

6. INCIDENCE AND MORTALITY

6.1 Incidence of cervical cancer

6.1.1 Incidence of cervical cancer by 5-year age group

Definition This measure reports the total and age-specific numbers of new cases of cervical cancer reported to the NSW Central Cancer Registry, and total (crude) and age-specific incidence rates of all cervical cancer, micro invasive and invasive.

I. Cross sectional rate 1995 - 1997

Current Registry coding practices include micro-invasive carcinomas within the classification of cancer of the cervix, but excludes cervical intra-epithelial neoplasia or carcinoma-in-situ. The NSW CSP, NSW Central Cancer Registry (NSW CCR) and NSW Pap Test Register are awaiting the results of a validation study currently underway to assess the existing procedures of classification and clinical correlation. This report should be available shortly.

Age-specific numbers and rates of new cases of cervical cancer are presented for the 1995 - 1997 period. These were aggregated because annual data produce insufficient numbers for age-specific differences to be examined. During 1995 - 1997, there were 942 new cases of cervical cancer in NSW. (Table 6.1 & Figure 11). The crude incidence rate of cervical cancer among NSW women aged 20 - 70+ was 13.8 per 100,000 women. The incidence of cervical cancer increased rapidly with age between 20 and 39 years, more slowly thereafter.

**FIGURE 11: Age-specific incidence of cervical cancer in NSW
1995 - 1997 (95% Poisson confidence intervals)**

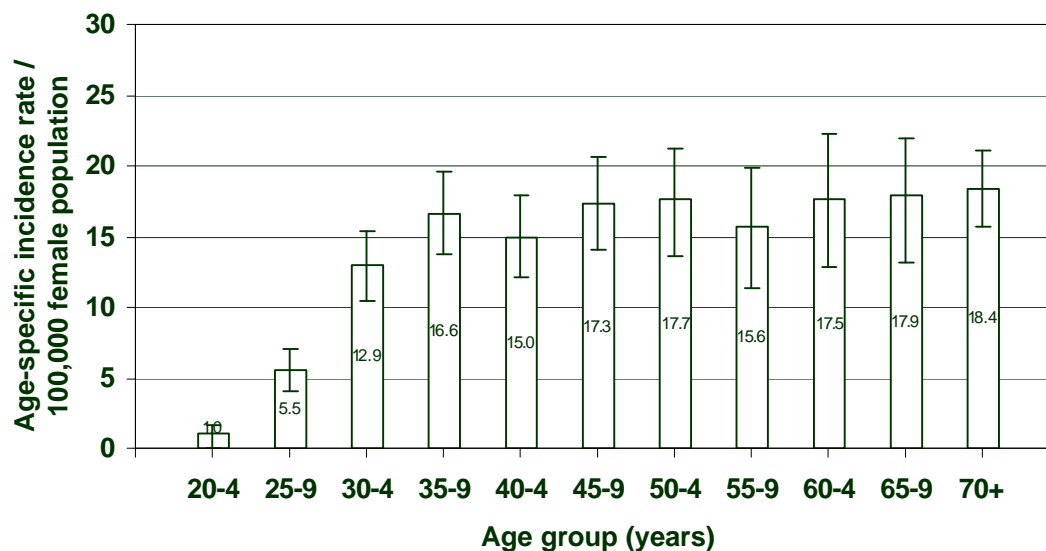


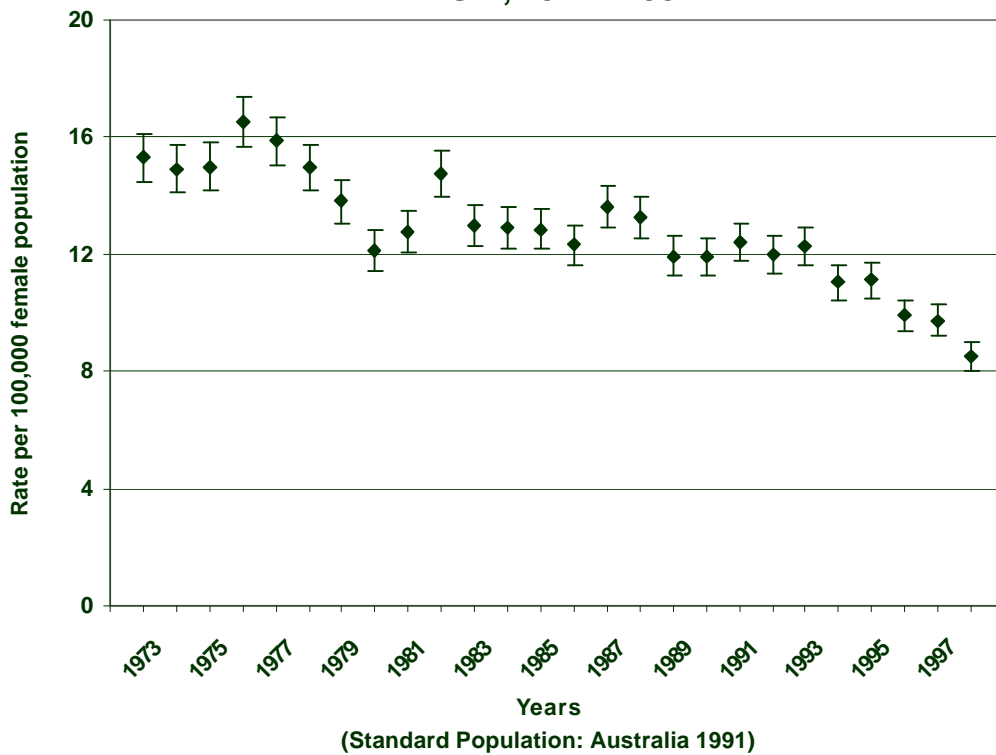
Table 6.1: Number of new cases of cervical cancer and age-specific incidence rates of cervical cancer among women in NSW, 1995 - 1997

Age (years)	Total number of new cases (1995 - 1997)	Age-specific incidence rate per 100,000 women (1995 - 1997)
20 - 24	7	1.0
25 - 29	39	5.5
30 - 34	95	12.9
35 - 39	123	16.6
40 - 44	102	15.0
45 - 49	111	17.3
50 - 54	90	17.7
55 - 59	66	15.6
60 - 64	66	17.5
65 - 69	68	17.9
70+	175	18.4
20-49	477	11.4
50-69	290	17.2
20 - 70+	942	13.8

II. Trends in incidence of cervical cancer

Between 1972 and 1997, the age-standardised incidence rate of cervical cancer fell by 44.2%, from 15.29 in 1972 to 8.53 per 100,000 women in 1997. (Figure 12)

FIGURE 12:
Annual age-standardised incidence of cervical cancer
in NSW, 1972 - 1997



6.1.2 Incidence of micro-invasive cervical cancer

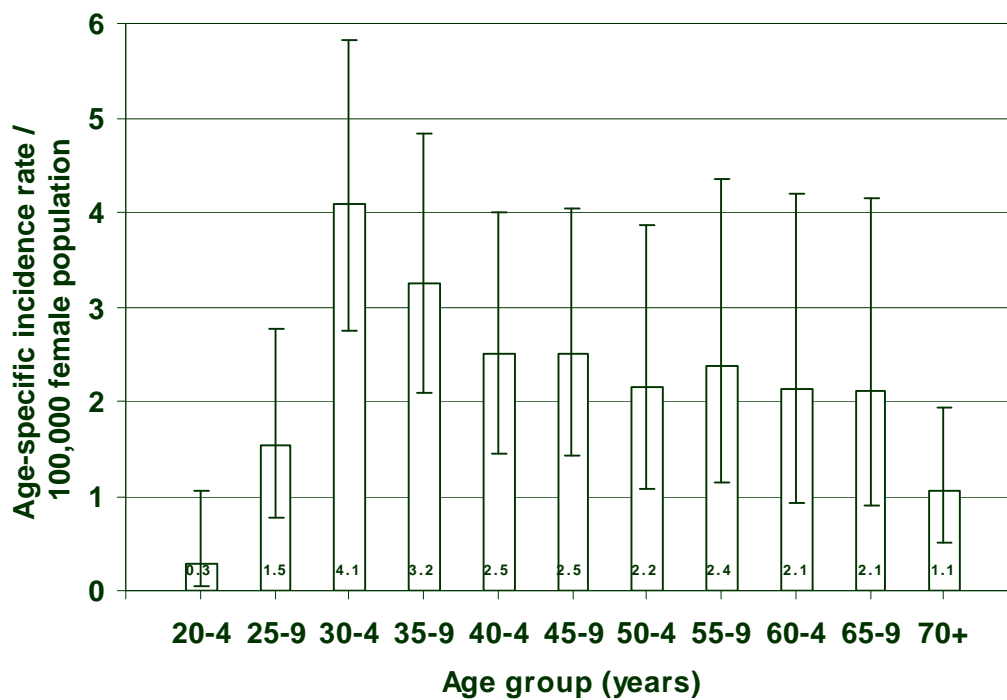
The numbers of incident cases of cervical cancer classified as micro-invasive (squamous cell cancers) reported to the NSW CCR in 1995 - 1997, and the age-specific incidence rates are summarised in Table 6.2 and Figure 13.

During 1995 -1997 there were 147 new cases of cervical cancer classified as micro-invasive reported for all women in NSW. A total of 137 cases of micro-invasive cervical cancer were reported for women in the target age group of 20 - 69 years. Between 1995 and 1997, there were 100 incident cases of micro-invasive cancer of the cervix among women aged 20 - 49 years and 37 new cases of micro-invasive cervical cancer reported among NSW women aged 50 - 69 years.

Table 6.2: Number of new cases of micro-invasive cervical cancer and age specific incidence rates of micro-invasive cervical cancer among women in NSW, 1995 - 1997.

Age (years)	Total number of new cases, 1995 - 1997	Age-specific incidence rate per 100,000 women
20 - 24	2	0.3
25 - 29	11	1.5
30 - 34	30	4.1
35 - 39	24	3.2
40 - 44	17	2.5
45 - 49	16	2.5
50 - 54	11	2.2
55 - 59	10	2.4
60 - 64	8	2.1
65 - 69	8	2.1
70+	10	1.1
20-49	100	2.4
50-69	37	2.2
20 - 70+	147	2.2

FIGURE 13: Age-specific incidence rates of micro-invasive cervical cancer in NSW 1995 - 1997 (95% Poisson confidence intervals)



6.1.3 Incidence of invasive cervical cancer

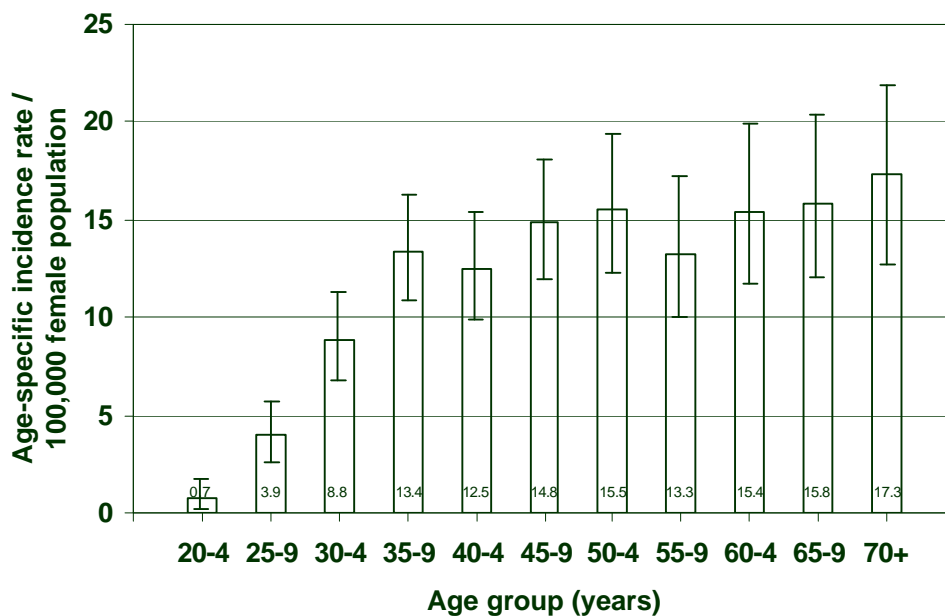
The number of incident cases of invasive cervical cancer reported to the NSW Central Cancer Registry between 1995 - 1997, and the age-specific incidence rates are summarised in Table 6.3 and Figure 14. Invasive cervical cancer includes all cervical cancers reported to the Cancer Registry other than those classified as "micro invasive", and includes invasive squamous cell carcinomas of the cervix.

Table 6.3: Number of new cases of invasive cervical cancer and age-specific incidence rates of invasive cervical cancer among women in NSW, 1995 - 1997.

Age (years)	Total number of new cases, 1995 - 1997	Age-specific incidence rate per 100,000 women
20 - 24	5	0.7
25 - 29	28	3.9
30 - 34	65	8.8
35 - 39	99	13.4
40 - 44	85	12.5
45 - 49	95	14.8
50 - 54	79	15.5
55 - 59	56	13.3
60 - 64	58	15.4
65 - 69	60	15.8
70+	165	17.3
20-49	377	9.0
50-69	253	15.0
20 - 70+	795	11.6

During 1995 - 1997, there were 795 new cases of invasive cervical cancer among all women in NSW. There were 630 new cases of invasive cervical cancer reported among women in the target age group of 20 - 69 years during 1995 - 1997. Between 1995 and 1997 there were 377 incident cases of invasive cancer of the cervix among women aged 20 - 49 years and 253 new cases among NSW women aged 50-69 years.

FIGURE 14:
Age-specific incidence rates of invasive cervical
cancer in NSW 1995 - 1997
(95% Poisson confidence intervals)



6.2 Age-specific incidence rates of cervical cancer by histological type

Morphology of incident cancers has been coded by NSW CCR according to SNOMED (Cote R. Systematised Nomenclature of Medicine, College of American Pathologists, Ill. 1987). Data are available for incident cases of cervical cancer classified as squamous cell carcinoma (SCC) or other than squamous reported to the Registry from 1995 - 1997. Cervical cancers classified as "other than squamous" include those cancers of unknown morphology, and may therefore incorporate some individual cases with squamous cell carcinoma of the cervix.

6.2.1 Incidence rates of cervical cancer classified as squamous cell carcinoma

The total number of new cases of cervical cancer classified as SCC reported to the NSW CCR from 1995 to 1997, and age-specific incidence rates are presented in Table 6.4 and Figure 15.

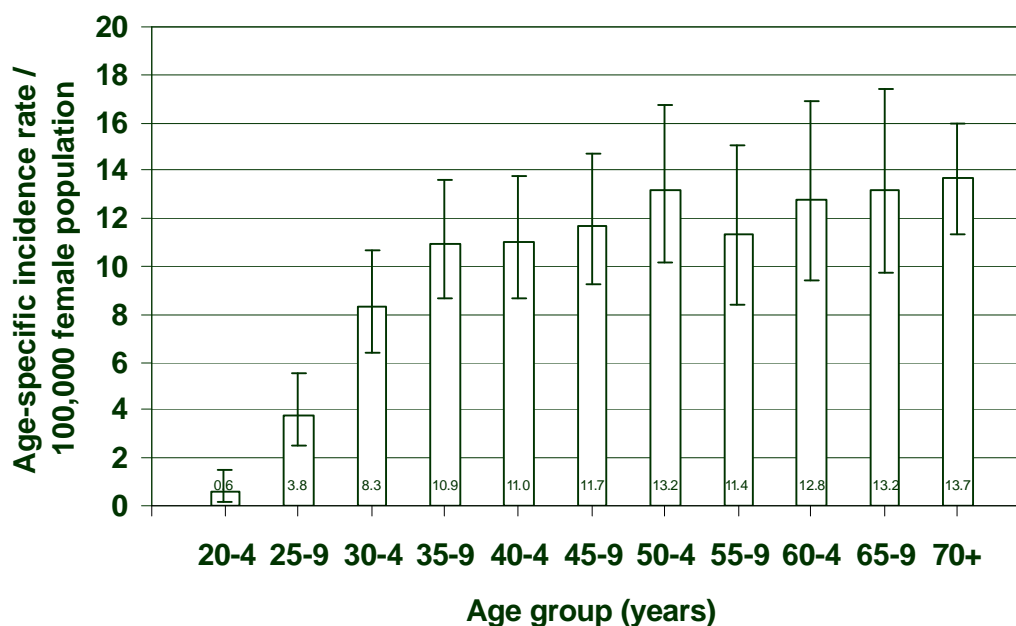
Of the 942 new cases of cancer of the cervix among all women in NSW during 1995-1997, 666 (70.7%) were classified as squamous cell carcinomas and 276 (29.3%) were classified as other than squamous cancers.

Between 1995 to 1997 there were 536 newly diagnosed cases of SCC of the cervix reported in NSW for women in the target age group of 20-69 years (80.5%). Among women aged 20 - 49 years, 323 cases of SCC of the cervix were reported (48.6%) and 213 cases of were reported among the 50-69 year age group (32.0%).

TABLE 6.4 Number of new cases and age-specific incidence rate of SCC in NSW, 1995 - 1997

Age (years)	Total number of new cases, 1995 - 1997	Age-specific incidence rate per 100,000 women
20 - 24	5	0.6
25 - 29	27	3.8
30 - 34	61	8.3
35 - 39	81	10.9
40 - 44	75	11.0
45 - 49	75	11.7
50 - 54	67	13.2
55 - 59	48	11.4
60 - 64	48	12.8
65 - 69	50	13.2
70+	130	13.7
20-49	323	7.7
50-69	213	12.6
20 - 70+	666	9.2

FIGURE 15:
Age-specific incidence rates of squamous cell carcinoma in NSW 1995 - 1997
(95% Poisson confidence intervals)



6.2.2 Incidence rates of cervical cancer classified as other than squamous

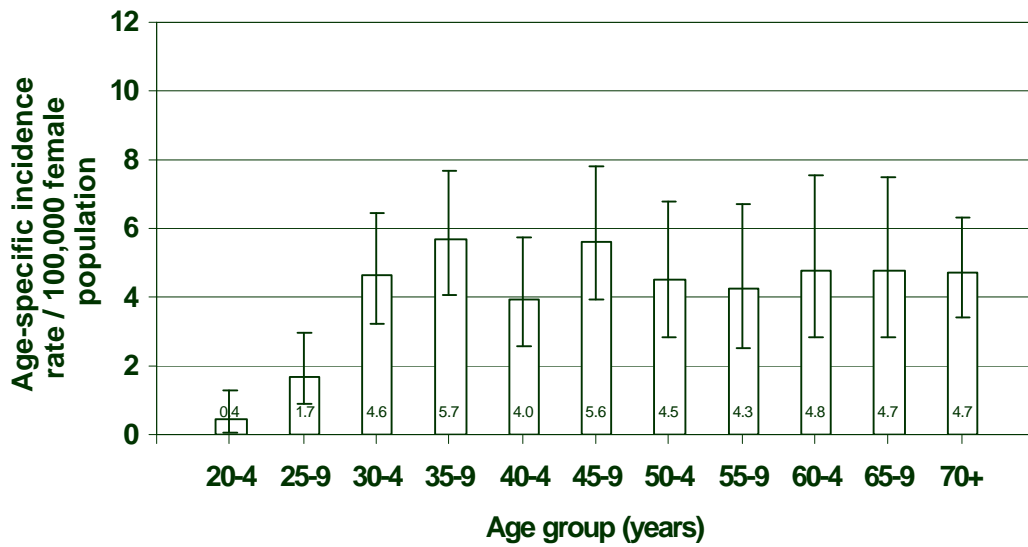
The number of new cases of cervical cancer classified as other than squamous reported to the NSW Central Cancer Registry between 1995 and 1997, and age-specific incidence rates of cervical cancer classified as other than squamous is recorded in Table 6.5 and Fig 16.

Between 1995 and 1997, there were 276 cases of cervical cancer classified as other than squamous in all women in NSW. Of these, 231 cases of cervical cancer classified as other than squamous in the target age group (20 - 69 years). There were 154 new cases of cervical cancer not classified as squamous among women aged 20 - 49 years in the reporting years of 1994 - 1996, and 77 new cases of non-SCC of the cervix among NSW women aged 50-69 years.

TABLE 6.5: Number of new cases of cervical cancer classified as other than squamous, and age-specific incidence rate, NSW, 1995 - 1997

Age (years)	Total number of new cases, 1995 - 1997	Age-specific incidence rate per 100,000 women
20 - 24	3	0.4
25 - 29	12	1.7
30 - 34	34	4.6
35 - 39	42	5.7
40 - 44	27	4.0
45 - 49	36	5.6
50 - 54	23	4.5
55 - 59	18	4.3
60 - 64	18	4.8
65 - 69	18	4.7
70+	45	4.7
20-49	154	3.7
50-69	77	4.6
20 - 70+	276	4.0

FIGURE 16: Age-specific incidence rates of other than squamous cell carcinoma in NSW 1995 - 1997 (95%Poisson confidence intervals)



6.3 AGE-SPECIFIC MORTALITY FROM CERVICAL CANCER

I. Cross Sectional rates 1995 - 1997

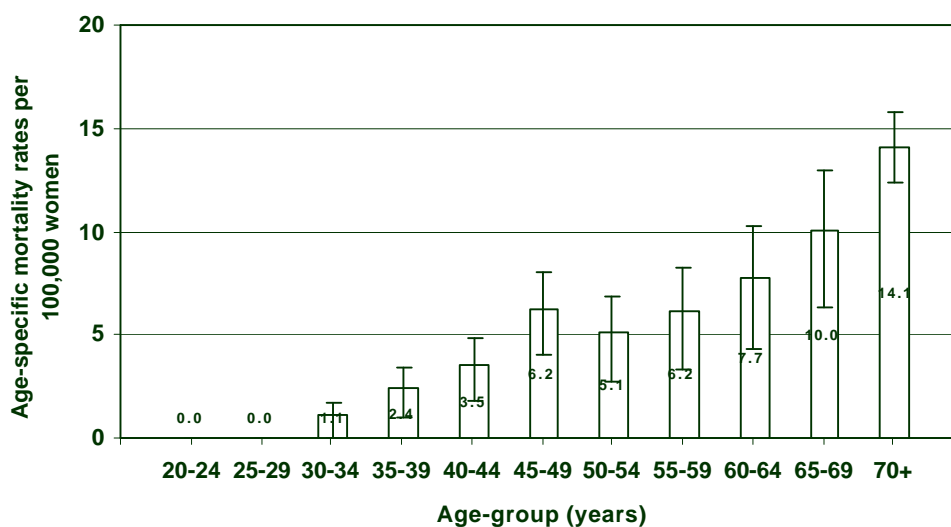
Age-specific mortality from cervical cancer is available from the NSW Central Cancer Registry for 1972 to 1997. There were 343 deaths from cancer of the cervix (ICD-9 180) among women of all ages in NSW between 1995 to 1997. Of these, 209 (60.9%) deaths occurred in women from the target 20-69 year age group. The number of cervical cancer deaths across five year age groups in NSW, and age-specific mortality rates per 100,000 women are summarised in Table 6.6 and Figure 17.

The average crude mortality rate for cervical cancer in NSW from 1995 to 1997 was 5.0 per 100,000 women.

TABLE 6.6: Number of cervical cancer deaths and age-specific mortality rates for cervical cancer in NSW, 1995 - 1997

Age (years)	Total number of cancer deaths (1995 - 1997)	Age-specific mortality rates per 100,000 women (1995 - 1997)
20 - 24	0	0.0
25 - 29	0	0.0
30 - 34	8	1.1
35 - 39	18	2.4
40 - 44	24	3.5
45 - 49	40	6.2
50 - 54	26	5.1
55 - 59	26	6.2
60 - 64	29	7.7
65 - 69	38	10.0
70+	134	14.1
20 - 70+	343	5.0

**FIGURE 17: Age-specific mortality for cervical cancer in NSW,
1995 - 1997
(Poisson Confidence Intervals)**



II. Time Trend

Between 1972 and 1997, age-standardised mortality rate from cervical cancer fell by approximately 48.6% from approximately 6 per 100,000 women to approximately 3 per 100,000. The fall in both incidence and mortality appears to be continuing. (Figure 18)

**FIGURE 18:
Annual age-standardised mortality from cervical
cancer in NSW, 1972 - 1997**

