Screening reduces the risk of death from breast, cervical and bowel cancer

In 2018, more than 7,400 people will die from breast, cervical or bowel cancer in Australia—that is 20 people every day. However, people whose cancer is diagnosed through one of Australia’s national cancer screen programs have a lower risk of dying from the cancer than people who had never been screened before diagnosis.

The fact sheet presents summary findings from a new AIHW report, *Analysis of cancer outcomes and screening behaviour for national cancer screening programs in Australia*. The report brings together multiple data sources to examine the survival outcomes of people who took part in a screening program and those who did not, to see if screening reduces the chance of dying from cancer. It also looks at what factors influence a person's screening behaviour, and how receiving the human papillomavirus (HPV) vaccine affects participation in cervical screening.

What is screening?

Australia has 3 population-based screening programs, BreastScreen Australia, the National Cervical Screening Program (NCSP), and the National Bowel Cancer Screening Program (NBCSP).

The aim of population screening programs is to detect disease earlier and improve outcomes for individuals, thereby reducing the overall burden in the community.

Each program targets specific at-risk population groups, with the aim to reduce the number of deaths from the 3 cancers. The NCSP and NBCSP also aim to reduce the incidence of cervical and bowel cancer by identifying and treating pre-cancerous disease.

### Breast cancer

This study looked at women aged 50–69 who were diagnosed with breast cancer between 2002 and 2012.

**Finding:** Women with cancers diagnosed through BreastScreen had a 42% lower risk of dying by 2015 than women with cancers who had never been screened.

### Bowel cancer

This study looked at people aged 50–69 who were diagnosed with bowel cancer between 2006 (when the screening program started) and 2012.

**Finding:** People with cancers diagnosed through the National Bowel Cancer Screening Program had a 40% lower risk of dying by 2015 than those who had not been invited during the study period.
Cervical cancer

This study looked at women aged 20–69 who were diagnosed with cervical cancer between 2002 and 2012.

Finding: Women with cancers diagnosed through cervical screening had an 87% lower risk of dying by 2015 than women with cancers who had never had a Pap test.

How does HPV vaccination affect screening?

The National HPV Vaccination Program was introduced in 2007 to immunise girls (and extended in 2013 to immunise boys) against common types of HPV that can cause cervical cancer and HPV-related disease.

Women who received the HPV vaccine were more likely to participate in cervical screening than women who were not vaccinated.

Combining data to tell a richer story

These are the first results from an Australian-first project that combined data from BreastScreen Australia, the National Cervical Screening Program, the National Bowel Cancer Screening Program, the Australian Cancer Database, the National Death Index, and the National HPV Vaccination Program Register. This work helps us to better understand screening outcomes and behaviours.

Where do I go for more information?

More information is available in Analysis of cancer outcomes and screening behaviour for national cancer screening programs in Australia.