Australian Government
Australian Institute of Health and Welfare

Bowel cancer screening in Australia

National Bowel Cancer Screening Program monitoring 2020

Bowel cancer is estimated to be the fourth most commonly diagnosed cancer and the second leading cause of cancer death in Australia in 2020. It is estimated that just over 5,300 people will die from the disease in 2020.

The National Bowel Cancer Screening Program (NBCSP) aims to reduce bowel cancer illness and deaths by actively recruiting and screening people aged 50–74 (without symptoms). In 2017–2018, 4 in 10 people who were invited to take part in the NBCSP did so.

This fact sheet presents findings from the *National Bowel Cancer Screening Program: monitoring report 2020* that examines data for Australians who were invited to screen between 1 January 2017 and 31 December 2018. The return of NBCSP forms is not mandatory, and as a result, diagnostic assessment data (colonoscopies, adenoma and cancer detection rates) are incomplete and should be interpreted with caution.

What is bowel cancer?

Bowel cancer, also known as colorectal cancer, affects the cells of the large bowel. Most bowel cancers develop through a multi-step process where early mutations in the cells of the intestinal lining can cause small growths called polyps.

If further mutations occur, a polyp can become an abnormal growth called a benign adenoma—a tumour that can keep growing larger but does not spread through other parts of the body. Over time, benign adenomas can develop into a malignant bowel cancer—a tumour that can spread through the surrounding tissue. As time passes, malignant bowel cancers can spread to other sites in the body through blood or the lymphatic system.

How many people were screened and what were the outcomes?

Of the 5.1 million people invited to take part in the NBCSP between January 2017 and December 2018, 2.2 million (42%) participated. Four-fifths (80%) of those who had participated in the screening program before, and were invited to screen again, did so.

Quick facts

Of people aged **50–74**:

- **42% (nearly 2.2 million)** of those invited in 2017–2018 participated in the NBCSP
- just over **7,200** are estimated to be newly diagnosed with bowel cancer in 2020
- **about 1,900** are estimated to die from the disease in 2020

About **half (47%)** of all bowel cancers diagnosed and about **one-third (36%)** of all bowel cancer deaths are estimated to occur in people aged 50–74.

In 2018, 7% of participants' valid screening tests returned a positive result, representing about 78,600 Australians whose test result indicated the presence of blood in their stool. Of these people, two-thirds (66%) had a follow-up colonoscopy recorded and on average had a colonoscopy 51 days after their positive screening test.

How many adenomas and cancers were diagnosed?

Of the diagnostic assessment data available, almost 51,100 people had a positive screening test and a follow-up colonoscopy recorded in 2018. Of these people, 3% (around 1,700) were diagnosed with bowel cancer or a suspected bowel cancer, and 12% (around 6,100) had an adenoma detected.

The benefits of early diagnosis

Early diagnosis of bowel cancer can improve treatment outcomes and survival, and detection of pre-cancerous abnormalities can stop them becoming a bowel cancer.

Bowel cancer can be present for many years before a person shows symptoms, such as visible blood in the stool, changes in their bowel habits, bowel obstruction or iron deficiency. Often, these symptoms are only experienced when the cancer has reached an advanced stage. However, non-visible bleeding may have been occurring in the earlier stages (including pre-cancerous stages) for some time. This bleeding can be picked up through the NBCSP.

The NBCSP uses an iFOBT (immunochemical faecal occult blood test) to screen participants for this non-visible bleeding. If bleeding is detected, further assessment (usually from a colonoscopy, where the large bowel is examined using a small camera) can be undertaken to investigate the cause. Through this process, abnormalities such as pre-cancerous polyps and adenomas and early stage cancers can be detected and treated.

More than 6.8 million screening tests have been done

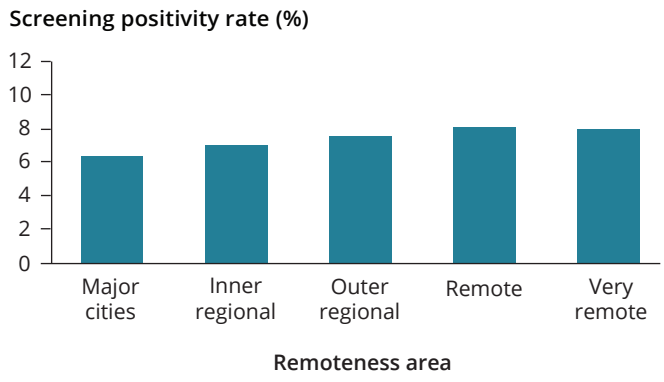
Since the NBCSP began in August 2006, about 6.8 million screening tests have been completed. About 3.8 million people have participated at least once, and for participants with available diagnostic assessment data, about 340,000 participants have had a colonoscopy after a positive screening result.

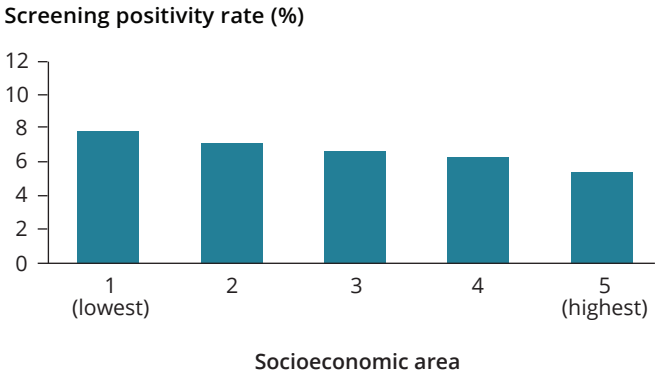
Studies by the Australian Institute of Health and Welfare combining multiple sources of data found that the NBCSP is helping to improve survival for those detected with bowel cancer (see *Analysis of bowel cancer outcomes for the National Bowel Cancer Screening Program 2018* for more information). The studies showed that NBCSP invitees (particularly those who participated) had significantly less risk of dying from bowel cancer, and were more likely to have less-advanced bowel cancers than non-invitees.

Screening outcomes are not equal for all Australians

Participants who identified as being of Aboriginal or Torres Strait Islander origin, lived in more remote parts of Australia, or who lived in low socioeconomic areas all had higher rates of positive screening tests. Despite this, these groups had lower rates of follow-up colonoscopies recorded. The time between positive screening result and colonoscopy was also typically longer for participants in these groups.

Figure 1. Positive screening rate for people aged 50–74, by remoteness area and socioeconomic area, 2018





Please note that data for follow-up investigations (colonoscopies, adenoma and cancer detection) are incomplete, and should be interpreted with caution. Due to the NBCSP register transition in mid-November 2019, data for assessments (colonoscopies) are reported as at 31 October 2019, resulting in a 10-month follow-up period rather than the usual 12 months to 31 December 2019.

For more information, see the full report *National Bowel Cancer Screening Program: monitoring report 2020.*