

Part 1—Cervical Screening in Australia 2000–2001

Part 1: Contents

- List of tables 4
- List of figures 6
- Acknowledgments..... 7
- Summary 8
- National cervical screening monitoring indicators..... 11
- Participation 15
 - Indicator 1: Participation rate for cervical screening..... 17
- Early re-screening 20
 - Indicator 2: Early re-screening..... 21
- Low-grade abnormalities 23
 - Indicator 3: Low-grade abnormality detection..... 24
- High-grade abnormalities 25
 - Indicator 4: High-grade abnormality detection 26
- Incidence 29
 - Indicator 5: Incidence of micro-invasive cervical cancer 30
 - Indicator 6: Incidence of squamous, adenocarcinoma, adeno-squamous and other
cervical cancers 32
 - Indicator 8: Incidence by location 36
- Mortality 39
 - Indicator 7: Mortality 40
 - Indicator 9: Mortality by location..... 43
 - Indicator 10: Indigenous mortality..... 45
- Tables 47

List of tables

Table 1:	Structure of the Rural, Remote and Metropolitan Areas classification.....	13
Table 1a:	Number of women participating in the National Cervical Screening Program by age, states and territories, 1999–2000.....	47
Table 1b:	Proportion of women participating in the National Cervical Screening Program by age, states and territories, 1999–2000.....	48
Table 2a:	Number of women participating in the National Cervical Screening Program by age, states and territories, 2000–2001.....	49
Table 2b:	Proportion of women participating in the National Cervical Screening Program by age, states and territories, 2000–2001.....	50
Table 3:	Number of women with repeat screenings in the 21 months following a negative Pap smear in February 2000, states and territories, 1999–2000 and 2000–2001.....	51
Table 4:	Percentage of women with repeat screenings in the 21 months following a negative Pap smear in February 2000, states and territories, 1999–2000 and 2000–2001.....	51
Table 5a:	Number of low- and high-grade abnormalities on histology for women aged 20–69 years, states and territories, 2000.....	52
Table 5b:	Number of low- and high-grade abnormalities on histology for women aged 20–69 years, states and territories, 2001.....	52
Table 6a:	Rate of histologically confirmed high-grade abnormalities per 1,000 women screened, states and territories, 2000.....	53
Table 6b:	Rate of histologically confirmed high-grade abnormalities per 1,000 women screened by age, states and territories, 2001.....	54
Table 7a:	Number of histologically confirmed high-grade abnormalities by age, states and territories, 2000.....	55
Table 7b:	Number of histologically confirmed high-grade abnormalities by age, states and territories, 2001.....	56
Table 8a:	Number of women screened by age, states and territories, 2000.....	57
Table 8b:	Number of women screened by age, states and territories, 2001.....	58
Table 9a:	Age-standardised high-grade abnormality rate on histology per 1,000 women screened aged 20–69 years, states and territories, 2000.....	59
Table 9b:	Age-standardised high-grade abnormality rate on histology per 1,000 women screened aged 20–69 years, states and territories, 2001.....	59
Table 10:	New cases of micro-invasive cervical cancer by age, Australia, 1989–2000.....	60
Table 11:	Age-specific and age-standardised rates of micro-invasive cervical cancer by age, Australia, 1989–2000.....	61
Table 12:	New cases of cervical cancer by age, Australia, 1989–2000.....	62
Table 13:	Age-specific and age-standardised incidence rates of cervical cancer by age, Australia, 1989–2000.....	63

Table 14a:	New cases of cervical cancer by age, states and territories, 1996–1999	64
Table 14b:	Age-specific rates of cervical cancer, states and territories, 1996–1999	65
Table 15a:	Number of new cases of cervical cancer by age, states and territories, 1997–2000	66
Table 15b:	Age-specific rates of cervical cancer, states and territories, 1997–2000	67
Table 16a:	New cases of cervical cancer by histological type for women aged 20–69 years, Australia, 1989–2000.....	68
Table 16b:	Age-standardised incidence rates for cervical cancer by histological type for women aged 20–69 years, Australia, 1989–2000.....	68
Table 17a:	New cases of cervical cancer by histological type for women, all ages, Australia, 1989–2000	69
Table 17b:	Age-standardised incidence rates for cervical cancer by histological type for women, all ages, Australia, 1989–2000.....	69
Table 18:	New cases of cervical cancer by age and location, 1993–1996 and 1997–2000	70
Table 19:	Age-specific and age-standardised incidence rates for cervical cancer by age and location, 1993–1996 and 1997–2000.....	71
Table 20:	Deaths from cervical cancer by age, Australia, 1982–2001.....	72
Table 21:	Age-specific and age-standardised death rates for cervical cancer by age, Australia, 1982–2001	73
Table 22:	Deaths from cervical cancer by age, states and territories, 1994–1997	74
Table 23:	Age-specific and age-standardised death rates for cervical cancer by age, states and territories, 1994–1997.....	75
Table 24:	Deaths from cervical cancer by age, states and territories, 1998–2001	76
Table 25:	Age-specific and age-standardised death rates for cervical cancer by age, states and territories, 1998–2001.....	77
Table 26:	Deaths from cervical cancer by age and location, 1994–1997 and 1998–2001.....	78
Table 27:	Age-specific and age-standardised death rates for cervical cancer by age and location, 1994–1997 and 1998–2001	79
Table 28:	Deaths from cervical cancer by age and Indigenous status, Queensland, South Australia, Western Australia and Northern Territory, 1996–1999, 1997–2000 and 1998–2001.....	80
Table 29:	Age-specific and age-standardised death rates for cervical cancer by age and Indigenous status, Queensland, South Australia, Western Australia and Northern Territory, 1996–1999, 1997–2000 and 1998–2001.....	81

List of figures

- Figure 1: Participation rates in the National Cervical Screening Program by age group, Australia, 1999–2000 and 2000–2001..... 17
- Figure 2: Participation (age-standardised) in the National Cervical Screening Program by women aged 20–69 years, states and territories, 1999–2000 and 2000–2001..... 19
- Figure 3: Proportion of women re-screened by number of screens during the 21-month period following a negative Pap smear in February 2000, Australia 21
- Figure 4: Proportion of women re-screened by number of screens during the 21-month period following a negative smear in February 2000, states and territories..... 22
- Figure 5: Ratio of low- to high-grade abnormalities by women aged 20–69 years, states and territories, 2000 and 2001..... 24
- Figure 6: High-grade abnormalities per 1,000 women by age group, Australia, 2000 and 2001..... 26
- Figure 7: Age-standardised rate of high-grade abnormalities per 1,000 women screened aged 20–69 years, states and territories, 2000 and 2001 28
- Figure 8: Age-standardised incidence rates for micro-invasive squamous cell cancer, women aged 20–69 years, Australia, 1989–2000..... 30
- Figure 9: Age-specific incidence rates of micro-invasive squamous cell cancer, women aged 20–69 years, Australia, 1999 and 2000 31
- Figure 10: Age-standardised incidence rates of cervical cancer, Australia, 1989–2000..... 32
- Figure 11: Age-specific incidence rates of cervical cancer, Australia, 1999 and 2000 33
- Figure 12: Age-standardised cervical cancer incidence rates by women aged 20–69 years, states and territories, 1996–1999 and 1997–2000 34
- Figure 13: Age-standardised incidence rates of cervical cancer by histological type, women aged 20–69 years, Australia, 1989–2000 35
- Figure 14: Age-standardised incidence rates of cervical cancer by location by women aged 20–69 years, Australia, 1993–1996 and 1997–2000..... 36
- Figure 15: Age-standardised death rates from cervical cancer, Australia, 1982–2001..... 40
- Figure 16: Age-specific cervical cancer death rates by age group, Australia, 1988–1991 and 1998–2001..... 41
- Figure 17: Age-standardised cervical cancer death rates by women aged 20–69 years, states and territories, 1994–1997 and 1998–2001..... 42
- Figure 18: Age-standardised cervical cancer death rates by location, women aged 20–69 years, 1994–1997 and 1998–2001 43
- Figure 19: Age-standardised cervical cancer mortality rates by Indigenous status, women aged 20–69 years (Qld, SA, SA and NT), 1996–1999, 1997–2000 and 1998–2001..... 45

Acknowledgments

Financial support by the Australian Government Department of Health and Ageing and assistance of the Cancer Screening Section in the department are gratefully acknowledged. The authors of this report are Ms Janet Markey, Dr Chris Stevenson and Mr John Harding from the Australian Institute of Health and Welfare. The authors wish to extend their gratitude to those people working in the National Cervical Screening Program who provided data and comments for this report. The authors also acknowledge the input of the members of the National Advisory Committee to the National Cervical Screening Program, and the Australasian Association of Cancer Registries. The support received during the production of this report from the staff at the AIHW Health Registers and Cancer Monitoring Unit is gratefully acknowledged.

National Cervical Screening Program

New South Wales

Ms Jayne Ross
Mr Hassan Mamoon
Ms Liz Martin

Victoria

Dr Heather Mitchell
Ms Cathy Burrows
Mr Rory Wilby

Queensland

Ms Jennifer Muller
Mr Stephen Heim
Mr Nathan Dunn

Western Australia

Ms Nerida Steel

South Australia

Ms Sue Gilchrist
Ms Penny Iosifidis

Tasmania

Ms Valerie Gardner
Mr Paul Chandler

Australian Capital Territory

Ms Helen Sutherland
Mr Peter Couvee
Ms Coral Swan

Northern Territory

Ms Karen Finch
Ms Sarah Steele

Australian Government Department of Health and Ageing, Cancer Screening Section

Ms Andriana Koukari
Ms Liz Pugh

Summary

This report is the fifth national report on the performance of the National Cervical Screening Program in Australia. Cervical screening services are provided as part of mainstream health services with general practitioners performing approximately 80% of Pap smears. The program is funded by Medicare, the Australian Government, and the state and territory governments.

There is a set of performance monitoring indicators agreed to by the National Advisory Committee to the program. This report presents statistics on the monitoring undertaken. The main features of the report are summarised below.

Participation

- The total number of women who participated in cervical screening in 2000–2001 was 3,314,787 of whom 3,244,329 (98%) were in the screening program target age group of 20–69 years. This represented an increase of 16,621 in the number of women screened in 1999–2000.
- Between the periods 1999–2000 and 2000–2001 the proportion of women in the target population (women aged 20–69 years) participating in cervical screening declined from 62.6% to 61.8%.
- Participation in screening declined in all 5-year age groups within the target population between 1999–2000 and 2000–2001 except for the youngest (20–24) and oldest (65–69) age groups which each showed a slight increase. The largest decline was in women in their thirties – decreasing from 67.0% to 64.9% for women aged 30–34 years and from 68.7% to 67.1% for women aged 35–39 years.

Early re-screening

- The recommended screening interval is 2 years following a negative smear. Of a cohort of women screened in February 2000 who had a negative Pap smear result, 32% screened again within 21 months. It is not known what proportion of this early re-screening is justified on clinical grounds.

Detection of abnormalities

- A low-grade abnormality includes atypia, warty atypia, possible cervical intraepithelial neoplasia (CIN), equivocal CIN, and CIN 1, and a high-grade abnormality is defined to include CIN 1/2, CIN 2 and CIN 3 or adenocarcinoma in situ. The ratio of histologically confirmed low-grade abnormalities to high-grade abnormalities was 1.3 for Australia in 2001, the same as in 2000. The 2001 ratio did not include data for the Northern Territory.
- In 2001, the National Cervical Screening Program detected 13,555 women in the target age group 20–69 years with high-grade abnormalities. The number of high-grade abnormalities was highest in the younger age groups. For women under 35 years of age, the rate of high-grade abnormalities was over 10 per 1,000 women screened whereas it was less than 2 per 1,000 women aged 50 years and over.

Incidence and mortality

- The number of new cases of cervical cancer in Australia has continued to decline. There were 745 new cases in Australia in 2000 compared with 1,072 detected in 1989.
- Cervical cancer is the 15th most common cause of cancer mortality in women, accounting for 262 deaths in 2001. Although there was some fluctuation from year to year, the age-standardised mortality rate from cervical cancer declined. For all women aged 20 years and over there was a decline of 5.9 per 100,000 women in 1982 to 2.8 per 100,000 in 2001. During the same period, for women in the target age group of 20–69 years the rate declined from 5.1 per 100,000 to 2.4 per 100,000. The mortality rate also declined for women aged 70 years and over from 2.7 per 100,000 in 1982 to 1.1 per 100,000 in 2001.
- Women in the target age group from remote locations experienced a relatively high mortality rate from cervical cancer – 3.0 deaths per 100,000 compared with 2.3 deaths per 100,000 women in metropolitan areas. However, between the periods 1994–1997 and 1998–2001, the age-standardised cervical cancer mortality rate declined in all regions (metropolitan, rural and remote).
- Prior to 1998, only Western Australia, South Australia and the Northern Territory had Indigenous mortality registration data of sufficient quality to be publishable. In 1998, Queensland's coverage of Indigenous deaths reached an acceptable level to be included in the analysis of Indigenous mortality data. For these jurisdictions, in the period 1998–2001 there were 20 deaths from cervical cancer among Indigenous women in the target age group (an age-standardised mortality rate of 11.4 per 100,000 women). This is more than four times the corresponding rate in non-Indigenous women (2.5 per 100,000). Compared with the 1996–1999 mortality rate for Indigenous women in the target age group, which was 9.8 per 100,000, there was an increase in mortality in the 1998–2001 period. However, these rates are based on relatively small numbers of cases and may be subject to large variability. Despite the relatively large size of the apparent increase in the rate, it is still within the range of variation that would be expected due to chance.

