

Tobacco

Key points

Tobacco consumption

The total amount of tobacco products released for consumption per adult reached a new low of 1371 cigarette equivalents in 1998. The target level of 1000 or fewer cigarettes per adult is likely to be met by 2005 if the consumption per adult is reduced by 4 percent annually.

Smoking prevalence among adults (15 years and over) has fallen from 32 percent in 1982 to 25 percent in 1998. Given this prevalence rate, an annual reduction of approximately 3 percent in the smoking prevalence rates is required to meet the target of 20 percent or less by 2005.

In 1998, around one in four Europeans, one in three Pacific peoples and one in two Māori were cigarette smokers. The target for Māori (40 percent or less by 2005) is likely to be achieved with approximately 3 percent per annum reduction.

Smoking prevalence among young people (15–24 years) has remained steady at about 31 percent since 1991.

Between 1984 and 1998 the smoking prevalence among 15–24-year-olds decreased from 35 to 27 percent for males, and from 40 to 30 percent for females. This is a substantial improvement in smoking behaviour among young people. However an additional annual reduction of 5 percent among males and 6 percent among females is required to meet the 2005 target of 20 percent or less.

Tobacco-related harm: lung cancer

Lung cancer is one of the leading causes of cancer death, accounting for 19 percent of total cancer deaths in 1997.

Female age-standardised lung cancer rates have marginally increased to 19 deaths per 100 000 population in 1997.

Male age-standardised lung cancer rates have dropped from 48 to 36 deaths per 100 000 population between 1987 and 1997.

Lung cancer was the most common cause of cancer deaths among Māori in 1997, accounting for 33 percent of total cancer deaths.

Targets

Tobacco consumption

To reduce tobacco products sold to 1000 cigarette equivalents or less per adult (15 years and over) by 2005.

To reduce the percentage of adults (15 years and over) smoking any type of cigarette to 20 percent or less by 2005.

To reduce the percentage of Māori adults (15 years and over) smoking any type of cigarette to 40 percent or less by 2005.

To reduce the percentage of young people (15–24 years) smoking any type of cigarette to 20 percent or less by 2005.

To reduce the percentage of pregnant females smoking any type of cigarette to 20 percent or less by 2005.

To reduce the percentage of pregnant Māori females smoking any type of cigarette to 50 percent or less by 2005.

To reduce the percentage of indoor workers exposed to environmental tobacco smoke during working hours to near zero by 2005, and during tea and lunch breaks to 5 percent or less by 2005.

Tobacco-related harm: lung cancer

To reduce the age-standardised mortality rate from lung cancer in males to 35 per 100 000 or less by 2020.

To prevent the age-standardised mortality rate from lung cancer in females rising above the 1990 rate of 18.4 per 100 000 beyond 2020.

* The target timeframe is extended to 2005 from 2000.

Target derivation

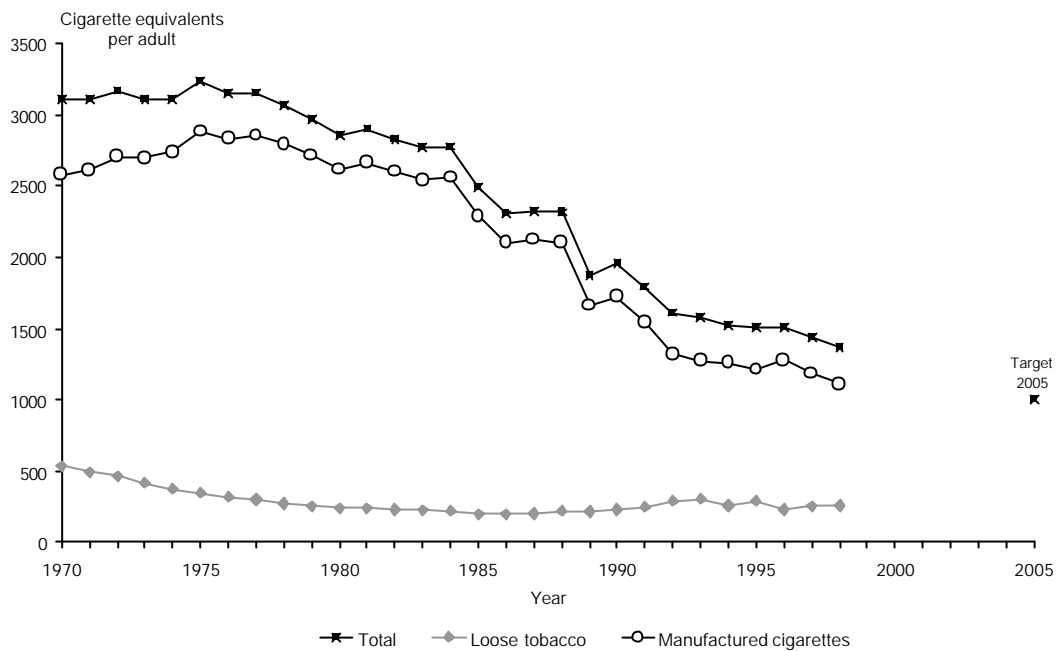
A recent review of targets for tobacco and alcohol and illicit and other drugs suggests that the timeframe to achieve the smoking targets by 2000 needs to be extended. Currently available data have been showing that the 2000 targets for smoking were unachievable because the targets were set in 1994 irrespective of the implementation of a number of tobacco control strategies (Ministry of Health 1999a). Hence the target year has been extended to 2005 instead of 2000.

Progress towards the targets

Tobacco consumption

The total amount of tobacco products released for consumption per adult in 1998 reached a new low of 1371 cigarette equivalents, down from 1439 cigarette equivalents in 1997 and 1505 in 1996. Figure 1 shows total tobacco products released for consumption to adults (15 years and over) for the period 1970–98.

Figure 1: Tobacco products released for consumption, 1970–98



Source: Ministry of Health 1999b

Notes:

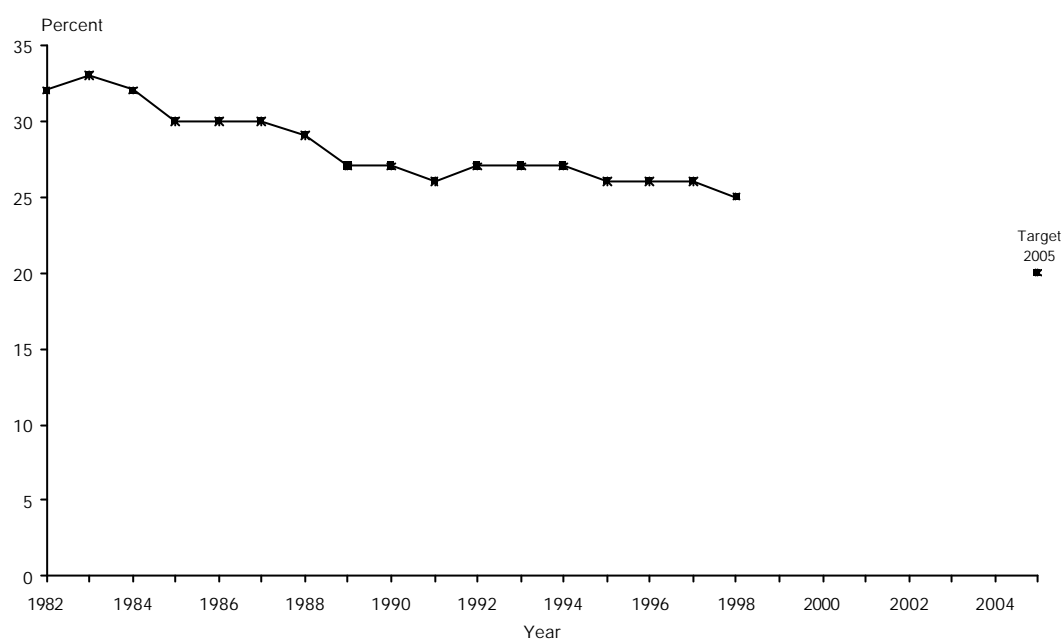
- 1) One gram of loose tobacco is counted as equivalent to one manufactured cigarette. With the use of filters, the average manufactured cigarette contains less than one gram of tobacco.
- 2) Calculations of cigarette equivalents are based on excise data on manufactured cigarettes and loose tobacco released for sale. Loose tobacco is mainly cigarette tobacco, but includes a small amount of pipe tobacco. Cigars are not included.

Historically there has been slow but continued progress towards reducing tobacco products released for consumption. The target level of 1000 or fewer cigarettes per adult is likely to be met by 2005 if the total amount of tobacco products released for consumption per adult is reduced by 4 percent annually.

Tobacco products released for consumption per adult have decreased in one type of product but increased in another. Manufactured cigarettes decreased by 13 percent between 1996 and 1998 while there was a 13 percent increase in the quantity of loose tobacco released for consumption. In addition, the amount of tobacco used in cigars in 1997 was the highest since 1990. The volume of cigar tobacco released for consumption increased by approximately 27 percent although cigars are a very small proportion of the tobacco market (Ministry of Health 1998).

Smoking prevalence in the adult population (15 years and over) in New Zealand in 1998 was 25 percent. Cigarette smoking prevalence has declined by approximately one-third, from 36 percent in 1976 to 25 percent in 1998. However, smoking prevalence in the adult population has not changed greatly in recent years. Figure 2 illustrates a trend of smoking prevalence for all adults (15 years and over).

Figure 2: Prevalence of smoking among adults (15 years and over), 1982–98



Source: Ministry of Health 1999b

Notes:

- 1) From July 1989 to March 1996, the youngest age group OTR Spectrum reported was 16–24-year-olds. Adjustment for the expected proportion of smokers aged 15–24 years from those aged 16–24 years has been made.
- 2) Between April 1996 and June 1998, the youngest age group OTR Spectrum reported was 18–24-year-olds. Adjustment for the expected proportion of smokers aged 15–24 years from those aged 18–24 years has been made.
- 3) Data collected from June 1998 are for those aged 15 years and over.
- 4) Smoking prevalence figures include the smoking of both manufactured and roll-your-own cigarettes.

In 1998 around one in four Europeans, one in three Pacific peoples and one in two Māori were cigarette smokers. Table 1 presents the percentage of adults smoking, by ethnicity over the period 1990–98. No rapid progress in reducing the percentage of Māori adults (15 years and over) smoking any type of cigarette is evident. In 1998 the smoking prevalence among Māori adults was 49 percent, down from 51 percent in 1997. Similar trends can be seen among Pacific peoples. The percentage of adults smoking among Pacific peoples was 33 percent compared to 34 percent in 1997. Although the proportion of adults smoking among New Zealand Europeans and Others remained lower than that of Māori and Pacific peoples, the prevalence rates remained unchanged at around 22 percent. The target for Māori (40 percent or less by 2005) is likely to be met by 2005 with an annual reduction of 3 percent in adult smoking during the period 1999–2005.

Smoking prevalence among young people (15–24 years) has remained steady at about 31 percent since 1991. Between 1984 and 1998 smoking prevalence of 15–24-year-olds dropped from 35 to 27 percent for males and from 40 to 30 percent for females. This is a substantial improvement in smoking behaviour among young people. The smoking prevalence among younger adults (15–34 years) was consistently higher than older adults (35 years and over). For instance, smoking prevalence for males was highest in the 25–34 years age group at 34 percent in 1998 compared to 27 and 16 percent in the age groups 15–24 and 55 years and over. Among females similar rates of prevalence of smoking were found in the age groups 15–24 (30 percent) and 25–34 years (31 percent) compared to 12 percent in the age group 55 years and over.

Table 1: Prevalence of smoking among adults (15 years and over), by ethnicity, 1990–98

Year	Prevalence of smoking (%)			
	Māori	Pacific peoples	European/Other	All adults
1990	51	32	25	28
1991	50	30	24	26
1992	52	33	24	27
1993	54	33	24	27
1994	52	34	24	27
1995	51	34	24	27
1996	49	32	23	26
1997	51	34	23	26
1998	49	33	22	25
Target (2000)	40	–	–	20

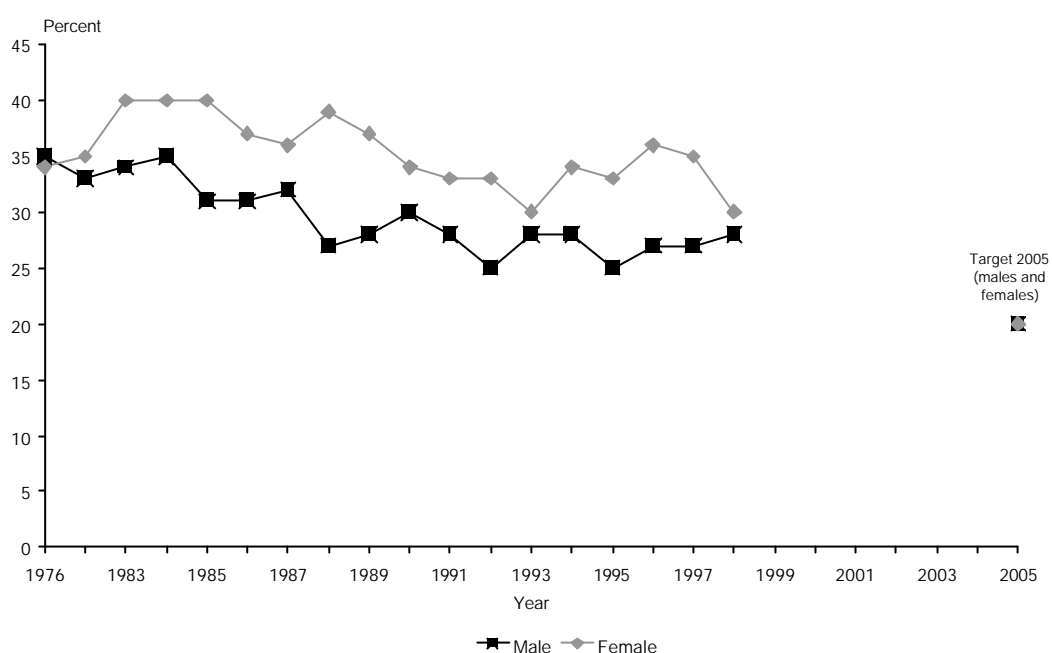
Source : Ministry of Health 1999b
See notes to Figure 2.

Figure 3 shows the prevalence of smoking among young persons (15–24 years) by sex. Throughout the period 1983–98, smoking prevalence for females was higher than for males. In recent years smoking prevalence among females has decreased substantially, from 35 percent in 1997 to 30 percent in 1998 while remaining unchanged among young males at 27 percent. An additional annual reduction in smoking prevalence of 5 percent among males and 6 percent among females is required to meet 2005 target of 20 percent or less. Given the current prevalence of youth smoking rates, it is unlikely that the target will be met by 2005.

Differences in smoking prevalence between males and females have narrowed in recent years, although higher rates were observed among Māori and particularly among young Māori females. Careful interpretation of the results is required due to small numbers (Table 2).

For commentary on smoking trends in the different groups of pregnant females, see the section on Sudden Infant Death Syndrome (SIDS). Also there are no data available to assess the exposure to environmental tobacco smoke (ETS) target (Ministry of Health 1997).

Figure 3: Prevalence of smoking among young persons (15–24 years), by sex, 1983–98



Source: Ministry of Health 1999b

Notes:

- 1) From July 1989 to March 1996, the youngest age group OTR Spectrum reported was 16–24-year-olds. Adjustment for the expected proportion of smokers aged 15–24 years from those aged 16–24 years has been made.
- 2) Between April 1996 and June 1998, the youngest age group OTR Spectrum reported was 18–24-year-olds. Adjustment for the expected proportion of smokers aged 15–24 years from those aged 18–24 years has been made.
- 3) Data collected from June 1998 are for those aged 15 years and over.
- 4) Smoking prevalence figures include the smoking of both manufactured and roll-your-own cigarettes. Confidence intervals for the survey estimates are wider for sub-groups of the population, such as 15–24-year-olds.

Table 2: Prevalence of smoking, by age, sex and ethnicity, 1996–98

Age (years)	1996 Percentage		1997 Percentage		1998 Percentage	
	Māori	Non-Māori	Māori	Non-Māori	Māori	Non-Māori
Males						
15–24	30.4	25.7	36.7	25.2	42.4	24.8
25–34	43.4	30.3	36.0	29.8	46.6	32.2
35–54	53.1	23.1	45.9	26.3	52.1	26.0
55+	27.5	17.2	36.5	15.2	31.6	15.8
Females						
15–24	53.9	31.7	55.7	29.8	51.4	25.4
25–34	57.5	31.0	65.2	31.5	52.3	27.2
35–54	58.9	21.9	53.0	22.4	57.2	22.2
55+	31.1	11.9	47.0	12.6	17.7	12.2

Source: Ministry of Health 1999b

Tobacco-related harm: lung cancer

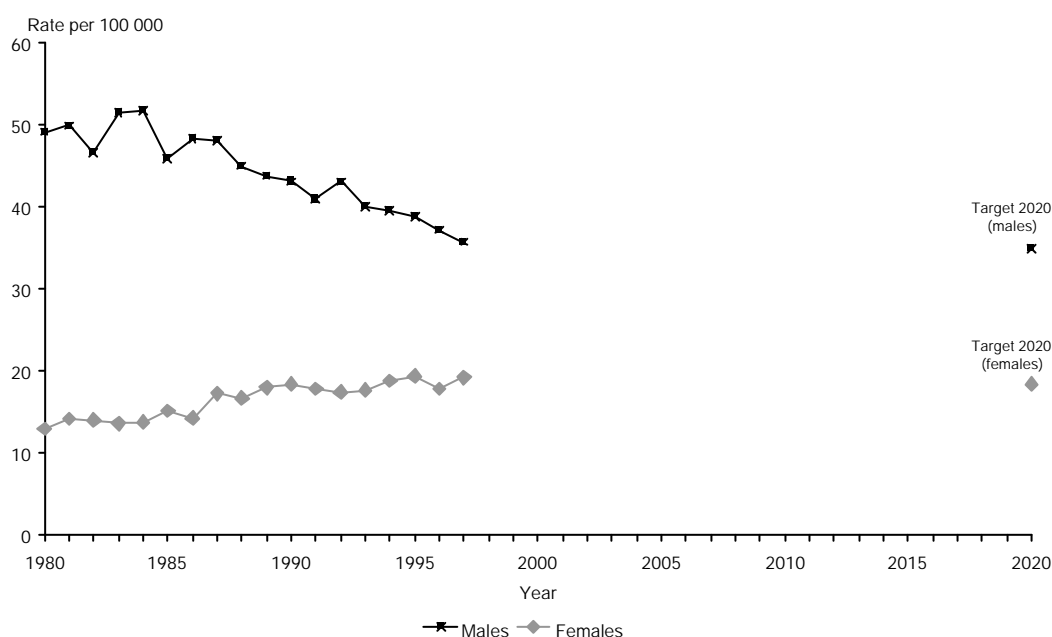
There were 1412 deaths due to lung cancer in 1997. There has been little change in the number of deaths since 1994 when there were around 1400 deaths each year. As in 1996, lung cancer accounted for 19 percent of total cancer deaths in 1997 (Ministry of Health 1998) and about two-thirds of these were males (63 percent).

Figure 4 shows the age-standardised lung cancer mortality rates since 1980 for males and females. The lung cancer mortality rate for males has decreased by 26 percent during 1987–97 while the rate for females has increased by 12 percent during the same period. Most of the increase among females and decrease among males has occurred during recent years.

Lung cancer mortality rates follow a downward trend among males with an average annual reduction of one death per 100 000 over the period 1986–97. The continuing progress in reducing mortality rates among males suggests that at the current rate of decline the target should be met by 2020 with less than a 1 percent annual increase.

Among females the age-standardised cancer mortality rate has continued to show a marginal increase in recent years. The age-standardised mortality rate for lung cancer in females has fluctuated between 17 and 19 per 100 000 since 1987. With less than a 1 percent annual decrease it is likely that the 2020 target will be met. However the current trend shows that the indicator is moving away from the target.

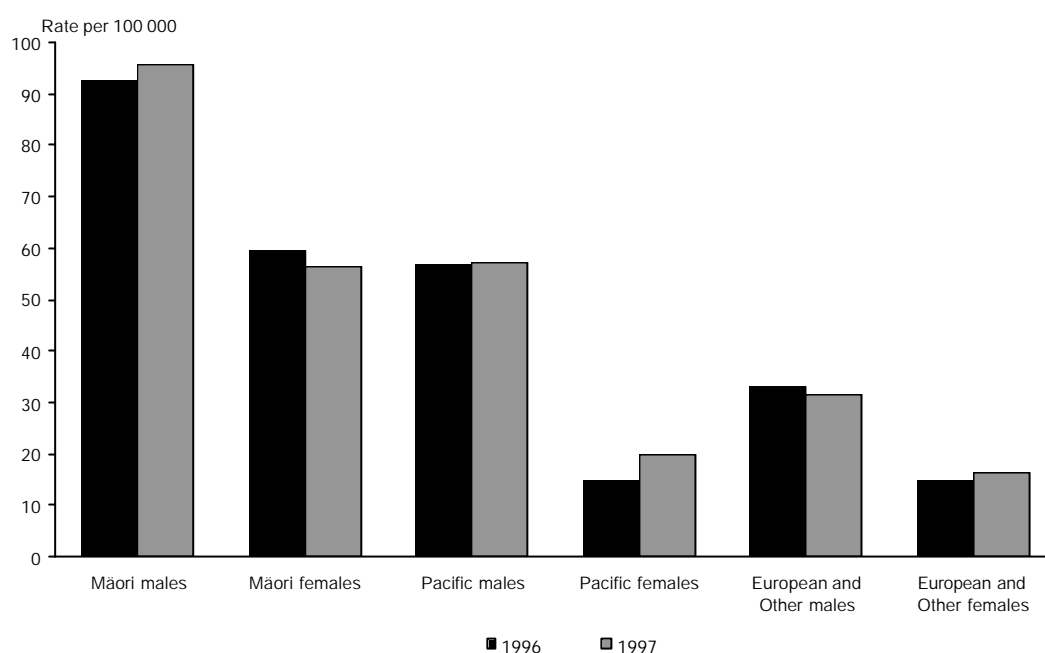
Figure 4: Lung cancer mortality rate, by sex, 1980–97



Source: New Zealand Health Information Service
 Note: Data for 1997 are provisional, and the rates are age-standardised to Segi's world population.

The mortality differential by ethnicity is quite marked for both sexes, with the exception of Pacific females (Figure 5).

Figure 5: Lung cancer mortality rate, by sex and ethnicity, 1996–97



Source: New Zealand Health Information Service
 Note: Data for 1997 are provisional, and the rates are age-standardised to Segi's world population.

Lung cancer was by far the most common cause of cancer deaths for Māori in 1997, accounting for 33 percent of total cancer deaths compared to only 18 percent among European and Others and 20 percent among Pacific peoples. Māori males had the highest proportion (37 percent) of lung cancer deaths of any group. In 1997 Māori had more than three times the lung cancer rate of the European and Other group.

Because of changes in the way ethnicity is coded during 1995, a time series is not shown by ethnic group. However a time series of lung cancer rates from 1980 to 1994 for Māori indicates no decline (Ministry of Health 1998). Figure 5 shows a slight increase in age-standardised lung cancer mortality rates for Māori males, European and Other females and Pacific peoples (both males and females) while a slight decrease is noted in the rates of European and Other males and Māori females between 1996 and 1997. It appears that the rates for Pacific females increased to a greater extent than all other ethnic groups from 15 per 100 000 in 1996 to 20 per 100 000 in 1997.

Indicators

Consumption

- ?? Cigarette equivalents consumed per adult (15 years and over).
- ?? Proportion of adults and Māori adults (15 years and over) smoking cigarettes.
- ?? Proportion of young persons and Māori young persons (15–24 years) smoking cigarettes.
- ?? Proportion of females and Māori females smoking cigarettes during pregnancy.
- ?? Proportion of indoor workers exposed to environmental tobacco smoke (ETS) during actual working hours, tea and lunch breaks.

Tobacco-related harm: lung cancer

- ?? Age-standardised mortality rate due to lung cancer for males.
- ?? Age standardised mortality rate due to lung cancer for females.

Data sources

Data on consumption of tobacco and population are supplied by Statistics New Zealand. Prevalence data for adult, youth and Māori adult smoking are supplied quarterly by AC Nielsen (NZ) Ltd (formerly OTR Spectrum Research). These data are available on the web page of the Ministry of Health at <http://www.moh.govt.nz> (Ministry of Health 1999b).

Prevalence of smoking during pregnancy is monitored using survey data provided by the Royal New Zealand Plunket Society (Plunket). The ETS indicators are from a periodic telephone survey initiated by the Ministry of Health and conducted by the National Research Bureau (NRB). However no new data are available at present.

Mortality data are from the New Zealand Health Information Service. The latest data are provisional for 1997.

References

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