High-grade abnormalities

High-grade lesions have a greater probability of progressing to invasive cancer than low-grade lesions. Therefore, one of the aims of the National Cervical Screening Program is to set a screening interval which 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).

State- and territory- specific issues

- The reference period for Indicator 4 was 12 months from January to December 2000 for all states and territories, except for Queensland where data refer to a 12-month period from March 2000 to February 2001.
- The Queensland register commenced in February 1999; therefore data for Queensland were not available for 1998–1999.
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).

The graph and table below refer to the data for the target age group only. For detailed data refer to Tables 6a and 6b (pages 45 and 46).

![Graph showing HGAs detected per 1,000 women screened by age group for 1999 and 2000.]

**Notes**

1. Queensland data were not available in 1999.
2. The reference period for this indicator is from January to December 2000; for Queensland it is from March 2000 to February 2001.

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

**Figure 6:** High-grade abnormalities per 1,000 women, by age group, Australia, 1999 and 2000

<table>
<thead>
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</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(Number per 1,000 women)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1999</td>
<td></td>
<td>16.8</td>
<td>15.0</td>
<td>10.0</td>
<td>6.7</td>
<td>4.4</td>
<td>3.2</td>
<td>2.0</td>
<td>1.7</td>
<td>1.6</td>
<td>2.0</td>
<td>7.6</td>
</tr>
<tr>
<td>2000</td>
<td></td>
<td>16.3</td>
<td>15.5</td>
<td>10.3</td>
<td>6.5</td>
<td>4.5</td>
<td>3.0</td>
<td>1.9</td>
<td>1.5</td>
<td>1.5</td>
<td>1.7</td>
<td>7.5</td>
</tr>
</tbody>
</table>

*Note: Queensland was included in 2000 data but not in 1999 data.*
• Of the 1,864,492 women screened in the target age group 20–69 years in 2000, high-grade intra-epithelial abnormalities were detected in 7.4 per 1,000 women (13,851).

• The age-standardised rate of histologically verified high-grade abnormalities declined from 7.6 per 1,000 women screened in the target age group 20–69 years in 1999 to 7.5 per 1,000 women screened in 2000. Queensland data were not included in 1999, and, when Queensland was excluded from 2000 data for comparison, the age-standardised rate of histologically verified high-grade abnormalities for Australia in 2000 was 7.1 per 1,000 women screened, a statistically significant fall from 7.6 per 1,000 in 1999.

• High-grade abnormalities per 1,000 women are highest in the younger ages. For example, women in the age groups under 35–39 had a rate of high-grade abnormalities of 10 per 1,000 or over. In contrast, the rate of high-grade abnormalities among women in age groups above 50–54 was less than 2 per 1,000.

• Between the two periods 1999 and 2000 the age-specific rates of high-grade abnormalities detected decreased in most age groups, in particular, in the older age groups. When Queensland was excluded, the age-specific rates of high-grade abnormalities detected in 2000 declined further in every age group except in the age groups 60–64 and 65–69 where the rates remained the same as before.
Refer to Tables 9a and 9b (p. 51).

Notes
1. The Queensland Health Pap Smear Register began operations in February 1999; therefore, no data were available for 1999.
2. The reference period for this indicator is from January to December 2000; for Queensland, it is from March 2000 to February 2001.
3. Rates are standardised to the 1991 Australian total population.
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, 1999 and 2000

<table>
<thead>
<tr>
<th>AS rate</th>
<th>NSW</th>
<th>Vic</th>
<th>Qld</th>
<th>WA</th>
<th>SA</th>
<th>Tas</th>
<th>ACT</th>
<th>NT</th>
<th>Australia</th>
</tr>
</thead>
<tbody>
<tr>
<td>1999</td>
<td>7.7</td>
<td>6.9</td>
<td>n.a</td>
<td>7.7</td>
<td>8.5</td>
<td>9.9</td>
<td>6.8</td>
<td>8.7</td>
<td>7.6</td>
</tr>
<tr>
<td>95% CI</td>
<td>7.4–7.9</td>
<td>6.7–7.2</td>
<td>n.a</td>
<td>7.4–8.2</td>
<td>8.0–9.0</td>
<td>9.0–10.9</td>
<td>5.8–7.7</td>
<td>7.4–10.2</td>
<td>7.4–7.7</td>
</tr>
<tr>
<td>2000</td>
<td>7.6</td>
<td>6.2</td>
<td>9.4</td>
<td>6.5</td>
<td>7.2</td>
<td>10.6</td>
<td>6.8</td>
<td>12.9</td>
<td>7.5</td>
</tr>
<tr>
<td>95% CI</td>
<td>7.4–7.8</td>
<td>5.9–6.4</td>
<td>9.0–9.7</td>
<td>6.1–6.9</td>
<td>6.8–7.7</td>
<td>9.7–11.5</td>
<td>5.8–7.6</td>
<td>11.2–14.7</td>
<td>7.4–7.6</td>
</tr>
</tbody>
</table>

- In 2000, the age-standardised rate of high-grade abnormalities varied considerably among states and territories. The lowest rate was observed in Victoria (6.2 per 1,000 women) and the highest rate was in the Northern Territory (12.9 per 1,000 women).
- Except in Tasmania, the Australian Capital Territory and the Northern Territory, in all jurisdictions the age-standardised rate of high-grade abnormalities declined between 1999 and 2000. In Victoria, Western Australia, and South Australia the decreases in the rates of high-grade abnormalities were statistically significant.
- In the Northern Territory and Tasmania, the rates increased between 1999 and 2000; of these, only the increase in the Northern Territory is statistically significant.