

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 (DHS 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.

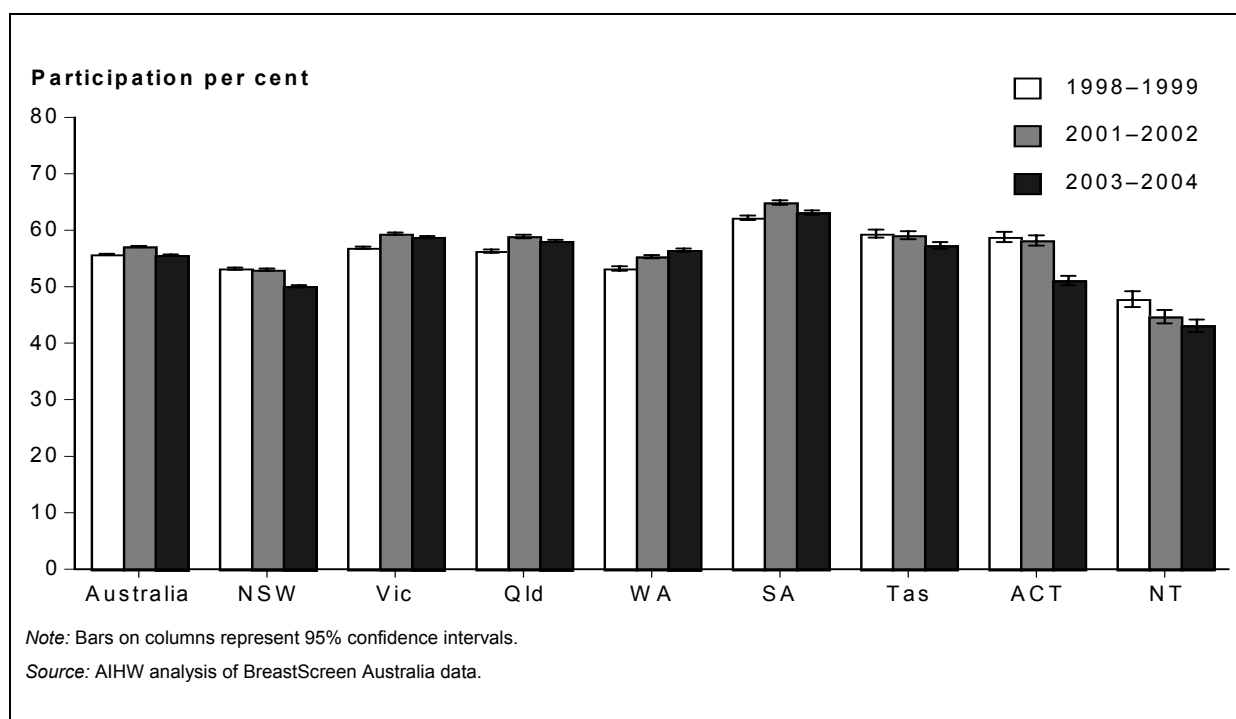
Main language spoken at home

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



	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

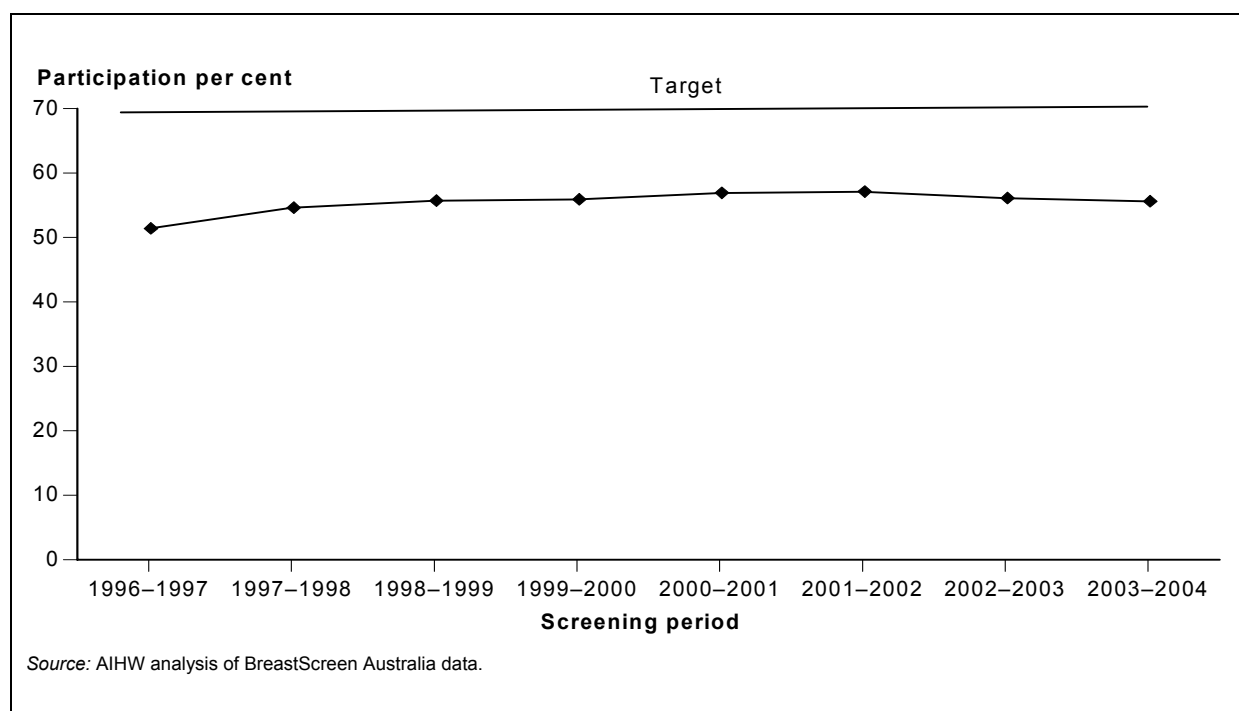
1. Rates are the number of women screened as a percentage of the eligible female population and age-standardised to the Australian population at 30 June 2001.
2. Periods cover 1 January 1998 to 31 December 1999, 1 January 2001 to 31 December 2002 and 1 January 2003 to 31 December 2004.

- 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



	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.

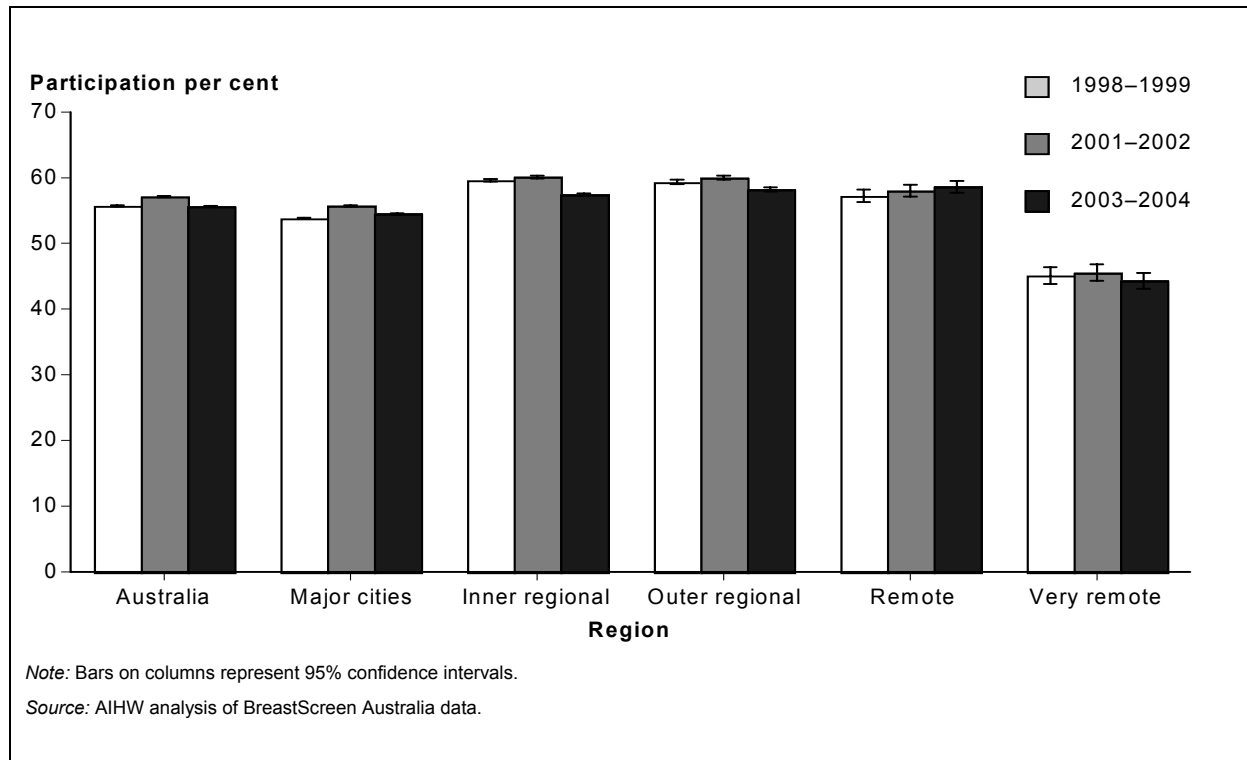
Notes

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



	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.

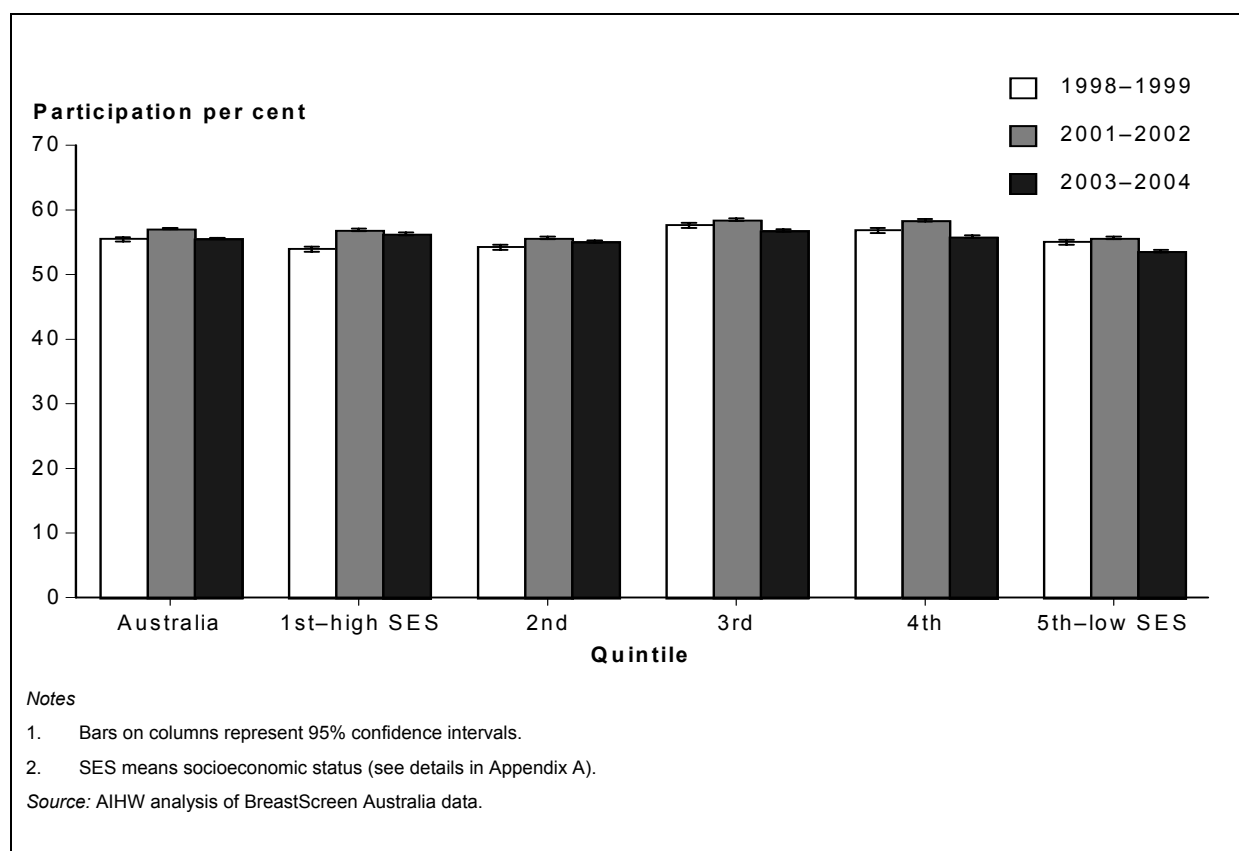
Notes

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



	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.

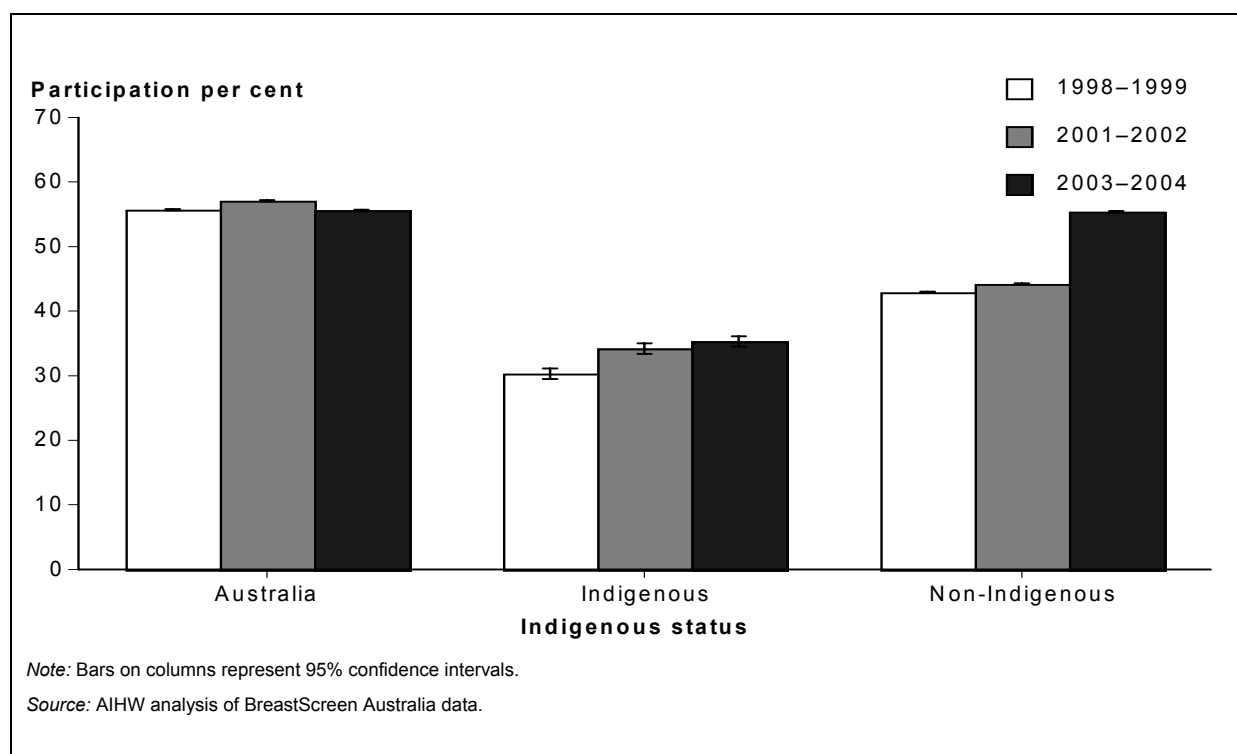
Notes

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



	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.

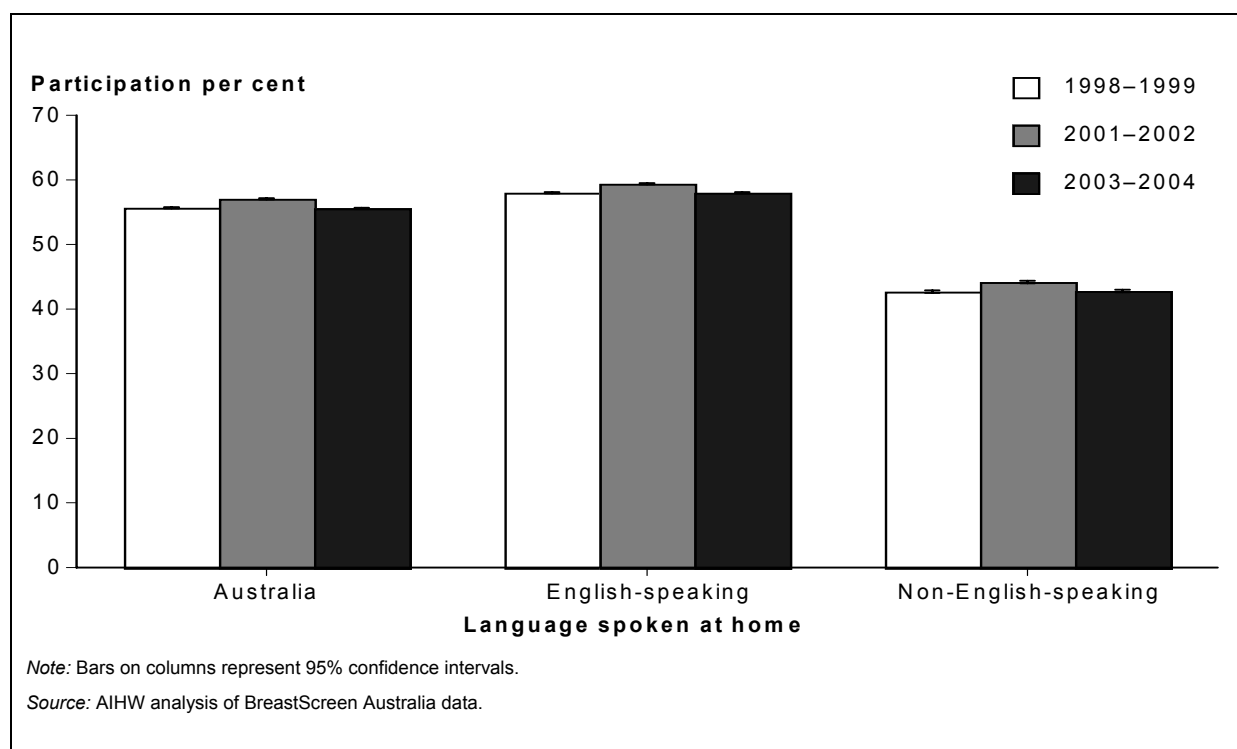
Note:

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



	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.

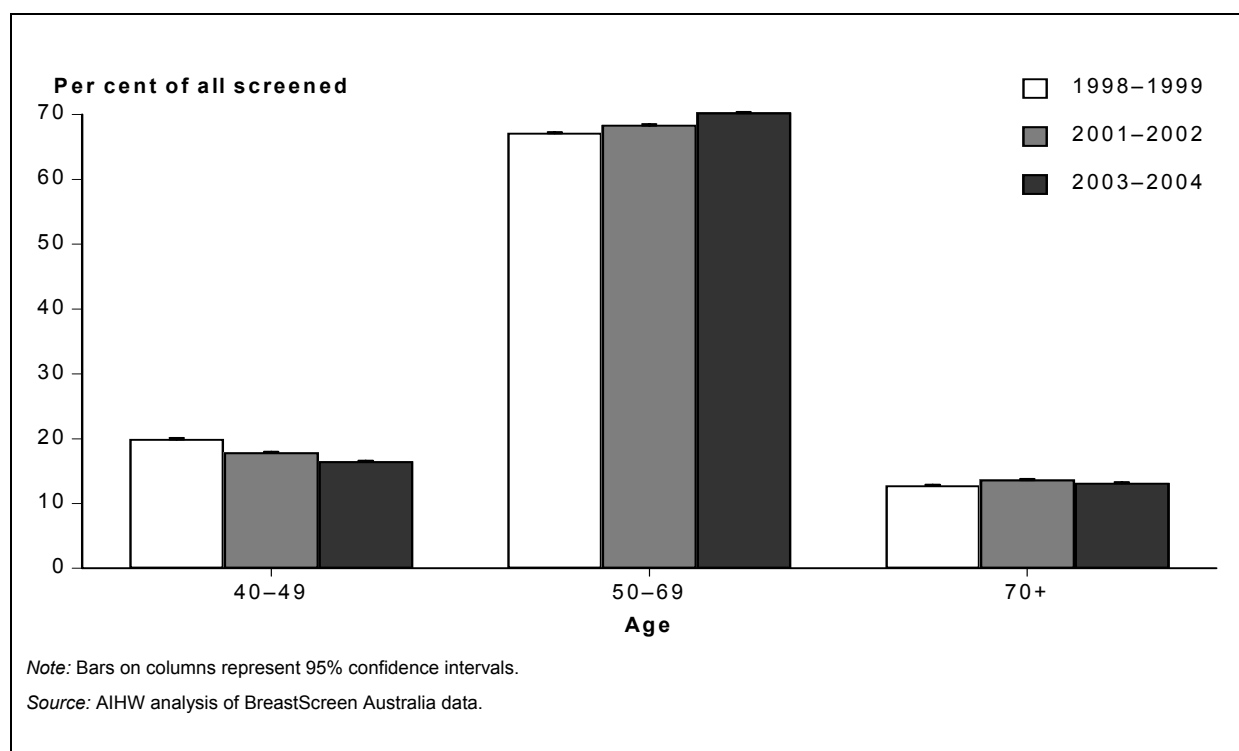
Note:

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



	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.