

Child hearing loss

Key points

In 1997–98 the national rate of new primary school entrants who failed hearing tests was approximately 9 percent. This is similar to the previous rate of 8 percent in 1996–97.

The rates of new primary school entrants who failed hearing tests among Māori (13 percent) and Pacific children (15 percent) were about twice the rates of European and Other children (7 percent).

An average annual reduction of 20 percent is required to meet the target for 2000. This seems an ambitious task unless there are additional interventions, especially for Māori and Pacific children.

Target

To reduce the rate of new primary school entrants who failed hearing tests to 5 percent or less by 2000.

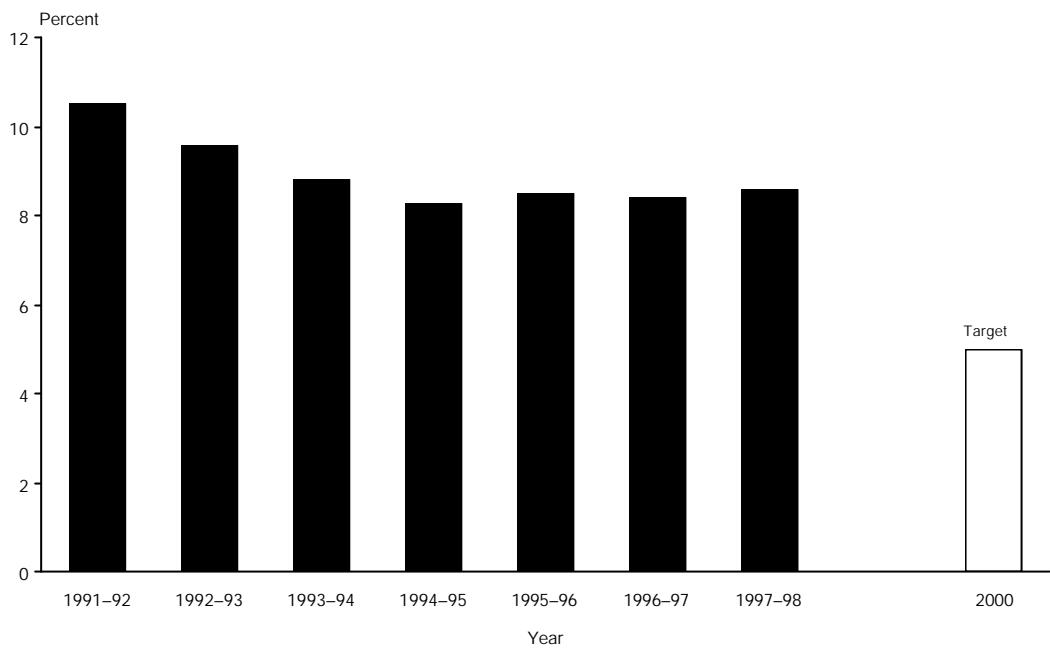
Progress towards the targets

The rate of child hearing loss among new school entrants in 1997–98 was approximately 9 percent (see Figure 1). According to the national hearing screening statistics, child hearing loss was 11 percent in 1991–92, falling to 8 percent in 1994–95. In 1995–96 the rate rose to approximately 9 percent although this figure may have been slightly increased due to omission of certain data (National Audiology Centre 1999). In recent years the rate appears to have levelled off at around 9 percent. Overall, child hearing loss decreased by 18 percent during the period 1991–98. This equates to an average reduction of 3 percent per year. Given the current rate of new primary school entrants who failed hearing tests (approximately 9 percent), an average annual reduction of 20 percent is required to meet the target for 2000. This seems an ambitious task.

The rates of child hearing loss differed considerably between ethnic groups (Figure 2). For European and Other children the rates for 1997–98 were about 7 percent, a slight increase from 6 percent in the previous year. Even for this group the 2000 target of 5 percent will not be met without additional intervention.

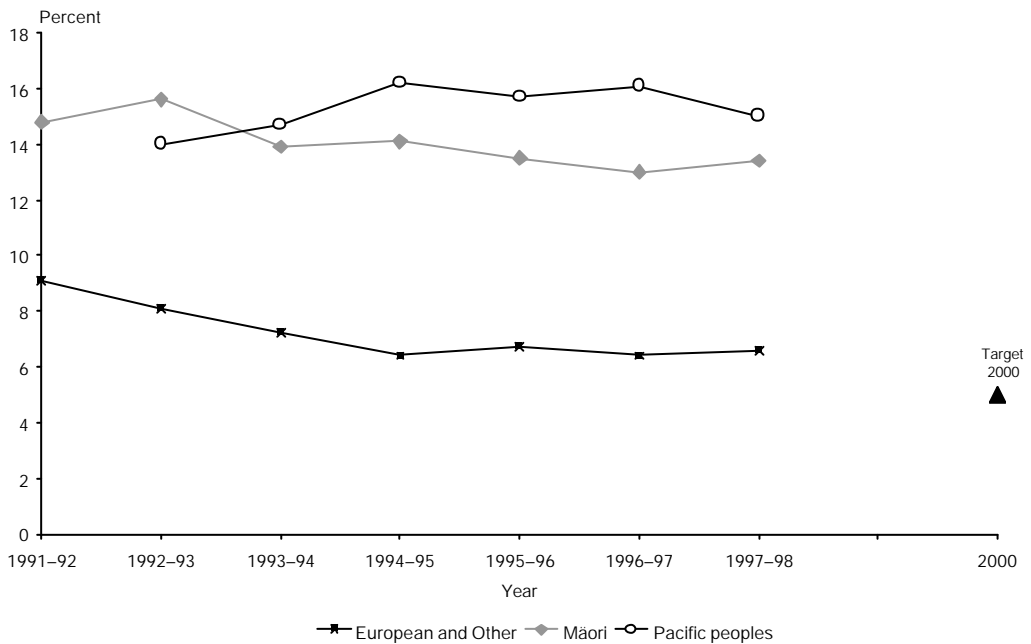
After a continuous decline in the prevalence of child hearing loss since 1991–92, the Māori rate remained at around 13 percent in 1996–97 which continued in 1997–98. Given this rate, it will require an annual decrease of 33 percent to achieve the 2000 target level of 5 percent. Without intensive interventions it is highly unlikely that the target will be met.

Figure 1: Percentage of new school entrants who failed hearing tests, 1991–98



Source: National Audiology Centre
 Note: Data for 1997–98 are provisional.

Figure 2: Percentage of new school entrants who failed hearing tests, by ethnicity, 1991–98



Source: National Audiology Centre 1999
 Note: Data for 1997–98 are provisional; □ represents target rates for all.

The child hearing loss rates decreased slightly from 16 percent in 1996–97 to 15 percent in 1997–98 among Pacific children yet the rates remain the highest among all ethnic groups. Based on the current erratic trend of child hearing loss among Pacific children, it is difficult to conclude whether the rate is actually increasing or decreasing. In any case, an additional decrease of 36 percent per year is required to reach the target level in 2000. Māori and Pacific children are more than twice as likely to fail hearing tests as European and Other children (National Audiology Centre 1999) and this requires intensive intervention.

Indicator

The ratio of those children who fail in two consecutive screening tests to all new school entrants in a given year.

Data source

The New Zealand hearing screening statistics were provided by the National Audiology Centre. The latest available data cover the period from July 1997 to June 1998. Projected population data are used for 1996–97 and 1997–98 to calculate prevalence rates (National Audiology Centre 1999).

The centre annually collates screening data. Data are collected from almost all new school entrants in primary schools. Vision and hearing testers and public health nurses, employed by Hospital and Health Services or Health Trusts throughout New Zealand, visit all primary schools three times a year, allowing approximately a 16-week test–retest interval to screen the hearing ability of all new school entrants using pure tone audiometry and tympanometry. The latter is also used for glue ear.

The hearing test provides close to 100 percent coverage of five-year-olds. The total number of children tested allows an estimation of the population coverage. Since the coverage is almost 100 percent, the current data for new school entrants reflect accuracy in reporting hearing disorders in children. However, in a number of regions, coverage rates of over 100 percent were obtained (National Audiology Centre 1999). This suggests that the estimated population of five-year-olds in some areas may have been incorrect. Despite this limitation, the failure rate of hearing tests at school entry level is useful as an indicator of trends.

References

National Audiology Centre. 1999. *New Zealand Hearing Screening Statistics. July 1997–June 1998*. Report to the Health Funding Authority, May 1999.