

About

This report looks at the impact of COVID-19 on cancer screening in 2020, by presenting the number of screens between January and September 2020, and how these compare to the number of screens over the same period in the previous comparable year. The impact of COVID-19 was clearest for BreastScreen Australia which experienced a drop in screening mammograms in April 2020 due to a suspension of BreastScreen services. Since then the number of screening mammograms has increased each month.

COVID-19

This release includes data from the COVID-19 period.

Cat. no: CAN 136

Findings from this report:

- In April 2020, around 1,100 screening mammograms were performed, compared to more than 74,000 in April 2018
- There were fewer cervical screening tests in 2020 but COVID-19 impact cannot yet be quantified due to program changes
- The number of bowel cancer screening tests did not clearly correspond with COVID-19 restrictions
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Behind the data episode 2: Cancer screening and COVID-19 in Australia



Cancer screening and COVID-19 in Australia

Web report | Last updated: 17 Dec 2020 | Topic: Cancer screening | Media release

How has COVID-19 affected Australia's cancer screening programs?

The COVID-19 pandemic affected many areas of people's lives, including their access to and use of health services such as cancer screening programs.

The first cases of COVID-19 were recorded in Australia on 25 January 2020. As the disease spread, restrictions were put in place to contain its impact. By the end of March 2020, restrictions had shut down all non-essential businesses and activities, with Australians urged to stay at home (Grattan Institute 2020). Restrictions started to ease from late April, although with state and territory differences.

In Victoria, COVID-19 cases began to rise again in June 2020, in what became known as the 'second wave'. Various restrictions were introduced in July, with the highest level of restrictions (Melbourne to Stage 4 and regional Victoria to Stage 3) introduced from 2 August. On 26 October, Victoria reached zero new cases for the first time since June 2020 (Department of Health and Human Services 2020).

As part of these restrictions, many health care services also suspended or changed the way they delivered their services. Due to this, and the potential for people to change their behaviour whilst under restrictions, there is increased public interest around the effects of COVID-19 on Australia's 3 national cancer screening programs—BreastScreen Australia, the National Cervical Screening Program, and the National Bowel Cancer Screening Program.

- BreastScreen Australia services (screening mammograms) are delivered in specialised facilities which usually involve close contact between clients and health workers. BreastScreen services were suspended from late March to late April/early May 2020 due to COVID-19 restrictions. BreastScreen services remained open during Victoria's second wave.
- The National Cervical Screening Program involves a test which is usually carried out by a person's general practitioner (GP). While GP services continued during the pandemic, cervical screening tests require in-person consultations. There was no suspension of the National Cervical Screening Program.
- The National Bowel Cancer Screening Program involves home test kits, sent to eligible participants who return them by mail. People do not need to leave their homes to complete the test, or to get their results, but do need to mail their completed test kit to the pathology laboratory. There was no suspension of the National Bowel Cancer Screening Program.

This report focuses specifically on screening tests performed through the 3 national cancer screening programs, to assess any impact of COVID-19 on these, comparing data from January to September 2020 to those from January to September 2019 (or in the case of BreastScreen, to those from January to September 2018, reflecting the stable biennial nature of screening patterns in this program).

This builds on recent findings from Cancer Australia that showed a reduction in diagnostic and therapeutic procedures for skin, breast and colorectal cancers between March and May 2020 compared to the same months in 2019 (Cancer Australia 2020).

References

Grattan Institute 2020. Australia's COVID-19 response: the story so far. Accessed 3 September 2020.

Department of Health and Human Services 2020. <u>Updates about the outbreak of the coronavirus disease (COVID-19</u>). Accessed 27 November 2020.

Cancer Australia 2020. <u>Review of the impact of COVID-19 on medical services and procedures in Australia utilising MBS data: Skin, breast and colorectal cancers, and telehealth services</u>. Cancer Australia, Surry Hills, NSW.



Why does it matter if cancer screening is delayed?

Screening aims to detect cancers early, either by detecting any early precancerous signs (to stop the cancer developing in the first place) or by detecting cancers when they are small (and treatment options and survival prospects are better). People who are diagnosed through the 3 national cancer screening programs generally have much better survival prospects than those who are diagnosed when their cancers have become symptomatic and are more advanced (AIHW 2018).

If screening is delayed or missed, it is possible that a precancerous abnormality may progress to cancer, or a cancer may develop to a stage that is more difficult to treat.

The long-term effects of delayed screening during the COVID-19 pandemic will not be known for some time. It will be important to continue monitoring the effects of this changing situation on cancer screening and other health services into the future.

References

Australian Institute of Health and Welfare 2018. <u>Analysis of cancer outcomes and screening behaviour for national cancer screening programs in Australia</u>. Cancer series no. 111. Cat. no. CAN 115. Canberra: AIHW.



Did fewer people screen for cancer during the COVID-19 pandemic?

Introduction

At the time of publication, the COVID-19 pandemic continues to be an evolving situation, posing a threat to people's health and wellbeing in Australia and globally. The data presented here cover the period from January to September 2020, capturing the first 9 months of the disease in Australia.

Data after this period will be captured in quarterly cancer screening data that are routinely published by the AIHW.

The national data included in this report, as well as state and territory monthly data, are shown in the associated data tables.

Timeliness and completeness of data

This report uses timely data to enable useful comparisons of trends in screening tests over the initial COVID-19 period in Australia -BreastScreen data from state and territory BreastScreen registers were supplied in November 2020, and National Cervical Screening Program and National Bowel Cancer Screening Program data were extracted from the National Cancer Screening Register in November 2020. When considering timely data, it is important to note that these are sourced from live databases, which are updated over time, with later data supply likely to have a greater level of completeness.

This means that the data in this report are considered preliminary, and should be not be directly compared with data used in other AIHW cancer screening reports, where data are sourced at a different time.

BreastScreen Australia

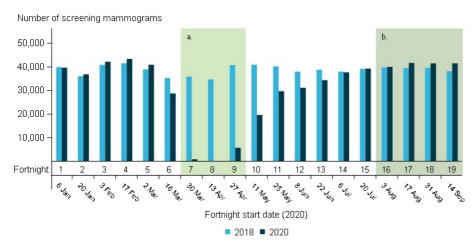
To protect clients, staff and the community from the risk of COVID-19, BreastScreen services were temporarily suspended from 25 March 2020. While the suspension was lifted around a month later (in late April-early May 2020 for many services), breast screening resumed in a staged approach with longer appointments and precautionary measures to ensure the safety of women and staff. The rate at which BreastScreen services could resume was impacted by various jurisdictional social distancing and infection control guidelines and requirements. BreastScreen services remained open during Victoria's second wave.

The number of screening mammograms performed through BreastScreen Australia significantly declined in March 2020 as the COVID-19 pandemic worsened and tighter restrictions were put in place that included a suspension of all BreastScreen services from 25 March 2020.

While more than 70,000 screening mammograms were conducted in March 2020, this had fallen to just over 1,100 in April. By comparison, in April 2018, more than 74,000 screening mammograms were carried out (2018 is chosen as the comparison year instead of 2019, as BreastScreen Australia is a biennial program).

Following an easing of restrictions that included a lifting of the suspension from late April/early May 2020, the number of screening mammograms increased through May and June, and in July 2020 numbered around 3,000 more than in July 2018. In September, the number of screening mammograms increased to over 90,000, which was again greater than the number of screening mammograms in September 2018.

In summary, while there were around 145,000 fewer screening mammograms performed through BreastScreen Australia in January to June 2020 compared with January to June 2018, there were around 12,000 more screening mammograms performed through BreastScreen Australia in July to September 2020 compared with July to September 2018.



- 1. As screening through BreastScreen is biennial, 2020 data are compared to 2018 data (not 2019 data).
- 2. Data show the number of screening mammograms performed in each fortnight. Date on x axis corresponds to the first date of the fortnight in 2020.
- 3. Shading labelled 'a.' refers to the period of tightened restrictions during Australia's 'first wave'; shading labelled 'b.' refers to the period of tightened restrictions in Victoria during the 'second wave'.
- 4. Data were extracted from state and territory BreastScreen registers and provided to the AIHW in November 2020. Data in this report are considered preliminary, and may differ from data sourced at a different time.

Chart: Australian Institute of Health and Welfare

Source: Australian Institute of Health and Welfare analysis of state and territory BreastScreen register data

National Cervical Screening Program

Due to changes to the National Cervical Screening Program, the number of new Cervical Screening Tests conducted was expected to be lower in 2020 than in 2019, irrespective of the COVID-19 pandemic and subsequent restrictions. This is largely due to the program changing from 2-yearly Pap tests to 5-yearly Cervical Screening Tests (as modelled in Smith et al. 2016). This makes it inappropriate to directly compare 2020 data to 2019 data.

Data show that, as expected, there were fewer tests performed in 2020 than in 2019. The number of tests in 2019 is shown alongside 2020 to provide context of cervical screening trends that could also be expected to occur in 2020 (for example, there are typically fewer tests performed around Easter and Christmas).

The expected trend of fewer cervical screening tests in 2020 compared with 2019 due to the change from 2-yearly to 5-yearly screening is evident.

Data show a decline in the number of cervical screening tests from the second half of March 2020. The number of tests remained low throughout April, during which there were fewer than 30,000 cervical screening tests carried out. The number of cervical screening tests increased in May and June, with a slight decrease in July and August, before increasing again in September 2020. Even with these differences, the number of cervical screening tests appear to have levelled off in July to September 2020.

While there were fewer cervical screening tests in 2020 compared with 2019, the impact of COVID-19 cannot be quantified without further years of data (as 2020 is the first year impacted by the transition to 5-yearly screening).



Notes:

- 1. The number of tests conducted was expected to be lower in 2020 than in 2019, irrespective of the COVID-19 pandemic and subsequent restrictions due to a change from 2-yearly to 5-yearly screens.
- 2. Data show the number of cervical screening tests performed in each fortnight. Date on x axis corresponds to the first date of the fortnight in 2020.
- 3. Shading labelled 'a.' refers to the period of tightened restrictions during Australia's 'first wave'; shading labelled 'b.' refers to the period of tightened restrictions in Victoria during the 'second wave'.
- 4. Data were extracted from the National Cancer Screening Register in November 2020. Data in this report are considered preliminary, and may differ from data sourced at a different time.

Chart: Australian Institute of Health and Welfare

Source: Australian Institute of Health and Welfare analysis of National Cancer Screening Register data

References

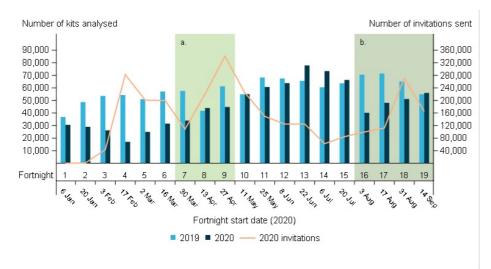
Smith, MA, Gertig, D, Hall, M, Simms, K, Lew, JB, Malloy, M, Saville, M, & Canfell, K 2016. <u>Transitioning from cytology-based screening to</u> <u>HPV-based screening at longer intervals: implications for resource use</u>. BMC health services research, 16, 147.

National Bowel Cancer Screening Program

Bowel cancer screening kits are sent to eligible invitees (those who fall within target age groups between 50 to 74 years) every 2 years. However, due to factors including transport times and weather (which can affect the quality of the sample returned for laboratory testing), there are some fluctuations in the number of screening kits sent out each month. This in turn impacts the number of completed kits that are returned in the ensuing weeks and months. The National Bowel Cancer Screening Program has also broadened its target age groups in recent years, and in early 2020 finalised the process of increasing the frequency of testing. This has led to testing kits being sent to more people in recent years. These factors can make it difficult to assess clear patterns in the number of participants each month, and in particular during the COVID-19 pandemic.

From the data, it appears that the COVID-19 pandemic did not have a direct effect on bowel cancer screening. The number of tests returned was, at times, lower in 2020 than in 2019. However, this does not appear to be related to the COVID-19 pandemic, and there may have been other factors behind this.

The number of kits returned did rise around the time restrictions first started to ease, overtaking the 2019 numbers by the end of June. This may have been due to a greater number of invitations sent in the preceding months. Likewise, a decrease in the number of kits returned in August and may have been due to a drop in the number of invitations sent in June and July.



Notes:

- 1. Data show the number of iFOBT kits performed in each fortnight (vertical bars) and the number of invitations sent each fortnight (line). Date on x axis corresponds to the first date of the fortnight in 2020.
- 2. Shading labelled 'a.' refers to the period of tightened restrictions during Australia's 'first wave'; shading labelled 'b.' refers to the period of tightened restrictions in Victoria during the 'second wave'.
- 3. Data were extracted from the National Cancer Screening Register in November 2020. Data in this report are considered preliminary, and may differ from data sourced at a different time.

Chart: Australian Institute of Health and Welfare

Source: Australian Institute of Health and Welfare analysis of National Cancer Screening Register data

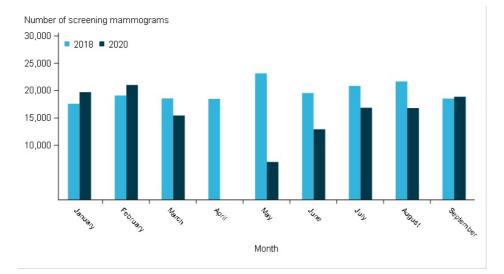
Spotlight on Victoria

Given the impact of the first wave on cancer screening in Australia, there is particular interest in understanding if and how screening may have been impacted by the second wave in Victoria.

This section explores monthly cancer screening test data for Victoria only. Various restrictions were introduced in July 2020, with the highest level of restrictions (Melbourne to Stage 4 and regional Victoria to Stage 3) introduced from 2 August 2020.

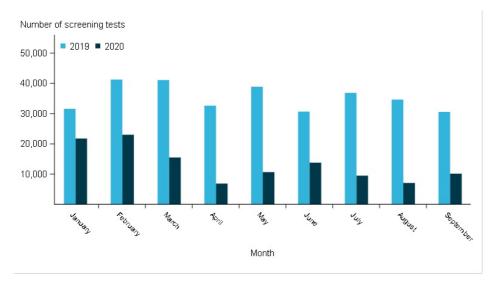
BreastScreen Victoria

The number of screening mammograms performed through BreastScreen Victoria dropped in March and April 2020 in line with tightened restrictions on 25 March 2020. The number of screening mammograms increased but remained lower from June to August 2020. In September 2020, the number of screening mammograms performed was similar to the number performed in 2018 (2018 is chosen as the comparison year instead of 2019, as BreastScreen Australia is a biennial program).



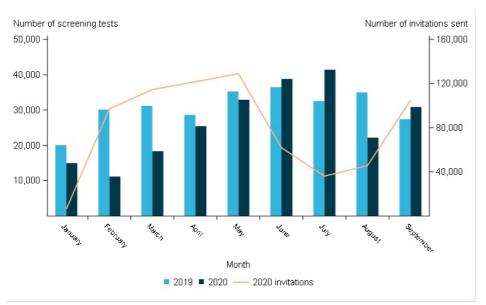
National Cervical Screening Program screening in Victoria

The number of cervical screening tests performed was lower in 2020 than 2019 due to a change from 2-yearly screening to 5-yearly screening. In April the number of cervical screening tests performed fell even lower. Numbers rose again in May and June before falling slightly in July and August. The number of cervical screening tests rose slightly again in September 2020.



National Bowel cancer Screening Program screening in Victoria

The number of invitations sent fluctuated considerably, being very low in January, then rising to a peak in May, then decreasing to a low in early July, before rising again. The number of kits returned was lower for each month in 2020 compared with 2019 until May 2020, after which the number of kits returned was higher, possibly due to the earlier peak in invitations. In June and July, there were more kits returned in 2020 than in 2019, and then in August this was reversed, with fewer kits returned in 2020 than in 2019. By the end of September, the number of kits returned in 2020 was similar to the number in 2019.



Notes for the above three figures:

- 1. As screening through BreastScreen is biennial, 2020 data are compared to 2018 data (not 2019 data).
- 2. The number of tests conducted was expected to be lower in 2020 than in 2019, irrespective of the COVID-19 pandemic and subsequent restrictions due to a change from 2-yearly to 5-yearly screens.
- 3. Data show the number of screening mammograms, cervical screening tests, and iFOBT kits returned in each month (the number of invitations sent is also shown for bowel screening data).
- 4. Data for the number of screening mammograms were extracted from state and territory BreastScreen registers and provided to the AIHW in November 2020. Data for the number of cervical screening tests, iFOBT kits returned and invitations sent were extracted from the National Cancer Screening Register in November 2020.
- 5. Data in this report are considered preliminary, and may differ from data sourced at a different time.

Chart: Australian Institute of Health and Welfare

Source: Australian Institute of Health and Welfare analysis of state and territory BreastScreen register data; Australian Institute of Health and Welfare analysis of National Cancer Screening Register data



Technical notes

BreastScreen Australia

The number of screening mammograms performed by BreastScreen Australia is reported for women aged 50-74 (the target age group of BreastScreen Australia) for:

- January to September 2018;
- January to September 2019; and
- January to September 2020.

Note that while data for 2019 are shown, due to the biennial nature of screening through BreastScreen Australia, 2020 data should only be compared with 2018 data.

These data are counts of screening mammograms, not people, and should not be compared to the formal BreastScreen Australia participation indicator.

All data are considered preliminary, and are therefore subject to minor changes in future publications as data are revised.

Data were kindly provided by state and territory BreastScreen programs.

National Cervical Screening Program

The number of cervical screening tests (defined as HPV tests for which the reason was primary screening test) is reported for people aged 25-74 (the target age group of the National Cervical Screening Program) for:

- January to September 2018;
- January to September 2019; and
- January to September 2020.

Note that while data for 2018 and 2019 are shown, it is not useful to compare the actual numbers to those in 2020 due to a shift from 2yearly screening to 5-yearly screening resulting in fewer cervical screening tests in 2020, even before COVID-19. These data do, however, provide information on temporal trends in cervical screening, to aid in the assessment of any impacts of COVID-19 on cervical screening tests in 2020.

These data are counts of tests, not people, and should not be compared to the formal National Cervical Screening Program participation indicator.

All data are considered preliminary, and are therefore subject to minor changes in future publications as data are revised.

Data were extracted from the National Cancer Screening Register.

National Bowel Cancer Screening Program

Invites issued are a count of all screening invitations issued by the National Cancer Screening Register (this register took over operation of the National Bowel Cancer Screening Register from November 2019). Two-yearly screening was fully rolled out during 2020.

Screening tests are a count of all kits returned. This can include kits issued in a previous period and returned to the register at a later date. It can also include multiple kits per person due to expired, spoiled, damaged, or incorrectly completed kits.

The number of invites and screening tests is reported for people aged 50-74 (the target age group of the National Bowel Cancer Screening Program) for:

- January to September 2019; and
- January to September 2020.

These data are counts of tests, not people, and should not be compared to the formal National Bowel Cancer Screening Program participation indicator.

All data are considered preliminary, and are therefore subject to minor changes in future publications as data are revised.

Data were extracted from the National Cancer Screening Register.

Weeks

The number-of-week value is represented as a decimal number in the range 01-53 and uses a leading zero and a maximum value of 53. Weeks begin on a Monday and week 1 of the year is the week that includes both January 4th and the first Thursday of the year. If the first Monday of January is the 2nd, 3rd, or 4th, the preceding days are part of the last week of the preceding year.

Week 1 in 2020 includes days in December 2019, and week 40 includes days in October 2020. Therefore these weeks are not included.

Months

Months were assigned using the month part of the invite or screening test date.

State or territory

For the National Cervical Screening Program and the National Bowel Cancer Screening Program, state or territory refers to the state or territory of residence. For BreastScreen Australia, state or territory reported refers to the state or territory in which screening occurred, not the state or territory of residence.

Data sources

AIHW analysis of state and territory BreastScreen register data; AIHW analysis of National Cancer Screening Register data.



Data



Related material

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