

Cervical cancer

Key points

Cervical cancer

Seventy-three females died from cervical cancer in 1997, resulting in an age-standardised rate of three per 100 000 females which was under the target of 3.5 per 100 000 females set for 2005.

Deaths from cervical cancer in 1997 were the lowest, both in number and rates for the past decade.

The 1997 age-standardised cervical cancer mortality rate for Māori was down by more than a quarter from 11 per 100 000 in 1996 to eight per 100 000 females in 1997. This meets the 2000 target of 9.4 per 100 000 females.

Māori rates were almost four times greater than the rates for European and Other females (eight versus two per 100 000). There were only two deaths in Pacific females, hence rates are not reported.

In 1998 224 females were registered with cervical cancer. The age-standardised incidence rate was nine per 100 000 females, close to the 2005 target of 8.6 per 100 000.

Cervical cancer screening

In 1998 88 percent (910 565) of eligible females were enrolled on the National Cervical Screening Programme. This figure reached 89 percent (932 835) at the end of July 1999 which meets the target of 85 percent set for 2000.

Of the total females enrolled in 1998, 869 161 had a smear within the last five years. This had increased to 882 090 by July 1999, accounting for 84 percent of all eligible females.

Targets

Cervical cancer

To reduce the age-standardised mortality rate from cervical cancer to 3.5 per 100 000 females or less by 2005.

To reduce the age-standardised incidence rate of cervical cancer to 8.6 per 100 000 females or less by 2005.

To reduce the proportion of invasive cervical cancers beyond Stage 1 at the time of detection to 30 percent or less by 2000.

To reduce the age-standardised mortality rate from cervical cancer in Māori to 9.4 per 100 000 females or less by 2000 and to 6.6 per 100 000 or less by 2005.

To reduce the age-standardised incidence rate of cervical cancer in Māori to 11.0 per 100 000 females or less by 2005.

Cervical cancer screening

To increase the proportion of eligible females enrolled and screened in the previous five years to 85 percent or more by 2000.

Progress towards the targets

Cervical cancer

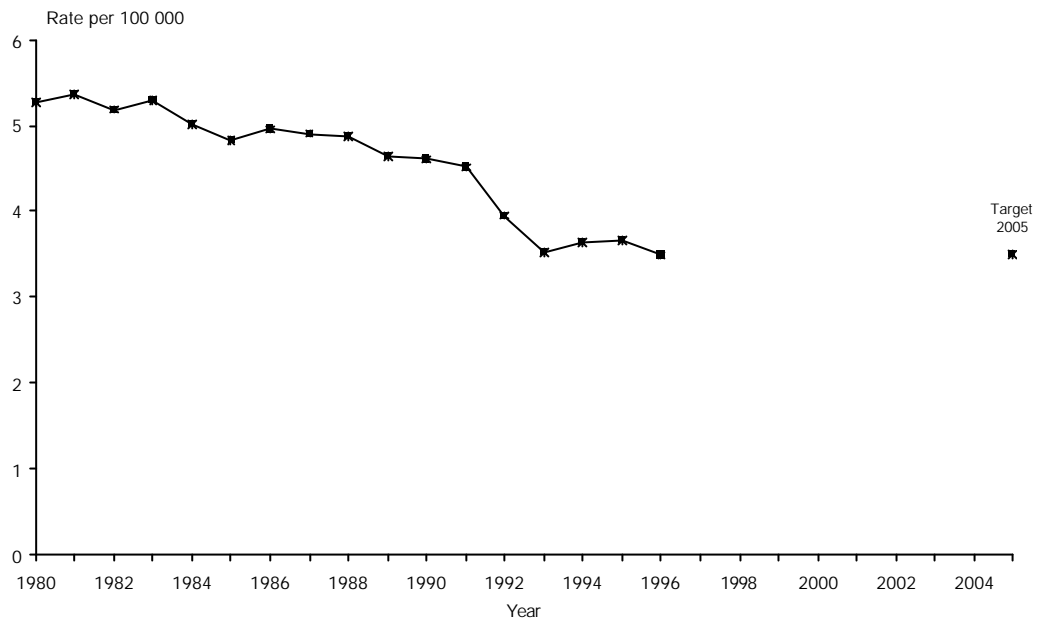
Mortality

In 1997 73 females died from cervical cancer of whom 26 percent were Māori, 3 percent Pacific and the remaining 71 percent European and Other. The age-standardised cervical cancer mortality rate in 1997 was three per 100 000 females. Deaths in 1997 due to cervical cancer were the lowest since 1980 both in terms of number and rates. The current rate is well under the target set for 2005. The three-year average for 1995–97 was 3.5 per 100 000, meeting the 2005 target level (Figure 1).

Over the period 1988–97 the age-standardised mortality rate for cervical cancer among all females decreased by 40 percent. The decline in mortality accelerated in the early 1990s which may reflect the improvements in the level of cervical screening adopted in the mid-1980s.

In 1997 the age-standardised mortality rates for Māori was eight per 100 000 females, down from 11 per 100 000 in 1996. The current rate meets the target set for 2000. It would require an additional decrease of 3 percent annually during 1998–2005 to attain the 2005 target of 6.6 per 100 000 females. Despite the fact that Māori rates have decreased considerably in 1997, a marked difference exists in the rates between Māori and European and Other females (Figure 2). The Māori rate was four times greater than that of European and Other females (eight versus two per 100 000).

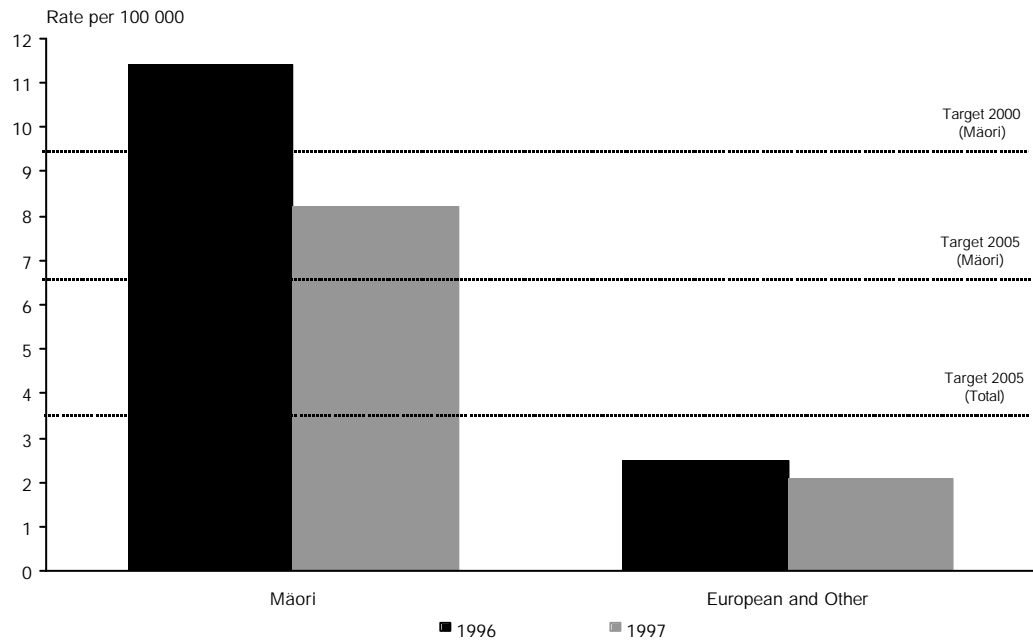
Figure 1: Mortality rate of cervical cancer, 1980–97



Source: New Zealand Health Information Service

Notes: Rates are three-year rolling averages. For example, the 1996 data point represents the average annual rate for 1995–97. The 1980 anchor data point is just the one-year value for 1980. Data for 1997 are provisional.

Figure 2: Mortality rate of cervical cancer, Māori and European and Other females, 1996–97



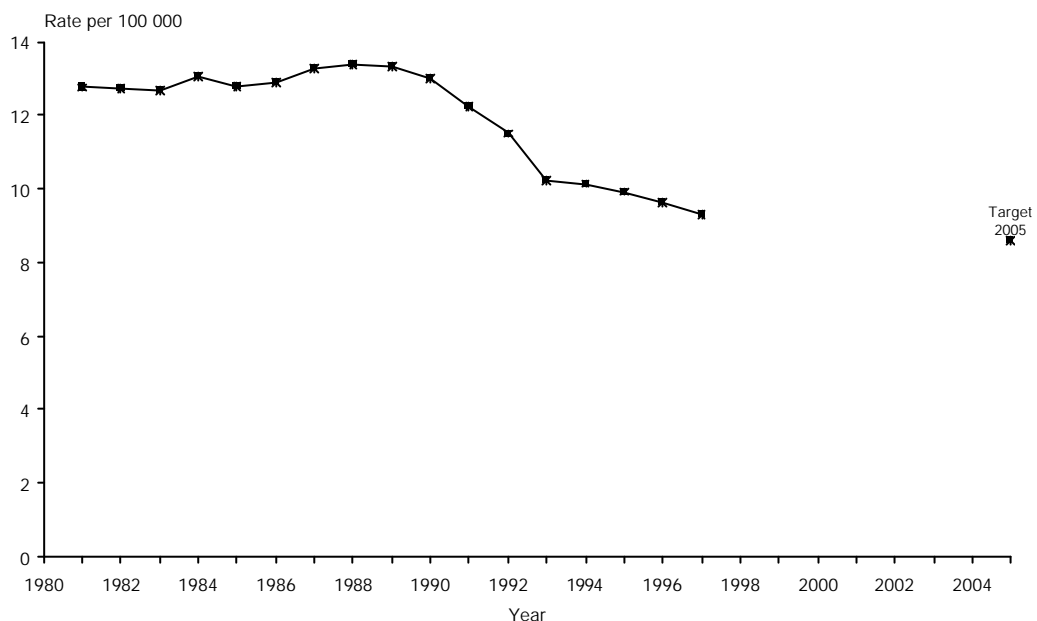
Source: New Zealand Health Information Service

Note: Data for 1997 are provisional, and rates are age-standardised to Segi's world population.

Incidence

In 1998 the latest year for which data are available, a total of 224 females were registered with cervical cancer. This is an age-standardised rate of nine per 100 000 females. Most of the decrease in the cervical cancer incidence rate has occurred since 1989. The age-standardised cervical cancer incidence rate for all females has decreased by more than a quarter during 1989–98. During 1995–98 the age-standardised cervical cancer registration rate declined by an average of 3 percent annually (see Figure 3). Given the current rate of registration, an average 1 percent annual decline in registration is required to achieve the target of 8.6 per 100 000 in 2005. The target is likely to be met. The recent lower incidence rates are most likely due to improvements in cervical screening since the mid-1980s.

Figure 3: Incidence rates of cervical cancer, 1980–98

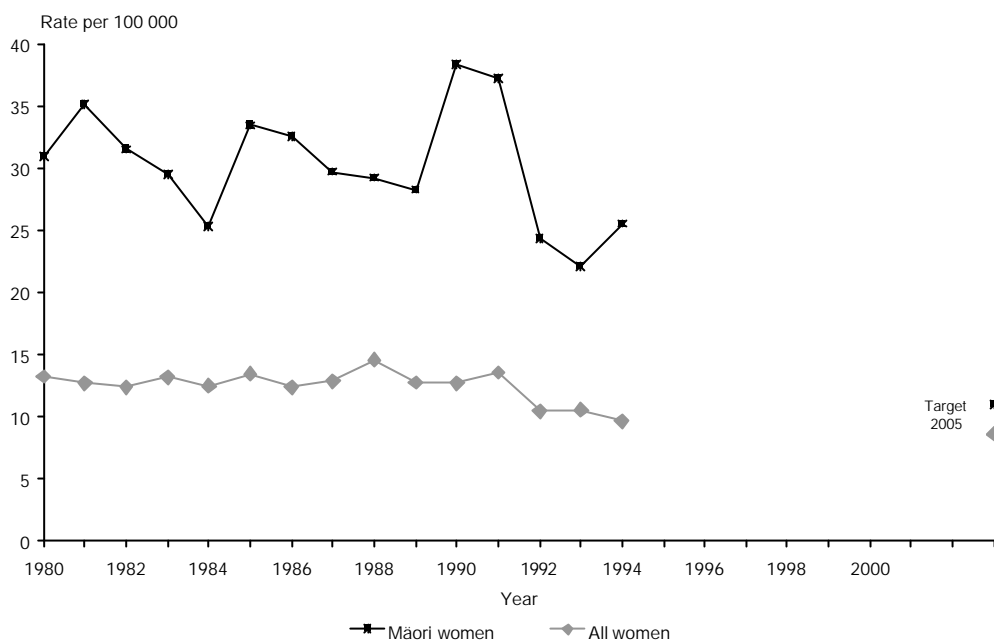


Source: New Zealand Health Information Service

Note: Rates are three-year rolling averages. For example, the 1997 data point represents the average annual rate for 1996–98.

Between 1991 and 1995 an average of 230 females were registered annually with cervical cancer of whom 16 percent were Māori and 7 percent Pacific females. The incidence rate for Māori females has declined by 35 percent since 1989–91, yet at 22 per 100 000 females (annual average 1993–94) it is still more than twice the national rate (Ministry of Health 1998b). New data are not available at the time of writing this chapter.

Figure 4: Incidence rate of cervical cancer, Māori and total, 1980–95



Source : New Zealand Health Information Service

Note: Rates are three-year rolling averages. For example, the 1994 data point represents the average annual rate for 1993–95. Rates are standardised to Segi's world population.

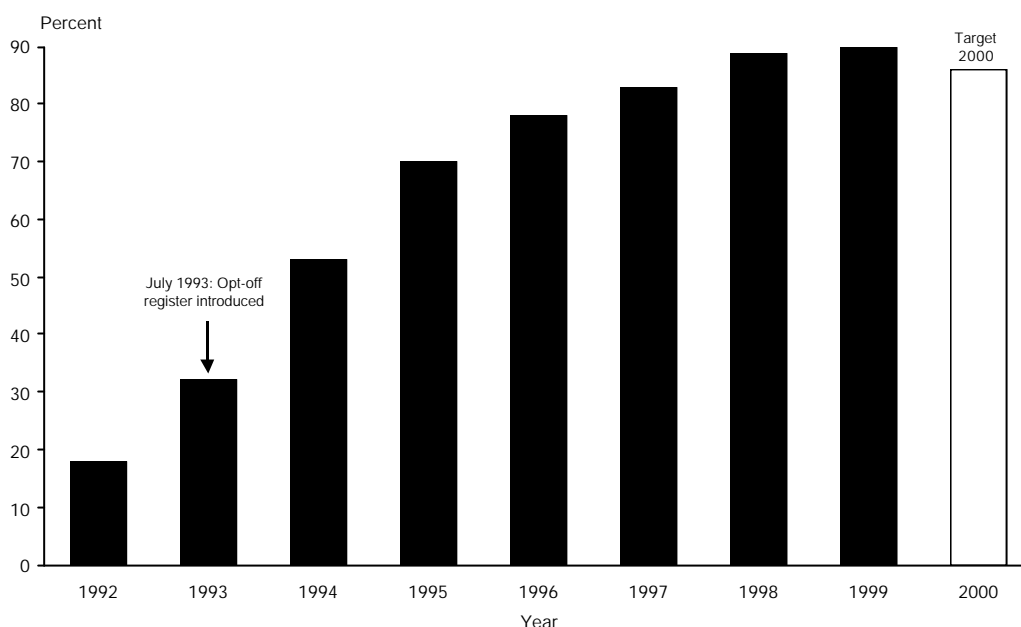
Stage of disease

Using stage-of-disease data is one way of estimating the extent to which the screening programme is detecting disease at an appropriately early stage. In the early 1980s approximately 45 percent of invasive cervical cancers were detected at Stage 2 (regional or node involvement) or Stage 3 (remote or diffuse metastases) of the disease, excluding cancers with no stage of disease reported. This proportion decreased to around 25 percent for 1992–94. Stage-of-disease information is currently not available from the New Zealand Health Information Service due to the poor quality of these data. Therefore this target cannot be monitored at present.

Cervical cancer screening

The National Cervical Screening Programme (NCSP) was introduced in 1990. At the end of December 1998, 910 565 females were enrolled on the National Cervical Screening Register. The proportion of eligible females enrolled had increased from 32 percent in 1993 to 88 percent in 1998. At the end of July 1999, 932 835 females (that is, 89 percent of eligible females) were actively enrolled on the register (Figure 5). This meets the target of 85 percent set for 2000.

Figure 5: Percentage of eligible females enrolled on the National Cervical Screening Programme, 1992–98



Source: National Cervical Screening Programme, Ministry of Health 1998

Note: Eligibility is unadjusted before 1995 for females who have had a hysterectomy; the eligible population is adjusted for hysterectomy from 1996 onwards.

The programme recommends females aged 20–69 be screened at least every five years. This group reached 882 900 females (84 percent) who have had a smear in the five years prior to July 1999, an increase from 75 percent in 1996 (Health Funding Authority 1999).

Overall, cervical screening enrolments have increased steadily in recent years. While the rate of new enrolments has slowed, the target is being met at present.

Indicators

Cervical cancer

Cervical cancer age-standardised mortality rate for all females.

Cervical cancer age-standardised mortality rate for Māori females.

Cervical cancer age-standardised incidence rate for all females.

Cervical cancer age-standardised rate for Māori females.

Proportion of invasive cervical cancer detected at Stage 2 or 3 of the disease.

Cervical cancer screening

Eligible females are defined as those who are aged 20–69 years inclusive on 31 March 1999, less an adjustment of 90 percent of the proportion of each age group who have had a hysterectomy (Health Funding Authority 1999). The numerator for the proportion of eligible females enrolled and screened is calculated as those who were enrolled on the National Cervical Screening Register and who have had a smear in the previous five years.

Data sources

Cervical cancer

Cancer mortality and cancer registration data are from the New Zealand Health Information Service (NZHIS). Cancer mortality data for 1997 are provisional. It is possible some cervical cancer deaths are coded to other sites such as the uterus (ICD-9-182) or possibly the vagina (ICD-9-184.0). However no studies have assessed the quality of cervical cancer mortality or registration data. With the complete registration of deaths in New Zealand, the cancer mortality data are assumed to be reliable irrespective of coding differences.

The Cancer Registry Act 1993 made registration of all cancers compulsory from 1 July 1994. The Act states that where information such as stage of disease is available, it must be reported. However information on staging of cancer has been poorly reported in the past few years. The staging system used by the New Zealand Cancer Registry is not the same as the international (FIGO) classification system used for staging cancer. In addition, in 1997 problems were identified with the staging of cancers of the cervix for the year 1994. As a result the NZHIS withheld all cervical staging data. A contributing factor was the lack of staging detail received by the NZHIS for this period, which was reflected in the quality of data. Alternative stage of disease coding systems are being considered, which will contribute to improving these data in future. Hence discussions on incidence and registration are retained from last year's publication (Ministry of Health 1998b).

Cervical cancer screening

Enrolment information was supplied by the National Cervical Screening Register and population data from Statistics New Zealand (denominator) were used to calculate the proportion of eligible females enrolled in the National Cervical Screening Programme as at 31 July 1999. The denominator data were adjusted for females in the population who have had a hysterectomy. If the hysterectomy was for a benign condition and the woman had a normal smear history, she no longer requires cervical smears (Ministry of Health 1998a).

Enrolments are likely to underestimate the level of screening because of a possibility that some females will be having regular smears but have chosen not to be enrolled in the programme.

References

- Health Funding Authority. 1999. *National Cervical Screening Register*. Wellington, Health Funding Authority.
- Ministry of Health. 1998a. *The National Cervical Screening Programme: Third statistical report*. Wellington: Ministry of Health.
- Ministry of Health. 1998b. *Progress on Health Outcome Targets: Te Haere Whakamua ki ngā Whāinga Hua mō te Hauora. The state of the public health in New Zealand 1998*. Wellington: Ministry of Health.