

8.2 Cancer screening in Australia

Population-based cancer screening is an organised, systematic and integrated process of testing for signs of cancer or pre-cancerous conditions in asymptomatic (see Glossary) populations. In Australia, there are 3 national population-based screening programs: for breast, cervical and bowel cancers. They are run through partnerships between the Australian Government and state and territory governments. The programs target particular populations and age groups where evidence shows screening is most effective at reducing cancer-related morbidity and mortality.

BreastScreen Australia

BreastScreen Australia, established in 1991, provides free, 2-yearly screening mammograms (see Glossary) to women aged 40 and over, and actively invites women aged 50–69 to participate.

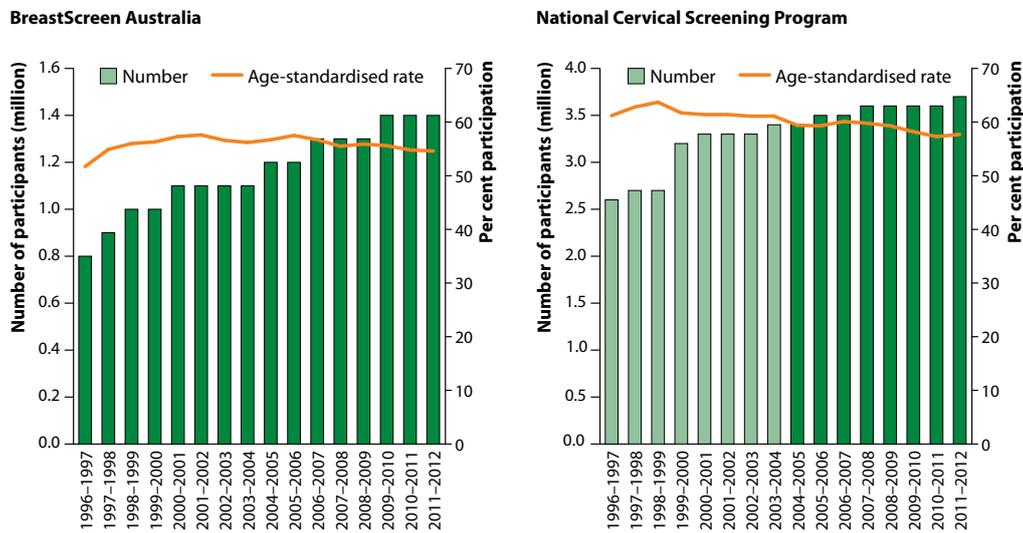
- In 2011–2012, more than 1.4 million women aged 50–69 had a screening mammogram—a participation rate of 55%. Participation rates were highest for women aged 60–64 (60%) and lowest for those aged 50–54 (49%).
- Participation rates were lower among Aboriginal and Torres Strait Islander women (38%), women living in *Very remote* areas (46%) and women who reported speaking a language other than English at home (50%).
- Between 1996–1997 and 2011–2012, the age-standardised participation rate remained steady at 55–57%, although the total number of women participating in screening increased (Figure 8.3).
- In 2011, there were 82 invasive breast cancers and 21 ductal carcinomas in situ (DCIS) (see Glossary) detected for every 10,000 women screened for the first time. The detection rate was lower among women attending a subsequent screening, with 43 invasive breast cancers and 11 DCIS per 10,000.

National Cervical Screening Program

The National Cervical Screening Program, established in 1991, targets women aged 20–69 for a 2-yearly Papanicolaou smear, or 'Pap test' (see Glossary).

- In 2011–2012, more than 3.7 million women aged 20–69 had a screening Pap test—a participation rate of 57%. Participation was highest for women aged 45–49 (64%) and lowest for those aged 20–24 (43%).
- Participation was lower among women living in *Very remote* areas compared with other regions, and rose with increasing socioeconomic status—from 52% in areas of lowest socioeconomic status to 64% in areas of highest status.
- The age-standardised participation rate has decreased slightly over time, from 59% in 2004–2005 to 58% in 2011–2012, although the total number of women participating in screening increased during the same period (Figure 8.3).
- In 2011, a high-grade abnormality (pre-cancerous condition) was detected in 16,641 women aged 20–69, at a rate of 8 per 1,000 women screened. Detection presents an opportunity for treatment before possible progression to cancer.

Figure 8.3



Sources: AIHW analysis of BreastScreen Australia data; AIHW analysis of state and territory cervical cytology register data.

Participation number and age-standardised participation rate, BreastScreen Australia and National Cervical Screening Program, Australia, 1996-1997 to 2011-2012

National Bowel Cancer Screening Program

The National Bowel Cancer Screening Program (NBCSP), established in 2006, targets men and women turning 50, 55, 60 or 65 for a free faecal occult blood test (see Glossary). The program will be expanded from 2015, and once fully implemented will offer free 2-yearly screening for all Australians aged 50-74. Of those people invited to participate in the NBCSP in 2011-12:

- 325,276 returned a completed bowel cancer screening kit for analysis—a participation rate of 35%. Participation was higher among women (37.5%) than men (32.5%).
- 22,472 (7.0%) returned a valid screening test and had a positive screening result and 72% of those (16,190) had a follow-up colonoscopy (see Glossary) recorded.
- 404 participants (1 in 32) who underwent a colonoscopy were diagnosed with a confirmed or suspected bowel cancer, and 857 (1 in 15) were diagnosed with an advanced adenoma (pre-cancerous tumour).

What is missing from the picture?

National cancer data do not include whether a new case of cancer was identified through screening, or if cancers identified through screening are diagnosed at an earlier stage to those that present naturally.

There is no national mechanism for reporting Aboriginal or Torres Strait Islander identification on pathology forms. As a result, state and territory cervical cytology (Pap test) registers are unable to report Indigenous status, so the reporting of cervical screening indicators is not possible nationally for Indigenous women. It is not known how the introduction of the national vaccination program against human papillomavirus (HPV) (see Glossary) in 2007 will affect cervical screening rates among vaccinated women.

Outcome data for the NBCSP is under-reported. The Department of Health is working on a number of steps to improve reporting of outcomes.

Where do I go for more information?

The [BreastScreen Australia monitoring report 2010–2011](#), [Cervical screening in Australia 2010–2011](#) and [National Bowel Cancer Screening Program monitoring report: July 2011–June 2012](#) are available for free download.