

National cervical screening monitoring indicators

This report monitors the performance of the National Cervical Screening Program using ten indicators which measure program activity, performance and outcome. They help measure changes in disease patterns and examine the contribution health interventions may have in preventing or reducing deaths. They can also be used to help evaluate screening or other health interventions.

Screening indicators for the National Cervical Screening Program cover the areas of participation, early re-screening, low- and high-grade abnormality detection, incidence and mortality. These have been endorsed by the National Advisory Committee and state and territory cervical screening programs. A listing of the ten indicators and their definitions follows. The target age group for the National Cervical Screening Program is 20 to 69 years.

Indicator 1: Participation rate for cervical screening

Percentage of women screened in a 24-month period by 5-year age groups (20–24, 25–29, 30–34, 35–39, 40–44, 45–49, 50–54, 55–59, 60–64, 65–69), for all ages (20–80+) and the target age group (20–69 years).

Indicator 2: Early re-screening

Proportion of women re-screened by number of re-screens during a 21-month period following a negative smear.

Indicator 3: Low-grade abnormality detection

Number of women with a histologically verified low-grade intraepithelial abnormality detected in a 12-month period as a ratio of the number of women with a histologically verified high-grade intraepithelial abnormality detected in the same period.

Indicator 4: High-grade abnormality detection

Detection rate for histologically verified high-grade intraepithelial abnormalities per 1,000 women screened in a 12-month period by 5-year age groups (20–24, 25–29, 30–34, 35–39, 40–44, 45–49, 50–54, 55–59, 60–64, 65–69, 70–74, 75–79, 80–84, 85+) and for the target age group (20–69 years, age-standardised).

Indicator 5.1: Incidence of micro-invasive squamous cell carcinoma

Incidence rate of micro-invasive squamous cell carcinoma per 100,000 estimated resident female population in a 12-month period by 5-year age groups (20–24, 25–29, 30–34, 35–39, 40–44, 45–49, 50–54, 55–59, 60–64, 65–69, 70–74, 75–79, 80–84, 85+) and for the target age group (20–69 years, age-standardised).

Indicator 5.2: Incidence of squamous, adenocarcinoma, adeno-squamous and other cervical cancer

Incidence rate of squamous, adenocarcinoma, adeno-squamous and other cervical cancers per 100,000 estimated resident female population in a 12-month period by 5-year age groups (20–24, 25–29, 30–34, 35–39, 40–44, 45–49, 50–54, 55–59, 60–64, 65–69, 70–74, 75–79, 80–84, 85+) and for the target age group (20–69 years, age-standardised).

Indicator 6.1: Mortality

Death rate from cervical cancer per 100,000 estimated resident female population in a 12-month period by 5-year age groups (20–24, 25–29, 30–34, 35–39, 40–44, 45–49, 50–54, 55–59, 60–64, 65–69, 70–74, 75–79, 80–84, 85+) and for the target age group (20–69 years, age-standardised).

Periodic indicators

Periodic indicators have been developed to report on issues that are of importance in monitoring the outcomes of the cervical screening program over a longer period of time than 1 year. This longer period allows for a greater aggregation of information on issues that are subject to wide annual fluctuations and for a more confident and meaningful estimate of the outcomes. The periodic indicators presented in this report are based on a reporting period of 4 years.

Periodic incidence and mortality indicators by location

Geographic region

In all previous reports, analysis of 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 zones.

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 classification, along with a sixth 'Migratory' class, are listed in Table 1.

Table 1: 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 classification is not directly comparable to the RRMA classification. Accessibility is judged purely on distance to one of the urban centres. For example, the ASGC 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.

Indicator 5.3: Incidence by location

Incidence rate of cervical cancer per 100,000 estimated resident female population in a 4-year period by location and 5-year age groups (20–24, 25–29, 30–34, 35–39, 40–44, 45–49, 50–54, 55–59, 60–64, 65–69, 70–74, 75–79, 80–84, 85+) and for the target age group (20–69 years, age-standardised).

Indicator 6.2: Mortality by location

Death rate from cervical cancer per 100,000 estimated resident female population in a 4-year period by location and 5-year age groups (20–24, 25–29, 30–34, 35–39, 40–44, 45–49, 50–54, 55–59, 60–64, 65–69, 70–74, 75–79, 80–84, 85+) and for the target age group (20–69 years, age-standardised).

Indicator 6.3: Indigenous mortality

Death rate from cervical cancer per 100,000 estimated resident female population in a 4-year period by Indigenous status and 5-year age groups (20–24, 25–29, 30–34, 35–39, 40–44, 45–49, 50–54, 55–59, 60–64, 65–69, 70–74, 75+) and for the target age group (20–69 years, age-standardised).

This indicator examines the patterns of mortality among Indigenous women.

Identification of Indigenous status is still very fragmented and generally of poor quality in health data collections, and cervical screening data are no exception. Of the seven cervical screening indicators, only one indicator can be stratified by Indigenous status: mortality. Even for this, coverage is not complete. Only Western Australia, South Australia, the Northern Territory and Queensland are currently considered to have adequate coverage of Indigenous deaths in the registration of deaths. Therefore, only mortality data from these jurisdictions are analysed in this report.

Confidence intervals

Where indicators include a comparison between states and territories, between time periods, between geographic location or between Indigenous and non-Indigenous women, a 95% confidence interval is presented along with the rates. This is because the observed value of a rate may vary due to chance even where there is no variation in the underlying value of the rate. The 95% confidence interval represents a range over which variation in the observed rate is consistent with this chance variation. These confidence intervals can be used as an approximate test of whether changes in a particular rate are consistent with chance variation. Where the confidence intervals do not overlap, the change in a rate is greater than that which could be explained by chance. Where the intervals do overlap, then changes in the rate may be taken as approximately consistent with variability due to chance.

For example, the participation rate for Victoria in 2000–2001 was 64.2% with a confidence interval of 64.1% to 64.4%. The corresponding rate for 2001–2002 was 64.8% with a confidence interval of 64.7% to 64.9%. These two intervals do not overlap, so the difference between the 2000–2001 and 2001–2002 rates is larger than we would expect due to chance alone.

Another example is the comparison between cervical mortality rates for women in the target group in the remote areas. In the period 1995 to 1998 there were 6.0 cervical cancer deaths per 100,000 women living in remote areas. This rate had a confidence interval of 3.9 to 8.7. The 1999–2002 rate for women living in remote areas was 3.0 per 100,000, with a confidence interval of 1.7 to 4.9. These confidence intervals overlap, so despite the relatively large difference between the two observed rates they are still consistent with chance variation. This arises from the fact that remote areas of Australia have small populations, resulting in small numbers of deaths from any specific cause, and these rates may fluctuate from year to year over time. This in turn leads to relatively wide confidence intervals for an observed death rate.

It is important to note that this result does not imply that the difference between the two rates is definitely due to chance. Instead, an overlapping confidence interval represents a difference in rates which is too small to differentiate between a real difference and one which is due to chance variation.

Participation

The major objective of the National Cervical Screening Program is to reduce morbidity and deaths from cervical cancer by detecting treatable pre-cancerous lesions before their progression to cancer. Through increased participation, more women with pre-cancerous abnormalities can be detected and treated before progression to cervical cancer, thus reducing morbidity. In addition, increased participation will lead to the detection of more women with early stages of cancer where treatment can reduce mortality.

The program, through a variety of recruitment initiatives, actively targets women in the age group 20–69 years. The recommended screening interval for women in this target age group who have been sexually active at any stage in their lives is 2 years. Pap smears may cease at the age of 70 years for women who have had two normal Pap smears within the previous 5 years. Women over 70 years who have never had a Pap smear, or who request a Pap smear, are screened.

Some women in the target population are unlikely to require screening. They include:

- those who have had a total hysterectomy with their cervix removed
- those who have never been sexually active
- women with a previously diagnosed gynaecological cancer.

Participation rate calculations should, in principle, exclude all three groups from the data. In practice, the data are adjusted to remove women who have had a hysterectomy but the latter two groups cannot be excluded due to the lack of reliable data.

State and territory programs have strategic plans in place to increase participation of women in cervical screening. Such strategies include targeting priority population groups including Indigenous women, rural and remote women, and women from culturally and linguistically diverse backgrounds.

The objectives and usefulness of participation as an indicator are outlined below:

- The participation indicator measures the proportion of the target population covered by the cervical screening program and the current screening policy of a 2-year interval.
- The indicator is important in assessing the contribution of the cervical screening program to changes in incidence and mortality.
- The indicator can be used as a means of evaluating recruitment practices, particularly if participation rates are analysed by demographic characteristics.
- When this indicator is used in conjunction with others, it can be used to support analysis relating to target groups and screening intervals.

State- and territory-specific issues

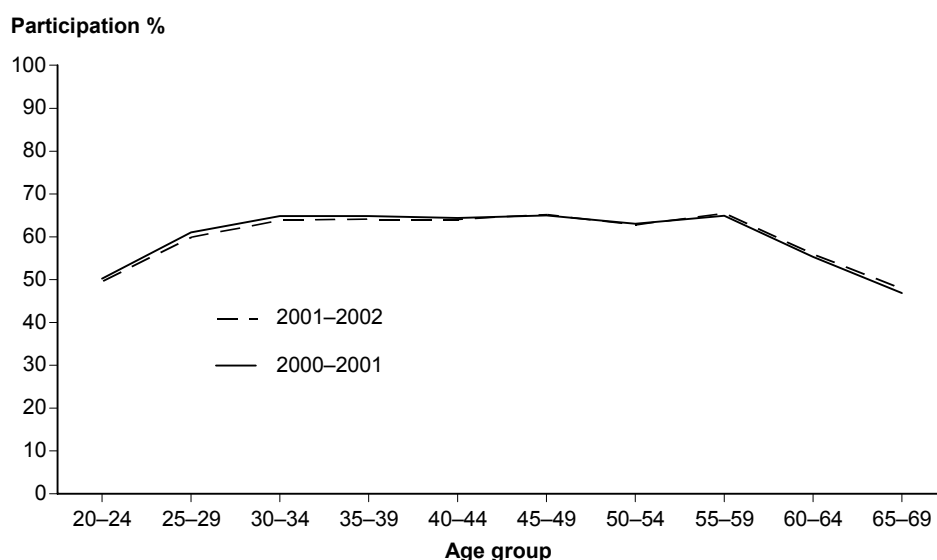
- Except for Victoria and the Australian Capital Territory, the participation rates are based on all women who were screened in that state or territory. This may lead to an over-estimation of numbers of women screened because of double counting of some women between states. This may be the result of difficulty in identifying state of residence for women in border areas, and inclusion of women resident overseas.
- The Western Australian participation rates for the period 2001–2002 includes all women screened in the state. In previous reports, participation rates referred to women resident in Western Australia only.
- The Northern Territory data were unavailable for 2001–2002. Northern Territory data have been excluded from the national comparisons presented in Figures 1–4.

Data issues

- In 2001 the Australian Bureau of Statistics (ABS) carried out a full population census and a national health survey. These led to the revision of the ABS estimated resident population (ERP) data, the introduction of a new Australian standard population for use in age standardisation and the production of new estimates of hysterectomy status among Australian women. The denominators for participation rates presented in this report have been calculated using the 2001 ABS National Health Survey hysterectomy fractions and the revised ERP values and age-adjusted using the 2001 Australian standard population. The denominators for the equivalent rates in previous reports were calculated using the 1995 ABS National Health Survey hysterectomy fractions and unrevised ERP values and age-adjusted using the 1991 Australian standard population. The combined effect of these changes is that participation rates presented in this report are on average between 1 and 2 percentage points lower than equivalent rates in previous reports.
- Recent fluctuations in participation rates over time and between jurisdictions may be influenced by improvements in record linkage procedures in the state and territory screening registers. These allow more accurate tracking of individual screening participants over time and may lead to an apparent decrease in recorded participation rates by up to 3 percentage points. There has also been variation over time and between jurisdictions in the use of short-term mass media campaigns which, in addition to any long-term effect, may have led to short-term fluctuations in screening participation.

Indicator 1: Participation rate for cervical screening

Percentage of women screened in a 24-month period by 5-year age groups (20–24, 25–29, 30–34, 35–39, 40–44, 45–49, 50–54, 55–59, 60–64, 65–69, 70–74, 75–79, 80–84, 85+) and for the target age group (20–69 years).



Refer to Tables 1b and 2b (pages 37 and 39).

Notes

1. Participation rates have been adjusted for the estimated proportion of women who have had a hysterectomy.
2. Northern Territory data were unavailable for 2001–2002 and they were excluded from 2000–2001 data for comparison purposes.
3. These data exclude women who have opted not to be on the register.

Source: AIHW analysis of state and territory Cervical Cytology Registry data.

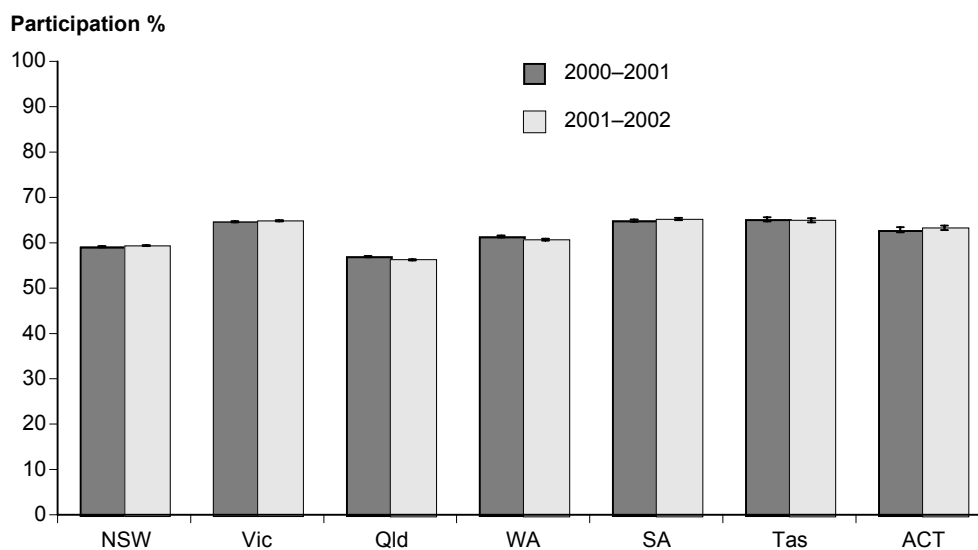
Figure 1: Participation in the National Cervical Screening Program by age group, Australia, 2000–2001 and 2001–2002

24-month period	Age group										20–69
	20–24	25–29	30–34	35–39	40–44	45–49	50–54	55–59	60–64	65–69	
	(Per cent)										
2000–2001	50.2	61.0	64.8	64.8	64.4	65.0	63.0	64.9	55.3	46.8	61.0
2001–2002	49.9	60.2	64.1	64.4	64.3	65.4	63.0	65.7	56.1	48.0	61.0

Note: Northern Territory data were unavailable for 2001–2002. In this table and graph the Northern Territory data were excluded from data for 2000–2001 for comparison purposes.

- From January 2001 to December 2002 there were 3,331,013 women screened in Australia for pre-cancerous changes to cervical cells. Of these women, 3,262,574 (98%) were in the target age group 20–69 years (Table 2a, page 38).
- The age-standardised participation rate for women aged 20–69 years was 61.0% in 2000–2001 and 2001–2002 (Tables 1b and 2b, pages 37 and 39).

- Participation in 2001–2002 was lower among women aged in their twenties and sixties than in the other age groups in the target population. Although incidence for women in their twenties is relatively low, among women aged 30–34 it increases to 11.6 per 100,000 women; therefore increasing participation and increasing detection rates of cervical abnormalities in women in their twenties would be likely to result in lower incidence of cervical cancer for women in their thirties. Screening is also very important for women in their sixties because they experience the highest incidence of cervical cancer in the target population with 15.9 and 14.8 per 100,000 women aged 60–64 and 65–69 respectively (Table 2b and 24, pages 39 and 65).



Notes

1. Rates are expressed as the percentage of the eligible female population and age-standardised to the Australian 2001 population.
2. Northern Territory data were unavailable for 2001-2002 and they were excluded from 2000-2001 data for comparison purposes.
3. Bars on graphs represent 95% confidence intervals.

Source: AIHW analysis of state and territory Cervical Cytology Registry data.

Figure 2: Participation (age-standardised) in the National Cervical Screening Program by women aged 20-69 years, states and territories, 2000-2001 and 2001-2002

24-month period/ rate	NSW	Vic ^(a)	Qld	WA ^(b)	SA	Tas	ACT ^(a)	Australia
2000-2001								
AS rate	59.1	64.6	57.0	61.4	64.9	65.2	62.8	61.0
95% CI	59.0-59.3	64.5-64.8	56.8-57.1	61.2-61.6	64.6-65.1	64.7-65.6	62.3-63.4	60.9-61.1
2001-2002								
AS rate	59.4	64.9	56.3	60.7	65.2	65.0	63.3	61.0
95% CI	59.3-59.5	64.7-65.0	56.1-56.4	60.5-60.9	65.0-65.5	64.5-65.4	62.8-63.8	60.9-61.0

(a) The Victorian and Australian Capital Territory registries only register women with a Victorian or Australian Capital Territory address respectively.

(b) Western Australian participation for 2001-2002 includes all women screened in that state, whereas in 2000-2001, and in all previous reports, the registry only registered women resident with a Western Australian address.

Note: Northern Territory data were unavailable for 2001-2002. In this table and graph the Northern Territory data were excluded from data for 2000-2001 for comparison purposes.

- There were no significant increases in participation between 2000-2001 and 2001-2002 in any state or territory. Queensland's and Western Australia's participation rates were significantly lower in 2001-2002 than in the previous reporting period.

- Participation rates varied across the states and the Australian Capital Territory among women aged 20–69 years in 2001–2002, ranging from 65.2% in South Australia to a low of 56.3% in Queensland.
- The largest increase in participation between 2000–2001 and 2001–2002 occurred in the Australian Capital Territory with an increase of 0.5 percentage point but this increase was not statistically significant.

Early re-screening

The National Cervical Screening Program seeks to maximise reductions in incidence and mortality for cervical cancer. The design of the screening program defines two key parameters for achieving these objectives – target populations and screening intervals. Compliance with these parameters is crucial to maintaining the effectiveness of the program and cost efficiency in order that resources may be used to increase population coverage. For most women who have a negative smear, the recommended interval before their next screen is 2 years.

This indicator is defined as the repeating of a Pap smear within 21 months of a negative smear report. Reasons for the choice of 21 months as the time line for reporting are discussed under 'Data issues' below.

This indicator:

- tracks over a period of 21 months a cohort of women from all states and territories, except the Northern Territory, who had a negative smear result in February 2001 to determine the extent of early re-screening within the National Cervical Screening Program. The exception to this is Queensland where the index month is March. February was selected as the index month nationally because it has been shown to be a relatively stable month in terms of the number of women who are screened. This pattern has been consistent over a number of years, partly because fewer women take holidays at this time;
- measures the compliance with the recommended screening interval following a negative smear; and
- is important in assessing screening coverage around the recommended interval, as significant differences may reduce program effectiveness.

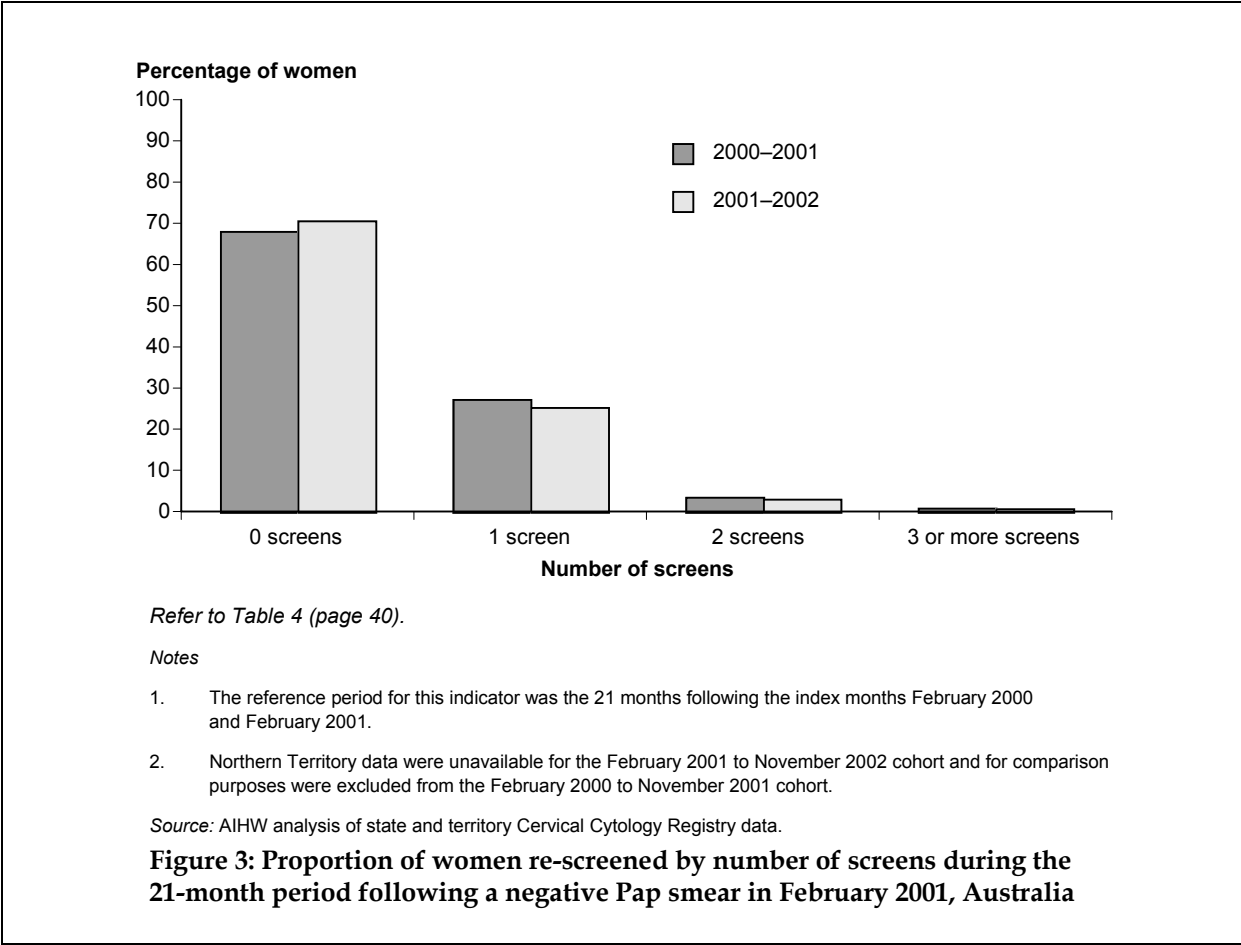
This indicator should be interpreted with caution as some early re-screening after a negative Pap smear report is appropriate and in accordance with the National Health and Medical Research Council (NHMRC) guidelines. Specifically, if a woman has a history of histologically proven high-grade abnormality, then annual screening is recommended. If a woman is being monitored after treatment or during the resolution phase of a low-grade abnormality, it is appropriate for her to be screened earlier than the 24 months recommended screening interval.

Data issues

Northern Territory data were unavailable for the February 2001 to November 2002 reporting period in this report. The data for Indicator 2 published in reports before the *Cervical Screening in Australia 1999–2000* report are not directly comparable with the data in this report as this indicator has been modified to change the follow-up period from 24 months to 21 months. This change was made because women often have their Pap smear taken at a time convenient to them and are likely to have their biennial screening immediately before the 24-month anniversary. Also for some women, prescriptions for oral contraceptives lapse at 22 months and these women are then likely to combine their Pap smears with their visit to the GP for renewing their scripts for contraceptives.

Indicator 2: Early re-screening

Proportion of women re-screened by number of re-screens during a 21-month period following a negative Pap smear.

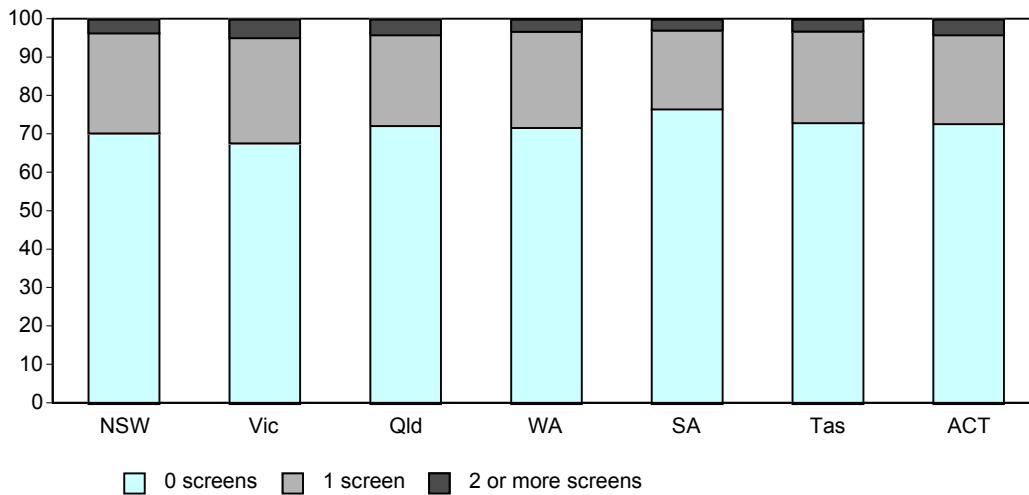


21-month period	0 screens	1 screen	2 screens	3+ screens
	(Per cent)			
Feb 2000–Nov 2001	68.1	27.3	3.6	0.9
Feb 2001–Nov 2002	70.7	25.4	3.1	0.8

Note: Northern Territory data were unavailable for the February 2001 to November 2002 cohort and for comparison purposes were excluded from the February 2000 to November 2001 cohort.

- A cohort of 170,145 women screened in February 2001 whose Pap smear results were normal was tracked over a 21-month period to measure the extent of early re-screening in Australia. Fewer women in the February 2001 cohort were re-screened early than in the previous cohort.
- Of the February 2001 cohort, 29.3% were re-screened within 21 months, including 3.9% who were re-screened two or more times.
- The proportion of women who did not have any additional Pap smears within 21 months following a negative result increased from 68.1% in 2000–2001 and to 70.7% in 2001–2002.

Percentage of women



Refer to Table 4 (page 40).

Notes

1. The reference period for this indicator was the 21 months following the index month February 2001.
2. Northern Territory data were unavailable for the February 2001 to November 2002 cohort and for comparison purposes were excluded from the February 2000 to November 2001 cohort.

Source: AIHW analysis of state and territory Cervical Cytology Registry data.

Figure 4: Proportion of women re-screened by number of screens during the 21-month period following a negative Pap smear in February 2001, states and territory

No. of screens	NSW	Vic	Qld	WA	SA	Tas	ACT	Australia
(Per cent)								
0 screens	70.4	67.8	72.3	71.8	76.7	73.1	72.9	70.7
1 screen	26.1	27.4	23.6	25.1	20.6	23.9	23.1	25.4
2 or more	3.5	4.8	4.1	3.1	2.7	3.1	4.0	3.9

Note: Northern Territory data were unavailable for the February 2001 to November 2002 cohort and for comparison purposes were excluded from the February 2000 to November 2001 cohort.

- South Australia (76.7%), Tasmania (73.1%) and the Australian Capital Territory (72.9%) had the highest proportions of women who were not re-screened in the 21 months following their negative Pap smears in February 2001.
- Victoria (32.2%) and New South Wales (29.6%) had the highest proportions of re-screens while the lowest proportion of re-screens within 21 months occurred in South Australia (23.3%).

Low-grade abnormalities

The Pap smear test is able to identify a range of abnormalities in cervical cells. Some of these abnormalities have a greater chance of becoming malignant (the so-called high-grade abnormalities), and are therefore treated aggressively. The chance of low-grade abnormalities progressing to malignant change is very much less.

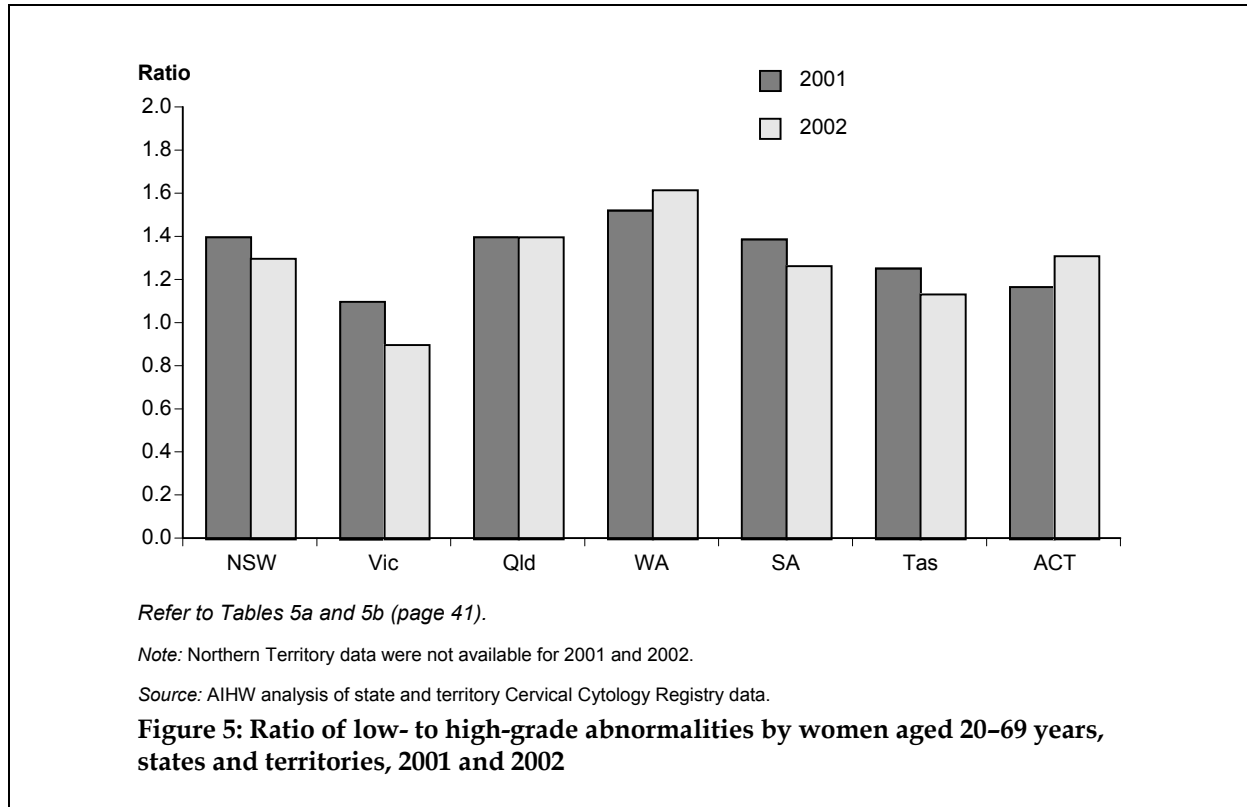
In this report a low-grade intraepithelial abnormality includes:

- atypia;
- warty atypia (human papilloma virus (HPV) effect);
- possible cervical intraepithelial neoplasia (CIN) (see Glossary);
- equivocal CIN;
- CIN 1; and
- endocervical dysplasia not otherwise specified (NOS).

The indicator is the ratio of low-grade to high-grade intraepithelial abnormalities, all histologically verified.

Indicator 3: Low-grade abnormality detection

Ratio of number of women with a histologically verified low-grade intraepithelial abnormality detected in a 12-month period to the number of women with a histologically verified high-grade intraepithelial abnormality detected in the same period.



Year	NSW	Vic	Qld	WA	SA	Tas	ACT	Australia
	(Ratio)							
2001	1.39	1.09	1.41	1.52	1.39	1.25	1.17	1.34
2002	1.29	0.91	1.40	1.62	1.27	1.13	1.31	1.26

Note: Northern Territory data were not available for 2001 and 2002.

- The ratio of histologically confirmed low-grade abnormalities to high-grade abnormalities found in women aged 20-69 years in Australia declined from 1.34 in 2001 to 1.26 in 2002.
- In 2002 there was some variation between states and the Australian Capital Territory with the highest ratio in Western Australia (1.62), while Victoria (0.91) had the lowest ratio.

High-grade abnormalities

High-grade lesions have a greater probability of progressing to invasive cancer than do low-grade lesions. Therefore one of the aims of the National Cervical Screening Program is to set a screening interval that detects most of these lesions before they progress and become invasive. This indicator measures the frequency of this type of abnormality in the screened community. A high-grade intraepithelial abnormality is defined in this report as CIN 1/2, CIN 2, CIN 3 or adenocarcinoma in situ.

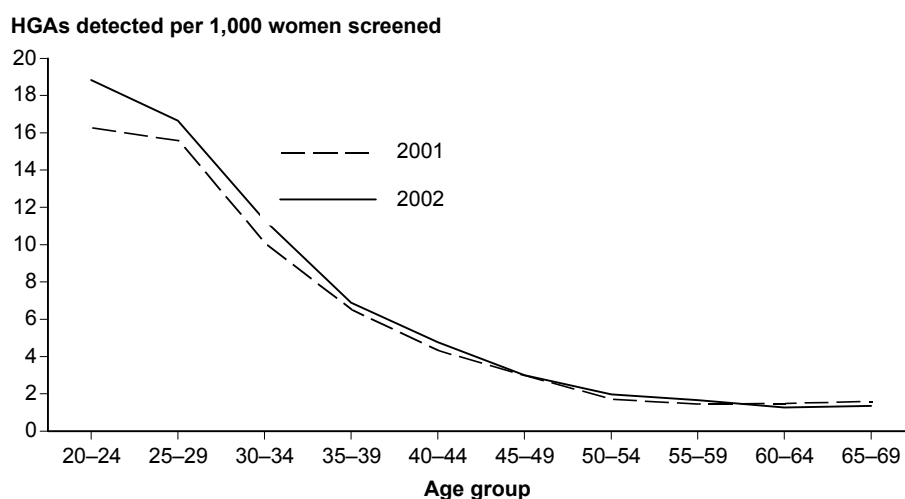
The National Health and Medical Research Council has produced guidelines to assist in the management of women who have low- and high-grade intraepithelial abnormalities (DHS 1994b). These are summarised in Appendix F.

State- and territory-specific issues

- The reference period for Indicator 4 was the 12 months from January to December 2002 for all states and the Australian Capital Territory. The Northern Territory was unable to provide data for 2001 and 2002.

Indicator 4: High-grade abnormality detection

Detection rate for histologically verified high-grade intra-epithelial abnormalities per 1,000 women screened in a 12-month period by 5-year age groups (20–24, 25–29, 30–34, 35–39, 40–44, 45–49, 50–54, 55–59, 60–64, 65–69, 70–74, 75–79, 80–84, 85+) and for the target age group (20–69 years, age-standardised).



Refer to Tables 6a and 6b (pages 42 and 43).

Notes

1. Northern Territory data were not available for 2001 and 2002.
2. The reference period for this indicator is from January to December 2002.

Source: AIHW analysis of state and territory Cervical Cytology Registry data.

Figure 6: High-grade abnormalities per 1,000 women by age group, Australia, 2001 and 2002

Year	Age group										20–69*
	20–24	25–29	30–34	35–39	40–44	45–49	50–54	55–59	60–64	65–69	
	(Number per 1,000 women)										
2001	16.3	15.6	10.1	6.6	4.4	3.0	1.8	1.5	1.5	1.6	6.9 (6.8–7.0)
2002	18.8	16.6	11.3	6.9	4.8	3.0	2.0	1.7	1.3	1.4	7.5 (7.4–7.6)

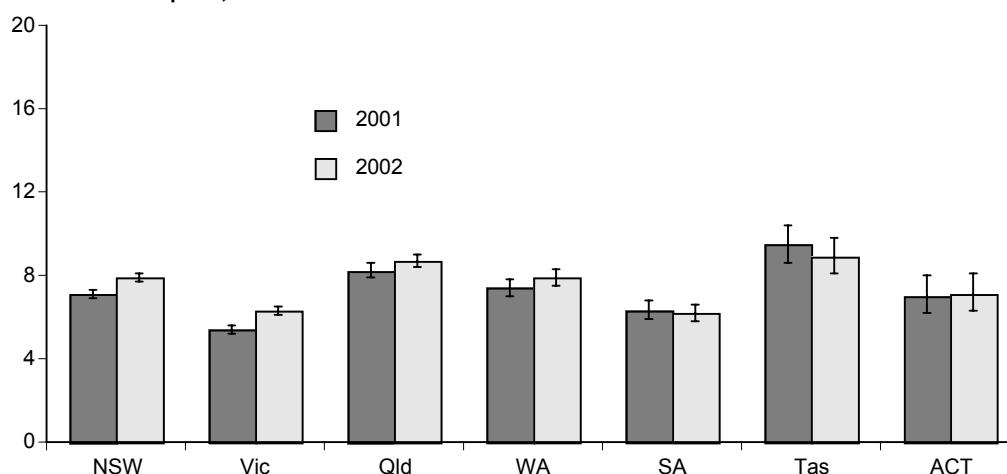
*Age-standardised rates (standardised to the Australian 2001 population) with 95% confidence intervals.

Note: Northern Territory data were not available for 2001 and 2002.

- In 2002, there were 14,590 histologically verified high-grade abnormalities detected in 1,849,294 women screened in the target age range 20–69 years (0.8%), compared with a 0.7% detection rate in 2001 (Table 7b, page 45).
- The age-standardised detection rate for histologically verified high-grade intraepithelial abnormalities increased from 6.9 per 1,000 women in the target age group, 20–69 years, in 2001 to 7.5 per 1,000 women screened in 2002.

- The age-specific detection rate of high-grade intraepithelial abnormalities for women aged 20–69 years increased between 2001 and 2002 in all age groups except for falls in the oldest age groups 60–64 and 65–69, and except for women aged 45–49 where there was no change.
- The rate of high-grade abnormalities detected was much higher in the younger age groups. In the 20–24 age group the rate was 18.8 per 1,000 women screened compared with less than 2 per 1,000 women aged 55–69 years. This age-specific distribution is the inverse of the pattern for cervical cancer mortality.

HGAs detected per 1,000 women screened



Refer to Tables 9a and 9b (page 48).

Notes

1. The reference period for this indicator is from January to December 2002.
2. Rates are standardised to the 2001 Australian total population.
3. Northern Territory data were not available for 2001 and 2002.
4. Bars on graphs represent 95% confidence intervals.

Source: AIHW analysis of state and territory Cervical Cytology Registry data.

Figure 7: Age-standardised rate of high-grade abnormalities per 1,000 women screened aged 20–69 years, states and territories, 2001 and 2002

AS rate	NSW	Vic	Qld	WA	SA	Tas	ACT	Australia
2001	7.1	5.4	8.2	7.4	6.3	9.5	7.0	6.9
95% CI	6.9–7.3	5.2–5.6	7.9–8.6	7.0–7.8	5.9–6.8	8.6–10.4	6.2–8.0	6.8–7.0
2002	7.9	6.3	8.7	7.9	6.2	8.9	7.1	7.5
95% CI	7.7–8.1	6.1–6.5	8.4–9.0	7.5–8.3	5.8–6.6	8.1–9.8	6.3–8.1	7.4–7.6

Note: Northern Territory data were unavailable for 2001 and 2002.

- The national rate of high-grade abnormalities found in women aged 20–69 years increased significantly from 6.9 per 1,000 women screened in 2001 to 7.5 in 2002.
- In 2002, Tasmania had the highest rate of 8.9 high-grade abnormalities detected per 1,000 women screened, while South Australia had the lowest with 6.2 for women in the target age group, 20–69 years.
- Detection of high-grade abnormalities increased between 2001 and 2002 in all states with the exception of South Australia and Tasmania.
- The increases in high-grade abnormalities observed in New South Wales and Victoria were statistically significant.