

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 (40–49, 50–59, 60–69, 70+ years), time since screen (0–12 months, 13–24 months, and 0–24 months) and screening round (first or subsequent).

3b. Program sensitivity

The program sensitivity rate is the percentage of women with screen-detected invasive breast cancer amongst all women diagnosed with invasive breast cancer during the screening interval (screen-detected and interval cancers). It is stratified by 10-year age groups (40–49, 50–59, 60–69, 70+ years), time since screen (0–12 months, 0–24 months) and screening round (first or subsequent).

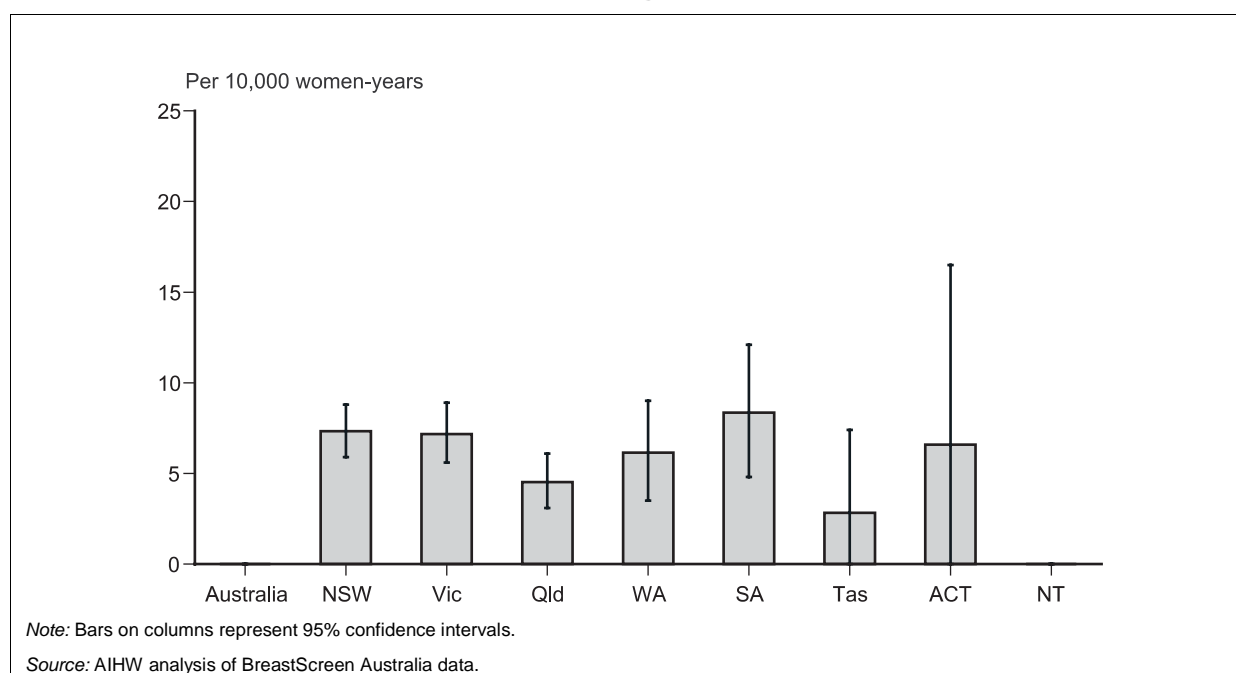
The sensitivity indicator

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 (see the glossary for definitions of ‘women-years’ and ‘interval cancers’). It measures how effective the BreastScreen Australia Program is at detecting the presence of breast cancer in well women. A low interval cancer rate suggests that the screening process is effective.

Program sensitivity measures the ability of the Program to detect invasive breast cancers in women attending for screening. The Program needs to achieve a high sensitivity in order to be effective. 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 screening interval.

In this chapter data for the years 1996, 1997 and 1998 are combined. This aggregation improves the stability of rates, especially those for the small states and territories. Data for the Northern Territory were unavailable at the time this report was compiled. Data for New South Wales were incomplete for 1998, so could not be included for 13–24 months or 0–24 months follow-up.

Interval cancer rate for women aged 50–69 years, screened during 1996, 1997 and 1998, first screening round, 0–12 months follow-up



	Australia	NSW	Vic	Qld	WA	SA	Tas	ACT	NT
Rate	n.a.	7.3	7.2	4.5	6.1	8.4	2.8	6.6	n.a.
95% CI	n.a.	5.9–8.8	5.6–8.9	3.1–6.1	3.5–9.0	4.8–12.1	0.0–7.4	0.0–16.5	n.a.

n.a. Not available.

Notes

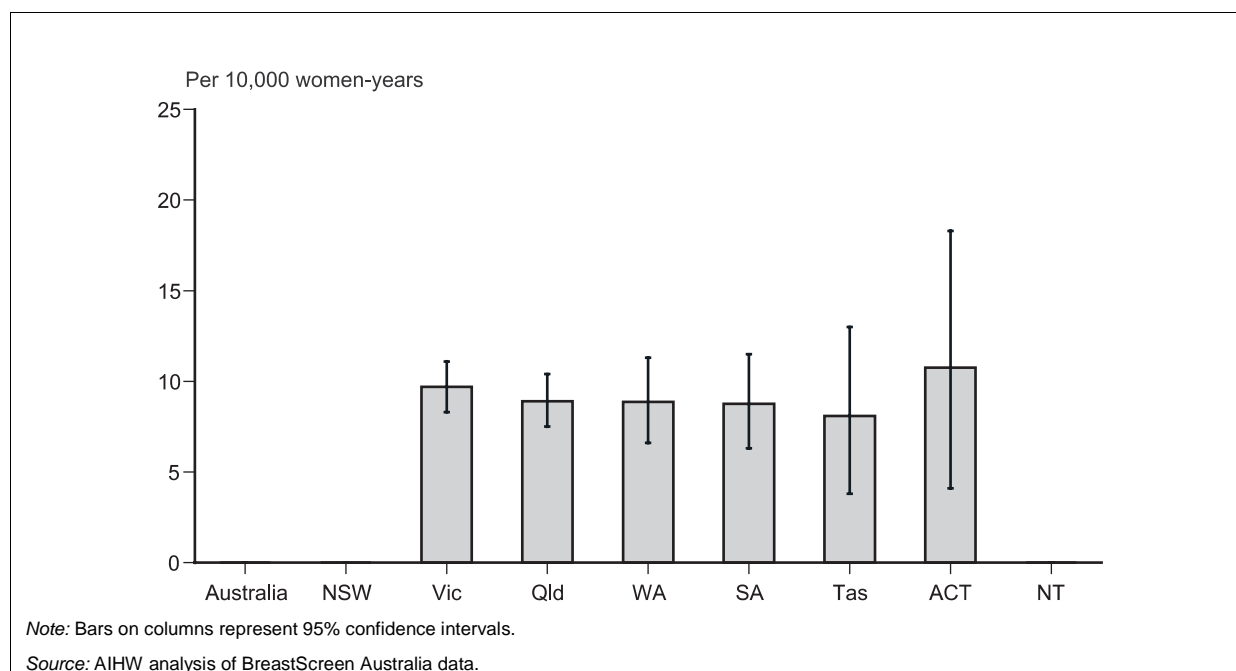
1. Rates are the number of interval cancers detected per 10,000 women-years and age-standardised to the population of women attending a BreastScreen Australia service in 1998.
2. Northern Territory data were unavailable at the time of publication.
3. NSW rates include women with a personal history of breast cancer in the denominator.
4. It is BreastScreen SA policy not to recall symptomatic women to assessment. If breast cancers are diagnosed in these women, they will appear as interval cancers.
5. It is BreastScreen Tasmania policy to only recall symptomatic women if a mammographic abnormality is present.

- Across the states and territories, the age-standardised rates of interval cancer for women in the target age group (50–69 years) 0–12 months after their first screen ranged from 2.8 per 10,000 women-years in Tasmania to 8.4 per 10,000 women-years in South Australia.

For more information, see:

Table 19.

Interval cancer rate for women aged 50–69 years, screened during 1996, 1997 and 1998, first screening round, 0–24 months follow-up



	Australia	NSW	Vic	Qld	WA	SA	Tas	ACT	NT
Rate	n.a.	n.a.	9.7	8.9	8.9	8.8	8.1	10.8	n.a.
95% CI	n.a.	n.a.	8.3–11.1	7.5–10.4	6.6–11.3	6.3–11.5	3.8–13.0	4.1–18.3	n.a.

n.a. Not available.

Notes

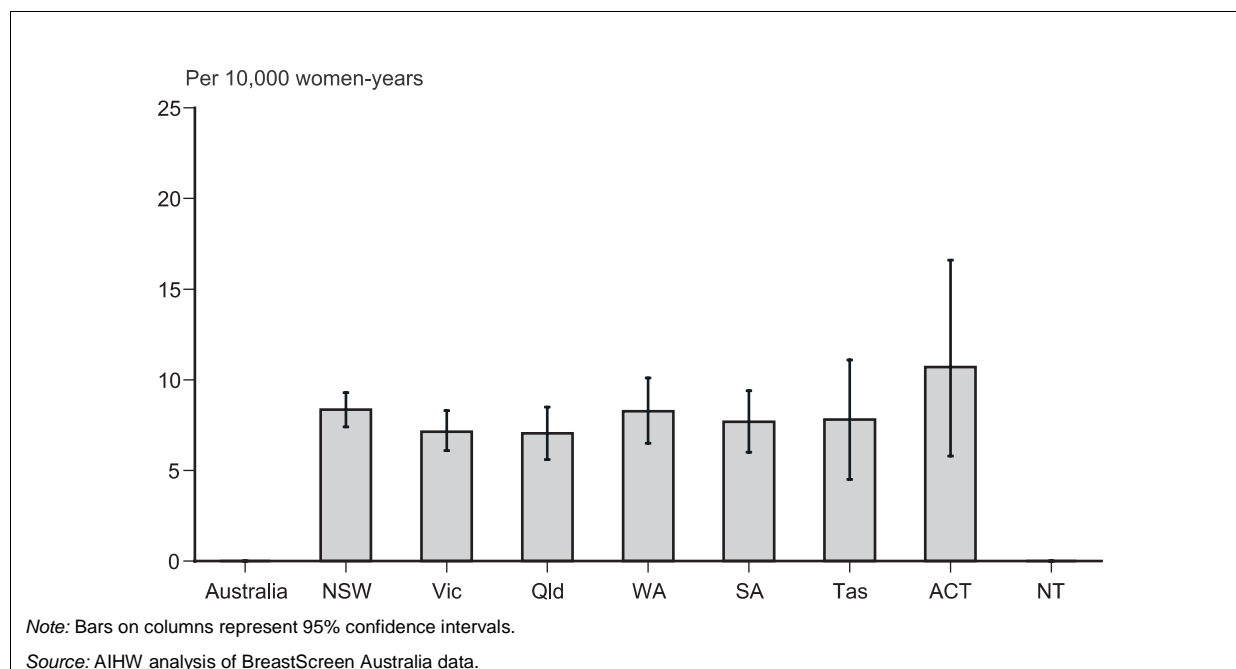
1. Rates are the number of interval cancers detected per 10,000 women-years and age-standardised to the population of women attending a BreastScreen Australia service in 1998.
2. New South Wales and Northern Territory data were unavailable at the time of publication.
3. It is BreastScreen SA policy not to recall symptomatic women to assessment. If breast cancers are diagnosed in these women, they will appear as interval cancers.
4. It is BreastScreen Tasmania policy to only recall symptomatic women if a mammographic abnormality is present.

- Across the states and territories, the age-standardised rates of interval cancer for women in the target age group 0–24 months after their first screen ranged from 8.1 per 10,000 women-years in Tasmania to 10.8 per 10,000 women-years in the Australian Capital Territory.

For more information, see:

Table 21.

Interval cancer rate for women aged 50–69 years, screened during 1996, 1997 and 1998, subsequent screening rounds, 0–12 months follow-up



	Australia	NSW	Vic	Qld	WA	SA	Tas	ACT	NT
Rate	n.a.	8.4	7.1	7.0	8.3	7.7	7.8	10.7	n.a.
95% CI	n.a.	7.4–9.3	6.1–8.3	5.6–8.5	6.5–10.1	6.0–9.4	4.5–11.1	5.8–16.6	n.a.

n.a. Not available.

Notes

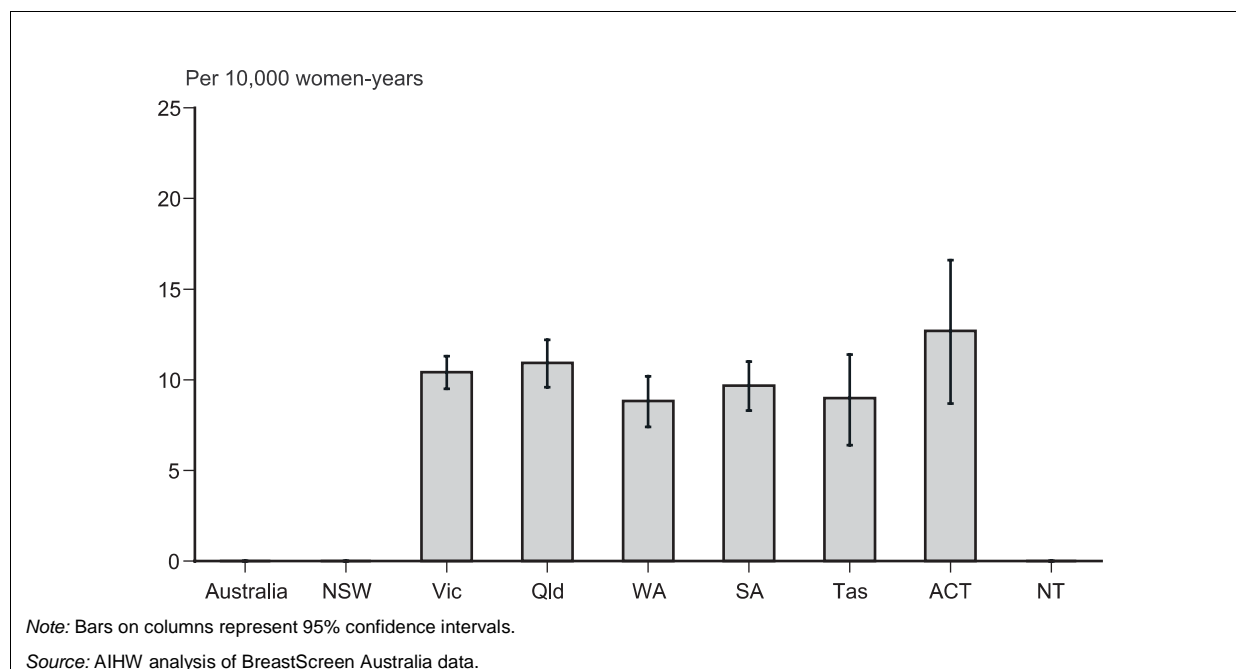
1. Rates are the number of interval cancers detected per 10,000 women-years and age-standardised to the population of women attending a BreastScreen Australia service in 1998.
2. Northern Territory data were unavailable at the time of publication.
3. NSW rates include women with a personal history of breast cancer in the denominator.
4. It is BreastScreen SA policy not to recall symptomatic women to assessment. If breast cancers are diagnosed in these women, they will appear as interval cancers.
5. It is BreastScreen Tasmania policy to only recall symptomatic women if a mammographic abnormality is present.

- Across the states and territories, the age-standardised rates of interval cancer for women in the target age group 0–12 months after their subsequent screen ranged from 7.0 per 10,000 women-years in Queensland to 10.7 per 10,000 women-years in the Australian Capital Territory.

For more information, see:

Table 22.

Interval cancer rate for women aged 50–69 years, screened during 1996, 1997 and 1998, subsequent screening rounds, 0–24 months follow-up



	Australia	NSW	Vic	Qld	WA	SA	Tas	ACT	NT
Rate	n.a.	n.a.	10.4	10.9	8.8	9.7	9.0	12.7	n.a.
95% CI	n.a.	n.a.	9.5–11.3	9.6–12.2	7.4–10.2	8.3–11.0	6.4–11.4	8.7–16.6	n.a.

n.a. Not available.

Notes

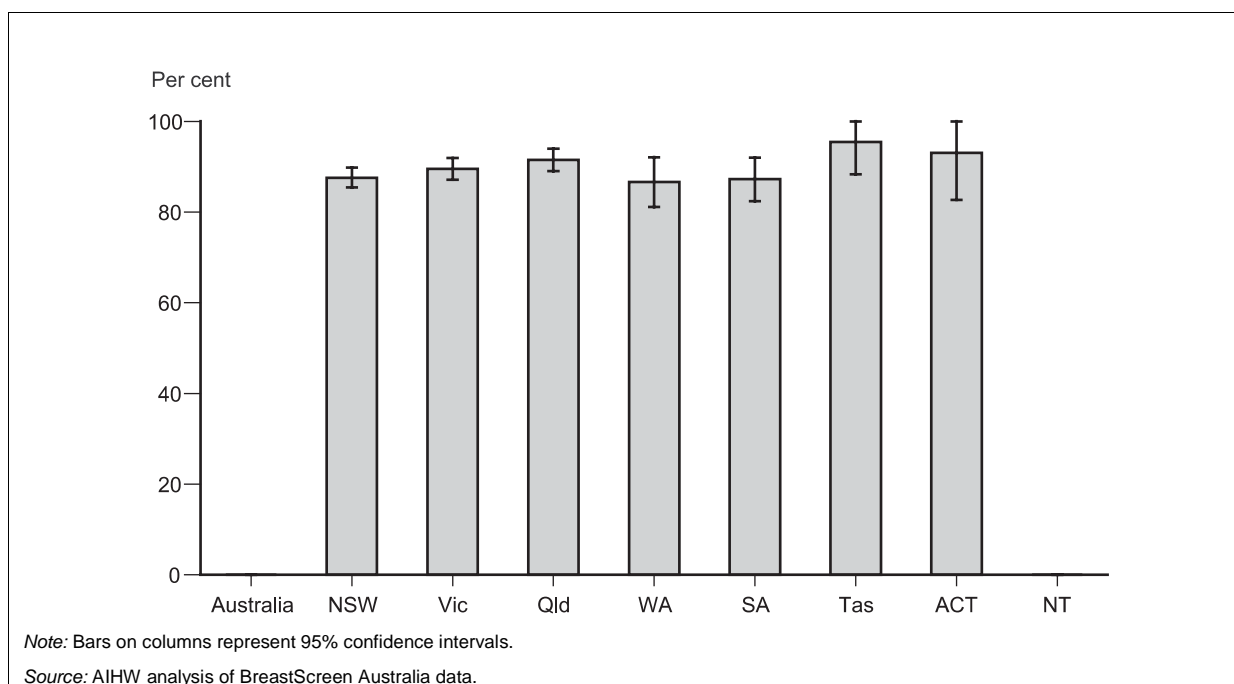
1. Rates are the number of interval cancers detected per 10,000 women-years and age-standardised to the population of women attending a BreastScreen Australia service in 1998.
2. New South Wales and Northern Territory data were unavailable at the time of publication.
3. It is BreastScreen SA policy not to recall symptomatic women to assessment. If breast cancers are diagnosed in these women, they will appear as interval cancers.
4. It is BreastScreen Tasmania policy to only recall symptomatic women if a mammographic abnormality is present.

- Across the states and territories, the age-standardised rates of interval cancer for women in the target age group 0–24 months after their subsequent screen ranged from 8.8 per 10,000 women-years in Western Australia to 12.7 per 10,000 women-years in the Australian Capital Territory.

For more information, see:

Table 24.

Program sensitivity for women aged 50–69 years, screened during 1996, 1997 and 1998, first screening round, 0–12 months follow-up



	Australia	NSW	Vic	Qld	WA	SA	Tas	ACT	NT
Rate	n.a.	87.5	89.5	91.5	86.6	87.3	95.5	93.1	n.a.
95% CI	n.a.	85.4–89.8	87.1–91.9	89.0–94.0	81.1–92.1	82.4–92.0	88.3–100.0	82.7–100.0	n.a.

n.a. Not available.

Notes

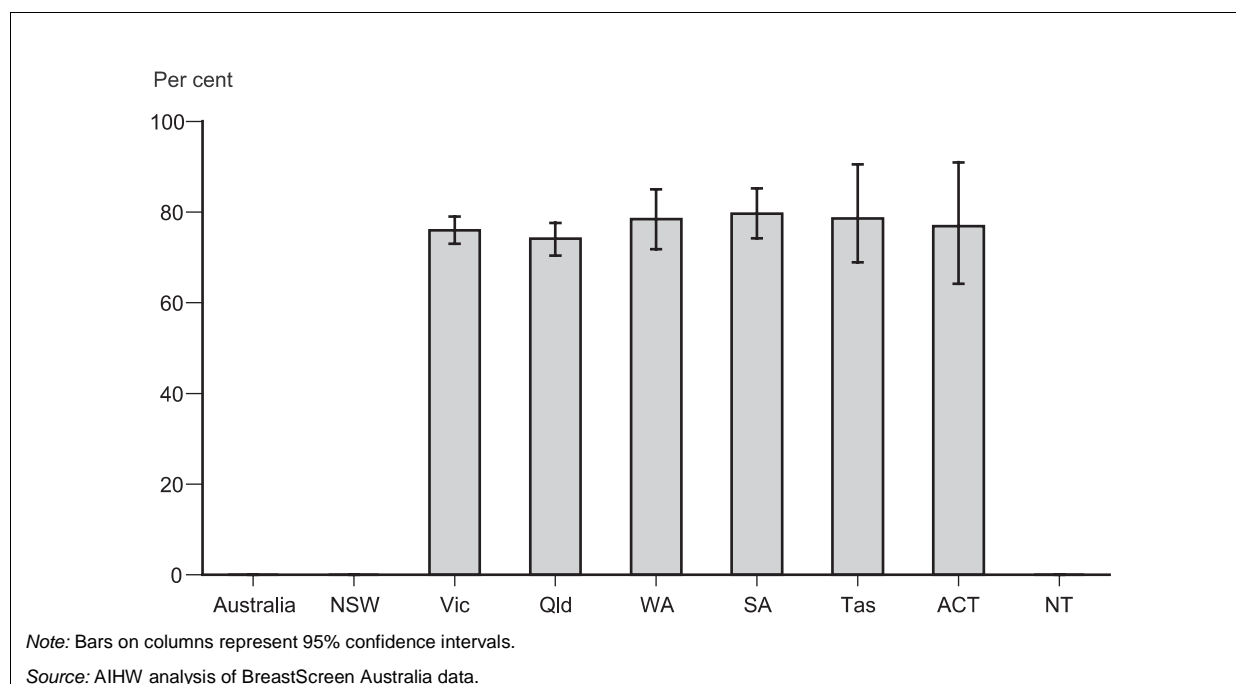
1. Rates are the number of screen-detected cancers as a percentage of all cancers (screen-detected and interval cancers) and age-standardised to the population of women attending a BreastScreen Australia service in 1998.
2. Northern Territory data were unavailable at the time of publication.

- Across the states and territories, the Program sensitivity rate for women in the target age group 0–12 months after their first screen ranged from 86.6% in Western Australia to 95.5% in Tasmania.

For more information, see:

Table 25.

Program sensitivity for women aged 50–69 years, screened during 1996, 1997 and 1998, first screening round, 0–24 months follow-up



	Australia	NSW	Vic	Qld	WA	SA	Tas	ACT	NT
Rate	n.a.	n.a.	75.9	74.1	78.4	79.7	78.6	76.9	n.a.
95% CI	n.a.	n.a.	72.9–78.9	70.6–77.8	71.8–85.0	74.1–85.1	66.7–88.3	62.8–89.6	n.a.

n.a. Not available.

Notes

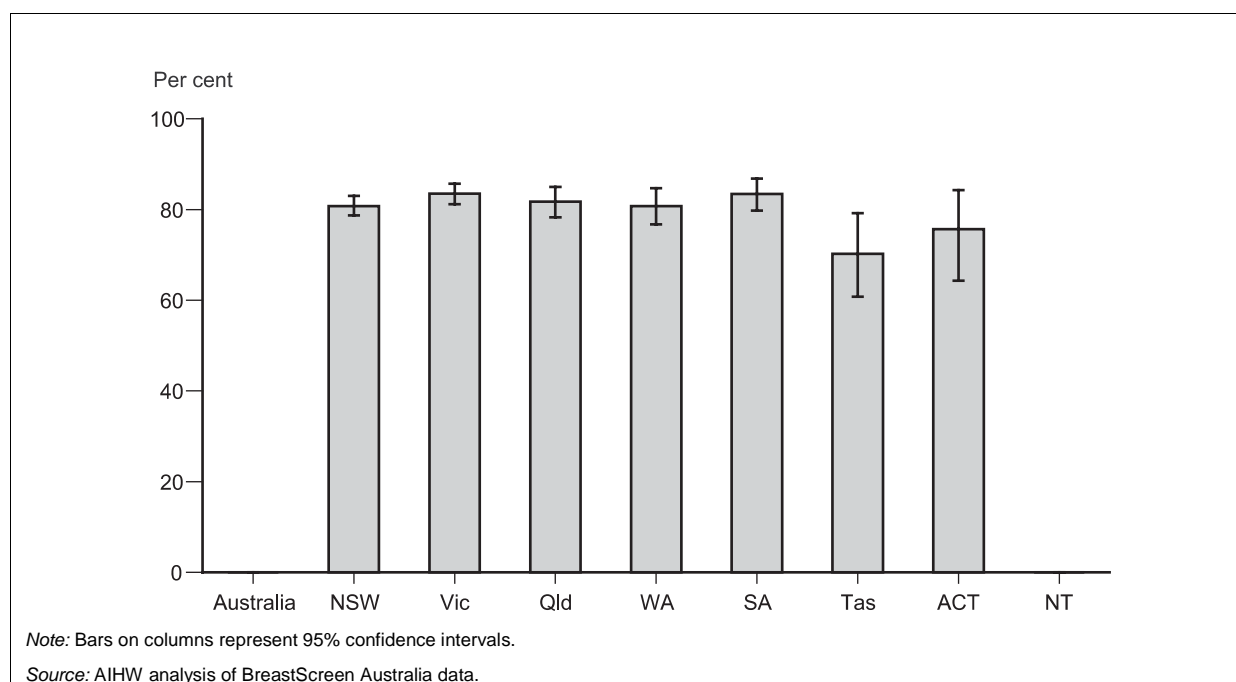
1. Rates are the number of screen-detected cancers as a percentage of all cancers (screen-detected and interval cancers) and age-standardised to the population of women attending a BreastScreen Australia service in 1998.
2. New South Wales and Northern Territory data were unavailable at the time of publication.

- Across the states and territories, the Program sensitivity rate for women in the target age group 0–24 months after their first screen ranged from 74.1% in Queensland to 79.7% in South Australia.

For more information, see:

Table 26.

Program sensitivity for women aged 50–69 years, screened during 1996, 1997 and 1998, subsequent screening rounds, 0–12 months follow-up



	Australia	NSW	Vic	Qld	WA	SA	Tas	ACT	NT
Rate	n.a.	80.8	83.5	81.7	80.8	83.5	70.2	75.7	n.a.
95% CI	n.a.	78.7–83.0	81.2–85.7	78.3–85.0	76.7–84.7	79.8–86.8	60.8–79.2	64.9–83.3	n.a.

n.a. Not available.

Notes

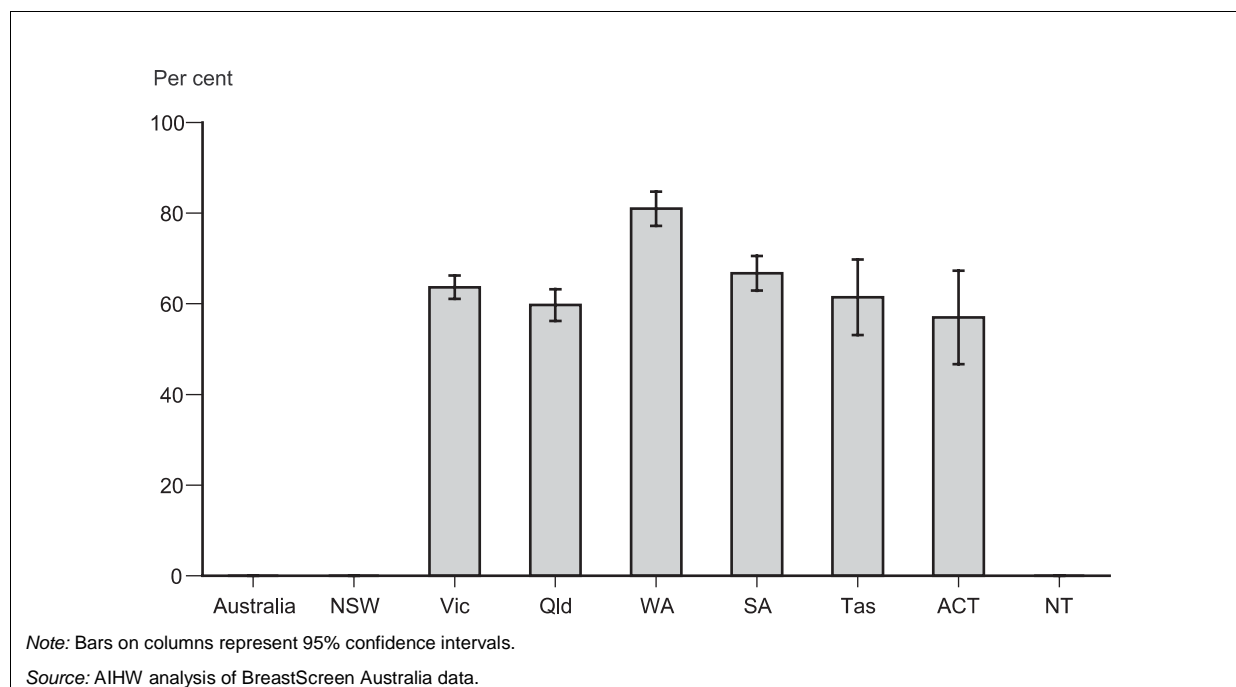
1. Rates are the number of screen-detected cancers as a percentage of all cancers (screen-detected and interval cancers) and age-standardised to the population of women attending a BreastScreen Australia service in 1998.
2. Northern Territory data were unavailable at the time of publication.

- Across the states and territories, the Program sensitivity rate for women in the target age group 0–12 months after their subsequent screen ranged from 70.2% in Tasmania to 83.5% in Victoria and South Australia.

For more information, see:

Table 27.

Program sensitivity for women aged 50–69 years, screened during 1996, 1997 and 1998, subsequent screening rounds, 0–24 months follow-up



	Australia	NSW	Vic	Qld	WA	SA	Tas	ACT	NT
Rate	n.a.	n.a.	63.7	59.7	81.0	66.7	61.4	57.0	n.a.
95% CI	n.a.	n.a.	61.1–66.1	56.2–63.3	77.2–84.9	62.9–70.7	53.1–69.5	46.7–67.6	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. New South Wales and Northern Territory data were unavailable at the time of publication.

- Across the states and territories, the Program sensitivity rate for women in the target age group 0–24 months after their subsequent screen ranged from 57.0% in the Australian Capital Territory to 81.0% in Western Australia.

For more information, see:

Table 28.