BreastScreen Australia monitoring report 2003–2004

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CANCER SERIES
Number 36

BreastScreen Australia monitoring report 2003–2004

The Australian Institute of Health and Welfare
and the
Australian Government Department of Health and Ageing
for the
BreastScreen Australia Program

April 2007

Australian Institute of Health and Welfare
Canberra
AIHW cat. no. CAN 31

This publication is part of the Australian Institute of Health and Welfare's Cancer Series. A complete list of the Institute's publications is available from the Institute's website <www.aihw.gov.au>.

ISSN: 1039 3307

ISBN: 978 1 74024 672 9

Suggested citation

Australian Institute of Health and Welfare 2007. BreastScreen Australia monitoring report 2003–2004. AIHW cat. no. CAN 31. Canberra: AIHW.

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Published by Australian Institute of Health and Welfare

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Acknowledgments

The BreastScreen Australia Program is funded by the Australian Government Department of Health and Ageing. This report was produced in collaboration with the Monitoring and Evaluation Working Group of the Australian Screening Advisory Committee and the Screening Section of the Department of Health and Ageing.

This report was prepared by Ms Edith Christensen, Mr John Harding and Dr Chris Stevenson. Thanks are extended to the following state and territory program and data managers for providing the data and overall assistance in the production of this report. Thanks are also extended to all state and territory cancer registries, which are the source of data on breast cancer incidence (through the National Cancer Statistics Clearing House) and data on ductal carcinoma in situ.

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Abbreviations

AIHW	Australian Institute of Health and Welfare
AACR	Australasian Association of Cancer Registries
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 (see glossary)
DoHA	Australian Government Department of Health and Ageing
DCIS	ductal carcinoma in situ (see glossary)
ERP	estimated resident population
ICD	International Classification of Diseases
IRSD	Index of Relative Socio-economic Disadvantage
NAS	National Accreditation Standards
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
SES	socioeconomic status
SLA	statistical local area
Tas	Tasmania
Vic	Victoria
WA	Western Australia
WHO	World Health Organization

Executive summary

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 and over may also be screened. This report shows that the Program appears to have been successful in reducing both mortality and morbidity. Mortality has declined from 69 deaths per 100,000 women aged 50–69 years in 1990 to 51 deaths per 100,000 in 2004. Various indicators showing improved early detection of ductal carcinoma in situ and small-diameter breast cancers suggest reduced morbidity from radical treatment of advanced disease.

The Program has performance objectives in National Accreditation Standards (NAS) agreed by the Department of Health and Ageing and BreastScreen Australia state and territory programs for individual screening services. These objectives include 70% participation by women in the target age group 50–69 years and rescreening rates of 75% after first screening and 90% after subsequent screening rounds.

This is the eighth national monitoring report for this program. It presents statistics on BreastScreen Australia screening activity and outcomes for 2003–2004 and trend data from 1996 onwards. A reporting interval of two years is used because it corresponds with the recommended interval between screens for asymptomatic women in the target age group of 50–69 years.

This edition of the report is published only on the Internet. In alternate years the report is provided as a printed copy, and also is made available electronically.

Highlights are as follows:

Indicator 1. Participation

- In 2003–2004, of the 1.6 million Australian women screened by the BreastScreen Australia Program, just over 1.1 million (70%) were in the target age group of 50–69 years.
- Participation among women in Australia aged 50–69 years increased from 51.4% in 1996–1997 to 57.1% in 2001–2002 and decreased significantly to 55.6% in 2003–2004.
- In 2003–2004 participation by women living in the most socioeconomically advantaged areas of Australia was 56.3% compared with 53.6% by women living in the least advantaged areas. This difference is statistically significant.
- Participation by Indigenous Australian women (35.3%) was significantly lower than for non-Indigenous women (55.4%). However, participation by Indigenous Australian women has been increasing from 30.3% in 1998–1999.
- Participation by women whose main language spoken at home was not English (42.8%) was significantly lower than participation by women whose main language spoken at home was English (58.0%).

Indicator 2. Detection of small invasive breast cancers

- In 2004, there were 3,851 invasive breast cancers detected by BreastScreen Australia, of which 2,735 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 significantly from 56 cancers detected per 10,000 women in 1996 to 78 per 10,000 women in 2004. For women screened who had previously attended the program the increase was from 35 cancers detected per 10,000 women in 1996 to 42 per 10,000 women in 2004.
- In 2004, there were 2,440 small-diameter breast cancers detected by BreastScreen Australia. Of these, 1,731 occurred in women aged 50–69 years.
- In 2004, 55.7% 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, 64.8% 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 43.4 per 10,000 women screened in 2004. This was significantly higher than the rate of 27.2 per 10,000 women screened aged 50–69 years in 2004 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 is two years.

- There were 4,585 interval cancers detected over the 24 months following a negative screening episode for women screened in the three-year period from 2000 to 2002. Of these, 3,242 were in women aged 50–69 years.
- For women aged 50–69 years attending their first screening round in 2000–2002, 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.
- For women aged 50–69 years attending subsequent screening rounds in 2000–2002, the age-standardised interval cancer rate was 10.1 interval cancers per 10,000 women-years.

Indicator 3b. Program sensitivity (screen detected cancers)

'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 two-year screening interval.

- For women screened over the period from 2000 to 2002 there were 10,993 screen detected cancers and 4,585 interval cancers in women aged 40 years and over, and 7,681 screen detected cancers and 3,242 interval cancers in women in the target age group.
- Program sensitivity has been improving for women aged 50–69 years. The sensitivity rate for women 24 months after their first screen was 77.1% during index years 1997–1999 and 78.6% during index years 2000–2002. These were significantly higher than the rates of 68.9% and 71.1% recorded during index years 1997–1999 and 2000–2002, respectively, for women attending subsequent screening rounds.

Indicator 4. Detection of ductal carcinoma in situ (DCIS)

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 2004, of the 917 cases of DCIS detected in women participating in the BreastScreen Australia Program, 673 were in the 50–69 age group. The age-standardised detection rate for DCIS for women in this age group attending for their first screening round was 19.8 per 10,000 women screened. For women attending for their second or subsequent screening rounds in 2004 the rate decreased significantly to 10.4 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 11.2 cases per 10,000 women screened in 2004.

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 2004, 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 9.9% 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.
- The proportion of women attending their first screening round who were recalled for assessment increased significantly from 7.7% in 1999 to 9.9% in 2004. The proportion of women recalled for assessment who attended subsequent screening rounds remained stable at 4.0% in 1999 and 2004.

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 2003, there were 11,788 new breast cancer cases diagnosed. Of these, 716 (6.1%) were in women younger than 40 years, 2,218 (18.8%) occurred in women aged 40–49 years,

5,793 (49.1%) occurred in women in the target age group 50–69 years and 3,061 (26.0%) occurred in women aged 70 years and over.

- The breast cancer incidence rate for women of all ages rose from 112.9 per 100,000 women in 1994–1998 to 114.5 per 100,000 women in 1999–2003. The increase was not statistically significant.
- In 1994–1998 and 1999–2003 the age-standardised breast cancer incidence rate for women of all ages was significantly lower in outer regional (102.7 and 106.8 new cases per 100,000 women, respectively), remote (98.3 and 100.5 new cases per 100,000 women, respectively) and very remote areas (82.3 and 91.9 new cases per 100,000 women, respectively) compared with major cities (115.2 and 116.5 new cases per 100,000 women, respectively).
- The breast cancer incidence rate for women in the target age group 50–69 years increased significantly from 280.5 per 100,000 women in 1994–1998 to 295.4 per 100,000 women in 1999–2003.
- The age of women with the highest incidence of breast cancer has been falling. In 1998 the highest breast cancer incidence rate was in women aged 75–79 years (327.4 new cases per 100,000 women). In 2002 the incidence peak was for women aged 65–69 years (360.2 per 100,000 women). In 2003 the age groups with the highest breast cancer incidence rate were 60–64 and 65–69 years old with 327.5 and 327.8 new cases per 100,000 women.
- In 1994–1998 and 1999–2003 the age-standardised breast cancer incidence rate for women aged 50–69 years was significantly lower in outer regional (256.3 and 274.6 new cases per 100,000 women, respectively), remote (233.0 and 255.8 new cases per 100,000 women, respectively) and very remote areas (176.4 and 228.6 new cases per 100,000 women, respectively) compared with major cities (286.4 and 300.7 new cases per 100,000 women, respectively).

Indicator 7b. Incidence of ductal carcinoma in situ (DCIS)

- In the five-year period 1999–2003 there were 6,722 new cases of DCIS detected in women of all ages. Of these, 4,053 (60%) were in women aged 50–69 years.
- The age-standardised DCIS incidence rate for women of all ages increased significantly from 10.5 new cases per 100,000 women in 1994–1998 to 13.5 new cases per 100,000 women in 1999–2003.
- The age-standardised DCIS incidence rate for women aged 50–69 years increased significantly from 31.2 per 100,000 women in 1994–1998 to 42.6 per 100,000 women in 1999–2003.

Indicator 8. Mortality

- Breast cancer was the most common cause of cancer-related deaths in women in Australia in 2004, with 2,641 deaths. Of these, 1,070 deaths (40.5%) occurred in women aged 50–69 years.
- The age-standardised breast cancer mortality rate in women of all ages declined from 30.4 per 100,000 women in 1990 to 23.4 per 100,000 women in 2004, an average of 2.0% per annum.

- The age-standardised mortality rate for women aged 50–69 years declined significantly from 68.5 per 100,000 women in 1990 to 50.9 per 100,000 women in 2004, an average of 2.1% per annum.
- Mortality rates in 2000–2004 for women aged 50–69 years were similar for women in major cities (54.1 deaths per 100,000 women), inner regional areas (51.0) and outer regional areas (54.2). The rates in remote areas (45.2) and very remote areas (43.9) were lower, but these were not significant because of the small number of deaths in these areas.

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 five years ago and 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 five-year comparison table for national data for all indicators for the target age group 50–69 years

		Latest reporting period		Previous non-overlapping reporting period		Five years ago	
Indicator	**Objective[a]**	**Year**	**Rate**	**Year**	**Rate**	**Year**	**Rate**
Participation in 24-month period (%)	70.0[b]	2003–2004	55.6	2001–2002	57.1	1998–1999	55.7
Detection rate of small invasive cancers (≤ 15 mm)[c]	≥25						
First screening round		2004	43.4	2003	40.1	1999	37.7
Subsequent screening rounds		2004	27.2	2003	27.2	1999	26.5
Interval cancer rate[c]							
First screening round 0–12 months following a negative screening episode	<7.5	Index years 2000, 2001 and 2002	6.8	Index years 1997, 1998 and 1999*	7.3	..	..
Subsequent screening rounds 0–12 months following a negative screening episode	<7.5	Index years 2000, 2001 and 2002	7.9	Index years 1997, 1998 and 1999*	7.7	..	..
Program sensitivity (screen detected cancers)[c]							
First screening round 0–12 months following a negative screening episode	..	Index years 2000, 2001 and 2002	90.0	Index years 1997, 1998 and 1999*	88.5	..	..
Subsequent screening rounds 0–12 months following a negative screening episode	..	Index years 2000, 2001 and 2002	84.3	Index years 1997, 1998 and 1999*	82.6	..	..
Detection of ductal carcinoma in situ (DCIS)[c]							
First screening round	≥12	2004	19.8	2003	16.8	1999	15.3
Subsequent screening rounds	≥7	2004	10.4	2003	10.3	1999	8.9
Recall to assessment[d]							
First screening round	<10	2004	9.9	2003	9.4	1999	7.7
Subsequent screening rounds	<5	2004	4.0	2003	4.0	1999	4.0

(continued)

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

		Latest reporting period		Previous non-overlapping reporting period		Five years ago	
Indicator	**Objective[a]**	**Year**	**Rate**	**Year**	**Rate**	**Year**	**Rate**
Rescreening for age group 50–67 years[d] [e]							
First screening round	≥75	Index year 2002	61.6	Index year 2001	62.9	..	..
Second screening round	≥90	Index year 2002	70.3	Index year 2001	71.9	..	..
Third and subsequent screening rounds	≥90	Index year 2002	80.7	Index year 2001	81.8	..	..
Incidence of breast cancer[f]	..	2003	285.1	2002	303.7	1998	288.4
Incidence of ductal carcinoma in situ (DCIS)[g]	..	1999–2003	42.6	..	..	1994–1998	31.2
Mortality from breast cancer[h]	..	2004	50.9	2003	54.1	1999	55.0

. . Not applicable.

(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 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) Prior to index year 2000, data for 50–69 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.

*The Australian figure includes data from NSW, Vic, Qld, WA, SA, Tas and ACT. NT data were unavailable at the time of publication of the *BreastScreen Australia monitoring report 2000–2001* from which the data for index years 1997, 1998 and 1999 were copied.

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 five-year age groups for women aged 40 years and 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. It is important that a high proportion of women in the target age group attend for screening if BreastScreen Australia is to realise the anticipated reductions in overall mortality from breast cancer (DHSH 1994). The participation rate is a direct measure of this attendance. 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 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 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 2003 and 2004 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 2003–2004 was 55.6%. This rate has been steadily increasing since 1996–1997, when it was 51.4%, to 57.1% in 2001–2002 but decreased to 55.6% in 2003–2004. This decrease is statistically significant.

Age-standardised participation rates for women in the target age group (50–69 years), Australia, 1996–1997 to 2003–2004

	Objective[(a)]	1996–1997	1997–1998	1998–1999	1999–2000	2000–2001	2001–2002	2002–2003	2003–2004
Rate (%)	70.0	51.4	54.6	55.7	55.9	56.9	57.1	56.1	55.6
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*	*55.9–56.2*	*55.5–55.7*

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

. . Not applicable.

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

Source: AIHW analysis of BreastScreen Australia data.

Another BreastScreen Australia objective relating to participation 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. Below are some key points on each of these variables.

Regional areas

Participation is highest in 'Inner regional', 'Outer regional' and 'Remote' areas and lowest in 'Major cities' and in 'Very remote' areas.

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 Indigenous Australian women in very remote areas.

Socioeconomic status

In 2003–2004 women aged 50–69 years living in the most socioeconomically disadvantaged areas of Australia had a 53.6% participation in BreastScreen Australia, significantly below the national average of 55.6%.

Between the years 1998–1999 and 2003–2004 there were significant increases in participation for women living in areas in the two most advantaged quintiles.

Aboriginal and Torres Strait Islander women

In 2003–2004 the age-standardised participation rate for Indigenous Australian women aged 50–69 years (35.3%) was much lower than the non-Indigenous rate (55.4%) but the rate for Indigenous Australian women increased significantly from 30.3% in 1998–1999 to 35.3% in 2003–2004.

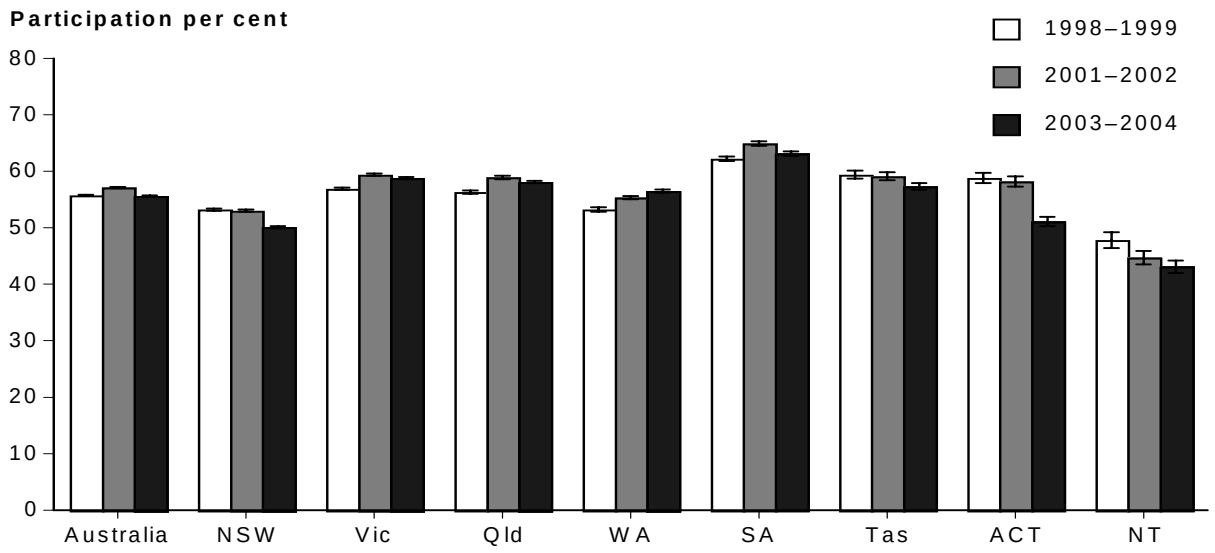
Main language spoken at home

Similarly, the age-standardised participation rate among women aged 50–69 years whose main language spoken at home was not English was significantly lower (42.8%) than the rate for women whose main language spoken at home was English (58.0%).

These results should, however, be treated with caution because of data issues including 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.

States and territories

Participation of women aged 50–69 years in BreastScreen Australia, 1998–1999, 2001–2002 and 2003–2004



Note: Bars on columns represent 95% confidence intervals.

Source: AIHW analysis of BreastScreen Australia data.

	Australia	NSW	Vic	Qld	WA	SA	Tas	ACT	NT
2003–2004	55.6*	50.1*#	58.8*#	58.1*#	56.5*#	63.1*#	57.3*#	51.1*	43.1#
95% CI	*55.5–55.7*	*49.9–50.2*	*58.6–59.0*	*57.9–58.3*	*56.2–56.8*	*62.7–63.5*	*56.6–57.9*	*50.3–51.8*	*41.9–44.2*
2001–2002	57.1	53.0	59.4	58.9	55.3	64.9	59.1	58.2	44.7
95% CI	*57.0–57.2*	*52.8–53.2*	*59.2–59.6*	*58.6–59.2*	*55.0–55.7*	*64.5–65.3*	*58.5–59.8*	*57.4–59.1*	*43.5–45.9*
1998–1999	55.7	53.2	56.9	56.3	53.2	62.2	59.4	58.8	47.8
95% CI	*55.5–55.8*	*53.0–53.4*	*56.6–57.1*	*56.0–56.5*	*52.9–53.6*	*61.8–62.6*	*58.7–60.1*	*57.8–59.7*	*46.4–49.1*

* Significantly different from the 2001–2002 rate.

Significantly different from the 1998–1999 rate.

Notes

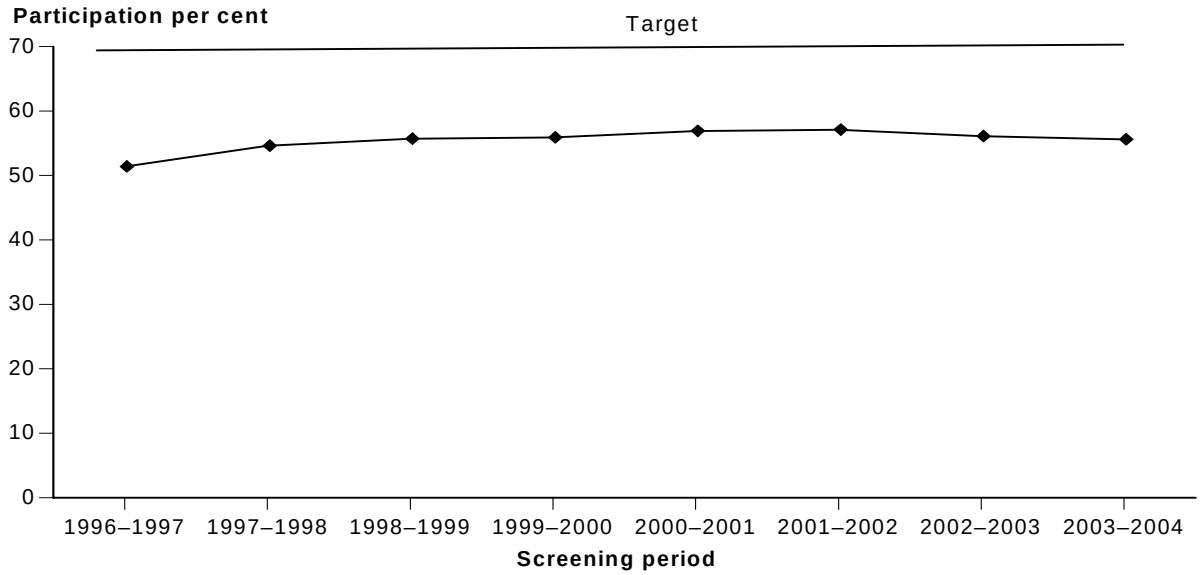
1. Rates are the number of women screened as a percentage of the eligible female population and age-standardised to the Australian population at 30 June 2001.
2. Periods cover 1 January 1998 to 31 December 1999, 1 January 2001 to 31 December 2002 and 1 January 2003 to 31 December 2004.

- Of the 1,627,115 women screened during 2003 and 2004 as part of the BreastScreen Australia Program, 1,144,483 (70.3%) were in the target age group (50–69 years).
- In 2003–2004, 55.6% of women in the target age group attended a BreastScreen Australia service.
- Across states and territories, the age-standardised participation rate for women in the target age group ranged from 43.1% in the Northern Territory to 63.1% 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.

- Victoria, Queensland, Western Australia and South Australia were jurisdictions with a statistically significant increase in participation for women in the target age group between 1998–1999 and 2003–2004. In New South Wales, Tasmania, Australian Capital Territory and the Northern Territory, the participation rate declined between 1998–1999 and 2003–2004 and the decrease was statistically significant.

For more information, see: Tables 1 and 2 beginning on page 76. Tables with data other than for the latest reporting period can be found on the AIHW's website at <www.aihw.gov.au>.

Participation of women aged 50–69 years in BreastScreen Australia, 1996–1997 to 2003–2004



Source: AIHW analysis of BreastScreen Australia data.

	1996–1997	1997–1998	1998–1999	1999–2000	2000–2001	2001–2002	2002–2003	2003–2004
Rate (%)	51.4	54.6	55.7	55.9	56.9	57.1	56.1	55.6*
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*	*55.9–56.2*	*55.5–55.7*

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

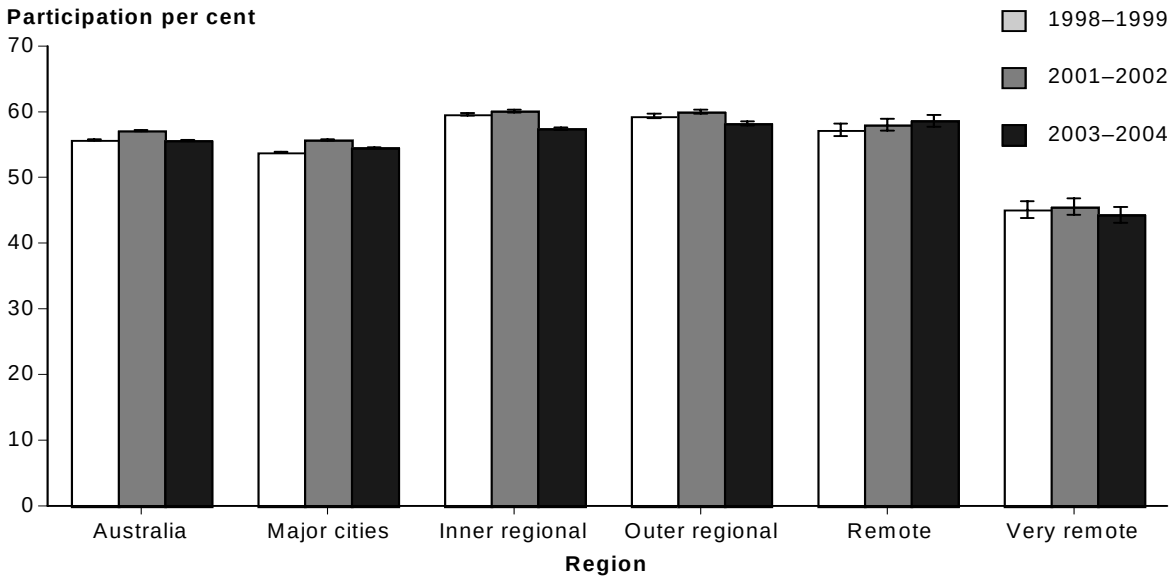
Notes

1. Rates are the number of women screened as a percentage of the eligible female 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 and 1 January 2003 to 31 December 2004.

- Participation in BreastScreen Australia among women in the target age group increased from 51.4% in 1996–1997 to 57.1% in 2001–2002, falling to 55.6% in 2003–2004. The fall in 2003–2004 was statistically significant.

For more information, see: Tables 1 and 2 beginning on page 76 . Tables with data other than for the latest reporting period can be found on the AIHW's website at <www.aihw.gov.au>.

Participation of women aged 50–69 years in BreastScreen Australia by region, 1998–1999, 2001–2002 and 2003–2004



Note: Bars on columns represent 95% confidence intervals.

Source: AIHW analysis of BreastScreen Australia data.

	Australia	Major cities	Inner regional	Outer regional	Remote	Very remote
2003–2004 rate (%)	55.6*	54.5*#	57.4*#	58.2*#	58.6	44.3
95% CI	*55.5–55.7*	*54.4–54.7*	*57.2–57.6*	*57.9–58.6*	*57.7–59.5*	*43.1–45.5*
2001–2002 rate (%)	57.1	55.7	60.1	60.0	58.0	45.5
95% CI	*57.0–57.2*	*55.5–55.8*	*59.9–60.3*	*59.6–60.3*	*57.1–59.0*	*44.3–46.8*
1998–1999 rate (%)	55.7	53.8	59.6	59.3	57.2	45.1
95% CI	*55.5–55.8*	*53.7–54.0*	*59.3–59.8*	*58.9–59.6*	*56.3–58.2*	*43.8–46.5*

* Significantly different from the 2001–2002 rate.

Significantly different from the 1998–1999 rate.

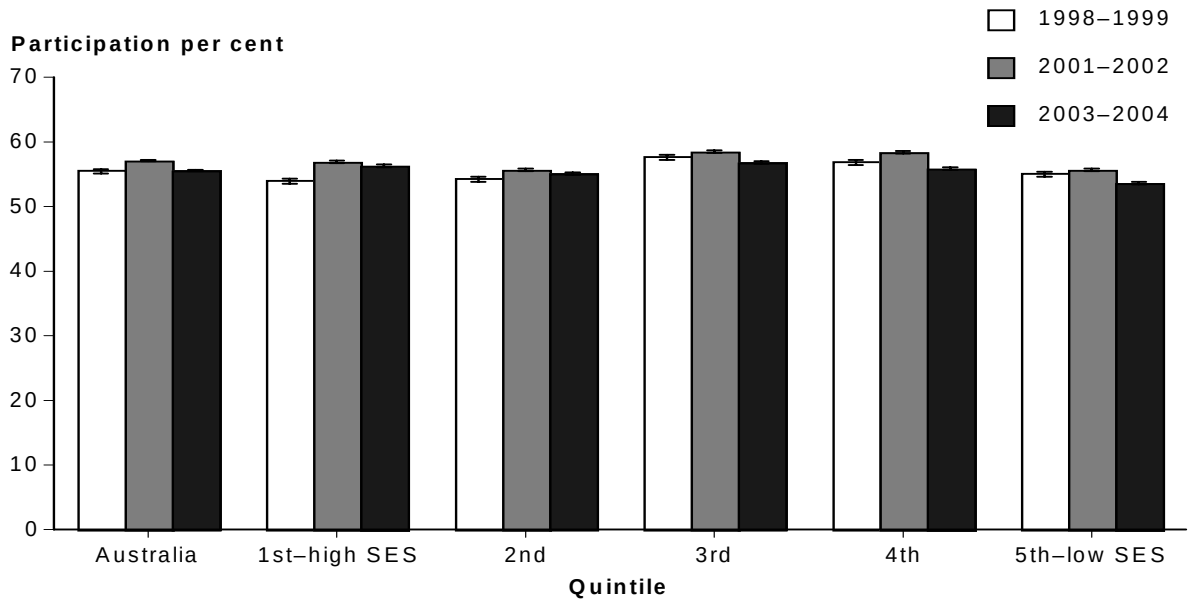
Notes

1. Rates are the number of women screened as a percentage of the eligible female population and age-standardised to the Australian population at 30 June 2001.
2. Periods cover 1 January 1998 to 31 December 1999, 1 January 2001 to 31 December 2002 and 1 January 2003 to 31 December 2004.
3. The Australian Standard Geographical Classification (ASGC) was used to create the above categories (ABS 2001).

- Participation in BreastScreen Australia varied significantly between regions in 1998–1999, 2001–2002 and 2003–2004.
- In 2003–2004 the age-standardised participation rates were lower than the national rate (55.6%) for women in the target age group in major cities (54.5%) and very remote areas (44.3%). Higher rates than the national rate were in the inner regional, outer regional areas and remote (57.4%, 58.2% and 58.6%, respectively).

For more information, see: Table 3 on page 78. Tables with data other than for the latest reporting period can be found on the AIHW's website at <www.aihw.gov.au>.

Participation of women aged 50–69 years in BreastScreen Australia by socioeconomic status, 1998–1999, 2001–2002 and 2003–2004



Notes

1. Bars on columns represent 95% confidence intervals.
2. SES means socioeconomic status (see details in Appendix A).

Source: AIHW analysis of BreastScreen Australia data.

	Australia	1st quintile	2nd quintile	3rd quintile	4th quintile	5th quintile
2003–2004 rate (%)	55.6*	56.3*#	55.1*#	56.8*#	55.9*#	53.6*#
95% CI	*55.5–55.7*	*56.1–56.5*	*54.9–55.4*	*56.6–57.0*	*55.7–56.2*	*53.4–53.8*
2001–2002 rate (%)	57.1	56.9	55.7	58.5	58.4	55.7
95% CI	*57.0–57.2*	*56.7–57.1*	*55.5–55.9*	*58.3–58.8*	*58.2–58.7*	*55.5–56.0*
1998–1999 rate (%)	55.7	54.1	54.4	57.8	57.0	55.2
95% CI	*55.5–55.8*	*53.8–54.3*	*54.1–54.6*	*57.5–58.0*	*56.7–57.2*	*54.9–55.4*

* Significantly different from the 2001–2002 rate.

Significantly different from the 1998–1999 rate.

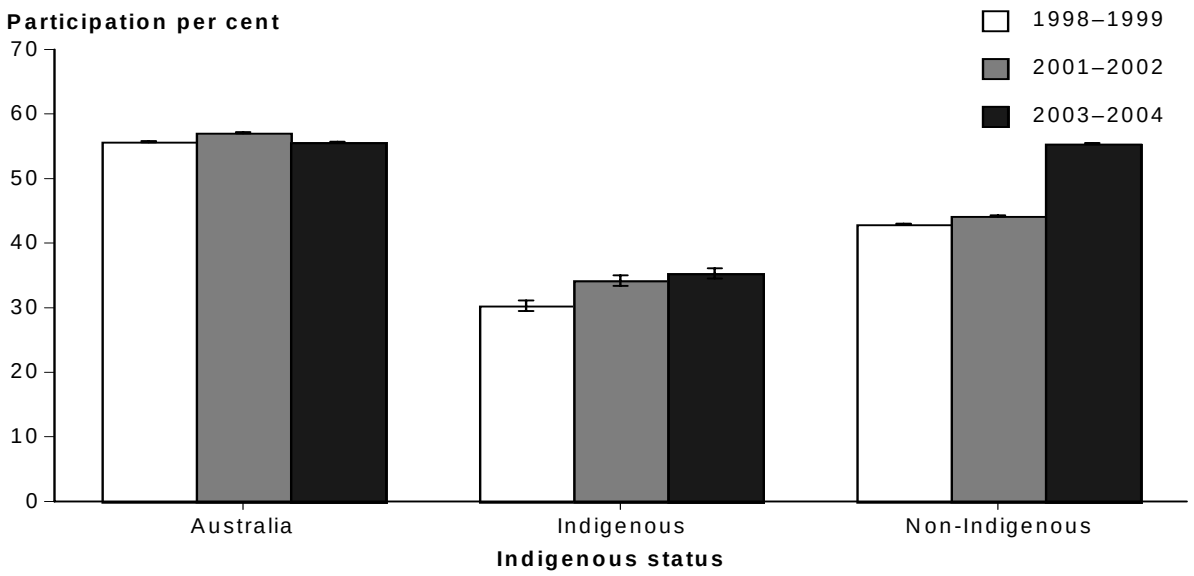
Notes

1. Rates are the number of women screened as a percentage of the eligible female population and age-standardised to the Australian population at 30 June 2001.
2. Periods cover 1 January 1998 to 31 December 1999, 1 January 2001 to 31 December 2002 and 1 January 2003 to 31 December 2004.
3. The first quintile corresponds to the highest socioeconomic status and the fifth to the lowest socioeconomic status.

- In 2003–2004 women aged 50–69 years living in the most socioeconomically disadvantaged areas of Australia had a 53.6% participation in BreastScreen Australia, significantly below the national average of 55.6%.
- Between the years 1998–1999 and 2003–2004 there were significant increases in participation for women living in areas in the two most advantaged quintiles.

For more information, see: Table 4 on page 79. Tables with data other than for the latest reporting period can be found on the AIHW's website at <www.aihw.gov.au>.

Participation of women aged 50–69 years in BreastScreen Australia by Indigenous status, 1998–1999, 2001–2002 and 2003–2004



Note: Bars on columns represent 95% confidence intervals.

Source: AIHW analysis of BreastScreen Australia data.

	Australia	Indigenous	Non-Indigenous
2003–2004 rate (%)	55.6*	35.3#	55.4*#
95% CI	*55.5–55.7*	*34.5–36.1*	*55.3–55.5*
2001–2002 rate (%)	57.1	34.2	44.2
95% CI	*57.0–57.2*	*33.4–35.1*	*44.1–44.3*
1998–1999 rate (%)	55.7	30.3	42.9
95% CI	*55.5–55.8*	*29.5–31.1*	*42.8–43.0*

* Significantly different from the 2001–2002 rate.

Significantly different from the 1998–1999 rate.

Notes

1. Rates are the number of women screened as a percentage of the eligible female population and age-standardised to the Australian population at 30 June 2001.
2. Periods cover 1 January 1998 to 31 December 1999, 1 January 2001 to 31 December 2002 and 1 January 2003 to 31 December 2004.
3. Women whose Indigenous status was recorded as 'not-stated' were included in the analysis for all women but excluded from the analysis by Indigenous status.

- In 2003–2004 the age-standardised participation rate for Indigenous Australian women (35.3%) was much lower than the rate for non-Indigenous women (55.4%) but the rate for Indigenous Australian women increased significantly from 30.3% in 1998–1999 to 35.3% in 2003–2004.

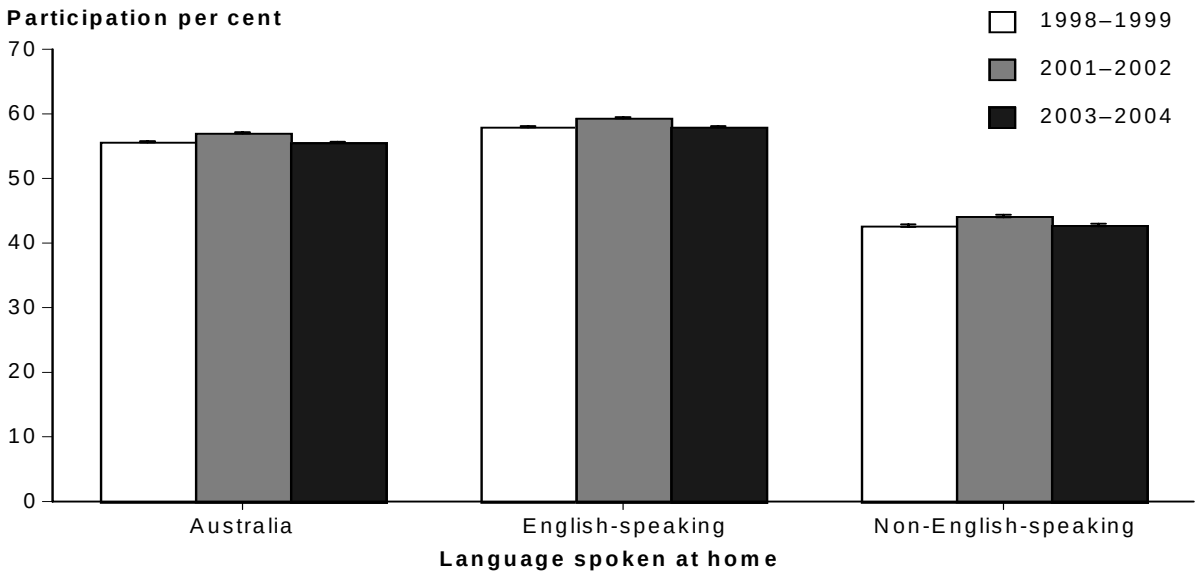
Note:

In 2004, 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 1,627,115 women aged 40 years and over participating in screening through the BreastScreen Australia Program in 2003–2004, there were 12,459 (0.8%) who identified themselves as Aboriginal or Torres Strait Islander (0.6% in 1998–1999 and 0.7% in 2001–2002). There were 7,874 Indigenous Australian women aged 50–69 years screened in 2003–2004. While 11,299 women aged 40 years and over in 2003–2004 were classified as not stating their Indigenous status, the true figure is likely to be higher because BreastScreen NSW classified these women as 'non-Indigenous' (see Appendix A for coding of Indigenous status). The comparison of participation rates between Indigenous and non-Indigenous women should therefore be treated with caution.

For more information, see: Table 5 on page 80. Tables with data other than for the latest reporting period can be found on the AIHW's website at <www.aihw.gov.au>.

Participation of women aged 50–69 years in BreastScreen Australia by language spoken at home, 1998–1999, 2001–2002 and 2003–2004



Note: Bars on columns represent 95% confidence intervals.

Source: AIHW analysis of BreastScreen Australia data.

	Australia	English-speaking	Non-English-speaking
2003–2004 rate (%)	55.6*	58.0*	42.8*
95% CI	*55.5–55.7*	*57.9–58.1*	*42.6–43.0*
2001–2002 rate (%)	57.1	59.4	44.2
95% CI	*57.0–57.2*	*59.2–59.5*	*44.0–44.5*
1998–1999 rate (%)	55.7	58.0	42.7
95% CI	*55.5–55.8*	*57.9–58.1*	*42.4–42.9*

* Significantly different from the 2001–2002 rate.

Notes

1. Rates are the number of women screened as a percentage of the eligible female population and age-standardised to the Australian population at 30 June 2001.
2. Periods cover 1 January 1998 to 31 December 1999, 1 January 2001 to 31 December 2002 and 1 January 2003 to 31 December 2004.
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 2003–2004 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 (42.8%) than for English-speaking women (58.0%). The same applied for the periods 1998–1999 and 2001–2002.

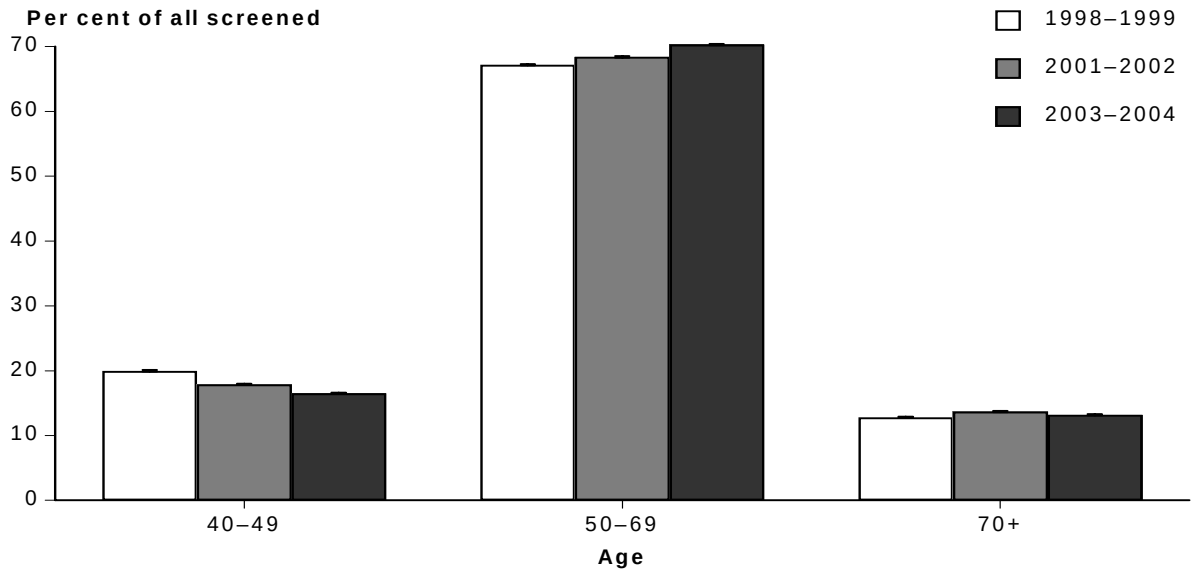
Note:

Of the 1,627,115 women aged 40 years and over participating in screening through the BreastScreen Australia Program in 2003–2004, there were 206,782 (12.7%) who identified as not having English as their language at home (12.2% in 1998–1999 and 12.6% in 2001–2002). In 2003–2004 there were 148,279 women screened aged 50–69 years whose language was not

English. While 4,938 women aged 40 years and over in 2003–2004 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 A). Participation rates between English-speaking and non-English-speaking women should therefore be treated with caution.

For more information, see: Table 6 on page 81. 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 aged 40 years and over screened by BreastScreen Australia, 1998–1999, 2001–2002 and 2003–2004



Note: Bars on columns represent 95% confidence intervals.

Source: AIHW analysis of BreastScreen Australia data.

	Age		
	40–49 years	**50–69 years**	**70+ years**
2003–2004 rate (%)	16.5*#	70.3*#	13.2*#
95% CI	*16.4–16.6*	*70.2–70.5*	*13.1–13.2*
2001–2002 rate (%)	17.9	68.4	13.7
95% CI	*17.8–17.9*	*68.3–68.5*	*13.7–13.8*
1998–1999 rate (%)	20.0	67.2	12.8
95% CI	*19.9–20.1*	*67.1–67.3*	*12.8–12.9*

* Significantly different from the 2001–2002 rate.

Significantly different from the 1998–1999 rate.

Notes

1. Rates are the number of women screened as a percentage of all women aged 40 years and over screened by BreastScreen Australia.
2. Periods cover 1 January 1998 to 31 December 1999, 1 January 2001 to 31 December 2002 and 1 January 2003 to 31 December 2004.
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 2003–2004, 70.3% were in the target age group (50–69 years). Of all women screened, 16.5% were aged 40–49 years, and 13.2% were aged 70 years and over.
- The proportion of women in the target age group increased from 67.2% in 1998–1999 to 70.3% in 2003–2004. In the 70 years and over age group there was also an increase from 12.8% to 13.2% between 1998–1999 and 2003–2004.
- The only age group with a downward trend was the 40–49 age group. The proportion of women in this age group decreased from 20.0% in 1998–1999 to 16.5% in 2003–2004.

Indicator 2: Detection of small invasive cancers

Small invasive cancer detection rate

The detection rate for small invasive cancers is the rate of women with small diameter (≤15 mm) invasive breast cancers per 10,000 women screened by five-year age groups for women aged 40 years and 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), five-year age groups and for the target age group.

The 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 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 small (≤15 mm) invasive breast cancers require:

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

The following table shows the detection rate of small-diameter invasive breast cancers achieved by the BreastScreen Australia Program in 1999, 2003 and 2004. In 1999, 2003 and 2004, more than 25 small-diameter (≤15 mm) cancers per 10,000 women screened were found for all screening rounds and age groups.

Small (≤15 mm) invasive breast cancer detection rate per 10,000 women, first and subsequent rounds, 1999, 2003 and 2004

	Objective[(a)]	1999	2003	2004
First screening round				
Rate for women aged 50–69 years	≥25	37.7	40.1	43.4
95% CI		*33.1–42.6*	*34.3–46.5*	*37.2–50.2*
Rate for women aged 40 years and over	..	37.0	42.5	39.1
95% CI		*33.3–40.9*	*37.3–48.0*	*34.1–44.7*
Subsequent screening rounds				
Rate for women aged 50–69 years	..	26.5	27.2	27.2
95% CI		*25.0–28.1*	*25.8–28.7*	*25.8–28.6*
Rate for women aged 40 years and over	..	25.0	25.8	26.8
95% CI		*23.8–26.3*	*24.7–27.0*	*25.6–28.0*

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

. . Not applicable.

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 table below shows the percentage of all invasive cancers detected that were small-diameter (≤15 mm) invasive breast cancers, by screening round, for women screened in 1999, 2003 and 2004.

Percentage of invasive cancers detected that were small (≤15 mm) in diameter, 1999, 2003 and 2004

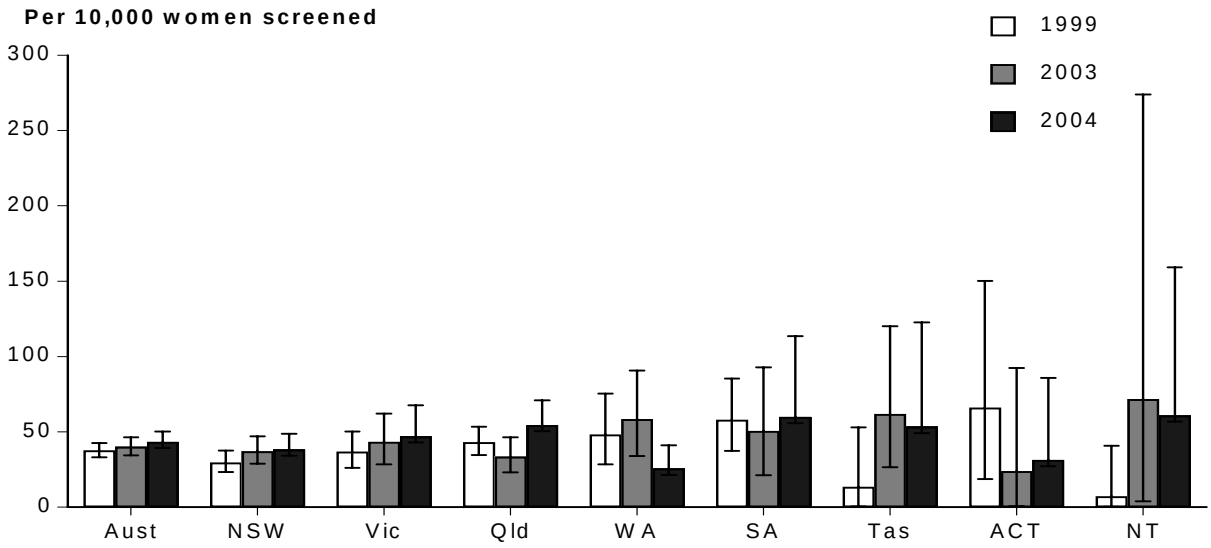
	1999	2003	2004
First screening round			
Women aged 50–69 years	55.6	54.8	55.7
Women aged 40 years and over	55.5	53.5	52.3
Subsequent screening rounds			
Women aged 50–69 years	67.4	63.7	64.8
Women aged 40 years and over	67.6	64.8	65.7

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 two years before the second round.

States and territories

Small (≤15 mm) invasive breast cancer detection in women aged 50–69 years, first screening round, 1999, 2003 and 2004



Note: Bars on columns represent 95% confidence intervals.

Source: AIHW analysis of BreastScreen Australia data.

	Australia	NSW	Vic	Qld	WA	SA	Tas	ACT	NT
2004 rate	43.4	38.2	47.1	54.5	25.6	59.9	53.3	31.4	60.9
95% CI	*37.2–50.2*	*29.4–48.7*	*30.2–67.5*	*40.8–71.0*	*14.0–41.2*	*22.7–113.5*	*16.0–122.7*	*6.0–85.8*	*15.0–159.2*
2003 rate	40.1	37.1	43.5	33.4	58.5	50.7	61.8	23.9	71.8
95% CI	*34.3–46.5*	*28.8–47.0*	*28.6–62.0*	*23.2–46.4*	*34.0–90.6*	*21.2–92.7*	*26.5–120.1*	*0.8–92.4*	*3.9–273.9*
1999 rate	37.7	29.8	36.9	43.2	48.3	58.0	13.7	66.1	7.3
95% CI	*33.1–42.6*	*23.3–37.5*	*26.0–50.3*	*34.6–53.3*	*28.5–75.5*	*37.3–85.3*	*0.4–52.9*	*18.7–150.3*	*0.2–40.8*

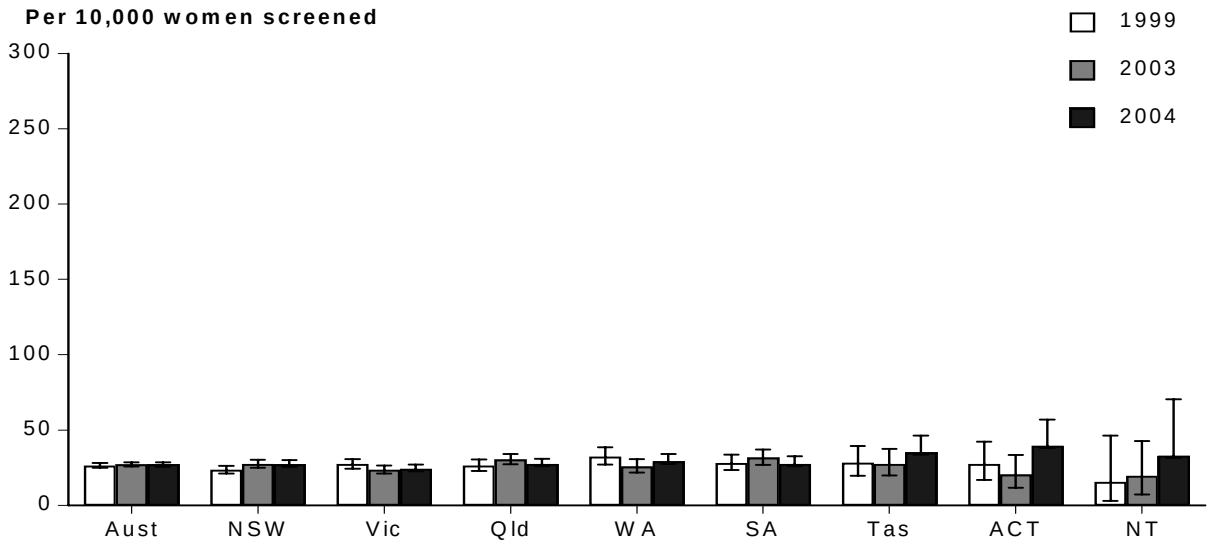
Note: Rates are the number of women with small invasive cancers detected per 10,000 women screened and age-standardised to the population of women attending a BreastScreen Australia service in 1998.

- In 2004, the age-standardised detection rate for small invasive cancers in women in the target age group attending for their first screening round ranged from 25.6 to 60.9 per 10,000 women screened across the states and territories. The small numbers of cases contributed to the wide variations in the rates.
- In 2004, small-diameter invasive cancers were found in 358 women aged 40 years and over attending a BreastScreen Australia service for their first screen. Of these women, 253 were in the target age group (50–69 years). The age-standardised detection rate was 43.4 per 10,000 women screened for women in the target age group and 39.1 per 10,000 women screened for all women aged 40 years and over. The detection rate for small-diameter invasive cancers for women in the target age group increased from 37.7 per 10,000 women screened in 1999 to 43.4 in 2004. The increase was not statistically significant.

For more information, see: Tables 7 to 10 beginning on page 82. Tables with data other than for the latest reporting period can be found on the AIHW's website at <www.aihw.gov.au>.

States and territories

Small (≤15 mm) invasive breast cancer detection in women aged 50–69 years, subsequent screening rounds, 1999, 2003 and 2004



Note: Bars on columns represent 95% confidence intervals.

Source: AIHW analysis of BreastScreen Australia data.

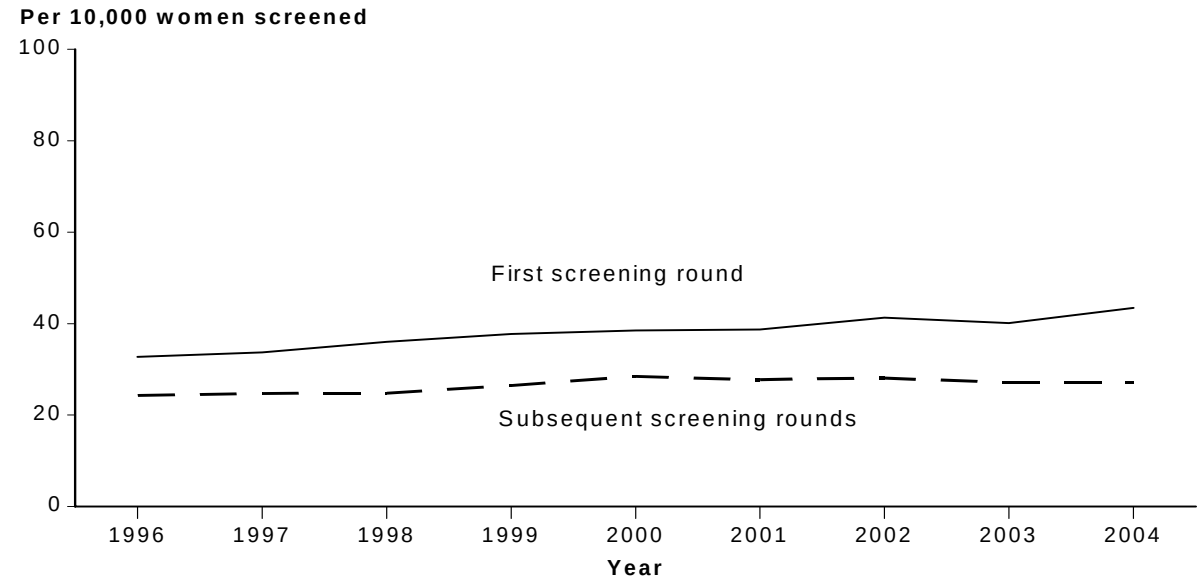
	Australia	NSW	Vic	Qld	WA	SA	Tas	ACT	NT
2004 rate	27.2	27.3	24.3	27.6	29.2	27.6	35.2	39.6	33.1
95% CI	*25.8–28.6*	*24.8–30.0*	*21.7–27.1*	*24.5–30.9*	*24.8–34.1*	*23.2–32.6*	*26.1–46.4*	*26.5–56.9*	*12.0–70.5*
2003 rate	27.2	27.5	23.7	30.5	25.9	31.7	27.6	20.5	19.6
95% CI	*25.8–28.7*	*25.0–30.1*	*21.2–26.5*	*27.2–34.0*	*21.8–30.7*	*26.9–37.1*	*19.8–37.3*	*11.6–33.4*	*7.1–42.8*
1999 rate	26.5	23.6	27.4	26.5	32.4	28.2	28.3	27.6	15.6
95% CI	*25.0–28.1*	*21.1–26.2*	*24.4–30.7*	*22.9–30.5*	*27.1–38.5*	*23.4–33.7*	*19.7–39.5*	*17.1–42.3*	*3.0–46.3*

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 2004, small-diameter invasive cancers were found in 2,082 women aged 40 years and over attending a BreastScreen Australia service for their second or subsequent screen. Of these women, 1,478 were in the target age group (50–69 years). The age-standardised detection rate was 27.2 per 10,000 women screened for women in the target age group and 26.8 per 10,000 women for all women aged 40 years and over. In both age categories, the small-diameter cancer detection rates for Australia for women attending their second or subsequent screen were lower than the rates for women attending their first screen.

For more information, see: Tables 7 to 10 beginning on page 82. Tables with data other than for the latest reporting period can be found on the AIHW's website at <www.aihw.gov.au>.

Small (≤15 mm) invasive breast cancer detection in women aged 50–69 years, first and subsequent screening rounds, 1996–2004



Source: AIHW analysis of BreastScreen Australia data.

	1996	1997	1998	1999	2000	2001	2002	2003	2004
First screening round									
Rate	32.7*	33.7*	36.0*	37.7*	38.5*	38.7*	41.3*	40.1*	43.4*
95% CI	*29.9–35.7*	*30.4–37.3*	*32.3–40.0*	*33.1–42.6*	*33.6–43.8*	*34.0–43.9*	*35.8–47.3*	*34.3–46.5*	*37.2–50.2*
Subsequent screening rounds									
Rate	24.3	24.7	24.8	26.5	28.5	27.8	28.1	27.2	27.2
95% CI	*22.5–26.3*	*23.0–26.4*	*23.3–26.4*	*25.0–28.1*	*27.0–30.1*	*26.4–29.3*	*26.7–29.6*	*25.8–28.7*	*25.8–28.6*

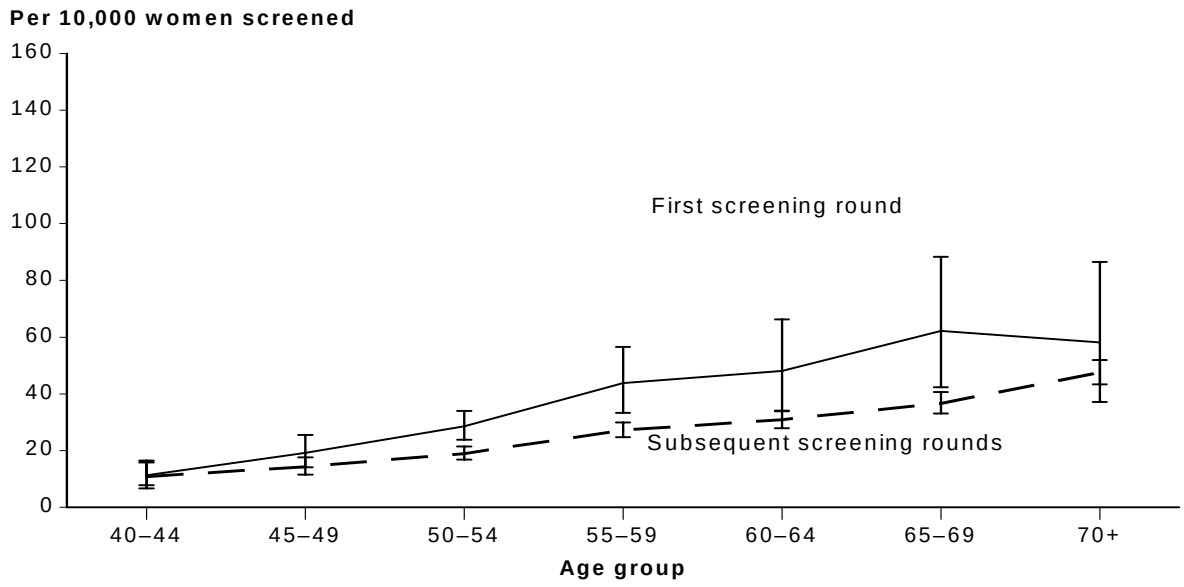
* Significantly different from subsequent screening rounds.

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 32.7 to 43.4 per 10,000 women screened. In subsequent screening rounds the increase from 24.3 in 1996 to 27.2 per 10,000 was not significant.

For more information, see: Tables 7 to 10 beginning on page 82. Tables with data other than for the latest reporting period can be found on the AIHW's website at <www.aihw.gov.au>.

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



Note: Bars represent 95% confidence intervals.

Source: AIHW analysis of BreastScreen Australia data.

	Age						
Age-specific rate	**40–44**	**45–49**	**50–54**	**55–59**	**60–64**	**65–69**	**70+**
First screening round							
Rate	11.3	19.2	28.6*	43.8*	48.1	62.2*	58.1
95% CI	*7.8–15.8*	*14.1–25.5*	*23.8–34.0*	*33.2–56.6*	*33.9–66.3*	*42.3–88.3*	*37.2–86.5*
Subsequent screening rounds							
Rate	10.8	14.3	19.0	27.2	30.9	36.7	47.5
95% CI	*6.7–16.5*	*11.5–17.6*	*16.8–21.4*	*24.7–29.8*	*27.9–34.1*	*33.2–40.6*	*43.4–51.9*

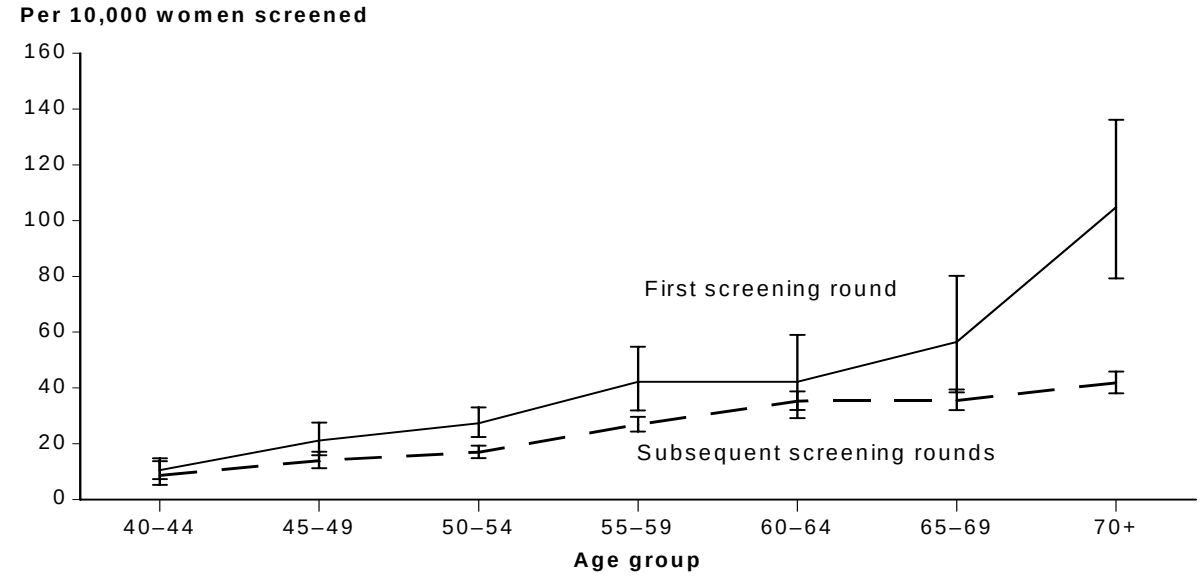
* Significantly different from subsequent screening rounds.

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 increases with age. This reflects rising incidence of breast cancer with age (Table 44 on page 115). The detection rate for women aged 40–44 years making a first round attendance at a BreastScreen Australia service in 2004 was 11.3 per 10,000 women screened. This rate increased to 58.1 per 10,000 women screened for women aged 70 years and over. A similar pattern occurred for women making a second or subsequent round attendance, although the level of increase, from 10.8 to 47.5 per 10,000 women screened, was not as great.

For more information, see: Tables 7 to 10 beginning on page 82. Tables with data other than for the latest reporting period can be found on the AIHW's website at <www.aihw.gov.au>.

Small (≤15 mm) invasive breast cancer detection by age, 2003



Note: Bars represent 95% confidence intervals.

Source: AIHW analysis of BreastScreen Australia data.

	Age						
Age-specific rate	**40–44**	**45–49**	**50–54**	**55–59**	**60–64**	**65–69**	**70+**
First screening round							
Rate	10.5	21.1	27.3*	42.2*	42.2	56.5	104.8*
95% CI	*7.3–14.7*	*15.8–27.5*	*22.4–33.0*	*31.9–54.8*	*29.2–58.9*	*38.4–80.2*	*79.2–136.1*
Subsequent screening rounds							
Rate	8.7	13.9	17.0	26.9	35.3	35.6	41.9
95% CI	*5.1–13.7*	*11.2–17.1*	*14.9–19.4*	*24.4–29.6*	*32.0–38.7*	*32.0–39.4*	*38.1–45.9*

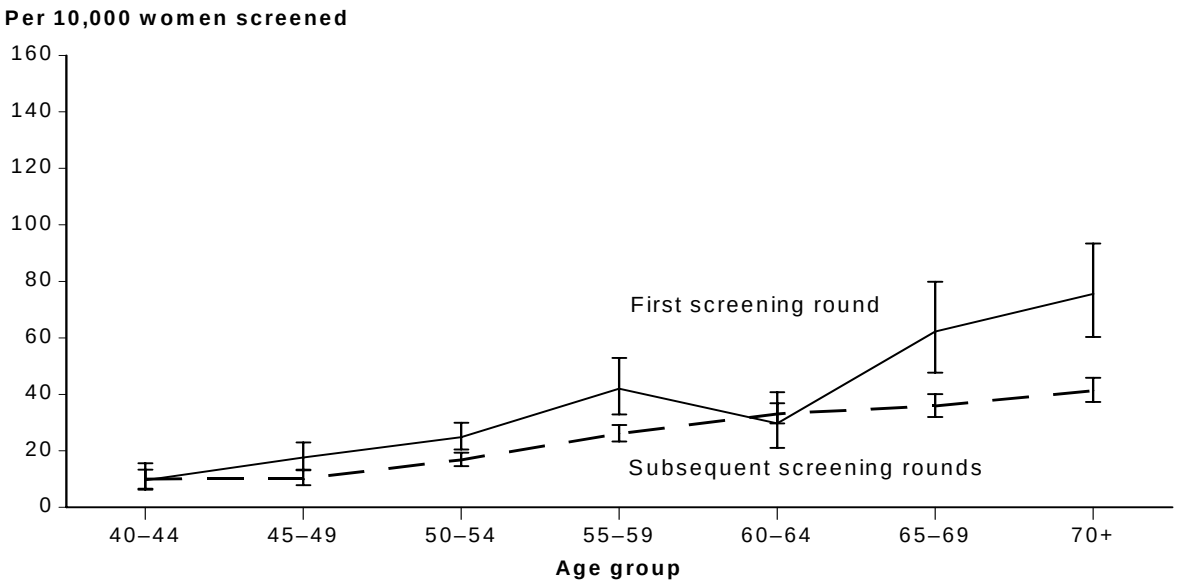
* Significantly different from subsequent screening rounds.

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

- In 2003, the rate of detection of small (≤15 mm) invasive cancers was not significantly different to the rate in 2004 for each age group and each screening round.

For more information, see: Tables 7 to 10 beginning on page 82. Tables with data other than for the latest reporting period can be found on the AIHW's website at <www.aihw.gov.au>.

Small (≤15 mm) invasive breast cancer detection by age, 1999



Note: Bars represent 95% confidence intervals.

Source: AIHW analysis of BreastScreen Australia data.

	Age						
Age-specific rate	**40–44**	**45–49**	**50–54**	**55–59**	**60–64**	**65–69**	**70+**
First screening round							
Rate	9.6	17.7*	24.9*	42.0*	29.7	62.2*	75.5*
95% CI	*6.7–13.4*	*13.4–22.9*	*20.5–30.0*	*32.8–52.9*	*21.0–40.8*	*47.7–79.8*	*60.3–93.3*
Subsequent screening rounds							
Rate	10.1	10.2	16.8	26.1	33.1	35.9	41.4
95% CI	*6.2–15.6*	*7.8–13.1*	*14.6–19.3*	*23.3–29.2*	*29.7–36.9*	*32.0–40.1*	*37.3–45.9*

* Significantly different from subsequent screening rounds.

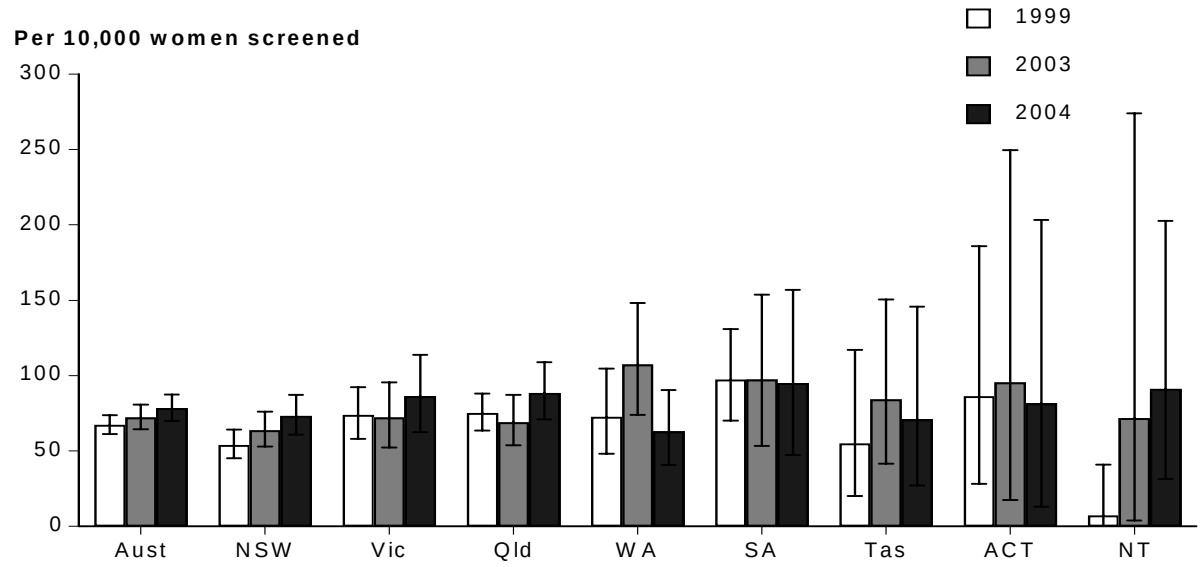
Note: Rates are the number of women with small invasive cancers detected per 10,000 women screened.

- In 1999, the detection rate of small (≤15 mm) invasive cancers was slightly lower than the rates in 2004 and 2003 but not statistically significant.

For more information, see: Tables 7 to 10 beginning on page 82. Tables with data other than for the latest reporting period can be found on the AIHW's website at <www.aihw.gov.au>.

States and territories

All-size invasive breast cancer detection in women aged 50–69 years, first screening round, 1999, 2003 and 2004



Note: Bars on columns represent 95% confidence intervals.

Source: AIHW analysis of BreastScreen Australia data.

	Australia	NSW	Vic	Qld	WA	SA	Tas	ACT	NT
2004 rate	78.4	73.2	86.3	88.5	62.9	95.0	70.9	81.6	91.3
95% CI	*69.9–87.5*	*60.7–87.3*	*62.5–113.7*	*71.0–108.7*	*40.6–90.5*	*47.3–156.9*	*27.1–145.7*	*13.0–203.4*	*31.4–202.6*
2003 rate	72.2	63.8	72.2	69.1	107.4	97.4	84.3	95.5	71.8
95% CI	*64.4–80.6*	*52.9–76.1*	*52.2–95.5*	*53.8–87.1*	*73.9–148.2*	*53.5–153.8*	*41.4–150.5*	*17.6–249.5*	*3.9–273.9*
1999 rate	67.3	54.1	74.0	75.1	72.7	97.3	55.1	86.4	7.3*
95% CI	*61.2–73.9*	*45.2–64.1*	*58.1–92.2*	*63.5–88.1*	*48.0–104.6*	*70.0–131.0*	*20.2–116.9*	*28.2–185.8*	*0.2–40.8*

* Statistically different from the 1999 Australian rate.

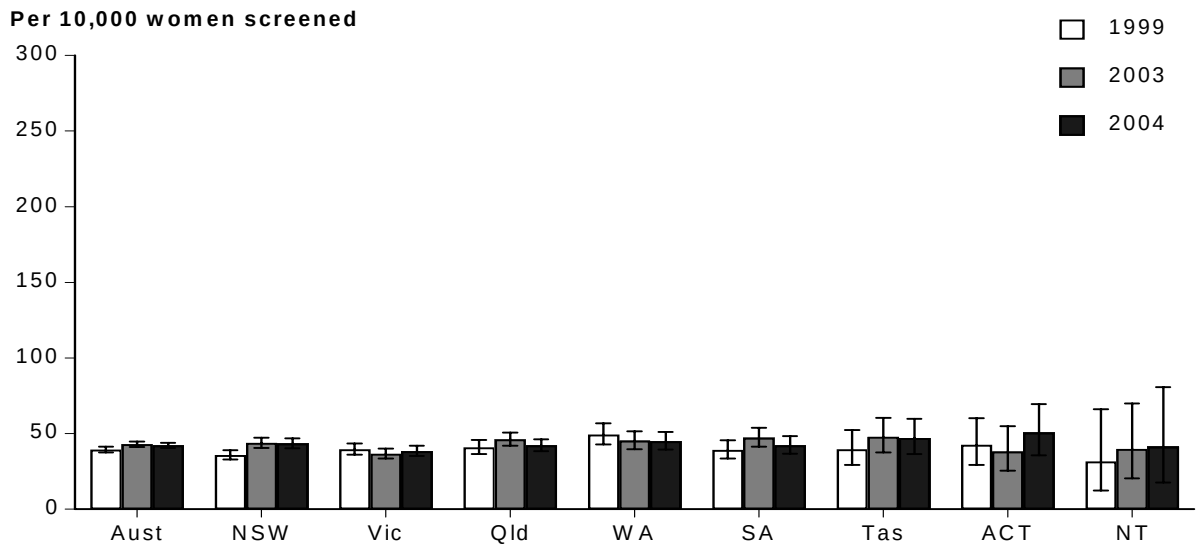
Note: Rates are the number of women with invasive cancers detected per 10,000 women screened and age-standardised to the population of women attending a BreastScreen Australia service in 1998.

- In 2004, the age-standardised invasive breast cancer detection rate for women attending a BreastScreen Australia Service for the first time was 78.4 per 10,000 women screened.
- Across the states and territories, Western Australia had the lowest age-standardised detection rate, at 62.9 per 10,000 women screened, and South Australia had the highest rate, at 95.0 per 10,000 women screened, but this difference was not statistically significant.

For more information, see: Tables 11 to 14 beginning on page 86. Tables with data other than for the latest reporting period can be found on the AIHW's website at <www.aihw.gov.au>.

States and territories

All-size invasive breast cancer detection in women aged 50–69 years, subsequent screening rounds, 1999, 2003 and 2004



Note: Bars on columns represent 95% confidence intervals.

Source: AIHW analysis of BreastScreen Australia data.

	Australia	NSW	Vic	Qld	WA	SA	Tas	ACT	NT
2004 rate	42.2	43.5	38.5	42.2	44.9	42.3	47.1	50.6	41.4
95% CI	*40.4–43.9*	*40.3–46.9*	*35.3–42.0*	*38.5–46.3*	*39.4–51.0*	*36.8–48.4*	*36.5–59.8*	*35.8–69.5*	*17.7–80.7*
2003 rate	43.0	43.8	36.7*	46.2	45.3	47.3	48.0	38.1	39.9
95% CI	*41.2–44.8*	*40.6–47.1*	*33.5–40.1*	*42.2–50.6*	*39.7–51.5*	*41.5–53.8*	*37.5–60.6*	*25.4–54.8*	*20.5–69.9*
1999 rate	39.5	35.8	39.6	40.9	49.4#	39.3	39.6	42.7	31.7
95% CI	*37.7–41.4*	*32.8–39.0*	*36.0–43.5*	*36.3–45.8*	*42.8–56.8*	*33.6–45.8*	*29.2–52.4*	*29.1–60.3*	*12.3–66.1*

* Statistically different from the 2003 Australian rate.

Statistically different from the 1999 Australian rate.

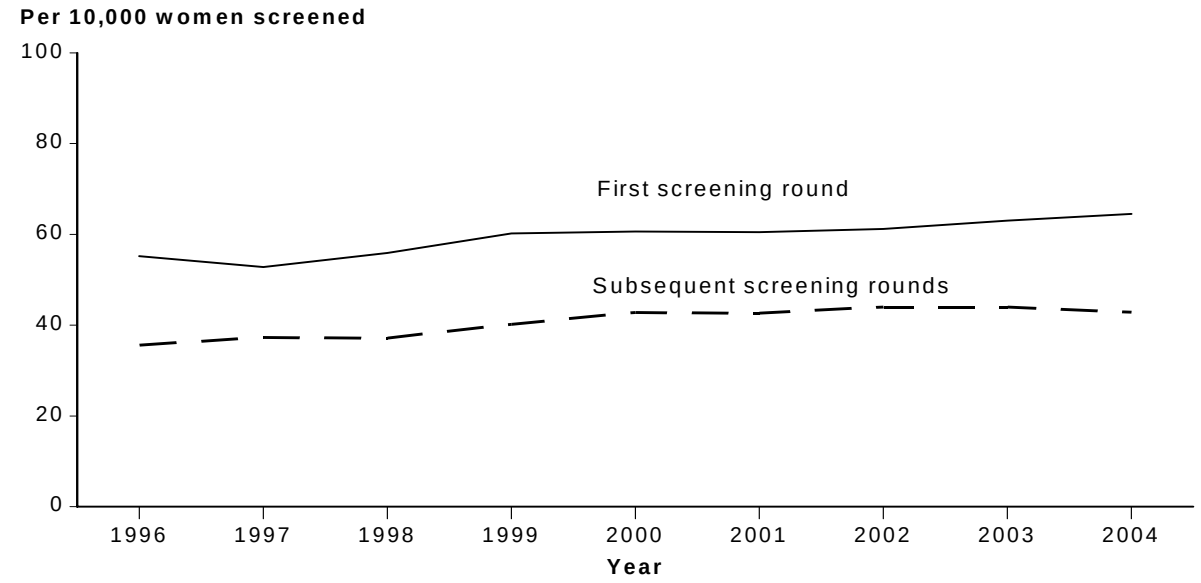
Note: Rates are the number of women with invasive cancers detected per 10,000 women screened and age-standardised to the population of women attending a BreastScreen Australia service in 1998.

- In 2004, the age-standardised invasive cancer detection rate for women in the target age group attending a BreastScreen Australia service for their second or subsequent screen was 42.2 per 10,000 women screened. This is significantly lower than the detection rate for first round attendances (78.4 per 10,000 women screened).
- In 2004, the detection rate for all women aged 40 years and over attending for their second or subsequent screen was 40.8 per 10,000 women screened. This is lower than the rate for women in the target age group (42.2 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 in 2004 ranged from 38.5 per 10,000 women screened in Victoria to 50.6 per 10,000 women screened in the Australian Capital Territory.

- The increase in the detection rate of all invasive cancers for Australia from 39.5 in 1999 to 42.2 in 2004 was not statistically significant.

For more information, see: Tables 11 to 14 beginning on page 86. 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 in women aged 50–69 years, first and subsequent screening rounds, 1996–2004



Source: AIHW analysis of BreastScreen Australia data.

	1996	1997	1998	1999	2000	2001	2002	2003	2004
First screening round									
Rate	55.6*	57.5*	61.2*	67.3*	67.8*	67.9*	73.4*	72.2*	78.4*
95% CI	52.0–59.5	53.1–62.2	56.4–66.3	61.2–73.9	61.2–74.8	61.6–74.7	66.1–81.1	64.4–80.6	69.9–87.5
Subsequent screening rounds									
Rate	34.7	36.6	36.4	39.5	42.3	42.0	43.1	43.0	42.2
95% CI	32.4–37.0	34.5–38.7	34.5–38.4	37.7–41.4	40.4–44.2	40.2–43.9	41.3–45.0	41.2–44.8	40.4–43.9

* 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 from 1996 to 2004.
- The rate of detection in the first screening round increased significantly from 55.6 in 1996 to 78.4 per 10,000 women screened in 2004. The detection rate also rose significantly in subsequent screening rounds, from 34.7 per 10,000 women screened in 1996 to 42.2 per 10,000 women screened in 2004.

For more information, see: Tables 11 to 14 beginning on page 86. Tables with data other than for the latest reporting period can be found on the AIHW's website at <www.aihw.gov.au>.

Indicator 3: 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 and 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 (see the glossary for definitions of 'women at risk of interval or screen-detected breast cancer' and 'interval cancer'). 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 following table shows the detection rate for interval cancers during index years 1997–1999 and 2000–2002 (see the glossary for definition of 'index year'). The objective of detecting less than 7.5 interval cancers per 10,000 women in the target age group 50–69 years was achieved in 1997–1999 and 2000–2002 for women attending for their first screening round. However, this has not been achieved for subsequent screening rounds where it has increased, though not significantly.

Interval cancer rate for women aged 40 years and over and 50–69 years, screened during index years 1997, 1998, 1999 and 2000, 2001, 2002, first and subsequent rounds, 0–12 months follow-up

	Objective[(a)]	Index years 1997, 1998 and 1999*	Index years 2000, 2001 and 2002
First screening round 0–12 months			
Rate for women aged 50–69 years	<7.5	7.3	6.8
95% CI		*6.4–8.4*	*5.8–8.0*
Rate for women aged 40 years and over	..	7.2	7.0
95% CI		*6.5–8.0*	*6.1–8.0*
Subsequent screening rounds 0–12 months			
Rate for women aged 50–69 years	<7.5	7.7	7.9
95% CI		*7.2–8.2*	*7.4–8.3*
Rate for women aged 40 years and over	..	7.6	7.9
95% CI		*7.2–8.1*	*7.5–8.3*

. . Not applicable.

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

* The Australian figure includes data from NSW, Vic, Qld, WA, SA, Tas and ACT. NT data were unavailable at the time of publication of the BreastScreen Australia monitoring report 2000–2001 from which the data for index years 1997, 1998 and 1999 were copied.

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 and over and for the target age group 50–69 years, time since screen (0–12 months, 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 the following table, in 2000, 2001 and 2002 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 1997–1999 and 2000–2002 (see Glossary for the definition of 'index years').

Program sensitivity for women aged 40 years and over and 50–69 years, screened during index years 1997, 1998, 1999 and 2000, 2001, 2002, first and subsequent rounds, 0–24 months follow-up

	Index years 1997, 1998 and 1999*	Index years 2000, 2001 and 2002
First screening round		
Rate (%) for women aged 50–69 years	77.1	78.6
95% CI	*73.5–80.9*	*74.5–82.8*
Rate (%) for women aged 40 years and over	75.7	77.2
95% CI	*72.8–78.7*	*74.0–80.4*
Subsequent screening rounds		
Rate (%) for women aged 50–69 years	68.9	71.1
95% CI	*66.7–71.2*	*69.4–72.9*
Rate (%) for women aged 40 years and over	67.8	69.0
95% CI	*65.8–69.9*	*67.4–70.6*

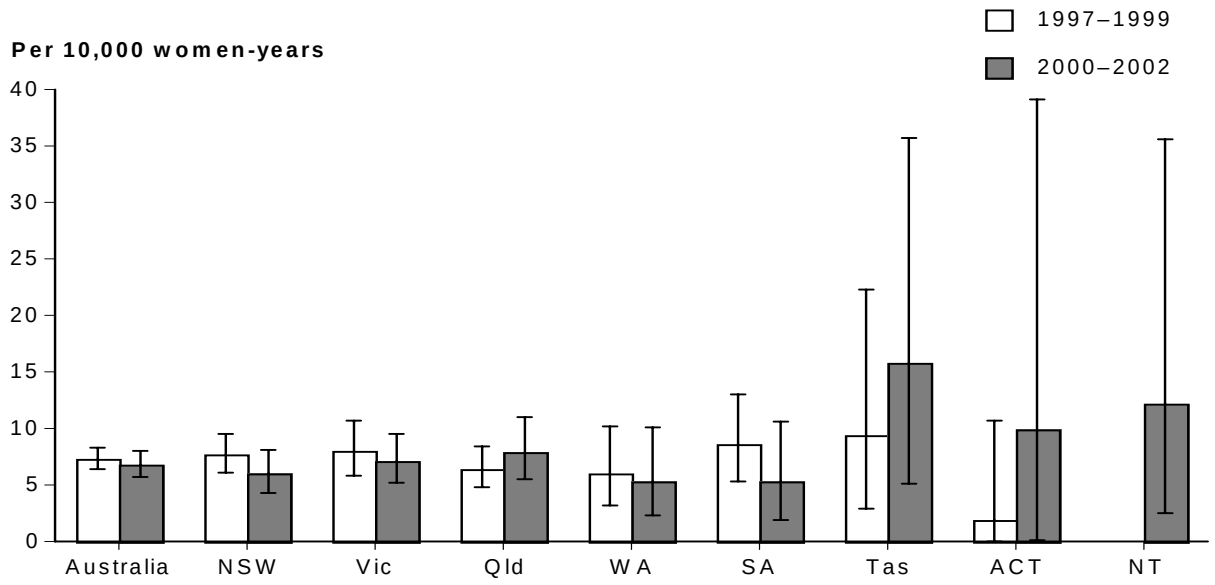
* Excludes NT.

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 are affected by the policy of management of symptomatic clients in that jurisdiction. For example, in NSW, 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.

States and territories

Interval cancer rate for women aged 50–69 years, screened during index years 1997, 1998, 1999 and 2000, 2001, 2002, first screening round, 0–12 months follow-up



Note: Bars on columns represent 95% confidence intervals.

Source: AIHW analysis of BreastScreen Australia data.

	Australia	NSW	Vic	Qld	WA	SA	Tas	ACT	NT
Index years 2000–2002									
Rate	6.8	6.0	7.1	7.9	5.3	5.3	15.8	9.9	12.2
95% CI	*5.8–8.0*	*4.3–8.0*	*5.1–9.4*	*5.5–11.0*	*2.2–10.1*	*1.9–10.7*	*5.0–35.7*	*0.0–39.0*	*2.5–35.5*
Index years 1997–1999									
Rate	7.3	7.7	8.0	6.4	6.0	8.6	9.4	1.9	n.a.
95% CI	*6.4–8.4*	*6.2–9.6*	*5.7–10.7*	*4.8–8.4*	*3.2–10.3*	*5.4–13.1*	*2.8–22.3*	*0.0–10.7*	*n.a.*

n.a. Not available.

Notes

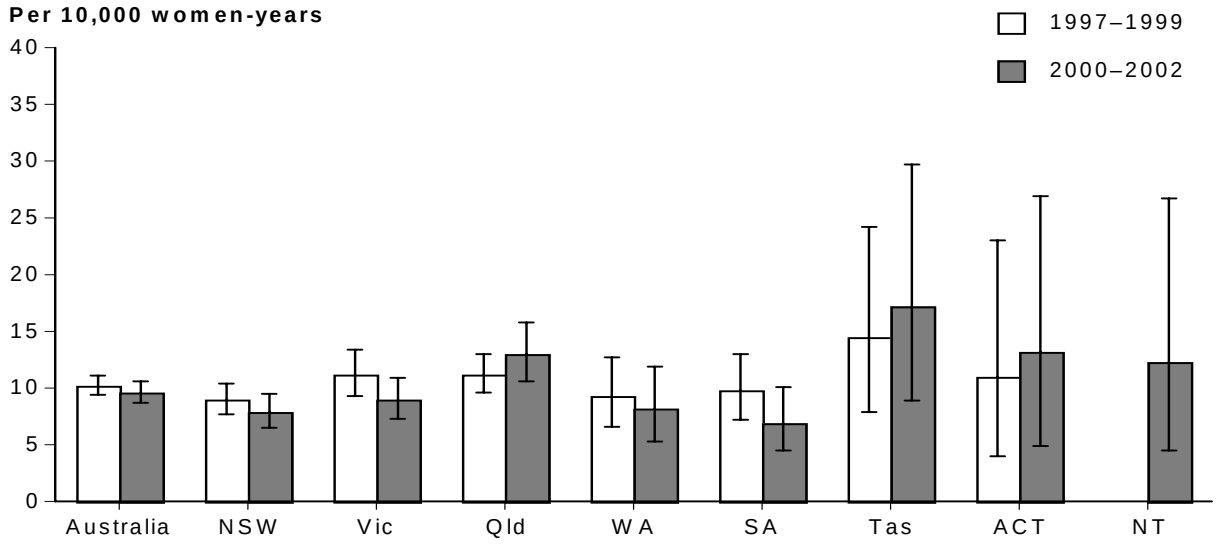
1. Rates are the number of interval cancers detected per 10,000 women-years and age-standardised to the population of women attending a BreastScreen Australia service in 1998.
2. The data include both symptomatic and asymptomatic women.
3. None of the rates was significantly different from the all-Australia rate.
4. The Australian figure includes data from NSW, Vic, Qld, WA, SA, Tas and ACT. NT data were unavailable at the time of publication of the BreastScreen Australia monitoring 2000–2001 from which the data for index years 1997, 1998 and 1999 were copied.

- The age-standardised rate of interval cancers detection for Australia decreased between the index years 1997–1999 and 2000–2002 from 7.3 to 6.8. However, the decrease was not statistically significant.

For more information, see: Tables 15 to 20 beginning on page 90. Tables with data other than for the latest reporting period can be found on the AIHW's website at <www.aihw.gov.au>.

States and territories

Interval cancer rate for women aged 50–69 years, screened during index years 1997, 1998, 1999 and 2000, 2001, 2002, first screening round, 0–24 months follow-up



Note: Bars on columns represent 95% confidence intervals.

Source: AIHW analysis of BreastScreen Australia data.

	Australia	NSW	Vic	Qld	WA	SA	Tas*	ACT	NT
Index years 2000–2002									
Rate	9.6	7.9	9.0	13.0	8.2	6.9	17.2	13.2	12.3
95% CI	*8.7–10.6*	*6.5–9.5*	*7.4–10.9*	*10.6–15.8*	*5.3–11.9*	*4.5–10.1*	*8.8–29.6*	*4.9–26.9*	*4.5–26.7*
Index years 1997–1999									
Rate	10.2	9.0	11.2	11.2	9.3	9.8	14.5	11.0	n.a.
95% CI	*9.4–11.1*	*7.7–10.4*	*9.3–13.4*	*9.7–13.0*	*6.6–12.7*	*7.1–13.0*	*7.9–24.2*	*4.0–23.0*	*n.a.*

* Interval cancers for 13–24 months for 2002 for Tasmania may not be fully complete as the Tasmanian Cancer Registry file for 2004 was not closed off at the time the interval cancer data were supplied to the AIHW.

n.a. Not available.

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. The Australian figure includes data from NSW, Vic, Qld, WA, SA, Tas and ACT. NT data were unavailable at the time of publication of the BreastScreen Australia monitoring 2000–2001 from which the data for index years 1997, 1998 and 1999 were copied.

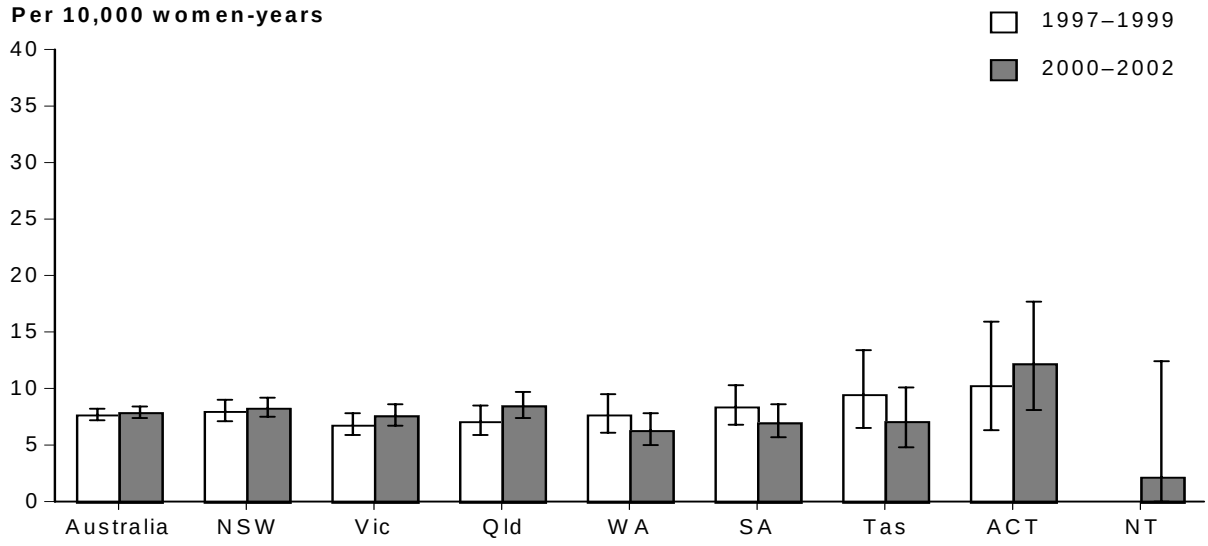
- The age-standardised rate of interval cancers detection for Australia decreased from 10.2 per 10,000 women-years for women aged 50–69 years 0–24 months after their first screen

during index years 1997–1999 to 9.6 per 10,000 women-years for women screened in index years 2000–2002. The decrease was not statistically significant.

For more information, see: Tables 15 to 20 beginning on page 90. Tables with data other than for the latest reporting period can be found on the AIHW's website at <www.aihw.gov.au>.

States and territories

Interval cancer rate for women aged 50–69 years, screened during index years 1997, 1998, 1999 and 2000, 2001, 2002, subsequent screening rounds, 0–12 months follow-up



Note: Bars on columns represent 95% confidence intervals.

Source: AIHW analysis of BreastScreen Australia data.

	Australia	NSW	Vic	Qld	WA	SA	Tas	ACT	NT
Index years 2000–2002									
Rate	7.9	8.3	7.6	8.5	6.3	7.0	7.1	12.2	2.2
95% CI	*7.4–8.3*	*7.5–9.2*	*6.7–8.6*	*7.4–9.7*	*5.1–7.8*	*5.7–8.6*	*4.8–10.1*	*8.1–17.7*	*0.1–12.4*
Index years 1997–1999									
Rate	7.7	8.0	6.8	7.1	7.7	8.4	9.5	10.3	n.a.
95% CI	*7.2–8.2*	*7.2–9.0*	*5.9–7.8*	*5.9–8.6*	*6.1–9.5*	*6.7–10.3*	*6.5–13.4*	*6.3–16.0*	*n.a.*

n.a. Not available.

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. The Australian figure includes data from NSW, Vic, Qld, WA, SA, Tas and ACT. NT data were unavailable at the time of publication of the *BreastScreen Australia monitoring 2000–2001* from which the data for index years 1997, 1998 and 1999 were copied.

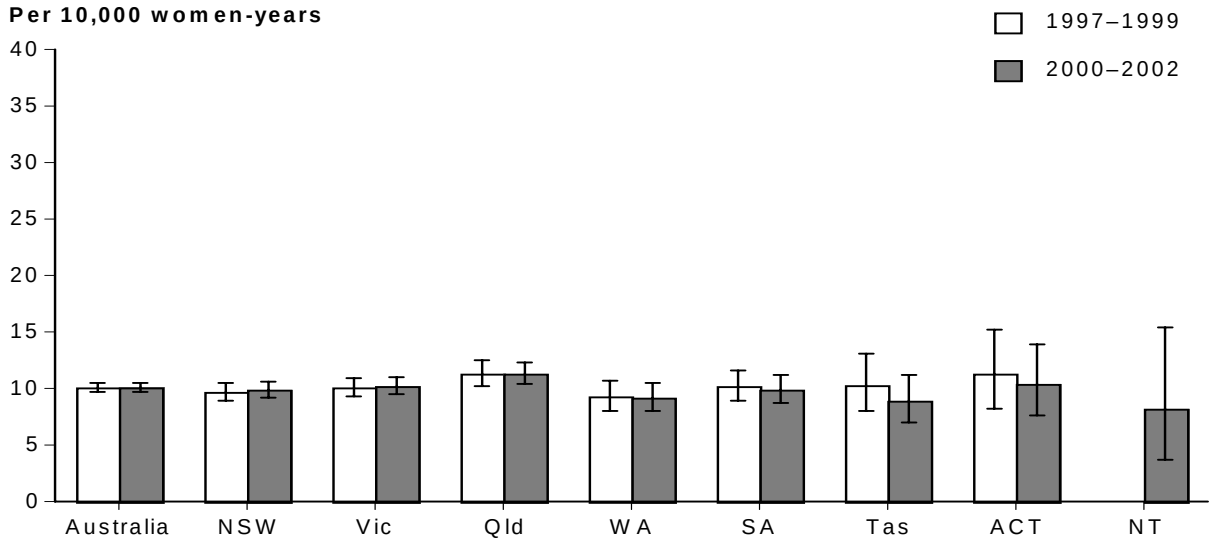
- There was almost no change between index years 1997–1999 and 2000–2002 in the age-standardised rate of interval cancers of 7.9 per 10,000 women-years in 2000–2002 for women aged 50–69 years during 0–12 months follow-up.
- For index years 2000–2002, the age-standardised rate of interval cancers for women aged 50–69 years for 0–12 months follow-up increased slightly between the first and the

subsequent rounds from 6.8 to 7.9 per 10,000 women-years. This increase was not significant.

For more information, see: Tables 15 to 20 beginning on page 90. Tables with data other than for the latest reporting period can be found on the AIHW's website at <www.aihw.gov.au>.

States and territories

Interval cancer rate for women aged 50–69 years, screened during index years 1997, 1998, 1999 and 2000, 2001, 2002, subsequent screening rounds, 0–24 months follow-up



Note: Bars on columns represent 95% confidence intervals.

Source: AIHW analysis of BreastScreen Australia data.

	Australia	NSW	Vic	Qld	WA	SA	Tas*	ACT	NT
Index years 2000–2002									
Rate	10.1	9.9	10.2	11.3	9.2	9.9	8.9	10.4	8.2
95% CI	*9.8–10.5*	*9.3–10.6*	*9.4–10.9*	*10.4–12.2*	*8.0–10.4*	*8.7–11.2*	*7.0–11.2*	*7.6–13.9*	*3.8–15.4*
Index years 1997–1999									
Rate	10.1	9.7	10.1	11.3	9.3	10.2	10.3	11.3	n.a.
95% CI	*9.7–10.6*	*8.9–10.5*	*9.3–11.0*	*10.2–12.6*	*8.0–10.7*	*8.9–11.6*	*8.0–13.1*	*8.2–15.2*	*n.a.*

* Interval cancers for 13–24 months for 2002 for Tasmania may not be fully complete as the Tasmanian Cancer Registry file for 2004 was not closed off at the time the interval cancer data were supplied to the AIHW.

n.a. Not available.

Notes

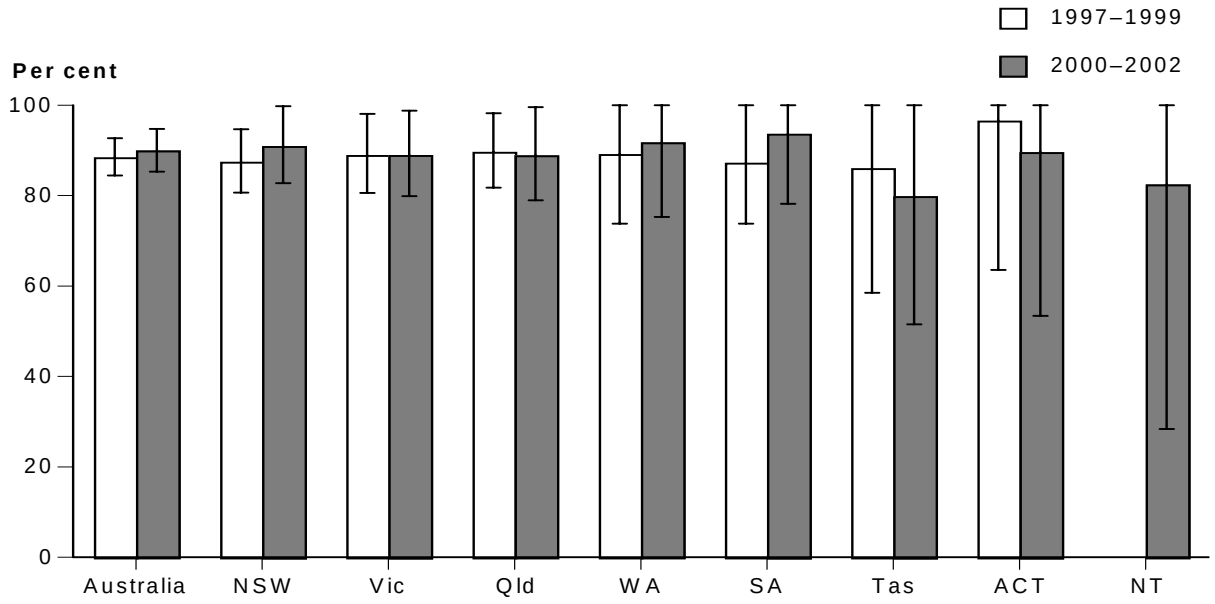
1. Rates are the number of interval cancers detected per 10,000 women-years and age-standardised to the population of women attending a BreastScreen Australia service in 1998.
2. The data include both symptomatic and asymptomatic women.
3. None of the rates was significantly different from the all-Australia rate.
4. The Australian figure includes data from NSW, Vic, Qld, WA, SA, Tas and ACT. NT data were unavailable at the time of publication of the BreastScreen Australia monitoring 2000–2001 from which the data for index years 1997, 1998 and 1999 were copied.

- 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 was 10.1 per 10,000 women-years for index years 2000–2002 and 1997–1999.

For more information, see: Tables 15 to 20 beginning on page 90. Tables with data other than for the latest reporting period can be found on the AIHW's website at <www.aihw.gov.au>.

States and territories

Program sensitivity for women aged 50–69 years, screened during index years 1997, 1998, 1999 and 2000, 2001, 2002, first screening round, 0–12 months follow-up



Note: Bars on columns represent 95% confidence intervals.

Source: AIHW analysis of BreastScreen Australia data.

	Australia	NSW	Vic	Qld	WA	SA	Tas	ACT	NT
Index years 2000–2002									
Rate	90.0	91.0	89.0	88.9	91.8	93.7	79.9	89.6	82.5
95% CI	*85.4–94.9*	*82.8–99.8*	*79.9–98.8*	*79.0–99.6*	*75.2–100.0*	*78.2–100.0*	*51.4–100.0*	*53.5–100.0*	*28.4–100.0*
Index years 1997–1999									
Rate	88.5	87.5	89.0	89.7	89.2	87.3	86.1	96.6	n.a.
95% CI	*84.5–92.7*	*80.7–94.7*	*80.5–98.0*	*81.8–98.2*	*73.8–100.0*	*73.7–100.0*	*58.5–100.0*	*63.6–100.0*	*n.a.*

n.a. Not available.

Notes

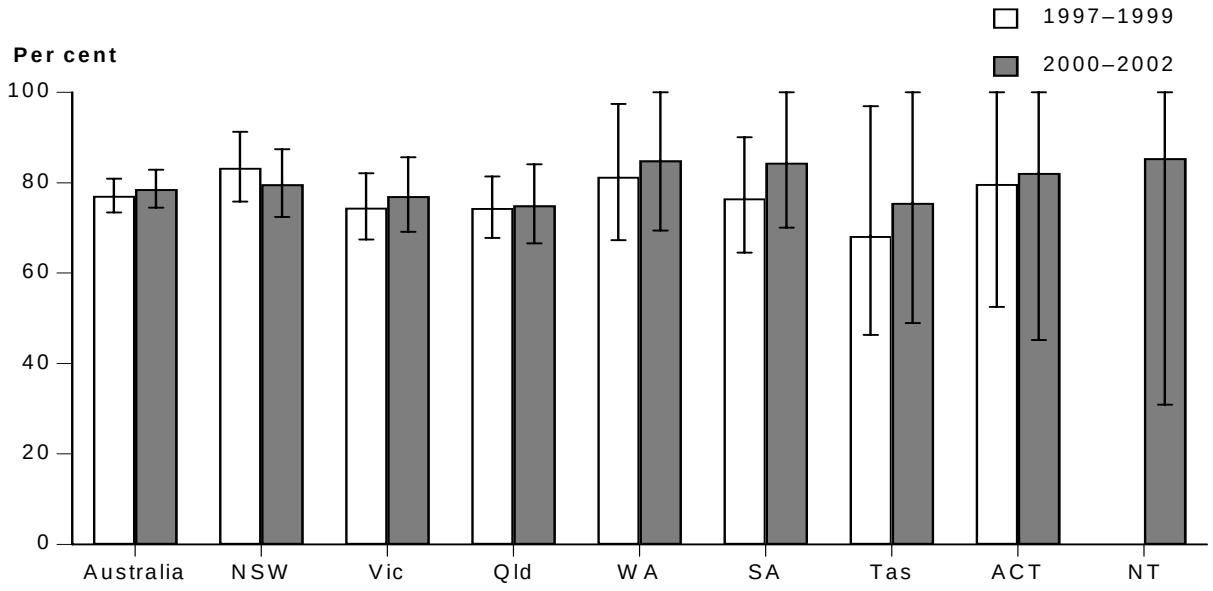
1. Rates are the number of screen-detected cancers as a percentage of all cancers (screen-detected and interval cancers) and age-standardised to the population of women attending a BreastScreen Australia service in 1998.
2. The data include both symptomatic and asymptomatic women.
3. None of the rates was significantly different from the all-Australia rate.
4. The Australian figure includes data from NSW, Vic, Qld, WA, SA, Tas and ACT. NT data were unavailable at the time of publication of the BreastScreen Australia monitoring 2000–2001 from which the data for index years 1997, 1998 and 1999 were copied.

- The age-standardised program sensitivity rate for women in the target age group (50–69) 0–12 months after their first screen was 90.0% for index years 2000–2002 compared with 88.5% for index years 1997–1999. The increase was not statistically significant.

For more information, see: Tables 21 to 24 beginning on page 96. Tables with data other than for the latest reporting period can be found on the AIHW's website at <www.aihw.gov.au>.

States and territories

Program sensitivity for women aged 50–69 years, screened during index years 1997, 1998, 1999 and 2000, 2001, 2002, first screening round, 0–24 months follow-up



Note: Bars on columns represent 95% confidence intervals.

Source: AIHW analysis of BreastScreen Australia data.

	Australia	NSW	Vic	Qld	WA	SA	Tas*	ACT	NT
Index years 2000–2002									
Rate	78.6	79.6	77.0	75.0	84.9	84.4	75.5	82.2	85.4
95% CI	*74.5–82.8*	*72.4–87.4*	*69.0–85.6*	*66.6–84.1*	*69.4–100.0*	*70.0–100.0*	*48.9–100.0*	*45.2–100.0*	*30.9–100.0*
Index years 1997–1999									
Rate	77.1	83.3	74.5	74.4	81.3	76.5	68.2	79.7	n.a.
95% CI	*73.5–80.9*	*75.8–91.3*	*67.3–82.1*	*67.9–81.5*	*67.3–97.4*	*64.5–90.1*	*46.2–96.8*	*52.5–100.0*	*n.a.*

* Interval cancers for 13–24 months for 2002 for Tasmania may not be fully complete as the Tasmanian Cancer Registry file for 2004 was not closed off at the time the interval cancer data were supplied to the AIHW.

n.a. Not available.

Notes

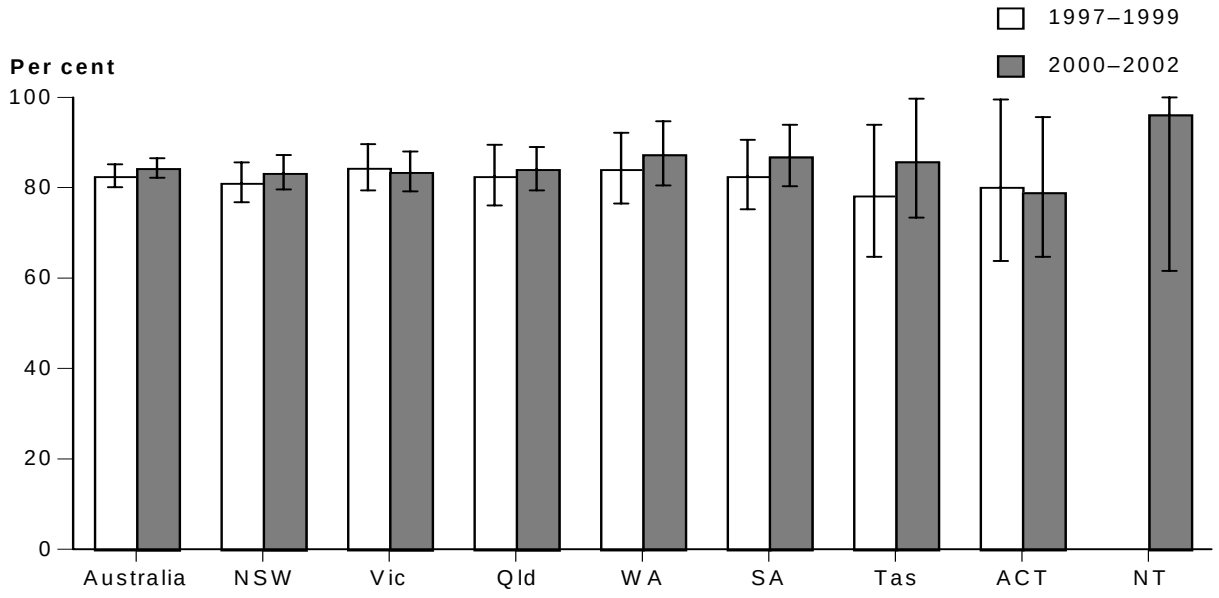
1. Rates are the number of screen-detected cancers as a percentage of all cancers (screen-detected and interval cancers) and age-standardised to the population of women attending a BreastScreen Australia service in 1998.
2. The data include both symptomatic and asymptomatic women.
3. The Australian figure includes data from NSW, Vic, Qld, WA, SA, Tas and ACT. NT data were unavailable at the time of publication of the BreastScreen Australia monitoring 2000–2001 from which the data for index years 1997, 1998 and 1999 were copied.

- The age-standardised program sensitivity rate for women in the target age group (50–69 years) 0–24 months after their first screen increased from 77.1% in 1997–1999 to 78.6% in 2000–2002, but this increase was not significant.

For more information, see: Tables 21 to 24 beginning on page 96. Tables with data other than for the latest reporting period can be found on the AIHW's website at <www.aihw.gov.au>.

States and territories

Program sensitivity for women aged 50–69 years, screened during index years 1997, 1998, 1999 and 2000, 2001, 2002, subsequent screening rounds, 0–12 months follow-up



Note: Bars on columns represent 95% confidence intervals.

Source: AIHW analysis of BreastScreen Australia data.

	Australia	NSW	Vic	Qld	WA	SA	Tas	ACT	NT
Index years 2000–2002									
Rate	84.3	83.3	83.5	84.1	87.4	86.9	85.8	79.0	96.2
95% CI	*82.2–86.5*	*79.6–87.2*	*79.2–88.0*	*79.5–89.0*	*80.5–94.7*	*80.3–93.9*	*73.3–99.6*	*64.7–95.6*	*61.6–100.0*
Index years 1997–1999									
Rate	82.6	81.1	84.4	82.6	84.1	82.6	78.3	80.2	n.a.
95% CI	*80.1–85.2*	*76.8–85.6*	*79.4–89.6*	*76.1–89.5*	*76.5–92.2*	*75.1–90.6*	*64.7–93.9*	*63.8–99.5*	*n.a.*

n.a. Not available.

Notes

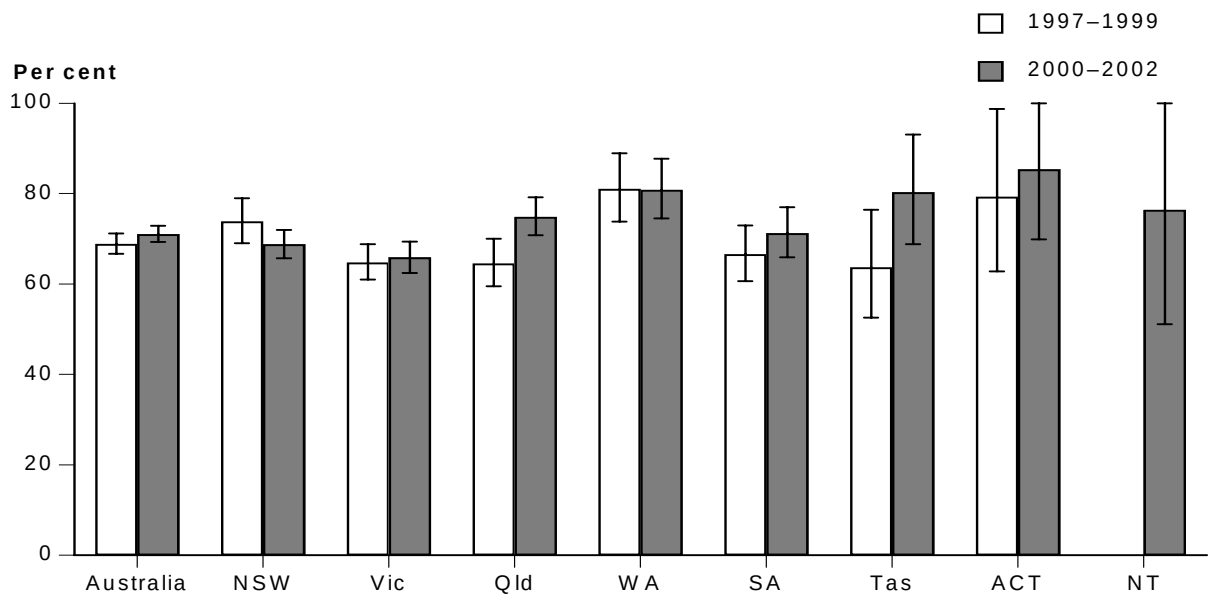
1. Rates are the number of screen-detected cancers as a percentage of all cancers (screen-detected and interval cancers) and age-standardised to the population of women attending a BreastScreen Australia service in 1998.
2. The data include both symptomatic and asymptomatic women.
3. None of the rates was significantly different from the all-Australia rate.
4. The Australian figure includes data from NSW, Vic, Qld, WA, SA, Tas and ACT. NT data were unavailable at the time of publication of the BreastScreen Australia monitoring 2000–2001 from which the data for index years 1997, 1998 and 1999 were copied.

- The program sensitivity rate between the index years 1997–1999 and 2000–2002 for women in the target age group (50–69) 0–12 months after their second or subsequent screens increased from 82.6% to 84.3% but the increase was not statistically significant.

For more information, see: Tables 21 to 24 beginning on page 96. Tables with data other than for the latest reporting period can be found on the AIHW's website at <www.aihw.gov.au>.

States and territories

Program sensitivity for women aged 50–69 years, screened during index years 1997, 1998, 1999 and 2000, 2001, 2002, subsequent screening rounds, 0–24 months follow-up



Note: Bars on columns represent 95% confidence intervals.

Source: AIHW analysis of BreastScreen Australia data.

	Australia	NSW	Vic	Qld	WA	SA	Tas*	ACT	NT
Index years 2000–2002									
Rate	71.1	68.8	65.9	74.9	80.9**	71.3	80.3	85.4	76.4
95% CI	*69.4–72.9*	*65.8–72.0*	*62.5–69.4*	*70.8–79.2*	*74.5–87.6*	*65.9–77.1*	*68.8–93.1*	*69.9–100.0*	*51.2–100.0*
Index years 1997–1999									
Rate	68.9	73.9	64.8	64.6	81.1#	66.6	63.7	79.3	n.a.
95% CI	*66.7–71.2*	*69.0–79.0*	*61.0–68.7*	*59.5–70.0*	*73.7–88.9*	*60.7–73.1*	*52.6–76.4*	*62.8–98.7*	*n.a.*

* Interval cancers for 13–24 months for 2002 for Tasmania may not be fully complete as the Tasmanian Cancer Registry file for 2004 was not closed off at the time the interval cancer data were supplied to the AIHW.

** Statistically different from all-Australia rate.

Statistically different from all-Australia rate.

n.a. Not available.

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. The Australian figure includes data from NSW, Vic, Qld, WA, SA, Tas and ACT. NT data were unavailable at the time of publication of the BreastScreen Australia monitoring 2000–2001 from which the data for index years 1997, 1998 and 1999 were copied.

- The program sensitivity rate for Australia between the index years 1997–1999 and 2000–2002 for women in the target age group (50–69) 0–24 months after their second or subsequent screen increased from 68.9% to 71.1%. This increase was not statistically significant.

For more information, see: Tables 21 to 24 beginning on page 96. 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 and 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 (NBCC 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 J A 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:

- ≥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 1999, 2003 and 2004. 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.

Ductal carcinoma in situ detection rate in women aged 40 years and over and 50–69 years, Australia, 1999, 2003 and 2004

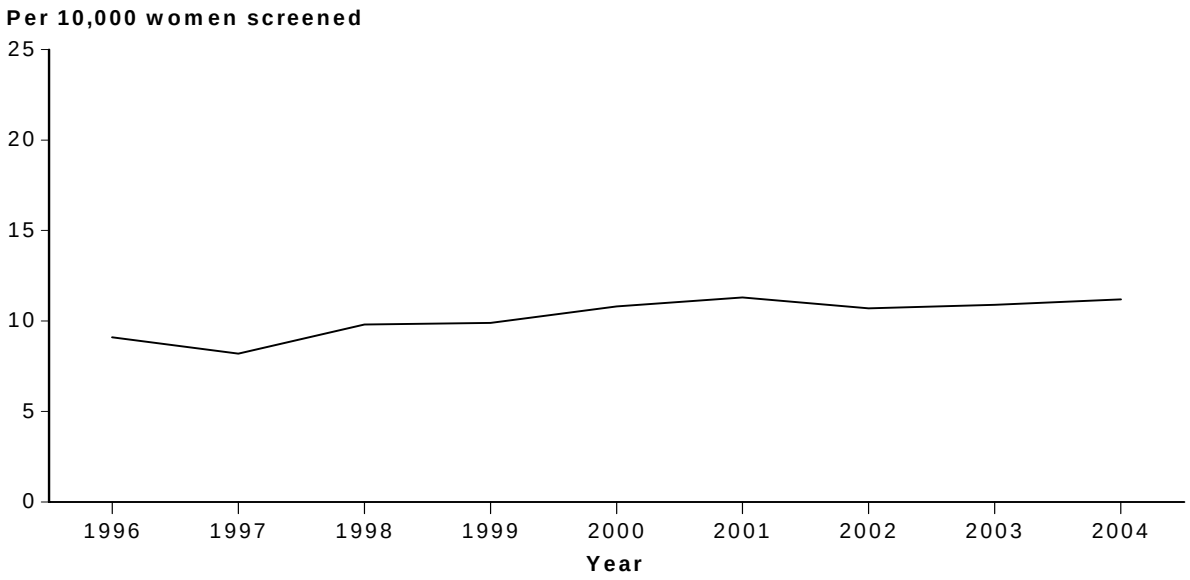
	Objective[(a)]	1999	2003	2004
First screening round				
Rate for women aged 50–69 years	≥12	15.3	16.8	19.8
95% CI		*12.6–18.3*	*13.3–20.8*	*15.7–24.4*
Rate for women aged 40 years and over	..	14.4	15.8	17.6
95% CI		*12.3–16.8*	*13.0–19.0*	*14.4–21.2*
Subsequent screening rounds				
Rate for women aged 50–69 years	≥7	8.9	10.3	10.4
95% CI		*8.0–9.8*	*9.4–11.2*	*9.6–11.3*
Rate for women aged 40 years and over	..	8.4	9.9	10.1
95% CI		*7.7–9.2*	*9.2–10.6*	*9.4–10.9*

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

. . Not applicable.

- There were 917 cases of DCIS detected by BreastScreen Australia in 2004 in women aged 40 years and over, 170 cases in the first screening round, and 747 cases in subsequent screening rounds.
- There were 673 cases of DCIS detected by BreastScreen Australia in 2004 in women aged 50–69 years, 117 cases in the first screening round, and 556 cases in subsequent screening rounds.
- The detection rate in the first screening round was 19.8 per 10,000 women screened, and in subsequent screening rounds 10.4 per 10,000 women screened.

Ductal carcinoma in situ detection in women aged 50–69 years, all screening rounds, 1996–2004



Source: AIHW analysis of BreastScreen Australia data.

	1996	1997	1998	1999	2000	2001	2002	2003	2004
Rate	9.1	8.2	9.8	9.9	10.8	11.3	10.7	10.9	11.2*
95% CI	*8.2–10.1*	*7.4–9.1*	*8.9–10.7*	*9.1–10.8*	*9.9–11.7*	*10.5–12.2*	*9.9–11.6*	*10.1–11.8*	*10.4–12.1*

* Statistically different from the 1996 and 1997 rate.

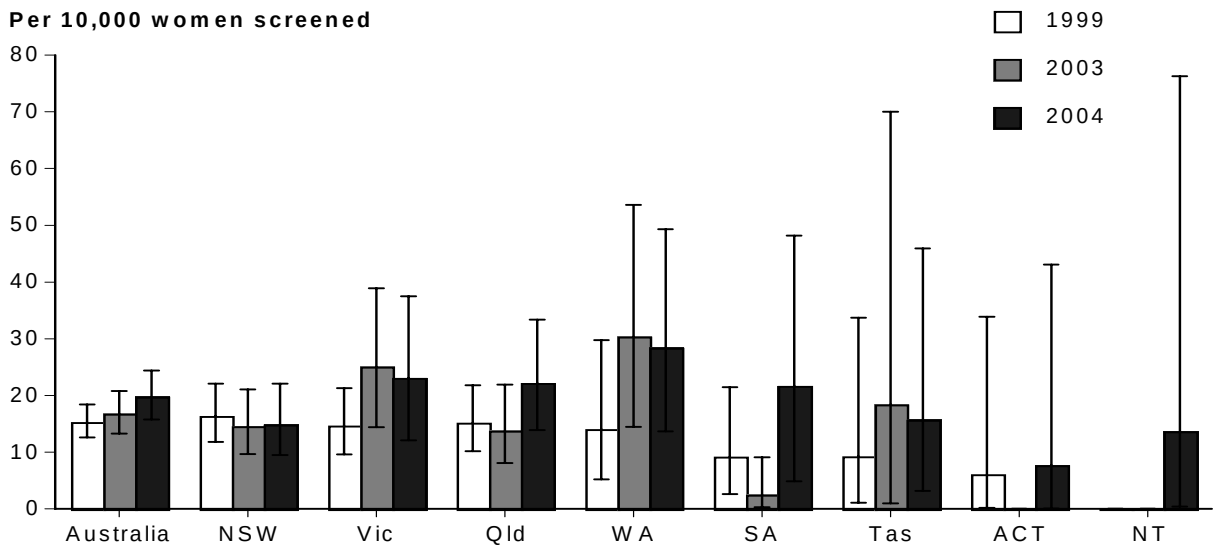
Note: Rates are the number of cases of DCIS per 10,000 women screened and age-standardised to the population of women attending a BreastScreen Australia service in 1998.

- The number of DCIS cases detected in women aged 50–69 years increased from 376 in 1996 to 673 DCIS cases in 2004 for all screening rounds.
- The age-standardised rate of DCIS detection for women in the target age group 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 to 28 beginning on page 98. Tables with data other than for the latest reporting period can be found on the AIHW's website at <www.aihw.gov.au>.

States and territories

Ductal carcinoma in situ detection in women aged 50–69 years, first screening round, 1999, 2003 and 2004



Note: Bars on columns represent 95% confidence intervals.

Source: AIHW analysis of BreastScreen Australia data.

	Australia	NSW	Vic	Qld	WA	SA	Tas	ACT	NT
2004 rate	19.8	14.9	23.1	22.2	28.4	21.7	15.7	7.7	13.7
95% CI	*15.7–24.4*	*9.5–22.1*	*12.1–37.5*	*13.9–33.4*	*13.7–49.4*	*4.9–48.2*	*3.2–45.9*	*0.2–43.2*	*0.3–76.2*
2003 rate	16.8	14.6	25.1	13.8	30.4	2.5*	18.4	..	..
95% CI	*13.3–20.8*	*9.7–21.0*	*14.4–38.9*	*8.1–21.9*	*14.5–53.6*	*0.3–9.2*	*1.0–70.0*	..	..
1999 rate	15.3	16.4	14.7	15.2	14.1	9.2	9.3	6.1	..
95% CI	*12.6–18.3*	*11.8–22.1*	*9.6–21.4*	*10.2–21.8*	*5.2–29.8*	*2.6–21.5*	*1.1–33.7*	*0.2–33.9*	..

* Statistically different from the 2003 Australian rate.

.. Not applicable—no DCIS cases detected.

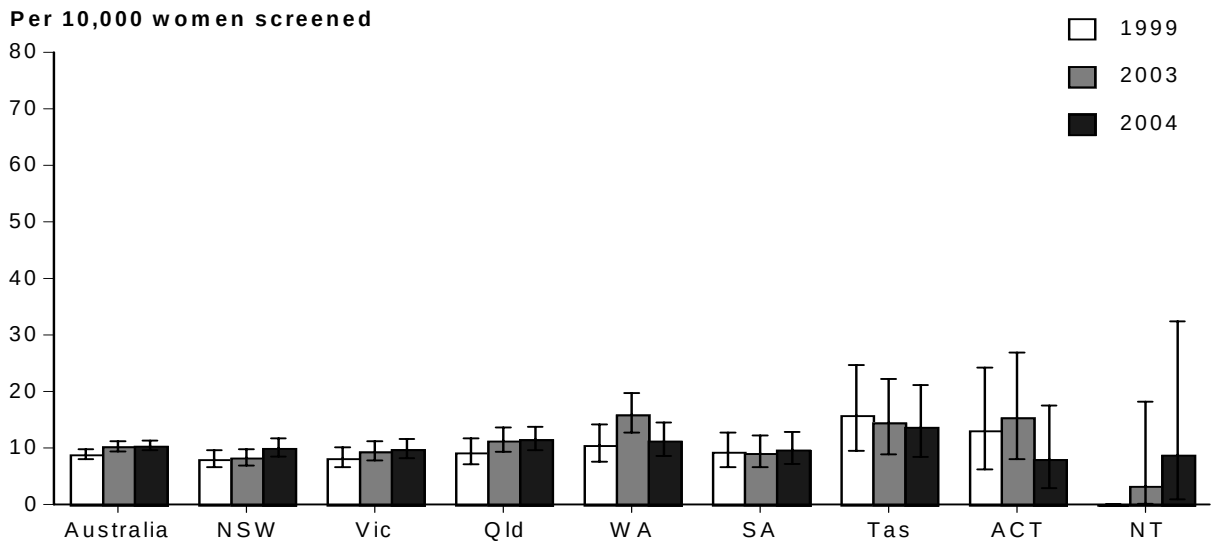
Note: Rates are the number of cases of DCIS per 10,000 women screened and age-standardised to the population of women attending a BreastScreen Australia service in 1998.

- DCIS was detected in 170 women attending for their first screening round in 2004, including 117 cases in women in the target age group. The age-standardised DCIS detection rate was 19.8 per 10,000 women screened for women in the target age group, and 17.6 per 10,000 for women aged 40 years and over.
- The national age-standardised detection rate of DCIS increased from 15.3 in 1999 to 19.8 in 2004 but the increase was not statistically significant.

For more information, see: Tables 25 to 28 beginning on page 98. Tables with data other than for the latest reporting period can be found on the AIHW's website at <www.aihw.gov.au>.

States and territories

Ductal carcinoma in situ detection in women aged 50–69 years, second or subsequent screening rounds, 1999, 2003 and 2004



Note: Bars on columns represent 95% confidence intervals.

Source: AIHW analysis of BreastScreen Australia data.

	Australia	NSW	Vic	Qld	WA	SA	Tas	ACT	NT
2004 rate	10.4	10.0	9.8	11.5	11.3	9.7	13.7	8.0	8.8
95% CI	*9.6–11.3*	*8.5–11.7*	*8.2–11.7*	*9.5–13.6*	*8.7–14.6*	*7.2–12.8*	*8.3–21.1*	*2.9–17.5*	*0.9–32.4*
2003 rate	10.3	8.3	9.4	11.3	15.9*	9.1	14.5	15.4	3.3
95% CI	*9.4–11.2*	*7.0–9.9*	*7.9–11.3*	*9.3–13.6*	*12.7–19.7*	*6.6–12.1*	*9.0–22.2*	*7.9–26.9*	*0.1–18.2*
1999 rate	8.9	8.0	8.2	9.2	10.5	9.3	15.8	13.1	..
95% CI	*8.0–9.8*	*6.6–9.6*	*6.6–10.0*	*7.1–11.8*	*7.6–14.2*	*6.6–12.7*	*9.5–24.7*	*6.3–24.2*	..

* Statistically different from the 2003 Australian rate.

.. Not applicable—no DCIS cases detected.

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 747 women aged 40 years and over attending for their second or subsequent screening rounds in 2004, including 556 cases in women in the target age group. The age-standardised DCIS detection rate was 10.4 per 10,000 women screened for women in the target age group, and 10.1 per 10,000 for women aged 40 years and over.
- The national age-standardised detection rate of DCIS increased from 8.9 in 1999 to 10.4 in 2004; however, the increase was not statistically significant.

For more information, see: Tables 25 to 28 beginning on page 98. 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 five-year age groups for women aged 40 years and 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 core 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:

- <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 1999, 2003 and 2004. The objectives of recalling less than 10% of women in the target age group 50–69 attending for their first screening round and less than 5% of women attending for their second or subsequent screening rounds were achieved in the three years.

Age-standardised recall to assessment rates for women aged 40 years and over and 50–69 years, mammographic reasons, 1999, 2003 and 2004

	Objective[(a)]	1999	2003	2004
First screening round				
Rate (%) for women aged 50–69 years	<10	7.7	9.4	9.9
95% CI		*7.5–7.9*	*9.1–9.6*	*9.6–10.2*
Rate (%) for women aged 40 years and over	..	7.6	9.4	9.7
95% CI		*7.4–7.7*	*9.2–9.6*	*9.5–10.0*
Subsequent screening rounds				
Rate (%) for women aged 50–69 years	<5	4.0	4.0	4.0
95% CI		*3.9–4.1*	*4.0–4.1*	*4.0–4.1*
Rate (%) for women aged 40 years and over	..	4.0	4.2	4.3
95% CI		*4.0–4.1*	*4.2–4.3*	*4.2–4.3*

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

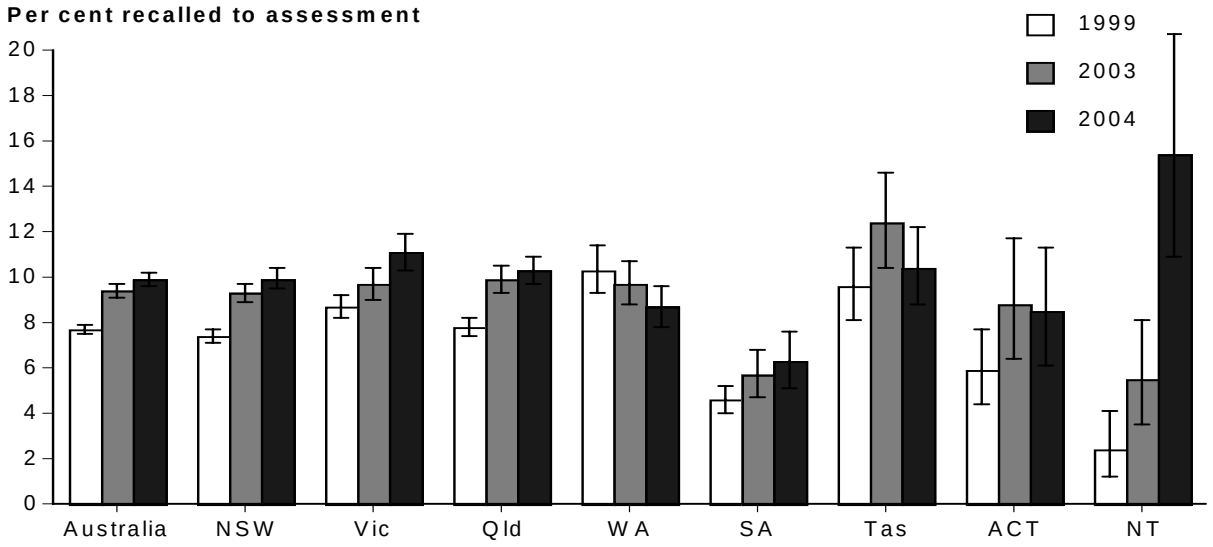
. . Not applicable.

Source: AIHW analysis of BreastScreen Australia data.

The age-standardised recall to assessment rate for women attending for their first screening round rose from 7.7% in 1999 to 9.9% in 2004. This increase was statistically significant. The age-standardised recall rate for women aged 40 years and over attending for their first screening round also rose significantly from 7.6% in 1999 to 9.7% in 2004.

States and territories

Recall to assessment rate for women aged 50–69 years, mammographic reasons, first screening round, 1999, 2003 and 2004



Note: Bars on columns represent 95% confidence intervals.

Source: AIHW analysis of BreastScreen Australia data.

	Australia	NSW	Vic	Qld	WA	SA	Tas	ACT	NT
2004 rate (%)	9.9#	9.9#	11.1#	10.3#	8.7	6.3	10.4	8.5	15.4*#
95% CI	*9.6–10.2*	*9.4–10.3*	*10.4–11.9*	*9.8–11.0*	*7.9–9.6*	*5.2–7.6*	*8.8–12.2*	*6.1–11.3*	*10.9–20.7*
2003 rate (%)	9.4	9.3	9.7	9.9	9.7	5.7	12.4	8.8	5.5
95% CI	*9.1–9.6*	*8.9–9.7*	*9.0–10.4*	*9.3–10.5*	*8.8–10.7*	*4.6–6.8*	*10.4–14.6*	*6.4–11.6*	*3.5–8.2*
1999 rate (%)	7.7	7.4	8.7	7.8	10.3	4.6	9.6	5.9	2.4
95% CI	*7.5–7.9*	*7.0–7.7*	*8.2–9.2*	*7.4–8.2*	*9.3–11.3*	*4.1–5.3*	*8.1–11.3*	*4.4–7.8*	*1.2–4.0*

* Statistically different from the 2003 rate.

Statistically different from the 1999 rate.

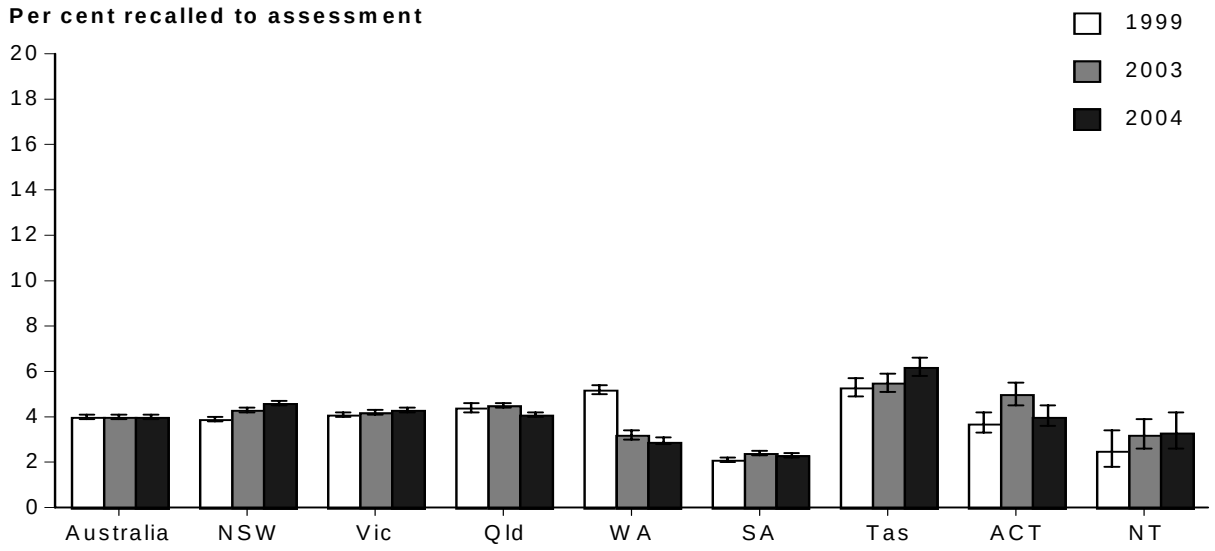
Note: Rates are the number of women recalled for assessment as a percentage of women screened and age-standardised to the population of women attending a BreastScreen Australia service in 1998.

- In 2004, 9.9% (age-standardised) of women in the target age group attending for their first screen were recalled for assessment due to an abnormal mammogram result. Between 1999 and 2004 there was a statistically significant increase in recalls due to mammographic reasons for women attending their first screen. Similar increases also occurred in New South Wales, Victoria, Queensland and Northern Territory. In other states and territories the changes between 1999 and 2004 were not statistically significant, mainly due to the number of cases being too small to measure significant change.

For more information, see: Tables 29 to 36 beginning on page 100. Tables with data other than for the latest reporting period can be found on the AIHW's website at <www.aihw.gov.au>.

States and territories

Recall to assessment rate for women aged 50–69 years, mammographic reasons, subsequent screening rounds, 1999, 2003 and 2004



Note: Bars on columns represent 95% confidence intervals.

Source: AIHW analysis of BreastScreen Australia data.

	Australia	NSW	Vic	Qld	WA	SA	Tas	ACT	NT
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*	*4.5–4.7*	*4.2–4.4*	*4.0–4.2*	*2.7–3.0*	*2.2–2.4*	*5.8–6.6*	*3.5–4.4*	*2.5–4.2*
2003 rate (%)	4.0	4.3	4.2	4.5	3.2	2.4	5.5	5.0	3.2
95% CI	*4.0–4.1*	*4.2–4.4*	*4.0–4.3*	*4.3–4.6*	*3.1–3.4*	*2.3–2.6*	*5.1–5.9*	*4.5–5.5*	*2.5–3.9*
1999 rate (%)	4.0	3.9	4.1	4.4	5.2	2.1	5.3	3.7	2.5
95% CI	*3.9–4.1*	*3.8–4.0*	*4.0–4.2*	*4.2–4.6*	*5.0–5.4*	*1.9–2.2*	*4.9–5.7*	*3.3–4.2*	*1.8–3.4*

* Statistically different from the 2003 rate.

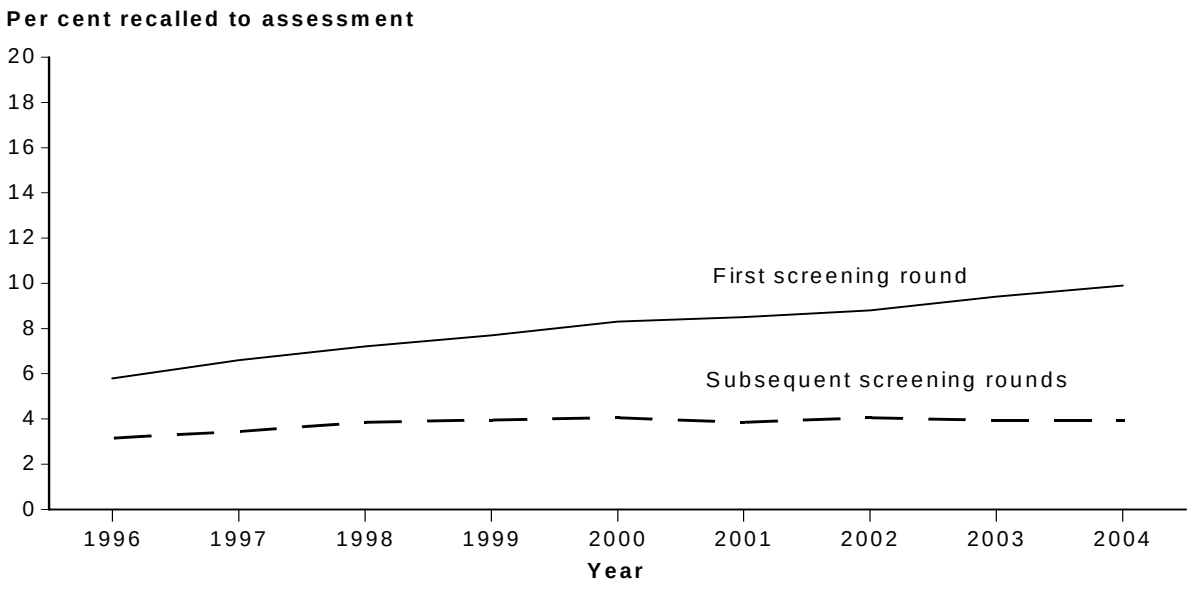
Statistically different from the 1999 rate.

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 in the target age group who were screened for a second or subsequent time in 2004, 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 (9.9%).

For more information, see: Tables 29 to 36 beginning on page 100. 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 for women aged 50–69 years, mammographic reasons, first and subsequent screening rounds, 1996 to 2004



Source: AIHW analysis of BreastScreen Australia data.

	1996	1997	1998	1999	2000	2001	2002	2003	2004
First screening round									
Rate	5.8*	6.6*	7.2*	7.7*	8.3*	8.5*	8.8*	9.4*	9.9*
95% CI	*5.7–5.9*	*6.5–6.7*	*7.1–7.4*	*7.5–7.9*	*8.0–8.5*	*8.3–8.7*	*8.6–9.1*	*9.1–9.6*	*9.6–10.2*
Subsequent screening rounds									
Rate	3.2	3.5	3.9	4.0	4.1	3.9	4.1	4.0	4.0
95% CI	*3.1–3.2*	*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*

* 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 2004. The rate increased from 5.8% to 9.9%.
- The age-standardised recall rate for women attending for their second or subsequent screen was relatively stable between 1998 and 2004, oscillating between 3.9% and 4.1%.

For more information, see: Tables 29 to 36 beginning on page 100. 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 two years who returned for a screen within 27 months. This rate is reported by five-year age groups for women aged 40 years and 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 two years. By having a mammogram every two 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 an additional 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. As can be seen in the table below, 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.

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

The National Accreditation Standards for rescreen require:

- ≥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 2001 and 2002 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 2001 and 2002. The age-standardised rescreen rate for women aged 50–67 years attending for their first screening round declined from 62.9% in 2001 to 61.6% in 2002, but this decline was not significant. The age-standardised rescreen rate for women aged 40 years and over attending for their first screening round also declined from 58.5% in 2001 to 56.6% in 2002. 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%.

Age-standardised rescreen rates for women aged 40 years and over and 50–67 years, screened during 2001 and 2002

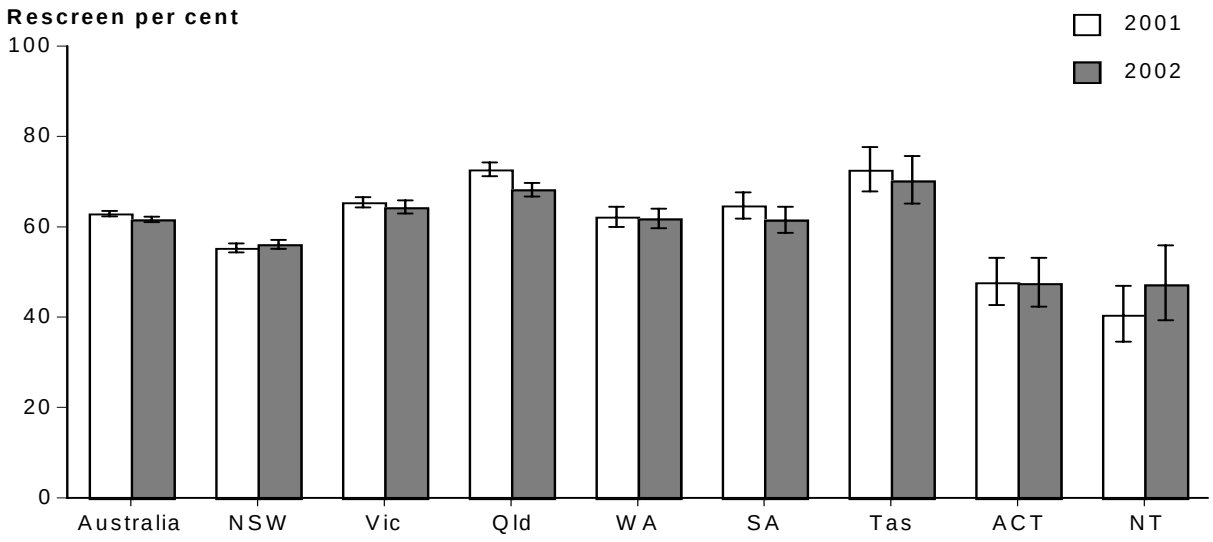
	Objective[(a)]	2001	2002
First screening round			
Rate (%) for women aged 50–67 years	≥75	62.9	61.6
95% CI		*62.2–63.5*	*60.9–62.2*
Rate (%) for women aged 40 years and over	..	58.5	56.6
95% CI		*58.1–59.0*	*56.1–57.1*
Second screening round			
Rate (%) for women aged 50–67 years	≥90	71.9	70.3
95% CI		*71.3–72.5*	*69.7–71.0*
Rate (%) for women aged 40 years and over	..	67.9	65.9
95% CI		*67.4–68.3*	*65.4–66.4*
Subsequent screening rounds			
Rate (%) for women aged 50–67 years	≥90	81.8	80.7
95% CI		*81.5–82.1*	*80.4–81.0*
Rate (%) for women aged 40 years and over	..	78.0	76.4
95% CI		*77.7–78.3*	*76.1–76.7*

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

. . Not applicable.

States and territories

Rescreen rate for women aged 50–67 years, screened during 2001 and 2002, first screening round



Note: Bars on columns represent 95% confidence intervals.

Source: AIHW analysis of BreastScreen Australia data.

	Australia	NSW	Vic	Qld	WA	SA	Tas	ACT	NT
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*
2001 rate (%)	62.9	55.3	65.4	72.7	62.2	64.7	72.6	47.7	40.5
95% CI	*62.2–63.5*	*54.4–56.3*	*64.3–66.6*	*71.2–74.2*	*60.0–64.4*	*61.8–67.6*	*67.8–77.7*	*42.7–53.1*	*34.6–46.9*

* Statistically different from the 2001 rate.

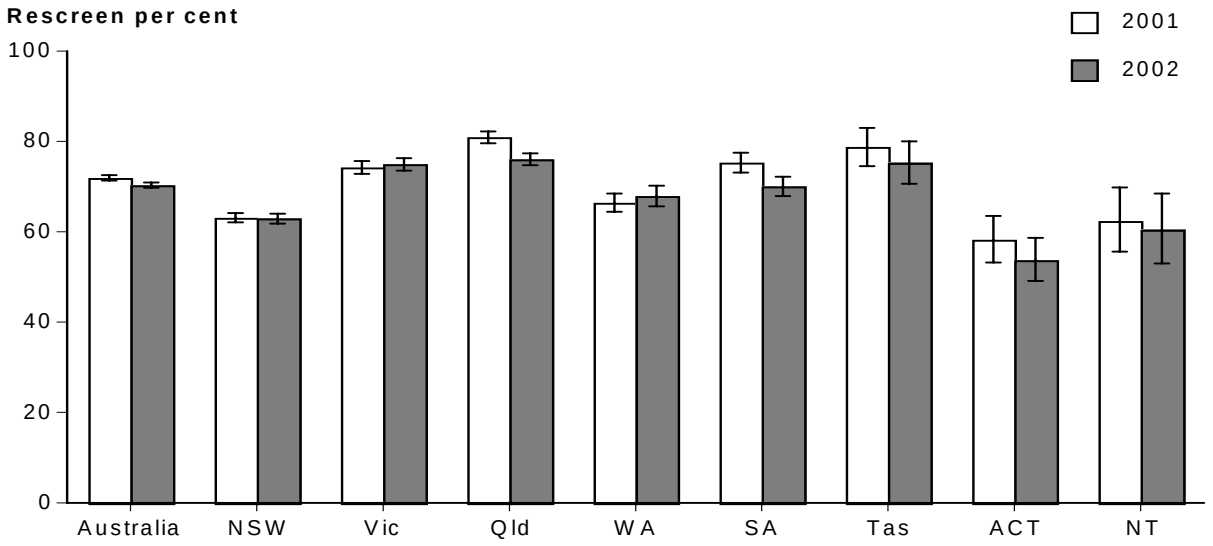
Note: Rates are the number of women attending for rescreening as a percentage of women screened and age-standardised to the population of women attending a BreastScreen Australia service in 1998.

- 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 2002 for the first time was 61.6%, a reduction from 62.9% in 2001. Of all women aged 40 years and over screened in 2002, 56.6% returned for screening, a fall from 58.5% in 2001.

For more information, see: Tables 37 to 42 beginning on page 108. Tables with data other than for the latest reporting period can be found on the AIHW's website at <www.aihw.gov.au>.

States and territories

Rescreen rate for women aged 50–67 years, screened during 2001 and 2002, second screening round



Note: Bars on columns represent 95% confidence intervals.

Source: AIHW analysis of BreastScreen Australia data.

	Australia	NSW	Vic	Qld	WA	SA	Tas	ACT	NT
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*
2001 rate (%)	71.9*	63.1*	74.2*	80.9*	66.4	75.3*	78.7	58.2*	62.4*
95% CI	*71.3–72.5*	*62.1–64.1*	*72.8–75.6*	*79.7–82.2*	*64.4–68.5*	*73.2–77.5*	*74.6–83.1*	*53.3–63.5*	*55.6–69.7*

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

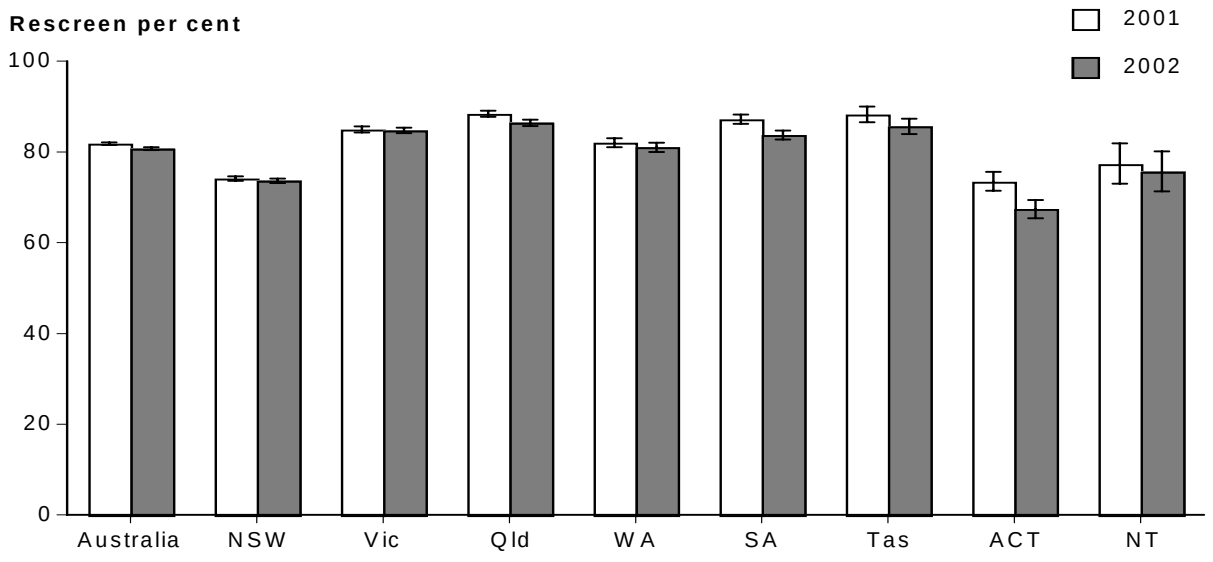
Note: Rates are the number of women attending for rescreening as a percentage of women screened and age-standardised to the population of women attending a BreastScreen Australia service in 1998.

- 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 2002 was 70.3%. This is higher than the rate for women attending for their first visit (61.6%).
- There was a statistically significant decrease in the age-standardised rescreen rates for women attending a screening service for their second round from 71.9% in 2001 to 70.3% in 2002.

For more information, see: Tables 37 to 42 beginning on page 108. Tables with data other than for the latest reporting period can be found on the AIHW's website at <www.aihw.gov.au>.

States and territories

Rescreen rate for women aged 50–67 years, screened during 2001 and 2002, third and subsequent screening rounds



Note: Bars on columns represent 95% confidence intervals.

Source: AIHW analysis of BreastScreen Australia data.

	Australia	NSW	Vic	Qld	WA	SA	Tas	ACT	NT
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*
2001 rate (%)	81.8	74.1	84.9	88.4	82.0	87.2	88.2	73.4	77.3
95% CI	*81.5–82.1*	*73.6–74.6*	*84.3–85.6*	*87.7–89.2*	*81.1–83.0*	*86.2–88.2*	*86.4–90.0*	*71.3–75.6*	*72.8–81.9*

* Statistically different from the 2001 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 2002 was 80.7%. This is much higher than the rates for women attending for their first or second visits (61.6% and 70.3%, respectively).
- The age-standardised national rescreen rate for the third and subsequent screening rounds declined from 81.8% in 2001 to 80.7% in 2002.

For more information, see: Tables 37 to 42 beginning on page 108. 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 five-year age groups for females aged 0–4 years and over 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 five-year period by ten-year age groups for females aged 0–19 years and over 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 Australian Institute of Health and Welfare (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, examining the trends in breast cancer incidence in different age groups helps to identify 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 2003, the latest national data available. This chapter also reports 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'.

The incidence of breast cancer for women in the target age group 50–69 increased from 288.4 new cases in 1998 to 303.7 new cases per 100,000 women in 2002 and fell to 285.1 new cases per 100,000 women in 2003. These changes were not statistically significant.

The incidence of breast cancer in the total female population decreased from 114.5 new cases per 100,000 women in 1998 to 111.8 new cases per 100,000 women in 2003. These changes were not statistically significant.

Incidence of breast cancer in women aged 50-69 years and all women, 1998, 2002 and 2003

	1998	2002	2003
Rate for women aged 50–69 years	288.4	303.7	285.1
95% CI	*280.4–296.5*	*296.0–311.5*	*277.8–292.6*
Rate for all women	114.5	116.8	111.8
95% CI	*112.3–116.7*	*114.7–118.9*	*109.8–113.8*

Incidence of breast cancer by regions is shown in the table below. In 1994–1998 and 1999–2003 the age-standardised breast cancer incidence rate was significantly lower in outer regional, remote and very remote areas than the national rate.

Incidence of breast cancer in women aged 50-69 years, 1994–1998 and 1999–2003 by region

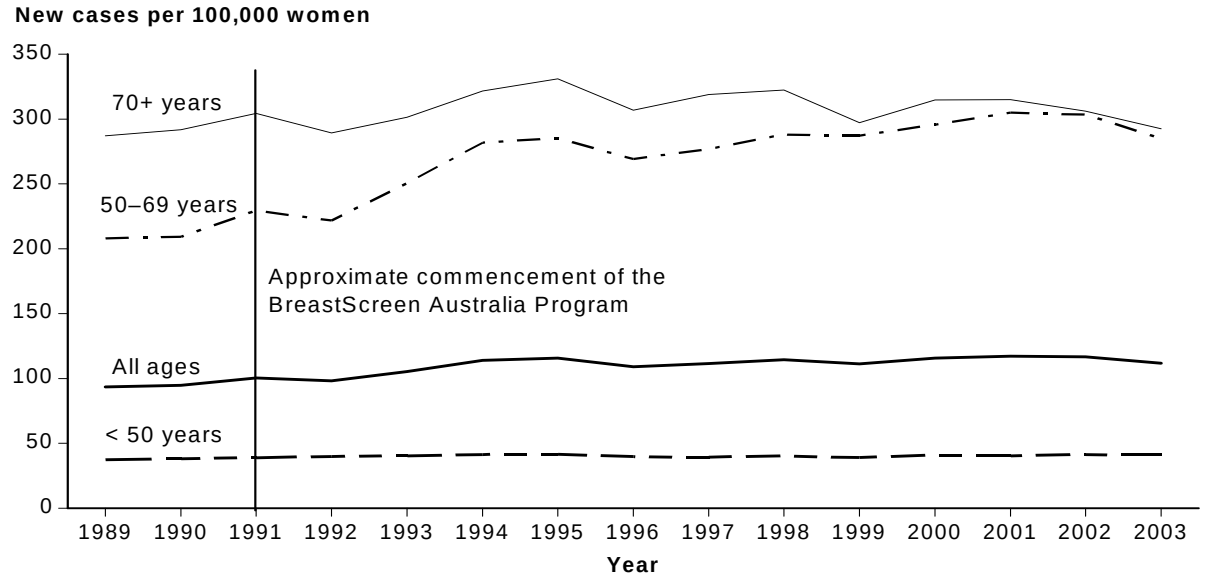
	Australia	Major cities	Inner regional	Outer regional	Remote	Very remote
Rate 1999–2003	295.4	300.7	293.8	274.6	255.8	228.6
95% CI	*291.9–298.9*	*296.4–305.1*	*286.6–301.2*	*264.4–285.0*	*229.1–284.7*	*189.6–271.5*
Rate 1994–1998	280.5	286.4	279.9	256.3	233.0	176.4
95% CI	*276.9–284.2*	*281.9–291.0*	*272.1–287.9*	*245.8–267.1*	*205.7–262.6*	*139.9–219.2*

The following table shows the incidence of DCIS. Incidence of DCIS increased from 31.2 cases per 100,000 women in the target age group in 1994–1998 to 42.6 cases per 100,000 women in 1999–2003. Similarly, the DCIS incidence rate for all women increased from 10.5 cases per 100,000 women in 1994–1998 to 13.5 cases per 100,000 women in 1999–2003.

Incidence of ductal carcinoma in situ in women aged 50-69 years and all women, 1994–1998 and 1999–2003

	1994–1998	1999–2003
Rate for women aged 50–69 years	31.2	42.6
95% CI	*30.0–32.4*	*41.3–44.0*
Rate for all women	10.5	13.5
95% CI	*10.2–10.8*	*13.2–13.9*

Incidence of breast cancer in women, Australia, 1989–2003



Source: AIHW National Cancer Statistics Clearing House.

	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
All ages	93.5	94.7	100.4	98.2	105.3	113.9	115.6	109.1	111.4	114.5	111.2	115.6	117.2	116.8	111.8
<50	37.4	38.1	39.0	39.9	40.4	41.3	41.6	40.0	39.5	40.3	39.1	40.8	40.4	41.4	41.2
50–69	208.0	209.3	229.5	222.0	250.8	282.0	285.3	269.2	276.9	288.4	287.2	295.6	305.1	303.7	285.1
70+	287.1	291.7	304.4	289.4	301.4	321.6	331.0	306.8	318.9	322.4	297.3	314.7	315.1	306.2	292.4

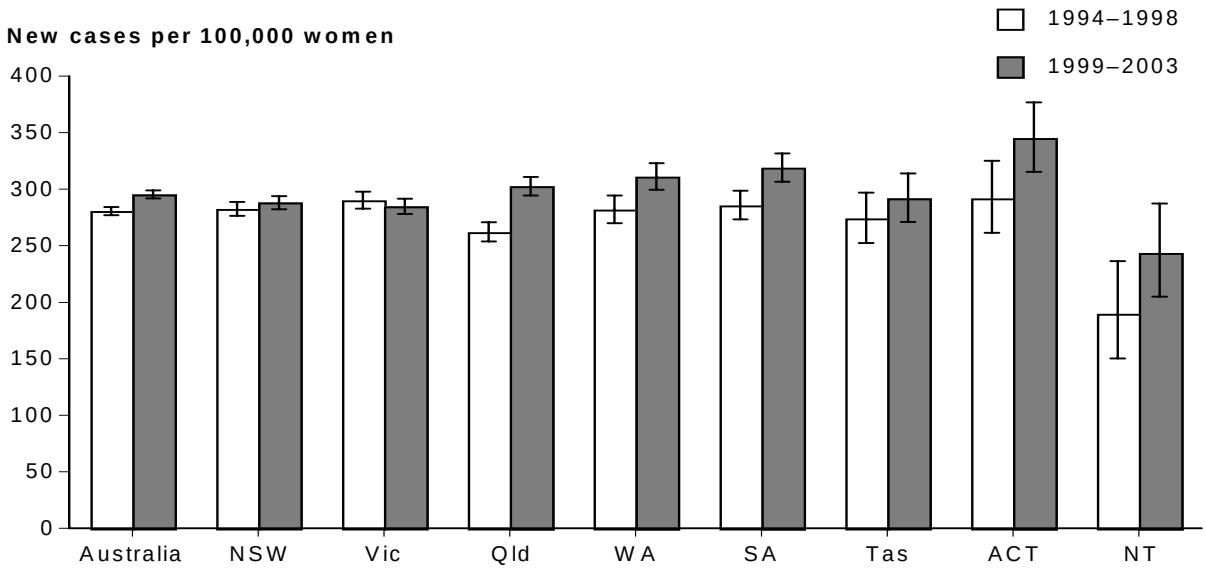
Note: Rates are the number of breast cancers detected per 100,000 women and age-standardised to the Australian population at 30 June 2001.

- With some fluctuations, there was a significant increase over the period 1989 to 2003 in the age-standardised breast cancer incidence rates for women in the target age group (50–69 years). Incidence increased in this group from 208.0 new cancers per 100,000 women in 1989 to 285.1 per 100,000 women in 2003, although there was a peak of 305.1 new breast cancers per 100,000 women in 2001.
- From 1994 onwards, incidence has been relatively constant among women aged less than 50 years, and aged 70 years and over.

For more information, see: Tables 43 to 48 beginning on page 114. Tables with data other than for the latest reporting period can be found on the AIHW's website at <www.aihw.gov.au>.

States and territories

Incidence of breast cancer in women aged 50–69 years, 1994–1998 and 1999–2003



Note: Bars on columns represent 95% confidence intervals.

Source: AIHW National Cancer Statistics Clearing House.

	Australia	NSW	Vic	Qld	WA	SA	Tas	ACT	NT
Rate 1999–2003	295.4#	288.1	284.8*	302.6#	311.1*#	318.9*#	291.9	345.1*	243.7*
95% CI	*291.9–298.9*	*282.2–294.0*	*278.1–291.7*	*294.5–310.9*	*299.6–322.9*	*306.6–331.6*	*271.0–313.9*	*315.4–376.9*	*205.0–287.5*
Rate 1994–1998	280.5	282.6	290.3	262.1*	281.9	274.1	273.3	292.0	189.8*
95% CI	*276.8–284.1*	*276.4–288.8*	*283.0–297.7*	*253.8–270.7*	*269.9–294.3*	*252.5–297.1*	*251.7–296.2*	*261.5–325.2*	*150.2–236.5*

* Significantly different from the Australian rate.

Significantly different from the 1994–1998 rate.

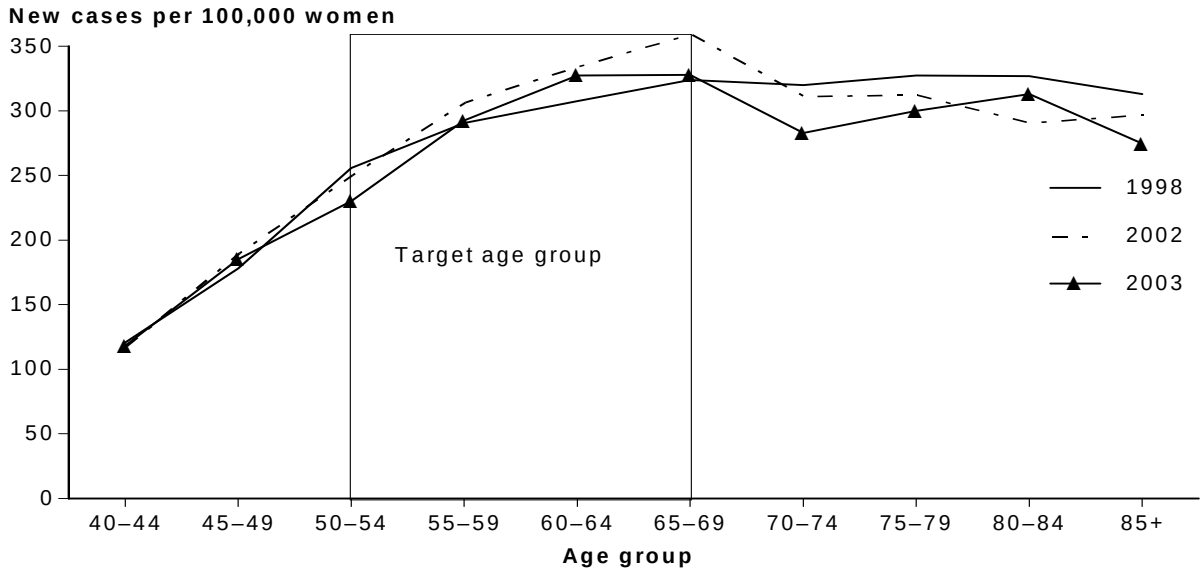
Note: Rates are the number of breast cancers detected per 100,000 women and age-standardised to the Australian population at 30 June 2001.

- The national age-standardised incidence rate for 1999–2003 was 295.4 new cancers per 100,000 women. Across the states and territories, incidence rates ranged from 243.7 new cancers per 100,000 women in the Northern Territory to 345.1 new cases per 100,000 women in the Australian Capital Territory. The rates for Western Australia, South Australia and the Australian Capital Territory (311.1, 318.9 and 345.1 per 100,000 women respectively) were much higher than the national rate of 295.2 cases per 100,000 women.
- In 1994–1998 the age-standardised breast cancer incidence rates in the Northern Territory and Queensland (189.8 and 262.1 new cases per 100,000 women respectively) were lower than the national rate (280.5 per 100,000 women).

- Between 1994–1998 and 1999–2003 there was a significant increase in age-standardised incidence rates in Queensland, Western Australia and South Australia.

For more information, see: Tables 43 to 48 beginning on page 114. 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 in women, Australia, 1998, 2002 and 2003



Source: AIHW National Cancer Statistics Clearing House.

Age	40–44	45–49	50–54	55–59	60–64	65–69	70–74	75–79	80–84	85+
2003 rate	118.3	185.1	230.1	292.6	327.5	327.8	283.0	299.9	313.2	274.8
2002 rate	118.8	190.5	251.1	307.5	335.1	360.2	311.8	313.2	291.3	297.5
1998 rate	120.7	177.9	255.7	290.7	307.7	324.0	319.9	327.4	326.8	313.2

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

- In 1998 the highest breast cancer incidence rate was in the 75–79 age group (327.4 new cases per 100,000 women). In 2002 the incidence peak shifted to the 65–69 age group with 360.2 cases per 100,000 women. Similarly, in 2003 the age group with the highest breast cancer incidence rate of 327.0 new cases per 100,000 women was 65–69 years old.

For more information, see: Tables 43 to 48 beginning on page 114. 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 in women aged 50–69 years, by region, 1994–1998 and 1999–2003

Note: Bars on columns represent 95% confidence intervals.

Source: AIHW National Cancer Statistics Clearing House.

	Australia	Major cities	Inner regional	Outer regional	Remote	Very remote
1999–2003 rate	295.4#	300.7#	293.8	274.6*	255.8*	228.6*
95% CI	*291.9–298.9*	*296.4–305.1*	*286.6–301.2*	*264.4–285.0*	*229.1–284.7*	*189.6–271.5*
1994–1998 rate	280.5	286.4	279.9	256.3*	233.0*	176.4*
95% CI	*276.9–284.2*	*281.9–291.0*	*272.1–287.9*	*245.8–267.1*	*205.7–262.6*	*139.9–219.2*

* Significantly different from the Australian rate.

Significantly different from the 1994–1998 rate.

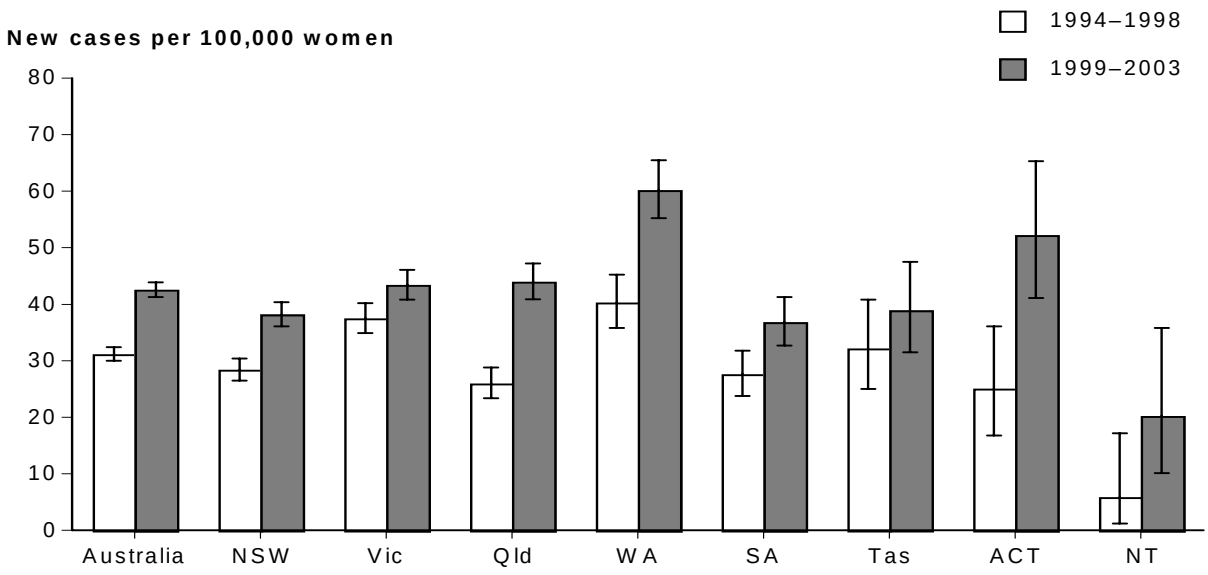
Note: Rates are the number of breast cancers detected per 100,000 women and age-standardised to the Australian population at 30 June 2001.

- In 1994–1998 and 1999–2003 the age-standardised breast cancer incidence rate was significantly lower in outer regional, remote and very remote areas than the national rate.
- Between 1994–1998 and 1999–2003 there was a significant increase in the age-standardised breast cancer incidence rate in major cities.

For more information, see: Tables 43 to 48 beginning on page 114. Tables with data other than for the latest reporting period can be found on the AIHW's website at <www.aihw.gov.au>.

States and territories

Incidence of ductal carcinoma in situ in women aged 50–69 years, 1994–1998 and 1999–2003



Note: Bars on columns represent 95% confidence intervals.

Source: National Cancer Statistics Clearing House.

	Australia	NSW	Vic	Qld	WA	SA	Tas	ACT	NT
Rate 1999–2003	42.6	38.2*	43.4	44.0	60.2*	36.8	38.9	52.2	20.2*
95% CI	*41.3–44.0*	*36.1–40.4*	*40.8–46.1*	*41.0–47.2*	*55.2–65.5*	*32.7–41.3*	*31.5–47.5*	*41.1–65.3*	*10.1–35.9*
Rate 1994–1998	31.2	28.4	37.5*	26.0*	40.3*	27.6	32.2	25.1	5.9*
95% CI	*30.0–32.4*	*26.4–30.4*	*34.9–40.2*	*23.5–28.8*	*35.8–45.1*	*23.8–31.8*	*25.0–40.8*	*16.8–36.1*	*1.2–17.1*

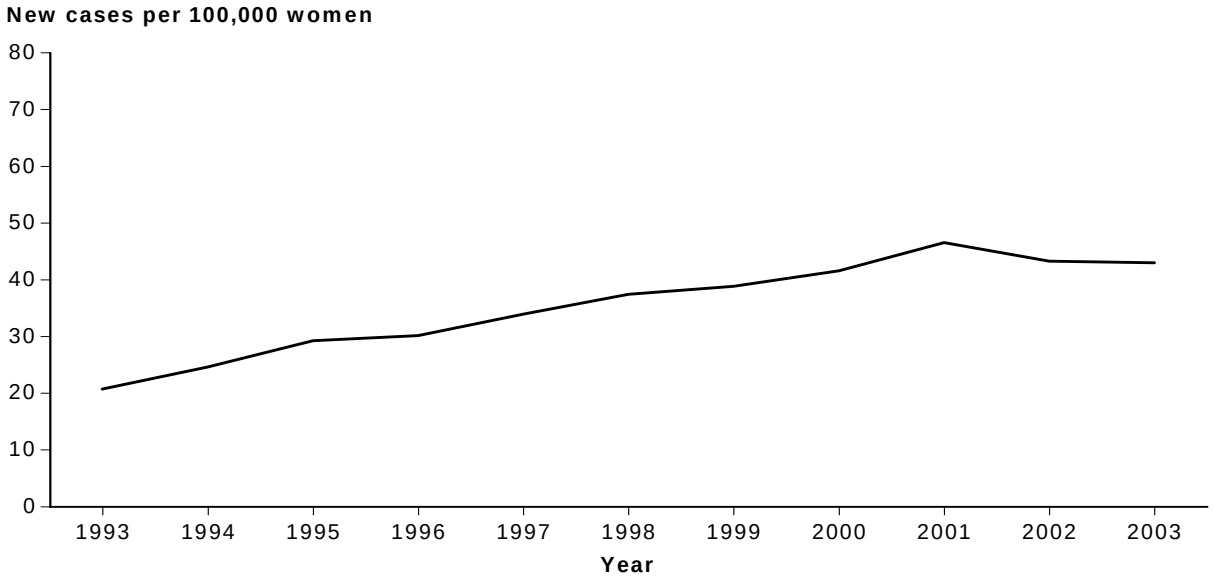
* Significantly different from the Australian rate.

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 1999 to 2003, the national age-standardised incidence rate of DCIS for women aged 50–69 years was 42.6 per 100,000 women, a large increase on the rate for 1994–1998 of 31.2 per 100,000 women.

For more information, see: Tables 49 to 52 beginning on page 120. 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 in women aged 50–69 years, 1993–2003



Source: National Cancer Statistics Clearing House.

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Rate	20.7*	24.6*	29.2*	30.1*	33.9*	37.4	38.8	41.5	46.5	43.2	42.9
95% CI	*18.4–23.1*	*22.2–27.3*	*26.6–32.0*	*27.5–32.9*	*31.2–36.8*	*34.6–40.4*	*35.9–41.8*	*38.6–44.6*	*43.5–49.7*	*40.3–46.2*	*40.1–45.8*

* Significantly different from the 2003 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 from 20.7 in 1993 to 46.5 per 100,000 women in 2001, before falling to 42.9 per 100,000 women in 2003.
- The increase in DCIS incidence rate is likely to be, at least partly, the result of the early detection of cancers in women who may otherwise have gone undiagnosed for some years.

For more information, see: Tables 49 to 52 beginning on page 120. 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 five-year age groups for females aged 0–4 years and over 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 2,400 women dying from the disease in 1990 and 2,641 women in 2004. However, over this period the rates of death caused by breast cancer have steadily fallen. Mortality from breast cancer for women in the target age group 50–69 years decreased significantly from 59.7 deaths per 100,000 women in 1995–1999 to 53.2 deaths per 100,000 women in 2000–2004. Similarly, mortality rates also decreased significantly for all women from 27.3 deaths per 100,000 women in 1995–1999 to 24.5 deaths per 100,000 women in 2000–2004.

In the longer term, mortality rates from breast cancer are an important indicator of the effectiveness of the screening program. A particularly important indication of the effectiveness of a screening program is the change in mortality rates over time in the target age group for screening. There are, however, two difficulties with using these mortality rates as an indicator of screening effectiveness. The first is that changes in mortality over time may reflect factors additional to screening, such as new and more effective treatments. The second is that changes in the mortality rates may not be apparent for a number of years following the commencement of a screening program. Accordingly, this is a measure that needs to be viewed over the long term and interpreted with caution.

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 1990 to 2004, the latest national data available. It also reports 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 A.

Mortality from breast cancer 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	59.7	53.2
95% CI	*58.1–61.4*	*51.7–54.6*
Rate for all women	27.3	24.5
95% CI	*26.8–27.8*	*24.1–24.9*

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.

The following table shows the breast cancer mortality rates by regions. For women in the target age group, mortality rates in 2000–2004 were highest in outer regional areas and in major cities with 54.2 and 54.1 deaths per 100,000 women, respectively, and lowest in very remote areas, with 43.9 deaths per 100,000 women. The difference was not statistically significant because the relatively small number of deaths in very remote areas.

Mortality from breast cancer in women aged 50-69 years, 2000–2004 by region

	Australia	Major cities	Inner regional	Outer regional	Remote	Very remote
Rate 2000–2004	53.2	54.1	51.0	54.2	45.2	43.9
95% CI	*51.7–54.6*	*52.3–55.9*	*48.1–54.1*	*49.8–58.8*	*34.4–57.9*	*27.6–65.3*

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 ASGC remoteness categories are available from 1997 only; therefore, there is no comparable non-overlapping five-year period prior to 2000–2004.

Source: AIHW National Mortality Database.

The following table shows the mortality rates by Indigenous status for Queensland, Western Australia, South Australia and Northern Territory combined. In 2000–2004 in the target age group, the age-standardised mortality rate for Indigenous Australian women (44.2 deaths per 100,000 women) was lower than that for non-Indigenous women (51.4 deaths per 100,000 women); however, this difference was not statistically significant.

Similarly, in 1995–1999 there was no statistically significant difference in mortality rates between the Indigenous Australian women and non-Indigenous women (59.2 and 80.7 deaths per 100,000 women, respectively). Across the time periods 1995–1999 and 2000–2004, the national mortality rates decreased significantly from 59.7 to 53.2 deaths per 100,000 women, respectively. Similarly, mortality rates for non-Indigenous women decreased significantly from 80.7 in 1995–1999 to 51.4 deaths per 100,000 women in 2000–2004. For Indigenous Australian women, the mortality rates decreased from 59.2 to 44.2 deaths per 100,000 women over the same time periods; however, these changes were not statistically significant because of small numbers.

Mortality from breast cancer in women aged 50-69 years, 1995–1999 and 2000–2004 by Indigenous status

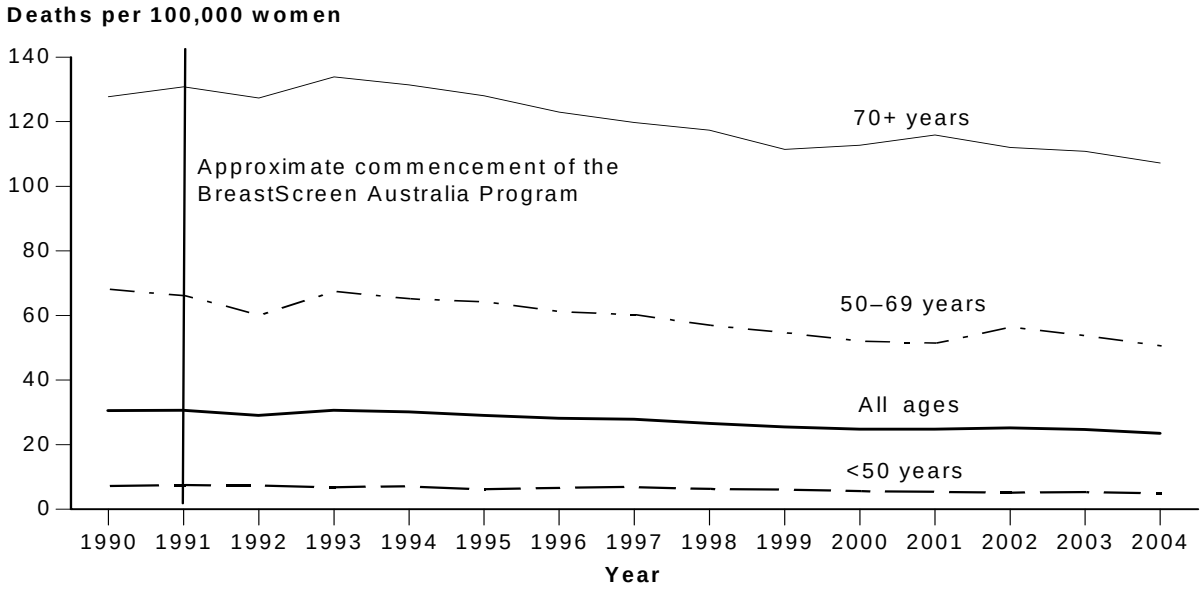
	Australia	Indigenous	Non-Indigenous
Rate 2000–2004	53.2	44.2	51.4
95% CI	*51.7–54.6*	*28.4–65.4*	*49.0–53.8*
Rate 1995–1999	59.7	59.2	80.7
95% CI	*58.1–61.4*	*37.0–89.8*	*76.9–84.6*

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.

Mortality from breast cancer, females, Australia, 1990–2004



Source: AIHW National Mortality Database.

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
All ages	30.4	30.5	28.9	30.5	30.0	28.9	28.1	27.8	26.5	25.4	24.7	24.7	25.1	24.6	23.4
<50	7.5	7.8	7.7	7.1	7.4	6.5	6.9	7.2	6.6	6.4	5.9	5.7	5.4	5.6	5.2
50–69	68.5	66.5	60.5	67.9	65.5	64.6	61.5	60.6	57.3	55.0	52.5	51.8	56.7	54.1	50.9
70+	127.7	130.8	127.3	133.8	131.4	128.0	123.0	119.7	117.3	111.4	112.7	115.9	112.0	110.8	107.2

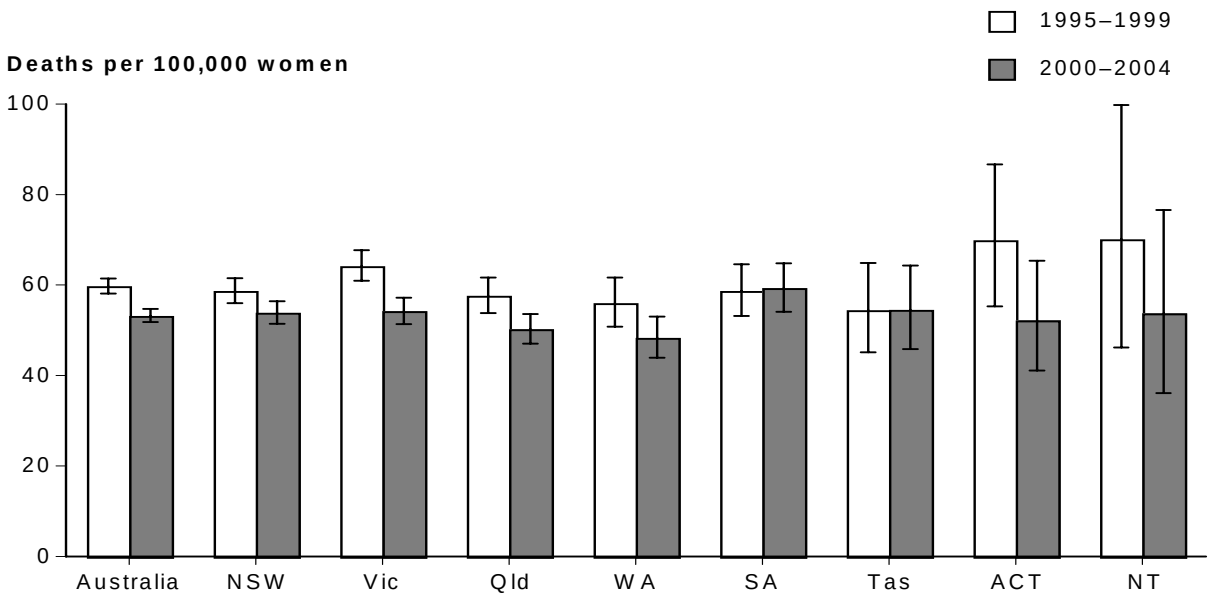
Note: Rates are the number of deaths from breast cancer per 100,000 women and age-standardised to the Australian population at 30 June 2001.

- The age-standardised mortality rate for women aged 50–69 years has been declining steadily from 68.5 deaths per 100,000 women in 1990 to 50.9 deaths per 100,000 women in 2004. There was a small increase in the mortality rate in 2002, to 56.7 deaths per 100,000 women. However, this increase was not statistically significant. Similar patterns of decline in mortality rates can be observed in women aged 70 years and over and women aged less than 50 years.

For more information, see: Tables 53 to 60 beginning on page 122. Tables with data other than for the latest reporting period can be found on the AIHW's website at <www.aihw.gov.au>.

States and territories

Mortality from breast cancer in women aged 50–69 years, 1995–1999 and 2000–2004



Note: Bars on columns represent 95% confidence intervals.

Source: AIHW National Mortality Database.

	Australia	NSW	Vic	Qld	WA	SA	Tas	ACT	NT
Rate 2000–2004	53.2*	53.9	54.2*	50.2*	48.3	59.3	54.5	52.2	53.7
95% CI	*51.7–54.6*	*51.4–56.5*	*51.4–57.2*	*47.0–53.6*	*44.0–53.0*	*54.1–64.8*	*45.8–64.3*	*41.1–65.4*	*36.1–76.6*
Rate 1995–1999	59.7	58.7	64.2	57.6	56.0	58.7	54.4	69.9	70.1
95% CI	*58.1–61.4*	*55.9–61.5*	*60.9–67.7*	*53.8–61.6*	*50.8–61.5*	*53.3–64.6*	*45.1–64.9*	*55.3–86.7*	*46.2–99.8*

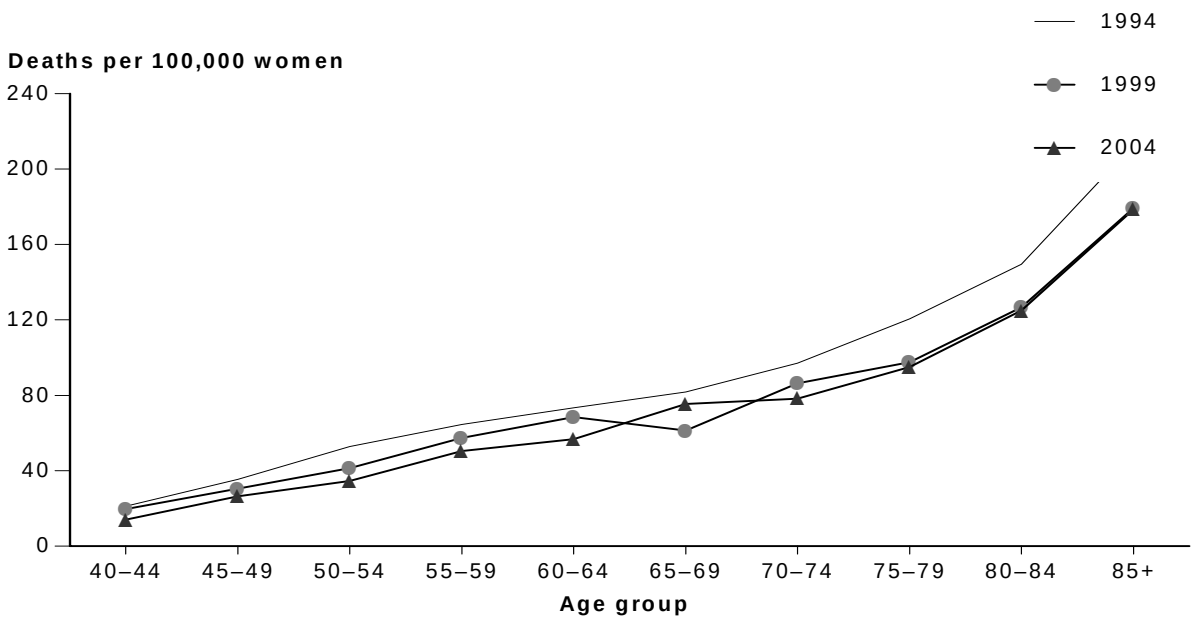
* Statistically different from the 1995–1999 rate.

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 1995–1999 and 2000–2004 from 59.7 to 53.2 deaths per 100,000 women. Victoria and Queensland also had significant decreases in mortality between the two time periods.

For more information, see: Tables 53 to 60 beginning on page 122. 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, females, Australia, 1994, 1999 and 2004



Source: AIHW National Mortality Database.

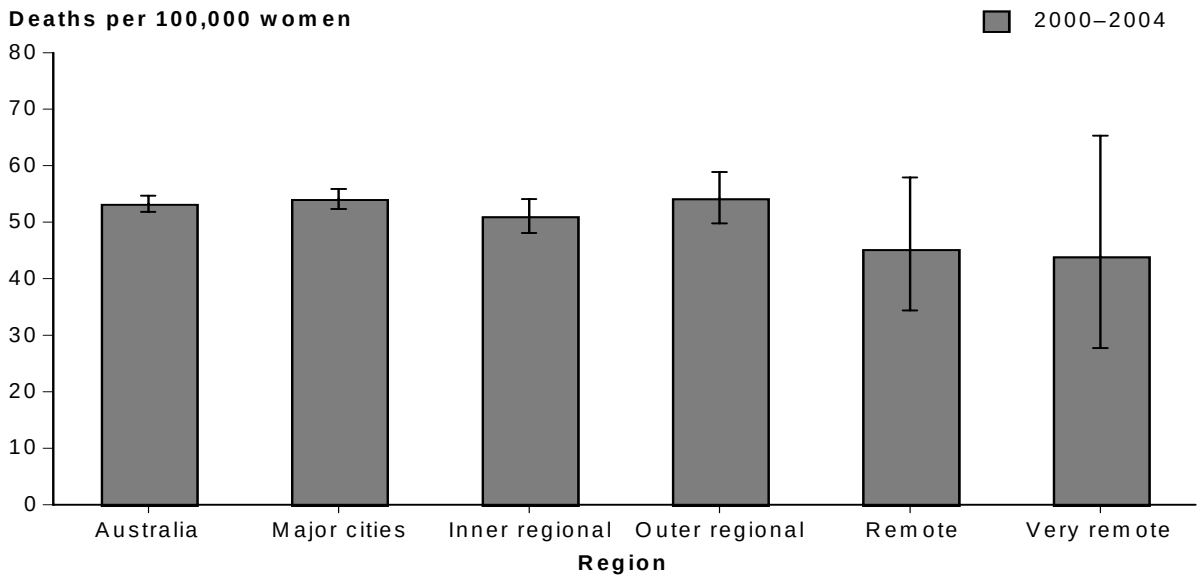
Age	40–44	45–49	50–54	55–59	60–64	65–69	70–74	75–79	80–84	85+
2004	14.1	26.5	34.6	50.5	56.7	75.4	78.3	95.0	125.0	178.7
1999	19.7	30.5	41.3	57.4	68.4	61.3	86.4	97.6	126.7	179.4
1994	21.2	35.4	52.8	64.5	73.3	81.8	97.0	120.5	149.5	212.9

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

- The age-specific mortality rates increased consistently with age. In 1994, the age-specific rate for women aged 40–44 years was 21.2 increasing to 212.9 deaths per 100,000 women for women aged 85 years and over. In 2004, the age-specific rate for women aged 40–44 years was 14.1 increasing to 178.7 deaths per 100,000 women for women aged 85 years and over.
- The mean age at death for women dying from breast cancer increased from 65 years in 1994 to 67 years in 2004. The median age at death increased from 66 years in 1994 to 67 years in 2004.

For more information, see: Tables 53 to 60 beginning on page 122. 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, females aged 50–69 years, 2000–2004



Note: Bars on columns represent 95% confidence intervals.

Source: AIHW National Mortality Database.

	Australia	Major cities	Inner regional	Outer regional	Remote	Very remote
Rate 2000–2004	53.2	54.1	51.0	54.2	45.2	43.9
95% CI	*51.7–54.6*	*52.3–55.9*	*48.1–54.1*	*49.8–58.8*	*34.4–57.9*	*27.6–65.3*

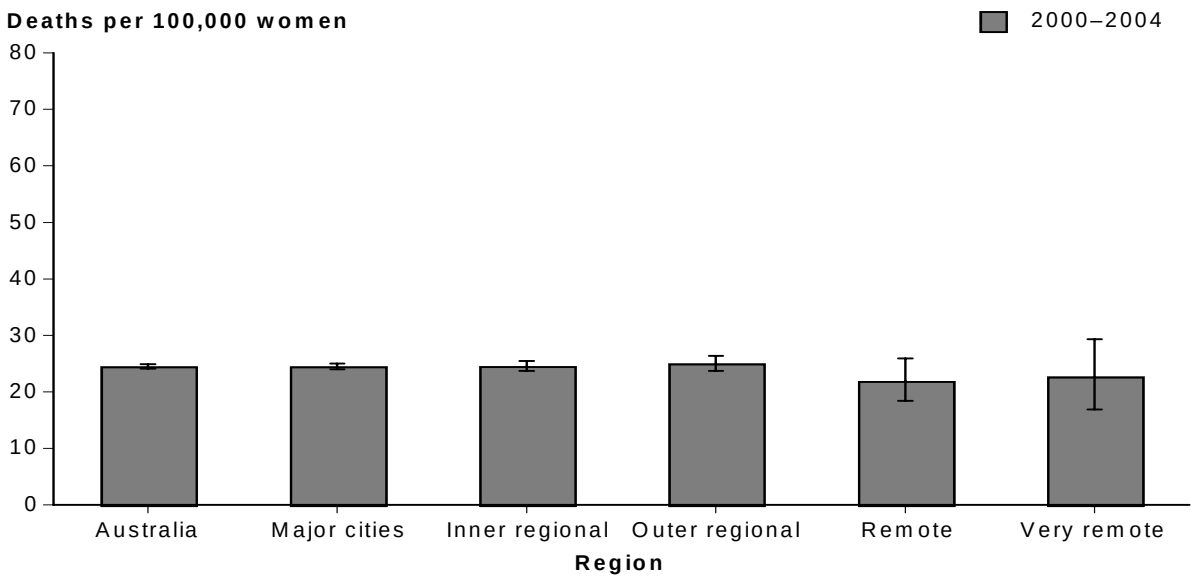
Notes

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 (ASGC) 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 ASGC remoteness categories are available from 1997 only; therefore, there is no comparable non-overlapping five-year period prior to 2000–2004.

- For women in the target age group, breast cancer mortality rates in 2000–2004 were highest in outer regional areas with 54.2 deaths per 100,000 women, and lowest in very remote areas, with 43.9 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 to 60 beginning on page 122. 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, females all ages, 2000–2004



Note: Bars on columns represent 95% confidence intervals.

Source: AIHW National Mortality Database.

	Australia	Major cities	Inner regional	Outer regional	Remote	Very remote
Rate 2000–2004	24.5	24.5	24.6	25.0	21.9	22.7
95% CI	*24.1–24.9*	*24.0–25.0*	*23.7–25.5*	*23.7–26.4*	*18.4–25.9*	*16.9–29.3*

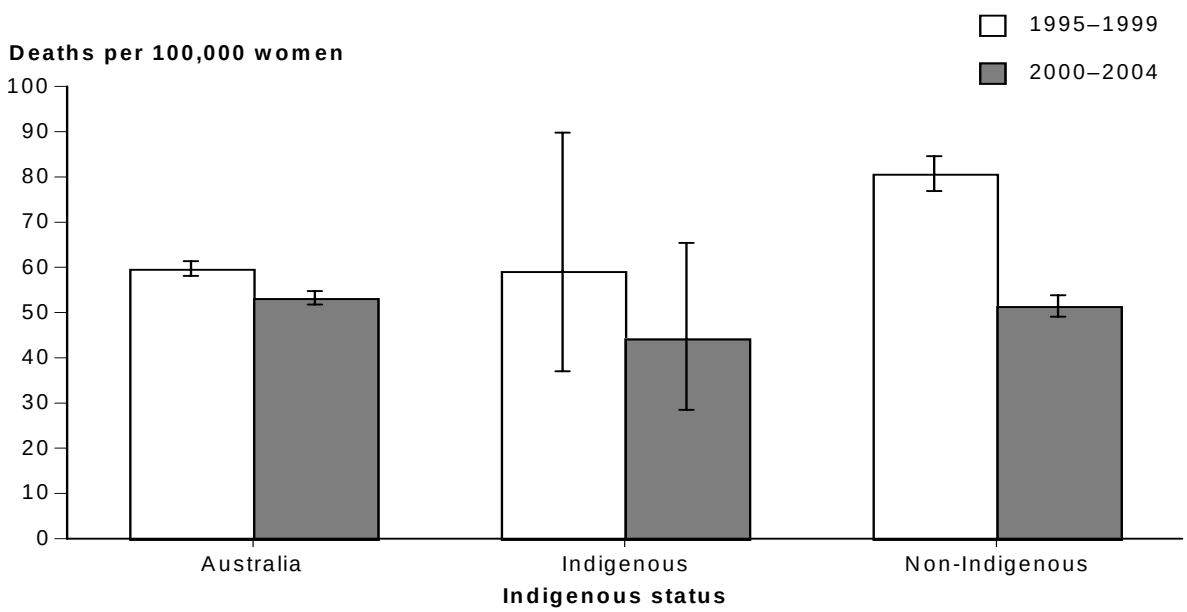
Notes

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 (ASGC) was used to create the above categories (ABS 2001).
3. AIHW Mortality data by ASGC remoteness categories are available from 1997 only; therefore, there is no comparable non-overlapping five-year period prior to 2000–2004.

- For women of all ages, mortality rates in 2000–2004 were highest in outer regional areas with 25.0 deaths per 100,000 women, and lowest in remote areas, with 21.9 deaths per 100,000 women. The difference between the rates was not statistically significant because of the relatively small number of deaths in remote areas.

For more information, see: Tables 53 to 60 beginning on page 122. 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, females aged 50–69 years, 1995–1999 and 2000–2004



Note: Bars on columns represent 95% confidence intervals.

Source: AIHW National Mortality Database.

	Australia	Indigenous	Non-Indigenous
Rate 2000–2004	53.2*	44.2	51.4*
95% CI	*51.7–54.6*	*28.4–65.4*	*49.0–53.8*
Rate 1995–1999	59.7	59.2	80.7
95% CI	*58.1–61.4*	*37.0–89.8*	*76.9–84.6*

* Statistically different from the 1995–1999 rate.

Notes

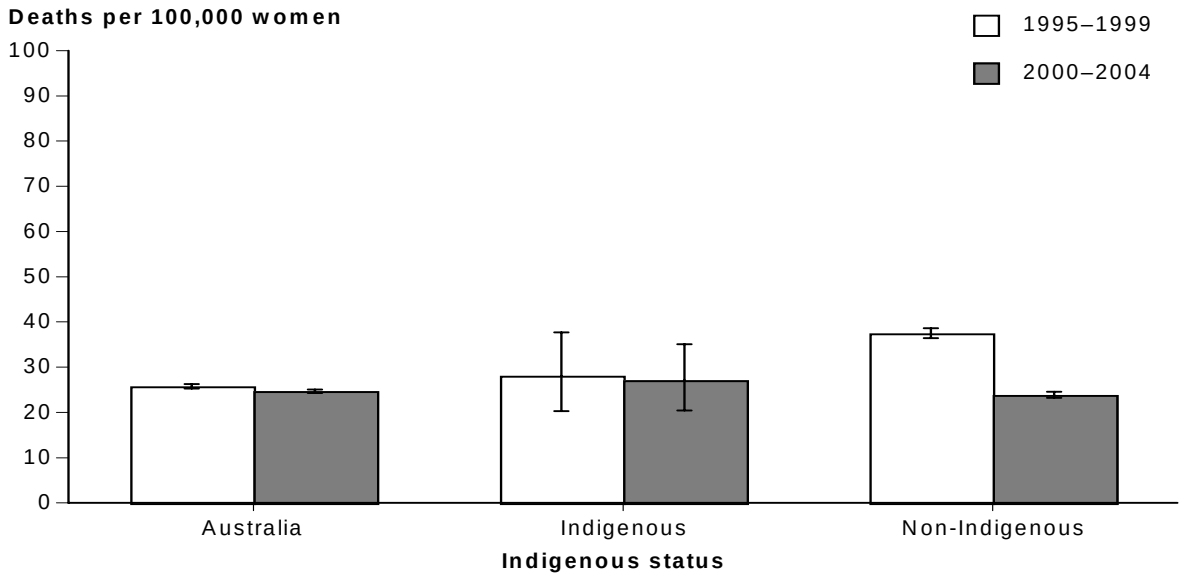
1. Only Queensland, Western Australia, South Australia and the Northern Territory had Indigenous death registration data considered to be of a publishable standard at the time this report was prepared. Therefore, data from these jurisdictions only are included in the analysis by Indigenous status. Queensland data are included from 1998 onwards.
2. 'Australia' includes all states and territories.
3. Women whose Indigenous status was recorded as 'not-stated' are included in the analysis for all women but excluded from the analysis by Indigenous status.
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.

- In 2000–2004 in the target age group, the age-standardised mortality rate for Indigenous women in Queensland, Western Australia, South Australia and Northern Territory combined (44.2 deaths per 100,000 women) was lower than that for non-Indigenous women (51.4 deaths per 100,000 women); however, this difference was not statistically significant because of small numbers. Similarly, in 1995–1999 there was no statistically significant difference in mortality rates between the Indigenous and non-Indigenous populations (59.2 and 80.7 deaths per 100,000 women, respectively).
- From 1995–1999 to 2000–2004 national breast cancer mortality decreased from 59.7 to 53.2 deaths per 100,000 women. Mortality for non-Indigenous women decreased from 80.7 in

1995–1999 to 51.4 deaths per 100,000 women in 2000–2004. For Indigenous women, the mortality rate decreased from 59.2 to 44.2 deaths per 100,000 women between these periods; however, these changes were not statistically significant.

For more information, see: Tables 53 to 60 beginning on page 122. 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, females all ages, 1995–1999 and 2000–2004



Note: Bars on columns represent 95% confidence intervals.

Source: AIHW National Mortality Database.

	Australia	Indigenous	Non-Indigenous
Rate 2000–2004	24.7*	27.1	23.9*
95% CI	*24.3–25.1*	*20.4–35.1*	*23.2–24.6*
Rate 1995–1999	27.4	28.1	37.5
95% CI	*26.9–27.9*	*20.3–37.7*	*36.4–38.7*

* Statistically different from the 1995–1999 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.
3. Women whose Indigenous status was recorded as 'not-stated' are included in the analysis for all women but excluded from the analysis by Indigenous status.
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.

- In 2000–2004 the age-standardised breast cancer mortality rate for Indigenous women of all ages in Queensland, Western Australia, South Australia and Northern Territory combined (27.1 deaths per 100,000 women) was not very different from the rate for non-Indigenous women (23.9 deaths per 100,000 women) and from the national rate (24.7 deaths per 100,000 women).
- Across the years from 1995–1999 to 2000–2004, the national mortality rate decreased from 27.4 to 24.7 deaths per 100,000 women respectively. Similarly, for non-Indigenous women, the mortality rate decreased from 37.5 to 23.9 deaths per 100,000 women over the same time periods. The mortality rate for Indigenous women decreased from 28.1 in

1995–1999 to 27.1 deaths per 100,000 women in 2000–2004, although this change was not statistically significant.

For more information, see: Tables 53 to 60 beginning on page 122. Tables with data other than for the latest reporting period can be found on the AIHW's website at <www.aihw.gov.au>.

Tables

- Appendix B includes the list of tables 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, 2003–2004

Age group	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
40–44	35,054	10,428	35,629	7,714	5,912	3,037	344	599	98,717
45–49	62,859	18,735	51,609	16,193	11,787	5,385	1,850	1,210	169,628
50–54	99,595	93,855	68,656	35,424	32,863	8,734	5,223	2,180	346,530
55–59	100,403	84,574	67,209	32,084	30,548	9,163	5,137	1,944	331,062
60–64	79,771	66,243	51,065	24,576	23,459	7,059	3,547	1,197	256,917
65–69	66,047	54,855	40,806	19,687	19,562	5,916	2,484	617	209,974
70–74	45,987	42,722	30,464	5,440	6,564	3,795	605	298	135,875
75–79	30,987	11,344	9,265	2,231	3,274	713	216	123	58,153
80–84	11,446	1,586	1,933	645	812	197	76	59	16,754
85+	2,495	270	462	107	122	28	12	9	3,505
Ages 40+	**534,644**	**384,612**	**357,098**	**144,101**	**134,903**	**44,027**	**19,494**	**8,236**	**1,627,115**
Ages 50–69	**345,816**	**299,527**	**227,736**	**111,771**	**106,432**	**30,872**	**16,391**	**5,938**	**1,144,483**

Note: Period covers 1 January 2003 to 31 December 2004.

Source: AIHW analysis of BreastScreen Australia data.

Table 2: Percentage of women participating in BreastScreen Australia, states and territories, 2003–2004

Age group	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
				(Per cent)					
40–44	13.6	5.5	23.9	10.0	10.0	16.1	2.7	7.9	12.8
45–49	26.6	10.7	37.9	22.3	21.2	30.3	15.0	18.2	23.8
50–54	45.7	57.6	54.1	53.4	61.9	52.1	44.7	37.9	52.4
55–59	51.7	58.9	59.3	57.8	63.5	60.3	53.5	47.9	56.7
60–64	53.7	60.9	60.7	59.2	65.3	59.7	56.9	46.5	58.5
65–69	51.5	58.1	60.7	57.2	62.3	59.8	52.4	41.7	56.5
70–74	39.9	50.5	53.0	18.8	22.8	43.5	16.1	29.8	41.4
75–79	29.2	14.5	18.1	8.9	11.7	9.2	6.3	17.7	19.4
80–84	14.3	2.7	5.0	3.4	3.8	3.3	3.0	12.8	7.4
85+	3.5	0.5	1.4	0.6	0.6	0.5	0.6	2.6	1.8
Ages 40+									
Crude rate	34.4	33.5	41.7	32.9	35.5	37.3	28.2	26.9	35.4
ASR(A)	34.9	34.2	42.1	33.1	36.4	37.7	27.8	27.8	36.0
95% CI	34.8–35.0	34.1–34.3	41.9–42.2	33.0–33.3	36.3–36.6	37.4–38.1	27.4–28.2	27.2–28.5	35.9–36.1
Ages 50–69									
Crude rate	50.2	58.8	58.2	56.5	63.1	57.5	50.8	42.8	55.7
ASR(A)	50.1	58.8	58.1	56.5	63.1	57.3	51.1	43.1	55.6
95% CI	49.9–50.2	58.6–59.0	57.9–58.3	56.2–56.8	62.7–63.5	56.6–57.9	50.3–51.8	41.9–44.2	55.5–55.7

Notes

1. Period covers 1 January 2003 to 31 December 2004.
2. Rates are the number of women screened as a percentage of the eligible female 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, 2003–2004

Age group	Number/ rate	Major cities	Inner regional	Outer regional	Remote	Very remote	Australia
40–44	Number	60,126	21,370	13,769	2,388	1,064	98,717
	Rate	11.8	13.0	17.5	19.6	17.6	12.8
45–49	Number	104,267	37,912	22,334	3,619	1,496	169,628
	Rate	22.1	24.8	30.9	33.3	29.3	23.8
50–54	Number	227,440	75,731	36,309	5,193	1,857	346,530
	Rate	51.9	53.4	54.4	54.4	40.8	52.4
55–59	Number	212,028	76,191	36,348	4,860	1,635	331,062
	Rate	55.7	58.5	59.7	60.3	46.7	56.7
60–64	Number	159,274	63,297	29,513	3,698	1,135	256,917
	Rate	57.1	61.1	60.9	61.8	45.9	58.5
65–69	Number	129,937	52,364	24,122	2,760	792	209,974
	Rate	54.9	59.0	60.1	60.1	45.6	56.5
70–74	Number	83,222	35,326	15,318	1,545	464	135,875
	Rate	39.2	45.6	45.5	42.3	34.6	41.4
75–79	Number	37,271	13,809	6,242	657	175	58,153
	Rate	18.8	20.0	21.4	23.5	17.9	19.4
80–84	Number	10,876	3,837	1,777	212	52	16,754
	Rate	7.2	7.6	8.4	10.4	7.9	7.4
85+	Number	2,212	792	441	44	16	3,505
	Rate	1.6	1.8	2.3	2.5	2.9	1.8
Ages 40+	**Number**	**1,026,652**	**380,628**	**186,174**	**24,976**	**8,685**	**1,627,115**
	Crude rate	34.1	37.2	39.6	40.6	32.2	35.4
	ASR(A)	34.9	37.4	39.7	40.6	32.1	36.0
	95% CI	34.8–34.9	37.3–37.5	39.5–39.9	40.1–41.1	31.4–32.8	35.9–36.1
Ages 50–69	**Number**	**728,679**	**267,582**	**126,292**	**16,512**	**5,419**	**1,144,483**
	Crude rate	54.6	57.6	58.4	58.6	44.2	55.7
	ASR(A)	54.5	57.4	58.2	58.6	44.3	55.6
	95% CI	54.4–54.7	57.2–57.6	57.9–58.6	57.7–59.5	43.1–45.5	55.5–55.7

Notes

1. Period covers 1 January 2003 to 31 December 2004.
2. Rates are the number of women screened as a percentage of the eligible female population and age-standardised to the Australian population at 30 June 2001.
3. The Australian Standard Geographical Classification (ASGC) 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, 2003–2004

Age group	Number/ rate	1st quintile	2nd quintile	3rd quintile	4th quintile	5th quintile	Australia
40–44	Number	18,507	18,902	21,917	20,898	18,492	98,717
	Rate	11.7	11.9	14.2	13.8	12.4	12.8
45–49	Number	33,453	31,573	36,780	35,827	31,994	169,628
	Rate	22.1	21.5	26.0	25.8	23.7	23.8
50–54	Number	77,124	70,976	69,749	67,439	61,242	346,530
	Rate	53.6	52.7	54.1	52.6	48.9	52.4
55–59	Number	71,909	64,636	67,125	66,510	60,881	331,062
	Rate	57.5	55.4	58.8	57.0	54.8	56.7
60–64	Number	51,320	48,300	52,437	54,856	50,005	256,917
	Rate	59.2	57.4	58.9	59.0	57.7	58.5
65–69	Number	39,138	38,921	42,978	46,638	42,298	209,974
	Rate	56.2	56.7	56.4	57.1	55.8	56.5
70–74	Number	25,728	25,485	28,565	29,483	26,614	135,875
	Rate	41.6	42.1	42.2	41.2	40.0	41.4
75–79	Number	12,585	9,915	11,744	12,958	10,950	58,153
	Rate	20.9	17.7	18.8	20.4	18.7	19.4
80–84	Number	3,925	2,603	3,487	3,709	3,029	16,754
	Rate	8.0	6.1	7.4	8.2	7.3	7.4
85+	Number	795	513	731	847	619	3,505
	Rate	1.7	1.3	1.8	2.3	1.8	1.8
Ages 40+	**Number**	**334,484**	**311,825**	**335,514**	**339,165**	**306,126**	**1,627,115**
	Crude rate	35.1	34.3	36.4	36.6	34.6	35.4
	ASR(A)	36.0	35.2	37.2	36.8	34.9	36.0
	95% CI	35.9–36.1	35.0–35.3	37.1–37.3	36.7–36.9	34.7–35.0	35.9–36.1
Ages 50–69	**Number**	**239,491**	**222,833**	**232,289**	**235,443**	**214,427**	**1,144,483**
	Crude rate	56.3	55.1	56.9	56.1	53.8	55.7
	ASR(A)	56.3	55.1	56.8	55.9	53.6	55.6
	95% CI	56.1–56.5	54.9–55.4	56.6–57.0	55.7–56.2	53.4–53.8	55.5–55.7

Notes

1. Period covers 1 January 2003 to 31 December 2004.
2. Rates are the number of women screened as a percentage of the eligible female 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, 2003–2004

Age group	Number/rate	Indigenous	Non-Indigenous	Australia
40–44	Number	1,565	96,812	98,717
	Rate	10.7	12.8	12.8
45–49	Number	2,121	166,640	169,628
	Rate	18.8	23.7	23.8
50–54	Number	2,827	340,754	346,530
	Rate	31.7	52.2	52.4
55–59	Number	2,259	326,219	331,062
	Rate	36.5	56.5	56.7
60–64	Number	1,636	253,312	256,917
	Rate	37.3	58.2	58.5
65–69	Number	1,152	207,353	209,974
	Rate	37.9	56.2	56.5
70–74	Number	655	134,340	135,875
	Rate	31.5	41.2	41.4
75+	Number	244	77,927	78,412
	Rate	10.1	10.8	10.8
Ages 40+	**Number**	**12,459**	**1,603,357**	**1,627,115**
	Crude rate	23.5	35.3	35.4
	ASR(A)	24.7	35.8	35.9
	95% CI	24.2–25.1	35.7–35.8	35.8–35.9
Ages 50–69	**Number**	**7,874**	**1,127,638**	**1,144,483**
	Crude rate	35.0	55.5	55.7
	ASR(A)	35.3	55.4	55.6
	95% CI	34.5–36.1	55.3–55.5	55.5–55.7

Notes

1. Rates are the number of women screened as a percentage of the eligible female population and age-standardised to the Australian population at 30 June 2001.
2. Period covers 1 January 2003 to 31 December 2004.
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, 2003–2004

Age group	Number/rate	English–speaking	Non-English–speaking	Australia
40–44	Number	86,234	12,102	98,717
	Rate	13.5	9.1	12.8
45–49	Number	146,746	22,177	169,628
	Rate	24.7	18.6	23.8
50–54	Number	303,123	42,214	346,530
	Rate	54.6	40.0	52.4
55–59	Number	289,919	40,067	331,062
	Rate	58.7	44.6	56.7
60–64	Number	221,507	34,634	256,917
	Rate	61.6	43.3	58.5
65–69	Number	178,136	31,364	209,974
	Rate	59.0	44.8	56.5
70–74	Number	118,669	16,977	135,875
	Rate	43.1	32.2	41.4
75–79	Number	52,316	5,755	58,153
	Rate	20.5	12.6	19.4
80–84	Number	15,423	1,315	16,754
	Rate	7.7	5.2	7.4
85+	Number	3,322	177	3,505
	Rate	1.9	0.9	1.8
Ages 40+	**Number**	**1,415,395**	**206,782**	**1,627,115**
	Crude rate	36.7	27.9	35.4
	ASR(A)	37.6	27.5	36.0
	95% CI	37.5–37.6	27.4–27.6	35.9–36.1
Ages 50–69	**Number**	**992,685**	**148,279**	**1,144,483**
	Crude rate	58.0	42.9	55.7
	ASR(A)	58.0	42.8	55.6
	95% CI	57.9–58.1	42.6–43.0	55.5–55.7

Notes

1. Period covers 1 January 2003 to 31 December 2004.
2. Rates are the number of women screened as a percentage of the eligible female 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 for small invasive cancers

Table 7: Numbers of women screened and cases of small-diameter (≤15 mm) invasive cancers detected in these women, first screening round, by age, states and territories, 2004

Age group	Number	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
40–44	Screened	8,847	4,506	11,032	2,682	1,690	1,100	5	186	30,048
	Cases	9	2	15	3	2	2	0	1	34
45–49	Screened	7,425	5,155	6,292	2,802	1,739	871	22	169	24,475
	Cases	14	14	10	5	0	2	0	2	47
50–54	Screened	10,393	17,034	6,110	5,120	4,191	746	574	293	44,461
	Cases	29	40	21	20	10	2	3	2	127
55–59	Screened	5,558	2,172	3,077	1,234	522	371	180	134	13,248
	Cases	16	13	18	3	4	1	1	2	58
60–64	Screened	3,313	1,136	1,945	672	288	208	66	66	7,694
	Cases	18	1	13	2	1	2	0	0	37
65–69	Screened	2,222	707	1,308	397	158	119	50	20	4,981
	Cases	11	8	9	0	2	1	0	0	31
70–74	Screened	878	326	617	128	68	41	16	10	2,084
	Cases	2	1	5	0	2	0	0	0	10
75–79	Screened	498	246	396	97	47	25	7	2	1,318
	Cases	2	2	3	2	0	0	0	0	9
80–84	Screened	208	111	169	50	22	14	2	1	577
	Cases	2	1	1	0	0	0	0	0	4
85+	Screened	53	21	51	10	10	2	3	1	151
	Cases	0	0	1	0	0	0	0	0	1
Ages 40+	**Screened**	**39,395**	**31,414**	**30,997**	**13,192**	**8,735**	**3,497**	**925**	**882**	**129,037**
	Cases	**103**	**82**	**96**	**35**	**21**	**10**	**4**	**7**	**358**
Ages 50–69	**Screened**	**21,486**	**21,049**	**12,440**	**7,423**	**5,159**	**1,444**	**870**	**513**	**70,384**
	Cases	**74**	**62**	**61**	**25**	**17**	**6**	**4**	**4**	**253**

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, 2004

Age group	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
40–44	10.2	4.4	13.6	11.2	11.8	18.2	0.0	53.8	11.3
45–49	18.9	27.2	15.9	17.8	0.0	23.0	0.0	118.3	19.2
50–54	27.9	23.5	34.4	39.1	23.9	26.8	52.3	68.3	28.6
55–59	28.8	59.9	58.5	24.3	76.6	27.0	55.6	149.3	43.8
60–64	54.3	8.8	66.8	29.8	34.7	96.2	0.0	0.0	48.1
65–69	49.5	113.2	68.8	0.0	126.6	84.0	0.0	0.0	62.2
70–74	22.8	30.7	81.0	0.0	294.1	0.0	0.0	0.0	48.0
75–79	40.2	81.3	75.8	206.2	0.0	0.0	0.0	0.0	68.3
80–84	96.2	90.1	59.2	0.0	0.0	0.0	0.0	0.0	69.3
85+	0.0	0.0	196.1	0.0	0.0	0.0	0.0	0.0	66.2
Ages 40+									
Crude rate	26.1	26.1	31.0	26.5	24.0	28.6	43.2	79.4	27.7
ASR(A)	32.7	41.1	49.5	26.6	65.5	40.0	21.0	60.1	39.1
95% CI	25.8–40.6	28.2–56.4	38.2–62.6	15.2–41.2	26.1–120.3	13.2–83.1	4.0–57.3	22.1–127.4	34.1–44.7
Ages 50–69									
Crude rate	34.4	29.5	49.0	33.7	33.0	41.6	46.0	78.0	35.9
ASR(A)	38.2	47.1	54.5	25.6	59.9	53.3	31.4	60.9	43.4
95% CI	29.4–48.7	30.2–67.5	40.8–71.0	14.0–41.2	22.7–113.5	16.0–122.7	6.0–85.8	15.0–159.2	37.2–50.2

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: Numbers of women screened and cases of small-diameter (≤15 mm) invasive cancers detected in these women, subsequent screening rounds, by age, states and territories, 2004

Age group	Number	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
40–44	Screened	7,207	966	7,894	1,413	1,198	562	98	113	19,451
	Cases	3	1	10	0	4	2	1	0	21
45–49	Screened	23,069	4,568	21,165	5,637	4,420	1,994	816	396	62,065
	Cases	30	5	33	9	4	4	4	0	89
50–54	Screened	41,533	32,656	30,320	14,032	12,878	3,731	2,053	812	138,015
	Cases	74	56	61	28	26	13	2	2	262
55–59	Screened	47,043	40,230	33,776	16,428	15,495	4,519	2,535	872	160,898
	Cases	130	108	82	53	39	13	10	2	437
60–64	Screened	38,428	33,193	25,546	12,897	11,747	3,443	1,745	512	127,511
	Cases	131	82	82	39	36	15	8	1	394
65–69	Screened	32,214	27,451	20,357	10,402	10,030	2,872	1,207	263	104,796
	Cases	113	89	80	41	40	10	10	2	385
70–74	Screened	21,006	21,682	15,314	2,892	3,230	2,060	321	115	66,620
	Cases	101	89	70	16	18	11	2	0	307
75–79	Screened	14,380	5,753	4,579	1,185	1,683	329	111	48	28,068
	Cases	71	29	21	6	8	2	1	0	138
80–84	Screened	5,272	703	913	340	409	87	33	27	7,784
	Cases	23	10	7	2	1	0	0	0	43
85+	Screened	1,053	119	224	54	57	9	4	5	1,525
	Cases	3	0	2	1	0	0	0	0	6
Ages 40+	**Screened**	**231,205**	**167,321**	**160,088**	**65,280**	**61,147**	**19,606**	**8,923**	**3,163**	**716,733**
	Cases	**679**	**469**	**448**	**195**	**176**	**70**	**38**	**7**	**2,082**
Ages 50–69	**Screened**	**159,218**	**133,530**	**109,999**	**53,759**	**50,150**	**14,565**	**7,540**	**2,459**	**531,220**
	Cases	**448**	**335**	**305**	**161**	**141**	**51**	**30**	**7**	**1,478**

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, 2004

Age group	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
40–44	4.2	10.4	12.7	0.0	33.4	35.6	102.0	0.0	10.8
45–49	13.0	10.9	15.6	16.0	9.0	20.1	49.0	0.0	14.3
50–54	17.8	17.1	20.1	20.0	20.2	34.8	9.7	24.6	19.0
55–59	27.6	26.8	24.3	32.3	25.2	28.8	39.4	22.9	27.2
60–64	34.1	24.7	32.1	30.2	30.6	43.6	45.8	19.5	30.9
65–69	35.1	32.4	39.3	39.4	39.9	34.8	82.9	76.0	36.7
70–74	48.1	41.0	45.7	55.3	55.7	53.4	62.3	0.0	46.1
75–79	49.4	50.4	45.9	50.6	47.5	60.8	90.1	0.0	49.2
80–84	43.6	142.2	76.7	58.8	24.4	0.0	0.0	0.0	55.2
85+	28.5	0.0	89.3	185.2	0.0	0.0	0.0	0.0	39.3
Ages 40+									
Crude rate	29.4	28.0	28.0	29.9	28.8	35.7	42.6	22.1	29.0
ASR(A)	26.2	24.6	27.5	28.6	28.6	35.2	48.8	22.1	26.8
95% CI	24.2–28.3	21.8–27.7	25.0–30.2	24.4–33.2	23.9–33.8	26.9–45.2	29.0–74.2	8.0–47.1	25.6–28.0
Ages 50–69									
Crude rate	28.1	25.1	27.7	29.9	28.1	35.0	39.8	28.5	27.8
ASR(A)	27.3	24.3	27.6	29.2	27.6	35.2	39.6	33.1	27.2
95% CI	24.8–30.0	21.7–27.1	24.5–30.9	24.8–34.1	23.2–32.6	26.1–46.4	26.5–56.9	12.0–70.5	25.8–28.6

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.

Source: AIHW analysis of BreastScreen Australia data.

Table 11: Numbers of women screened and cases of invasive cancer detected in these women, first screening round, by age, states and territories, 2004

Age group	Number	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
40–44	Screened	8,847	4,506	11,032	2,682	1,690	1,100	5	186	30,048
	Cases	15	7	24	7	3	6	0	1	63
45–49	Screened	7,425	5,155	6,292	2,802	1,739	871	22	169	24,475
	Cases	30	31	26	11	2	2	0	2	104
50–54	Screened	10,393	17,034	6,110	5,120	4,191	746	574	293	44,461
	Cases	55	72	33	36	23	2	5	3	229
55–59	Screened	5,558	2,172	3,077	1,234	522	371	180	134	13,248
	Cases	32	19	31	5	5	2	1	3	98
60–64	Screened	3,313	1,136	1,945	672	288	208	66	66	7,694
	Cases	30	3	25	6	2	3	0	0	69
65–69	Screened	2,222	707	1,308	397	158	119	50	20	4,981
	Cases	24	16	11	2	3	1	1	0	58
70–74	Screened	878	326	617	128	68	41	16	10	2,084
	Cases	7	3	10	2	2	0	0	0	24
75–79	Screened	498	246	396	97	47	25	7	2	1,318
	Cases	6	4	7	2	1	1	0	0	21
80–84	Screened	208	111	169	50	22	14	2	1	577
	Cases	7	2	4	1	1	0	0	0	15
85+	Screened	53	21	51	10	10	2	3	1	151
	Cases	0	0	1	1	1	0	0	0	3
Ages 40+	**Screened**	**39,395**	**31,414**	**30,997**	**13,192**	**8,735**	**3,497**	**925**	**882**	**129,037**
	Cases	**206**	**157**	**172**	**73**	**43**	**17**	**7**	**9**	**684**
Ages 50–69	**Screened**	**21,486**	**21,049**	**12,440**	**7,423**	**5,159**	**1,444**	**870**	**513**	**70,384**
	Cases	**141**	**110**	**100**	**49**	**33**	**8**	**7**	**6**	**454**

Source: AIHW analysis of BreastScreen Australia data.

Table 12: Age-specific rates of invasive breast cancers per 10,000 women screened, first screening round, states and territories, 2004

Age group	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
40–44	17.0	15.5	21.8	26.1	17.8	54.5	0.0	53.8	21.0
45–49	40.4	60.1	41.3	39.3	11.5	23.0	0.0	118.3	42.5
50–54	52.9	42.3	54.0	70.3	54.9	26.8	87.1	102.4	51.5
55–59	57.6	87.5	100.7	40.5	95.8	53.9	55.6	223.9	74.0
60–64	90.6	26.4	128.5	89.3	69.4	144.2	0.0	0.0	89.7
65–69	108.0	226.3	84.1	50.4	189.9	84.0	200.0	0.0	116.4
70–74	79.7	92.0	162.1	156.3	294.1	0.0	0.0	0.0	115.2
75–79	120.5	162.6	176.8	206.2	212.8	400.0	0.0	0.0	159.3
80–84	336.5	180.2	236.7	200.0	454.5	0.0	0.0	0.0	260.0
85+	0.0	0.0	196.1	1000.0	1000.0	0.0	0.0	0.0	198.7
Ages 40+									
Crude rate	52.3	50.0	55.5	55.3	49.2	48.6	75.7	102.0	53.0
ASR(A)	68.6	80.8	87.4	72.1	103.2	66.9	54.5	80.4	76.6
95% CI	58.2–80.2	61.8–102.1	72.3–104.4	47.2–101.7	55.9–162.6	28.9–121.6	8.7–135.9	34.4–156.5	69.3–84.3
Ages 50–69									
Crude rate	65.6	52.3	80.4	66.0	64.0	55.4	80.5	117.0	64.5
ASR(A)	73.2	86.3	88.5	62.9	95.0	70.9	81.6	91.3	78.4
95% CI	60.7–87.3	62.5–113.7	71.0–108.7	40.6–90.5	47.3–156.9	27.1–145.7	13.0–203.4	31.4–202.6	69.9–87.5

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: Numbers of women screened and cases of invasive cancer detected in these women, subsequent screening rounds, by age, states and territories, 2004

Age group	Number	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
40–44	Screened	7,207	966	7,894	1,413	1,198	562	98	113	19,451
	Cases	7	1	15	2	4	2	1	0	32
45–49	Screened	23,069	4,568	21,165	5,637	4,420	1,994	816	396	62,065
	Cases	52	9	50	13	7	4	5	0	140
50–54	Screened	41,533	32,656	30,320	14,032	12,878	3,731	2,053	812	138,015
	Cases	130	95	93	53	43	16	3	3	436
55–59	Screened	47,043	40,230	33,776	16,428	15,495	4,519	2,535	872	160,898
	Cases	202	162	127	78	60	20	13	2	664
60–64	Screened	38,428	33,193	25,546	12,897	11,747	3,443	1,745	512	127,511
	Cases	199	133	131	53	55	18	13	2	604
65–69	Screened	32,214	27,451	20,357	10,402	10,030	2,872	1,207	263	104,796
	Cases	178	138	117	60	57	15	10	2	577
70–74	Screened	21,006	21,682	15,314	2,892	3,230	2,060	321	115	66,620
	Cases	144	118	97	20	26	18	3	0	426
75–79	Screened	14,380	5,753	4,579	1,185	1,683	329	111	48	28,068
	Cases	106	39	33	11	17	5	3	1	215
80–84	Screened	5,272	703	913	340	409	87	33	27	7,784
	Cases	35	15	9	3	3	0	0	0	65
85+	Screened	1,053	119	224	54	57	9	4	5	1,525
	Cases	5	0	2	1	0	0	0	0	8
Ages 40+	**Screened**	**231,205**	**167,321**	**160,088**	**65,280**	**61,147**	**19,606**	**8,923**	**3,163**	**716,733**
	Cases	**1,058**	**710**	**674**	**294**	**272**	**98**	**51**	**10**	**3,167**
Ages 50–69	**Screened**	**159,218**	**133,530**	**109,999**	**53,759**	**50,150**	**14,565**	**7,540**	**2,459**	**531,220**
	Cases	**709**	**528**	**468**	**244**	**215**	**69**	**39**	**9**	**2,281**

Source: AIHW analysis of BreastScreen Australia data.

Table 14: Age-specific rates of invasive breast cancers per 10,000 women screened, subsequent screening rounds, by age, states and territories, 2004

Age group	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
40–44	9.7	10.4	19.0	14.2	33.4	35.6	102.0	0.0	16.5
45–49	22.5	19.7	23.6	23.1	15.8	20.1	61.3	0.0	22.6
50–54	31.3	29.1	30.7	37.8	33.4	42.9	14.6	36.9	31.6
55–59	42.9	40.3	37.6	47.5	38.7	44.3	51.3	22.9	41.3
60–64	51.8	40.1	51.3	41.1	46.8	52.3	74.5	39.1	47.4
65–69	55.3	50.3	57.5	57.7	56.8	52.2	82.9	76.0	55.1
70–74	68.6	54.4	63.3	69.2	80.5	87.4	93.5	0.0	63.9
75–79	73.7	67.8	72.1	92.8	101.0	152.0	270.3	208.3	76.6
80–84	66.4	213.4	98.6	88.2	73.3	0.0	0.0	0.0	83.5
85+	47.5	0.0	89.3	185.2	0.0	0.0	0.0	0.0	52.5
Ages 40+									
Crude rate	45.8	42.4	42.1	45.0	44.5	50.0	57.2	31.6	44.2
ASR(A)	41.4	37.5	41.3	43.8	43.4	48.8	65.8	34.0	40.8
95% CI	38.8–44.0	34.1–41.2	38.2–44.5	38.5–49.6	37.8–49.5	39.0–60.2	43.4–93.6	14.9–64.9	39.4–42.4
Ages 50–69									
Crude rate	44.5	39.5	42.5	45.4	42.9	47.4	51.7	36.6	42.9
ASR(A)	43.5	38.5	42.2	44.9	42.3	47.1	50.6	41.4	42.2
95% CI	40.3–46.9	35.3–42.0	38.5–46.3	39.4–51.0	36.8–48.4	36.5–59.8	35.8–69.5	17.7–80.7	40.4–43.9

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 2000, 2001 and 2002, first screening round, 0–12 months, states and territories

Age group	Number/ rate	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
40–49	Number	53	23	23	8	14	2	3	1	127
	Rate	7.4	7.7	4.8	5.1	10.6	4.7	12.6	6.7	6.8
50–59	Number	35	46	28	9	10	4	1	3	136
	Rate	6.2	9.5	8.5	5.4	6.2	13.0	3.9	20.8	7.7
60–69	Number	12	5	9	2	1	2	1	0	32
	Rate	5.6	3.6	7.0	5.1	4.1	19.6	18.2	0.0	5.7
70+	Number	11	4	4	0	1	0	0	0	20
	Rate	10.4	7.6	7.5	0.0	8.2	0.0	0.0	0.0	8.2
Ages 40+	**Number**	**111**	**78**	**64**	**19**	**26**	**8**	**5**	**4**	**315**
	Crude rate	7.0	8.0	6.5	5.1	7.9	9.1	8.8	12.2	7.1
	ASR(A)	6.8	7.2	7.2	4.6	6.8	11.5	9.2	9.5	7.0
	95% CI	5.4–8.5	5.6–9.2	5.3–9.5	2.4–7.7	3.6–11.0	4.0–24.3	0.9–25.6	2.4–24.8	6.1–8.0
Ages 50–69	**Number**	**47**	**51**	**37**	**11**	**11**	**6**	**2**	**3**	**168**
	Crude rate	6.1	8.2	8.1	5.3	5.9	14.6	6.5	17.8	7.2
	ASR(A)	6.0	7.1	7.9	5.3	5.3	15.8	9.9	12.2	6.8
	95% CI	4.3–8.0	5.1–9.4	5.5–11.0	2.2–10.1	1.9–10.7	5.0–35.7	0.0–39.0	2.5–35.5	5.8–8.0

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.

Table 16: Numbers and age-specific rates of interval cancers in women screened during 2000, 2001 and 2002, first screening round, 13–24 months, states and territories

Age group	Number/ rate	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
40–49	Number	61	35	42	12	14	2	3	2	171
	Rate	9.0	11.7	9.2	8.7	11.3	5.1	13.1	13.7	9.6
50–59	Number	65	59	45	20	23	7	7	3	229
	Rate	12.1	12.3	14.4	13.2	14.6	24.2	28.1	21.2	13.4
60–69	Number	14	13	30	3	0	1	0	0	61
	Rate	7.0	9.2	24.0	8.8	0.0	10.7	0.0	0.0	11.3
70+	Number	11	5	1	0	0	1	0	0	18
	Rate	11.0	9.5	1.9	0.0	0.0	27.7	0.0	0.0	7.7
Ages 40+	**Number**	**151**	**112**	**118**	**35**	**37**	**11**	**10**	**5**	**479**
	Crude rate	10.0	11.5	12.5	10.5	11.7	13.5	18.2	15.6	11.3
	ASR(A)	9.9	11.0	14.4	9.4	8.0	16.9	13.7	11.1	11.3
	95% CI	8.2–11.9	8.8–13.4	11.6–17.7	6.0–13.8	5.6–11.1	7.2–32.2	6.4–25.5	3.3–26.5	10.2–12.5
Ages 50–69	**Number**	**79**	**72**	**75**	**23**	**23**	**8**	**7**	**3**	**290**
	Crude rate	10.7	11.6	17.1	12.4	12.7	20.9	23.3	18.1	12.9
	ASR(A)	10.0	11.0	18.4	11.4	8.5	18.6	16.4	12.4	12.5
	95% CI	7.8–12.5	8.4–14.1	14.3–23.2	6.6–17.9	5.4–12.8	7.4–37.7	6.6–33.9	2.6–36.1	11.0–14.2

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 17: Numbers and age-specific rates of interval cancers in women screened during 2000, 2001 and 2002, first screening round, 0–24 months, states and territories

Age group	Number/ Rate	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
40–49	Number	114	58	65	20	28	4	6	3	298
	Rate	8.2	9.7	6.9	6.8	10.9	4.9	12.8	10.1	8.2
50–59	Number	100	105	73	29	33	11	8	6	365
	Rate	9.1	10.9	11.4	9.1	10.4	18.4	15.9	21.0	10.5
60–69	Number	26	18	39	5	1	3	1	0	93
	Rate	6.3	6.4	15.4	6.8	2.1	15.4	9.3	0.0	8.4
70+	Number	22	9	5	0	1	1	0	0	38
	Rate	10.7	8.5	4.8	0.0	4.1	13.0	0.0	0.0	8.0
Ages 40+	**Number**	**262**	**190**	**182**	**54**	**63**	**19**	**15**	**9**	**794**
	Crude rate	8.4	9.7	9.4	7.6	9.7	11.3	13.5	13.9	9.1
	ASR(A)	8.3	9.1	10.7	6.9	7.4	14.1	11.5	10.3	9.1
	95% CI	7.2–9.6	7.7–10.6	9.0–12.7	4.8–9.4	5.3–9.9	7.7–23.1	5.4–20.4	4.5–19.9	8.4–9.9
Ages 50–69	**Number**	**126**	**123**	**112**	**34**	**34**	**14**	**9**	**6**	**458**
	Crude rate	8.3	9.9	12.5	8.7	9.3	17.7	14.7	17.9	10.0
	ASR(A)	7.9	9.0	13.0	8.2	6.9	17.2	13.2	12.3	9.6
	95% CI	6.5–9.5	7.4–10.9	10.6–15.8	5.3–11.9	4.5–10.1	8.8–29.6	4.9–26.9	4.5–26.7	8.7–10.6

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 2000, 2001 and 2002, subsequent screening rounds, 0–12 months, states and territories

Age group	Number/ rate	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
40–49	Number	76	21	86	20	9	5	4	2	223
	Rate	6.9	11.8	11.0	9.8	5.2	5.4	8.4	11.2	8.6
50–59	Number	209	168	142	47	55	14	18	0	653
	Rate	8.3	8.4	9.0	6.1	7.2	5.9	12.3	0.0	8.1
60–69	Number	169	103	84	39	41	16	10	1	463
	Rate	8.4	6.5	7.8	6.6	6.8	8.8	12.1	5.3	7.5
70+	Number	97	45	56	5	9	1	2	0	215
	Rate	7.0	5.8	10.0	5.0	6.1	2.4	17.5	0.0	7.1
Ages 40+	**Number**	**551**	**337**	**368**	**111**	**114**	**36**	**34**	**3**	**1,554**
	Crude rate	7.8	7.4	9.2	6.7	6.8	6.5	11.8	3.3	7.8
	ASR(A)	7.9	8.3	9.2	6.9	6.5	6.2	12.1	3.8	7.9
	95% CI	7.2–8.6	7.1–9.6	8.3–10.2	5.6–8.4	5.3–7.9	4.3–8.6	7.9–17.6	0.8–11.2	7.5–8.3
Ages 50–69	**Number**	**378**	**271**	**226**	**86**	**96**	**30**	**28**	**1**	**1,116**
	Crude rate	8.3	7.6	8.5	6.3	7.0	7.1	12.2	1.5	7.9
	ASR(A)	8.3	7.6	8.5	6.3	7.0	7.1	12.2	2.2	7.9
	95% CI	7.5–9.2	6.7–8.6	7.4–9.7	5.1–7.8	5.7–8.6	4.8–10.1	8.1–17.7	0.1–12.4	7.4–8.3

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 19: Numbers and age-specific rates of interval cancers in women screened during 2000, 2001 and 2002, subsequent screening rounds, 13–24 months, states and territories

Age group	Number/ rate	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
40–49	Number	113	22	80	28	10	14	5	2	274
	Rate	11.4	12.4	11.2	17.7	6.7	17.0	11.7	11.5	11.8
50–59	Number	280	234	215	76	82	25	12	6	930
	Rate	12.3	11.8	14.6	11.8	11.5	11.4	8.8	12.9	12.4
60–69	Number	195	222	145	66	84	17	6	3	738
	Rate	10.8	14.1	13.8	13.7	15.0	10.3	7.8	16.2	12.8
70+	Number	136	65	73	4	11	3	1	2	295
	Rate	11.0	8.4	13.2	5.1	7.5	8.0	8.7	31.2	10.4
Ages 40+	**Number**	**724**	**543**	**513**	**174**	**187**	**59**	**24**	**13**	**2,237**
	Crude rate	11.5	12.0	13.5	12.8	11.9	11.7	9.0	14.7	12.1
	ASR(A)	11.5	12.1	13.5	12.7	11.0	11.8	9.1	15.8	12.1
	95% CI	10.7–12.4	10.8–13.5	12.3–14.7	10.8–14.9	9.4–12.8	8.9–15.3	5.6–14.0	8.0–27.7	11.6–12.7
Ages 50–69	**Number**	**475**	**456**	**360**	**142**	**166**	**42**	**18**	**9**	**1,668**
	Crude rate	11.6	12.8	14.2	12.6	13.1	10.9	8.5	13.9	12.6
	ASR(A)	11.7	12.7	14.2	12.6	13.0	10.9	8.4	14.3	12.6
	95% CI	10.6–12.8	11.6–13.9	12.8–15.8	10.6–14.9	11.1–15.1	7.9–14.8	5.0–13.3	6.2–27.7	12.0–13.2

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 20: Numbers and age-specific rates of interval cancers in women screened during 2000, 2001 and 2002, subsequent screening rounds, 0–24 months, states and territories

Age group	Number/ Rate	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
40–49	Number	189	43	166	48	19	19	9	4	497
	Rate	9.0	12.1	11.1	13.3	5.9	10.9	10.0	11.3	10.1
50–59	Number	489	402	357	123	137	39	30	6	1,583
	Rate	10.2	10.1	11.7	8.7	9.3	8.5	10.6	6.4	10.2
60–69	Number	364	325	229	105	125	33	16	4	1,201
	Rate	9.5	10.3	10.7	9.8	10.7	9.5	10.0	10.7	10.1
70+	Number	233	110	129	9	20	4	3	2	510
	Rate	8.9	7.1	11.6	5.1	6.8	5.0	13.1	15.5	8.7
Ages 40+	**Number**	**1,275**	**880**	**881**	**285**	**301**	**95**	**58**	**16**	**3,791**
	Crude rate	9.6	9.7	11.3	9.4	9.3	9.0	10.5	8.9	9.9
	ASR(A)	9.6	10.2	11.3	9.5	8.7	8.8	10.6	9.8	10.0
	95% CI	9.1–10.2	9.3–11.1	10.6–12.1	8.4–10.8	7.7–9.8	7.1–10.8	7.8–14.1	5.4–16.1	9.6–10.3
Ages 50–69	**Number**	**853**	**727**	**586**	**228**	**262**	**72**	**46**	**10**	**2,784**
	Crude rate	9.9	10.2	11.3	9.2	9.9	8.9	10.4	7.6	10.1
	ASR(A)	9.9	10.2	11.3	9.2	9.9	8.9	10.4	8.2	10.1
	95% CI	9.3–10.6	9.4–10.9	10.4–12.2	8.0–10.4	8.7–11.2	7.0–11.2	7.6–13.9	3.8–15.4	9.8–10.5

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 2000, 2001 and 2002, first screening round, 0–12 months, states and territories

Age group	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
				(Per cent)					
40–49	75.6	81.5	86.1	84.3	71.4	81.8	62.5	50.0	79.8
50–59	89.6	83.8	85.7	89.7	90.8	75.0	94.1	70.0	87.1
60–69	93.1	96.2	93.4	94.7	97.7	86.7	83.3	100.0	94.1
70+	92.2	96.3	96.0	100.0	95.0	100.0	100.0	100.0	95.0
Ages 40+									
Crude rate	87.2	88.0	89.3	90.5	88.2	82.2	84.8	73.3	88.0
ASR(A)	88.0	88.3	89.2	91.2	89.2	82.8	85.3	77.9	88.5
95% CI	81.7–94.6	81.1–96.0	81.6–97.3	78.1–100.0	76.7–100.0	57.3–100.0	54.4–100.0	32.3–100.0	84.9–92.3
Ages 50–69									
Crude rate	90.8	87.8	88.9	91.2	92.8	80.6	91.3	75.0	89.5
ASR(A)	91.0	89.0	88.9	91.8	93.7	79.9	89.6	82.5	90.0
95% CI	82.8–99.8	79.9–98.8	79.0–99.6	75.2–100.0	78.2–100.0	51.4–100.0	53.5–100.0	28.4–100.0	85.4–94.9

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 22: Program sensitivity rates for women screened during 2000, 2001 and 2002, first screening round, 0–24 months, states and territories

Age group	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
				(Per cent)					
40–49	59.0	63.5	72.4	78.2	55.6	81.8	62.5	33.3	64.7
50–59	75.0	69.4	70.8	79.6	75.0	63.2	69.6	75.0	72.8
60–69	86.2	87.7	80.8	92.3	97.7	92.9	100.0	100.0	86.7
70+	85.5	92.1	93.1	100.0	95.0	75.0	100.0	100.0	90.4
Ages 40+									
Crude rate	74.3	75.1	76.8	83.7	75.6	77.1	73.7	72.2	75.8
ASR(A)	76.1	76.1	76.7	85.4	79.8	76.8	80.3	76.4	77.2
95% CI	70.6–81.9	69.8–82.8	70.1–83.6	72.9–99.3	68.2–92.6	53.8–100.0	49.0–100.0	32.3–100.0	74.0–80.4
Ages 50–69									
Crude rate	78.6	74.8	74.8	83.2	80.6	75.8	75.0	78.6	77.2
ASR(A)	79.6	77.0	75.0	84.9	84.4	75.5	82.2	85.4	78.6
95% CI	72.4–87.4	69.0–85.6	66.6–84.1	69.4–100.0	70.0–100.0	48.9–100.0	45.2–100.0	30.9–100.0	74.5–82.8

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 23: Program sensitivity rates for women screened during 2000, 2001 and 2002, subsequent screening rounds, 0–12 months, states and territories

Age group	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
					(Per cent)				
40–49	68.1	67.7	67.7	59.2	83.0	81.5	81.0	66.7	69.2
50–59	81.4	80.0	81.3	86.1	85.0	85.3	76.3	100.0	81.9
60–69	86.0	88.4	88.1	89.3	89.6	86.4	82.8	90.9	87.6
70+	89.5	91.2	87.4	94.3	92.9	97.6	84.6	100.0	90.0
Ages 40+									
Crude rate	84.2	85.3	83.1	86.8	87.9	87.2	79.8	91.2	84.8
ASR(A)	80.9	81.2	81.1	82.4	86.9	86.3	80.1	90.6	81.9
95% CI	77.5–84.4	76.0–86.5	77.3–85.1	75.6–89.6	79.9–94.2	75.0–98.9	66.4–95.6	61.1–100.0	79.9–83.9
Ages 50–69									
Crude rate	83.8	84.3	84.6	87.7	87.4	85.9	79.1	96.0	84.8
ASR(A)	83.3	83.5	84.1	87.4	86.9	85.8	79.0	96.2	84.3
95% CI	79.6–87.2	79.2–88.0	79.5–89.0	80.5–94.7	80.3–93.9	73.3–99.6	64.7–95.6	61.6–100.0	82.2–86.5

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 24: Program sensitivity rates for women screened during 2000, 2001 and 2002, subsequent screening rounds, 0–24 months, states and territories

Age group	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
					(Per cent)				
40–49	46.2	50.6	61.1	50.9	69.8	61.1	77.3	66.7	54.8
50–59	65.1	62.5	72.0	79.3	69.5	76.4	82.9	73.9	68.1
60–69	74.0	70.7	78.9	83.1	74.0	85.7	88.9	80.0	75.4
70+	78.0	81.0	83.0	95.4	85.5	93.2	91.7	66.7	81.1
Ages 40+									
Crude rate	69.8	69.0	75.0	80.7	73.4	80.7	84.8	74.0	72.3
ASR(A)	65.3	64.6	73.1	76.5	72.8	77.9	84.5	73.2	69.0
95% CI	62.7–68.0	60.7–68.7	69.6–76.7	70.2–83.0	66.9–79.0	68.0–88.8	70.2–100.0	50.8–100.0	67.4–70.6
Ages 50–69									
Crude rate	69.6	66.7	75.3	81.2	71.8	81.3	85.5	76.3	71.7
ASR(A)	68.8	65.9	74.9	80.9	71.3	80.3	85.4	76.4	71.1
95% CI	65.8–72.0	62.5–69.4	70.8–79.2	74.5–87.6	65.9–77.1	68.8–93.1	69.9–100.0	51.2–100.0	69.4–72.9

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 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, 2004

Age group	Number	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
40–49	Screened	16,272	9,661	17,317	5,484	3,429	1,971	27	355	54,516
	Cases	6	12	12	5	3	5	0	1	44
50–59	Screened	15,951	19,206	9,235	6,354	4,713	1,117	754	427	57,757
	Cases	14	24	15	14	10	3	1	1	82
60–69	Screened	5,535	1,843	3,278	1,069	446	327	116	86	12,700
	Cases	13	7	10	4	1	0	0	0	35
70+	Screened	1,637	704	1,238	285	147	82	28	14	4,135
	Cases	1	1	2	4	1	0	0	0	9
Ages 40+	**Screened**	**39,395**	**31,414**	**31,068**	**13,192**	**8,735**	**3,497**	**925**	**882**	**129,108**
	Cases	**34**	**44**	**39**	**27**	**15**	**8**	**1**	**2**	**170**
Ages 50–69	**Screened**	**21,486**	**21,049**	**12,513**	**7,423**	**5,159**	**1,444**	**870**	**513**	**70,457**
	Cases	**27**	**31**	**25**	**18**	**11**	**3**	**1**	**1**	**117**

Source: AIHW analysis of BreastScreen Australia data.

Table 26: Age-specific rate of DCIS detected in women screened, first screening round, states and territories, 2004

Age group	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
40–49	3.7	12.4	6.9	9.1	8.7	25.4	0.0	28.2	8.1
50–59	8.8	12.5	16.2	22.0	21.2	26.9	13.3	23.4	14.2
60–69	23.5	38.0	30.5	37.4	22.4	0.0	0.0	0.0	27.6
70+	6.1	14.2	16.2	140.4	68.0	0.0	0.0	0.0	21.8
Ages 40+									
Crude rate	8.6	14.0	12.6	20.5	17.2	22.9	10.8	22.7	13.2
ASR(A)	11.5	19.8	18.3	38.4	24.8	15.7	5.2	15.0	17.6
95% CI	7.6–16.5	11.5–30.1	12.0–26.2	19.8–63.1	6.2–52.2	5.3–33.6	0.1–28.8	1.5–55.1	14.4–21.2
Ages 50–69									
Crude rate	12.6	14.7	20.0	24.2	21.3	20.8	11.5	19.5	16.6
ASR(A)	14.9	23.1	22.2	28.4	21.7	15.7	7.7	13.7	19.8
95% CI	9.5–22.1	12.1–37.5	13.9–33.4	13.7–49.4	4.9–48.2	3.2–45.9	0.2–43.2	0.3–76.2	15.7–24.4

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.

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, 2004

Age group	Number	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
40–49	Screened	30,276	5,534	29,040	7,050	5,618	2,556	914	509	81,497
	Cases	24	4	26	3	4	1	1	0	63
50–59	Screened	88,576	72,886	64,079	30,460	28,373	8,250	4,588	1,684	298,896
	Cases	78	73	59	34	24	10	3	1	282
60–69	Screened	70,642	60,644	45,876	23,299	21,777	6,315	2,952	775	232,280
	Cases	83	58	67	27	25	10	3	1	274
70+	Screened	41,711	28,257	21,023	4,471	5,379	2,485	469	195	103,990
	Cases	50	37	24	6	7	4	0	0	128
Ages 40+	**Screened**	**231,205**	**167,321**	**160,018**	**65,280**	**61,147**	**19,606**	**8,923**	**3,163**	**716,663**
	Cases	**235**	**172**	**176**	**70**	**60**	**25**	**7**	**2**	**747**
Ages 50–69	**Screened**	**159,218**	**133,530**	**109,955**	**53,759**	**50,150**	**14,565**	**7,540**	**2,459**	**531,176**
	Cases	**161**	**131**	**126**	**61**	**49**	**20**	**6**	**2**	**556**

Source: AIHW analysis of BreastScreen Australia data.

Table 28: Age-specific rate of DCIS detected in women screened, subsequent screening rounds, states and territories, 2004

Age group	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
40–49	7.9	7.2	9.0	4.3	7.1	3.9	10.9	0.0	7.7
50–59	8.8	10.0	9.2	11.2	8.5	12.1	6.5	5.9	9.4
60–69	11.7	9.6	14.6	11.6	11.5	15.8	10.2	12.9	11.8
70+	12.0	13.1	11.4	13.4	13.0	16.1	0.0	0.0	12.3
Ages 40+									
Crude rate	10.2	10.3	11.0	10.7	9.8	12.8	7.8	6.3	10.4
ASR(A)	9.8	9.7	10.9	10.1	9.6	11.9	7.6	5.9	10.1
95% CI	8.6–11.2	7.8–11.8	9.4–12.7	7.7–13.0	7.1–12.6	7.7–17.7	2.6–16.5	0.6–21.7	9.4–10.9
Ages 50–69									
Crude rate	10.1	9.8	11.5	11.3	9.8	13.7	8.0	8.1	10.5
ASR(A)	10.0	9.8	11.5	11.3	9.7	13.7	8.0	8.8	10.4
95% CI	8.5–11.7	8.2–11.7	9.5–13.6	8.7–14.6	7.2–12.8	8.3–21.1	2.9–17.5	0.9–32.4	9.6–11.3

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 rate

Table 29: Numbers of women screened and women recalled for assessment by age, mammographic reasons, first screening round, states and territories, 2004

Age group	Number	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
40–44	Screened	8,848	4,506	11,020	2,682	1,690	1,100	5	186	30,037
	Recalled	723	409	954	283	91	125	1	25	2,611
45–49	Screened	7,425	5,155	6,297	2,802	1,739	871	22	169	24,480
	Recalled	721	574	672	344	88	120	1	20	2,540
50–54	Screened	10,393	17,034	6,145	5,120	4,191	746	574	293	44,496
	Recalled	1,092	1,810	650	532	241	107	50	51	4,533
55–59	Screened	5,558	2,172	3,090	1,234	522	371	180	134	13,261
	Recalled	563	261	315	94	34	40	15	18	1,340
60–64	Screened	3,314	1,136	1,957	672	288	208	66	66	7,707
	Recalled	311	112	216	59	20	20	8	7	753
65–69	Screened	2,222	707	1,321	397	158	119	50	20	4,994
	Recalled	198	87	124	29	10	5	2	4	459
70–74	Screened	878	326	618	128	68	41	16	10	2,085
	Recalled	69	31	64	12	4	6	0	1	187
75–79	Screened	498	246	397	97	47	25	7	2	1,319
	Recalled	36	24	31	8	5	4	0	0	108
80–84	Screened	208	111	170	50	22	14	2	1	578
	Recalled	24	10	17	4	1	0	0	0	56
85+	Screened	53	21	53	10	10	2	3	1	153
	Recalled	4	6	7	3	2	0	0	0	22
Ages 40+	**Screened**	**39,397**	**31,414**	**31,068**	**13,192**	**8,735**	**3,497**	**925**	**882**	**129,110**
	Recalled	**3,741**	**3,324**	**3,050**	**1,368**	**496**	**427**	**77**	**126**	**12,609**
Ages 50–69	**Screened**	**21,487**	**21,049**	**12,513**	**7,423**	**5,159**	**1,444**	**870**	**513**	**70,458**
	Recalled	**2,164**	**2,270**	**1,305**	**714**	**305**	**172**	**75**	**80**	**7,085**

Source: BreastScreen Australia.

Table 30: Age-specific and age-standardised recall to assessment rates, mammographic reasons, first screening round, states and territories, 2004

Age group	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
				(Per cent)					
40–44	8.2	9.1	8.7	10.6	5.4	11.4	20.0	13.4	8.7
45–49	9.7	11.1	10.7	12.3	5.1	13.8	4.5	11.8	10.4
50–54	10.5	10.6	10.6	10.4	5.8	14.3	8.7	17.4	10.2
55–59	10.1	12.0	10.2	7.6	6.5	10.8	8.3	13.4	10.1
60–64	9.4	9.9	11.0	8.8	6.9	9.6	12.1	10.6	9.8
65–69	8.9	12.3	9.4	7.3	6.3	4.2	4.0	20.0	9.2
70–74	7.9	9.5	10.4	9.4	5.9	14.6	0.0	10.0	9.0
75–79	7.2	9.8	7.8	8.2	10.6	16.0	0.0	0.0	8.2
80–84	11.5	9.0	10.0	8.0	4.5	0.0	0.0	0.0	9.7
85+	7.5	28.6	13.2	30.0	20.0	0.0	0.0	0.0	14.4
Ages 40+									
Crude rate	9.5	10.6	9.8	10.4	5.7	12.2	8.3	14.3	9.8
ASR(A)	9.5	10.8	10.2	9.4	6.2	11.3	7.8	13.7	9.7
95% CI	9.1–9.8	10.2–11.4	9.7–10.7	8.6–10.2	5.2–7.2	9.7–13.0	4.3–12.0	10.2–17.7	9.5–10.0
Ages 50–69									
Crude rate	10.1	10.8	10.4	9.6	5.9	11.9	8.6	15.6	10.1
ASR(A)	9.9	11.1	10.3	8.7	6.3	10.4	8.5	15.4	9.9
95% CI	9.4–10.3	10.4–11.9	9.8–11.0	7.9–9.6	5.2–7.6	8.8–12.2	6.1–11.3	10.9–20.7	9.6–10.2

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: Numbers of women screened and women recalled for assessment by age, mammographic reasons, subsequent screening rounds, states and territories, 2004

Age group	Number	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
40–44	Screened	7,206	966	7,886	1,413	1,198	562	98	113	19,442
	Recalled	377	68	362	78	29	44	3	4	965
45–49	Screened	23,070	4,569	21,154	5,637	4,420	1,994	816	396	62,056
	Recalled	1,286	294	1,114	261	118	149	54	35	3,311
50–54	Screened	41,533	32,655	30,310	14,032	12,878	3,731	2,053	812	138,004
	Recalled	1,966	1,591	1,304	480	305	270	81	27	6,024
55–59	Screened	47,043	40,230	33,769	16,428	15,495	4,519	2,535	872	160,891
	Recalled	2,127	1,665	1,270	457	333	284	107	21	6,264
60–64	Screened	38,427	33,193	25,533	12,897	11,747	3,443	1,745	512	127,497
	Recalled	1,751	1,328	1,041	312	277	190	63	11	4,973
65–69	Screened	32,214	27,451	20,343	10,402	10,030	2,872	1,207	263	104,782
	Recalled	1,416	1,051	849	280	238	148	49	15	4,046
70–74	Screened	21,006	21,682	15,311	2,892	3,230	2,060	321	115	66,617
	Recalled	923	854	619	84	91	90	13	1	2,675
75–79	Screened	14,380	5,753	4,576	1,185	1,683	329	111	48	28,065
	Recalled	616	246	199	36	56	17	7	2	1,179
80–84	Screened	5,272	703	912	340	409	87	33	27	7,783
	Recalled	207	43	34	10	12	5	1	1	313
85+	Screened	1,053	119	224	54	57	9	4	5	1,525
	Recalled	42	3	10	3	0	0	0	1	59
Ages 40+	**Screened**	**231,204**	**167,321**	**160,018**	**65,280**	**61,147**	**19,606**	**8,923**	**3,163**	**716,662**
	Recalled	**10,711**	**7,143**	**6,802**	**2,001**	**1,459**	**1,197**	**378**	**118**	**29,809**
Ages 50–69	**Screened**	**159,217**	**133,529**	**109,955**	**53,759**	**50,150**	**14,565**	**7,540**	**2,459**	**531,174**
	Recalled	**7,260**	**5,635**	**4,464**	**1,529**	**1,153**	**892**	**300**	**74**	**21,307**

Source: BreastScreen Australia.

Table 32: Age-specific and age-standardised recall to assessment rates, mammographic reasons, subsequent screening rounds, states and territories, 2004

Age group	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
				(Per cent)					
40–44	5.2	7.0	4.6	5.5	2.4	7.8	3.1	3.5	5.0
45–49	5.6	6.4	5.3	4.6	2.7	7.5	6.6	8.8	5.3
50–54	4.7	4.9	4.3	3.4	2.4	7.2	3.9	3.3	4.4
55–59	4.5	4.1	3.8	2.8	2.1	6.3	4.2	2.4	3.9
60–64	4.6	4.0	4.1	2.4	2.4	5.5	3.6	2.1	3.9
65–69	4.4	3.8	4.2	2.7	2.4	5.2	4.1	5.7	3.9
70–74	4.4	3.9	4.0	2.9	2.8	4.4	4.0	0.9	4.0
75–79	4.3	4.3	4.3	3.0	3.3	5.2	6.3	4.2	4.2
80–84	3.9	6.1	3.7	2.9	2.9	5.7	3.0	3.7	4.0
85+	4.0	2.5	4.5	5.6	0.0	0.0	0.0	20.0	3.9
Ages 40+									
Crude rate	4.6	4.3	4.3	3.1	2.4	6.1	4.2	3.7	4.2
ASR(A)	4.7	4.8	4.3	3.3	2.4	6.3	4.3	3.9	4.3
95% CI	4.6–4.8	4.6–4.9	4.2–4.4	3.2–3.5	2.3–2.6	5.9–6.7	3.8–4.8	3.2–4.7	4.2–4.3
Ages 50–69									
Crude rate	4.6	4.2	4.1	2.8	2.3	6.1	4.0	3.0	4.0
ASR(A)	4.6	4.3	4.1	2.9	2.3	6.2	4.0	3.3	4.0
95% CI	4.5–4.7	4.2–4.4	4.0–4.2	2.7–3.0	2.2–2.4	5.8–6.6	3.5–4.4	2.5–4.2	4.0–4.1

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 33: Numbers of women screened and women recalled for assessment by age, other reasons only, first screening round, states and territories, 2004

Age group	Number	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
40–44	Screened	8,848	4,506	11,020	2,682	1,690	1,100	5	186	30,037
	Recalled	4	111	286	22	0	0	0	0	423
45–49	Screened	7,425	5,155	6,297	2,802	1,739	871	22	169	24,480
	Recalled	2	90	134	12	0	0	0	0	238
50–54	Screened	10,393	17,034	6,145	5,120	4,191	746	574	293	44,496
	Recalled	4	163	95	11	0	0	1	0	274
55–59	Screened	5,558	2,172	3,090	1,234	522	371	180	134	13,261
	Recalled	3	23	64	3	0	0	0	0	93
60–64	Screened	3,314	1,136	1,957	672	288	208	66	66	7,707
	Recalled	1	4	28	3	0	0	0	0	36
65–69	Screened	2,222	707	1,321	397	158	119	50	20	4,994
	Recalled	1	2	18	0	0	0	0	0	21
70–74	Screened	878	326	618	128	68	41	16	10	2,085
	Recalled	0	3	8	0	0	0	0	0	11
75–79	Screened	498	246	397	97	47	25	7	2	1,319
	Recalled	1	2	5	0	0	0	0	0	8
80–84	Screened	208	111	170	50	22	14	2	1	578
	Recalled	0	2	5	0	0	0	0	0	7
85+	Screened	53	21	53	10	10	2	3	1	153
	Recalled	0	1	2	0	0	0	0	0	3
Ages 40+	**Screened**	**39,397**	**31,414**	**31,068**	**13,192**	**8,735**	**3,497**	**925**	**882**	**129,110**
	Recalled	**16**	**401**	**645**	**51**	**0**	**0**	**1**	**0**	**1,114**
Ages 50–69	**Screened**	**21,487**	**21,049**	**12,513**	**7,423**	**5,159**	**1,444**	**870**	**513**	**70,458**
	Recalled	**9**	**192**	**205**	**17**	**0**	**0**	**1**	**0**	**424**

Source: BreastScreen Australia.

Table 34: Age-specific and age-standardised recall to assessment rates, first screening round, other reasons only, states and territories, 2004

Age group	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
				(Per cent)					
40–44	0.0	2.5	2.6	0.8	0.0	0.0	0.0	0.0	1.4
45–49	0.0	1.7	2.1	0.4	0.0	0.0	0.0	0.0	1.0
50–54	0.0	1.0	1.5	0.2	0.0	0.0	0.2	0.0	0.6
55–59	0.1	1.1	2.1	0.2	0.0	0.0	0.0	0.0	0.7
60–64	0.0	0.4	1.4	0.4	0.0	0.0	0.0	0.0	0.5
65–69	0.0	0.3	1.4	0.0	0.0	0.0	0.0	0.0	0.4
70–74	0.0	0.9	1.3	0.0	0.0	0.0	0.0	0.0	0.5
75–79	0.2	0.8	1.3	0.0	0.0	0.0	0.0	0.0	0.6
80–84	0.0	1.8	2.9	0.0	0.0	0.0	0.0	0.0	1.2
85+	0.0	4.8	3.8	0.0	0.0	0.0	0.0	0.0	2.0
Ages 40+									
Crude rate	0.0	1.3	2.1	0.4	0.0	0.0	0.1	0.0	0.9
ASR(A)	0.0	1.0	1.7	0.3	0.0	0.0	0.0	0.0	0.7
95% CI	0.0–0.1	0.9–1.2	1.6–1.9	0.2–0.4	0.0–0.0	0.0–0.0	0.0–0.2	0.0–0.0	0.6–0.8
Ages 50–69									
Crude rate	0.0	0.9	1.6	0.2	0.0	0.0	0.1	0.0	0.6
ASR(A)	0.0	0.7	1.6	0.2	0.0	0.0	0.1	0.0	0.6
95% CI	0.0–0.1	0.6–0.9	1.4–1.9	0.1–0.4	0.0–0.0	0.0–0.0	0.0–0.3	0.0–0.0	0.5–0.6

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: Numbers of women screened and women recalled for assessment by age, other reasons only, subsequent screening rounds, states and territories, 2004

Age group	Number	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
40–44	Screened	7,206	966	7,886	1,413	1,198	562	98	113	19,442
	Recalled	9	7	143	8	0	0	0	0	167
45–49	Screened	23,070	4,569	21,154	5,637	4,420	1,994	816	396	62,056
	Recalled	16	65	340	15	0	0	0	0	436
50–54	Screened	41,533	32,655	30,310	14,032	12,878	3,731	2,053	812	138,004
	Recalled	28	207	332	26	0	0	0	0	593
55–59	Screened	47,043	40,230	33,769	16,428	15,495	4,519	2,535	872	160,891
	Recalled	25	172	332	34	0	0	0	0	563
60–64	Screened	38,427	33,193	25,533	12,897	11,747	3,443	1,745	512	127,497
	Recalled	7	127	243	24	0	0	0	0	401
65–69	Screened	32,214	27,451	20,343	10,402	10,030	2,872	1,207	263	104,782
	Recalled	12	72	156	15	0	0	0	0	255
70–74	Screened	21,006	21,682	15,311	2,892	3,230	2,060	321	115	66,617
	Recalled	5	70	110	4	0	0	0	0	189
75–79	Screened	14,380	5,753	4,576	1,185	1,683	329	111	48	28,065
	Recalled	4	27	60	3	0	0	0	0	94
80–84	Screened	5,272	703	912	340	409	87	33	27	7,783
	Recalled	1	4	17	0	0	0	0	0	22
85+	Screened	1,053	119	224	54	57	9	4	5	1,525
	Recalled	0	1	5	0	0	0	0	0	6
Ages 40+	**Screened**	**231,204**	**167,321**	**160,018**	**65,280**	**61,147**	**19,606**	**8,923**	**3,163**	**716,662**
	Recalled	**107**	**752**	**1,738**	**129**	**0**	**0**	**0**	**0**	**2,726**
Ages 50–69	**Screened**	**159,217**	**133,529**	**109,955**	**53,759**	**50,150**	**14,565**	**7,540**	**2,459**	**531,174**
	Recalled	**72**	**578**	**1,063**	**99**	**0**	**0**	**0**	**0**	**1,812**

Source: BreastScreen Australia.

Table 36: Age-specific and age-standardised recall to assessment rates, other reasons only, subsequent screening rounds, states and territories, 2004

Age group	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
				(Per cent)					
40–44	0.1	0.7	1.8	0.6	0.0	0.0	0.0	0.0	0.9
45–49	0.1	1.4	1.6	0.3	0.0	0.0	0.0	0.0	0.7
50–54	0.1	0.6	1.1	0.2	0.0	0.0	0.0	0.0	0.4
55–59	0.1	0.4	1.0	0.2	0.0	0.0	0.0	0.0	0.3
60–64	0.0	0.4	1.0	0.2	0.0	0.0	0.0	0.0	0.3
65–69	0.0	0.3	0.8	0.1	0.0	0.0	0.0	0.0	0.2
70–74	0.0	0.3	0.7	0.1	0.0	0.0	0.0	0.0	0.3
75–79	0.0	0.5	1.3	0.3	0.0	0.0	0.0	0.0	0.3
80–84	0.0	0.6	1.9	0.0	0.0	0.0	0.0	0.0	0.3
85+	0.0	0.8	2.2	0.0	0.0	0.0	0.0	0.0	0.4
Ages 40+									
Crude rate	0.0	0.4	1.1	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	0.4
95% CI	0.0–0.1	0.5–0.7	1.1–1.2	0.2–0.3	0.0–0.0	0.0–0.0	0.0–0.0	0.0–0.0	0.4–0.4
Ages 50–69									
Crude rate	0.0	0.4	1.0	0.2	0.0	0.0	0.0	0.0	0.3
ASR(A)	0.0	0.5	1.0	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	0.3–0.4

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: Rescreen rate

Table 37: Number of women screened during 2002 and number of those women who returned for screening within 27 months by age, first screening round, states and territories

Age group	Number	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
40–44	Screened	13,354	4,737	10,280	2,206	1,895	816	52	190	33,530
	Returned	5,938	751	6,992	1,286	1,110	611	17	107	16,812
45–49	Screened	10,467	5,645	6,193	2,758	2,064	602	69	210	28,008
	Returned	5,088	2,248	4,077	1,700	1,263	409	34	93	14,912
50–54	Screened	13,298	12,332	6,890	5,514	3,982	635	627	314	43,592
	Returned	7,371	8,459	4,598	3,534	2,585	454	282	170	27,453
55–59	Screened	6,317	2,823	3,203	1,303	769	295	215	79	15,004
	Returned	3,517	1,722	2,134	759	456	197	102	29	8,916
60–64	Screened	4,139	1,924	2,230	829	369	181	115	42	9,829
	Returned	2,360	1,197	1,549	519	241	131	52	20	6,069
65–69	Screened	2,990	1,430	1,530	535	223	107	58	25	6,898
	Returned	1,600	897	1,088	251	111	77	26	10	4,060
70–74	Screened	1,690	820	788	165	107	38	17	13	3,638
	Returned	751	445	489	32	15	20	4	3	1,759
75–79	Screened	1,058	486	481	109	112	37	25	8	2,316
	Returned	444	64	75	19	19	2	2	3	628
80–84	Screened	430	185	153	49	61	11	5	3	897
	Returned	130	12	27	10	9	0	0	2	190
85+	Screened	111	45	50	17	7	4	0	0	234
	Returned	21	2	9	4	2	1	0	0	39
Ages 40+	**Screened**	**53,854**	**30,427**	**31,798**	**13,485**	**9,589**	**2,726**	**1,183**	**884**	**143,946**
	Returned	**27,220**	**15,797**	**21,038**	**8,114**	**5,811**	**1,902**	**519**	**437**	**80,838**
Ages 50–67	**Screened**	**25,682**	**17,974**	**13,315**	**7,997**	**5,343**	**1,182**	**996**	**451**	**72,940**
	Returned	**14,348**	**11,950**	**9,008**	**5,028**	**3,393**	**832**	**459**	**227**	**45,245**

Source: BreastScreen Australia.

Table 38: Age-specific and age-standardised rescreen rates for women screened during 2002, first screening round, states and territories

Age group	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
				(Per cent)					
40–44	44.5	15.9	68.0	58.3	58.6	74.9	32.7	56.3	50.1
45–49	48.6	39.8	65.8	61.6	61.2	67.9	49.3	44.3	53.2
50–54	55.4	68.6	66.7	64.1	64.9	71.5	45.0	54.1	63.0
55–59	55.7	61.0	66.6	58.3	59.3	66.8	47.4	36.7	59.4
60–64	57.0	62.2	69.5	62.6	65.3	72.4	45.2	47.6	61.7
65–69	53.5	62.7	71.1	46.9	49.8	72.0	44.8	40.0	58.9
70–74	44.4	54.3	62.1	19.4	14.0	52.6	23.5	23.1	48.4
75–79	42.0	13.2	15.6	17.4	17.0	5.4	8.0	37.5	27.1
80–84	30.2	6.5	17.6	20.4	14.8	0.0	0.0	66.7	21.2
85+	18.9	4.4	18.0	23.5	28.6	25.0	..	..	16.7
Ages 40+									
Crude rate	50.5	51.9	66.2	60.2	60.6	69.8	43.9	49.4	56.2
ASR(A)	52.1	54.2	65.2	54.2	54.8	66.4	41.6	44.1	56.6
95% CI	51.4–52.8	53.1–55.2	64.1–66.4	52.7–55.8	52.7–57.1	62.3–70.6	37.0–46.5	38.2–50.6	56.1–57.1
Ages 50–67									
Crude rate	55.9	66.5	67.7	62.9	63.5	70.4	46.1	50.3	62.0
ASR(A)	56.1	64.3	68.2	61.8	61.5	70.2	47.5	47.2	61.6
95% CI	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	60.9–62.2

. . Not applicable—no women in this age group were screened in 2002.

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 2002 and number of those women who returned for screening within 27 months by age, second screening round, states and territories

Age group	Number	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
40–44	Screened	6,224	839	5,263	951	903	410	194	98	14,882
	Returned	3,564	315	4,061	685	671	314	107	74	9,791
45–49	Screened	8,730	2,654	6,208	1,941	1,849	535	419	185	22,521
	Returned	4,952	1,369	4,572	1,314	1,372	400	199	122	14,300
50–54	Screened	10,813	14,411	7,975	3,447	4,938	736	700	358	43,378
	Returned	6,979	11,153	5,991	2,431	3,853	561	379	229	31,576
55–59	Screened	6,140	4,062	5,027	1,470	1,847	453	279	151	19,429
	Returned	3,841	2,894	3,779	957	1,331	333	145	78	13,358
60–64	Screened	4,034	2,546	3,390	840	705	208	164	61	11,948
	Returned	2,483	1,919	2,630	578	483	157	86	42	8,378
65–69	Screened	2,934	1,784	2,476	589	509	165	94	32	8,583
	Returned	1,672	1,343	1,915	293	234	120	44	14	5,635
70–74	Screened	1,882	1,022	1,548	185	159	112	26	9	4,943
	Returned	891	633	1,031	46	46	72	9	3	2,731
75–79	Screened	1,166	283	422	154	176	58	20	2	2,281
	Returned	525	44	107	33	45	14	1	2	771
80–84	Screened	506	146	92	36	51	27	3	3	864
	Returned	211	17	26	8	8	3	0	2	275
85+	Screened	117	30	29	7	6	1	0	1	191
	Returned	35	3	5	2	1	0	0	0	46
Ages 40+	**Screened**	**42,546**	**27,777**	**32,430**	**9,620**	**11,143**	**2,705**	**1,899**	**900**	**129,020**
	Returned	**25,153**	**19,690**	**24,117**	**6,347**	**8,044**	**1,974**	**970**	**566**	**86,861**
Ages 50–67	**Screened**	**22,900**	**22,153**	**17,930**	**6,152**	**7,999**	**1,512**	**1,211**	**594**	**80,451**
	Returned	**14,478**	**16,821**	**13,588**	**4,222**	**5,901**	**1,138**	**650**	**362**	**57,160**

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 2002, second screening round, states and territories

Age group	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
				(Per cent)					
40–44	57.3	37.5	77.2	72.0	74.3	76.6	55.2	75.5	65.8
45–49	56.7	51.6	73.6	67.7	74.2	74.8	47.5	65.9	63.5
50–54	64.5	77.4	75.1	70.5	78.0	76.2	54.1	64.0	72.8
55–59	62.6	71.2	75.2	65.1	72.1	73.5	52.0	51.7	68.8
60–64	61.6	75.4	77.6	68.8	68.5	75.5	52.4	68.9	70.1
65–69	57.0	75.3	77.3	49.7	46.0	72.7	46.8	43.8	65.7
70–74	47.3	61.9	66.6	24.9	28.9	64.3	34.6	33.3	55.2
75–79	45.0	15.5	25.4	21.4	25.6	24.1	5.0	100.0	33.8
80–84	41.7	11.6	28.3	22.2	15.7	11.1	0.0	66.7	31.8
85+	29.9	10.0	17.2	28.6	16.7	0.0	..	0.0	24.1
Ages 40+									
Crude rate	59.1	70.9	74.4	66.0	72.2	73.0	51.1	62.9	67.3
ASR(A)	58.9	65.4	73.0	60.6	64.3	71.7	48.1	59.5	65.9
95% CI	58.1–59.7	64.3–66.5	72.0–74.0	58.9–62.3	62.5–66.1	68.2–75.4	44.3–52.0	52.1–67.5	65.4–66.4
Ages 50–67									
Crude rate	63.2	75.9	75.8	68.6	73.8	75.3	53.7	60.9	71.0
ASR(A)	62.9	74.9	76.0	67.9	70.0	75.2	53.7	60.4	70.3
95% CI	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	69.7–71.0

. . Not applicable—no women in this age group were screened in 2002.

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 2002 and number of those women who returned for screening within 27 months by age, third and subsequent screening rounds, states and territories

Age group	Number	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
40–44	Screened	2,716	130	2,266	382	354	217	67	30	6,162
	Returned	1,863	71	1,913	325	305	179	54	22	4,732
45–49	Screened	18,670	2,121	13,703	3,216	2,638	1,787	810	298	43,243
	Returned	12,463	1,481	11,442	2,600	2,199	1,489	565	223	32,462
50–54	Screened	30,157	18,024	21,199	8,558	8,367	3,302	2,051	545	92,203
	Returned	21,882	15,022	18,047	6,970	7,114	2,813	1,351	418	73,617
55–59	Screened	38,252	31,959	24,133	11,990	11,959	3,893	2,345	625	125,156
	Returned	28,112	27,080	20,884	9,663	10,328	3,296	1,569	467	101,399
60–64	Screened	32,708	27,515	19,120	10,192	10,245	3,140	1,573	362	104,855
	Returned	24,466	23,714	16,725	8,311	8,986	2,703	1,081	263	86,249
65–69	Screened	27,916	23,486	15,231	8,462	8,898	2,619	1,180	195	87,987
	Returned	19,504	19,978	13,277	5,356	5,967	2,275	638	144	67,139
70–74	Screened	23,567	19,694	12,503	2,333	3,164	1,399	247	125	63,032
	Returned	14,245	13,643	9,115	1,151	1,634	1,012	91	69	40,960
75–79	Screened	14,871	4,913	3,161	805	1,417	236	92	52	25,547
	Returned	8,199	860	991	347	676	102	27	26	11,228
80–84	Screened	4,834	500	698	196	263	43	26	23	6,583
	Returned	2,351	142	304	93	107	14	3	11	3,025
85+	Screened	1,002	70	150	27	31	5	3	3	1,291
	Returned	371	17	81	8	11	2	0	1	491
Ages 40+	**Screened**	**194,693**	**128,412**	**112,164**	**46,161**	**47,336**	**16,641**	**8,394**	**2,258**	**556,059**
	Returned	**133,456**	**102,008**	**92,779**	**34,824**	**37,327**	**13,885**	**5,379**	**1,644**	**421,302**
Ages 50–67	**Screened**	**118,601**	**92,116**	**73,945**	**36,118**	**39,469**	**11,928**	**6,752**	**1,654**	**380,583**
	Returned	**87,465**	**78,347**	**63,988**	**29,242**	**32,395**	**10,213**	**4,549**	**1,246**	**307,445**

Source: BreastScreen Australia.

Table 42: Age-specific and age-standardised rescreen rates in women screened during 2002, third and subsequent screening rounds, states and territories

Age group	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
				(Per cent)					
40–44	68.6	54.6	84.4	85.1	86.2	82.5	80.6	73.3	76.8
45–49	66.8	69.8	83.5	80.8	83.4	83.3	69.8	74.8	75.1
50–54	72.6	83.3	85.1	81.4	85.0	85.2	65.9	76.7	79.8
55–59	73.5	84.7	86.5	80.6	86.4	84.7	66.9	74.7	81.0
60–64	74.8	86.2	87.5	81.5	87.7	86.1	68.7	72.7	82.3
65–69	69.9	85.1	87.2	63.3	67.1	86.9	54.1	73.8	76.3
70–74	60.4	69.3	72.9	49.3	51.6	72.3	36.8	55.2	65.0
75–79	55.1	17.5	31.4	43.1	47.7	43.2	29.3	50.0	44.0
80–84	48.6	28.4	43.6	47.4	40.7	32.6	11.5	47.8	46.0
85+	37.0	24.3	54.0	29.6	35.5	40.0	0.0	33.3	38.0
Ages 40+									
Crude rate	68.5	79.4	82.7	75.4	78.9	83.4	64.1	72.8	75.8
ASR(A)	69.8	76.4	82.6	74.9	78.8	82.1	62.5	71.9	76.4
95% CI	69.4–70.3	75.3–77.6	82.1–83.2	73.9–76.0	77.7–79.9	80.5–83.7	60.1–64.9	67.8–76.2	76.1–76.7
Ages 50–67									
Crude rate	73.7	85.1	86.5	81.0	82.1	85.6	67.4	75.3	80.8
ASR(A)	73.6	84.7	86.4	81.0	83.7	85.6	67.4	75.6	80.7
95% CI	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	80.4–81.0

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, Australia, 1989–2003

Age group	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
0–4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5–9	0	0	0	0	0	0	1	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	1	0	2	3	0	2	0	1	1
20–24	8	4	10	6	14	7	8	6	13	15	12	5	8	7	7
25–29	46	52	51	47	57	58	58	44	51	51	49	54	44	54	45
30–34	159	204	182	181	172	196	200	196	176	197	187	188	171	202	185
35–39	369	345	401	380	412	401	397	422	443	421	442	441	451	431	478
40–44	659	666	722	720	783	779	756	763	762	848	818	846	920	903	911
45–49	751	832	860	1,013	1,024	1,134	1,233	1,186	1,163	1,163	1,149	1,270	1,223	1,320	1,307
50–54	721	781	850	863	981	1,106	1,248	1,183	1,323	1,464	1,511	1,559	1,655	1,633	1,513
55–59	684	694	799	815	934	1,030	1,142	1,126	1,175	1,260	1,284	1,428	1,529	1,647	1,670
60–64	890	821	891	787	965	1,107	1,063	1,017	1,086	1,146	1,241	1,331	1,446	1,407	1,411
65–69	823	858	953	935	995	1,214	1,095	1,062	1,078	1,131	1,091	1,123	1,166	1,280	1,199
70–74	712	756	795	781	904	1,015	1,024	985	1,030	1,059	991	1,099	1,105	1,038	933
75–79	627	632	669	645	691	774	833	739	859	880	831	899	900	923	895
80–84	395	422	486	491	467	533	579	573	578	595	550	576	614	616	693
85+	324	336	371	365	390	374	414	433	444	491	492	522	561	567	540
All ages	**7,168**	**7,403**	**8,040**	**8,029**	**8,789**	**9,728**	**10,052**	**9,735**	**10,183**	**10,724**	**10,648**	**11,343**	**11,793**	**12,029**	**11,788**
Ages 50–69	**3,118**	**3,154**	**3,493**	**3,400**	**3,875**	**4,457**	**4,548**	**4,388**	**4,662**	**5,001**	**5,127**	**5,441**	**5,796**	**5,967**	**5,793**

Source: AIHW National Cancer Statistics Clearing House.

Table 44: Age-specific and age-standardised incidence rates for breast cancer in women, Australia, 1989–2003

Age group	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
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	0.0	0.2	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	0.2	0.0	0.3	0.5	0.0	0.3	0.0	0.2	0.2
20–24	1.2	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
25–29	6.5	7.4	7.3	6.8	8.4	8.5	8.4	6.2	7.0	7.0	6.7	7.4	6.2	7.9	6.6
30–34	23.5	29.4	25.6	25.0	23.5	26.7	27.4	27.1	24.6	27.8	26.3	26.2	23.1	26.7	24.1
35–39	57.1	52.6	60.4	56.1	59.9	57.5	55.7	57.9	59.6	56.0	58.3	58.3	60.1	58.1	65.0
40–44	110.6	107.6	113.0	112.2	121.0	118.6	113.2	112.4	110.2	120.7	114.5	116.1	123.5	118.8	118.3
45–49	164.7	173.8	171.1	188.1	178.7	190.3	200.0	185.4	181.0	177.9	172.7	188.4	178.9	190.5	185.1
50–54	185.3	194.8	205.7	203.4	226.0	244.1	262.2	237.8	246.3	255.7	252.7	250.2	255.3	251.1	230.1
55–59	189.5	193.2	222.8	222.4	248.6	267.1	288.7	276.3	279.0	290.7	283.6	301.6	308.3	307.5	292.6
60–64	240.2	221.5	240.8	215.5	268.4	310.1	297.9	285.1	298.6	307.7	323.0	335.4	354.4	335.1	327.5
65–69	240.0	246.2	271.3	264.9	280.0	342.5	309.2	299.4	306.0	324.0	315.2	325.4	336.1	360.2	327.8
70–74	267.9	279.3	281.7	267.0	297.8	319.9	317.1	301.2	313.4	319.9	297.3	329.4	330.0	311.8	283.0
75–79	291.9	286.4	296.7	281.6	300.4	339.8	356.9	303.1	334.9	327.4	295.9	312.4	308.2	313.2	299.9
80–84	295.2	302.9	334.2	324.2	295.0	318.8	335.8	324.5	321.4	326.8	300.4	303.2	304.3	291.3	313.2
85+	313.9	318.2	337.2	315.6	320.1	293.3	308.2	305.8	297.3	313.2	296.2	298.0	306.0	297.5	274.8
All ages															
Crude rate	85.1	86.5	92.7	91.5	99.1	108.5	110.7	105.8	109.3	113.9	111.7	117.6	120.6	121.7	117.9
ASR(A)	93.5	94.7	100.4	98.2	105.3	113.9	115.6	109.1	111.4	114.5	111.2	115.6	117.2	116.8	111.8
95% CI	91.3–95.7	92.5–96.9	98.2–102.6	96.1–100.4	103.1–107.6	111.6–116.2	113.4–117.9	107.0–111.3	109.2–113.6	112.3–116.7	109.1–113.3	113.5–117.7	115.1–119.4	114.7–118.9	109.8–113.8
Ages 50–69															
Crude rate	213.0	213.2	233.9	225.3	254.2	287.5	287.4	271.5	278.4	289.5	287.9	295.9	305.2	304.3	286.1
ASR(A)	208.0	209.3	229.5	222.0	250.8	282.0	285.3	269.2	276.9	288.4	287.2	295.6	305.1	303.7	285.1
95% CI	200.6–215.6	202.0–216.9	221.8–237.4	214.5–229.8	242.8–258.9	273.7–290.5	277.0–293.8	261.3–277.3	269.0–285.0	280.4–296.5	279.4–295.2	287.8–303.6	297.3–313.1	296.0–311.5	277.8–292.6

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, 1999–2003

Age group	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	17	10	4	4	4	0	0	0	39
25–29	73	83	42	23	16	3	3	3	246
30–34	302	250	162	104	63	24	21	7	933
35–39	768	569	419	211	177	47	33	19	2,243
40–44	1,502	1,125	817	394	337	100	85	38	4,398
45–49	1,994	1,578	1,235	646	493	154	121	48	6,269
50–54	2,520	1,938	1,436	826	721	194	175	61	7,871
55–59	2,572	1,743	1,450	738	664	197	148	46	7,558
60–64	2,297	1,637	1,331	665	593	187	94	32	6,836
65–69	1,943	1,476	1,086	554	555	148	86	11	5,859
70–74	1,872	1,360	958	383	385	140	56	12	5,166
75–79	1,589	1,179	720	376	406	113	56	9	4,448
80–84	1,107	762	527	268	273	72	35	5	3,049
85+	914	732	453	240	252	64	22	5	2,682
All ages	**19,471**	**14,443**	**10,640**	**5,434**	**4,939**	**1,443**	**935**	**296**	**57,601**
Ages 50–69	**9,332**	**6,794**	**5,303**	**2,783**	**2,533**	**726**	**503**	**150**	**28,124**

Source: AIHW National Cancer Statistics Clearing House.

Table 46: Age-specific and age-standardised incidence rates for breast cancer in women, states and territories, 1999–2003

Age group	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	1.6	1.2	0.6	1.2	1.7	0.0	0.0	0.0	1.2
25–29	6.1	9.3	6.3	6.8	6.5	4.1	4.6	6.7	7.0
30–34	24.4	26.3	23.7	28.9	23.5	29.5	32.7	15.7	25.3
35–39	61.0	60.7	59.9	56.9	62.4	53.3	51.9	46.9	59.9
40–44	120.4	122.4	117.4	105.7	116.1	108.7	133.0	103.2	118.3
45–49	175.1	186.7	193.3	186.1	180.9	180.0	196.8	148.5	183.2
50–54	238.6	246.4	240.0	265.3	277.0	242.1	305.0	228.1	247.7
55–59	300.5	278.7	303.5	311.8	317.6	299.6	366.5	266.7	298.9
60–64	327.9	318.6	358.1	350.5	347.6	342.0	336.3	301.9	335.1
65–69	315.9	326.4	353.8	349.8	366.2	315.1	400.7	169.5	333.0
70–74	317.5	315.7	336.8	270.4	255.4	319.0	300.4	263.9	310.4
75–79	307.6	311.7	295.1	315.8	294.7	291.8	339.8	297.7	306.0
80–84	307.6	295.2	307.8	327.0	284.6	258.8	327.1	252.7	302.6
85+	285.0	305.7	300.7	306.5	286.1	263.2	253.6	328.7	294.2
All ages									
Crude rate	118.0	118.6	116.6	114.6	129.2	120.4	116.1	63.4	117.9
ASR(A)	112.9	113.7	117.1	116.5	116.4	111.1	126.5	96.8	114.5
95% CI	111.3–114.5	111.8–115.6	114.9–119.4	113.4–119.6	113.1–119.7	105.4–117.1	118.4–135.0	84.5–110.3	113.6–115.5
Ages 50–69									
Crude rate	289.1	285.7	302.2	310.6	320.0	293.3	341.8	245.6	295.9
ASR(A)	288.1	284.8	302.6	311.1	318.9	291.9	345.1	243.7	295.4
95% CI	282.2–294.0	278.1–291.7	294.5–310.9	299.6–322.9	306.6–331.6	271.0–313.9	315.4–376.9	205.0–287.5	291.9–298.9

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, 1999–2003

Age group	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	30	7	1	0	0	39
25–29	168	46	21	4	7	246
30–34	663	159	94	12	5	933
35–39	1,581	424	194	33	11	2,243
40–44	3,017	859	418	80	25	4,398
45–49	4,246	1,273	628	84	38	6,269
50–54	5,320	1,655	747	104	45	7,871
55–59	5,040	1,634	758	88	38	7,558
60–64	4,440	1,589	687	95	25	6,836
65–69	3,850	1,363	577	50	18	5,859
70–74	3,387	1,252	465	43	18	5,166
75–79	2,989	1,032	384	31	12	4,448
80–84	2,079	680	258	27	4	3,049
85+	1,795	597	260	21	9	2,682
All ages	**38,610**	**12,570**	**5,494**	**671**	**256**	**57,601**
Ages 50–69	**18,651**	**6,241**	**2,769**	**336**	**127**	**28,124**

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, 1999–2003

Age group	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	1.3	1.4	0.5	0.0	0.0	1.2
25–29	6.6	7.8	6.7	6.9	18.6	7.0
30–34	25.8	23.7	26.8	18.6	14.0	25.3
35–39	62.9	56.4	51.1	51.4	31.5	59.9
40–44	122.6	109.3	108.9	132.7	87.1	118.3
45–49	186.3	176.6	181.5	161.1	156.4	183.2
50–54	250.7	248.7	232.0	224.2	214.4	247.7
55–59	305.8	292.4	281.3	240.6	247.8	298.9
60–64	340.5	336.7	305.0	344.8	230.5	335.1
65–69	340.7	330.3	309.2	231.3	225.2	333.0
70–74	311.1	325.5	277.8	250.1	297.7	310.4
75–79	307.2	316.8	279.1	233.9	276.4	306.0
80–84	307.4	303.4	271.5	296.9	156.5	302.6
85+	290.9	300.5	305.2	255.8	348.6	294.2
All ages						
Crude rate	118.5	123.8	111.2	87.9	62.0	117.9
ASR(A)	116.5	113.6	106.8	100.5	91.9	114.5
95% CI	115.3–117.6	111.7–115.7	104.0–109.7	93.0–108.5	80.4–104.3	113.6–115.5
Ages 50–69						
Crude rate	300.6	295.9	276.0	255.1	228.4	295.9
ASR(A)	300.7	293.8	274.6	255.8	228.6	295.4
95% CI	296.4–305.1	286.6–301.2	264.4–285.0	229.1–284.7	189.6–271.5	291.9–298.9

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, 1999–2003

Age group	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
0–19	0	0	0	1	0	0	0	0	1
20–29	3	8	3	3	1	0	1	0	19
30–39	86	63	38	22	13	5	4	0	231
40–49	462	272	225	154	76	15	32	3	1239
50–59	698	591	429	302	182	60	52	8	2322
60–69	537	441	342	237	109	36	25	4	1731
70+ years	457	264	209	128	82	28	11	0	1179
All ages	**2,243**	**1,639**	**1,246**	**847**	**463**	**144**	**125**	**15**	**6,722**
Ages 50–69	**1,235**	**1,032**	**771**	**539**	**291**	**96**	**77**	**12**	**4,053**

Source: AIHW National Cancer Statistics Clearing House.

Table 50: Age-specific and age-standardised rates of ductal carcinoma in situ, states and territories, 1999–2003

Age group	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	0.5	0.2	0.5	0.2	0.0	0.8	0.0	0.3
30–39	3.4	3.3	2.7	3.0	2.4	2.9	3.1	0.0	3.1
40–49	19.4	15.4	16.9	21.4	13.5	8.4	25.5	4.3	17.4
50–59	36.5	41.9	39.9	55.1	38.8	41.1	53.2	18.2	40.7
60–69	40.8	45.6	50.4	68.1	33.8	35.4	50.6	23.4	45.6
70+ years	25.6	20.2	24.6	30.4	17.4	20.8	20.2	0.0	23.4
All ages									
Crude rate	13.6	13.5	13.7	17.9	12.1	12.0	15.5	3.2	13.8
ASR(A)	13.2	13.2	13.8	18.2	11.2	11.2	16.4	4.6	13.5
95% CI	12.6–13.7	12.5–13.8	13.0–14.6	17.0–19.5	10.2–12.2	9.4–13.2	13.6–19.6	2.5–7.7	13.2–13.9
Ages 50–69									
Crude rate	38.3	43.4	43.9	60.1	36.8	38.8	52.3	19.6	42.6
ASR(A)	38.2	43.4	44.0	60.2	36.8	38.9	52.2	20.2	42.6
95% CI	36.1–40.4	40.8–46.1	41.0–47.2	55.2–65.5	32.7–41.3	31.5–47.5	41.1–65.3	10.1–35.9	41.3–44.0

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, Australia, 1993–2003

Age group	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
0–19	0	0	0	0	1	0	0	0	0	0	1
20–29	3	2	5	2	10	6	4	2	5	4	4
30–39	39	40	47	39	45	42	39	54	42	57	39
40–49	148	152	163	199	229	230	232	238	262	255	252
50–59	168	207	265	267	318	354	400	454	495	487	486
60–69	147	175	194	221	251	295	291	309	389	360	382
70+ years	75	99	178	163	159	213	193	242	249	226	269
All ages	**580**	**675**	**852**	**891**	**1,013**	**1,140**	**1,159**	**1,299**	**1,442**	**1,389**	**1,433**
Ages 50–69	**315**	**382**	**459**	**488**	**569**	**649**	**691**	**763**	**884**	**847**	**868**

Source: AIHW National Cancer Statistics Clearing House.

Table 52: Age-specific and age-standardised rates of ductal carcinoma in situ, Australia, 1993–2003

Age group	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
0–19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20–29	0.2	0.1	0.4	0.1	0.7	0.4	0.3	0.1	0.4	0.3	0.3
30–39	2.7	2.8	3.3	2.7	3.1	2.9	2.7	3.7	2.8	3.8	2.6
40–49	12.1	12.1	12.7	15.1	17.2	17.0	16.8	17.0	18.3	17.5	17.1
50–59	20.7	24.7	30.4	29.5	33.2	35.2	38.1	41.4	43.3	41.1	39.6
60–69	20.6	24.6	27.3	31.1	35.1	40.9	39.8	41.6	51.5	46.4	48.0
70+ years	9.2	11.8	20.6	18.3	17.4	22.7	20.0	24.5	24.6	21.9	25.7
All ages											
Crude rate	6.5	7.5	9.4	9.7	10.9	12.1	12.2	13.5	14.7	14.0	14.3
ASR(A)	7.1	8.1	10.0	10.2	11.3	12.4	12.3	13.4	14.5	13.7	13.7
95% CI	6.5–7.7	7.5–8.8	9.3–10.7	9.5–10.9	10.6–12.0	11.7–13.1	11.6–13.1	12.7–14.2	13.8–15.3	12.9–14.4	13.0–14.4
Ages 50–69											
Crude rate	20.7	24.6	29.0	30.2	34.0	37.6	38.8	41.5	46.5	43.2	42.9
ASR(A)	20.7	24.6	29.2	30.1	33.9	37.4	38.8	41.5	46.5	43.2	42.9
95% CI	18.4–23.1	22.2–27.3	26.6–32.0	27.5–32.9	31.2–36.8	34.6–40.4	35.9–41.8	38.6–44.6	43.5–49.7	40.3–46.2	40.1–45.8

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, Australia, 1990–2004

Age group	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	1	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	0
20–24	0	2	1	0	1	1	0	1	2	2	1	1	0	0	0
25–29	6	12	4	2	2	5	9	6	7	6	5	2	4	5	5
30–34	26	25	33	39	19	25	28	37	28	20	23	21	24	26	24
35–39	63	79	79	74	87	57	90	84	68	59	66	63	71	65	50
40–44	149	150	136	116	139	120	136	135	128	141	122	126	112	118	109
45–49	168	177	196	202	211	207	189	211	207	203	187	185	173	185	191
50–54	228	232	212	225	239	221	230	271	265	247	255	262	295	242	230
55–59	215	227	219	252	249	248	240	236	227	260	257	253	289	307	301
60–64	282	258	236	276	262	268	258	239	255	263	239	228	273	289	254
65–69	328	306	272	316	290	317	289	284	252	212	216	242	256	263	285
70–74	258	305	287	264	308	288	296	297	268	288	287	315	245	252	256
75–79	254	249	254	298	274	281	279	291	300	274	281	289	312	301	287
80–84	205	211	213	257	250	259	252	244	236	232	237	273	277	277	288
85+	219	229	247	268	271	280	273	273	314	298	335	325	367	383	361
All ages	**2,400**	**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**
Ages 50–69	**1,054**	**1,023**	**939**	**1,069**	**1,040**	**1,054**	**1,017**	**1,030**	**999**	**982**	**967**	**985**	**1,113**	**1,101**	**1,070**

Source: AIHW National Mortality Database.

Table 54: Age-specific and age-standardised mortality rates for breast cancer in women, Australia, 1990–2004

Age group	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	0.2	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	0.0
20–24	0.0	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
25–29	0.8	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
30–34	3.8	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
35–39	9.6	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
40–44	24.1	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	14.1
45–49	35.0	35.3	36.4	35.2	35.4	33.5	29.6	32.8	31.7	30.5	27.7	27.1	25.0	26.2	26.5
50–54	57.0	56.2	49.9	51.9	52.8	46.5	46.3	50.4	46.3	41.3	40.9	40.4	45.4	36.8	34.6
55–59	59.8	63.4	59.6	67.0	64.5	62.7	58.9	56.0	52.4	57.4	54.3	51.0	54.0	53.8	50.5
60–64	76.1	69.6	64.7	76.9	73.3	75.0	72.3	65.7	68.5	68.4	60.2	55.9	65.0	67.1	56.7
65–69	94.2	87.0	77.2	88.8	81.8	89.4	81.5	80.6	72.2	61.3	62.6	69.8	72.0	71.9	75.4
70–74	95.2	108.0	98.2	86.8	97.0	89.2	90.5	90.4	80.9	86.4	86.0	94.1	73.6	76.4	78.3
75–79	115.0	110.4	110.8	129.5	120.5	120.5	114.6	113.5	111.6	97.6	97.7	99.0	105.9	100.9	95.0
80–84	147.0	144.9	140.4	162.2	149.5	150.0	142.6	135.7	129.6	126.7	124.7	135.3	131.0	125.2	125.0
85+	206.9	208.4	213.6	219.6	212.9	208.6	193.1	182.8	200.3	179.4	191.3	177.3	192.6	194.9	178.7
All ages															
Crude rate	28.1	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
ASR(A)	30.4	30.5	28.9	30.5	30.0	28.9	28.1	27.8	26.5	25.4	24.7	24.7	25.1	24.6	23.4
95% CI	29.1–31.6	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	23.7–25.6	22.5–24.3
Ages 50–69															
Crude rate	71.2	68.5	62.2	70.1	67.1	66.6	62.9	61.5	57.8	55.1	52.6	51.9	56.8	54.4	51.3
ASR(A)	68.5	66.5	60.5	67.9	65.5	64.6	61.5	60.6	57.3	55.0	52.5	51.8	56.7	54.1	50.9
95% CI	64.3–72.8	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	53.4–60.1	51.0–57.4	47.9–54.0

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, 2000–2004

Age group	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	0	0	0	0	0	0	0	0	0
20–24	0	1	0	1	0	0	0	0	2
25–29	6	7	2	4	1	0	0	1	21
30–34	39	34	19	16	3	2	1	4	118
35–39	99	95	45	25	38	9	2	2	315
40–44	179	157	116	51	59	15	6	4	587
45–49	291	236	179	85	85	27	12	6	921
50–54	403	341	246	110	118	37	21	8	1,284
55–59	495	362	241	115	130	34	19	11	1,407
60–64	441	329	230	110	107	37	21	8	1,283
65–69	463	300	202	114	130	32	16	5	1,262
70–74	467	363	239	120	109	35	19	3	1,355
75–79	513	413	230	127	129	42	14	2	1,470
80–84	454	378	223	116	125	34	17	5	1,352
85+	592	505	275	146	183	52	18	0	1,771
All ages	**4,442**	**3,521**	**2,247**	**1,140**	**1,217**	**356**	**166**	**59**	**13,148**
Ages 50–69	**1,802**	**1,332**	**919**	**449**	**485**	**140**	**77**	**32**	**5,236**

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, 2000–2004

Age group	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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20–24	0.0	0.1	0.0	0.3	0.0	0.0	0.0	0.0	0.1
25–29	0.5	0.8	0.3	1.2	0.4	0.0	0.0	2.3	0.6
30–34	3.1	3.5	2.7	4.4	1.1	2.5	1.5	8.8	3.1
35–39	8.0	10.1	6.4	6.8	13.6	10.5	3.2	5.0	8.5
40–44	14.2	16.8	16.2	13.5	20.2	16.1	9.4	10.7	15.5
45–49	25.2	27.5	27.3	24.0	31.0	31.1	19.5	18.3	26.5
50–54	37.5	42.5	40.0	34.2	44.7	45.2	36.1	28.8	39.6
55–59	55.1	54.9	47.2	45.7	58.9	49.0	43.9	59.7	52.7
60–64	61.4	62.5	58.8	55.9	61.4	65.5	71.8	69.7	61.0
65–69	74.3	65.5	63.7	69.9	85.0	67.0	71.8	73.0	70.5
70–74	79.8	84.8	83.6	83.8	73.5	80.0	101.5	63.1	81.7
75–79	98.1	107.6	92.4	104.5	92.8	108.1	83.3	63.1	99.7
80–84	120.9	139.4	124.3	134.4	124.6	118.3	149.2	235.6	128.2
85+	177.4	203.8	174.6	179.8	200.6	205.6	192.4	0.0	186.9
All ages									
Crude rate	26.7	28.6	24.1	23.7	31.7	29.6	20.5	12.6	26.6
ASR(A)	24.0	25.8	23.5	23.5	26.3	25.4	23.4	21.6	24.5
95% CI	23.3–24.8	24.9–26.7	22.5–24.4	22.1–24.9	24.8–27.8	22.8–28.3	20.0–27.3	15.7–28.8	24.1–24.9
Ages 50–69									
Crude rate	54.4	54.5	50.1	48.1	59.7	54.8	50.3	49.6	53.4
ASR(A)	53.9	54.2	50.2	48.3	59.3	54.5	52.2	53.7	53.2
95% CI	51.4–56.5	51.4–57.2	47.0–53.6	44.0–53.0	54.1–64.8	45.8–64.3	41.1–65.4	36.1–76.6	51.7–54.6

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. 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, 2000–2004

Age group	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	0	0	0	0	0	0
20–24	2	0	0	0	0	2
25–29	13	5	1	1	1	21
30–34	72	25	15	2	4	118
35–39	211	65	35	2	2	315
40–44	373	131	71	9	4	587
45–49	596	220	90	7	8	921
50–54	835	287	143	15	4	1,284
55–59	953	276	154	17	7	1,407
60–64	817	298	147	17	5	1,283
65–69	853	268	120	13	8	1,262
70–74	874	315	141	18	8	1,355
75–79	966	356	135	12	1	1,470
80–84	918	303	116	10	4	1,352
85+	1,183	387	179	17	5	1,771
All ages	**8,667**	**2,935**	**1,348**	**139**	**60**	**13,148**
Ages 50–69	**3,459**	**1,129**	**564**	**61**	**24**	**5,236**

Notes

1. Regions have been defined according to the ASGC 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, 2000–2004

Age group	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	0.1	0.0	0.0	0.0	0.0	0.1
25–29	0.5	0.9	0.4	1.7	2.7	0.6
30–34	2.8	3.7	4.2	2.9	10.1	3.1
35–39	8.4	8.7	9.5	3.2	6.1	8.5
40–44	14.9	16.3	18.3	14.9	12.3	15.5
45–49	25.8	29.8	25.6	13.8	33.2	26.5
50–54	38.7	41.9	43.6	31.0	18.3	39.6
55–59	54.7	46.5	54.6	44.8	41.7	52.7
60–64	60.9	60.7	63.3	58.2	40.2	61.0
65–69	74.4	63.3	62.7	57.1	100.2	70.5
70–74	80.9	81.4	83.9	100.0	122.5	81.7
75–79	98.3	106.8	96.2	91.7	11.3	99.7
80–84	129.6	129.0	117.4	106.5	144.9	128.2
85+	184.9	186.1	201.8	202.6	189.8	186.9
All ages						
Crude rate	26.3	28.5	27.1	18.2	14.4	26.6
ASR(A)	24.5	24.6	25.0	21.9	22.7	24.5
95% CI	24.0–25.0	23.7–25.5	23.7–26.4	18.4–25.9	16.9–29.3	24.1–24.9
Ages 50–69						
Crude rate	54.1	51.5	54.6	44.8	40.9	53.4
ASR(A)	54.1	51.0	54.2	45.2	43.9	53.2
95% CI	52.3–55.9	48.1–54.1	49.8–58.8	34.4–57.9	27.6–65.3	51.7–54.6

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. The Australian Standard Geographical Classification (ASGC) 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, 2000–2004

Age group	Indigenous	Non–Indigenous	Australia
0–4	0	0	0
5–9	0	0	0
10–14	0	0	0
15–19	0	0	0
20–24	0	1	2
25–29	2	6	21
30–34	3	39	118
35–39	3	106	315
40–44	8	218	587
45–49	11	339	921
50–54	4	472	1,284
55–59	5	489	1,407
60–64	6	446	1,283
65–69	10	431	1,262
70–74	8	454	1,355
75+	12	1,528	4,593
All ages	**72**	**4,529**	**13,148**
Ages 50–69	**25**	**1,838**	**5,236**

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, 2000–2004

Age group	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	0.1	0.1
25–29	3.4	0.5	0.6
30–34	5.2	3.0	3.1
35–39	6.1	7.9	8.5
40–44	19.6	15.8	15.5
45–49	34.6	26.4	26.5
50–54	16.3	39.2	39.6
55–59	29.7	49.6	52.7
60–64	47.2	58.6	61.0
65–69	115.0	68.3	70.5
70–74	136.6	78.8	81.7
75+	155.7	126.8	132.1
All ages			
Crude rate	10.2	25.6	26.6
ASR(A)	27.1	23.9	24.7
95% CI	20.4–35.1	23.2–24.6	24.3–25.1
Ages 50–69			
Crude rate	39.8	51.3	53.4
ASR(A)	44.2	51.4	53.2
95% CI	28.4–65.4	49.0–53.8	51.7–54.6

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 A: Data and statistical issues

Data sources

Multiple data sources were analysed to produce this report. These are summarised in Table A1. All data used in this report are based on calendar years.

Table A1: 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 2003 and 2004 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 most recent direct count of the Aboriginal and Torres Strait Islander population was carried out in the 2001 census. However, the ABS has released estimates of Aboriginal and Torres Strait Islander population for more recent years (ABS 2004). The average of the projected populations for 2003 and 2004 was used as the denominator for Indigenous Australian women participation rates.

Mortality data

Mortality data in this report are given for 1990 to 2004. 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 have been coded using ICD-10. These data were coded using an automated system with slightly different coding rules.

The change to the coding and processing of mortality data has 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 one (0.98).

The application of a comparability factor causes 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 five-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 two 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

In all previous reports including 2000–2001, analysis of participation, incidence and mortality data by geographic region used the Rural, Remote and Metropolitan Areas (RRMA) classification. This classification was developed in 1994 by the then Department of Primary Industries and Energy and the then Department of Human Services and Health. It allows geographic regions to be classified into seven zones: two metropolitan, three rural and two remote (DPIE & DHSH 1994).

This report uses a more recent geographic classification in place of RRMA. The new system, known as the Australian Standard Geographical Classification (ASGC), 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 A2.

Table A2: 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 off-shore, shipping and migratory CDs

Source: ABS 2001.

The ASGC Remoteness classification is not directly comparable to the RRMA classification. 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), whereas the RRMA classification grouped them together with the other capital cities.

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 (SEIFA 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 forthcoming) 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 forthcoming) 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 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 forthcoming).

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 forthcoming). 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.

Appendix B: Tables published on the Internet

Indicator 1: Participation

Table 1: Number of women participating in BreastScreen Australia by age, states and territories, 2003–2004

Table 2: Percentage of women participating in BreastScreen Australia, states and territories, 2003–2004

Table 3: Number of women participating in BreastScreen Australia by age, states and territories, 2002–2003

Table 4: Percentage of women participating in BreastScreen Australia, states and territories, 2002–2003

Table 5: Number of women participating in BreastScreen Australia by age, states and territories, 2001–2002

Table 6: Percentage of women participating in BreastScreen Australia, states and territories, 2001–2002

Table 7: Number of women participating in BreastScreen Australia by age, states and territories, 2000–2001

Table 8: Percentage of women participating in BreastScreen Australia, states and territories, 2000–2001

Table 9: Number of women participating in BreastScreen Australia by age, states and territories, 1999–2000

Table 10: Percentage of women participating in BreastScreen Australia, states and territories, 1999–2000

Table 11: Number of women participating in BreastScreen Australia by age, states and territories, 1998–1999

Table 12: Percentage of women participating in BreastScreen Australia, states and territories, 1998–1999

Table 13: Number of women participating in BreastScreen Australia by age, states and territories, 1997–1998

Table 14: Percentage of women participating in BreastScreen Australia, states and territories, 1997–1998

Table 15: Number of women participating in BreastScreen Australia by age, states and territories, 1996–1997

Table 16: Percentage of women participating in BreastScreen Australia, states and territories, 1996–1997

Table 17: Participation in BreastScreen Australia by age and region, 2003–2004

Table 18: Participation in BreastScreen Australia by age and region, 2001–2002

Indicator 2: Detection rate for small invasive cancers

Indicator 3a: Interval cancer rate

Indicator 3b: Program sensitivity

Indicator 4: Ductal carcinoma in situ

Indicator 5: Recall to assessment rate

Indicator 6: Rescreen rate

Indicator 7a: Incidence of breast cancer

Indicator 7b: Incidence of ductal carcinoma in situ

Indicator 8: Mortality

Appendix C: BreastScreen Australia state programs contact list

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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 and is accepted as such by the community with which he or she is associated.

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 tenth 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 six 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, or
- an invasive breast cancer diagnosed between six 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 Australian Bureau of Statistics 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 and education of health practitioners and the general public. Women are encouraged to attend every two 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 commences at the date of attendance for screening. It is completed when:

(i) a recommendation is made to return the woman to routine rescreening

(ii) a recommendation is made for early review at 6 months or more from the screening date

(iii) a diagnosis of cancer is made

(iv) the woman fails to attend for technical recall or assessment within 6 months

(v) 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, 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 A 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.

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