Cervical cancer screening, survey data and programme data

Number of women aged 20-69 who have been screened for cervical cancer within the past three years (or according to the specific screening frequency recommended in each country) divided by the number of women aged 20-69 answering the survey question (for survey-based data) or eligible for an organised screening programme (for programme-based data).

⚠️ Note: Countries are invited to supply both survey data and programme data when these two sources are available.

Summary table

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Sources and Methods

Australia

Survey data not available.

Programme data


Coverage: - National coverage.

Numerator: Number of women aged 20-69 who participated in the national screening programme over a 24-month period.
**Denominator**: Number of women aged 20-69 who were at risk. Women at risk are calculated with the average number of residents between the reporting year and the previous year adjusted for women with hysterectomy.

**Screening programme**: Every two years for women aged 20-69. Data are reported against the latest year in the time period, for example, 2015-2016 are recorded here in 2016.

**Break in time series**:
- The estimated proportion of women who had a hysterectomy was derived from the Australian Bureau of Statistics (ABS) 2001 National Health Survey until 2004, and was derived from the National Hospital Morbidity Database from 2005 onward.

**Austria**

**Survey data**


Coverage:
- National representative sample.
- The survey will be repeated every 5 years.

Numerator: Number of women aged 20-69 reporting to have had a Pap smear in the past 3 years.

Denominator: Number of women aged 20-69 answering the survey.

**Screening programme data** not available.

**Belgium**

**Survey data**


Coverage:
- **Numerator**: Number of women aged 20-69 reporting cervical cancer screening in the past three years.
- **Denominator**: Number of women aged 20-69 answering survey questions on mammography.

**Programme data**

Source of data:

Coverage:
- National coverage.
- **Numerator**: Number of women aged 25-64 who had a Pap smear taken in the past three years.
- **Denominator**: Number of women aged 25-64 in the past three years.
- **Recall period/periodicity**: 3 years.

Deviation from the definition:
- **Age variation**: 25-64 years old.

Estimation method: Data for other years than 1996-2000 and 2002-2012 are estimated using observed screening data and total annual consumption of cervical cytology by year (National Institute of Health Insurance) based on a linear regression imputation method.

Further information:
- Arbyn, M., Simoens, C., and Fabri, V. Analysis of individual health insurance data pertaining to Pap smears,

**Canada**

**Survey data**  
*Coverage:* National representative sample.  
- *Numerator:* Number of women aged 20-69 reporting having had a Pap smear in the past 3 years.  
- *Denominator:* Number of women aged 20-69 answering the survey and excluding non-response.  
- There is no national-level data available after 2012 as the module on Pap smear tests has been optional content in the CCHS since 2013. For example, in the 2016 CCHS only three provinces selected this content.

**Programme data**  
*Source of data:*  
- **2015 Data:** Estimation based on data for 6 provinces: Newfoundland and Labrador, Ontario, Manitoba, Saskatchewan, Alberta and British Columbia.  
*Coverage:*  
- **2008 Data:** Percentage of women 20–69 years of age in 7 provinces who had at least one Pap test in the three-year period 2006–2008.  
- Non-hysterectomy corrected for 5 provinces: Alberta, Saskatchewan, Manitoba, Nova Scotia and Newfoundland.  
- Hysterectomy corrected for 2 provinces: British Columbia and Ontario.  
- **2011 Data:** Percentage of women 20–69 years of age in 8 provinces who had at least one Pap test in the three-year period 2009–2011.  
- Non-hysterectomy corrected for 5 provinces: Alberta, Saskatchewan, Nova Scotia, Prince Edward Island and Newfoundland.  
- Hysterectomy corrected for 3 provinces: British Columbia, Manitoba and Ontario.  
- **2015 Data:** Percentage of women 20–69 years of age in 2 provinces (Newfoundland and Labrador, British Columbia) and 21-69 years of age in 4 provinces (Ontario, Manitoba, Saskatchewan, Alberta) who had at least one Pap test in the three-year period 2013–2015.  
- Manitoba data are corrected for hysterectomy and invasive cervical cancer.  
- Ontario data are age-standardised.
Chile

Survey data
Source of data:
- Years 2013 and 2015: National Socioeconomic Characterization Survey 2015. See information at:

Coverage:
- National representative sample.
- The specific question is: “In the last three years, have you had a pap smear?”
- Numerator: Number of women aged 20-69 reporting having had a Pap smear in the past three years.
- Denominator: Number of women aged 20-69 answering the survey question.
- The survey was conducted every three years until 2009, and every other year since then.

Programme data
Source of data: Ministry of Health, Department of Statistics and Health Information.
http://deis.minsal.cl/index.asp.
- The official source is from the CITOEXPERT software.
- Data collected by the team in charge of the programme at the local level and consolidated by the national team.
  Further information:
  - 2013-2014 data have been updated. Data were obtained from the Cervical Cancer Report, specifically from the indicator “Women with valid cervical cancer screening, which can be found in the following link:
    http://intradeis.minsal.cl/reportesrem/2013/PBC_CANCER_UTERINO_2/PBC_CANCER_UTERINO_2.aspx
    http://intradeis.minsal.cl/reportesrem/2014/PBC_CANCER_UTERINO_2/PBC_CANCER_UTERINO_2.aspx

Coverage:
- Data refer to only those covered by the public health insurance scheme, accounting for 73.5% of total population.
  The rest of the population is covered by private health insurances or "Defense Health System" (members of the Army, Navy, Police, Air Force and their direct family).
- Numerator: Number of women aged 25-64 who received a Pap smear (include test outside of organised screening) in the public health system in the past three years.
- Denominator: Number of women aged 25-64 who were beneficiaries of the public health system as of June 30th in the reporting year.
  Deviation from the definition: The data measure triennial exams for women aged 25-64, not 20-69.

Czech Republic

Survey data

Coverage:
- National representative sample survey of population aged 15 years old and over.
- Numerator: Number of women aged 20-69 reporting having had a Pap smear through or outside the organised screening programme in the past three years.
- Denominator: Number of women aged 20-69 answering the survey.
- Screening programme: Every year for women aged 15 and over.

Programme data
Source of data: Administrative data from all health insurance companies (aggregated and analysed by Institute of Health Information and Statistics of the Czech Republic and Institute of Biostatistics and Analyses, Faculty of
Coverage:
- National coverage.

**Numerator**: Number of women aged 20-69 who underwent cervico-vaginal screening cytology during the reporting year (the recommended interval according to the national legislation is 1 year). The effective coverage is therefore underestimated if compared to other countries with longer screening interval.

**Denominator**: Number of female residents 20-69 in the reporting year.

**Screening programme**: Every year for women aged 15 and over.

**Denmark**

**Survey data**
**Source of data**: Danish Health Interview Surveys, 2000 and 2005.

**Coverage**:
- National coverage.

**Numerator**: Number of women aged 20-69 years old who had a Pap smear through or outside the organised cervical cancer screening during the past three years.

**Denominator**: Number of women aged 20-69 years old answering the survey question.

**Screening programme**: Every three years for women aged 23-50 years old and every five years for women aged 51-64 years old.

**Programme data**
**Source of data**: Danish Quality Database for Cervical Cancer Screening, Annual Report 2016.

**Coverage**:
- National coverage.

**Numerator**: Number of women aged 23-64 years old who had a cervical cancer screening through the organised screening programme within 270 days after the invitation was sent.

**Denominator**: Number of women aged 23-64 years old to whom the invitation to the organised screening programme was sent between June 2008 and June 2009. The denominator excludes those who do not need or decline to participate in the screening because of the prior diagnosis of cervical cancer as they are not part of the target population who receive a personal invitation.

**Deviation**: Age group.

**Screening programme**: Every three years for women aged 23-50 years old and every five years for women aged 51-64 years old.

**Estonia**

**Survey data**
**Source of data**: EUROSTAT, European Health Interview Survey (Data extracted in March 2012); 

**Coverage**:
- National coverage.

**Numerator**: Number of women aged 20-69 years old reporting cervical cancer screening in the past three years.

**Denominator**: Number of women aged 20-69 years old answering survey questions on cervical cancer screening.

**Programme data**
**Source of data**: Cervical cancer screening programme (project 2003-2008). 
Estonian Health Insurance Fund ([www.haigekassa.ee](http://www.haigekassa.ee)) database.

**National Institute for Health Development, Non-infectious diseases prevention department.**

**Coverage**:
- National coverage.

**Numerator**: Number of women aged 30-55 years old who had a Pap test through or outside the national screening programme in a 12-month period.

**Denominator**: Number of women aged 30-55 years old who were invited to the screening programme in a 12-month period. Invitations are not sent to women who have a diagnosis of cervical cancer, who do not have valid health insurance (~10%) or whose address in the population register is incomplete, and the denominator excludes
these women. Up to 2012, the invitations were additionally not sent to women who had participated in screening in the previous year.

2015–2016: number of women aged 30-55 years old who were invited to the screening programme in a 12-month period. Women who have a diagnosis of cervical cancer in past five years are not invited to screening and the denominator excludes these women. Women without a valid health insurance are not excluded because they can still participate in screening even though they must pay for the test.

- **Screening programme**: Every five years for women aged 30-55 years old.

**Deviation from the definition:**

- Data refer to women aged 30-55 years old.

### Finland

**Survey data** not available.

**Programme data**

**Source of data**: Finland National Cancer Registry.

**Coverage**:

- National coverage.

- **Numerator**: Number of women aged 30-60 years old who were invited and had a cytological Pap smear through the organised cervical cancer screening during the reporting year.

- **Denominator**: Number of women aged 30-60 years old who received issued personal invitations to undergo organised cervical cancer screening during the reporting year. Personal invitations are sent to all women who belong to the target age group.

- **Screening programme**: Every five years for women aged 30-60 years old. Some municipalities also provide screening for women aged 25 years old and 65 years old.

**Deviation from the definition**:

- Screening programme: every five years.

- Age group 30-60 years old, in some municipalities 25 years old and 65 years old.

### France

**Survey data**

**Source of data**:

- 2014 data: common with EHIS.
- National Health Survey, INSEE. “Enquête décennale INSEE 2003”.

**Coverage**:

- **Numerator**: Number of women aged 20-69 reporting having had a Pap smear during the past three years.

- **Denominator**: Number of women aged 20-69 answering the survey question.

- **Screening recommendation**: Every three years for women aged 25-65.

**Programme data**:

There is no cervical cancer screening programme but only recommendation campaign and pilot local programmes.

### Germany

**Survey data**


**Coverage**:

- **Numerator**: Number of women aged 20-69 reporting cervical cancer screening in the past three years.

- **Denominator**: Number of women aged 20-69 answering survey questions on cervical cancer screening.

**Programme data**

**Source of data**: Gesetzliche Krankenversicherung, GKV.
Coverage:
- Insurance data from "GKV" includes information from a combined screening system involving various cancer sites for different ages offered in an unorganized form to all women with health insurance. “Zentralinstitut für die kassenärztliche Versorgung" based on national health insurance data (Gesetzliche Krankenversicherung – GKV).
- Cervical cancer screening programme offered to all women aged 20+. Evidence from survey shows that participation rates decline with age.

Deviation from the definition: Age group: 20-49 years old (5-year increments).

2009:
Source of data: EUROSTAT, European Health Interview Survey data (Data extracted in March 2012).

Coverage:
- Numerator: Number of women aged 20-69 reporting cervical cancer screening in the past three years.
- Denominator: Number of women aged 20-69 answering survey questions on cervical cancer screening.

Programme data
Source of data: Gesetzliche Krankenversicherung, GKV.

Coverage:
- Insurance data from "GKV" includes information from a combined screening system involving various cancer sites for different ages offered in an unorganized form to all women with health insurance. “Zentralinstitut für die kassenärztliche Versorgung" based on national health insurance data (Gesetzliche Krankenversicherung – GKV).
- Cervical cancer screening programme offered to all women aged 20+. Evidence from survey shows that participation rates decline with age.

Deviation from the definition: Age group: 20-49 years old (5-year increments).

Greece
Source of data:

Coverage:
- 2009, 2014: Data refer to women aged 20-69 who have been screened for cervical cancer (having done a Pap test) within the past two years divided by the number of women aged 20-69 answering survey questions on screening for cervical cancer.
- 2006: All women aged 15 and over.
- Screening recommendation: Every year for women aged 20 and over.

Break in time series: 2009 (change in data source).

Programme data not available.

Hungary

Programme data
Source of data:
- From 2006 onwards: National Healthcare Services Center (ÁEEK in Hungarian) www.aeek.hu.

Coverage:
- Numerator: Number of women aged 20-69 who had a Pap smear through the organised cervical cancer screening programme during the past three years.
- Denominator: Number of women aged 20-69 who were invited to the organised cervical cancer screening programme during the past three years.

Screening programme in Hungary: Every three years for women aged 25-65. Organised screenings for cervical cancer started in October 2003 in Hungary.
Survey data
Source of data:
  www.ksh.hu.
  www.ksh.hu.
Coverage:
- **Numerator**: Number of women age 20-69 reporting cervical cancer screening within the last three years.
- **Denominator**: Number of women age 20-69 answering the survey question.
  Deviation from the definition:
  - In OLEF 2003 the numerator: number of women age 20-69 reporting cervical cancer screening within the last two years.

Iceland

Survey data not available.

Programme data
Source of data: Cancer Detection Clinic of the Icelandic Cancer Society.
Coverage:
- National coverage.
- **Numerator**: As of 1st January 2014 number of women aged 23-65 years old (20-69 before) who received a Pap smear/LBC through or outside the organised cervical cancer screening programme during the past three and a half years (three years before).
- **Denominator**: As of 1st January 2014 number of women aged 23-65 years old (20-69 before) who were invited to the organised cervical cancer screening programme during the past three and a half years.
- Screening rates refer to the coverage in three and a half years in order to take into account young women's delay in coming to the screening after invitation.
- **Screening programme**: As of 1st January 2014 every three years for women aged 23-65 years old. For 2010-2013 every two years for women aged 20-39 years old and every four years for women aged 40-69 years old (with specified number of former normal pap-smears) since 2009. Prior to 2009, every two years for women aged 20-69 years old.

Ireland

Survey data not available.

Programme data
Coverage:
- 5-year coverage
  - CervicalCheck nationwide programme rolled out 1st September 2008. The National Cervical Screening Programme offers free smear tests to women aged 25-44 every three years and 45 to 60 every five years.
  - **Numerator**: the number of women in the eligible population who have had a satisfactory smear test in the previous five years where end-year is of the reporting period.
  - **Denominator**: the number of eligible women in the population at the mid-point of the 5-year reporting period adjusted for known rates of women who have undergone hysterectomy (and are not eligible for screening).
  Deviation from the definition:
  - Age group 25-60 years old.
  Break in time series: Data for 2011 refer to three years coverage, 2012 four years coverage, and from 2013 onwards refers to a rolling five years coverage.

Israel

Survey data
Source of data: Israel Center for Disease Control (ICDC), Ministry of Health.
- 2010: **Israeli National Health Interview Survey (INHIS-2), 2007-2010.** The INHIS-2 2007-2010 survey is the second in a series of population based National Health Interview Surveys. The INHIS-2 survey was a telephone survey on a representative sample of 10,331 Israelis aged 21 and above.
- 2004: **Israel National Health Interview Survey (INHIS-1), 2003-2004.** The INHIS-1 2003-2004 is the first in a series of population based National Health Interview Surveys. INHIS was conceived and implemented within the framework of the international EUROMI project of the WHO. The INHIS-1 survey was a telephone survey on a representative sample of 9,500 Israelis aged 21 and above.

For further information on INHIS surveys: [http://www.health.gov.il/English/MinistryUnits/ICDC/Health_Surveys/Pages/INHIS.aspx](http://www.health.gov.il/English/MinistryUnits/ICDC/Health_Surveys/Pages/INHIS.aspx)

**Deviation from the definition:**
- Data are based on self-reported PAP test in women **aged 21-69 during the five years preceding the survey.**

**Programme data**

**Source of data:**
- 2013-2016: Data based on The National Program for Quality Indicators in Community Healthcare in Israel, compiled by the [directorate of the National Program for Quality Indicators in Community Healthcare in Israel](http://healthindicators.org.il/en/reports/), Braun School of Public Health and Community Medicine, Hebrew University – Hadassah, Jerusalem. http://healthindicators.org.il/en/reports/: This program is funded by the Israel National Institute for Health Policy and Health Services Research (NIHP).

**Coverage:** Complete.

**Deviation from the definition:**
- Numerator: Number of women aged **35-54** who have been screened for cervical cancer within the past three years.

**Screening recommendation:** There is no national screening program for cervical cancer in Israel. For women aged 25-65 it is recommended that a Pap Smear be performed every three years. For women at high risk it is recommended that a Pap Smear be performed every three years after beginning of sexual relations.

**Italy**

**Survey data**

**Source of data:** [Istituto Superiore di Sanità. Progressi delle Aziende Sanitarie per la Salute in Italia: la sorveglianza Passi.](http://www.epicentro.iss.it/passi/)

**Coverage:**
- **Numerator:** Number of women aged 25-64 (sampled in the survey) reporting a pap smear or an HPV test during the past three years.
- **Denominator:** Number of resident women aged 25-64 (sampled in the survey).
- **Screening programme:** Every 3 years for women aged 25-64.

**Deviation from the definition:** Age group: 25-64 years (target population).

**Programme data**

**Source of data:** [Ministry of Health - National Centre for Screening Monitoring.](http://www.osservatorionazionalescreening.it/sites/default/files/allegati/screening_matite_2.pdf#overlay-context=content/i-rapporti-brevi-dell%25E2%2580%2599ons).

**Coverage:**
- Regional coverage. As of 2015, 76% of the women aged 25-64 were invited to the cervical cancer screening programmes. The coverage was 72% for 2014, 71% for 2013, 77% for 2012, 67% for 2011, 68% for 2010, 66% for 2009 and 63% for 2008.
- **Numerator:** Number of women aged 25-64 who had a Pap smear through the organised cervical cancer screening programme during the reporting year and up to April of the following year.
- **Denominator:** Number of women aged 25-64 who were invited to the organised cervical cancer screening programme during the reporting year. The denominator does not always exclude those who do not need/decline to participate in the screening because of the prior diagnosis of cervical cancer, etc.
- **Screening programme**: Every 3 years for women aged 25-64.
  
  **Deviation from the definition**: Age group: 25-64 years (target population).

**Japan**

**Survey data**


**Coverage**:
- National representative sample.
- **Numerator**: Number of women aged 20-69 reporting having received a uterine cancer screening during the past year (data up to 2007) or the past two years (data since 2010). The numerator includes those women with screenings for uterine cancer including cervical cancer.
- **Denominator**: Number of women aged 20-69 answering the survey question.
- The survey has been conducted every three years since 2001.

**Screening recommendation**: Uterine cancer screening every 2 years for women aged 20 and over.

**Break in time series**: 2010. From 2010, number of women reporting having received a screening in the past two years before the survey.

**Programme data** not available.

**Korea**

**Survey data**

**Source of data**: National Cancer Center, Korea National Cancer Screening Survey, each year.

**Coverage**:
- National representative sample.

**Methodology**:

**Until 2014**:
- **Numerator**: Number of women aged 30-69 reporting having had a Pap smear during the past two years.
- **Denominator**: Number of women aged 30-69 answering the survey.

**From 2015**:
- **Numerator**: Number of women aged 20-69 reporting having had a Pap smear during the past two years.
- **Denominator**: Number of women aged 20-69 answering the survey.

**Screening programme**: Every two years for women aged 30 and over.

**Deviation from the definition**: Age group (until 2014).

**Break in time series**: 2015.

**Programme data**

**Source of data**: National Health Insurance Corporation (NHIC), unpublished data.

**Coverage**:
- National coverage.
- **Numerator**: Number of women aged 30-69 who were invited to and had a Pap smear through the organised cervical cancer screening programme during the reporting year.
- **Denominator**: Number of women aged 30-69 who were invited to a Pap smear through the organised cervical cancer screening programme during the reporting year.
- **Screening programme**: Every two years for women aged 30 and over.

**Deviation from the definition**: Age group.

**Break in time series**: Prior to 2008, data refer to women aged 30 and over. From 2008 onwards, data refer to women aged 30 to 69.

**Latvia**

**Source of data**: National Health Service.

**Coverage/Deviation from the definition**: 


- Data are collected, dividing number of women aged 25-70 who have taken tests in current year by the number of sent invitation letters (letter is valid for three years) in current year.
- Age group for cervical cancer screening: 25-70.
- Note: Screening programme in Latvia was launched in 2009. Invitation to cervical cancer screening is valid for 3 years.
- In 2011, invitation letters sent to large target population and received in 2009 and 2010 were also valid. Due to the social activities and informative measures, as well as support from professional associations of gynaecologists and general practitioners, population interest in screening grew, therefore also rise in the number of examinations performed basing on the invitation letters was recorded.
- The reasons for the strong increase in 2017 are the following:
  1. In 2016, NHS had technical problems to deliver system generated invitation letters for part of the target population. Hence many invitations (valid for two years) were sent at the end of 2016, and screening was done in 2017. This explains the low rate in 2016 and the high rate in 2017.
  2. In 2017, the government has done several organisational changes in order to increase cancer screening rates.

**Luxembourg**

**Survey data** EHIS wave 2.

**Programme data**
*Source of data:* [Fichiers de la sécurité sociale](#). Data prepared by [Inspection générale de la sécurité sociale](#).

**Coverage:**
- Women covered by statutory health insurance scheme and living in Luxembourg at the moment of testing.
- **Numerator:** Number of female residents covered by the statutory health insurance scheme aged 20-69 years old who underwent a screening consultation in Luxembourg within the past three years relative of the reporting year.
- **Denominator:** Average number of female residents covered by the statutory health insurance scheme aged 20-69 years old in the reporting year.
- **Screening programme:** No organised screening programme (no personal invitation). The (annual) gynaecological check-up is complemented with a smear test for cervical cancer. Every year for women aged 15 years old and over living in Luxembourg.

Data for 2016 are provisional.

**Deviation from the Joint questionnaire definition:**

**Break in time series:**
- There has been a change in the screening procedure for cervical cancer, which has led to a change in calculation methodology. Data established according to this methodology are only available since 2013. From 2015 onwards, data is aligned with the definition (Number of women aged 20-69 who have been screened for cervical cancer within the past three years). Before 2015, data refers to a screening consultation during the past year.

**Mexico**

**Survey data**

**Coverage:**
- The percentage of women aged 20-69, who attended the preventive medicine module for a Papanicolaou test (Pap smears) during the last 12 months.
- **Numerator:** Number of women aged 20-69 who attended the preventive medicine module for a Papanicolaou test (Pap smears) during the last 12 months.
- **Denominator:** Number of women aged 20-69 answering the survey question.
- **Screening programme:** Every year for women aged 20-69.

**Programme data**
*Source of data:* [Programa de Salud de la Mujer (Women’s Health Programme).](#) [Women’s Cancer Information System (SICAM), 2000-2017.](#)

**Coverage:**
- **Numerator**: Number of women aged 20-59 who attended the preventive medicine module for a Papanicolaou test (Pap smears) during the last three years.
- **Denominator**: Number of women aged 20-59 who were invited to the preventive medicine module for a Papanicolaou test (Pap smears) during the last three years. Denominator includes women with prior diagnosis of cervical cancer.

**Screening programme**: Every year for women aged 20-59.

**Deviation from the definition**: Age group.

**Netherlands**

**Survey data**

*Source of data:*
- 2000-2004: Data from the Integrated System of Social Surveys (POLs).
- 2005 onwards: Data from the Health Interview Survey.

*Coverage:*
- **Numerator**: Number of women aged 20-69 years old reporting having had a Pap smear during the past five years.
- **Denominator**: Number of women aged 20-69 years old answering the question. The denominator excludes those who answered 'don't know'.

*Screening programme*: For women aged 30 years old, 35 years old, 40 years old, 45 years old, 50 years old, 55 years old and 60 years old.


**Programme data**

*Source of data:*
- National Evaluation Team for cervix cancer screening, Population statistics of Statistics Netherlands, National Medical Registry (hospital registry) and nationwide network and registry of histo- and cytopathology in the Netherlands (PALGA).

*Coverage:*
- **Numerator**: Number of women aged 30 years old, 35 years old, 40 years old, 45 years old, 50 years old, 55 years old and 60 years old who were invited to the organised cervical cancer screening during the reporting year and had a Pap smear through the organised programme. The numerator includes women who were invited to the screening in the reporting year but had a Pap smear up to three months after the end of the reporting year.
- **Denominator**: Number of women aged 30 years old, 35 years old, 40 years old, 45 years old, 50 years old, 55 years old and 60 years old who were in Population Registration excluding the number of hysterectomy patients during the reporting year. Women who refused to participate in the programme are included in the denominator.

*Screening programme*: For women aged 30 years old, 35 years old, 40 years old, 45 years old, 50 years old, 55 years old and 60 years old.

*Deviation from the definition*: Age group.

**New Zealand**

**Survey data**


*Coverage:*
- National representative sample.
- **Numerator**: Number of women aged 20-69 reporting having had a Pap smear within the previous two years.
- **Denominator**: Number of women aged 20-69 answering the survey question.

*National Health Survey usually shows a greater screening coverage than the National Cervical Screening Programme (NSCP) figures because the survey includes women who have screening outside the national screening programme. However, NSCP’s data sources are considered a more accurate record of screening events than the national survey for calculating total population coverage. This data source is no longer available as the question is no longer asked as part of the NZ Health Survey.*

*Screening programme*: Every three years for women aged 20-69.

**Programme data**

*Source of data:*
- National Cervical Screening Programme (NCSP), National Screening Unit, Ministry of Health, New Zealand.
Coverage:
- **Numerator**: Number of women aged 25-69 who have had a cervical screening sample (cytology, histology or HPV test) taken in the 36 months prior to the end of the annual reporting period ending on 31 December.
- **Denominator**: The NCSP coverage denominator is the number of eligible women aged 25-69 years in New Zealand at the end-point of the 36 month screening period, as derived from Statistics New Zealand’s district health board (DHB) population projections. Number of women aged 25-69 years who were alive and resident in New Zealand in the 36 months prior to the end of the reporting period and who have not had a hysterectomy. The denominator for calculating coverage is Statistics New Zealand’s 2016 update of population projections (2013 Census) adjusted for the prevalence of hysterectomy. 2017, 2016, 2015, 2014 and 2013 coverage uses the 2016 update of the 2013 Census based projections. Earlier coverage estimates use the 2015 update of the 2013 Census based projections.
- **Screening programme**: Every three years for women aged 20-69.
- **Break in time series**: 2008. The NCSP has revised the methods and definitions for calculating coverage and now only provide figures for the 25-69 year age group. Figures from 2008-2012 have been updated using this method.
- **Prior to 2008**, the population (denominator) was estimated based on the 2001 census data. Coverage was reported for women between 20-69 years.
- Since 2008, the denominator populations have been updated to projections based on the 2006 census. Coverage was reported for women between 25 to 69 years. A new hysterectomy adjustor was applied to population data from 1 January 2012.
- **Deviation from the definition**: Coverage is calculated for the age group 25-69 at the end of each reporting period so that women aged 17-19 years (not eligible for screening), are excluded (in the case of 3-yearly coverage). This has been in place since 2008. Excluding women aged 20-21 years in the coverage calculation allows time for recruitment i.e. it is considered unrealistic for all women to have their first screen on their 20th birthday.

**Norway**

Survey data not available.

**Programme data**
Source of data: [Norwegian Cervical Screening Programme](https://www.specific.who.int/).

Coverage:
- **Numerator**: Number of women aged 25-69 years old who had a cervical cancer screening through the organised screening programme (which in Norway include all PAP tests taken).
- **Denominator**: Number of women aged 25-69 years old who were living in Norway. The denominator excludes those who do not need to participate in the screening because of the prior diagnosis of cervical cancer or hysterectomy due to benign lesions.
- **Screening programme**: programme data five years coverage, women aged 25-69 years old.

**Poland**

Survey data
Source of data: [Central Statistical Office (CSO)](https://www.stat.gov.pl/).

- 2004: [Health Interview Survey](https://www.stat.gov.pl/).

Coverage:
- **Numerator**: Number of women aged 20-69 years old reporting having had the last Pap smear in the last three years.
- **Denominator**: Number of women aged 20-69 years old answering the survey question.

**Portugal**

Survey data not available.
Source of data:
- National Heath Survey 2005/2006, developed in partnership by National Health Institute Doutor Ricardo Jorge (INSA) and Statistics Portugal.
- National Heath Survey 2014, developed in partnership by National Health Institute Doutor Ricardo Jorge (INSA) and Statistics Portugal.

Coverage:
- National coverage.
- Data collection of the National Heath Survey 2005/2006 took place between February 2005 and February 2006. Results regarding the percentage of females that undertook cervical cancer screening were reported to a single year (2005), having in mind that the data collection took place mostly during that year.
- Data collection of National Heath Survey 2014 took place between October and December 2014.

Programme data not available.

Slovak Republic

Survey data
Source of data: EUROSTAT, European Health Interview Survey 2009 (data extracted in March 2012) and European Health Interview Survey 2014 (data extracted in April 2017).

Coverage:
- Numerator: Number of women aged 20-69 reporting cervical cancer screening in the past three years.
- Denominator: Number of women aged 20-69 answering survey questions on mammography.

Programme data
Source of data: National health Information Center (NHIC), Annual report on activity of gynaecology out-patient unit from 2009. Data since 2009 were revised in 2018.
Coverage: Data from the Annual report on activity of gynaecology out-patient unit refer to cervical cancer screening among women who received/ participated in the gynaecological preventive care programme examination and who are at age 19+ in a reporting year.
- Numerator: Number of women aged 19 + who received/ participated in the gynaecologic preventive care programme examination in the reporting year. The gynaecological preventive programme examination includes a cervical cancer screening.
- Denominator: Number of women aged 19-69 within the women population in the reporting year.
- Screening programme: For women aged 23-64. Every year for the first two cytology exams. If first two tests come back negative, cervical cancer screening is carried out once every three years until the age 64. The screening ends at the age 64, if the last 3 cytology findings are negative.
Deviation from the definition: Data refer to annual preventive gynaecological examinations, and not exactly examinations of cervix uteri.

Slovenia

Survey data
Source of data:

Coverage:
- Population living in private households (persons living in institutions are excluded).
- National representative data for 2007, but regional coverage for previous years. Prior to 2007, data were collected through pilot study which covered all women aged 20-64 years old in two regions.
- Numerator: Number of women aged 20-64 years old reporting having had a Pap smear through and outside of the organised cervical cancer screening programme during the past three years.
- Denominator: Number of female residents aged 20-64 years old in the reporting year.
- **Screening programme**: Every three years for women aged 20-64 years old.

  **Deviation from the definition**: *Age group (20-64 years old).*

  **Break in time series**: Change of data source for 2007.

**Programme data**

**Source of data**: Cervical cancer screening registry ZORA at the National Cancer Registry, Institute of Oncology, Ljubljana. Data analysed on January 15th 2018.

**Coverage**:
- National coverage.
- **Numerator**: Number of women aged 20-64 years old screened at least once in the defined 3-year interval.
- **Denominator**: Number of female residents aged 20-64 years old in the same period (3-year average).

- **Screening programme**: Every three years for women aged 20-64 years old.

  **Deviation from the definition**: *Age group (eligible women for cervical cancers screening are aged 20-64).*

**Spain**

**Survey data**

**Source of data**: Ministerio de Sanidad, Servicios Sociales e Igualdad (Ministry of Health, Social Services and Equality) and Instituto Nacional de Estadística - INE (National Statistics Institute).

- Encuesta Europea de Salud en España (European Health Interview Survey (EHIS), 2014).
  http://www.ine.es.

- Encuesta Europea de Salud en España (European Health Interview Survey (EHIS), 2011).

- EUROSTAT, European Health Interview Survey 2009 data (data extracted in March 2012).

**Coverage**:
- **Numerator**: Number of women aged 20-69 reporting a cervical cancer screening in the past three years.
- **Denominator**: Number of women aged 20-69 answering survey questions on cervical cancer screening.

**Programme data** are not available.

**Screening programme**: Generally every three years for women aged 30-39 and every five years for women aged 40-69.

**Sweden**

**Survey data** not available.

**Programme data**

2000-2016

**Source of data**: Swedish National Quality Registry for Cervical Cancer Screening.

**Coverage**:
- **Numerator**: Number of women aged 23-49 years old having had a Pap smear through or outside the organised cervical screening.
- **Denominator**: Number of female residents aged 23-49 years old.
- **Screening programme**: A Pap smear every three years for women aged 23-49 years old and every five years for women aged 50-60 years old. All female residents in Sweden, aged 23-60 years old, who have not opted out of the screening programme are invited to the screening programme periodically. The programme is organised by counties following national recommendations.

  **Deviation from the definition**: age group 23-60 years old.

See http://www.nkcx.se/Covr_all.htm

**Switzerland**
Survey data

Coverage:
- Numerator: Number of women (aged 20-69) reporting having undergone a cervical cancer screening test within the past three years. Women who have had a hysterectomy were excluded in 2007.
- Denominator: Number of women aged 20-69 answering the survey question.

Screening recommendation: Every three years for women.

Programme data are not available.

Turkey

Programme data
Source of data: Cancer Control Department, The Ministry of Health of Turkey.

Coverage:
- Throughout the entire country.
- Numerator: Number of women aged 30-65 who had Pap Smear Tests in the past three years (incl. women who had Pap smear tests on 5 years basis of public based screening by invitation and opportunistic screenings in KETEMs and number of Pap Smear Tests performed for women with no age limitation on a year basis as opportunistic screenings in other health institutions).
- Denominator: Women aged 30-65 in current year (latest data of TurkStat).
- Screening Programme: Women over 30 are screened once every five years by pap smear test. Screening ends at the age of 65. Screenings performed by invitation are made at the KETEMs (Cancer Early Diagnosis, Screening and Education Centers). Opportunistic screenings are performed among the women aged 30-65 in KETEMs and among women with no age limitation in other health institutions.

Deviation from the definition: Target population for cervical cancer screening in Turkey is 30-65.

Survey data
Source of data: TURKSTAT, European Health Interview Survey (EHIS) 2014 and 2016.

Coverage:
- Self-reported last cervical smear test among women: Percentage of women aged 20-69 who reported that they had a cervical smear test within the past three years.

United Kingdom

Survey data
Source of data: European Health Interview Survey 2014 (extraction from Eurostat database in May 2017).

Coverage: Percentage of women aged 20-69 who reported to have had a cervical smear test within the past three years.

Programme data
Source of data: Calculated by the NHS Digital (http://content.digital.nhs.uk/) using data from:
- Wales: Public Health Wales.
- Scotland: NHS National Services Scotland.
- Northern Ireland: Quality Assurance Reference Centre (QARC), HSC Public Health Agency.

Coverage:
- England for 2000; 2001-2009 includes England, Wales & Scotland; from 2010 onwards it is a full UK estimate with data from England, Wales, Scotland and Northern Ireland.
- Data are based on 'coverage'. In England, coverage is defined as the percentage of women in a population who were eligible for screening at a given point in time (31st March in any given year), who were screened adequately within a specified period. Coverage for women aged 25-64 is calculated as the number of women in this age group who have had an adequate screening test within the last 5 years as a percentage of the eligible population aged 25 to 64 for England & Wales only.
- In England, smear tests are no longer used. Tests refer to any test for cervical screening.
- In Wales, coverage calculation for the denominator is the total number resident minus those who have been ceased for clinical reasons.
- 2010 onwards for Northern Ireland is based on 25-64 (5 years).

**Numerator:**
- England: number of women aged 25-64 screened within 5 years.
- Scotland: number of women aged 20-60 screened within 5.5 years.
- Wales: number of women aged 25-64 screened within 5 years.
- Northern Ireland: number of women aged 25-64 screened within 5 years.

**Denominator:**
- England: number of women aged 25-64 eligible for screening.
- Scotland: number of women aged 20-60 eligible for screening.
- Wales: number of women aged 25-64 eligible for screening.
- Northern Ireland: number of women aged 25-64 eligible for screening.

**United States**

**Survey data**

**Coverage:** National Representative Sample of the U.S. Civilian Non-Institutionalised Population, females aged 20-69 years.
- **Numerator:** Number of women aged 20-69 years old reporting having received a Pap smear test three years ago or less.
- **Denominator:** Denominator excludes respondents (females aged 20-69 years old) who reported “Refused”, “Not ascertained”, or “Don’t know” to the question “Have you ever had a Pap smear test?”
- **Screening programme:** Every one, two or three years for women aged 21 and over depending on the insurance coverage.

**Estimation method:**
- Method B was formulated by the National Cancer Institute (NCI) to provide the analyst a protocol to study trends overtime based on a common methodology of cancer screening. This method is consistent with the methods used in 2000 and 2003 by the National Cancer Institute and the Office of Analysis and Epidemiology as well as the National Center for Health Statistics. More information can be found at [http://www.cdc.gov/NCHS/nhis/nhis_2008_data_release.htm](http://www.cdc.gov/NCHS/nhis/nhis_2008_data_release.htm).

**Break in time series:** No breaks in time series.

**Programme data** not available.

**NON-OECD ECONOMIES**

**Lithuania**

*Source of data:* Health Information Centre of Institute of Hygiene, data from Compulsory Health Insurance Database.

**Coverage:** National cervical cancer screening programme cover women aged 25-60 every 3 years. Programme was started in 2008.