

Indicator 1: Participation

Participation rate

The participation rate is the percentage of women in the population screened through the BreastScreen Australia Program in a 24-month period by 5-year age groups (40–44, 45–49, 50–54, 55–59, 60–64, 65–69, 70–74, 75–79, 80–84, 85+ years) 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. To some extent, therefore, the results presented in this report are an underestimation of screening on a national basis. This chapter reports on the participation rates for the two-year periods 1998–1999 and 1999–2000. Comparative data are also provided for the three periods 1997–1998, 1998–1999 and 1999–2000.

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 1999–2000 was 56.5%. This rate has been steadily increasing since 1996–1997, when it was 51.4%.

Age-standardised participation rates for women in the target age group (50–69 years), Australia, 1996–1997 to 1999–2000

	Objective ^(a)	1996–1997	1997–1998	1998–1999	1999–2000
Rate (%)	70.0	51.4	54.3	56.0	56.5
95% CI	. .	51.3–51.5	54.2–54.4	55.8–56.1	56.3–56.6

(a) Performance objective of the BreastScreen Australia Program as set out in the National Accreditation Standards (NMQC unpublished).
. . 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 1991.

Source: AIHW analysis of BreastScreen Australia data.

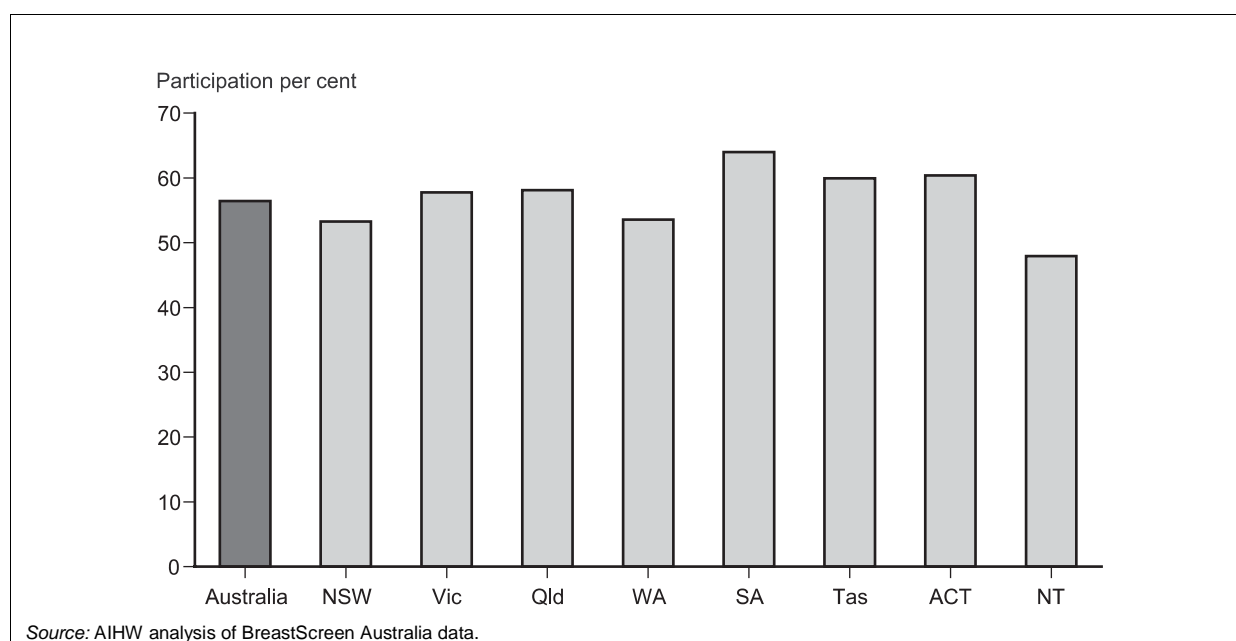
Another BreastScreen Australia objective relating to participation is 'To achieve patterns of participation in the Program which are representative of the socioeconomic, ethnic and cultural profiles of the target population' (BSANAC & DHAC 2000). This chapter reports national participation rates by region, socioeconomic status, Indigenous status, and main language spoken at home.

Participation rates in capital cities and 'other remote areas' were significantly lower than those in other regions. The lower participation rates in capital cities may reflect greater access to private radiology services. Or there may be a group of women in the target age group who are working women and cannot easily access BreastScreen Australia services. For some women, proximity to services may create over familiarity and lead to postponement of screening in order to accommodate other priorities. Lower rates in remote areas may reflect a larger number of Indigenous women in the target age group in these areas who may not find services culturally accessible. However, there are no data to test these hypotheses. Although the participation rate for 'other remote areas' is lower than that for all other regions except capital cities, it is similar to the all-Australia rate. Participation in country areas is encouraged through the use of mobile mammography units.

There was some variation in the participation rates among different socioeconomic groups, but there was no significant difference between the most and least disadvantaged groups. This demonstrates the success of the program in reaching women at all socioeconomic levels, since there is no decline in participation with decreasing socioeconomic status.

Participation among Indigenous women was significantly lower than that of non-Indigenous women. Similarly, participation among women who speak a language other than English at home was significantly lower than that of women who speak English at home. These results should, however, be treated with caution because of the data issues discussed in the report. Results for 1998–1999 and 1999–2000 are reported separately, due to inconsistencies in reporting over the two periods.

Participation of women aged 50–69 years in BreastScreen Australia, 1999–2000



	Australia	NSW	Vic	Qld	WA	SA	Tas	ACT	NT
Rate (%)	56.5	53.3*	57.8*	58.1*	53.6*	64.0*	59.9*	60.4*	47.9*
95% CI	56.3–56.6	53.1–53.4	57.5–58.0	57.8–58.4	53.2–53.9	63.6–64.4	59.2–60.6	59.4–61.4	46.5–49.3

* Significantly different from the all-Australia rate.

Notes

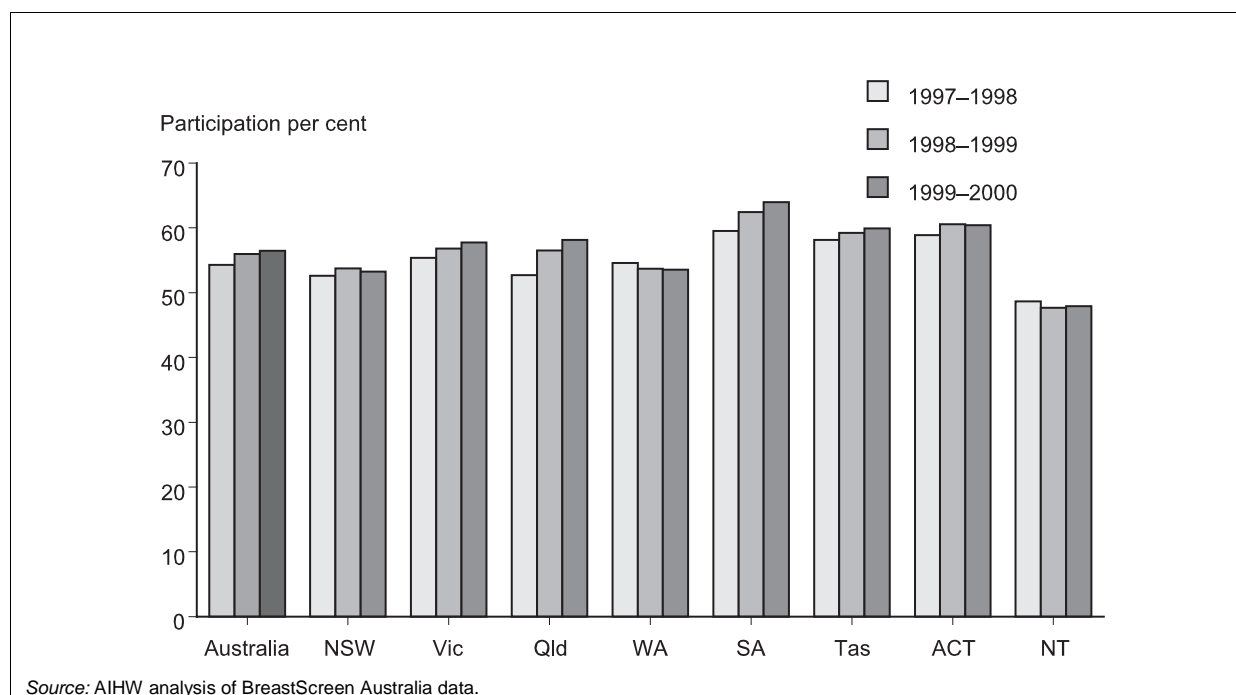
1. Rates are the number of women screened as a percentage of the eligible female population and age-standardised to the Australian population at 30 June 1991.
2. Period covers 1 January 1999 to 31 December 2000.
3. BreastScreen services are not provided in the remote areas of the Northern Territory. Women in these areas are offered a clinical breast examination as part of a well women's screening episode.

- Nationally, 1,496,417 women attended a BreastScreen Australia service in the two-year period 1999–2000. Of these, 1,011,394 (68%) were in the target age group (50–69 years).
- The age-standardised participation rates for Australian women attending BreastScreen Australia were 37.1% for women aged 40 and over and 56.5% for women in the target age group.
- The age-standardised participation rate in the target age group ranged from 47.9% in the Northern Territory to 64.0% in South Australia.

For more information, see:

Tables 1b and 2b.

Participation of women aged 50–69 years in BreastScreen Australia, 1997–1998, 1998–1999 and 1999–2000



	Australia	NSW	Vic	Qld	WA	SA	Tas	ACT	NT
1997–1998	54.3	52.6	55.4	52.7	54.6	59.5	58.2	58.9	48.6
95% CI	54.2–54.4	52.4–52.8	55.2–55.6	52.5–52.9	54.2–54.9	59.2–59.9	57.6–58.8	58.0–59.7	47.4–49.9
1998–1999	56.0*	53.8*	56.8*	56.5*	53.7	62.4*	59.2	60.6	47.7
95% CI	55.8–56.1	53.6–53.9	56.6–57.0	56.2–56.8	53.3–54.0	62.1–62.9	58.5–59.9	59.5–61.5	46.2–49.2
1999–2000	56.5*	53.3*	57.8*	58.1*	53.6	64.0*	59.9	60.4	47.9
95% CI	56.3–56.6	53.1–53.4	57.5–58.0	57.8–58.4	53.2–53.9	63.6–64.4	59.2–60.6	59.4–61.4	46.5–49.3

*Significantly different from the rate for the previous two-year period.

Notes

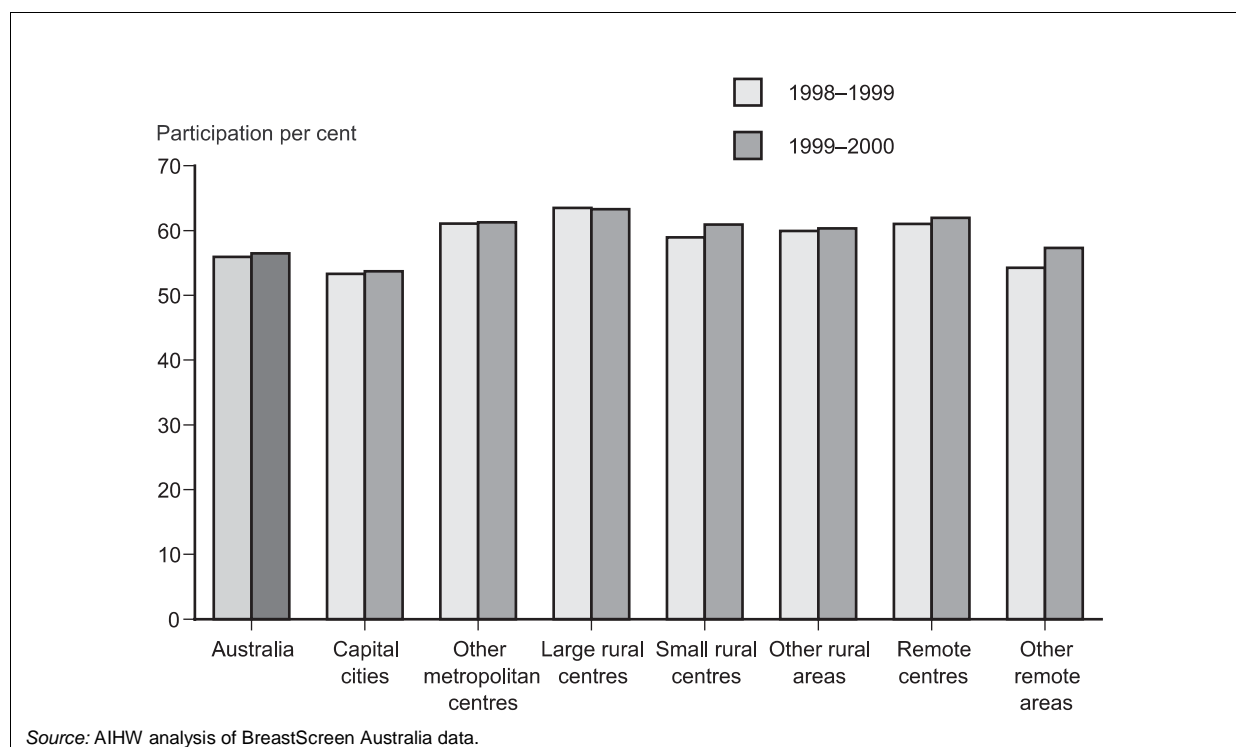
1. Rates are the number of women screened as a percentage of the eligible female population and age-standardised to the Australian population at 30 June 1991.
2. Periods cover 1 January 1997 to 31 December 1998, 1 January 1998 to 31 December 1999, and 1 January 1999 to 31 December 2000.
3. BreastScreen services are not provided in the remote areas of the Northern Territory. Women in these areas are offered a clinical breast examination as part of a well women's screening episode.

- The age-standardised participation rate for Australian women in the target age group (50–69 years) increased significantly from 54.3% in 1997–1998 to 56.0% in 1998–1999 and 56.5% in 1999–2000.

For more information, see:

Tables 1a, 1b, 2a and 2b.

Participation of women aged 50–69 years in BreastScreen Australia by region, 1998–1999 and 1999–2000



	Australia	Capital cities metropolitan	Other metropolitan centres	Large rural centres	Small rural centres	Other rural areas	Remote centres	Other remote
1998–1999	55.9	53.3*	61.0*	63.5*	58.9*	59.9*	61.0*	54.2*
95% CI	55.8–56.1	53.2–53.4	60.6–61.4	63.0–64.0	58.5–59.3	59.7–60.2	59.6–62.4	53.4–55.2
1999–2000	56.5	53.7*	61.3*	63.3*	60.9*	60.3*	62.0*	57.3
95% CI	56.3–56.6	53.6–53.9	60.9–61.7	62.8–63.8	60.5–61.3	60.0–60.6	60.6–63.4	56.3–58.3

* Significantly different from the all-Australia rate for the corresponding period.

Notes

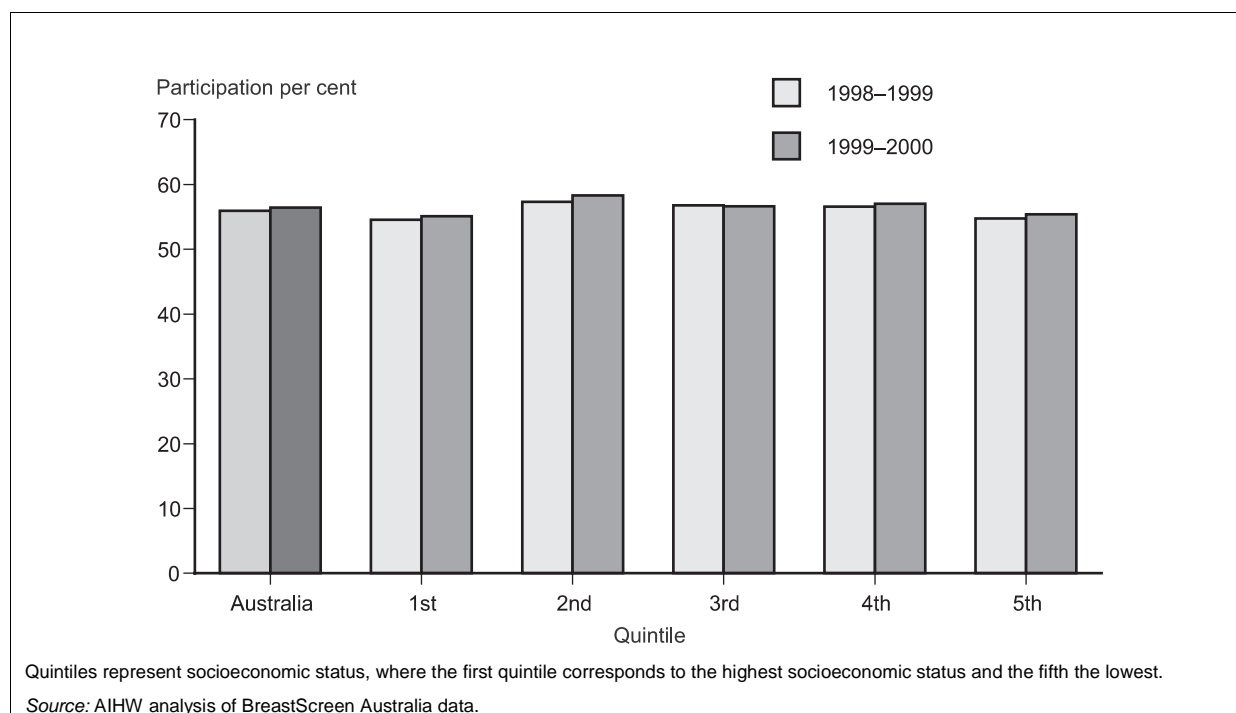
1. Rates are the number of women screened as a percentage of the eligible female population and age-standardised to the Australian population at 30 June 1991.
2. Periods cover 1 January 1998 to 31 December 1999 and 1 January 1999 to 31 December 2000.

- Regional participation rates in 1999–2000 for the target age group (50–69 years) ranged from 53.7% in capital cities to 63.3% in large rural centres. The rate in capital cities was significantly lower than the all-Australia rate, and the rate in large rural centres was significantly higher.
- The regional participation rates for 1998–1999 showed a pattern similar to that of 1999–2000.

For more information, see:

Tables 3a and 3b and Appendix A.

Participation of women aged 50–69 years in BreastScreen Australia by socioeconomic status, 1998–1999 and 1999–2000



	Australia	1st quintile	2nd quintile	3rd quintile	4th quintile	5th quintile
1998–1999	55.9	54.6*	57.3*	56.8*	56.6*	54.7*
95% CI	55.8–56.1	54.3–54.8	57.0–57.6	56.5–57.0	56.3–56.8	54.5–55.0
1999–2000	56.5	55.1*	58.3*	56.6	57.0*	55.4*
95% CI	56.3–56.6	54.9–55.4	58.0–58.6	56.4–56.9	56.8–57.3	55.2–55.6

* Significantly different from the all-Australia rate for the corresponding period.

Notes

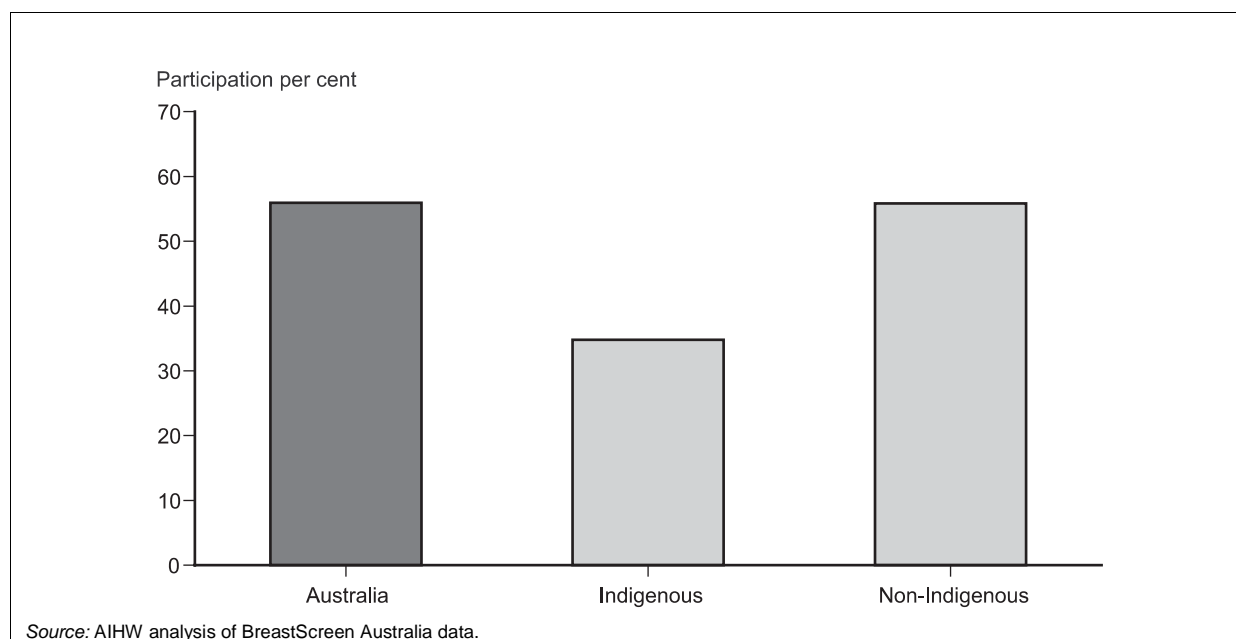
1. Rates are the number of women screened as a percentage of the eligible female population and age-standardised to the Australian population at 30 June 1991.
2. Periods cover 1 January 1998 to 31 December 1999 and 1 January 1999 to 31 December 2000.
3. Participants are allocated to quintiles by mapping their postcode to the Index of Relative Socioeconomic Disadvantage (Appendix A). The first quintile corresponds to the highest socioeconomic status and the fifth to the lowest.

- Participation rates by socioeconomic status in 1999–2000 for the target age group (50–69 years) ranged from 55.1% in the highest group (first quintile) to 58.3% in the second quintile. The rates in these two categories were significantly different from the all-Australia rate. There was no significant difference between the most (fifth quintile) and least (first quintile) disadvantaged groups. Rates in 1998–1999 were similar to those in 1999–2000.

For more information, see:

Tables 4a, 4b and Appendix A.

Participation of women aged 50–69 years in BreastScreen Australia by Indigenous status, 1998–1999



	Australia	Indigenous	Non-Indigenous
Rate (%)	55.9	34.8*	55.9
95% CI	55.8–56.1	33.8–35.7	55.8–56.0

* Significantly different from the all-Australia rate.

Notes

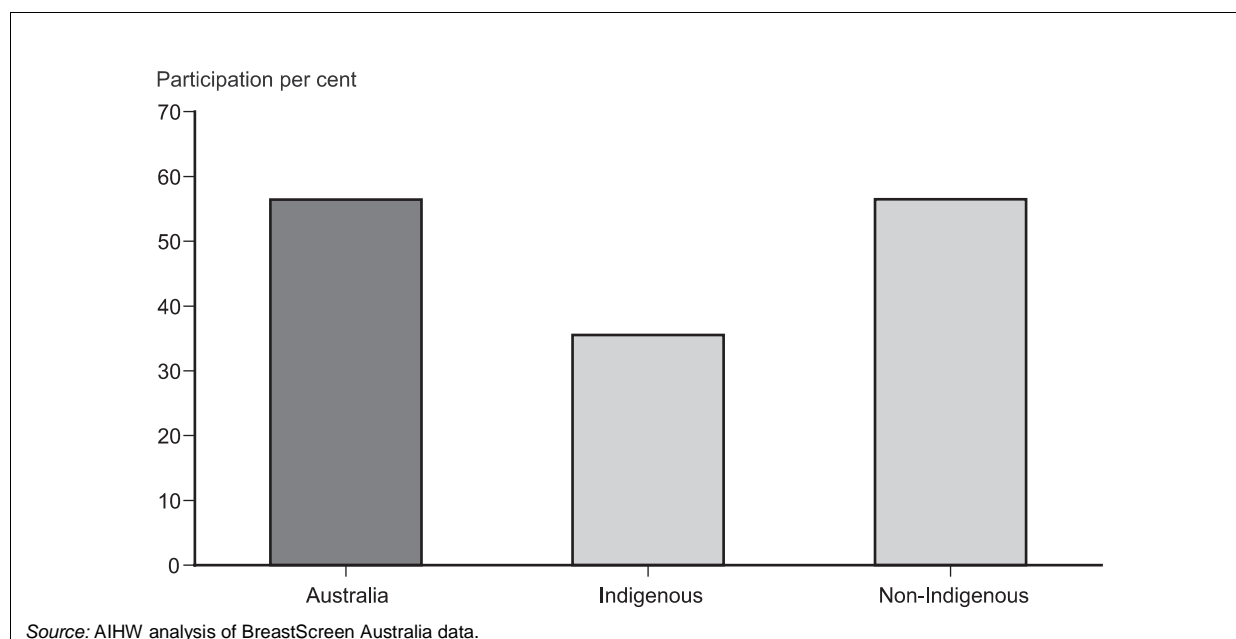
1. Rates are the number of women screened as a percentage of the eligible female population and age-standardised to the Australian population at 30 June 1991.
2. Period covers 1 January 1998 to 31 December 1999.
3. Women whose Indigenous status was recorded as 'not stated' are included in the analysis for all women but excluded from the analysis by Indigenous status.

- Of the 1,452,263 women screened by BreastScreen Australia in the two-year period 1998–1999, 9,523 (0.7%) identified themselves as Indigenous. While 6,952 women were classified as not stating whether they were Indigenous or non-Indigenous (4,892 women in the target age group), the true figure is higher because some jurisdictions classified women who did not give their Indigenous status as 'non-Indigenous' (Appendix A). The comparison between the participation rates of Indigenous and non-Indigenous women should therefore be treated with caution (Table 5a).
- The participation rate for Indigenous women in the target age group was significantly lower than the rate for all Australian women: 34.8% of Indigenous women attended a BreastScreen Australia service in 1998–1999, compared with 55.9% of all Australian women (Table 5a).

For more information, see:

Table 5a and Appendix A.

Participation of women aged 50–69 years in BreastScreen Australia by Indigenous status, 1999–2000



	Australia	Indigenous	Non-Indigenous
Rate (%)	56.5	35.5*	56.5
95% CI	56.3–56.6	34.6–36.4	56.4–56.6

* Significantly different from the all-Australia rate.

Notes

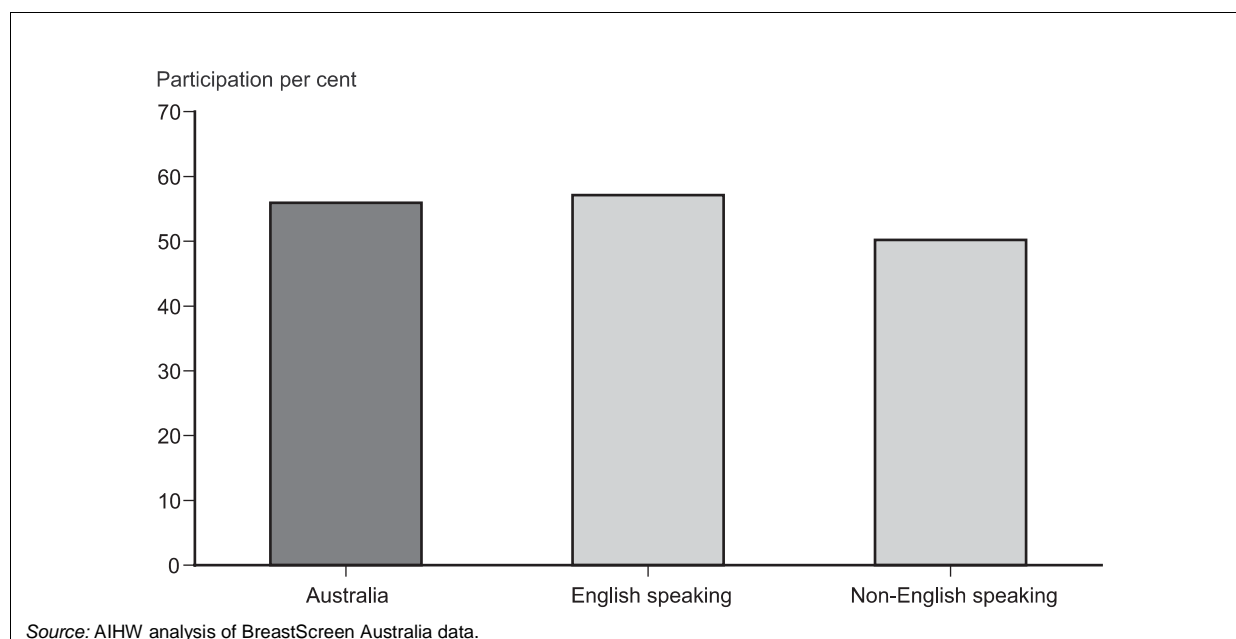
1. Rates are the number of women screened as a percentage of the eligible female population and age-standardised to the Australian population at 30 June 1991.
2. Period covers 1 January 1999 to 31 December 2000.
3. Women whose Indigenous status was recorded as 'not stated' are included in the analysis for all women but excluded from the analysis by Indigenous status.

- Of the 1,496,417 women participating in screening through the BreastScreen Australia Program in 1999–2000, 9,948 (0.7%) identified themselves as being Indigenous. While 3,917 women were classified as not stating whether they were Indigenous or non-Indigenous (2,937 women in the target age group), the true figure is higher because some jurisdictions classified women who did not give their Indigenous status as 'non-Indigenous' (Appendix A). The comparison of participation rates between Indigenous and non-Indigenous women should therefore be treated with caution.
- The participation rate for Indigenous women was significantly lower than the rate for non-Indigenous women. This applied both for women in the target age group and for women aged 40 and over.

For more information, see:

Table 5b and Appendix A.

Participation of women aged 50–69 years in BreastScreen Australia by language spoken at home, 1998–1999



	Australia	English speaking	Non-English speaking
Rate (%)	55.9	57.1*	50.2*
95% CI	55.8–56.1	57.0–57.2	50.0–50.5

* Significantly different from the all-Australia rate.

Notes

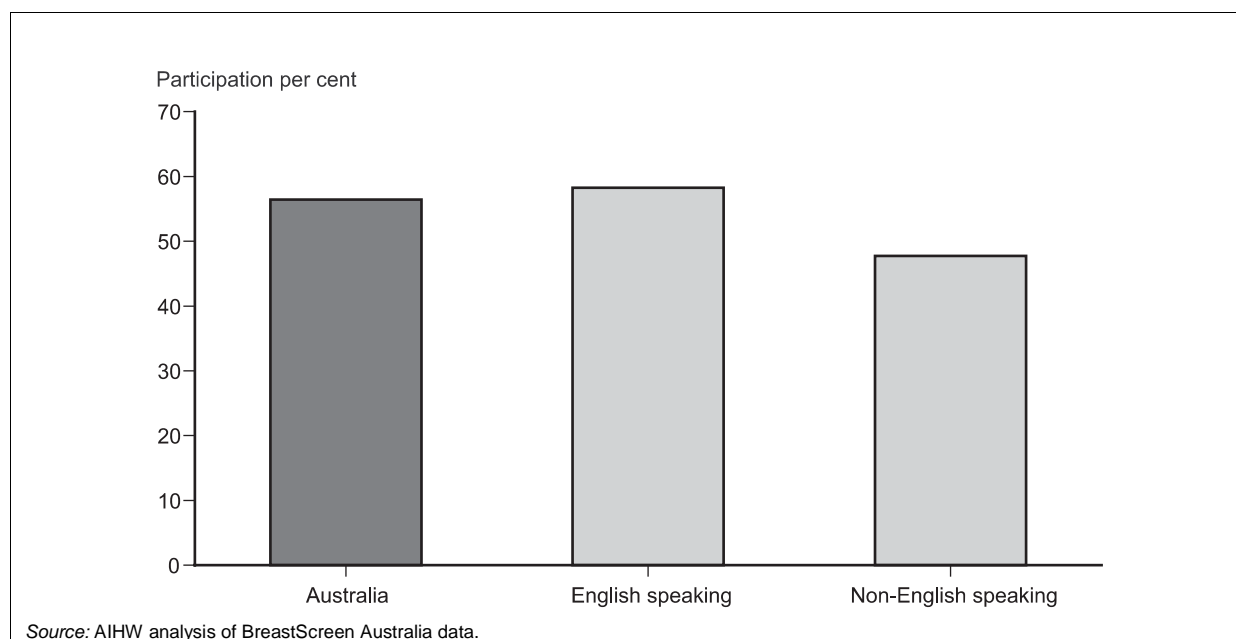
1. Rates are the number of women screened as a percentage of the eligible female population and age-standardised to the Australian population at 30 June 1991.
2. Period covers 1 January 1998 to 31 December 1999.
3. Women who were recorded as not stating their language spoken at home are included in the analysis for all women but excluded from the analysis by language.

- Of the 1,452,263 women screened by BreastScreen Australia in 1998–1999, 206,880 (14%) women indicated that they spoke a language other than English at home. In the target age group, 50–69 years, the number was 148,369 (Table 6a). While 682 women were classified as not stating whether they spoke English or another language at home (454 in the target age group), the true figure is higher because some jurisdictions did not use the 'not stated' classification (Appendix A). Women in these jurisdictions who did not state the language they spoke at home were allocated to one of the other two categories. Comparison of participation rates between English-speaking and non-English speaking women should therefore be treated with caution.
- For women aged 50–69 years, the participation rate for women of non-English speaking background (50.2%) was significantly lower than the rate for English-speaking women (57.1%).

For more information, see:

Table 6a and Appendix A.

Participation of women aged 50–69 years in BreastScreen Australia by language spoken at home, 1999–2000



	Australia	English speaking	Non-English speaking
Rate (%)	56.5	58.3*	47.7*
95% CI	56.3–56.6	58.2–58.4	47.5–48.0

* Significantly different from the all-Australia rate.

Notes

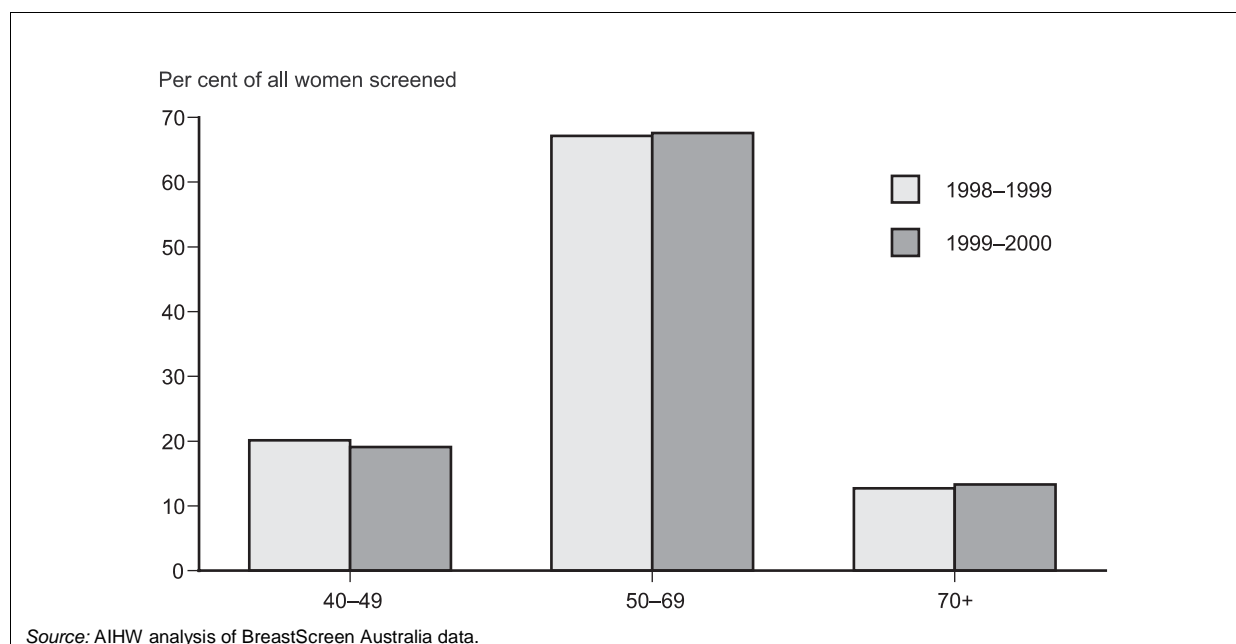
1. Rates are the number of women screened as a percentage of the eligible female population and age-standardised to the Australian population at 30 June 1991.
2. Period covers 1 January 1999 to 31 December 2000.
3. Women who were recorded as not stating their language spoken at home are included in the analysis for all women but excluded from the analysis by language.

- Of the 1,496,417 women participating in screening through the BreastScreen Australia Program in 1999–2000, 199,458 (13%) were classified as non-English speaking (Table 6b). While 157 women were classified as not stating whether they spoke English or another language at home (97 women in the target age group), the true figure is higher because some jurisdictions did not use the 'not stated' classification (Appendix A). Women in these jurisdictions who did not state the language they spoke at home were allocated to one of the other two categories. Comparison of participation rates between English-speaking and non-English speaking women should therefore be treated with caution.
- The age-standardised participation rate for non-English speaking women in the target age group was significantly lower than the rate for English-speaking women.

For more information, see:

Table 6b and Appendix A.

Age distribution of women aged 40 years and over participating in BreastScreen Australia, 1998–1999 and 1999–2000



Age (years)	40–49	50–69	70+
1998–1999 (%)	20.1	67.2	12.7
1999–2000 (%)	19.1	67.6	13.3

Notes

1. Rates are the number of women screened as a percentage of all women aged 40 or more screened by BreastScreen Australia.
2. Periods cover 1 January 1998 to 31 December 1999 and 1 January 1999 to 31 December 2000.

- The majority (67.6%) of women screened by BreastScreen Australia in 1999–2000 were in the target age group (50–69 years); 19.1% were in the 40–49 years group; and 13.3% were aged 70 or more. The distribution of participants by age showed little change between 1998–1999 and 1999–2000.

For more information, see:

Table 1a, 1b, 2a and 2b.