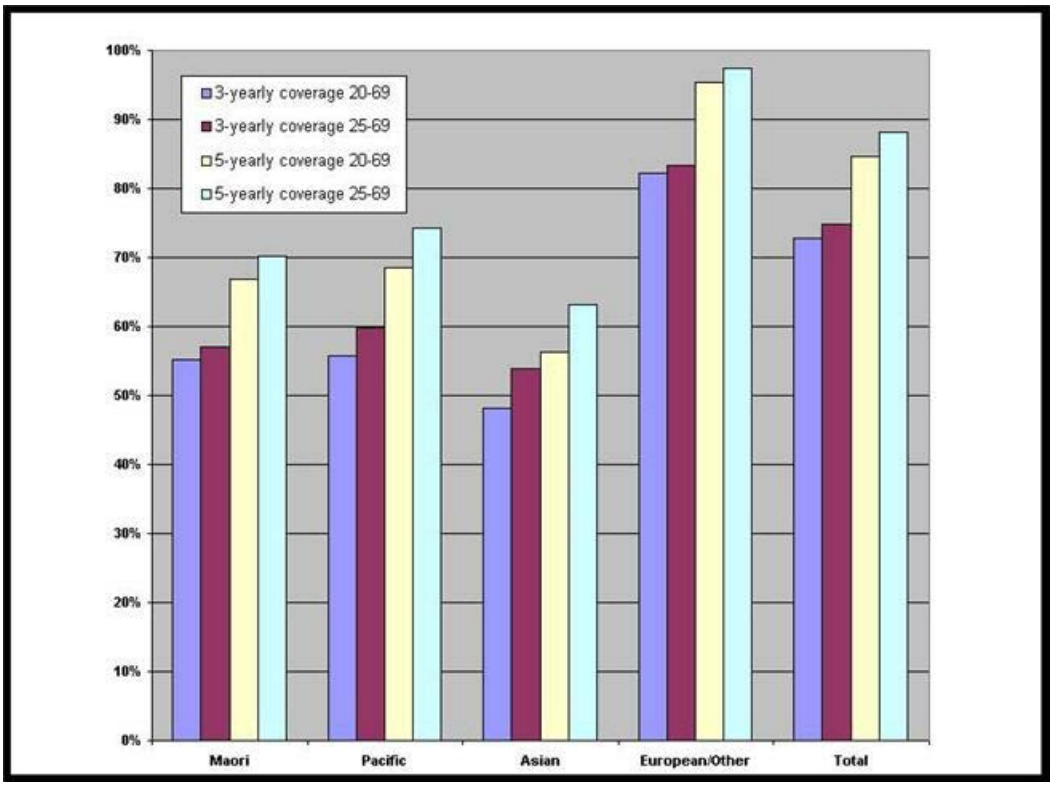
Cervical screening coverage: An update on calculation methods



Coverage is an important performance indicator for all those involved in the NCSP, at both regional and national levels. We define coverage as the proportion of women eligible for screening who have been screened in the preceding three or five years (3-yearly or 5-yearly coverage respectively).

The statistical methods used to calculate NCSP indicators are revised approximately every three years, in line with international best practice. Regular revisions are needed because Statistics New Zealand (SNZ) updates population estimates (the denominators of the coverage rates) and changes are also introduced from time to time by the NCSP to the method for calculating the numerators for these rates. The reviews are carried out with expert advice from the Cancer Modelling Group of the University of New South Wales and are approved by the Independent NCSP Advisory and Monitoring Group.

Such a review has recently been conducted and several changes to the statistical methods for calculating coverage have been introduced in 2011. Firstly, the denominator populations have been updated to SNZ projections based on the 2006 census base. These populations are more accurate than those based on projecting from the 2001 census base population.

Secondly, coverage will now be reported for women aged 25–69 at the end of each reporting period, not 20–69 as previously. This change aligns with international best

practice. There are three advantages in excluding women aged 20–24 from the calculation of coverage:

- including women aged 20–22 years at the end of the reporting period leads to coverage being underestimated, because these women were only aged 17–19 years at the beginning of the reporting period (in the case of 3-yearly coverage) and so were not eligible for screening for all or part of the reporting period. This error is even greater in the case of 5-yearly coverage
- including women aged 20–21 years in the coverage calculation does not allow time for recruitment, ie, it is unrealistic to expect all women to have their first screen exactly on their 20th birthday
- many countries only begin screening at the age of 25 years so for international comparison of screening programme performance, coverage has to be reported from this age.

While these improvements to statistical methods are important, they do not make a very big difference to reported coverage rates. To illustrate this, figure 1 shows 3-yearly and 5-yearly coverage in September 2011 for the four main ethnic groups, both for women aged 20–69 (old indicator) and 25–69 (new indicator).

Estimates shown in figure 1 are adjusted for the proportion of women not eligible for screening because they have had a total hysterectomy.

A new hysterectomy adjustor was applied to population data from 1 January 2012.