# 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. These indicators help measure changes in disease patterns and examine the contribution of cervical screening to preventing or reducing deaths from cancer of the cervix.

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 were developed and endorsed by the former National Advisory Committee and by 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 20–69 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, adenosquamous and other cervical cancer

Incidence rate of squamous, adenocarcinoma, adenosquamous and other cervical cancers (micro-invasive and invasive) 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 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 reports before 2000–2001, 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 instead of the RRMA classification. 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, along with a sixth 'Migratory' class, are listed in
Table 1.

**Table 1: The remoteness areas for the ASGC**

| 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 is not directly comparable to the RRMA classification. Accessibility is judged purely on distance to one of the metropolitan centres. For example, the ASGC 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 locations or between Indigenous and other Australian women, a 95% confidence interval is presented along with the rates. This is because the observed value of a rate may vary owing 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.

For example, the participation rate for Tasmania in 2002–2003 was 63.1% with a confidence interval of 62.6% to 63.5%. The corresponding rate for 2000–2001 was 65.2% with a confidence interval of 64.7% to 65.6%. These two intervals do not overlap, so the difference between the 2000–2001 and 2002–2003 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 1996 to 1999 there were 5.2 cervical cancer deaths per 100,000 women in living remote areas. This rate had a confidence interval of 3.2 to 7.6. The 2000–2003 rate for women living in remote areas was 2.7 per 100,000, with a confidence interval of 1.5 to 4.4. 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 and deaths. 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, focuses on 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 a range of strategies to increase participation of women in cervical screening. Such strategies include focusing on 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 the effect of communication and recruitment strategies, 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

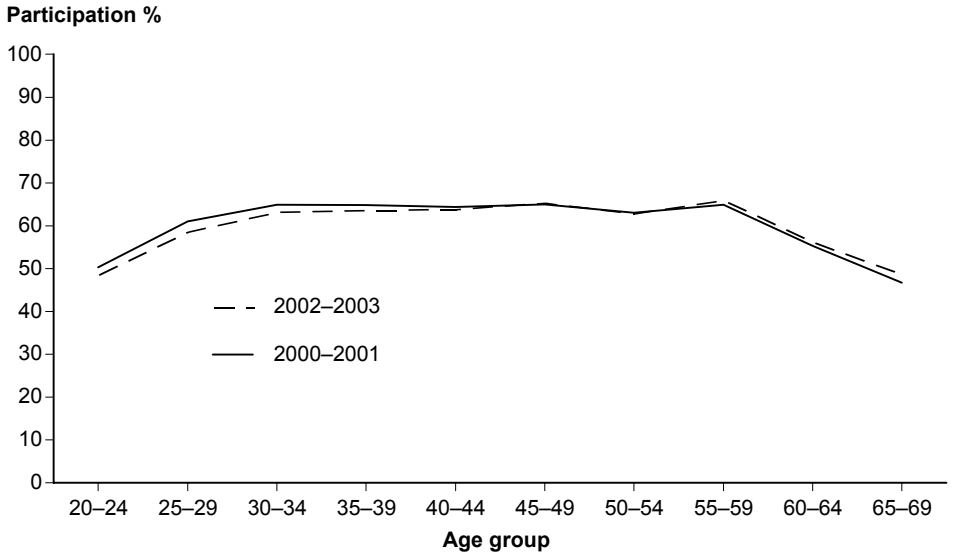
- Except for Victoria and the Australian Capital Territory, the participation rates are based on all women who were screened in the particular state or territory. This may lead to an over-estimation of numbers of women screened because of double counting of some women between states. This may be the result of difficulty in identifying state of residence for women in border areas, and inclusion of women resident overseas.

## 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 are, in some jurisdictions, partly due to more accurate tracking of individual screening participants over time; this has led 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+), for all ages (20–80+) and for the target age group (20–69 years).**




*Refer to Tables 1b and 2b (pages 36 and 38).*

*Notes*

1. Participation rates have been adjusted for the estimated proportion of women who have had a hysterectomy.
2. These data exclude women who have opted not to be on the register.

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

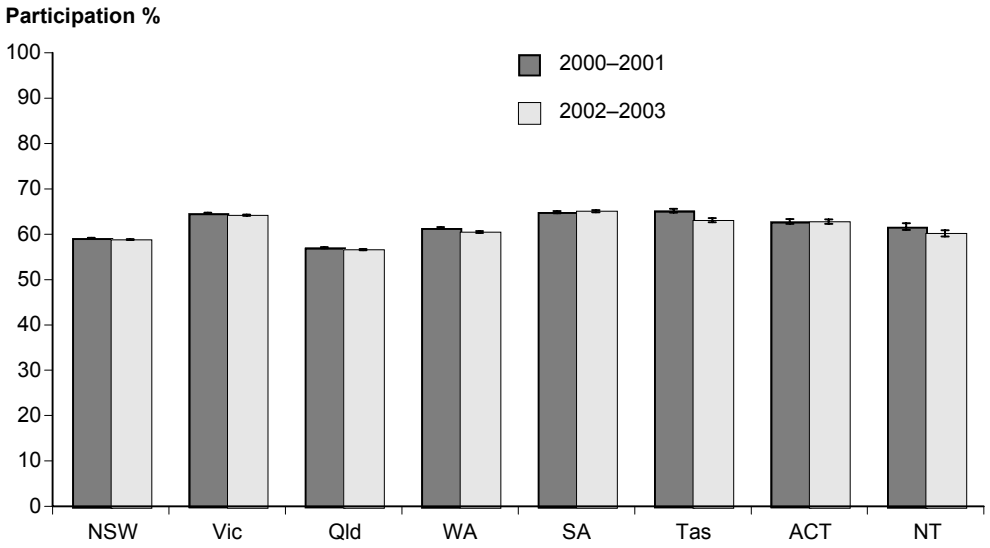
**Figure 1: Participation in the National Cervical Screening Program by age group, Australia, 2000–2001 and 2002–2003**

| 24-month period | Age group | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 20–24 | 25–29 | 30–34 | 35–39 | 40–44 | 45–49 | 50–54 | 55–59 | 60–64 | 65–69 | 20–69* |
| | (Per cent) | | | | | | | | | | |
| 2000–2001 | 50.3 | 61.0 | 64.9 | 64.8 | 64.4 | 65.0 | 63.0 | 64.9 | 55.3 | 46.7 | 61.0 (60.9–61.1) |
| 2002–2003 | 49.0 | 59.0 | 63.4 | 63.9 | 64.1 | 65.6 | 63.1 | 66.2 | 56.4 | 48.8 | 60.7 (60.6–60.8) |

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

- From January 2002 to December 2003 there were 3,382,825 women screened in Australia for pre-cancerous changes to cervical cells. Of these women, 3,318,354 (98%) were in the target age group 20–69 years (Table 2a, page 37).
- The age-standardised participation rate for women aged 20–69 years was 61.0% in 2000–2001 and 60.7% in 2002–2003 (Tables 1b and 2b, pages 36 and 38).

- There was a decline in participation among younger women (20–44 years) and an improvement in participation for older women (45–69 years) in 2002–2003 when compared with 2000–2001; however, these changes were relatively small.
- Participation in 2002–2003 was lower among women aged in their twenties and sixties than in the other age groups in the target population.
- Participation has risen among women aged 45 years and older; however, the level is still relatively low for women in their sixties. It is important for the Program to achieve further increases in screening levels for women in their sixties because they experience some of the highest incidence of cervical cancer in the target population with 11.5 and 12.4 per 100,000 women aged 60–64 and 65–69 respectively (Tables 2b and 24, pages 38 and 65).




*Notes*

1. Rates are expressed as the percentage of the eligible female population and age-standardised to the Australian 2001 population.
2. 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 2002–2003**

| 24-month period/ rate | NSW | Vic[(a)] | Qld | WA | SA | Tas | ACT[(a)] | NT | Australia |
|---|---|---|---|---|---|---|---|---|---|
| **2000–2001** | | | | | | | | | |
| AS rate | 59.1 | 64.6 | 57.0 | 61.4 | 64.9 | 65.2 | 62.8 | 61.7 | 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 | 61.0–62.4 | 60.9–61.1 |
| **2002–2003** | | | | | | | | | |
| AS rate | 58.8 | 64.2 | 57.2 | 60.6 | 65.1 | 63.1 | 62.7 | 60.2 | 60.7 |
| 95% CI | 58.7–58.9 | 64.1–64.4 | 57.0–57.3 | 60.3–60.8 | 64.8–65.3 | 62.6–63.5 | 62.2–63.3 | 59.5–60.9 | 60.6–60.8 |

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

- There were small but statistically significant decreases in participation between 2000–2001 and 2002–2003 in New South Wales, Victoria, Western Australia, Tasmania and Northern Territory.
- Participation rates varied across the states and territories among women aged 20–69 years in 2002–2003, ranging from 65.1% in South Australia to a low of 57.2% in Queensland.

# Early re-screening

The National Cervical Screening Program seeks to maximise reductions in incidence and mortality of cervical cancer within a cost-effective framework. 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 so 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.

An early re-screen is defined as having a repeat Pap smear within 21 months of a negative smear result. 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 who had a negative smear result in February 2002 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. It is also helped by the fact that February is not a month during which public holidays are nationally gazetted.
- measures the compliance with the recommended screening interval following a negative smear.
- is important in assessing screening coverage around the recommended interval, as significant differences may reduce program effectiveness.

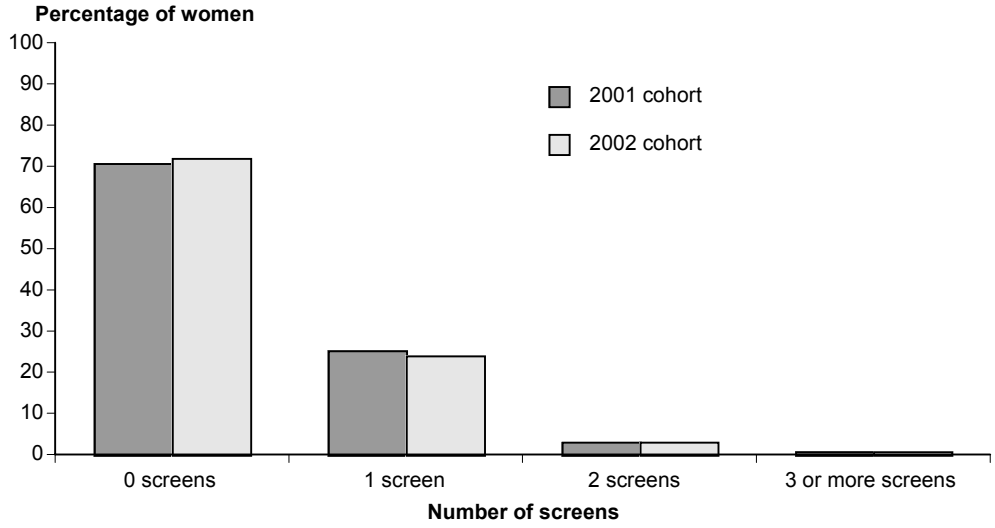
This indicator should be interpreted with caution as some early re-screening after a negative Pap smear report is appropriate and in accordance with the National Health and Medical Research Council guidelines. Specifically, if a woman has a history of histologically proven high-grade abnormality, then 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

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, with some choosing to have their biennial screening immediately before the 24-month anniversary. Also prescriptions for oral contraceptives lapse at 22 months and some women are then likely to combine their Pap smears with their visit to the GP for renewing their scripts.

# 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.**




*Refer to Table 4 (page 39).*

*Notes*

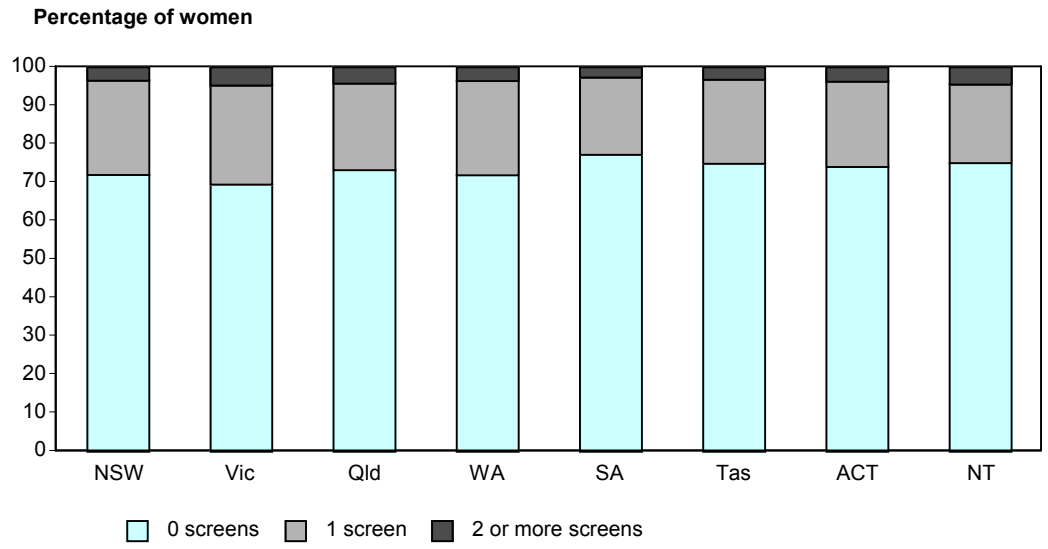
1. The reference period for this indicator was the 21 months following the index months February 2001 and February 2002 (or March 2001 and March 2002 for Queensland).
2. The data for the 2001 cohort is not comparable with the data published in *Cervical Screening in Australia 2001–2002* because Northern Territory data have been included in this report.

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

**Figure 3: Proportion of women re-screened by number of screens during the 21-month period following a negative Pap smear in the 2001 and 2002 cohorts, Australia**

| Cohort | 0 screens | 1 screen | 2 screens | 3+ screens |
|---|---|---|---|---|
| | | (Per cent) | | |
| 2001 | 70.8 | 25.3 | 3.1 | 0.8 |
| 2002 | 72.0 | 24.1 | 3.1 | 0.8 |

- A cohort of 167,421 women screened in February 2002 (except for Queensland where the 21-month period starts in March) whose Pap smear results were normal was tracked over a 21-month period to measure the extent of early re-screening in Australia. A smaller proportion of women in the 2002 cohort were re-screened early than in the previous cohort.
- Of the 2002 cohort, 24.1% were re-screened within 21 months, and a further 3.9% 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 70.8% in 2000–2001 to 72.0% in 2002–2003.




*Refer to Table 4 (page 39).*

*Note:* The reference period for this indicator was the 21 months following the index month February 2002.

*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 the 2002 cohort, states and territories**

| No. of screens | NSW | Vic | Qld | WA | SA | Tas | ACT | NT | Australia |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | (Per cent) | | | | |
| 0 screens | 72.0 | 69.5 | 73.3 | 71.9 | 77.3 | 74.9 | 74.1 | 75.1 | 72.0 |
| 1 screen | 24.6 | 25.8 | 22.5 | 24.6 | 20.1 | 21.9 | 22.2 | 20.5 | 24.1 |
| 2 or more | 3.4 | 4.7 | 4.2 | 3.5 | 2.6 | 3.2 | 3.7 | 4.4 | 3.9 |

- South Australia (77.3%), Northern Territory (75.1) and Tasmania (74.9%) had the highest proportions of women who were not re-screened in the 21 months following their negative Pap smears in 2002.
- Victoria (30.5%), Western Australia (28.1%) and New South Wales (28.0%) had the highest proportions of re-screens and the lowest proportion of re-screens within 21 months occurred in South Australia (22.7%).

# 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 (high-grade abnormalities), and are therefore treated aggressively. The chance of low-grade abnormalities progressing to malignant change is lower.

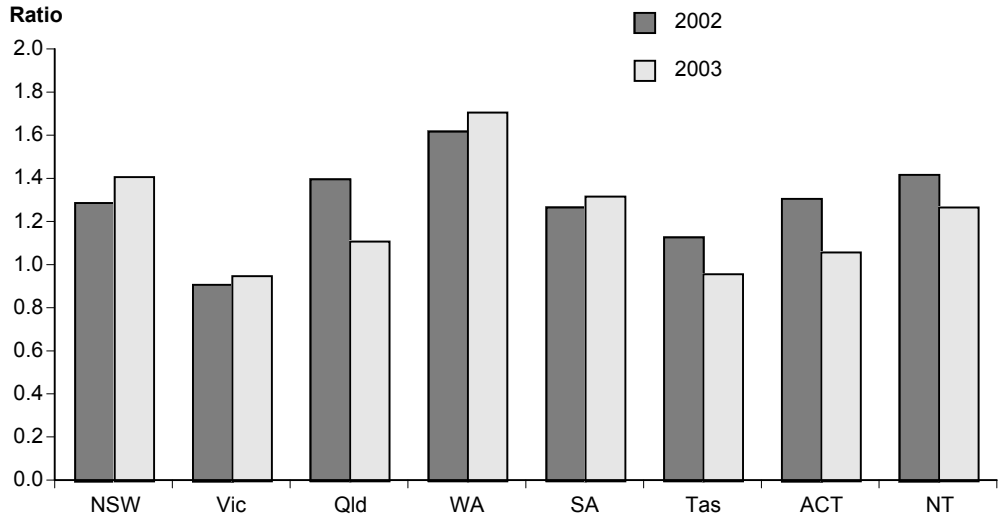
In this report a low-grade intraepithelial abnormality includes:

- 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.**




*Refer to Tables 5a and 5b (page 40).*

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

**Figure 5: Ratio of low-grade to high-grade abnormalities in women aged 20–69 years, states and territories, 2002 and 2003**

| Year | NSW | Vic | Qld | WA | SA | Tas | ACT | NT | Australia |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | (Ratio) | | | | |
| 2002 | 1.29 | 0.91 | 1.40 | 1.62 | 1.27 | 1.13 | 1.31 | 1.42 | 1.26 |
| 2003 | 1.41 | 0.95 | 1.11 | 1.71 | 1.32 | 0.96 | 1.06 | 1.31 | 1.24 |

- The ratio of histologically confirmed low-grade abnormalities to high-grade abnormalities found in women aged 20–69 years in Australia declined from 1.26 in 2002 to 1.24 in 2003.
- In 2003 there was some variation between states and territories, with the highest ratio in Western Australia (1.71); Victoria (0.95) 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.

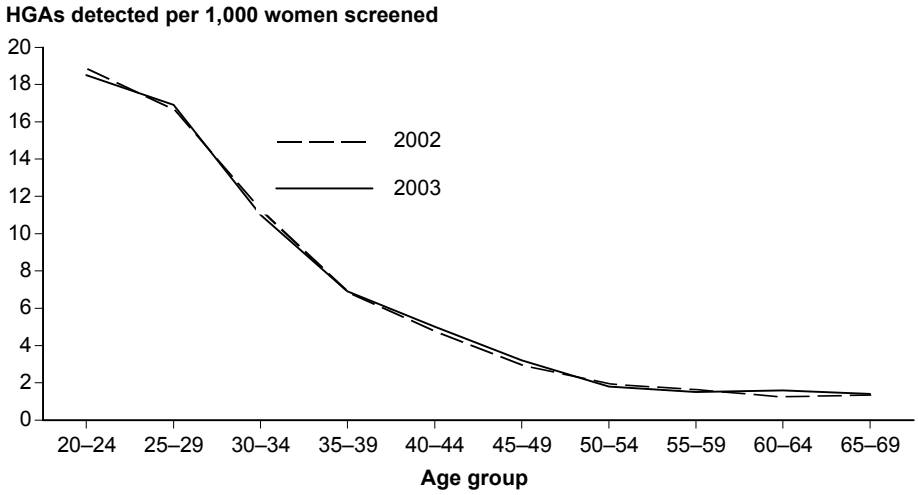
The National Health and Medical Research Council has produced guidelines to assist in the management of women who have low- and high-grade intraepithelial abnormalities (DHSH 1994b). These are summarised in Appendix F.

## State- and territory-specific issues

- The reference period for Indicator 4 was the 12 months from January to December 2003 for all states and territories.

# 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).**




*Refer to Tables 6a and 6b (pages 41 and 42).*

*Note:* The reference period for this indicator is from January to December 2003.

*Source:* AIHW analysis of State and Territory Cervical Cytology Registry data.

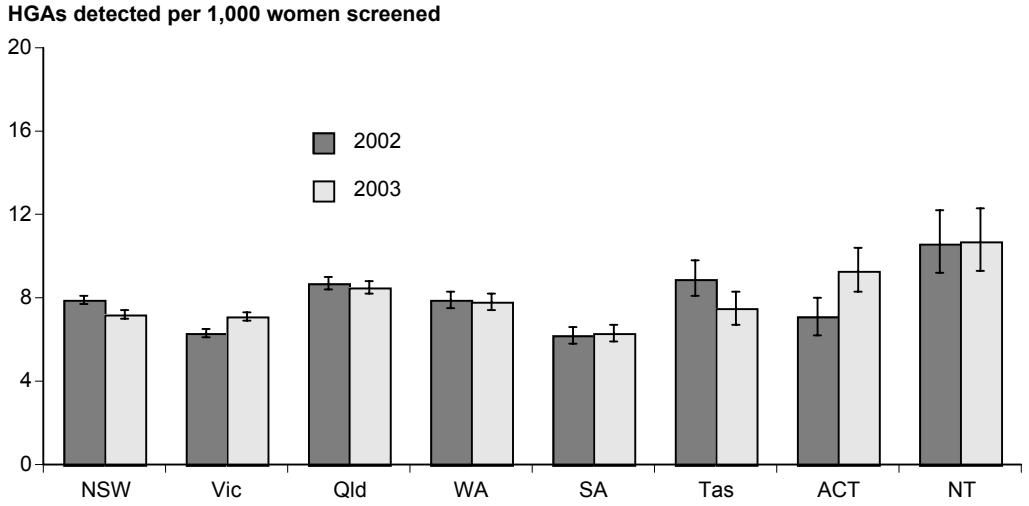
**Figure 6: High-grade abnormalities per 1,000 women by age group, Australia, 2002 and 2003**

| | Age group | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | 20–24 | 25–29 | 30–34 | 35–39 | 40–44 | 45–49 | 50–54 | 55–59 | 60–64 | 65–69 | 20–69* |
| | (Number per 1,000 women) | | | | | | | | | | |
| 2002 | 18.9 | 16.7 | 11.3 | 6.9 | 4.8 | 3.0 | 2.0 | 1.7 | 1.3 | 1.4 | 7.5 (7.4–7.6) |
| 2003 | 18.5 | 16.9 | 11.0 | 6.9 | 5.0 | 3.2 | 1.8 | 1.5 | 1.6 | 1.4 | 7.5 (7.4–7.6) |

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

- In 2003, there were 14,745 histologically verified high-grade abnormalities detected in 1,880,240 women screened in the target age range 20–69 years (0.8%). The same detection rate also applied in 2002 (Table 7b, page 44).
- The age-standardised detection rate for histologically verified high-grade intraepithelial abnormalities was 7.5 per 1,000 women in the target age group, 20–69 years, in 2002 and in 2003.

- The age-specific detection rate of high-grade intraepithelial abnormalities for women aged 20–69 years increased slightly between 2002 and 2003 in the 25–29, 40–49 and 60–64 age groups and declined in all the other age groups except in the 35–39 and 65–69 age groups where there was no change.
- In 2003, the National Cervical Screening Program detected 14,725 women in the target age group 20–69 years with high-grade abnormalities. In 2000, the first year when data for all jurisdictions were included, the age-standardised rate was 6.9 (standardised to the 2001 Australian population) per 1,000 women screened; this increased to 7.5 in 2003.
- The rate of high-grade abnormalities detected was much higher in the younger age groups. In the 20–24 age group the rate was 18.5 per 1,000 women screened compared with less than 2 per 1,000 women aged 50–54 years and older. This age-specific distribution is the inverse of the pattern for cervical cancer mortality.




*Refer to Tables 9a and 9b (pages 47 and 47).*

*Notes*

1. The reference period for this indicator is from January to December 2003.
2. Rates are standardised to the 2001 Australian total population.
3. 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, 2002 and 2003**

| AS rate | NSW | Vic | Qld | WA | SA | Tas | ACT | NT | Australia |
|---|---|---|---|---|---|---|---|---|---|
| 2002 | 7.9 | 6.3 | 8.7 | 7.9 | 6.2 | 8.9 | 7.1 | 10.6 | 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 | 9.1–12.1 | 7.4–7.6 |
| 2003 | 7.2 | 7.1 | 8.5 | 7.8 | 6.4 | 7.5 | 9.3 | 10.7 | 7.5 |
| 95% CI | 7.0–7.4 | 6.8–7.3 | 8.2–8.8 | 7.4–8.2 | 6.0–6.8 | 6.7–8.3 | 8.3–10.5 | 9.3–12.3 | 7.4–7.6 |

- In 2003, Northern Territory had the highest rate of 10.7 high-grade abnormalities detected per 1,000 women screened and South Australia had the lowest with 6.3 for women in the target age group, 20–69 years.
- Detection of high-grade abnormalities increased between 2002 and 2003 in Victoria, South Australia, Australian Capital Territory and Northern Territory, but only the increases in Victoria and Australian Capital Territory were statistically significant.