 and 53.0 deaths per 100,000 women, respectively, and lowest in very remote areas, with 44.9 deaths per 100,000 women. The differences were not statistically significant because of the relatively small number of deaths in very remote areas.

Table 8.3: Number of deaths from breast cancer per 100,000 in women aged 50–69 years, Queensland, Western Australia, South Australia and Northern Territory, 1996–2000 and 2001–2005, by Indigenous status

	Australia	Indigenous	Non-Indigenous
Rate 2001–2005	53.1	45.4	51.8
95% CI	51.7–54.5	29.8–66.3	49.5–54.1
Rate 1996–2000	57.3	55.7	67.2
95% CI	55.7–58.9	35.6–82.9	64.0–70.5

Notes

1. Only Queensland, Western Australia, South Australia, and the Northern Territory have Indigenous death registration data considered to be of a publishable standard; therefore, data from these jurisdictions only are included in the analysis by Indigenous status. Queensland data are included from 1998 onwards.
2. 'Australia' includes all states and territories of Australia. 'Indigenous' and 'Non-Indigenous' includes Queensland, Western Australia, South Australia, and the Northern Territory.
3. Deaths in the 'not-stated' category are included in the column 'Australia', but they are not included in the other columns.

4. Rates are the number of deaths from breast cancer per 100,000 women and age-standardised to the Australian population at 30 June 2001.

Source: AIHW National Mortality Database.

- Table 8.3 presents mortality rates by Indigenous status for Queensland, Western Australia, South Australia and Northern Territory combined. In 2001–2005, in the target age group (50–69 years), the age-standardised mortality rate for Aboriginal and Torres Strait Islander women (45.4 deaths per 100,000 women) was lower than that for non-Indigenous women (51.8 deaths per 100,000 women), but this difference was not statistically significant.
- Similarly, in 1996–2000, there was no statistically significant difference in mortality rates between Aboriginal and Torres Strait Islander women and non-Indigenous women (55.7 and 67.2 deaths per 100,000 women, respectively). From 1996–2000 to 2001–2005 the national mortality rate decreased significantly from 57.3 to 53.1 deaths per 100,000 women. Similarly, the mortality rate for non-Indigenous women decreased significantly from 67.2 in 1996–2000 to 51.8 deaths per 100,000 women in 2001–2005. For Aboriginal and Torres Strait Islander women, the mortality rate decreased from 55.7 to 45.4 deaths per 100,000 women over the same time periods, but these changes were not statistically significant because of small numbers.

Mortality from breast cancer over the years

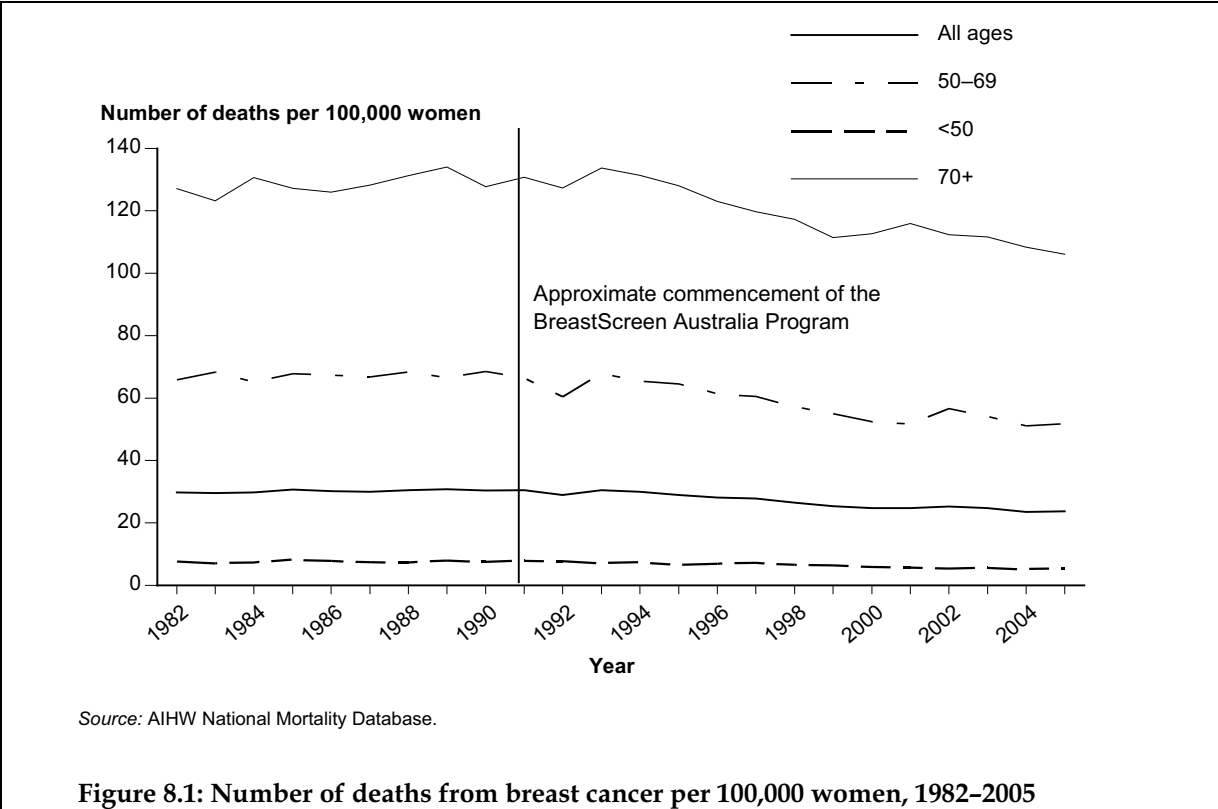


Table 8.4: Number of deaths from breast cancer per 100,000 women, 1982–2005

Year of death	Age group (years)			
	All ages	<50	50–69	70+
1982	29.8	7.6	65.9	127.1
1983	29.5	7.0	68.3	123.2
1984	29.8	7.3	65.2	130.7
1985	30.7	8.3	67.8	127.2
1986	30.2	7.8	67.4	126.0
1987	30.0	7.4	66.8	128.2
1988	30.5	7.3	68.3	131.3
1989	30.8	7.9	66.6	134.1
1990	30.4	7.5	68.5	127.7
1991	30.5	7.8	66.5	130.8
1992	28.9	7.7	60.5	127.3
1993	30.5	7.1	67.9	133.8
1994	30.0	7.4	65.5	131.4
1995	28.9	6.5	64.6	128.0
1996	28.1	6.9	61.5	123.0
1997	27.8	7.2	60.6	119.7
1998	26.5	6.6	57.3	117.3
1999	25.4	6.4	55.0	111.4
2000	24.7	5.9	52.5	112.7
2001	24.7	5.7	51.8	115.9
2002	25.2	5.4	56.7	112.4
2003	24.7	5.6	54.2	111.6
2004	23.5	5.2	51.1	108.4
2005	23.7	5.5	51.8	106.1

Note: Rates are the number of deaths from breast cancer per 100,000 women and age-standardised to the Australian population at 30 June 2001.

- The age-standardised mortality rate for women aged 50–69 years declined steadily from 65.9 deaths per 100,000 women in 1982 to 51.8 deaths per 100,000 women in 2005. Similar patterns of decline in mortality rates can be observed in women aged 70 years or over, women aged less than 50 years and in women of all ages.

For more information, see tables 53–60 in Appendix A. Tables with data other than for the latest reporting period can be found on the AIHW's website at <www.aihw.gov.au>.

Mortality from breast cancer by states and territories

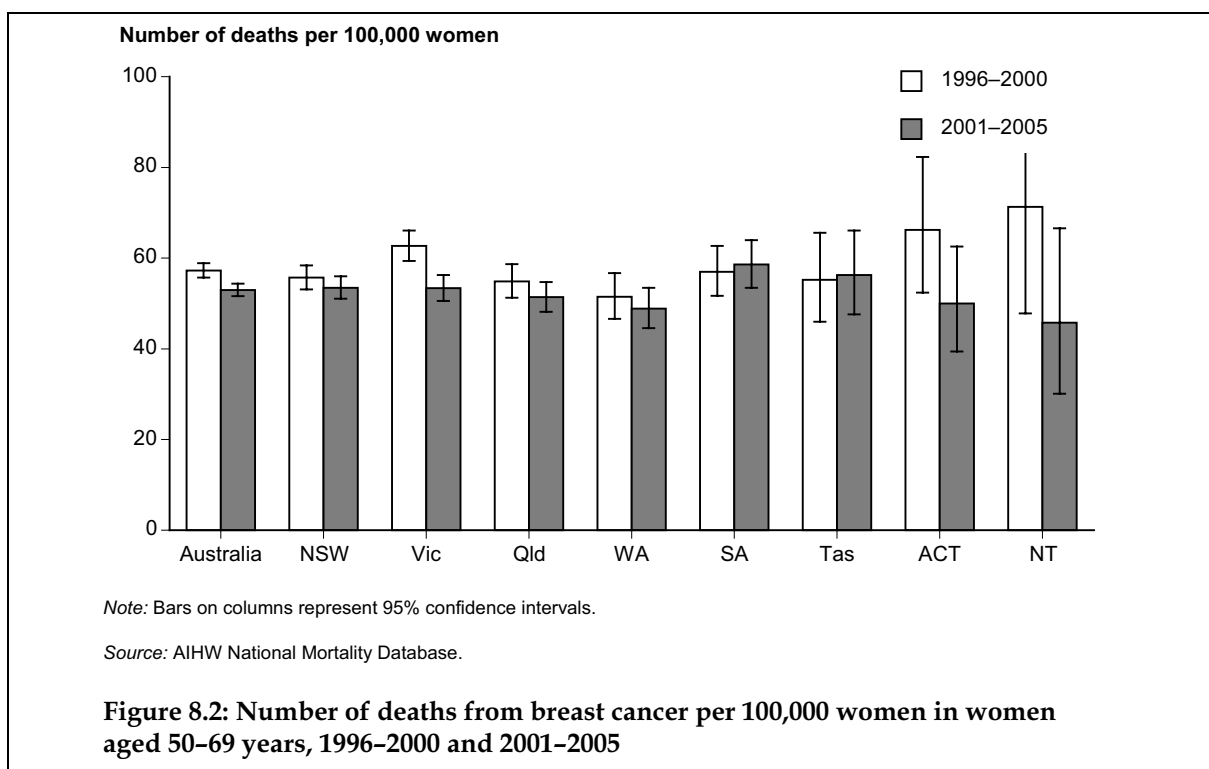


Table 8.5: Number of deaths from breast cancer per 100,000 women in women aged 50-69 years, 1996-2000 and 2001-2005

	Australia	NSW	Vic	Qld	WA	SA	Tas	ACT	NT
Rate 2001-2005	53.1*	53.8	53.5*	51.2	49.2	58.5	56.4	50.2	45.2
95% CI	51.7-54.5	51.4-56.3	50.7-56.4	48.1-54.6	44.8-53.8	53.5-64.0	47.7-66.2	39.5-62.8	29.7-65.7
Rate 1996-2000	57.3	55.7	62.7	54.9	51.5	57.0	55.2	66.2	71.3
95% CI	55.7-58.9	53.0-58.4	59.4-66.1	51.2-58.7	46.6-56.8	51.7-62.8	45.9-65.6	52.4-82.4	47.8-99.6

* Statistically different from the 1996-2000 rate.

Note: Rates are the number of deaths from breast cancer per 100,000 women and age-standardised to the Australian population at 30 June 2001.

- There were statistically significant changes in the mortality rates between the states and territories and across the time periods. The national mortality rate declined between 1996-2000 and 2001-2005 from 57.3 to 53.1 deaths per 100,000 women. Victoria also had significant decreases in mortality between the two time periods.

For more information, see tables 53-60 in Appendix A. Tables with data other than for the latest reporting period can be found on the AIHW's website at <www.aihw.gov.au>.

Age-specific mortality rates for breast cancer

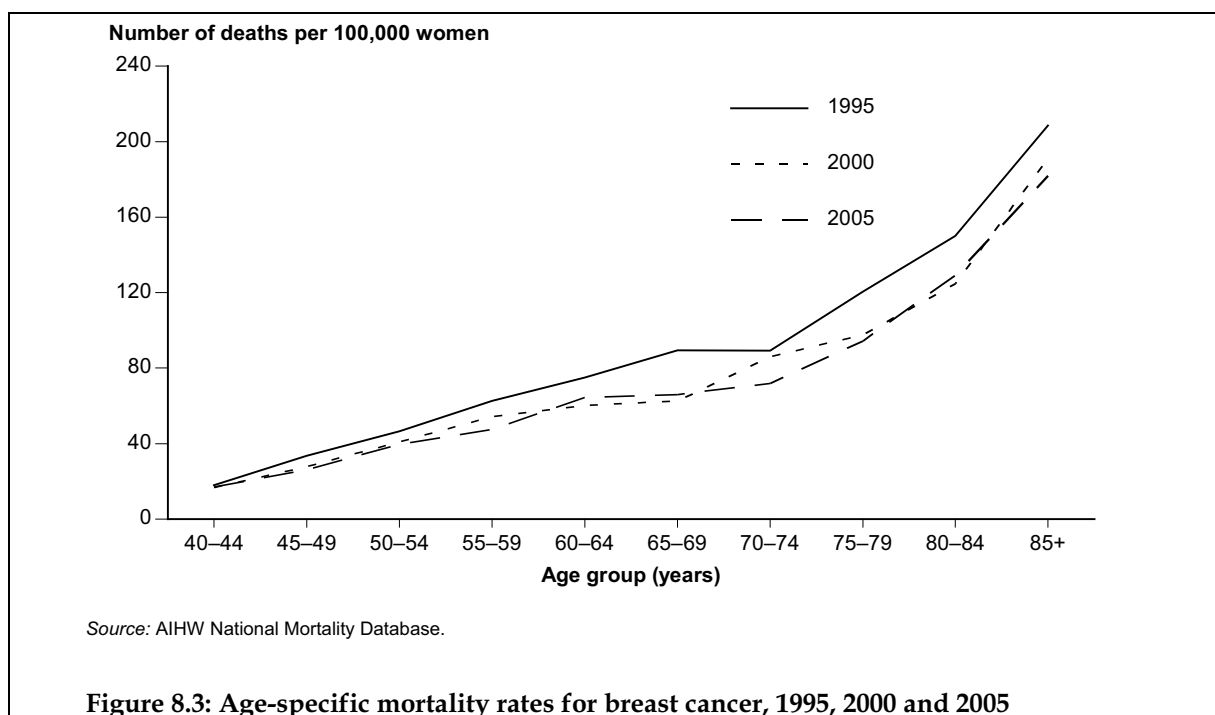


Table 8.6: Age-specific mortality rates for breast cancer, 1995, 2000 and 2005

	Age group (years)									
	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80-84	85+
2005	17.0	26.0	39.6	47.5	64.5	66.0	72.0	94.4	129.3	182.0
2000	16.7	27.7	40.9	54.3	60.2	62.6	86.0	97.7	124.7	191.3
1995	17.9	33.5	46.5	62.7	75.0	89.4	89.2	120.5	150.0	208.6

Note: Rates are the number of deaths from breast cancer per 100,000 women.

- Age-specific mortality rates increased consistently with age. In 1995, the age-specific rate for women aged 40-44 years was 17.9 per 100,000 women increasing to 208.6 deaths per 100,000 for women aged 85 years or over. In 2005, the age-specific rate for women aged 40-44 years was 17.0 deaths per 100,000 women increasing to 182.0 deaths per 100,000 for women aged 85 years or over.
- The mean age at death for women dying from breast cancer increased from 66 years in 1995 to 67 years in 2005. The median age at death decreased from 67 years in 1995 to 66 years in 2005.

For more information, see tables 53-60 in Appendix A. Tables with data other than for the latest reporting period can be found on the AIHW's website at <www.aihw.gov.au>.

Mortality from breast cancer by region for women aged 50–69 years

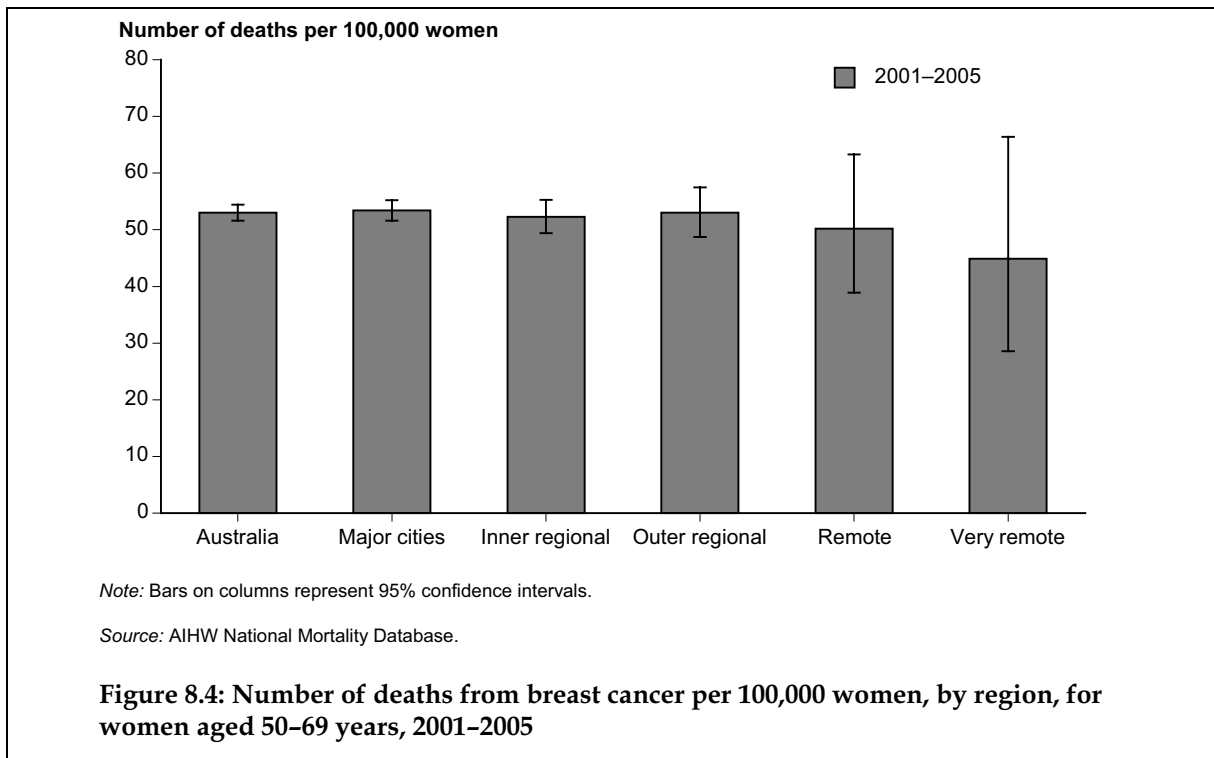


Table 8.7: Number of deaths from breast cancer per 100,000 women, by region, for women aged 50–69 years, 2001–2005

	Australia	Major cities	Inner regional	Outer regional	Remote	Very remote
Rate 2001–2005	53.0	53.4	52.3	53.0	50.2	44.9
95% CI	51.6–54.4	51.6–55.2	49.4–55.4	48.8–57.6	38.9–63.3	28.6–66.5

Notes

1. Rates are the number of deaths from breast cancer per 100,000 women and age-standardised to the Australian population at 30 June 2001.
2. The Australian Standard Geographical Classification was used to create the above categories (ABS 2001) and applied to the area of usual residence of the deceased persons.
3. AIHW Mortality data by Australian Standard Geographical Classification remoteness categories are available from 1997 only; therefore, there is no comparable non-overlapping 5-year period before 2001–2005.

- For women in the target age group (50–69 years), breast cancer mortality rates in 2001–2005 were highest in major cities with 53.4 deaths per 100,000 women, and lowest in very remote areas, with 44.9 deaths per 100,000 women. The difference was not statistically significant because of the relatively small number of deaths in very remote areas.

For more information, see tables 53–60 in Appendix A. Tables with data other than for the latest reporting period can be found on the AIHW's website at <www.aihw.gov.au>.

Mortality from breast cancer by region for women of all ages

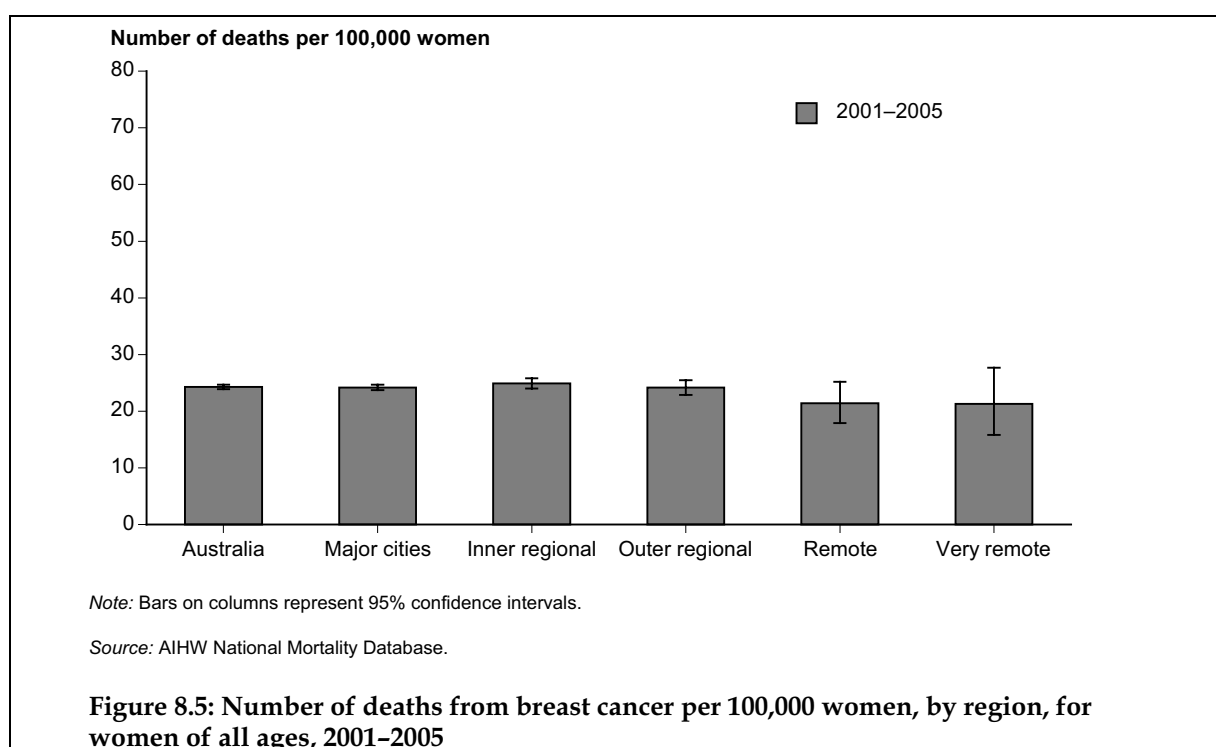


Table 8.8: Number of deaths from breast cancer per 100,000 women, by region, for women of all ages, 2001-2005

	Australia	Major cities	Inner regional	Outer regional	Remote	Very remote
Rate 2001-2005	24.3	24.2	24.9	24.2	21.4	21.3
95% CI	23.9-24.7	23.7-24.7	24.0-25.8	22.9-25.5	18.0-25.3	15.9-27.8

Notes

1. Rates are the number of deaths from breast cancer per 100,000 women and age-standardised to the Australian population at 30 June 2001.
2. The Australian Standard Geographical Classification was used to create the above categories (ABS 2001) and applied to the area of usual residence of the deceased persons.
3. AIHW Mortality data by Australian Standard Geographical Classification remoteness categories are available from 1997 only; therefore, there is no comparable non-overlapping 5-year period before 2001-2005.

- For women of all ages, mortality rates in 2001-2005 were highest in inner regional areas with 24.9 deaths per 100,000 women, and lowest in very remote areas, with 21.3 deaths per 100,000 women. The difference was not statistically significant because of the relatively small number of deaths in very remote areas.

For more information, see tables 53-60 in Appendix A. Tables with data other than for the latest reporting period can be found on the AIHW's website at <www.aihw.gov.au>.

Mortality from breast cancer by Indigenous status for women aged 50–69 years

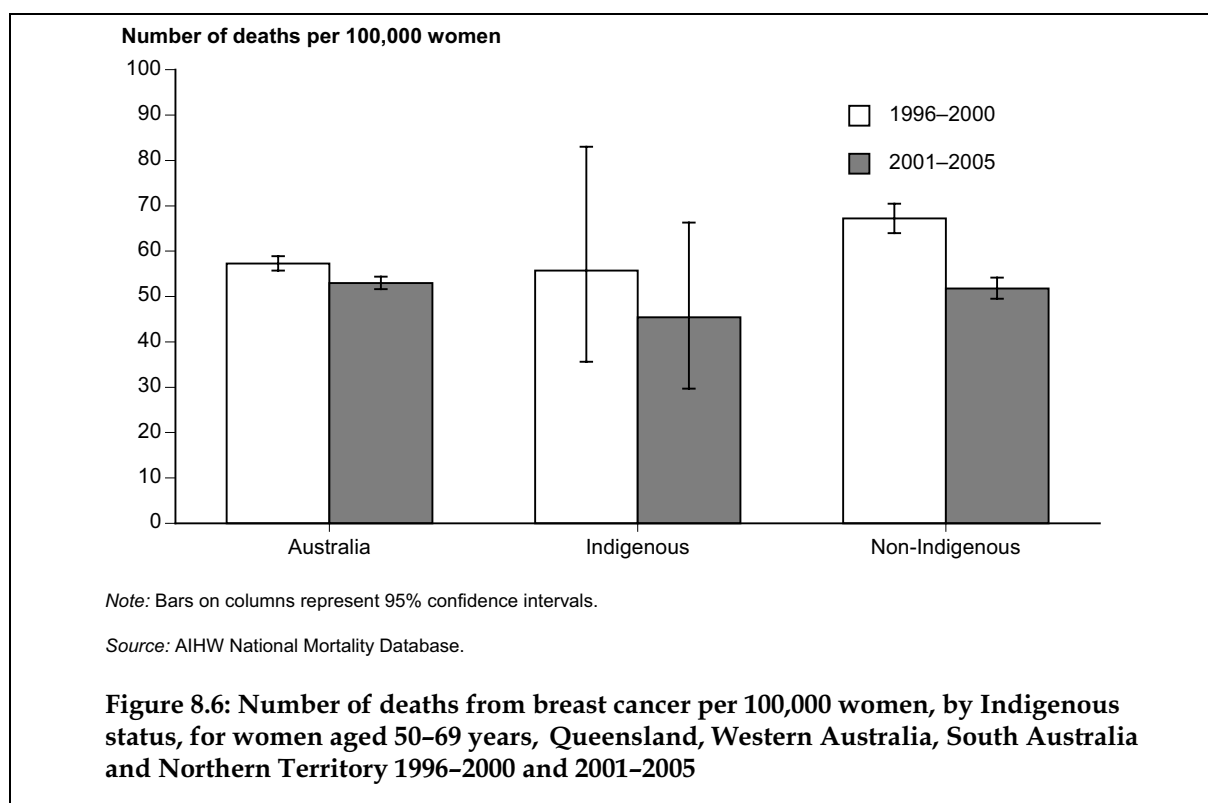


Table 8.9: Number of deaths from breast cancer per 100,000 women, by Indigenous status, for women aged 50–69 years, Queensland, Western Australia, South Australia and Northern Territory 1996–2000 and 2001–2005

	Australia	Indigenous	Non-Indigenous
Rate 2001–2005	53.1*	45.4	51.8*
95% CI	51.7–54.5	29.8–66.3	49.5–54.1
Rate 1996–2000	57.3	55.7	67.2
95% CI	55.7–58.9	35.6–82.9	64.0–70.5

* Statistically different from the 1996–2000 rate.

Notes

1. Only Queensland, Western Australia, South Australia and the Northern Territory had Indigenous death registration data considered to be of a publishable standard at the time this report was prepared. Therefore, data from these jurisdictions only are included in the analysis by Indigenous status. Queensland data are included from 1998 onwards.
2. 'Australia' includes all states and territories of Australia. 'Indigenous' and 'Non-Indigenous' includes Queensland, Western Australia, South Australia, and the Northern Territory.
3. Rates are the number of deaths from breast cancer per 100,000 women and age-standardised to the Australian population at 30 June 2001.

- In 2001–2005, in the target age group (50–69 years), the age-standardised mortality rate for Aboriginal and Torres Strait Islander women in Queensland, Western Australia, South Australia and Northern Territory combined (45.4 deaths per 100,000 women) was lower than that for non-Indigenous women (51.8 deaths per 100,000 women), but this difference was not statistically significant. Similarly, in 1996–2000, there was no statistically significant difference in mortality rates between the Aboriginal and Torres

Strait Islander and non-Indigenous populations (55.7 and 67.2 deaths per 100,000 women, respectively).

- From 1996–2000 to 2001–2005, national breast cancer mortality decreased from 57.3 to 53.1 deaths per 100,000 women. Mortality for non-Indigenous women decreased from 67.2 in 1996–2000 to 51.8 deaths per 100,000 women in 2001–2005. For Aboriginal and Torres Strait Islander women, the mortality rate decreased from 55.7 to 45.4 deaths per 100,000 women between these periods, but this change was not statistically significant.

For more information, see tables 53–60 in Appendix A. Tables with data other than for the latest reporting period can be found on the AIHW's website at <www.aihw.gov.au>.

Mortality from breast cancer by Indigenous status for women of all ages

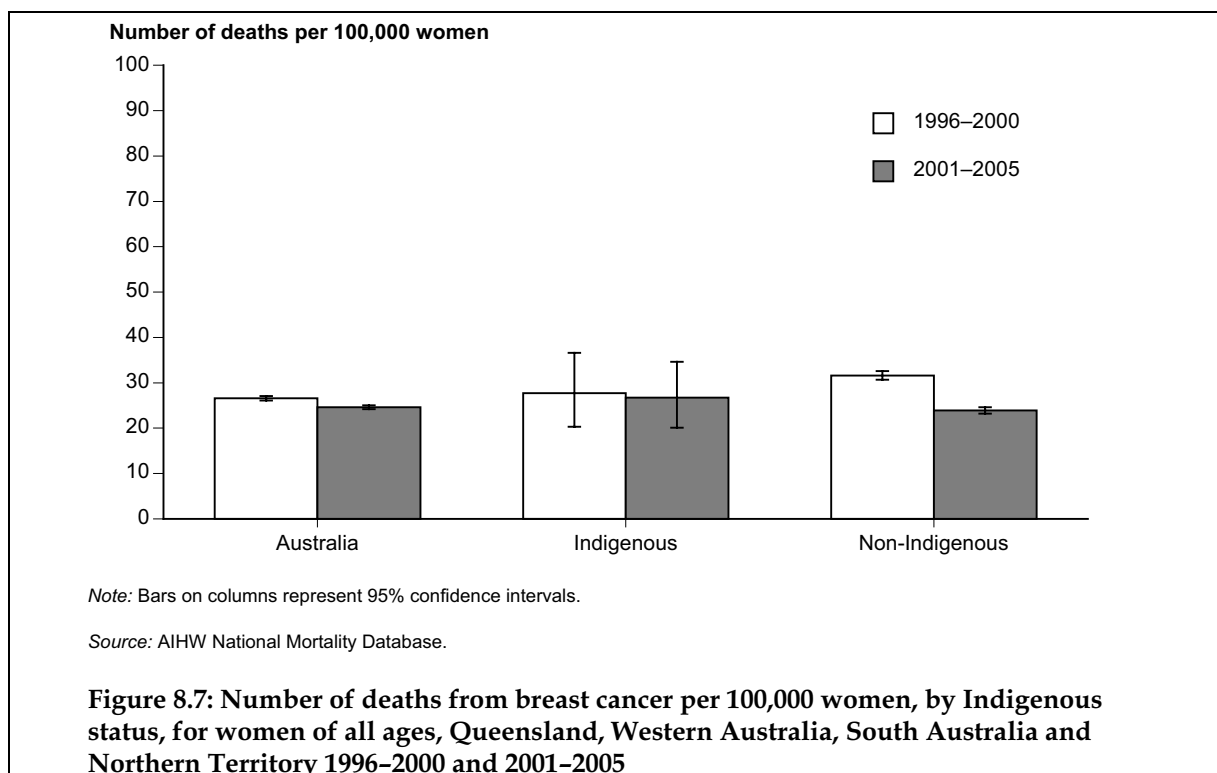


Table 8.10: Number of deaths from breast cancer per 100,000 women, by Indigenous status, for women of all ages, Queensland, Western Australia, South Australia and Northern Territory 1996–2000 and 2001–2005

	Australia	Indigenous	Non-Indigenous
Rate 2001–2005	24.6*	26.7	23.9*
95% CI	24.1–25.0	20.1–34.6	23.3–24.6
Rate 1996–2000	26.6	27.7	31.6
95% CI	26.1–27.1	20.4–36.7	30.6–32.5

* Statistically different from the 1996–2000 rate.

Notes

1. Only Queensland, Western Australia, South Australia and the Northern Territory had Indigenous death registration data considered to be of a publishable standard at the time this report was prepared. Therefore, data from these jurisdictions only are included in the analysis by Indigenous status. Queensland data are included from 1998 onwards.
2. 'Australia' includes all states and territories of Australia. 'Indigenous' and 'Non-Indigenous' includes Queensland, Western Australia, South Australia, and the Northern Territory.
3. Rates are the number of deaths from breast cancer per 100,000 women and age-standardised to the Australian population at 30 June 2001.

- In 2001–2005, the age-standardised breast cancer mortality rate for Aboriginal and Torres Strait Islander women of all ages in Queensland, Western Australia, South Australia and Northern Territory combined (26.7 deaths per 100,000 women) was not significantly different from the rate for non-Indigenous women (23.9 deaths per 100,000 women) and from the national rate (24.6 deaths per 100,000 women).

- From 1996–2000 to 2001–2005, the national mortality rate decreased from 26.6 deaths per 100,000 women to 24.6 per 100,000. There was no significant change in the mortality rate for Aboriginal and Torres Strait Islander women in Queensland, Western Australia, South Australia and Northern Territory from 27.7 per 100,000 women in 1996–2000 to 26.7 deaths per 100,000 in 2001–2005.

For more information, see tables 53–60 in Appendix A. Tables with data other than for the latest reporting period can be found on the AIHW's website at <www.aihw.gov.au>.

Appendix A Additional data tables

As well as the additional data tables that follow, trend tables are published on the Internet. The tables can be found on the AIHW's website at <www.aihw.gov.au>.

Indicator 1 Participation

Table 1: Number of women participating in BreastScreen Australia, by age, states and territories, 2004–2005

Age group (years)	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
40–44	22,777	12,152	38,526	8,593	6,286	3,688	116	525	92,663
45–49	40,484	20,676	54,233	16,543	12,203	6,054	1,463	1,174	152,830
50–54	106,120	91,815	71,879	35,353	32,527	8,912	5,323	2,213	354,142
55–59	106,351	85,535	70,967	33,167	30,671	9,687	5,886	2,025	344,289
60–64	85,107	69,253	54,748	25,317	23,982	7,421	4,037	1,267	271,132
65–69	70,147	56,097	42,755	20,468	20,092	6,026	2,906	666	219,157
70–74	28,114	42,766	30,829	5,773	6,573	4,144	804	178	119,181
75–79	18,254	11,949	9,584	2,475	3,485	816	258	78	46,899
80–84	6,577	1,762	1,936	679	887	215	84	35	12,175
85+	1,276	318	474	146	141	25	16	7	2,403
Ages 40+ years	485,207	392,323	375,931	148,514	136,847	46,988	20,893	8,168	1,614,871
Ages 50–69 years	367,725	302,700	240,349	114,305	107,272	32,046	18,152	6,171	1,188,720

Note: Period covers 1 January 2004 to 31 December 2005.

Source: AIHW analysis of BreastScreen Australia data.

Table 2: Percentage of women participating in BreastScreen Australia, states and territories, 2004–2005

Age group (years)	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
	(per cent)								
40–44	8.8	6.3	25.3	11.1	10.7	19.7	0.9	6.8	11.9
45–49	16.8	11.5	38.3	22.4	21.4	33.4	11.7	16.7	20.9
50–54	48.5	55.9	55.3	52.5	60.7	52.3	45.7	36.3	53.0
55–59	53.5	57.5	59.5	56.9	61.6	61.0	59.1	45.1	56.9
60–64	55.4	61.3	61.0	58.6	63.7	60.3	61.4	45.3	59.1
65–69	54.2	58.5	60.8	58.1	62.4	59.1	59.9	41.4	57.7
70–74	24.9	51.1	53.3	19.9	23.1	47.6	21.1	17.1	36.6
75–79	17.4	15.4	18.4	9.8	12.5	10.4	7.6	10.7	15.7
80–84	8.1	2.9	4.9	3.5	4.0	3.4	3.2	7.7	5.2
85+	1.8	0.6	1.4	0.8	0.7	0.5	0.8	2.2	1.2
Ages 40+ years									
Crude rate	30.9	33.6	42.4	33.3	35.4	39.0	29.7	25.3	34.5
ASR(A)	31.4	34.2	42.7	33.2	36.1	39.4	29.3	25.0	35.0
95% CI	31.3–31.5	34.1–34.3	42.5–42.8	33.1–33.4	35.9–36.3	39.0–39.8	28.9–29.7	24.5–25.6	34.9–35.0
Ages 50–69 years									
Crude rate	52.5	58.0	58.7	56.0	61.9	57.8	55.0	41.1	56.3
ASR(A)	52.3	58.0	58.6	56.0	61.9	57.6	55.2	41.5	56.2
95% CI	52.2–52.5	57.8–58.2	58.4–58.9	55.7–56.3	61.5–62.3	56.9–58.2	54.4–56.0	40.4–42.5	56.1–56.3

Notes

1. Period covers 1 January 2004 to 31 December 2005.
2. Rates are the number of women screened as a percentage of the eligible female population calculated as the average of the 2004 and 2005 Australian Bureau of Statistics estimated resident population and age-standardised to the Australian population at 30 June 2001.
3. BreastScreen Australia services are not provided in some remote areas of the Northern Territory. This may affect the Northern Territory's participation rate.

Source: AIHW analysis of BreastScreen Australia data.

Table 3: Participation in BreastScreen Australia, by age and region, 2004–2005

Age group (years)	Number/ rate	Major cities	Inner regional	Outer regional	Remote	Very remote	Australia
40–44	Number	55,461	20,378	13,342	2,316	1,161	92,658
	Rate	10.8	12.4	17.0	19.4	19.1	11.9
45–49	Number	92,080	34,090	21,399	3,627	1,638	152,834
	Rate	19.2	21.7	29.0	32.5	31.2	20.9
50–54	Number	231,270	78,087	37,657	5,106	2,021	354,142
	Rate	52.4	53.7	55.5	53.2	43.8	53.0
55–59	Number	219,318	80,066	38,272	4,898	1,736	344,290
	Rate	55.3	58.6	60.4	59.1	46.9	56.9
60–64	Number	167,000	67,670	31,371	3,852	1,225	271,118
	Rate	57.5	62.2	62.5	61.6	47.5	59.1
65–69	Number	134,075	55,626	25,804	2,831	835	219,170
	Rate	55.1	60.1	62.0	60.0	46.4	57.7
70–74	Number	71,903	31,364	13,999	1,462	452	119,180
	Rate	34.2	40.2	41.4	39.5	32.4	36.6
75–79	Number	29,486	11,270	5,342	595	209	46,901
	Rate	14.8	16.1	18.0	20.7	20.4	15.7
80–84	Number	7,843	2,744	1,350	192	46	12,175
	Rate	5.0	5.2	6.2	9.2	6.4	5.2
85+	Number	1,520	531	294	45	13	2,403
	Rate	1.1	1.2	1.5	2.3	2.1	1.2
Ages 40+ years	Number	1,009,956	381,826	188,830	24,923	9,336	1,614,871
	Crude rate	32.9	36.3	39.3	39.8	33.6	34.5
	ASR(A)	33.6	36.3	39.2	39.6	33.3	35.0
	95% CI	33.5–33.6	36.2–36.4	39.0–39.4	39.1–40.1	32.6–33.9	34.9–35.0
Ages 50–69 years	Number	751,663	281,449	133,104	16,687	5,818	1,188,720
	Crude rate	54.8	58.3	59.7	57.8	45.8	56.3
	ASR(A)	54.7	58.0	59.5	57.8	45.9	56.2
	95% CI	54.6–54.9	57.8–58.2	59.2–59.8	56.9–58.7	44.7–47.1	56.1–56.3

Notes

1. Period covers 1 January 2004 to 31 December 2005.
2. Rates are the number of women screened as a percentage of the eligible female population calculated as the average of the 2004 and 2005 Australian Bureau of Statistics estimated resident population and age-standardised to the Australian population at 30 June 2001.
3. The Australian Standard Geographical Classification was used to create the above categories (ABS 2001).
4. Totals may not add up due to rounding.

Source: AIHW analysis of BreastScreen Australia data.

Table 4: Participation in BreastScreen Australia, by age and socioeconomic status, 2004–2005

Age group (years)	Number/ rate	First quintile	Second quintile	Third quintile	Fourth quintile	Fifth quintile	Australia
40–44	Number	16,951	19,399	20,736	19,125	16,448	92,658
	Rate	10.5	12.3	13.2	12.5	11.0	11.9
45–49	Number	29,601	30,731	33,518	31,760	27,223	152,834
	Rate	19.0	20.9	22.8	22.1	19.7	20.9
50–54	Number	79,317	72,261	71,076	68,765	62,722	354,142
	Rate	54.3	54.5	53.7	52.4	49.6	53.0
55–59	Number	75,056	67,288	69,434	68,909	63,602	344,290
	Rate	57.3	57.0	58.2	56.6	55.2	56.9
60–64	Number	55,021	51,078	55,256	57,199	52,563	271,118
	Rate	59.4	59.2	59.3	58.7	58.8	59.1
65–69	Number	41,149	40,111	44,956	48,268	44,686	219,170
	Rate	57.0	58.5	57.4	57.7	58.1	57.7
70–74	Number	22,791	23,683	24,761	25,138	22,807	119,180
	Rate	36.9	40.3	36.7	35.2	34.6	36.6
75–79	Number	10,197	8,811	9,341	10,055	8,498	46,901
	Rate	17.0	16.1	14.9	15.7	14.6	15.7
80–84	Number	2,971	2,110	2,537	2,485	2,073	12,175
	Rate	5.9	4.9	5.2	5.3	4.8	5.2
85+	Number	582	391	480	548	402	2,403
	Rate	1.2	1.0	1.1	1.4	1.2	1.2
Ages 40+ years	Number	333,637	315,863	332,096	332,252	301,023	1,614,871
	Crude rate	34.0	34.9	35.0	34.9	33.5	34.5
	ASR(A)	34.8	35.6	35.7	35.0	33.7	35.0
	95% CI	34.6–34.9	35.5–35.8	35.6–35.8	34.9–35.1	33.5–33.8	34.9–35.0
Ages 50–69 years	Number	250,544	230,739	240,723	243,141	223,573	1,188,720
	Crude rate	56.7	56.9	56.9	56.0	54.8	56.3
	ASR(A)	56.7	56.9	56.8	55.8	54.6	56.2
	95% CI	56.5–56.9	56.6–57.1	56.5–57.0	55.6–56.1	54.4–54.8	56.1–56.3

Notes

1. Period covers 1 January 2004 to 31 December 2005.
2. Rates are the number of women screened as a percentage of the eligible female population calculated as the average of the 2004 and 2005 Australian Bureau of Statistics estimated resident population and age-standardised to the Australian population at 30 June 2001.
3. The first quintile corresponds to the highest level of socioeconomic status and the fifth to the lowest.
4. Totals may not add up due to rounding.

Source: AIHW analysis of BreastScreen Australia data.

Table 5: Participation in BreastScreen Australia, by age and Indigenous status, 2004–2005

Age group (years)	Number/rate	Indigenous	Non-Indigenous	Australia
40–44	Number	1,498	90,812	92,658
	Rate	9.9	11.9	11.9
45–49	Number	2,001	150,053	152,834
	Rate	16.9	20.8	20.9
50–54	Number	2,907	347,806	354,142
	Rate	31.5	52.7	53.0
55–59	Number	2,366	338,650	344,290
	Rate	36.0	56.6	56.9
60–64	Number	1,755	267,544	271,118
	Rate	39.0	58.9	59.1
65–69	Number	1,243	216,676	219,170
	Rate	39.7	57.5	57.7
70–74	Number	554	118,001	119,180
	Rate	26.6	36.5	36.6
75+	Number	256	60,851	61,479
	Rate	10.6	8.3	8.4
Ages 40+ years	Number	12,580	1,590,393	1,614,871
	Crude rate	23.0	34.4	34.5
	ASR(A)	24.2	34.7	34.9
	95% CI	23.7–24.6	34.7–34.8	34.8–34.9
Ages 50–69 years	Number	8,271	1,170,676	1,188,720
	Crude rate	35.3	56.0	56.3
	ASR(A)	35.8	55.9	56.2
	95% CI	35.0–36.6	55.8–56.0	56.1–56.3

Notes

1. Rates are the number of women screened as a percentage of the eligible female population calculated as the average of the 2004 and 2005 Australian Bureau of Statistics estimated resident population and age-standardised to the Australian population at 30 June 2001.
2. Period covers 1 January 2004 to 31 December 2005.
3. Women in the 'not stated' category are included in the column for 'Australia', but are not included in the other columns.

Source: AIHW analysis of BreastScreen Australia data.

Table 6: Participation in BreastScreen Australia, by age and main language spoken at home, 2004–2005

Age group (years)	Number/rate	English-speaking	Non-English-speaking	Australia
40–44	Number	81,599	10,743	92,658
	Rate	12.7	8.0	11.9
45–49	Number	133,079	19,099	152,834
	Rate	21.8	15.6	20.9
50–54	Number	308,972	43,743	354,142
	Rate	55.0	41.0	53.0
55–59	Number	300,797	42,132	344,290
	Rate	58.8	45.2	56.9
60–64	Number	235,237	34,927	271,118
	Rate	62.7	41.8	59.1
65–69	Number	185,927	32,645	219,170
	Rate	60.3	45.7	57.7
70–74	Number	103,491	15,365	119,180
	Rate	37.9	29.4	36.6
75–79	Number	42,048	4,726	46,901
	Rate	16.6	10.4	15.7
80–84	Number	11,138	1,010	12,175
	Rate	5.4	3.9	5.2
85+	Number	2,244	148	2,403
	Rate	1.2	0.7	1.2
Ages 40+ years	Number	1,404,532	204,538	1,614,871
	Crude rate	35.8	27.1	34.5
	ASR(A)	36.5	26.6	35.0
	95% CI	36.4–36.6	26.4–26.7	34.9–35.0
Ages 50–69 years	Number	1,030,933	153,447	1,188,720
	Crude rate	58.7	43.2	56.3
	ASR(A)	58.6	43.1	56.2
	95% CI	58.5–58.7	42.9–43.4	56.1–56.3

Notes

1. Period covers 1 January 2004 to 31 December 2005.
2. Rates are the number of women screened as a percentage of the eligible female population calculated as the average of the 2004 and 2005 Australian Bureau of Statistics estimated resident population and age-standardised to the Australian population at 30 June 2001.
3. Women who were recorded as not stating their language spoken at home are included in the analysis for all women but excluded from the analysis by language.

Source: AIHW analysis of BreastScreen Australia data.

Indicator 2

Detection rate all-size and small invasive cancers

Table 7: Number of women screened and cases of small-diameter (≤ 15 mm) invasive cancers detected in these women, first screening round, by age, states and territories, 2005

Age group (years)	Number	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
40–44	Screened	5,129	5,705	13,019	3,555	2,391	1,554	6	156	31,515
	Cases	5	5	14	8	3	3	0	0	38
45–49	Screened	4,226	6,028	7,232	3,387	2,159	1,221	23	216	24,492
	Cases	13	7	20	7	2	3	0	0	52
50–54	Screened	13,168	12,782	8,352	4,925	3,907	923	721	374	45,152
	Cases	30	35	24	15	11	4	3	0	122
55–59	Screened	6,475	2,436	3,583	1,212	582	504	222	167	15,181
	Cases	24	12	16	5	4	0	1	0	62
60–64	Screened	3,644	1,037	2,223	587	323	239	78	75	8,206
	Cases	14	8	10	2	0	2	1	0	37
65–69	Screened	2,346	705	1,414	382	171	168	55	38	5,279
	Cases	12	2	5	1	0	1	1	1	23
70–74	Screened	470	291	461	133	58	40	25	9	1,487
	Cases	1	1	4	1	0	0	0	0	7
75–79	Screened	215	201	308	95	43	35	6	7	910
	Cases	2	1	6	3	1	0	0	0	13
80–84	Screened	80	104	108	27	25	7	5	1	357
	Cases	1	3	1	1	0	0	0	0	6
85+	Screened	22	26	32	14	9	1	2	0	106
	Cases	0	1	0	0	1	0	0	0	2
Ages 40+ years										
	Screened	35,775	29,315	36,732	14,317	9,668	4,692	1,143	1,043	132,685
	Cases	102	75	100	43	22	13	6	1	362
Ages 50–69 years										
	Screened	25,633	16,960	15,572	7,106	4,983	1,834	1,076	654	73,818
	Cases	80	57	55	23	15	7	6	1	244

Source: AIHW analysis of BreastScreen Australia data.

Table 8: Age-specific rates of small-diameter (≤ 15 mm) invasive cancers detected in women screened, first screening round, states and territories, 2005

Age group (years)	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
40–44	9.7	8.8	10.8	22.5	12.5	19.3	0.0	0.0	12.1
45–49	30.8	11.6	27.7	20.7	9.3	24.6	0.0	0.0	21.2
50–54	22.8	27.4	28.7	30.5	28.2	43.3	41.6	0.0	27.0
55–59	37.1	49.3	44.7	41.3	68.7	0.0	45.0	0.0	40.8
60–64	38.4	77.1	45.0	34.1	0.0	83.7	128.2	0.0	45.1
65–69	51.2	28.4	35.4	26.2	0.0	59.5	181.8	263.2	43.6
70–74	21.3	34.4	86.8	75.2	0.0	0.0	0.0	0.0	47.1
75–79	93.0	49.8	194.8	315.8	232.6	0.0	0.0	0.0	142.9
80–84	125.0	288.5	92.6	370.4	0.0	0.0	0.0	0.0	168.1
85+	0.0	384.6	0.0	0.0	1,111.1	0.0	0.0	..	188.7
Ages 40+ years									
Crude rate	28.5	25.6	27.2	30.0	22.8	27.7	52.5	9.6	27.3
ASR(A)	34.1	39.3	43.6	45.7	29.4	34.2	59.4	34.2	39.0
95% CI	26.1–43.3	27.1–53.8	32.7–56.3	25.9–70.6	12.4–52.8	12.7–66.8	10.2–150.8	0.9–190.7	33.6–44.8
Ages 50–69 years									
Crude rate	31.2	33.6	35.3	32.4	30.1	38.2	55.8	15.3	33.1
ASR(A)	35.5	44.2	37.7	33.2	27.0	44.2	88.9	51.2	37.8
95% CI	27.4–45.0	29.2–62.6	27.5–50.3	17.2–55.2	11.1–50.4	14.4–97.0	15.3–225.7	1.3–285.4	32.4–43.8

Note: Rates are the number of women with small invasive cancers detected per 10,000 women screened and age-standardised to the population of women attending a BreastScreen Australia service in 1998.

Source: AIHW analysis of BreastScreen Australia data.

Table 9: Number of women screened and cases of small-diameter (≤ 15 mm) invasive cancers detected in these women, subsequent screening rounds, by age, states and territories, 2005

Age group (years)	Number	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
40–44	Screened	1,956	1,028	8,164	1,570	1,240	618	34	104	14,714
	Cases	0	1	4	2	2	1	0	0	10
45–49	Screened	7,230	5,099	22,113	5,915	4,351	2,179	711	454	48,052
	Cases	10	7	30	11	6	1	1	0	66
50–54	Screened	45,700	30,459	30,293	13,600	12,385	3,812	2,189	830	139,268
	Cases	79	43	63	30	21	8	4	2	250
55–59	Screened	52,693	41,544	33,991	16,860	14,997	4,598	3,171	940	168,794
	Cases	136	95	92	38	46	7	6	4	424
60–64	Screened	44,368	34,605	26,397	13,371	12,336	3,745	2,316	661	137,799
	Cases	144	107	89	45	38	11	5	3	442
65–69	Screened	36,835	27,833	20,880	11,019	10,315	3,084	1,710	375	112,051
	Cases	135	103	71	44	40	18	8	1	420
70–74	Screened	6,429	20,899	15,377	3,052	3,340	2,149	455	45	51,746
	Cases	28	95	60	12	14	5	2	0	216
75–79	Screened	3,568	5,834	4,773	1,255	1,762	439	141	22	17,794
	Cases	16	29	33	7	9	2	1	0	97
80–84	Screened	1,135	856	1,010	315	447	110	45	6	3,924
	Cases	5	2	6	2	1	0	0	0	16
85+	Screened	167	156	250	75	67	13	7	1	736
	Cases	0	0	3	0	2	0	0	0	5
Ages 40+ years										
	Screened	200,081	168,313	163,248	67,032	61,240	20,747	10,779	3,438	694,878
	Cases	553	482	451	191	179	53	27	10	1,946
Ages 50–69 years										
	Screened	179,596	134,441	111,561	54,850	50,033	15,239	9,386	2,806	557,912
	Cases	494	348	315	157	145	44	23	10	1,536

Source: AIHW analysis of BreastScreen Australia data.

Table 10: Age-specific rates of small-diameter (≤ 15 mm) invasive cancers detected in women screened, subsequent screening rounds, states and territories, 2005

Age group (years)	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
40–44	0.0	9.7	4.9	12.7	16.1	16.2	0.0	0.0	6.8
45–49	13.8	13.7	13.6	18.6	13.8	4.6	14.1	0.0	13.7
50–54	17.3	14.1	20.8	22.1	17.0	21.0	18.3	24.1	18.0
55–59	25.8	22.9	27.1	22.5	30.7	15.2	18.9	42.6	25.1
60–64	32.5	30.9	33.7	33.7	30.8	29.4	21.6	45.4	32.1
65–69	36.6	37.0	34.0	39.9	38.8	58.4	46.8	26.7	37.5
70–74	43.6	45.5	39.0	39.3	41.9	23.3	44.0	0.0	41.7
75–79	44.8	49.7	69.1	55.8	51.1	45.6	70.9	0.0	54.5
80–84	44.1	23.4	59.4	63.5	22.4	0.0	0.0	0.0	40.8
85+	0.0	0.0	120.0	0.0	298.5	0.0	0.0	0.0	67.9
Ages 40+ years									
Crude rate	27.6	28.6	27.6	28.5	29.2	25.5	25.0	29.1	28.0
ASR(A)	24.9	24.4	26.8	27.8	27.4	24.3	24.1	22.8	25.8
95% CI	22.5–27.5	21.7–27.4	24.4–29.5	23.6–32.4	23.2–32.2	17.9–32.2	14.9–36.4	10.6–42.3	24.6–27.0
Ages 50–69 years									
Crude rate	27.5	25.9	28.2	28.6	29.0	28.9	24.5	35.6	27.5
ASR(A)	26.6	24.6	27.8	28.2	27.8	28.6	24.7	34.1	26.7
95% CI	24.3–29.1	22.0–27.3	24.8–31.1	23.9–33.1	23.4–32.8	20.7–38.5	15.5–37.4	15.9–63.3	25.4–28.1

Note: Rates are the number of women with small invasive cancers detected per 10,000 women screened and age-standardised to the population of women attending a BreastScreen Australia service in 1998.

Source: AIHW analysis of BreastScreen Australia data.

Table 11: Number of women screened and cases of all-size invasive cancer detected in these women, first screening round, by age, states and territories, 2005

Age group (years)	Number	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
40–44	Screened	5,129	5,705	13,019	3,555	2,391	1,554	6	156	31,515
	Cases	10	9	32	11	6	3	0	1	72
45–49	Screened	4,226	6,028	7,232	3,387	2,159	1,221	23	216	24,492
	Cases	25	11	37	13	5	6	0	0	97
50–54	Screened	13,168	12,782	8,352	4,925	3,907	923	721	374	45,152
	Cases	57	61	47	34	23	6	5	0	233
55–59	Screened	6,475	2,436	3,583	1,212	582	504	222	167	15,181
	Cases	37	29	25	10	6	2	2	0	111
60–64	Screened	3,644	1,037	2,223	587	323	239	78	75	8,206
	Cases	25	15	25	5	3	2	1	1	77
65–69	Screened	2,346	705	1,414	382	171	168	55	38	5,279
	Cases	23	6	8	2	1	4	2	1	47
70–74	Screened	470	291	461	133	58	40	25	9	1,487
	Cases	3	1	8	1	0	0	1	0	14
75–79	Screened	215	201	308	95	43	35	6	7	910
	Cases	5	3	10	7	1	0	1	0	27
80–84	Screened	80	104	108	27	25	7	5	1	357
	Cases	1	4	1	1	0	0	0	0	7
85+	Screened	22	26	32	14	9	1	2	0	106
	Cases	0	2	1	0	1	0	0	0	4
Ages 40+ years										
	Screened	35,775	29,315	36,732	14,317	9,668	4,692	1,143	1,043	132,685
	Cases	186	141	194	84	46	23	12	3	689
Ages 50–69 years										
	Screened	25,633	16,960	15,572	7,106	4,983	1,834	1,076	654	73,818
	Cases	142	111	105	51	33	14	10	2	468

Source: AIHW analysis of BreastScreen Australia data.

Table 12: Age-specific rates of all-size invasive breast cancers per 10,000 women screened, first screening round, states and territories, 2005

Age group (years)	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
40–44	19.5	15.8	24.6	30.9	25.1	19.3	0.0	64.1	22.8
45–49	59.2	18.2	51.2	38.4	23.2	49.1	0.0	0.0	39.6
50–54	43.3	47.7	56.3	69.0	58.9	65.0	69.3	0.0	51.6
55–59	57.1	119.0	69.8	82.5	103.1	39.7	90.1	0.0	73.1
60–64	68.6	144.6	112.5	85.2	92.9	83.7	128.2	133.3	93.8
65–69	98.0	85.1	56.6	52.4	58.5	238.1	363.6	263.2	89.0
70–74	63.8	34.4	173.5	75.2	0.0	0.0	400.0	0.0	94.1
75–79	232.6	149.3	324.7	736.8	232.6	0.0	1666.7	0.0	296.7
80–84	125.0	384.6	92.6	370.4	0.0	0.0	0.0	0.0	196.1
85+	0.0	769.2	312.5	0.0	1111.1	0.0	0.0	..	377.4
Ages 40+ years									
Crude rate	52.0	48.1	52.8	58.7	47.6	49.0	105.0	28.8	51.9
ASR(A)	64.8	79.2	82.6	88.0	66.1	72.1	181.2	59.0	75.5
95% CI	53.0–77.9	61.7–99.0	67.3–99.5	61.4–119.3	38.1–101.0	37.9–118.9	58.7–370.4	4.3–191.6	67.9–83.5
Ages 50–69 years									
Crude rate	55.4	65.4	67.4	71.8	66.2	76.3	92.9	30.6	63.4
ASR(A)	63.1	94.9	72.3	72.8	77.8	96.3	145.0	80.7	73.8
95% CI	52.1–75.6	72.0–121.3	57.8–89.0	48.1–103.3	41.7–124.5	47.2–169.6	45.1–306.0	7.2–299.0	66.0–82.1

Note: Rates are the number of women with invasive cancers detected per 10,000 women screened and age-standardised to the population of women attending a BreastScreen Australia service in 1998.

Source: AIHW analysis of BreastScreen Australia data.

Table 13: Number of women screened and cases of all-size invasive cancer detected in these women, subsequent screening rounds, by age, states and territories, 2005

Age group (years)	Number	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
40–44	Screened	1,956	1,028	8,164	1,570	1,240	618	34	104	14,714
	Cases	0	1	11	3	3	1	0	0	19
45–49	Screened	7,230	5,099	22,113	5,915	4,351	2,179	711	454	48,052
	Cases	18	11	60	14	9	7	1	1	121
50–54	Screened	45,700	30,459	30,293	13,600	12,385	3,812	2,189	830	139,268
	Cases	133	81	99	41	34	11	7	3	409
55–59	Screened	52,693	41,544	33,991	16,860	14,997	4,598	3,171	940	168,794
	Cases	195	148	136	62	56	12	10	6	625
60–64	Screened	44,368	34,605	26,397	13,371	12,336	3,745	2,316	661	137,799
	Cases	219	167	144	70	66	19	10	4	699
65–69	Screened	36,835	27,833	20,880	11,019	10,315	3,084	1,710	375	112,051
	Cases	197	149	107	75	59	23	10	2	622
70–74	Screened	6,429	20,899	15,377	3,052	3,340	2,149	455	45	51,746
	Cases	43	140	78	21	22	9	3	0	316
75–79	Screened	3,568	5,834	4,773	1,255	1,762	439	141	22	17,794
	Cases	24	38	48	10	17	3	2	0	142
80–84	Screened	1,135	856	1,010	315	447	110	45	6	3,924
	Cases	6	5	12	4	3	0	0	0	30
85+	Screened	167	156	250	75	67	13	7	1	736
	Cases	0	2	3	1	2	0	0	0	8
Ages 40+ years										
	Screened	200,081	168,313	163,248	67,032	61,240	20,747	10,779	3,438	694,878
	Cases	835	742	698	301	271	85	43	16	2,991
Ages 50–69 years										
	Screened	179,596	134,441	111,561	54,850	50,033	15,239	9,386	2,806	557,912
	Cases	744	545	486	248	215	65	37	15	2,355

Source: AIHW analysis of BreastScreen Australia data.

Table 14: Age-specific rates of all-size invasive breast cancers per 10,000 women screened, subsequent screening rounds, by age, states and territories, 2005

Age group (years)	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
40–44	0.0	9.7	13.5	19.1	24.2	16.2	0.0	0.0	12.9
45–49	24.9	21.6	27.1	23.7	20.7	32.1	14.1	22.0	25.2
50–54	29.1	26.6	32.7	30.1	27.5	28.9	32.0	36.1	29.4
55–59	37.0	35.6	40.0	36.8	37.3	26.1	31.5	63.8	37.0
60–64	49.4	48.3	54.6	52.4	53.5	50.7	43.2	60.5	50.7
65–69	53.5	53.5	51.2	68.1	57.2	74.6	58.5	53.3	55.5
70–74	66.9	67.0	50.7	68.8	65.9	41.9	65.9	0.0	61.1
75–79	67.3	65.1	100.6	79.7	96.5	68.3	141.8	0.0	79.8
80–84	52.9	58.4	118.8	127.0	67.1	0.0	0.0	0.0	76.5
85+	0.0	128.2	120.0	133.3	298.5	0.0	0.0	0.0	108.7
Ages 40+ years									
Crude rate	41.7	44.1	42.8	44.9	44.3	41.0	39.9	46.5	43.0
ASR(A)	38.2	37.9	41.8	43.6	41.9	39.0	38.0	37.6	40.1
95% CI	35.2–41.4	34.6–41.4	38.8–45.1	38.3–49.3	36.6–47.8	30.8–48.5	26.2–52.8	21.1–61.6	38.6–41.7
Ages 50–69 years									
Crude rate	41.4	40.5	43.6	45.2	43.0	42.7	39.4	53.5	42.2
ASR(A)	40.4	39.0	43.0	44.2	41.6	41.9	39.5	52.1	41.2
95% CI	37.5–43.4	35.7–42.5	39.3–47.1	38.8–50.1	36.1–47.6	32.2–53.5	27.5–54.8	28.5–86.7	39.5–42.9

Note: Rates are the number of women with invasive cancers detected per 10,000 women screened and age-standardised to the population of women attending a BreastScreen Australia service in 1998.

Source: AIHW analysis of BreastScreen Australia data.

Indicator 3a Interval cancer rate

Table 15: Numbers and age-specific rates of interval cancers in women screened during 2001, 2002 and 2003, first screening round, 0–12 months, states and territories

Age group (years)	Number/ rate	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
40–49	Number	45	26	29	7	10	3	1	0	121
	Rate	6.5	9.1	5.9	4.4	8.2	6.6	8.1	0.0	6.6
50–59	Number	33	38	20	12	9	4	1	1	118
	Rate	5.8	8.1	6.8	6.5	6.3	13.4	4.2	9.2	6.9
60–69	Number	15	7	9	1	0	3	0	0	35
	Rate	7.1	6.0	8.4	2.6	0.0	34.3	0.0	0.0	6.9
70+	Number	6	4	4	0	1	0	0	0	15
	Rate	6.3	9.3	9.4	0.0	11.8	0.0	0.0	0.0	7.3
Ages 40+ years										
	Number	99	75	62	20	20	10	2	1	289
	Crude rate	6.3	8.2	6.7	5.1	6.8	11.4	4.7	4.1	6.8
	ASR(A)	6.3	7.9	7.4	4.2	5.6	16.1	3.3	3.6	6.9
	95% CI	5.0–8.0	5.9–10.2	5.3–10.0	2.3–6.8	2.5–9.9	6.0–32.4	0.4–12.1	0.1–20.1	5.9–7.9
Ages 50–69 years										
	Number	48	45	29	13	9	7	1	1	153
	Crude rate	6.1	7.7	7.3	5.9	5.6	18.2	3.5	7.8	6.9
	ASR(A)	6.3	7.3	7.5	4.9	3.7	22.1	2.5	5.4	6.9
	95% CI	4.6–8.5	5.0–10.0	4.9–10.9	2.3–8.9	1.7–6.9	7.7–47.7	0.1–13.8	0.1–30.1	5.7–8.2

Note: Rates are the number of interval cancers detected per 10,000 women-years and age-standardised to the population of women attending a BreastScreen Australia service in 1998.

Source: AIHW analysis of BreastScreen Australia data.

Table 16: Numbers and age-specific rates of interval cancers in women screened during 2001, 2002 and 2003, first screening round, 13–24 months, states and territories

Age group (years)	Number/rate	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
40–49	Number	64	45	39	9	14	4	0	2	177
	Rate	9.6	15.7	8.4	6.6	12.1	9.4	0.0	19.9	10.2
50–59	Number	58	52	36	18	17	6	4	1	192
	Rate	10.7	11.2	12.9	11.1	12.2	21.3	17.6	9.8	11.6
60–69	Number	18	10	24	5	0	0	0	0	57
	Rate	9.0	8.6	23.1	15.3	0.0	0.0	0.0	0.0	11.8
70+	Number	15	4	2	2	1	1	0	0	25
	Rate	16.5	9.3	4.8	22.4	11.8	34.8	0.0	0.0	12.6
Ages 40+ years										
	Number	155	111	101	34	32	11	4	3	451
	Crude rate	10.3	12.2	11.4	10.0	11.4	13.3	10.0	13.3	11.1
	ASR(A)	10.7	11.1	13.8	12.7	8.7	14.6	6.9	8.0	11.5
	95% CI	8.8–12.8	8.9–13.8	10.7–17.3	7.4–19.6	5.2–13.3	5.3–29.3	1.9–17.5	1.3–24.1	10.3–12.8
Ages 50–69 years										
	Number	76	62	60	23	17	6	4	1	249
	Crude rate	10.2	10.6	15.7	11.8	10.8	16.2	14.6	8.3	11.7
	ASR(A)	10.0	10.1	17.1	12.9	7.1	12.5	10.3	5.8	11.7
	95% CI	7.8–12.6	7.4–13.3	12.9–22.3	7.2–20.6	4.1–11.4	4.6–27.1	2.8–26.3	0.1–32.0	10.1–13.4

Note: Rates are the number of interval cancers detected per 10,000 women-years and age-standardised to the population of women attending a BreastScreen Australia service in 1998.

Source: AIHW analysis of BreastScreen Australia data.

Table 17: Numbers and age-specific rates of interval cancers in women screened during 2001, 2002 and 2003, first screening round, 0–24 months, states and territories

Age group (years)	Number/Rate	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
40–49	Number	109	71	68	16	24	7	1	2	298
	Rate	8.0	12.4	7.1	5.4	10.1	7.9	4.2	9.4	8.4
50–59	Number	91	90	56	30	26	10	5	2	310
	Rate	8.2	9.6	9.8	8.7	9.2	17.3	10.8	9.5	9.2
60–69	Number	33	17	33	6	0	3	0	0	92
	Rate	8.0	7.3	15.6	8.5	0.0	16.9	0.0	0.0	9.3
70+	Number	21	8	6	2	2	1	0	0	40
	Rate	11.2	9.3	7.2	10.0	11.8	16.2	0.0	0.0	9.9
Ages 40+ years										
	Number	254	186	163	54	52	21	6	4	740
	Crude rate	8.3	10.2	9.0	7.4	9.1	12.3	7.3	8.5	8.9
	ASR(A)	8.5	9.5	10.5	8.1	7.1	15.1	5.1	5.7	9.1
	95% CI	7.3–9.8	8.0–11.2	8.7–12.7	5.4–11.4	4.7–10.1	8.0–24.9	1.9–11.1	1.3–14.9	8.4–9.9
Ages 50–69 years										
	Number	124	107	89	36	26	13	5	2	402
	Crude rate	8.1	9.2	11.4	8.6	8.2	17.2	8.9	8.1	9.2
	ASR(A)	8.1	8.7	12.2	8.6	5.4	17.1	6.3	5.6	9.2
	95% CI	6.7–9.7	6.9–10.7	9.7–15.2	5.5–12.5	3.5–7.8	8.4–30.3	2.0–14.7	0.7–20.1	8.3–10.3

Note: Rates are the number of interval cancers detected per 10,000 women-years and age-standardised to the population of women attending a BreastScreen Australia service in 1998.

Source: AIHW analysis of BreastScreen Australia data.

Table 18: Numbers and age-specific rates of interval cancers in women screened during 2001, 2002 and 2003, subsequent screening rounds, 0–12 months, states and territories

Age group (years)	Number/rate	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
40–49	Number	73	23	78	22	11	5	1	2	215
	Rate	6.8	13.7	9.6	10.3	6.5	6.1	2.6	13.8	8.3
50–59	Number	188	156	130	55	57	15	9	0	610
	Rate	7.3	7.4	7.7	6.8	7.1	6.3	6.4	0.0	7.3
60–69	Number	151	103	74	39	39	15	4	1	426
	Rate	7.3	6.3	6.4	6.3	6.2	8.0	4.5	5.1	6.6
70+	Number	96	42	43	9	9	4	0	0	203
	Rate	6.6	5.4	7.6	8.4	5.9	7.2	0.0	0.0	6.5
Ages 40+ years										
	Number	508	324	325	125	116	39	14	3	1,454
	Crude rate	7.1	6.9	7.7	7.2	6.6	6.9	5.0	3.8	7.1
	ASR(A)	7.1	8.1	7.7	7.6	6.6	6.8	4.3	4.3	7.2
	95% CI	6.5–7.7	6.9–9.5	6.9–8.6	6.2–9.2	5.3–8.0	4.8–9.4	2.3–7.3	0.9–12.5	6.8–7.6
Ages 50–69 years										
	Number	339	259	204	94	96	30	13	1	1,036
	Crude rate	7.3	6.9	7.2	6.6	6.7	7.0	5.7	1.7	7.0
	ASR(A)	7.3	6.9	7.2	6.6	6.7	7.0	5.6	2.1	7.0
	95% CI	6.5–8.1	6.1–7.8	6.2–8.2	5.3–8.1	5.4–8.2	4.7–10.0	3.0–9.6	0.1–11.8	6.6–7.4

Note: Rates are the number of interval cancers detected per 10,000 women-years and age-standardised to the population of women attending a BreastScreen Australia service in 1998.

Source: AIHW analysis of BreastScreen Australia data.

Table 19: Numbers and age-specific rates of interval cancers in women screened during 2001, 2002 and 2003, subsequent screening rounds, 13–24 months, states and territories

Age group (years)	Number/rate	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
40–49	Number	132	20	79	31	11	6	5	2	286
	Rate	13.5	11.9	10.5	19.3	7.6	8.2	15.6	22.9	12.4
50–59	Number	274	277	218	71	90	25	8	6	969
	Rate	11.7	13.2	13.8	10.8	12.0	11.4	6.4	25.0	12.4
60–69	Number	209	226	160	58	70	18	5	3	749
	Rate	11.2	13.8	14.2	11.7	12.0	10.6	6.2	23.1	12.5
70+	Number	146	73	77	4	13	4	0	0	317
	Rate	11.1	9.4	13.8	5.0	8.5	8.1	0.0	0.0	10.7
Ages 40+ years										
	Number	761	596	534	164	184	53	18	11	2,321
	Crude rate	11.7	12.7	13.3	11.8	11.3	10.4	7.1	21.8	12.2
	ASR(A)	11.8	12.6	13.2	12.1	10.6	10.1	7.4	20.9	12.2
	95% CI	11.0–12.7	11.3–14.0	12.1–14.4	10.2–14.3	9.1–12.4	7.5–13.3	4.2–12.0	10.3–37.6	11.7–12.8
Ages 50–69 years										
	Number	483	503	378	129	160	43	13	9	1,718
	Crude rate	11.5	13.5	14.0	11.2	12.0	11.1	6.3	24.3	12.5
	ASR(A)	11.5	13.5	14.0	11.2	12.0	11.1	6.3	24.2	12.5
	95% CI	10.5–12.6	12.3–14.7	12.6–15.4	9.3–13.3	10.2–14.0	8.0–14.9	3.3–10.8	10.9–46.1	11.9–13.1

Note: Rates are the number of interval cancers detected per 10,000 women-years and age-standardised to the population of women attending a BreastScreen Australia service in 1998.

Source: AIHW analysis of BreastScreen Australia data.

Table 20: Numbers and age-specific rates of interval cancers in women screened during 2001, 2002 and 2003, subsequent screening rounds, 0–24 months, states and territories

Age group (years)	Number/Rate	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
40–49	Number	205	43	157	53	22	11	6	4	501
	Rate	10.0	12.8	10.0	14.2	7.0	7.1	8.6	17.3	10.2
50–59	Number	462	433	348	126	147	40	17	6	1,579
	Rate	9.4	10.3	10.7	8.6	9.4	8.7	6.4	9.6	9.8
60–69	Number	360	329	234	97	109	33	9	4	1,175
	Rate	9.1	10.0	10.2	8.7	9.0	9.3	5.3	12.3	9.5
70+	Number	242	115	120	13	22	8	0	0	520
	Rate	8.7	7.4	10.7	6.9	7.2	7.6	0.0	0.0	8.5
Ages 40+ years										
	Number	1,269	920	859	289	300	92	32	14	3,775
	Crude rate	9.3	9.8	10.4	9.2	8.8	8.6	6.0	10.8	9.5
	ASR(A)	9.3	10.4	10.4	9.6	8.5	8.4	5.7	10.7	9.6
	95% CI	8.8–9.9	9.5–11.4	9.7–11.1	8.4–10.9	7.5–9.6	6.7–10.3	3.8–8.2	5.8–18.1	9.3–9.9
Ages 50–69 years										
	Number	822	762	582	223	256	73	26	10	2,754
	Crude rate	9.3	10.2	10.5	8.7	9.2	9.0	6.0	10.5	9.6
	ASR(A)	9.3	10.2	10.5	8.7	9.2	8.9	5.9	10.7	9.6
	95% CI	8.6–9.9	9.5–10.9	9.6–11.4	7.6–9.9	8.1–10.5	7.0–11.2	3.9–8.7	5.1–19.8	9.3–10.0

Note: Rates are the number of interval cancers detected per 10,000 women-years and age-standardised to the population of women attending a BreastScreen Australia service in 1998.

Source: AIHW analysis of BreastScreen Australia data.

Indicator 3b Program sensitivity

Table 21: Program sensitivity rates for women screened during 2001, 2002 and 2003, first screening round, 0–12 months, states and territories

Age group years	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
	(per cent)								
40–49	80.3	78.2	84.8	84.8	77.8	75.0	75.0	100.0	81.4
50–59	90.1	85.8	88.7	89.5	90.4	82.6	92.9	80.0	88.5
60–69	91.6	93.9	92.1	97.7	100.0	82.4	100.0	100.0	93.0
70+	95.7	95.5	95.0	100.0	93.3	100.0	100.0	100.0	95.8
Ages 40+ years									
Crude rate	88.7	87.3	89.0	91.3	89.0	81.8	92.0	90.9	88.6
ASR(A)	89.2	87.7	89.6	92.1	90.8	83.1	92.0	92.2	89.2
95% CI	82.9–95.8	80.1–95.8	81.6–98.2	79.6–100.0	76.3–100.0	59.4–100.0	56.3–100.0	42.1–100.0	85.5–93.0
Ages 50–69 years									
Crude rate	90.6	88.2	90.0	91.7	92.6	82.5	94.7	85.7	90.0
ASR(A)	90.7	89.2	90.1	92.9	94.4	82.5	95.8	88.3	90.4
95% CI	82.6–99.4	79.6–99.5	79.5–100.0	77.6–100.0	76.2–100.0	56.8–100.0	54.5–100.0	30.1–100.0	85.6–95.4

Note: Rates are the number of screen-detected cancers as a percentage of all cancers (screen-detected and interval cancers) and age-standardised to the population of women attending a BreastScreen Australia service in 1998.

Source: AIHW analysis of BreastScreen Australia data.

Table 22: Program sensitivity rates for women screened during 2001, 2002 and 2003, first screening round, 0–24 months, states and territories

Age group (years)	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
	(per cent)								
40–49	62.8	56.7	74.0	81.3	59.3	56.3	100.0	60.0	65.4
50–59	76.7	71.9	75.1	85.0	76.6	65.5	76.5	80.0	75.7
60–69	83.2	86.3	77.8	89.4	100.0	82.4	100.0	100.0	84.1
70+	86.3	91.4	95.0	93.1	87.5	75.0	100.0	100.0	89.9
Ages 40+ years									
Crude rate	75.4	73.5	77.8	86.1	75.7	68.2	85.2	76.9	76.3
ASR(A)	76.8	75.2	78.1	86.4	80.9	69.5	90.8	83.9	77.7
95% CI	71.4–82.6	68.6–82.2	71.1–85.5	74.8–99.3	67.4–96.0	49.9–93.9	53.8–100.0	36.3–100.0	74.4–81.1
Ages 50–69 years									
Crude rate	78.9	75.9	76.2	86.2	81.3	71.7	81.8	85.7	78.4
ASR(A)	79.4	77.9	76.2	86.8	86.3	72.5	86.3	88.3	79.2
95% CI	72.2–87.1	69.4–87.0	67.3–86.0	72.6–100.0	69.1–100.0	49.8–100.0	47.6–100.0	30.1–100.0	75.0–83.6

Note: Rates are the number of screen-detected cancers as a percentage of all cancers (screen-detected and interval cancers) and age-standardised to the population of women attending a BreastScreen Australia service in 1998.

Source: AIHW analysis of BreastScreen Australia data.

Table 23: Program sensitivity rates for women screened during 2001, 2002 and 2003, subsequent screening rounds, 0–12 months, states and territories

Age group (years)	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
	(per cent)								
40–49	69.8	61.0	70.9	59.3	78.8	77.3	93.3	60.0	70.0
50–59	83.4	81.1	83.9	85.6	84.8	86.1	83.9	100.0	83.5
60–69	88.4	88.0	90.1	89.8	90.9	87.8	92.2	92.3	89.1
70+	90.2	91.3	90.1	90.9	93.2	92.2	100.0	100.0	90.8
Ages 40+ years									
Crude rate	86.1	85.5	85.6	86.4	88.3	87.2	89.5	91.9	86.2
ASR(A)	82.8	80.1	83.7	82.0	86.3	85.5	90.2	89.6	83.2
95% CI	79.4–86.3	75.0–85.4	79.8–87.7	75.5–88.8	79.5–93.5	74.2–97.9	73.7–100.0	59.9–100.0	81.2–85.2
Ages 50–69 years									
Crude rate	86.1	84.6	86.9	87.7	88.1	87.0	87.9	96.7	86.4
ASR(A)	85.5	84.0	86.5	87.3	87.4	86.8	87.3	96.8	85.8
95% CI	81.7–89.3	79.6–88.5	81.9–91.2	80.7–94.3	80.9–94.2	74.9–100.0	70.5–100.0	64.8–100.0	83.7–88.0

Note: Rates are the number of screen-detected cancers as a percentage of all cancers (screen-detected and interval cancers) and age-standardised to the population of women attending a BreastScreen Australia service in 1998.

Source: AIHW analysis of BreastScreen Australia data.

Table 24: Program sensitivity rates for women screened during 2001, 2002 and 2003, subsequent screening rounds, 0–24 months, states and territories

Age group (years)	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
	(per cent)								
40–49	45.2	45.6	58.1	50.8	65.1	56.7	73.7	60.0	52.3
50–59	67.1	60.7	68.3	82.2	68.5	71.0	85.5	73.9	67.6
60–69	76.1	69.6	75.9	85.5	78.1	75.5	87.0	80.0	75.7
70+	78.5	79.5	78.0	95.6	84.9	88.7	100.0	100.0	80.0
Ages 40+ years									
Crude rate	71.3	67.4	71.3	82.8	74.4	74.2	85.6	75.6	71.8
ASR(A)	66.5	62.4	69.5	78.3	72.5	71.5	85.3	76.0	68.2
95% CI	63.9–69.1	58.5–66.4	66.3–72.8	72.2–84.6	66.8–78.5	62.4–81.5	70.0–100.0	49.4–100.0	66.7–69.8
Ages 50–69 years									
Crude rate	71.8	65.1	71.9	83.8	73.4	73.4	86.2	76.3	71.7
ASR(A)	70.9	64.4	71.4	83.5	72.5	72.9	86.1	76.4	71.0
95% CI	67.8–74.0	61.1–67.9	67.7–75.4	77.2–90.2	67.1–78.1	62.9–83.9	69.4–100.0	51.2–100.0	69.3–72.8

Note: Rates are the number of screen-detected cancers as a percentage of all cancers (screen-detected and interval cancers) and age-standardised to the population of women attending a BreastScreen Australia service in 1998.

Source: AIHW analysis of BreastScreen Australia data.

Indicator 4

Ductal carcinoma in situ

Table 25: Number of women screened and cases of DCIS detected in these women, by age, first screening round, states and territories, 2005

Age group years	Number	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
40–49	Screened	9,355	11,733	20,251	6,942	4,550	2,775	29	372	56,007
	Cases	7	17	12	10	2	2	0	1	51
50–59	Screened	19,643	15,218	11,935	6,137	4,489	1,427	943	541	60,333
	Cases	31	17	17	8	7	0	2	1	83
60–69	Screened	5,990	1,742	3,637	969	494	407	133	113	13,485
	Cases	10	3	3	3	0	2	0	0	21
70+	Screened	787	622	909	269	135	83	38	17	2,860
	Cases	3	4	2	1	0	0	0	0	10
Ages 40+ years										
	Screened	35,775	29,315	36,732	14,317	9,668	4,692	1,143	1,043	132,685
	Cases	51	41	34	22	9	4	2	2	165
Ages 50–69 years										
	Screened	25,633	16,960	15,572	7,106	4,983	1,834	1,076	654	73,818
	Cases	41	20	20	11	7	2	2	1	104

Source: AIHW analysis of BreastScreen Australia data.

Table 26: Age-specific rate of DCIS detected in women screened, first screening round, states and territories, 2005

Age group (years)	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
40–49	7.5	14.5	5.9	14.4	4.4	7.2	0.0	26.9	9.1
50–59	15.8	11.2	14.2	13.0	15.6	0.0	21.2	18.5	13.8
60–69	16.7	17.2	8.2	31.0	0.0	49.1	0.0	0.0	15.6
70+	38.1	64.3	22.0	37.2	0.0	0.0	0.0	0.0	35.0
Ages 40+ years									
Crude rate	14.3	14.0	9.3	15.4	9.3	8.5	17.5	19.2	12.4
ASR(A)	17.1	20.2	11.8	21.3	7.0	15.1	8.3	12.8	15.9
95% CI	11.0–24.6	11.1–31.6	6.9–18.1	8.9–38.4	3.1–13.4	1.0–45.4	1.0–29.9	1.5–46.5	12.6–19.7
Ages 50–69 years									
Crude rate	16.0	11.8	12.8	15.5	14.0	10.9	18.6	15.3	14.1
ASR(A)	16.2	13.7	11.8	20.5	9.1	20.4	12.4	10.8	14.5
95% CI	11.2–22.4	6.0–24.5	6.8–18.6	7.4–41.2	3.7–18.8	2.5–73.8	1.5–44.8	0.3–60.2	11.4–18.1

Note: Rates are the number of cases of DCIS per 10,000 women screened and age-standardised to the population of women attending a BreastScreen Australia service in 1998.

Source: AIHW analysis of BreastScreen Australia data.

Table 27: Number of women screened and cases of DCIS detected in these women, by age, subsequent screening rounds, states and territories, 2005

Age group (years)	Number	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
40–49	Screened	9,186	6,127	30,277	7,486	5,591	2,797	745	558	62,767
	Cases	6	4	21	4	2	0	1	0	38
50–59	Screened	98,393	72,003	64,284	30,459	27,382	8,410	5,360	1,770	308,061
	Cases	79	78	50	49	25	12	6	4	303
60–69	Screened	81,203	62,438	47,277	24,390	22,651	6,829	4,026	1,036	249,850
	Cases	93	78	60	46	27	6	4	4	318
70+	Screened	11,299	27,745	21,410	4,697	5,616	2,711	648	74	74,200
	Cases	13	39	28	10	5	5	1	0	101
Ages 40+ years										
	Screened	200,081	168,313	163,248	67,032	61,240	20,747	10,779	3,438	694,878
	Cases	191	199	159	109	59	23	12	8	760
Ages 50–69 years										
	Screened	179,596	134,441	111,561	54,849	50,033	15,239	9,386	2,806	557,911
	Cases	172	156	110	95	52	18	10	8	621

Source: AIHW analysis of BreastScreen Australia data.

Table 28: Age-specific rate of DCIS detected in women screened, subsequent screening rounds, states and territories, 2005

Age group (years)	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
40–49	6.5	6.5	6.9	5.3	3.6	0.0	13.4	0.0	6.1
50–59	8.0	10.8	7.8	16.1	9.1	14.3	11.2	22.6	9.8
60–69	11.5	12.5	12.7	18.9	11.9	8.8	9.9	38.6	12.7
70+	11.5	14.1	13.1	21.3	8.9	18.4	15.4	0.0	13.6
Ages 40+ years									
Crude rate	9.5	11.8	9.7	16.3	9.6	11.1	11.1	23.3	10.9
ASR(A)	9.1	10.8	9.6	15.3	8.7	10.3	11.8	19.5	10.3
95% CI	7.5–10.9	9.0–12.8	8.2–11.2	12.4–18.6	6.5–11.4	6.5–15.5	5.0–22.4	8.4–38.6	9.6–11.1
Ages 50–69 years									
Crude rate	9.6	11.6	9.9	17.3	10.4	11.8	10.7	28.5	11.1
ASR(A)	9.5	11.5	9.8	17.2	10.3	12.0	10.7	29.3	11.0
95% CI	8.1–11.0	9.8–13.5	8.1–11.8	13.9–21.1	7.7–13.5	7.1–19.0	5.1–19.6	12.6–57.8	10.2–11.9

Note: Rates are the number of cases of DCIS per 10,000 women screened and age-standardised to the population of women attending a BreastScreen Australia service in 1998.

Source: AIHW analysis of BreastScreen Australia data.

Indicator 5

Recall to assessment

Table 29: Number of women screened and women recalled for assessment, by age, mammographic reasons, first screening round, states and territories, 2005

Age group (years)	Number	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
40–44	Screened	5,129	5,705	13,019	3,555	2,391	1,554	6	156	31,515
	Recalled	404	570	1,072	351	114	156	0	22	2,689
45–49	Screened	4,226	6,028	7,232	3,387	2,159	1,221	23	216	24,492
	Recalled	416	681	718	394	130	152	2	30	2,523
50–54	Screened	13,168	12,782	8,352	4,925	3,907	923	721	374	45,152
	Recalled	1,310	1,553	867	587	277	110	42	53	4,799
55–59	Screened	6,475	2,436	3,583	1,212	582	504	222	167	15,181
	Recalled	570	296	346	103	31	42	14	20	1,422
60–64	Screened	3,644	1,037	2,223	587	323	239	78	75	8,206
	Recalled	332	109	267	52	23	20	4	10	817
65–69	Screened	2,346	705	1,414	382	171	168	55	38	5,279
	Recalled	197	87	135	31	10	12	3	3	478
70–74	Screened	470	291	461	133	58	40	25	9	1,487
	Recalled	41	24	46	11	2	5	1	0	130
75–79	Screened	215	201	308	95	43	35	6	7	910
	Recalled	23	27	34	13	2	2	1	1	103
80–84	Screened	80	104	108	27	25	7	5	1	357
	Recalled	8	21	14	2	0	1	0	1	47
85+	Screened	22	26	32	14	9	1	2	0	106
	Recalled	0	5	1	0	1	0	0	0	7
Ages 40+ years										
	Screened	35,775	29,315	36,732	14,317	9,668	4,692	1,143	1,043	132,685
	Recalled	3,301	3,373	3,500	1,544	590	500	67	140	13,015
Ages 50–69 years										
	Screened	25,633	16,960	15,572	7,106	4,983	1,834	1,076	654	73,818
	Recalled	2,409	2,045	1,615	773	341	184	63	86	7,516

Source: AIHW analysis of BreastScreen Australia data.

Table 30: Age-specific and age-standardised recall to assessment rates, mammographic reasons, first screening round, states and territories, 2005

Age group (years)	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
	(per cent)								
40–44	7.9	10.0	8.2	9.9	4.8	10.0	0.0	14.1	8.5
45–49	9.8	11.3	9.9	11.6	6.0	12.4	8.7	13.9	10.3
50–54	9.9	12.1	10.4	11.9	7.1	11.9	5.8	14.2	10.6
55–59	8.8	12.2	9.7	8.5	5.3	8.3	6.3	12.0	9.4
60–64	9.1	10.5	12.0	8.9	7.1	8.4	5.1	13.3	10.0
65–69	8.4	12.3	9.5	8.1	5.8	7.1	5.5	7.9	9.1
70–74	8.7	8.2	10.0	8.3	3.4	12.5	4.0	0.0	8.7
75–79	10.7	13.4	11.0	13.7	4.7	5.7	16.7	14.3	11.3
80–84	10.0	20.2	13.0	7.4	0.0	14.3	0.0	100.0	13.2
85+	0.0	19.2	3.1	0.0	11.1	0.0	0.0	..	6.6
Ages 40+ years									
Crude rate	9.2	11.5	9.5	10.8	6.1	10.7	5.9	13.4	9.8
ASR(A)	9.1	11.4	10.2	9.9	5.9	9.9	5.8	12.3	9.8
95% CI	8.7–9.6	10.8–12.1	9.7–10.6	9.1–10.7	5.0–6.8	8.5–11.4	3.6–8.4	9.5–15.5	9.5–10.0
Ages 50–69 years									
Crude rate	9.4	12.1	10.4	10.9	6.8	10.0	5.9	13.1	10.2
ASR(A)	9.2	11.8	10.4	9.6	6.4	9.3	5.7	12.2	9.8
95% CI	8.8–9.6	11.1–12.6	9.8–11.0	8.7–10.6	5.3–7.6	7.8–10.9	3.9–7.9	9.2–15.7	9.6–10.1

Note: Rates are the number of women recalled for assessment as the percentage of women screened and age-standardised to the population of women attending a BreastScreen Australia service in 1998.

Source: AIHW analysis of BreastScreen Australia data.

Table 31: Number of women screened and women recalled for assessment, by age, mammographic reasons, subsequent screening rounds, states and territories, 2005

Age group (years)	Number	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
40–44	Screened	1,956	1,028	8,164	1,570	1,240	618	34	104	14,714
	Recalled	94	84	374	83	36	41	1	9	722
45–49	Screened	7,230	5,099	22,113	5,916	4,351	2,179	711	454	48,053
	Recalled	412	353	997	273	123	158	21	33	2,370
50–54	Screened	45,700	30,459	30,293	13,599	12,385	3,812	2,189	830	139,267
	Recalled	2,068	1,635	1,276	450	277	227	72	44	6,049
55–59	Screened	52,693	41,544	33,991	16,860	14,997	4,598	3,171	940	168,794
	Recalled	1,990	1,859	1,208	461	343	255	119	47	6,282
60–64	Screened	44,369	34,605	26,397	13,371	12,336	3,745	2,316	661	137,800
	Recalled	1,817	1,544	1,041	370	298	169	63	33	5,335
65–69	Screened	36,834	27,833	20,880	11,019	10,315	3,084	1,710	375	112,050
	Recalled	1,365	1,239	817	308	259	115	52	11	4,166
70–74	Screened	6,429	20,899	15,377	3,052	3,340	2,149	455	45	51,746
	Recalled	279	884	578	82	102	87	20	2	2,034
75–79	Screened	3,568	5,834	4,773	1,255	1,762	439	141	22	17,794
	Recalled	148	251	223	38	62	29	6	0	757
80–84	Screened	1,135	856	1,010	315	447	110	45	6	3,924
	Recalled	44	41	41	12	17	3	1	1	160
85+	Screened	167	156	250	75	67	13	7	1	736
	Recalled	1	8	12	1	7	0	0	0	29
Ages 40+ years										
	Screened	200,081	168,313	163,248	67,032	61,240	20,747	10,779	3,438	694,878
	Recalled	8,218	7,898	6,567	2,078	1,524	1,084	355	180	27,904
Ages 50–69 years										
	Screened	179,596	134,441	111,561	54,849	50,033	15,239	9,386	2,806	557,911
	Recalled	7,240	6,277	4,342	1,589	1,177	766	306	135	21,832

Source: AIHW analysis of BreastScreen Australia data.

Table 32: Age-specific and age-standardised recall to assessment rates, mammographic reasons, subsequent screening rounds, states and territories, 2005

Age group (years)	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
	(per cent)								
40–44	4.8	8.2	4.6	5.3	2.9	6.6	2.9	8.7	4.9
45–49	5.7	6.9	4.5	4.6	2.8	7.3	3.0	7.3	4.9
50–54	4.5	5.4	4.2	3.3	2.2	6.0	3.3	5.3	4.3
55–59	3.8	4.5	3.6	2.7	2.3	5.5	3.8	5.0	3.7
60–64	4.1	4.5	3.9	2.8	2.4	4.5	2.7	5.0	3.9
65–69	3.7	4.5	3.9	2.8	2.5	3.7	3.0	2.9	3.7
70–74	4.3	4.2	3.8	2.7	3.1	4.0	4.4	4.4	3.9
75–79	4.1	4.3	4.7	3.0	3.5	6.6	4.3	0.0	4.3
80–84	3.9	4.8	4.1	3.8	3.8	2.7	2.2	16.7	4.1
85+	0.6	5.1	4.8	1.3	10.4	0.0	0.0	0.0	3.9
Ages 40+ years									
Crude rate	4.1	4.7	4.0	3.1	2.5	5.2	3.3	5.2	4.0
ASR(A)	4.4	5.2	4.1	3.3	2.6	5.4	3.3	5.3	4.2
95% CI	4.2–4.5	5.1–5.4	4.0–4.2	3.2–3.5	2.4–2.7	5.1–5.8	2.7–3.9	4.3–6.3	4.1–4.2
Ages 50–69 years									
Crude rate	4.0	4.7	3.9	2.9	2.4	5.0	3.3	4.8	3.9
ASR(A)	4.1	4.8	3.9	2.9	2.3	5.1	3.2	4.7	4.0
95% CI	4.0–4.2	4.6–4.9	3.8–4.0	2.8–3.1	2.2–2.5	4.7–5.5	2.9–3.6	3.9–5.6	3.9–4.0

Note: Rates are the number of women recalled for assessment as the percentage of women screened and age-standardised to the population of women attending a BreastScreen Australia service in 1998.

Source: AIHW analysis of BreastScreen Australia data.

Table 33: Number of women screened and women recalled for assessment, by age, other reasons only, first screening round, states and territories, 2005

Age group (years)	Number	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
40–44	Screened	5,129	5,705	13,019	3,555	2,391	1,554	6	156	31,515
	Recalled	6	115	313	27	0	0	0	0	461
45–49	Screened	4,226	6,028	7,232	3,387	2,159	1,221	23	216	24,492
	Recalled	4	87	169	18	0	0	0	0	278
50–54	Screened	13,168	12,782	8,352	4,925	3,907	923	721	374	45,152
	Recalled	19	109	110	19	0	0	0	0	257
55–59	Screened	6,475	2,436	3,583	1,212	582	504	222	167	15,181
	Recalled	1	27	43	3	0	0	0	0	74
60–64	Screened	3,644	1,037	2,223	587	323	239	78	75	8,206
	Recalled	4	9	20	1	0	0	0	0	34
65–69	Screened	2,346	705	1,414	382	171	168	55	38	5,279
	Recalled	3	14	12	0	0	0	0	0	29
70–74	Screened	470	291	461	133	58	40	25	9	1,487
	Recalled	0	8	5	0	0	0	0	0	13
75–79	Screened	215	201	308	95	43	35	6	7	910
	Recalled	0	4	2	0	0	0	0	0	6
80–84	Screened	80	104	108	27	25	7	5	1	357
	Recalled	0	0	5	0	0	0	0	0	5
85+	Screened	22	26	32	14	9	1	2	0	106
	Recalled	0	0	0	0	0	0	0	0	0
Ages 40+ years										
	Screened	35,775	29,315	36,732	14,317	9,668	4,692	1,143	1,043	132,685
	Recalled	37	373	679	68	0	0	0	0	1,157
Ages 50–69 years										
	Screened	25,633	16,960	15,572	7,106	4,983	1,834	1,076	654	73,818
	Recalled	27	159	185	23	0	0	0	0	394

Source: AIHW analysis of BreastScreen Australia data.

Table 34: Age-specific and age-standardised recall to assessment rates, first screening round, other reasons only, states and territories, 2005

Age group (years)	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
	(per cent)								
40–44	0.1	2.0	2.4	0.8	0.0	0.0	0.0	0.0	1.5
45–49	0.1	1.4	2.3	0.5	0.0	0.0	0.0	0.0	1.1
50–54	0.1	0.9	1.3	0.4	0.0	0.0	0.0	0.0	0.6
55–59	0.0	1.1	1.2	0.2	0.0	0.0	0.0	0.0	0.5
60–64	0.1	0.9	0.9	0.2	0.0	0.0	0.0	0.0	0.4
65–69	0.1	2.0	0.8	0.0	0.0	0.0	0.0	0.0	0.5
70–74	0.0	2.7	1.1	0.0	0.0	0.0	0.0	0.0	0.9
75–79	0.0	2.0	0.6	0.0	0.0	0.0	0.0	0.0	0.7
80–84	0.0	0.0	4.6	0.0	0.0	0.0	0.0	0.0	1.4
85+	0.0	0.0	0.0	0.0	0.0	0.0	0.0	..	0.0
Ages 40+ years									
Crude rate	0.1	1.3	1.8	0.5	0.0	0.0	0.0	0.0	0.9
ASR(A)	0.1	1.4	1.4	0.3	0.0	0.0	0.0	0.0	0.7
95% CI	0.1–0.1	1.2–1.7	1.2–1.5	0.2–0.4	0.0–0.0	0.0–0.0	0.0–0.0	0.0–0.0	0.6–0.8
Ages 50–69 years									
Crude rate	0.1	0.9	1.2	0.3	0.0	0.0	0.0	0.0	0.5
ASR(A)	0.1	1.1	1.1	0.2	0.0	0.0	0.0	0.0	0.5
95% CI	0.1–0.2	0.9–1.4	0.9–1.3	0.1–0.4	0.0–0.0	0.0–0.0	0.0–0.0	0.0–0.0	0.4–0.6

Note: Rates are the number of women recalled for assessment as the percentage of women screened and age-standardised to the population of women attending a BreastScreen Australia service in 1998.

Source: AIHW analysis of BreastScreen Australia data.

Table 35: Number of women screened and women recalled for assessment, by age, other reasons only, subsequent screening rounds, states and territories, 2005

Age group (years)	Number	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
40–44	Screened	1,956	1,028	8,164	1,570	1,240	618	34	104	14,714
	Recalled	1	16	136	8	0	0	0	0	161
45–49	Screened	7,230	5,099	22,113	5,916	4,351	2,179	711	454	48,053
	Recalled	13	66	342	27	0	0	0	0	448
50–54	Screened	45,700	30,459	30,293	13,599	12,385	3,812	2,189	830	139,267
	Recalled	24	161	325	33	0	0	0	0	543
55–59	Screened	52,693	41,544	33,991	16,860	14,997	4,598	3,171	940	168,794
	Recalled	27	175	299	35	0	0	0	0	536
60–64	Screened	44,369	34,605	26,397	13,371	12,336	3,745	2,316	661	137,800
	Recalled	15	113	236	16	0	0	0	0	380
65–69	Screened	36,834	27,833	20,880	11,019	10,315	3,084	1,710	375	112,050
	Recalled	4	90	145	12	0	0	1	0	252
70–74	Screened	6,429	20,899	15,377	3,052	3,340	2,149	455	45	51,746
	Recalled	3	72	99	4	0	0	0	0	178
75–79	Screened	3,568	5,834	4,773	1,255	1,762	439	141	22	17,794
	Recalled	1	23	41	3	0	0	0	0	68
80–84	Screened	1,135	856	1,010	315	447	110	45	6	3,924
	Recalled	1	6	29	0	0	0	0	0	36
85+	Screened	167	156	250	75	67	13	7	1	736
	Recalled	0	0	10	1	0	0	0	0	11
Ages 40+ years										
	Screened	200,081	168,313	163,248	67,032	61,240	20,747	10,779	3,438	694,878
	Recalled	89	722	1,662	139	0	0	1	0	2,613
Ages 50–69 years										
	Screened	179,596	134,441	111,561	54,849	50,033	15,239	9,386	2,806	557,911
	Recalled	70	539	1,005	96	0	0	1	0	1,711

Source: AIHW analysis of BreastScreen Australia data.

Table 36: Age-specific and age-standardised recall to assessment rates, other reasons only, subsequent screening rounds, states and territories, 2005

Age group (years)	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
	(per cent)								
40–44	0.1	1.6	1.7	0.5	0.0	0.0	0.0	0.0	1.1
45–49	0.2	1.3	1.5	0.5	0.0	0.0	0.0	0.0	0.9
50–54	0.1	0.5	1.1	0.2	0.0	0.0	0.0	0.0	0.4
55–59	0.1	0.4	0.9	0.2	0.0	0.0	0.0	0.0	0.3
60–64	0.0	0.3	0.9	0.1	0.0	0.0	0.0	0.0	0.3
65–69	0.0	0.3	0.7	0.1	0.0	0.0	0.1	0.0	0.2
70–74	0.0	0.3	0.6	0.1	0.0	0.0	0.0	0.0	0.3
75–79	0.0	0.4	0.9	0.2	0.0	0.0	0.0	0.0	0.4
80–84	0.1	0.7	2.9	0.0	0.0	0.0	0.0	0.0	0.9
85+	0.0	0.0	4.0	1.3	0.0	0.0	0.0	0.0	1.5
Ages 40+ years									
Crude rate	0.0	0.4	1.0	0.2	0.0	0.0	0.0	0.0	0.4
ASR(A)	0.1	0.6	1.1	0.2	0.0	0.0	0.0	0.0	0.5
95% CI	0.0–0.1	0.5–0.7	1.0–1.1	0.2–0.3	0.0–0.0	0.0–0.0	0.0–0.0	0.0–0.0	0.4–0.5
Ages 50–69 years									
Crude rate	0.0	0.4	0.9	0.2	0.0	0.0	0.0	0.0	0.3
ASR(A)	0.0	0.4	0.9	0.2	0.0	0.0	0.0	0.0	0.3
95% CI	0.0–0.1	0.4–0.5	0.9–1.0	0.1–0.2	0.0–0.0	0.0–0.0	0.0–0.0	0.0–0.0	0.3–0.3

Note: Rates are the number of women recalled for assessment as the percentage of women screened and age-standardised to the population of women attending a BreastScreen Australia service in 1998.

Source: AIHW analysis of BreastScreen Australia data.

Indicator 6 Rescreening

Table 37: Number of women screened during 2003 and number of those women who returned for screening within 27 months by age, first screening round, states and territories

Age group (years)	Number	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
40–44	Screened	12,086	4,094	10,400	2,611	2,001	896	11	188	32,287
	Returned	1,576	724	7,069	1,384	1,175	404	9	101	12,442
45–49	Screened	9,103	4,663	5,944	2,847	1,918	784	27	195	25,481
	Returned	2,789	1,794	3,884	1,508	1,158	613	23	109	11,878
50–54	Screened	10,952	12,016	6,133	4,655	3,947	665	473	279	39,120
	Returned	6,200	7,932	4,080	2,672	2,565	519	378	150	24,496
55–59	Screened	5,860	1,938	2,969	1,100	619	364	165	111	13,126
	Returned	3,106	1,139	2,012	626	368	310	120	46	7,727
60–64	Screened	3,609	1,045	1,991	667	289	204	85	42	7,932
	Returned	1,943	650	1,443	412	167	172	64	16	4,867
65–69	Screened	2,547	728	1,350	386	186	117	54	30	5,398
	Returned	1,052	420	1,011	180	85	100	29	10	2,887
70–74	Screened	1,283	382	637	153	66	41	23	5	2,590
	Returned	160	194	375	31	11	45	12	1	829
75–79	Screened	806	244	425	105	67	27	13	9	1,696
	Returned	103	31	67	21	15	9	2	1	249
80–84	Screened	342	117	144	52	45	11	6	0	717
	Returned	31	7	17	8	4	1	0	0	68
85+	Screened	97	37	37	13	9	3	2	0	198
	Returned	9	3	8	1	3	2	0	0	26
Ages 40+ years										
	Screened	46,685	25,264	30,030	12,589	9,147	3,112	859	859	128,545
	Returned	16,969	12,894	19,966	6,843	5,551	2,175	637	434	65,469
Ages 50–67 years										
	Screened	22,074	15,496	11,970	6,657	4,982	1,317	762	452	63,710
	Returned	12,162	10,002	8,195	3,849	3,170	902	586	219	39,085

Source: AIHW analysis of BreastScreen Australia data.

Table 38: Age-specific and age-standardised rescreen rates for women screened during 2003, first screening round, states and territories

Age group (years)	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
	(per cent)								
40–44	13.0	17.7	68.0	53.0	58.7	45.1	81.8	53.7	38.5
45–49	30.6	38.5	65.3	53.0	60.4	78.2	85.2	55.9	46.6
50–54	56.6	66.0	66.5	57.4	65.0	78.0	79.9	53.8	62.6
55–59	53.0	58.8	67.8	56.9	59.5	85.2	72.7	41.4	58.9
60–64	53.8	62.2	72.5	61.8	57.8	84.3	75.3	38.1	61.4
65–69	41.3	57.7	74.9	46.6	45.7	85.5	53.7	33.3	53.5
70–74	12.5	50.8	58.9	20.3	16.7	109.8	52.2	20.0	32.0
75–79	12.8	12.7	15.8	20.0	22.4	33.3	15.4	11.1	14.7
80–84	9.1	6.0	11.8	15.4	8.9	9.1	0.0	..	9.5
85+	9.3	8.1	21.6	7.7	33.3	66.7	0.0	..	13.1
Ages 40+ years									
Crude rate	36.3	51.0	66.5	54.4	60.7	69.9	74.2	50.5	50.9
ASR(A)	41.3	52.2	65.9	50.9	53.5	79.2	70.3	42.2	52.1
95% CI	40.6–42.0	50.8–53.6	64.7–67.2	49.2–52.7	51.1–55.9	74.6–84.0	62.3–78.8	36.4–48.6	51.6–52.6
Ages 50–67 years									
Crude rate	55.1	64.5	68.5	57.8	63.6	68.5	76.9	48.5	61.3
ASR(A)	54.8	61.9	69.4	58.5	60.4	56.4	74.4	44.2	60.5
95% CI	53.7–55.8	60.1–63.7	67.8–71.0	56.1–61.0	57.2–63.8	52.9–60.1	67.5–81.9	37.2–51.8	59.8–61.2

Note: Rates are the number of women attending for rescreening as a percentage of women screened and age-standardised to the population of women attending a BreastScreen Australia service in 1998.

Source: AIHW analysis of BreastScreen Australia data.

Table 39: Number of women screened during 2003 and number of those women who returned for screening within 27 months, by age, second screening round, states and territories

Age group (years)	Number	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
40–44	Screened	6,066	730	5,532	1,111	940	422	162	114	15,077
	Returned	1,111	291	4,367	741	704	332	147	76	7,769
45–49	Screened	8,215	2,380	6,039	2,368	1,597	600	395	202	21,796
	Returned	2,925	1,238	4,471	1,495	1,186	464	326	132	12,237
50–54	Screened	10,646	14,320	6,785	4,436	4,530	787	514	294	42,312
	Returned	7,143	10,691	5,144	2,854	3,349	592	443	187	30,403
55–59	Screened	6,362	4,364	3,839	1,801	1,354	360	274	135	18,489
	Returned	4,036	2,996	2,828	1,102	908	261	229	71	12,431
60–64	Screened	3,963	3,380	2,465	987	492	246	106	57	11,696
	Returned	2,472	2,391	1,923	640	343	177	85	30	8,061
65–69	Screened	2,949	2,698	1,763	718	334	156	67	39	8,724
	Returned	1,406	1,898	1,350	334	168	127	43	15	5,341
70–74	Screened	1,720	1,549	1,051	158	119	75	21	17	4,710
	Returned	274	953	698	47	40	41	8	3	2,064
75–79	Screened	1,072	191	345	119	110	49	23	9	1,918
	Returned	154	31	64	32	17	10	4	2	314
80–84	Screened	491	108	89	33	47	16	10	3	797
	Returned	54	18	23	5	12	1	2	1	116
85+	Screened	137	19	28	12	11	3	0	1	211
	Returned	11	4	9	3	4	0	0	0	31
Ages 40+ years										
	Screened	41,621	29,739	27,936	11,743	9,534	2,714	1,572	871	125,730
	Returned	19,586	20,511	20,877	7,253	6,731	2,005	1,287	517	78,767
Ages 50–67 years										
	Screened	22,937	23,785	14,258	7,690	6,591	1,494	936	511	78,202
	Returned	14,876	17,311	10,797	4,887	4,741	1,116	788	301	54,817

Note: Rates are the number of women attending for rescreening as a percentage of women screened and age-standardised to the population of women attending a BreastScreen Australia service in 1998.

Source: AIHW analysis of BreastScreen Australia data.

Table 40: Age-specific and age-standardised rescreen rates in women screened during 2003, second screening round, states and territories

Age group (years)	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
	(per cent)								
40–44	18.3	39.9	78.9	66.7	74.9	78.7	90.7	66.7	51.5
45–49	35.6	52.0	74.0	63.1	74.3	77.3	82.5	65.3	56.1
50–54	67.1	74.7	75.8	64.3	73.9	75.2	86.2	63.6	71.9
55–59	63.4	68.7	73.7	61.2	67.1	72.5	83.6	52.6	67.2
60–64	62.4	70.7	78.0	64.8	69.7	72.0	80.2	52.6	68.9
65–69	47.7	70.3	76.6	46.5	50.3	81.4	64.2	38.5	61.2
70–74	15.9	61.5	66.4	29.7	33.6	54.7	38.1	17.6	43.8
75–79	14.4	16.2	18.6	26.9	15.5	20.4	17.4	22.2	16.4
80–84	11.0	16.7	25.8	15.2	25.5	6.3	20.0	33.3	14.6
85+	8.0	21.1	32.1	25.0	36.4	0.0	0.0	0.0	14.7
Ages 40+ years									
Crude rate	47.1	69.0	74.7	61.8	70.6	73.9	81.9	59.4	62.6
ASR(A)	48.9	63.3	72.8	57.1	63.5	71.5	75.0	51.8	61.0
95% CI	48.1–49.6	62.3–64.4	71.7–74.0	55.5–58.7	61.5–65.6	67.9–75.2	69.9–80.4	46.4–57.5	60.5–61.4
Ages 50–67 years									
Crude rate	64.9	72.8	75.7	63.6	71.9	74.7	84.2	58.9	70.1
ASR(A)	64.3	71.6	75.9	63.3	69.9	74.9	82.4	56.4	69.5
95% CI	63.3–65.4	70.5–72.9	74.4–77.4	61.3–65.4	67.2–72.7	70.3–79.8	75.8–89.4	49.2–64.3	68.8–70.1

Note: Rates are the number of women attending for rescreening as a percentage of women screened and age-standardised to the population of women attending a BreastScreen Australia service in 1998.

Source: AIHW analysis of BreastScreen Australia data.

Table 41: Number of women screened during 2003 and number of those women who returned for screening within 27 months, by age, third and subsequent screening rounds, states and territories

Age group (years)	Number	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
40–44	Screened	2,308	117	2,200	401	324	178	39	27	5,594
	Returned	763	70	1,872	315	279	144	39	23	3,505
45–49	Screened	17,645	1,986	14,362	3,662	2,579	1,304	588	303	42,429
	Returned	8,381	1,431	11,985	2,756	2,117	1,055	526	239	28,490
50–54	Screened	30,087	18,094	22,158	9,275	8,140	3,094	1,571	572	92,991
	Returned	21,482	14,777	18,761	6,977	6,761	2,598	1,420	431	73,207
55–59	Screened	40,012	36,153	26,396	13,772	13,398	3,783	2,188	728	136,430
	Returned	29,381	30,137	22,820	10,176	11,209	3,168	1,986	564	109,441
60–64	Screened	34,328	27,649	20,668	11,315	11,333	3,173	1,750	528	110,744
	Returned	25,418	23,518	18,166	8,714	9,802	2,713	1,561	395	90,287
65–69	Screened	29,423	23,413	17,262	9,309	9,368	2,853	1,276	268	93,172
	Returned	16,160	19,646	14,992	5,710	6,298	2,394	973	166	66,339
70–74	Screened	23,447	18,909	13,708	2,436	3,154	1,700	347	146	63,847
	Returned	4,844	13,041	9,900	1,176	1,698	1,150	186	12	32,007
75–79	Screened	15,790	4,863	3,923	846	1,411	291	84	52	27,260
	Returned	2,727	910	1,156	425	670	124	49	4	6,065
80–84	Screened	5,693	540	819	207	291	69	30	25	7,674
	Returned	829	147	359	95	129	23	13	0	1,595
85+	Screened	1,254	72	196	21	36	10	4	1	1,594
	Returned	127	19	85	10	13	3	1	0	258
Ages 40+ years										
	Screened	199,987	131,796	121,692	51,244	50,034	16,455	7,877	2,650	581,735
	Returned	110,112	103,696	100,096	36,354	38,976	13,372	6,754	1,834	411,194
Ages 50–67 years										
	Screened	122,824	96,721	80,099	40,280	38,907	11,874	6,368	2,014	399,087
	Returned	89,784	80,992	69,257	30,407	32,896	10,018	5,728	1,541	320,623

Source: AIHW analysis of BreastScreen Australia data.

Table 42: Age-specific and age-standardised rescreen rates in women screened during 2003, third and subsequent screening rounds, states and territories

Age group (years)	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
	(per cent)								
40–44	33.1	59.8	85.1	78.6	86.1	80.9	100.0	85.2	62.7
45–49	47.5	72.1	83.4	75.3	82.1	80.9	89.5	78.9	67.1
50–54	71.4	81.7	84.7	75.2	83.1	84.0	90.4	75.3	78.7
55–59	73.4	83.4	86.5	73.9	83.7	83.7	90.8	77.5	80.2
60–64	74.0	85.1	87.9	77.0	86.5	85.5	89.2	74.8	81.5
65–69	54.9	83.9	86.8	61.3	67.2	83.9	76.3	61.9	71.2
70–74	20.7	69.0	72.2	48.3	53.8	67.6	53.6	8.2	50.1
75–79	17.3	18.7	29.5	50.2	47.5	42.6	58.3	7.7	22.2
80–84	14.6	27.2	43.8	45.9	44.3	33.3	43.3	0.0	20.8
85+	10.1	26.4	43.4	47.6	36.1	30.0	25.0	0.0	16.2
Ages 40+ years									
Crude rate	55.1	78.7	82.3	70.9	77.9	81.3	85.7	69.2	70.7
ASR(A)	57.4	76.2	82.5	70.4	77.8	80.4	84.5	66.7	70.9
95% CI	57.0–57.8	74.9–77.5	81.9–83.0	69.4–71.4	76.7–78.9	78.7–82.1	81.3–87.8	62.7–70.7	70.7–71.2
Ages 50–67 years									
Crude rate	73.1	83.7	86.5	75.5	84.6	84.4	89.9	76.5	80.3
ASR(A)	72.9	83.3	86.3	75.5	84.3	84.3	90.0	76.6	80.1
95% CI	72.4–73.4	82.7–84.0	85.6–86.9	74.6–76.4	83.3–85.3	82.6–86.0	87.6–92.4	72.7–80.6	79.8–80.4

Note: Rates are the number of women attending for rescreening as a percentage of women screened and age-standardised to the population of women attending a BreastScreen Australia service in 1998.

Source: AIHW analysis of BreastScreen Australia data.

Indicator 7a Incidence of breast cancer

Table 43: Number of new cases of breast cancer in women, by age, 1990–2004

Age group (years)	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
0–4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5–9	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
10–14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15–19	0	0	0	0	0	1	0	2	3	0	2	0	1	1	0
20–24	4	10	6	14	7	8	6	13	15	12	5	8	7	7	10
25–29	53	51	47	55	58	57	44	51	51	49	54	44	54	45	55
30–34	204	181	181	171	196	200	196	178	197	187	189	171	204	185	207
35–39	345	400	382	411	401	397	422	444	422	441	443	450	430	480	422
40–44	662	721	720	783	779	755	764	760	849	817	847	919	903	914	892
45–49	834	858	1,013	1,025	1,136	1,230	1,186	1,163	1,166	1,152	1,271	1,222	1,320	1,311	1,342
50–54	778	851	861	979	1,109	1,250	1,182	1,327	1,466	1,505	1,557	1,654	1,631	1,508	1,616
55–59	696	800	814	935	1,031	1,141	1,125	1,176	1,261	1,281	1,427	1,527	1,650	1,674	1,722
60–64	820	893	790	966	1,109	1,063	1,018	1,084	1,143	1,245	1,329	1,445	1,411	1,405	1,442
65–69	860	953	934	994	1,214	1,093	1,059	1,079	1,133	1,090	1,119	1,165	1,281	1,202	1,251
70–74	754	796	781	906	1,016	1,024	986	1,029	1,061	992	1,097	1,102	1,041	937	1,015
75–79	633	668	646	692	777	829	739	863	875	836	901	901	928	902	879
80–84	421	487	490	466	532	578	574	578	596	553	579	617	616	700	673
85+	335	370	365	390	374	415	432	444	492	494	520	563	582	550	600
All ages	7,399	8,039	8,030	8,787	9,739	10,042	9,733	10,191	10,730	10,654	11,340	11,788	12,059	11,821	12,126
Ages 50–69 years	3,154	3,497	3,399	3,874	4,463	4,547	4,384	4,666	5,003	5,121	5,432	5,791	5,973	5,789	6,031

Source: AIHW National Cancer Statistics Clearing House.

Table 44: Age-specific and age-standardised incidence rates for breast cancer in women, 1990–2004

Age group (years)	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
0–4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5–9	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10–14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15–19	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.3	0.5	0.0	0.3	0.0	0.1	0.1	0.0
20–24	0.6	1.5	0.9	2.0	1.0	1.1	0.9	1.9	2.3	1.9	0.8	1.2	1.1	1.0	1.5
25–29	7.5	7.3	6.8	8.1	8.5	8.3	6.2	7.0	7.0	6.7	7.4	6.2	7.8	6.6	8.1
30–34	29.4	25.4	25.0	23.4	26.7	27.4	27.1	24.9	27.8	26.3	26.3	23.1	26.9	24.1	26.9
35–39	52.6	60.2	56.4	59.7	57.5	55.7	57.9	59.8	56.1	58.2	58.6	59.9	57.8	65.1	57.1
40–44	107.0	112.8	112.2	121.0	118.6	113.1	112.5	109.9	120.9	114.4	116.2	123.4	118.6	118.3	114.6
45–49	174.2	170.7	188.1	178.9	190.6	199.5	185.4	181.0	178.4	173.2	188.5	178.8	190.0	185.0	185.3
50–54	194.1	206.0	203.0	225.6	244.8	262.6	237.6	247.0	256.0	251.7	249.9	255.2	251.5	230.1	243.4
55–59	193.8	223.1	222.2	248.8	267.3	288.5	276.0	279.2	290.9	283.0	301.4	307.9	307.9	293.5	289.9
60–64	221.2	241.3	216.3	268.6	310.7	297.9	285.4	298.1	306.9	324.0	334.9	354.1	336.6	326.5	321.7
65–69	246.7	271.3	264.6	279.7	342.5	308.6	298.5	306.3	324.6	314.9	324.3	335.8	361.2	330.5	334.1
70–74	278.6	282.0	267.0	298.5	320.2	317.1	301.5	313.1	320.5	297.6	328.8	329.1	313.4	285.1	311.6
75–79	286.8	296.2	282.0	300.8	341.1	355.2	303.1	336.5	325.5	297.6	313.1	308.6	315.4	303.5	293.8
80–84	302.2	334.9	323.5	294.4	318.2	335.2	325.0	321.4	327.4	302.1	304.7	305.7	292.2	318.1	294.1
85+	317.2	336.3	315.6	320.1	293.3	308.9	305.1	297.3	313.9	297.4	296.9	307.1	307.9	284.6	304.2
All ages															
Crude rate	86.5	92.7	91.5	99.1	108.6	110.6	105.8	109.4	113.9	111.8	117.5	120.5	121.8	118.0	119.7
ASR(A)	94.6	100.4	98.2	105.3	114.1	115.5	109.1	111.4	114.6	111.2	115.6	117.2	117.2	112.2	112.8
95% CI	92.4–96.8	98.1–102.6	96.1–100.4	103.1–107.6	111.8–116.4	113.3–117.8	106.9–111.3	109.3–113.6	112.4–116.8	109.1–113.4	113.4–117.7	115.1–119.3	115.1–119.3	110.2–114.3	110.8–114.8
Ages 50–69 years															
Crude rate	213.2	234.2	225.3	254.1	287.9	287.3	271.2	278.7	289.6	287.5	295.5	304.9	305.0	286.6	289.9
ASR(A)	209.3	229.8	221.9	250.7	282.4	285.3	269.0	277.1	288.5	286.9	295.1	304.9	304.4	285.6	288.8
95% CI	201.9–216.9	222.1–237.7	214.4–229.7	242.8–258.8	274.1–290.9	277.0–293.8	261.0–277.1	269.2–285.2	280.5–296.6	279.1–294.9	287.3–303.1	297.1–312.8	296.7–312.2	278.3–293.0	281.6–296.2

Note: Rates are the number of cases of invasive cancers per 100,000 women and age-standardised to the Australian population at 30 June 2001.

Source: AIHW National Cancer Statistics Clearing House.

Table 45: Number of new cases of breast cancer in women, by age, states and territories, 2000–2004

Age group (years)	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
0–4	0	0	0	0	0	0	0	0	0
5–9	0	0	0	0	0	0	0	0	0
10–14	0	0	0	0	0	0	0	0	0
15–19	1	1	0	2	0	0	0	0	4
20–24	16	9	4	2	5	1	0	0	37
25–29	81	79	39	23	22	4	2	2	252
30–34	317	244	171	102	68	21	25	8	956
35–39	767	572	404	208	182	45	30	17	2,225
40–44	1,521	1,119	842	404	352	112	91	34	4,475
45–49	2,082	1,612	1,276	672	473	163	132	56	6,466
50–54	2,570	1,943	1,447	853	725	191	175	62	7,966
55–59	2,695	1,889	1,530	763	713	206	159	45	8,000
60–64	2,388	1,673	1,375	662	604	194	102	34	7,032
65–69	2,019	1,495	1,119	576	554	151	91	13	6,018
70–74	1,891	1,342	941	396	397	151	63	11	5,192
75–79	1,648	1,164	741	361	402	118	68	9	4,511
80–84	1,177	793	527	288	282	79	34	5	3,185
85+	964	764	468	246	273	66	30	4	2,815
All ages	20,137	14,699	10,884	5,558	5,052	1,502	1,002	300	59,134
Ages 50–69 years	9,672	7,000	5,471	2,854	2,596	742	527	154	29,016

Source: AIHW National Cancer Statistics Clearing House.

Table 46: Age-specific and age-standardised incidence rates for breast cancer in women, states and territories, 2000–2004

Age group (years)	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
0–4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5–9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10–14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15–19	0.1	0.1	0.0	0.6	0.0	0.0	0.0	0.0	0.1
20–24	1.5	1.1	0.6	0.6	2.1	1.4	0.0	0.0	1.1
25–29	6.8	9.0	5.9	6.9	9.1	5.6	3.1	4.6	7.2
30–34	25.1	25.3	24.3	28.1	25.3	25.8	38.2	17.6	25.5
35–39	61.6	60.9	57.5	56.3	65.1	52.3	47.5	41.8	59.7
40–44	120.1	119.7	117.4	106.9	120.0	120.5	141.2	90.3	118.2
45–49	180.0	187.6	194.1	189.8	171.6	187.9	213.9	168.2	185.5
50–54	240.1	242.9	234.9	266.2	274.6	233.5	301.1	221.1	245.9
55–59	300.9	287.0	298.9	303.8	322.7	296.6	368.2	241.4	299.7
60–64	333.3	318.0	351.2	337.1	345.4	343.8	348.9	295.4	334.4
65–69	325.8	327.3	353.6	355.2	362.5	316.7	410.4	188.3	337.2
70–74	324.4	313.8	329.0	277.3	267.5	344.9	337.3	231.3	313.7
75–79	316.9	304.5	297.5	297.9	289.4	303.1	405.5	283.3	306.8
80–84	315.2	293.4	293.7	334.7	281.5	274.8	298.7	243.3	302.9
85+	292.4	312.0	298.8	305.6	302.2	261.8	328.6	267.2	300.1
All ages									
Crude rate	120.9	119.2	116.5	115.7	131.3	124.6	123.0	63.2	119.5
ASR(A)	114.8	113.5	115.7	115.8	116.9	113.2	132.5	93.0	115.0
95% CI	113.2–116.4	111.6–115.3	113.5–117.9	112.8–118.9	113.6–120.2	107.6–119.2	124.3–141.1	81.2–105.8	114.0–115.9
Ages 50–69 years									
Crude rate	292.9	286.8	298.0	306.8	319.4	290.6	345.1	236.6	296.2
ASR(A)	291.6	285.9	298.1	307.3	318.3	288.8	348.7	236.6	295.5
95% CI	285.8–297.5	279.2–292.6	290.3–306.1	296.2–318.8	306.2–330.8	268.4–310.4	319.3–380.0	199.5–278.4	292.2–299.0

Note: Rates are the number of cases of invasive cancers per 100,000 women and age-standardised to the Australian population at 30 June 2001.

Source: AIHW National Cancer Statistics Clearing House.

Table 47: Number of new cases of breast cancer in women, by age and region, 2000–2004

Age group (years)	Major cities	Inner regional	Outer regional	Remote	Very remote	Australia
0–4	0	0	0	0	0	0
5–9	0	0	0	0	0	0
10–14	0	0	0	0	0	0
15–19	3	0	1	0	0	4
20–24	29	6	2	0	0	37
25–29	179	46	16	5	6	252
30–34	680	159	100	13	5	956
35–39	1,575	414	197	27	12	2,225
40–44	3,070	874	422	78	30	4,475
45–49	4,406	1,305	624	88	43	6,466
50–54	5,378	1,707	729	107	45	7,966
55–59	5,339	1,746	783	98	34	8,000
60–64	4,534	1,670	712	92	24	7,032
65–69	3,897	1,437	618	50	16	6,018
70–74	3,376	1,283	466	48	20	5,192
75–79	3,015	1,062	397	24	13	4,511
80–84	2,179	717	260	26	3	3,185
85+	1,896	612	277	21	9	2,815
All ages	39,555	13,038	5,606	678	257	59,134
Ages 50–69 years	19,148	6,560	2,843	347	118	29,016

Note: Because some postcodes cross regional boundaries, totals may not add up due to rounding.

Source: AIHW National Cancer Statistics Clearing House.

Table 48: Age-specific and age-standardised incidence rates for breast cancer in women, by region, 2000–2004

Age group (years)	Major cities	Inner regional	Outer regional	Remote	Very remote	Australia
0–4	0.0	0.0	0.0	0.0	0.0	0.0
5–9	0.0	0.0	0.0	0.0	0.0	0.0
10–14	0.0	0.0	0.0	0.0	0.0	0.0
15–19	0.1	0.0	0.3	0.0	0.0	0.1
20–24	1.2	1.1	0.8	0.4	0.0	1.1
25–29	7.2	7.9	5.4	8.8	16.2	7.2
30–34	26.0	23.3	28.4	20.5	12.5	25.5
35–39	62.8	55.7	53.2	42.6	36.6	59.7
40–44	122.8	109.3	108.8	129.3	101.6	118.2
45–49	190.7	176.9	177.3	166.7	170.8	185.5
50–54	248.8	248.9	222.5	228.2	205.6	245.9
55–59	306.4	294.4	277.5	257.4	208.3	299.7
60–64	338.0	340.7	306.9	323.1	204.7	334.4
65–69	340.1	339.2	323.1	227.3	188.5	337.2
70–74	312.7	332.1	277.0	271.7	310.6	313.7
75–79	306.8	318.4	282.4	179.6	276.1	306.8
80–84	307.6	305.1	262.8	273.1	94.0	302.9
85+	296.2	294.9	311.9	249.7	335.2	300.1
All ages						
Crude rate	120.0	126.5	112.8	88.9	61.8	119.5
ASR(A)	116.7	114.4	106.5	99.1	88.3	115.0
95% CI	115.6–117.9	112.4–116.4	103.7–109.3	91.7–107.0	77.3–100.2	114.0–115.9
Ages 50–69 years						
Crude rate	299.6	299.2	275.1	256.2	203.7	296.2
ASR(A)	299.6	296.9	273.2	256.2	203.1	295.5
95% CI	295.4–303.9	289.7–304.2	263.3–283.5	229.9–284.7	167.3–242.9	292.2–299.0

Note: Rates are the number of cases of invasive cancers per 100,000 women and age-standardised to the Australian population at 30 June 2001.

Source: AIHW National Cancer Statistics Clearing House.

Indicator 7b

Incidence of ductal carcinoma in situ

Table 49: Number of new cases of ductal carcinoma in situ, by age, states and territories, 2000–2004

Age group (years)	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
0–19	0	0	0	1	0	0	0	0	1
20–29	3	10	3	3	1	0	0	0	20
30–39	86	64	43	20	15	3	5	0	236
40–49	466	300	253	151	69	17	29	5	1290
50–59	732	615	466	320	190	60	49	11	2443
60–69	579	461	377	248	118	37	30	5	1855
70+	491	288	225	132	82	28	10	0	1256
All ages	2,357	1,738	1,367	875	475	145	123	21	7,101
Ages 50–69 years	1,311	1,076	843	568	308	97	79	16	4,298

Source: AIHW National Cancer Statistics Clearing House.

Table 50: Age-specific and age-standardised rates of ductal carcinoma in situ, states and territories, 2000–2004

Age group (years)	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
0–19	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0
20–29	0.1	0.6	0.2	0.5	0.2	0.0	0.0	0.0	0.3
30–39	3.4	3.4	3.1	2.7	2.7	1.8	3.9	0.0	3.2
40–49	19.2	16.7	18.4	20.6	12.1	9.5	23.0	7.0	17.7
50–59	37.2	42.2	41.3	56.0	39.2	39.7	48.4	23.6	41.3
60–69	43.3	46.9	53.2	69.2	36.0	35.5	58.4	27.2	47.7
70+	27.2	21.7	25.8	30.7	17.2	20.5	17.9	0.0	24.6
All ages									
Crude rate	14.1	14.1	14.6	18.2	12.3	12.0	15.1	4.4	14.4
ASR(A)	13.6	13.7	14.6	18.3	11.2	11.0	15.8	5.9	14.0
95% CI	13.0–14.2	13.0–14.3	13.8–15.4	17.1–19.6	10.2–12.3	9.3–12.9	13.1–18.9	3.6–9.2	13.6–14.3
Ages 50–69 years									
Crude rate	39.7	44.1	45.9	61.1	37.9	38.0	51.7	24.6	43.9
ASR(A)	39.6	44.0	46.0	61.2	37.9	38.0	52.3	25.0	43.9
95% CI	37.5–41.8	41.4–46.8	43.0–49.2	56.3–66.4	33.8–42.4	30.8–46.4	41.3–65.3	13.9–41.0	42.6–45.2

Note: Rates are the number of cases of DCIS per 100,000 women and age-standardised to the Australian population at 30 June 2001.

Source: AIHW National Cancer Statistics Clearing House.

Table 51: Number of new cases of ductal carcinoma in situ, 1994–2004

Age group (years)	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
0–19	0	0	0	1	0	0	0	0	0	1	0
20–29	2	5	2	10	6	4	2	5	4	4	5
30–39	40	47	38	45	42	39	53	42	57	38	46
40–49	152	163	199	225	232	229	238	260	253	255	284
50–59	207	266	266	320	351	400	454	492	485	486	526
60–69	175	195	221	249	295	289	309	389	362	382	413
70+	98	178	164	160	215	189	242	248	227	271	268
All ages	674	854	890	1,010	1,141	1,150	1,298	1,436	1,388	1,437	1,542
Ages 50–69 years	382	461	487	569	646	689	763	881	847	868	939

Source: AIHW National Cancer Statistics Clearing House.

Table 52: Age-specific and age-standardised rates of ductal carcinoma in situ, 1994–2004

Age group (years)	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
0–19	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.04	0.00
20–29	0.14	0.36	0.14	0.72	0.43	0.29	0.15	0.37	0.30	0.30	0.37
30–39	2.79	3.26	2.62	3.08	2.87	2.65	3.59	2.82	3.80	2.52	3.05
40–49	12.13	12.69	15.09	16.86	17.11	16.60	16.96	18.20	17.38	17.22	18.90
50–59	24.68	30.52	29.39	33.39	34.89	38.07	41.40	43.00	40.95	39.65	41.82
60–69	24.60	27.43	31.07	34.78	40.89	39.57	41.65	51.53	46.78	48.11	50.20
70+	11.67	20.62	18.45	17.50	22.90	19.62	24.53	24.51	22.12	26.08	25.50
All ages											
Crude rate	7.5	9.4	9.7	10.8	12.1	12.1	13.5	14.7	14.0	14.3	15.2
ASR(A)	8.1	10.0	10.2	11.3	12.4	12.2	13.4	14.5	13.7	13.8	14.4
95% CI	7.5–8.8	9.4–10.7	9.5–10.9	10.6–12.0	11.7–13.1	11.5–13.0	12.7–14.2	13.7–15.2	12.9–14.4	13.1–14.5	13.7–15.2
Ages 50–69 years											
Crude rate	24.6	29.1	30.1	34.0	37.4	38.7	41.5	46.4	43.3	43.0	45.1
ASR(A)	24.6	29.3	30.1	33.9	37.3	38.7	41.5	46.4	43.3	43.0	45.1
95% CI	22.2–27.3	26.7–32.1	27.4–32.9	31.2–36.9	34.4–40.2	35.8–41.7	38.6–44.6	43.4–49.5	40.4–46.3	40.2–45.9	42.3–48.1

Note: Rates are the number of cases of DCIS per 100,000 women and age-standardised to the Australian population at 30 June 2001.

Source: AIHW National Cancer Statistics Clearing House.

Indicator 8

Mortality

Table 53: Number of deaths from breast cancer in women, 1991–2005

Age group (years)	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
0–4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5–9	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
10–14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15–19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
20–24	2	1	0	1	1	0	1	2	2	1	1	0	0	0	0
25–29	12	4	2	2	5	9	6	7	6	5	2	4	5	5	4
30–34	25	33	39	19	25	28	37	28	20	23	21	24	26	24	26
35–39	79	79	74	87	57	90	84	68	59	66	63	71	65	50	51
40–44	150	136	116	139	120	136	135	128	141	122	126	112	118	109	132
45–49	177	196	202	211	207	189	211	207	203	187	185	173	185	191	192
50–54	232	212	225	239	221	230	271	265	247	255	262	295	242	230	267
55–59	227	219	252	249	248	240	236	227	260	257	253	289	307	301	293
60–64	258	236	276	262	268	258	239	255	263	239	228	273	289	254	303
65–69	306	272	316	290	317	289	284	252	212	216	242	256	263	285	254
70–74	305	287	264	308	288	296	297	268	288	287	315	245	252	256	234
75–79	249	254	298	274	281	279	291	300	274	281	289	312	301	287	283
80–84	211	213	257	250	259	252	244	236	232	237	273	277	277	288	304
85+	229	247	268	271	280	273	273	314	298	335	325	367	383	361	375
All ages	2,463	2,389	2,588	2,602	2,576	2,571	2,609	2,557	2,505	2,511	2,585	2,698	2,713	2,641	2,719
Ages 50–69 years	1,023	939	1,069	1,040	1,054	1,017	1,030	999	982	967	985	1,113	1,101	1,070	1,117

Note: See Appendix B Mortality data section for explanation on changes to the coding and processing of mortality data.

Source: AIHW National Mortality Database.

Table 54: Age-specific and age-standardised mortality rates for breast cancer in women, 1991–2005

Age group (years)	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
0–4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5–9	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10–14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15–19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
20–24	0.3	0.1	0.0	0.1	0.1	0.0	0.1	0.3	0.3	0.2	0.2	0.0	0.0	0.0	0.0
25–29	1.7	0.6	0.3	0.3	0.7	1.2	0.8	1.0	0.8	0.7	0.3	0.6	0.7	0.7	0.6
30–34	3.6	4.6	5.4	2.5	3.5	3.9	5.2	3.9	2.8	3.2	2.8	3.2	3.4	3.1	3.4
35–39	12.0	11.7	10.7	12.5	8.0	12.4	11.3	9.0	7.8	8.7	8.4	9.6	8.8	6.8	6.8
40–44	23.5	21.2	17.9	21.2	17.9	20.1	19.5	18.2	19.7	16.7	16.9	14.7	15.3	14.0	17.0
45–49	35.3	36.4	35.2	35.4	33.5	29.6	32.8	31.7	30.5	27.7	27.1	24.9	26.1	26.4	26.0
50–54	56.2	49.9	51.9	52.8	46.5	46.3	50.4	46.3	41.3	40.9	40.4	45.5	36.9	34.6	39.6
55–59	63.4	59.6	67.0	64.5	62.7	58.9	56.0	52.4	57.4	54.3	51.0	53.9	53.8	50.7	47.5
60–64	69.6	64.7	76.9	73.3	75.0	72.3	65.7	68.5	68.4	60.2	55.9	65.1	67.2	56.7	64.5
65–69	87.0	77.2	88.8	81.8	89.4	81.5	80.6	72.2	61.3	62.6	69.8	72.2	72.3	76.1	66.0
70–74	108.0	98.2	86.8	97.0	89.2	90.5	90.4	80.9	86.4	86.0	94.1	73.8	76.7	78.6	72.0
75–79	110.4	110.8	129.5	120.5	120.5	114.6	113.5	111.6	97.6	97.7	99.0	106.1	101.3	95.9	94.4
80–84	144.9	140.4	162.2	149.5	150.0	142.6	135.7	129.6	126.7	124.7	135.3	131.4	125.9	125.8	129.3
85+	208.4	213.6	219.6	212.9	208.6	193.1	182.8	200.3	179.4	191.3	177.3	194.1	198.2	183.1	182.0
All ages															
Crude rate	28.4	27.2	29.2	29.0	28.4	27.9	28.0	27.2	26.3	26.0	26.4	27.3	27.1	26.1	26.5
ASR(A)	30.5	28.9	30.5	30.0	28.9	28.1	27.8	26.5	25.4	24.7	24.7	25.2	24.7	23.5	23.7
95% CI	29.3–31.7	27.7–30.0	29.3–31.7	28.9–31.2	27.8–30.0	27.0–29.2	26.8–28.9	25.5–27.6	24.4–26.4	23.7–25.7	23.8–25.7	24.2–26.1	23.8–25.7	22.6–24.5	22.8–24.6
Ages 50–69 years															
Crude rate	68.5	62.2	70.1	67.1	66.6	62.9	61.5	57.8	55.1	52.6	51.9	56.8	54.5	51.4	52.1
ASR(A)	66.5	60.5	67.9	65.5	64.6	61.5	60.6	57.3	55.0	52.5	51.8	56.7	54.2	51.1	51.8
95% CI	62.4–70.8	56.7–64.6	63.8–72.1	61.5–69.7	60.7–68.7	57.8–65.5	57.0–64.4	53.8–61.0	51.6–58.5	49.2–55.9	48.6–55.1	53.4–60.2	51.1–57.5	48.0–54.2	48.8–54.9

Note: Rates are the number of deaths from breast cancer per 100,000 women and age-standardised to the Australian population at 30 June 2001.

Source: AIHW National Mortality Database.

Table 55: Number of deaths from breast cancer in women, by age, states and territories, 2001–2005

Age group (years)	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
0–4	0	0	0	0	0	0	0	0	0
5–9	0	0	0	0	0	0	0	0	0
10–14	0	0	0	0	0	0	0	0	0
15–19	1	0	0	0	0	0	0	0	1
20–24	0	1	0	0	0	0	0	0	1
25–29	6	8	2	2	1	0	0	1	20
30–34	33	40	22	13	6	2	1	4	121
35–39	101	83	47	21	36	8	2	2	300
40–44	190	158	118	47	57	14	10	3	597
45–49	295	242	177	91	73	29	14	5	926
50–54	408	352	238	109	120	42	20	7	1,296
55–59	507	365	247	119	137	37	20	11	1,443
60–64	459	320	262	126	109	41	24	6	1,347
65–69	463	311	234	119	126	29	13	5	1,300
70–74	441	341	224	128	111	34	20	3	1,302
75–79	531	408	236	117	125	38	12	5	1,472
80–84	459	398	234	128	140	43	15	2	1,419
85+	620	488	300	148	195	46	14	0	1,811
All ages	4,514	3,515	2,341	1,168	1,236	363	165	54	13,356
Ages 50–69 years	1,837	1,348	981	473	492	149	77	29	5,386

Note: State refers to the state of usual residence.

Source: AIHW National Mortality Database.

Table 56: Age-specific and age-standardised mortality rates for breast cancer in women, states and territories, 2001–2005

Age group (years)	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
0–4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5–9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10–14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15–19	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20–24	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25–29	0.5	0.9	0.3	0.6	0.4	0.0	0.0	2.3	0.6
30–34	2.6	4.1	3.0	3.6	2.2	2.5	1.5	8.8	3.2
35–39	8.2	8.8	6.6	5.7	13.0	9.5	3.2	4.9	8.1
40–44	14.9	16.7	16.0	12.3	19.4	15.0	15.5	7.9	15.6
45–49	25.1	27.7	26.2	25.2	26.2	32.9	22.6	14.7	26.1
50–54	37.7	43.4	37.7	33.2	45.1	50.5	34.2	24.0	39.4
55–59	54.2	52.7	45.3	44.6	58.9	50.5	43.6	54.8	51.3
60–64	62.4	59.2	63.4	61.8	60.6	70.2	78.3	48.0	61.9
65–69	73.6	66.9	71.2	71.1	81.1	59.5	56.5	68.1	71.2
70–74	76.4	80.4	77.8	88.9	76.0	77.8	106.5	60.6	79.1
75–79	101.8	105.9	93.2	94.8	89.8	97.5	70.9	148.8	99.3
80–84	118.4	140.9	124.6	142.2	133.9	144.7	124.0	93.2	129.4
85+	182.3	193.8	183.6	177.8	209.6	176.5	145.2	0.0	186.9
All ages									
Crude rate	26.9	28.2	24.5	24.0	31.9	29.9	20.1	11.2	26.7
ASR(A)	24.1	25.3	23.6	23.4	26.1	25.5	22.5	19.3	24.4
95% CI	23.4–24.8	24.5–26.2	22.6–24.5	22.1–24.8	24.6–27.6	22.9–28.3	19.1–26.2	13.7–26.1	23.9–24.8
Ages 50–69 years									
Crude rate	54.3	53.7	51.1	48.9	59.0	56.5	48.7	42.0	53.3
ASR(A)	53.8	53.5	51.2	49.2	58.5	56.4	50.2	45.2	53.1
95% CI	51.4–56.3	50.7–56.4	48.1–54.6	44.8–53.8	53.5–64.0	47.7–66.2	39.5–62.8	29.7–65.7	51.7–54.5

Notes

1. Rates are the number of deaths from breast cancer per 100,000 women and age-standardised to the Australian population at 30 June 2001.
2. State refers to the state of usual residence.

Source: AIHW National Mortality Database.

Table 57: Number of deaths from breast cancer in women, by age and region, 2001–2005

Age group (years)	Major cities	Inner regional	Outer regional	Remote	Very remote	Australia
0–4	0	0	0	0	0	0
5–9	0	0	0	0	0	0
10–14	0	0	0	0	0	0
15–19	1	0	0	0	0	1
20–24	1	0	0	0	0	1
25–29	12	5	1	1	1	20
30–34	79	23	15	1	4	121
35–39	194	67	35	2	2	300
40–44	402	124	58	10	3	597
45–49	598	221	92	8	6	926
50–54	844	291	143	14	4	1,296
55–59	964	310	146	19	5	1,443
60–64	852	317	151	21	5	1,347
65–69	857	288	129	15	11	1,300
70–74	830	311	138	16	7	1,302
75–79	957	373	128	11	2	1,472
80–84	959	324	125	8	2	1,419
85+	1,202	410	178	16	5	1,811
All ages	8,753	3,065	1,340	141	57	13,356
Ages 50–69 years	3,517	1,206	570	69	25	5,386

Notes

1. Regions have been defined according to the Australian Standard Geographical Classification Remoteness Areas classification.
2. Because some postcodes cross regional boundaries, totals may not add up due to rounding.

Source: AIHW National Mortality Database.

Table 58: Age-specific and age-standardised mortality rates for breast cancer in women, by region, 2001–2005

Age group (years)	Major cities	Inner regional	Outer regional	Remote	Very remote	Australia
0–4	0.0	0.0	0.0	0.0	0.0	0.0
5–9	0.0	0.0	0.0	0.0	0.0	0.0
10–14	0.0	0.0	0.0	0.0	0.0	0.0
15–19	0.0	0.0	0.0	0.0	0.0	0.0
20–24	0.0	0.0	0.0	0.0	0.0	0.0
25–29	0.5	0.8	0.4	1.8	2.7	0.6
30–34	3.0	3.3	4.2	1.0	9.7	3.2
35–39	7.8	9.1	9.5	2.5	6.2	8.1
40–44	15.9	15.3	14.8	15.7	9.9	15.6
45–49	25.5	29.3	25.7	15.7	23.2	26.2
50–54	38.6	41.4	42.9	30.1	18.3	39.3
55–59	52.4	49.2	49.4	47.6	28.9	51.2
60–64	61.6	62.2	63.1	72.1	40.6	61.9
65–69	73.2	65.9	65.6	65.7	124.6	70.8
70–74	77.5	80.0	81.9	89.1	111.0	78.8
75–79	97.0	109.9	89.1	80.7	47.1	98.8
80–84	129.5	131.8	121.4	82.2	74.6	128.7
85+	181.2	189.2	192.3	176.3	186.3	184.0
All ages						
Crude rate	26.3	29.3	26.8	18.5	13.7	26.7
ASR(A)	24.2	24.9	24.2	21.4	21.3	24.3
95% CI	23.7–24.7	24.0–25.8	22.9–25.5	18.0–25.3	15.9–27.8	23.9–24.7
Ages 50–69 years						
Crude rate	53.4	52.9	53.4	49.8	40.9	53.2
ASR(A)	53.4	52.3	53.0	50.2	44.9	53.0
95% CI	51.6–55.2	49.4–55.4	48.8–57.6	38.9–63.3	28.6–66.5	51.6–54.4

Notes

1. Rates are the number of deaths from breast cancer per 100,000 women and age-standardised to the Australian population at 30 June 2001.
2. The Australian Standard Geographical Classification was used to create the above categories (ABS 2001).

Source: AIHW National Mortality Database.

Table 59: Number of deaths from breast cancer in women, by age and Indigenous status, Queensland, Western Australia, South Australia, Northern Territory, 2001–2005

Age group (years)	Indigenous	Non-Indigenous	Australia
0–4	0	0	0
5–9	0	0	0
10–14	0	0	0
15–19	0	0	1
20–24	0	0	1
25–29	2	4	20
30–34	3	42	121
35–39	4	101	300
40–44	7	216	597
45–49	10	332	926
50–54	5	463	1,296
55–59	4	507	1,443
60–64	9	491	1,347
65–69	9	466	1,300
70–74	9	450	1,302
75+	11	1,602	4,702
All ages	73	4,674	13,356
Ages 50–69 years	27	1,927	5,386

Notes

1. Only Queensland, Western Australia, South Australia and the Northern Territory have Indigenous death registration data considered to be of a publishable standard; therefore, data from these jurisdictions only are included in the analysis by Indigenous status.
2. 'Australia' includes all states and territories of Australia. 'Indigenous' and 'Non-Indigenous' includes Queensland, Western Australia, South Australia and the Northern Territory.
3. Deaths in the 'not-stated' category are included in the column for all women, but they are not included in the other columns.

Source: AIHW National Mortality Database.

Table 60: Age-standardised and age-specific mortality rates for breast cancer in women, by Indigenous status, Queensland, Western Australia, South Australia, Northern Territory, 2001–2005

Age group (years)	Indigenous	Non-Indigenous	Australia
0–4	0.0	0.0	0.0
5–9	0.0	0.0	0.0
10–14	0.0	0.0	0.0
15–19	0.0	0.0	0.0
20–24	0.0	0.0	0.0
25–29	3.4	0.3	0.6
30–34	5.1	3.1	3.2
35–39	7.9	7.5	8.1
40–44	16.5	15.3	15.6
45–49	30.5	25.2	26.1
50–54	19.3	37.7	39.4
55–59	22.9	48.4	51.3
60–64	68.8	61.6	61.9
65–69	100.4	71.7	71.2
70–74	149.8	78.0	79.1
75+	143.8	129.5	132.5
All ages			
Crude rate	10.1	25.9	26.7
ASR(A)	26.7	23.9	24.6
95% CI	20.1–34.6	23.3–24.6	24.1–25.0
Ages 50–69 years			
Crude rate	41.3	51.8	53.3
ASR(A)	45.4	51.8	53.1
95% CI	29.8–66.3	49.5–54.1	51.7–54.5

Notes

1. Only Queensland, Western Australia, South Australia and the Northern Territory have Indigenous death registration data considered to be of a publishable standard; therefore, data from these jurisdictions only are included in the analysis by Indigenous status.
2. 'Australia' includes all states and territories of Australia. 'Indigenous' and 'Non-Indigenous' includes Queensland, Western Australia, South Australia, and the Northern Territory.
3. Rates are the number of deaths from breast cancer per 100,000 women and age-standardised to the Australian population at 30 June 2001.
4. Deaths in the 'not-stated' category are included in the column for all women, but they are not included in the other columns.

Source: AIHW National Mortality Database.

Appendix B Data and statistical issues

Data sources

Multiple data sources were analysed to produce this report. These are summarised in Table B1. All data used in this report are based on calendar years.

Table B1: Sources for data presented in this report

Indicator	Description	Data source
1	Participation	BreastScreen Australia state and territory services
2	Cancer detection	BreastScreen Australia state and territory services
3	Sensitivity	BreastScreen Australia state and territory services
4	DCIS detection	BreastScreen Australia state and territory services, state and territory cancer registries
5	Recall to assessment	BreastScreen Australia state and territory services
6	Rescreening	BreastScreen Australia state and territory services
7	Incidence (ICD-10 C50)	National Cancer Statistics Clearing House, AIHW
8	Mortality (ICD-9 174, ICD-10 C50)	National Mortality Database, AIHW

Population data

The ABS estimated resident population (ERP) data were used to calculate screening participation, and cancer incidence and mortality rates.

Participation rates were calculated using the average of the 2004 and 2005 estimated resident female populations. The only exceptions to this were participation rates by socioeconomic status, by language spoken at home and by Indigenous status.

As the ABS does not calculate ERP by socioeconomic status or language spoken at home, alternative methods were used to calculate the denominators for these rates. In the case of language spoken at home, the denominator was calculated by applying the age-specific distribution from the language question in the 2001 national population census to the relevant age-specific ERP counts. The denominator for rates based on socioeconomic status was calculated by applying an ABS concordance between statistical local area (SLA) and socioeconomic status to the relevant ERP by SLA counts.

The average of the ABS projected populations for 2004 and 2005 (ABS 2004) was used as the denominator for Aboriginal and Torres Strait Islander women participation rates.

Mortality data

Mortality data in this report are given for 1982–2005. During this time, changes have been made to the coding and processing of mortality data that affect the comparability of the data. Data holdings for 1987–1996 were manually coded using the ninth revision of the International Classification of Diseases (ICD-9). Data holdings for 1997 onwards were coded using ICD-10, using an automated system with slightly different coding rules.

The change to the coding and processing of mortality data introduced a break in the data time series. The ABS has developed comparability factors, which are applied to the pre-1997 data, so that a single time series may still be derived (ABS 2002). For breast cancer, the comparability factor is close to 1 (0.98).

The applications of a comparability factor cause the number of deaths before 1997 to be non-integer. Rounding has been used to put the number of deaths into whole numbers.

Statistical analysis of BreastScreen monitoring indicators

Crude rates

A crude rate is defined as the number of events over a specified period (for example, a year) divided by the total population at risk of the event. For example, a crude cancer incidence rate is defined as the number of new cases of cancer in a specified period divided by the population at risk.

Age-specific rates

An age-specific rate is defined as the number of events for a specified age group over a specified period (for example, a year) divided by the total population at risk of the event in that age group. Age-specific rates in this report were calculated by dividing the number of deaths, cancer cases or women participating in the screening programs in each specified age group by the corresponding population in the same age group.

Age-standardised rates

Age-standardised rates (ASRs) enable comparisons to be made between populations that have different age structures. This publication uses direct standardisation, in which the age-specific rates are multiplied by a constant population. This effectively removes the influence of the age structure on the summary rate.

As the *National health data dictionary* recommends the use of the 2001 Australian total estimated resident population as the standard population for health statistics, this population has been used for age-standardising mortality, incidence and participation rates. For statistics based on the population of women screened – that is, cancer detection rates, interval cancer rates and program sensitivity – rates are standardised to the 1998 population of women screened by BreastScreen Australia.

The method used for all these calculations consists of three steps:

- *Step 1:* Calculate the age-specific rate for each age group.
- *Step 2:* Calculate the expected number of cases in each 5-year age group by multiplying the age-specific rates by the corresponding standard population and dividing by the appropriate factor (that is, 100,000 for mortality and incidence rates, 10,000 for cancer detection and sensitivity rates, and 100 for the participation rate).
- *Step 3:* Sum the expected number of cases in each age group, divide by the total of the standard population and multiply by the appropriate factor (that is, 100,000 for mortality and incidence rates, 10,000 for cancer detection and sensitivity rates, and 100 for the participation rate). This gives the age-standardised rate.

Rate denominators

Death rates and cancer incidence rates are expressed in this report as annual rates per 100,000 population. Rates for cancer detection are calculated per 10,000 women screened. Screening participation rates are expressed as a percentage of the eligible population. Rescreen and recall to assessment rates are expressed as a percentage of women screened.

Confidence intervals

The 95% confidence intervals (CIs) in this report were calculated using a method developed by Dobson et al. (1991). This method calculates approximate confidence intervals for a weighted sum of Poisson parameters.

The confidence intervals are used to provide an approximate indication of the differences between rates. Where the confidence intervals of two rates do not overlap, the corresponding rates are statistically significantly different from each other. This is used to compare individual stratified rates with the all-Australia rate. To be truly rigorous, such a comparison should be between a given rate and the rate calculated from the all-Australia data excluding the data underlying the specific rate in the comparison. Presentation of such a comparison in this report would, however, be unnecessarily complex. The approximate comparisons presented might understate the statistical significance of some differences, but they are sufficiently accurate for the purposes of this report.

As with all statistical comparisons, care should be exercised in interpreting the results of the comparison. If two rates are statistically significantly different from each other, this means that the difference is unlikely to have arisen by chance. Judgement should, however, be exercised in deciding whether or not the difference is of any practical significance.

Stratification variables

The data in this report are presented either stratified by the age of the women at the time of screening (for the screening data), at the time of diagnosis (for the cancer incidence data) or at the time of death (for the cancer mortality data). A number of stratification variables apply to some or all of the data presented:

- state or territory
- geographic location
- socioeconomic status
- Indigenous status
- main language spoken at home
- tumour size
- screening round.

State or territory

The state or territory reported is the one where screening took place (for the screening data) or where the diagnosis was made (for the cancer incidence data) or the place of usual residence (for the cancer mortality data).

This means that it is possible for a woman to be double-counted in the screening data. If she was screened in one jurisdiction and then screened again less than 2 years later in another

jurisdiction, both screens may be included in the participation rate. This should, however, have a negligible effect on the reported participation rates.

Geographic location

This report uses the Australian Standard Geographical Classification (ASGC), which groups geographic areas into five classes. These classes are based on Census Collection Districts (CDs) and defined using the Accessibility/Remoteness Index for Australia (ARIA). ARIA is a measure of the remoteness of a location from the services provided by large towns or cities. A higher ARIA score denotes a more remote location. The five classes of the ASGC Remoteness classification, along with a sixth 'Migratory' class, are listed in Table B2.

Accessibility is judged purely on distance to one of the major urban centres. For example, the ASGC remoteness classification allocates Hobart to its second group (Inner regional Australia) and Darwin to its third group (Outer regional Australia).

Table B2: The remoteness areas for the ASGC Remoteness Classification

Region	Collection districts within region
Major cities of Australia	CDs with an average ARIA index value of 0 to 0.2
Inner regional Australia	CDs with an average ARIA index value greater than 0.2 and less than or equal to 2.4
Outer regional Australia	CDs with an average ARIA index value greater than 2.4 and less than or equal to 5.92
Remote Australia	CDs with an average ARIA index value greater than 5.92 and less than or equal to 10.53
Very remote Australia	CDs with an average ARIA index value greater than 10.53
Migratory	Areas composed of offshore, shipping and migratory CDs

Source: ABS 2001.

Socioeconomic status

Socioeconomic status was coded according to the Index of Relative Socio-economic Disadvantage (IRSD). The IRSD is one of the socioeconomic indexes for areas (Socio-Economic Indexes for Areas indexes) developed by the ABS to categorise geographic areas according to their social and economic characteristics.

It is important to note that the IRSD relates to the average disadvantage of all people living in a geographic area. Hence, any variability between groups based on the IRSD will probably be smaller than if the variability had been measured between individuals.

Indigenous status

The BreastScreen Australia Data Dictionary (AIHW & DoHA) specifies that Indigenous status should be coded as

- Aboriginal
- Torres Strait Islander
- both Aboriginal and Torres Strait Islander
- not Indigenous or
- not stated.

For the purposes of this report these categories were amalgamated and the data stratified into three categories:

- Indigenous
- not Indigenous or
- not stated.

In addition, some jurisdictions do not use the 'Not stated' category. If Indigenous status is not given, it is set to a default value. The default used is not the same for all jurisdictions. This means that the analysis based upon Indigenous status should be interpreted with caution.

Main language spoken at home

The *BreastScreen Australia data dictionary* (AIHW & DoHA) recommends that main language spoken at home be coded according to the four-digit ABS Australian Standard Classification of Languages, 1998 (ABS cat. no. 1267.0). This report has collapsed the classification into the simple dichotomy of 'English' and 'Other language'.

Although this stratification is reported as 'main language spoken at home', practice varies between the jurisdictions as to how this information is collected. In some jurisdictions, there may thus be some lack of comparability with the *BreastScreen Australia data dictionary* definition of 'main language'.

In addition, some jurisdictions do not use the 'Not stated' category. If main language spoken at home is not given, it is set to a default value. The default used is not the same for all jurisdictions. This means that the analysis based upon main language spoken at home should be interpreted with caution.

Tumour size

Tumour size is the size in millimetres of the malignant lesion, and applies to invasive cancers only. For more details about this stratification, see the definition given in the *BreastScreen Australia data dictionary* (AIHW & DoHA).

Screening round

The *BreastScreen Australia data dictionary* distinguishes between a woman's screening round in the national program and her round in the state or territory program. Round in the national program is used for this stratification in this report. However, it is not always possible to determine round in the national program, so, for some women, this stratification has been collected as round number in the state or territory program.

BreastScreen Australia data dictionary

A data dictionary has been developed for the BreastScreen Australia Program (AIHW & DoHA). Summary definitions of key concepts and terminology used in this report are given in the glossary. More detailed definitions and explanations may be found in the data dictionary.

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Glossary

Administrative databases: observations about events that are routinely recorded or required by law to be recorded. Such events include births, deaths, hospital separations and cancer incidence. Administrative databases include the National Mortality Database, the National Hospital Morbidity Database and the National Cancer Statistics Clearing House Database.

Age-specific rate: a rate for a specific age group. The numerator and denominator relate to the same age group.

Age-standardised rate: weighted average of age-specific rates according to a standard distribution of the population by age to eliminate the effect of different age distributions and thus facilitate valid comparison of groups with differing age compositions.

Assessment: further investigation of a mammographic abnormality or symptom reported at screening. This includes women who choose assessment outside the program.

Benign: not cancerous.

Cancer (malignant neoplasm): a term used to describe one of several diseases that result when the process of cell division, by which tissues normally grow and renew themselves, becomes uncontrolled and leads to the development of malignant cells. These cancer cells multiply in an uncoordinated way, independently of normal growth control mechanisms, to form a tumour. The tumour can expand locally by invasion or systemically by metastasis via the lymphatic or vascular systems. If left untreated, most malignant tumours eventually result in death.

Cancer death: a death where the underlying cause is indicated as cancer. People with cancer who died of other causes are not counted in the death statistics in this publication.

Confidence interval: a range determined by variability in data, within which there is a specified (usually 95%) chance that the true value of a calculated parameter (for example, relative risk) lies.

Core biopsy: removal of a cylindrical sample of breast tissue under a local or general anaesthetic through a needle for microscopic examination.

Data: refers to the building blocks of health information, including observations from administrative databases and health survey data sets.

Ductal carcinoma in situ: a non-invasive tumour of the mammary gland (breast) arising from cells lining the ducts.

Early review: the recall of a woman to a second assessment within 12 months of the screening date and following an equivocal assessment visit. Early review within 6 months of the screening date is considered part of the screening episode, but early review at 6 months or more occurs after the screening episode is complete.

Epidemiology: the quantitative study of the distribution and determinants of health-related states and events in populations and the application of this study to the control of health problems.

False negative: means that the test has incorrectly observed that the disease is not present.

False positive: means that the test has incorrectly observed that the disease is present.

Film reading: viewing of a radiographic depiction of the breast (a mammogram) to determine the presence or absence of an abnormality indicative of a tumour.

Fine needle aspiration biopsy: the sampling of cells from breast tissue for examination by a pathologist.

First screening round: see *Screening round*.

Incidence: see *New cancer case*.

Index screening year: the year for which the interval cancer rate and the program sensitivity rate are determined.

Index screens: all screening examinations performed within the index screening year.

Indicators: observations about data that have been analysed to provide a means of comparing measures of health within and between population groups.

Indigenous: a person of Aboriginal and/or Torres Strait Islander descent who identifies as an Aboriginal and/or Torres Strait Islander.

Information: observations about data that have been analysed to provide a means of comparing measures of health within and between population groups.

International Classification of Diseases: World Health Organization's internationally accepted classification of death and disease. The 10th revision (ICD-10) is currently in use.

Interval cancer – invasive (as defined for national reporting purposes by Kavanagh et al. (1999), with minor changes pending endorsement by the National Advisory Committee):

- an invasive breast cancer diagnosed after completion of a negative screening episode and before the next screening examination (within 24 months from the date of the previous screen)
- a case of invasive breast cancer that is diagnosed at early review or in the interval between assessment and early review, where the recommendation for early review is 6 months or more from the screening date
- breast cancer diagnosed in a woman by BreastScreen Australia within 24 months of a negative screen (early rescreen) if the woman presents with a breast lump and/or clear or blood-stained nipple discharge in the breast in which the breast cancer was diagnosed
- an invasive breast cancer diagnosed between 6 and 24 months after a recommendation for assessment is made and a woman fails to attend assessment.

Invasive cancer: a tumour whose cells have invaded healthy or normal tissue.

Lymph node: masses of lymphatic tissue, often bean-shaped, that produce lymphocytes and through which lymph filters. These are located throughout the body.

Mammogram: a radiographic depiction of the breast.

Metastasis: the process by which a disease is transferred from one part of the body to another – for example, via the lymphatic system or the bloodstream.

Mortality: see *Cancer death*.

New cancer case: a person who has a new cancer diagnosed for the first time. One person can have more than one cancer and therefore may be counted twice in incidence statistics if it is decided that the two cancers are not of the same origin. This decision is based on a series of principles set out in more detail in a publication by Jensen et al. (1991).

Next scheduled screening examination: 24 months after previous screen unless the woman is recommended for annual rescreening, when the next scheduled screening examination is 12 months.

Population estimates: official population numbers compiled by the ABS at both state and territory and statistical local area levels, by age and sex, as at 30 June each year. These estimates allow comparisons to be made between geographic areas of differing population sizes and age structures.

Prevalence: the number of instances of a specific disease or other condition in a given population at a designated time.

Recruitment: strategies that aim to promote participation of women in the BreastScreen Australia Program through direct contact with women in the target age group (50–69 years) and education of health practitioners and the general public. Women are encouraged to attend every 2 years.

Rescreening: the next screening examination after the screening episode in the index screening year.

Risk factor: an attribute or exposure that is associated with an increased probability of a specified outcome, such as the occurrence of a disease. Risk factors are not necessarily the causes of disease.

Screening: the performance of tests on apparently well people in order to detect a medical condition at an earlier stage than would otherwise be the case. As a screening test is not intended to be diagnostic, a person with a positive or suspicious result must be referred for diagnosis and treatment.

Screening episode: a screening episode includes all attendances for screening and assessment within 6 months relating to a particular round of screening. It starts at the date of attendance for screening. It is completed when:

- a recommendation is made to return the woman to routine rescreening
- a recommendation is made for early review at 6 months or more from the screening date
- a diagnosis of cancer is made
- the woman fails to attend for technical recall or assessment within 6 months
- the woman dies.

Screening round: the first screening round is a woman's first visit to a mammography screening service; a subsequent screening round means that she has been screened before. If she attends for the fourth screening round, she has been screened three times before.

Screening round (first): a woman's first visit to a BreastScreen Australia mammography screening service.

Screening round (subsequent): a woman's visit to a BreastScreen Australia mammography screening service when she has attended such a service before.

Sensitivity: the proportion of people with a disease who have a positive test result for the disease.

Significant difference: where rates are referred to as significantly different, or one rate is deemed significantly higher or lower than another, and these differences are statistically significant. Rates are deemed statistically significantly different when their confidence intervals do not overlap, since their difference is greater than what could be explained by chance. See 'Confidence intervals' in Appendix B for more information.

Symptom: any evidence of disease apparent to the patient. For the purposes of this report, symptoms refer to a self-reported breast lump and/or blood-stained or watery nipple discharge.

Ultrasound: diagnostic method based on the reflection of ultrasonic sound waves generated through scanning of, in this case, the breast. The reflections are viewed on a computer screen or photograph and checked for variations in images.

Unit record file: observations containing person-specific records from health surveys and administrative databases that are unanalysed and not tabulated. This is the most basic form of data and cannot be accessed for general use without appropriate confidentiality measures being in place.

Women-years 'at risk' of interval or screen-detected breast cancer are:

- all women screened aged 50–69 years who are resident in the service catchment area in which they are screened at the time of screening who have not reported a personal history of invasive cancer or DCIS
- women who are recommended for annual rescreening are only at risk of interval cancer up until 12 months after the screening examination
- women who are recommended for routine rescreening are only at risk of an interval cancer up until 24 months after the screening examination.

References

- ABS (Australian Bureau of Statistics) 2001. ABS views on remoteness. Information paper. ABS cat. no. 1244.0. Canberra: ABS.
- ABS 2002. Causes of death, Australia 2000. Cat. no. 3303.0. Canberra: ABS.
- ABS 2004. Experimental estimates and projections, Aboriginal and Torres Strait Islander Australians. Cat. no. 3238.0. Canberra: ABS.
- AIHW (Australian Institute of Health and welfare) & DoHA (Department of Health and Ageing). BreastScreen Australia Data Dictionary.
- BreastScreen Queensland 2005. A decade of achievement 1991–2001. Brisbane: BreastScreen Queensland.
- BreastScreen South Australia 2005. BreastScreen SA: 2001 and 2002 statistical report. Adelaide: BreastScreen South Australia.
- BSANAC (BreastScreen Australia National Advisory Committee) & DHAC (Department of Health and Aged Care) 2000. BreastScreen Australia Evaluation Plan Phase II. Canberra: Commonwealth of Australia.
- Day N 1991. Screening for breast cancer. *British Medical Bulletin* 47:400-15.
- DHSH (Commonwealth Department of Human Services and Health) 1994. National Program for the Early Detection of Breast Cancer: minimum data set: for screening and assessment services. Canberra: Australian Government Publishing Service.
- Dobson AJ, Kuulasmaa K, Eberle E & Scherer J 1991. Confidence intervals for weighted sums of Poisson parameters. *Statistics in Medicine* 10:457-62.
- DPIE (Commonwealth Department of Primary Industries and Energy) & DHSH (Commonwealth Department of Human Services and Health) 1994. Rural, remote and metropolitan areas classification: 1991 Census edition. Canberra: Australian Government Publishing Service.
- Duffy S, Tabar L, Fagerberg G, Gad A, Grontoft O, South M 1991. Breast Screening, prognostic facts and survival-results from the Swedish Two-Country Study. *British Journal of Cancer* 64:1133-38.
- Feig S 1998. Decreased breast cancer mortality through mammographic screening: results in clinical trials. *Radiology* 167:659-65.
- Fletcher S, Black W, Harris R, Rimer V & Shapiro S 1993. Report on the International Workshop on Screening for Breast Cancer. *Journal of the National Cancer Institute* 85:1644-56.
- Jensen O, Parkin D, MacLennan R, Muir C & Skeet R (eds) 1991. *Cancer registration: principles and methods*. Lyon: International Agency for Research on Cancer.
- Kavanagh A, Amos A & Marr G 1999. The ascertainment and reporting of interval cancers within the BreastScreen Australia Program. Sydney: NHMRC National Breast Cancer Centre.
- NQMC (National Quality Management Committee of BreastScreen Australia) 2004. *BreastScreen Australia National Accreditation Standards: BreastScreen Australia Quality Improvement Program*.
- O'Shaughnessy J A 2000. Treating breast precancer. *Clinical Breast Cancer* 1 Suppl:S74-9.

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