

# National cervical screening monitoring indicators

This report focuses on monitoring the performance of the National Cervical Screening Program. Indicators are used as summary measures of program activity, performance and outcome. Indicators such as those described below help measure changes in disease patterns and examine the contribution health interventions might have in preventing or reducing deaths. While indicators can be used in the evaluation of screening or other health interventions, they typically relate to the impact of the intervention at a broad level. Indicators are generally not designed to focus on processes or particularly detailed operations.

Screening indicators for the National Cervical Screening Program cover the areas of participation, early rescreening, low- and high-grade abnormality detection, incidence and mortality. These indicators have been endorsed by the National Screening Information Advisory Group, by State and Territory cervical screening programs and by the National Advisory Committee. On the following pages an overview is presented of each indicator's intention, application and definition. This is supported with data indicating the current status and trend of the indicator. In this section of the report additional information has been provided as background material to interpret the indicators, and to assist those not familiar with this area of population health.

## 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).

## Indicator 2: Early rescreening

Proportion of women rescreened by number of rescreens during a 24-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: Incidence of micro-invasive cervical cancer**

Incidence rate of micro-invasive 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).

### **Indicator 6: Incidence of invasive squamous, adenocarcinoma, adeno-squamous and other cervical cancer**

Incidence rate of squamous, adenocarcinoma, adeno-squamous and other 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).

### **Indicator 7: 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**

In addition to the indicators from the 1996–1997 report (Indicators 1–7), three new indicators have been added for performance monitoring. These are periodic incidence and mortality indicators stratified by location (Indicators 8 and 9), and a periodic mortality indicator stratified by Indigenous status (Indicator 10). The periodic indicators have been developed to report on issues that are of importance in monitoring the outcomes of the cervical screening program over a long period of time. The longer period allows for a greater aggregation of information on issues that are subject to wide annual fluctuations and allows for a more confident and meaningful estimate of the outcomes.

The periodic indicators presented here are periodic rolling blocks of 3-yearly data, for example, 1993–1995, 1994–1996, 1995–1997.

## **Periodic incidence and mortality indicators by location**

### **Indicator 8: Incidence by location**

Incidence rate of cervical cancer per 100,000 estimated resident female population in a 3-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 9: Mortality by location**

Death rate from cervical cancer per 100,000 estimated resident female population in a 3-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).

The periodic indicators have been developed to examine the proposition that there is a difference in the availability and take-up of screening services between urban and rural areas. Information for these indicators is based on population-based data rather than screening data.

Usual place of residence information is available as part of incidence and mortality data collections.

Postcode and statistical local area information for incidence and mortality is routinely collected at the point of diagnosis or death, and these data have been classified into urban rural and remote groups using the Rural, Remote and Metropolitan Areas classification (RRMA). This classification was developed in 1994 by the then Department of Primary Industries and Energy and the then Department of Human Services and Health as a framework by which various data sources could be analysed for metropolitan, rural and remote zones. The RRMA groups are classified according to Statistical Local Area based on the Australian Standard Geographical Classification (ASGC) version 2.1 (DPIE & DSHS 1994). Concordance algorithms have been developed to convert statistical local area information coded according to earlier and later ASGC versions into rural, remote and metropolitan area groupings.

**Table 2: Structure of the Rural, Remote and Metropolitan Areas classification**

Zone	Category
Metropolitan zone	Capital cities
	Other metropolitan centres (urban centre population >100,000)
Rural zone	Large rural centres (urban centre population 25,000–99,999)
	Small rural centres (urban centre population 10,000–24,999)
	Other rural areas (urban centre population <10,000)
Remote zone	Remote centres (urban centre population >5,000)
	Other remote area (urban centre population <5,000)

Source: DPIE & DSHS 1994.

## Indigenous status mortality indicator

### Indicator 10: Indigenous mortality

Death rate from cervical cancer per 100,000 estimated resident female population in a 3-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, 75–79, 80–84, 85+) and for the target age group (20–69 years – age-standardised).

In early 1996 the AHMAC commissioned the Australian Institute of Health and Welfare (the Institute) in conjunction with stakeholders to conduct a review of, and develop a national plan to improve the reporting of Aboriginal and Torres Strait Islander health information. In October 1997, the report *The Aboriginal and Torres Strait Islander Health Information Plan—this time let's make it happen* brought together recommendations from a diverse range of stakeholders and users.

One of the recommendations was that Commonwealth, State and Territory Governments routinely publish information about Indigenous health status and the performance of their programs and services (AHMAC & AIHW 1997). The Institute seeks to address this recommendation by including Indigenous status as one of its periodic indicators. The 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 is 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 and the Northern Territory are currently considered to have adequate coverage of Indigenous deaths in the registration of deaths. Therefore, mortality data from these States and Territory only are analysed in this report.