

# National Cervical Screening Program screening data 2018–2020; Quality Statement

## Identifying and definitional attributes

**Metadata item type:** Quality Statement

**METEOR identifier:** 741991

**Registration status:**

- [AIHW Data Quality Statements](#), Standard 11/05/2021

## Data quality

## Quality statement summary:

## Summary of Key Issues

- National Cervical Screening Program (NCSP) screening data are highly relevant for monitoring trends and outcomes from NCSP screening participation.
- NCSP data are now maintained in the National Cancer Screening Register (NCSR), which is operated by Telstra Health (TH) on behalf of the Australian Department of Health.
- These are data reported under the renewed NCSP that commenced on 1 December 2017. As a result of significant changes to the NCSP, it must be recognised that program data presented in this report are not comparable to data published in previous years. Further, due to insufficient time having elapsed to adequately measure all performance indicators, in addition to current limitations of data held in the NCSR, this report presents a snapshot that is transitional in nature and cannot be considered directly comparable to data that will be published for future reporting periods.

## Description

The NCSP is a highly successful public health initiative in Australia, halving cervical cancer incidence and mortality since it was introduced in 1991. This has been achieved through organised, population-based cervical screening using 2-yearly Pap tests to detect precancerous changes to cervical cells, allowing treatment before any progression to cervical cancer, thereby preventing this disease. Cervical screening using Pap tests has been supported by high-quality cervical cytology through pathology laboratories, and by state and territory cervical cytology registers, that supported appropriate recommendations for clinical management, and provided a safety net to people who participated in cervical screening.

Improvements in technology, a greater understanding of the role of human papillomavirus (HPV) in the development of cervical cancer, and the introduction of an HPV vaccine that is now administered to girls and boys under the National Immunisation Program, led to a process by which the NCSP was reviewed and 'renewed', to ensure that the NCSP continued to provide Australians with safe and effective cervical screening. As a result of this process, on 1 December 2017, a 'renewed' NCSP was introduced.

The renewed NCSP includes a new screening pathway, and changes to the way that people are screened. Instead of people aged 20–69 having a Pap test every 2 years, people aged 25–74 will now have a CST every 5 years (the CST is an HPV test, followed by a cytology test if HPV is found). Another change is the collection of cervical screening data by the NCSR, which is now the sole source of national cervical screening data.

Data from the NCSR are available for download monthly.

Policies related to the new program are available from the [National Cervical Screening Program](#) site.

The new screening pathway can be found in the [National Cervical Screening Program Quality Framework](#).

The NCSP is monitored annually by the Australian Institute of Health and Welfare (AIHW). Results are compiled and reported at the national level by the AIHW in an annual NCSP monitoring report.

**Institutional environment:** Australian Institute of Health and Welfare (AIHW) is a major national agency set up by the Australian Government under the [Australian Institute of Health and Welfare Act 1987](#) to provide reliable, regular and relevant information and statistics on Australia's health and welfare. It is an independent Commonwealth entity established in 1987, governed by a management [Board](#), and accountable to the Australian Parliament through the Health Portfolio.

The AIHW aims to improve the health and wellbeing of Australians through better health and welfare information and statistics. It collects and reports information on a wide range of topics and issues, ranging from health and welfare expenditure, hospitals, disease and injury, and mental health, to ageing, homelessness, disability and child protection.

The Institute also plays a role in developing and maintaining national metadata standards. This work contributes to improving the quality and consistency of national health and welfare statistics. The Institute works closely with governments and non-government organisations to achieve greater adherence to these standards in administrative data collections to promote national consistency and comparability of data and reporting.

One of the main functions of the AIHW is to work with the states and territories to improve the quality of administrative data and, where possible, to compile national datasets based on data from each jurisdiction, to analyse these datasets and disseminate information and statistics.

The [Australian Institute of Health and Welfare Act 1987](#), in conjunction with compliance to the [Privacy Act 1988](#), ensures that the data collections managed by the AIHW are kept securely and under the strictest conditions with respect to privacy and confidentiality.

For further information see the AIHW website [www.aihw.gov.au](http://www.aihw.gov.au).

The AIHW has been receiving cervical screening data since 1996.

TH provides a raw data extract of the NCSR data tables monthly that the AIHW can download for analysis. Data reported by the AIHW represent a 'snapshot' of the NCSR database at the time of extraction, and may not include retrospective updates made to data after the time of extraction.

**Timeliness:** NCSP data are available the following month, but many performance indicators require follow-up to allow them to be calculated accurately. Further, there are delays in the completeness of some data, which limits how soon they can be used. For example, while screening test data are complete within around two months, colposcopy and histology data have a six month lag before they are considered of sufficient completeness to be used for analyses.

The data discussed in this data quality statement relate to people who participated in (or were invited to participate in) the NCSP in 2018, 2019 and 2020.

**Accessibility:** NCSP data are published annually in the NCSP monitoring report available on the [AIHW website](#) where they can be downloaded without charge. Supplementary data tables presenting data that are more detailed accompany each report and these are also available on the [AIHW website](#) where they can be downloaded without charge.

Users can request data not available online or in reports via the Screening Analysis & Monitoring Unit of the AIHW on (02) 6244 1000 or via email to [screening@aihw.gov.au](mailto:screening@aihw.gov.au). Requests that take longer than half an hour to compile are charged for on a cost-recovery basis.

General enquiries about AIHW publications can be made to the Strategic Communications and Stakeholder Engagement Unit on (02) 6244 1000 or via email to [info@aihw.gov.au](mailto:info@aihw.gov.au).

**Interpretability:** Details of the 20 performance indicators developed for the renewed NCSP can be found in [National Cervical Screening Program Data Dictionary version 1.0](#).

While the concept of participation is easy to interpret, the NCSP screening pathway, other concepts, and statistical calculations are more complex. All concepts are explained within the body of the report presenting these data, along with footnotes to provide further details and caveats. Additional detail on the data sources, classifications, and the statistical methods used can be found in the Appendixes of the report.

**Relevance:** NCSP data are highly relevant for monitoring trends in cervical screening participation, and for monitoring key measures along the NCSP screening pathway. The data are used for many purposes by policy-makers and researchers, but are supplied and analysed specifically to monitor and inform the NCSP. Any Cervical Screening Test performed in Australia, unless the woman has opted out of the NCSR, are included in these data. NCSR data also include data from the previous NCSP, as all historical data held in state and territory cervical screening registers were provided to TH for inclusion in historical data tables. Therefore, the NCSR has the potential to contain every cervical screening test performed in Australia from 1991 to the present.

## Accuracy:

The NCSR is the source of cervical screening data in Australia, following the migration and consolidation of state and territory cervical screening register data. This change may impact comparisons with previous NCSP reporting, particularly for women who screen in a different state or territory to which they reside.

Screening data are considered to be of an acceptable level of completeness, although there remains an unknown number of screening tests that have not yet been ingested into the NCSR.

There are known issues with the completeness of colposcopy and histology data. These issues also relate to an unknown number of histology tests and colposcopy forms not yet provided to the NCSR by pathology laboratories or practitioners.

Transition issues include tests that have not been ingested into the NCSR, incomplete colposcopy and histology data, under-matching of women who have moved between jurisdictions, and an indeterminate effect on the reporting of performance indicators going forward.

It is possible that data for performance indicators that have been reported will change in future as transition issues are resolved, since these may affect results if, for example, there are a high number of un-ingested screening tests added, which would change participation and screening data reported.

It is not possible to anticipate if and how these data may change, as at this time it is not possible to know the impact of NCSR transition data issues on the screening data that have been reported.

In addition, further work will need to occur over the coming years to improve Indigenous identification on the NCSR and explore additional methodology to enable participation of Indigenous women to be estimated using NCSR data.

Socioeconomic status Index of Relative Socio-economic Disadvantage (IRSD) rankings are calculated by Postal Area (POA) using a population-based method at the Australia-wide level. These ranked socioeconomic status POAs are then allocated to their relevant jurisdiction, meaning quintiles should contain similar socioeconomic groups across jurisdictions.

Socioeconomic status IRSD rankings are only measured at the time of the Australian Census of Population and Housing and are not available for approximately 18 months from the Census date. Consequently, socioeconomic status for a geographical area may be up to 6 years old and not an accurate representation of the status of residents at the time the data are analysed. In addition, IRSD is a measure of the average disadvantage of households in an area and the level of disadvantage of an individual household may vary significantly from the average.

An Australian Bureau of Statistics POA to remoteness correspondence and a POA to socioeconomic status correspondence are used to allocate persons screened to remoteness and socioeconomic status areas based on their postcode of residence. The remoteness (and socioeconomic status) to POA correspondences are based on postal areas, boundaries and classifications as at the year of the last Australian census, which may have been up to 5 years earlier, and boundaries, socioeconomic status and remoteness regions may have changed over time, creating inaccuracies. New postal areas defined since the last Census will not have valid remoteness or socioeconomic status correspondence data available as they will not exist in earlier correspondences.

Correspondences that convert POAs to PHN and Statistical Area geographies are also used. This may lead to some minor inaccuracies in results, as some postcodes cross PHN and Statistical Area geographies. This error tends to be largest in areas where the boundaries of the two geographies do not align, or when mapping from larger to smaller areas. Correspondences rated with a 'Poor' quality [as determined by the Australian Bureau of Statistics](#) are excluded from reporting. Records that cannot be converted by the correspondences are classified in an 'unknown' category.

**Coherence:**

Prior to the change in the NCSP, these data were collected by and stored in the cervical screening register in each state and territory, and provided to the AIHW by state and territory cervical screening programs. Now, under agreement with the Department of Health, TH provides a raw data extract of the NCSR data tables monthly that the AIHW can download for analysis. Data reported by the AIHW represent a 'snapshot' of the NCSR database at the time of extraction, and may not include retrospective updates made to data after the time of extraction.

NCSP cervical screening data are reported and published annually by the AIHW. However, the 2019 NCSP monitoring report was the first to report on the renewed NCSP using data from the NCSR. Therefore, results in reports from December 2019 onwards cannot be compared with earlier reports. Further, the 2020 NCSP monitoring report was the first to report on a revised definition of 'participation', and so participation cannot be compared with earlier reports.

Differences in cervical screening data reported by the AIHW and from other users of the NCSR may be due to retrospective updates to data and differences in the data extraction and analysis methodologies used.

## Source and reference attributes

**Submitting organisation:** Australian Institute of Health and Welfare

## Relational attributes

**Related metadata references:**

Supersedes [National Cervical Screening Program screening data 2018–2019: Quality Statement](#)

- [AIHW Data Quality Statements](#), Standard 01/12/2020