Screening

Definitions

*Updated: September 2021*

<table>
<thead>
<tr>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Breast cancer screening</td>
<td>Number of women aged 50-69 who have received a bilateral mammography within the past two years (or according to the specific screening frequency recommended in each country) divided by the number of women aged 50-69 answering survey questions on mammography (for survey-based data) or eligible for an organised screening programme (for programme-based data).</td>
</tr>
<tr>
<td>Cervical cancer screening</td>
<td>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).</td>
</tr>
</tbody>
</table>

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

Country specific notes

Belgium, Bulgaria, Czechia, Denmark, Germany, Estonia, Ireland, Greece, Spain, France, Croatia, Italy, Cyprus, Latvia, Lithuania, Luxembourg, Hungary, Malta, Netherlands, Austria, Poland, Portugal, Romania, Slovenia, Slovakia, Finland, Sweden, Iceland, Liechtenstein, Norway, Switzerland, Montenegro, North Macedonia, Albania, Serbia, Turkey, United Kingdom
Belgium

Breast cancer screening (mammography)

Survey data

Coverage:
- **Numerator**: Number of women aged 50-69 reporting having received a bilateral mammography in the past two years.
- **Denominator**: Number of women aged 50-69 answering survey questions on mammography.

Programme data

Coverage:
- National coverage.
- **Numerator**: Number of women aged 50-69 having received a mammogram through or outside the organised screening programme during the past two years.
- **Denominator**: Number of female residents aged 50-69 in the past two years.
- **Screening programme**: Mammography every two years for women aged 50-69.

Cervical cancer screening

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:
There are no data for the cervix cancer screening coverage since 2013.
The reason is that there were changes in the reimbursement rules, and there is currently no agreement on the way to compute the coverage. Different figures are circulating but without consensus.

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/persodicity: 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:

Bulgaria

Breast cancer screening (mammography)

Survey data:
Source of data: National Statistical Institute, European Health Interview Survey 2008, harmonised questionnaire was used.
Reference period: November – December 2008
October – December 2014 – EHIS wave 2
2019 – EHIS wave 3
Coverage: All persons aged 15 and over within the selected non-institutionalised households are surveyed. In accordance with the EHIS methodology people that live in institutionalised households (residencies for students or workers, medical or social institutions, prisons) are excluded from the target population.
Data refer to women aged 50-69.

Programme data:
Source of data: Ministry of Health, National screening register.
Reference period: 2013 - 2015
Programmes:
“Stop and check yourselves” – 2013-2014
National programme for prevention of chronic non-communicable diseases (2014-2020)
Coverage: Data refer to women aged 50-69
- National coverage
- Numerator: Number of women aged 50-69 who received a mammography through the organised breast cancer screening programme.
- Denominator: Number of women aged 50-69 who were invited to the organised breast cancer screening during the reporting period (2013 – 2015). In order to define the target group additional administrative data sources were used – the National Civil Registration System, the National Health Insurance Fund, and the National Cancer Registry.
The denominator does not include women already registered in the National Cancer Registry with the relevant cancer and those who have undergone prophylactic check in the last 12 months.
The data does not include women who have had a mammography elsewhere, outside the screening programme.

Reference period: 2016, 2017
National programme for prevention of chronic non-communicable diseases (2014-2020)
2016 and 2017 data
Coverage: Data refer to women aged 50-69
- National coverage
- Numerator: Number of women aged 50-69 who received a mammography through the organised breast cancer programme.
- Denominator: Number of women aged 50-69 who were invited to the organised breast cancer screening during the reporting year.
The data does not include women who have had a mammography elsewhere, outside the screening programme.
Break in time series - In 2018, in accordance with the Order of the Minister of Health, the screening for breast cancer was carried out in 2 districts only (NUTS 3 regions - Stara Zagora and Ruse). These districts have the highest incidence rate of oncological diseases per 100,000 of the population according to the National cancer registry 2015 data. For the screening only persons with family burden as well as without age restrictions have been covered.
Note: Bulgaria does not have a program for screening. These activities are part of the prevention activities performed by GPs or specialists.

Cervical cancer screening

Survey data:
Source of data: National Statistical Institute, European Health Interview Survey 2008 and 2014, harmonised questionnaire was used.
Reference period: November – December 2008
October – December 2014
2019 – EHIS wave 3
Coverage: All persons aged 15 and over within the selected non-institutionalised households are surveyed. In accordance with the EHIS methodology people that live in institutionalised households (residencies for students or workers, medical or social institutions, prisons) are excluded from the target population.
Data refer to women aged 20-69.

Programme data:
Source of data: Ministry of Health, National screening register.
Reference period: 2013 - 2015
Programmes:
“Stop and check yourselves” – 2013-2014
National programme for prevention of chronic non-communicable diseases (2014-2020)
Reference period: 2017
National programme for prevention of chronic non-communicable diseases (2014-2020)
Coverage: Data refer to women aged 25-60
- National coverage
- Numerator: Number of women aged 25-60 who had a Pap test and/or HPV test through the organised national programme.
- Denominator: Number of women aged 25-60 who were invited to the organised screening during the reporting period (2013 – 2015). In order to define the target group additional administrative data sources were used – the National Civil Registration System, the National Health Insurance Fund, and the National Cancer Registry.
Denominator: Number of women aged 25-60 who were invited to the organised screening during the year. The data does not include women who have had a Pap test and/or HPV test elsewhere, outside the screening programme. Deviation from the definition: Age groups. Break in time series - In 2018, in accordance with the Order of the Minister of Health, the screening for cervical cancer was carried out in 2 districts only (NUTS 3 regions - Stara Zagora and Ruse). These districts have the highest incidence rate of oncological diseases per 100,000 of the population according to the National cancer registry 2015 data. For the screening only persons with family burden as well as without age restrictions have been covered. Note: Bulgaria does not have a program for screening. These activities are part of the prevention activities performed by GPs or specialists.

**Czechia**

**Breast cancer screening (mammography)**

**Survey data**
Coverage:
- National representative sample survey of population aged 15 years old and over.
- **Numerator**: Number of women aged 50-69 reporting having received a bilateral mammography through or outside the organised screening programme in the past two years.
- **Denominator**: Number of women aged 50-69 answering the survey question.

**Screening programme**: Every two years for women over 45 years old.

**Programme data**
Source of data: **Breast Cancer Screening Database** (Institute of Biostatistics and Analyses, Faculty of Medicine and the Faculty of Science, Masaryk University, [www.iba.muni.cz]).
Coverage:
- National coverage.
- Data cover all examinations performed at the accredited screening centres participating in the National breast cancer screening programme.
- **Numerator**: Number of women aged 50-69 having received a mammogram through the organised breast cancer screening programme during the past two years.
- **Denominator**: Number of female residents aged 50-69 years old in the reporting year.

**Screening programme**: Mammography every two years for women aged 45 and over.

Further information: The whole time series was revised in 2021 and further revisions are possible in the future based on continuous validation of source data.

**Cervical cancer screening**

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

**Programme data**

**Source of data**: Since 2012, the National Register of Reimbursed Health Services.

**Coverage**: National coverage.

- **Numerator**: The number of women aged 20-69 who underwent cervico-vaginal screening cytology in the three years prior to the reporting year.
- **Denominator**: The number of female residents aged 20-69 at the end of the reporting year.

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

**Denmark**

**Breast cancer screening (mammography)**

**Survey data** not available.

**Programme data**

**Source of data**: Quality Database Mammography, Annual Report 2016.

**Coverage**: Data covers all of the five regions in Denmark.

- **Numerator**: Number of women aged 50-69 years old who received a mammography through the organised screening programme in the past two years.
- **Denominator**: Number of women aged 50-69 years old who received an invitation to undergo organised breast cancer screening in the past two years. The denominator excludes those who do not need or decline to participate in the screening because of the prior diagnosis of breast cancer as they are not part of the target population who receive a personal invitation.

**Screening programme**: Mammography every two years for women aged 50-69 years old.

**Cervical cancer screening**

**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 2017.

**Coverage**: National coverage.
**Numerator:** Number of women aged 23-64 years old who had a cervical cancer screening through the organised screening programme within 270/365 days after the invitation was sent (within 270 days for the period 2009-2013; within 365 days for the period 2014-2016).

**Denominator:** Number of women aged 23-64 years old to whom an invitation to the organised screening programme was sent in the specific year. The denominator excludes those who do not need to be screened due to a prior diagnosis of cervical cancer as they are not part of the target population who receive a personal invitation. The denominator does not include women screened without getting an invitation. In Denmark, it is possible for women to get screened for free without having an invitation. Women are automatically invited, when her last smear test was performed more than 3 / 5 years ago. Therefore, women who together with their GP/gynaecologist choose to be screened a bit before the 3 / 5 years have gone will not receive an invitation and will not be included in the denominator nor in the numerator. Women who have chosen to opt-out of the screening programmes do not receive further invitations and will therefore not be included in the denominator.

**Deviation:** Age group.

**Screening programme:** Every three years for women aged 23-49 years old and every five years for women aged 50-64 years old.

**Germany**

**Breast cancer screening (mammography)**

**Survey data**

**2012:**

**Source of data:** Robert Koch Institute (RKI), German Health Interview and Examination Survey for Adults (DEGS1); Bundesgesundheitsblatt 2013 56:858-867, “Inanspruchnahme von Krebsfrüherkennungsuntersuchungen - Ergebnisse der Studie zur Gesundheit Erwachsener in Deutschland (DEGS1)”.


**Coverage:**

- **Numerator:** Number of women aged 50-69 reporting having received a bilateral mammography in the past two years.
- **Denominator:** Number of women aged 50-69 answering survey questions on mammography.
- The “German Health Interview and Examination Survey for Adults” (DEGS1) is part of the health monitoring of the Robert Koch Institute (RKI) and is designed as a combined cross-sectional and longitudinal survey. The aim of the study is to repeatedly provide nationally representative data on the health status of the adult general population (18-79 years) in Germany.
- In order to perform both cross-sectional and longitudinal analyses, a mixed study design was implemented. Therefore, a sample of participants was randomly chosen form local population registries and then supplemented by former participants of the “German National Health Interview and Examination Survey 1998” (BGS98) – a previous nationwide cross-sectional study conducted by the RKI. Representativeness of the collapsed sample for the German general population is ensured by the use of weighting procedures.
- In total 8,152 adults took part in the study. Among them were 4,193 participants who had been invited for the first time as well as 3,959 participants who had already taken part in BGS98.
- A nonresponse analysis and a comparison of several indicators of the study with official statistics show a high representativeness of this net random sample for the German resident population.
- DEGS1 was carried out by the RKI from November 2008 through December 2011.
- Using data from the first wave of the German Health Interview and Examination Survey for Adults
(DEGS1), current levels of participation in cancer screening services were determined.
- In DEGS1, persons who were entitled to different cancer screening services were interviewed on their awareness, participation and regular utilisation of cancer screening for different types of cancer.

2009 and 2014:
Source of data: EUROSTAT, European Health Interview Survey (Data extracted in February 2017).
http://ec.europa.eu/eurostat/data/database
Coverage:
- Numerator: Number of women aged 50-69 reporting having received a bilateral mammography in the past two years.
- Denominator: Number of women aged 50-69 answering survey questions on mammography.

Programme data
See http://www.mammoprogramm.de.
Coverage:
- Screening programme: Mammography every two years for women aged 50-69. Women are invited to screening based on the inhabitants’ registries. The examination and assessment is free for the women.

Cervical cancer screening

Survey data

Data not available.

Programme data
Source of data: Central Research Institute of Ambulatory Health Care in Germany, Documentation of the examination findings arising from the statutory measures for the early detection according to Article 25 of the German (SGB - Sozialgesetzbuch) Code of Social Law V; Annual report on participation rates of screening colonoscopy.
Data coverage (e.g. national, regional (please specify)): Utilization of statutory measures for early detection of colorectal cancer - faecal occult blood test (FOBT) at the age of 50-55 in Germany.
Numerator (please specify target age range, screening methods and time period (e.g. in the past two years, in the past ten years, etc.)): Faecal occult blood test (FOBT) once a year between the 50th and 54th year of life.
Denominator (please specify target age range, screening methods and time period (e.g. in the past two years, in the past ten years, etc.)): Entitled persons insured in the Statutory Health Insurance.
Deviation from the definition: Only FOTB.
Estimation method: The legal base to carry out measures for early detection of cancer in persons insured in the statutory health insurance is Article 25 in the German Code of Social Law, Part V (SGB-V). According to Article 92 SGB V guidelines by the Federal Joint Committee (G-BA) define how to collect and process the data of the measures for early detection of cancer. - The “total” has been estimated as the unweighted average of data by gender. Further information: http://www.gbe-bund.de.

Estonia

Breast cancer screening (mammography)

Survey data
Coverage:
- Numerator: Number of women aged 50-69 years old reporting having received a bilateral mammography in the past two years.
- Denominator: Number of women aged 50-69 years old answering survey questions on mammography.

Programme data
Source of data: Estonian Health Insurance Fund database (www.haigekassa.ee).
National Institute for Health Development, Cancer Screening Registry.
Coverage:
- National coverage.
- Numerator: Number of women aged 50-62 years old who participated in the national screening programme in a 12-month period.
- Denominator: Number of women aged 50-62 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 breast cancer, who participated in screening or had mammography in the previous year, who do not have valid health insurance (~10%), or whose address in the population register is incomplete, and the denominator excludes these women.
2015-2016: number of women aged 50-62 years old who were invited to the screening programme in a 12-month period. Women who have a diagnosis of breast cancer in past five years or who participated in screening or had mammography in the previous year 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: Mammography every two years for women aged 50-65 years old since 2007. Before 2007, there was no regular rule for sending invitations.
Deviation from the definition: Age group.
- Data refer to women aged 45-59 years old for 2002 to 2005, women aged 50-59 years old for 2006 and 2007, women aged 50-65 years old for 2008 and 2009, and to women aged 50-62 years old since 2010.

Cervical cancer screening

Survey data

**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, Cancer Screening Registry.**

**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.

**Ireland**

**Breast cancer screening (mammography)**

**Survey data**

Source of data: Irish Health Survey 2015

**Coverage:**

- National coverage

- Information relates to women surveyed who indicated they had a mammogram (breast X-ray) within the last 2 years.

Source of data: National Screening Service - BreastCheck.

Coverage:
- National coverage.
- Numerator is the number of women who were eligible for organised screening programme during the index year.
- The denominator is eligible women which refers to the known target population less those women excluded or suspended (e.g. working abroad, women who defer) by the programme based on certain eligibility criteria. BreastCheck is transitioning from screening women in the 50-64 age-range to the 50-69 age group. Roll out of this initiative is gradual and is aimed to be completed by 2021.
- Data for 2017 refer to 2017/2018, etc.
- Screening programme: BreastCheck reports Annual Uptake (% of women receiving their first invitation (in a round) during the index year who attend for screening in that round). Eligible population is changing year-on-year to fully incorporate women aged 50-69 by 2021. BreastCheck has been a nationwide screening programme since 2007.

Deviation from the definition: Age group.

- More information on cancer screening in Ireland can be found at the following weblink: https://www.screeningservice.ie/screening.html

Cervical cancer screening

Survey data
Irish Health Survey 2015

Coverage:
- National coverage

- Information relates to women surveyed who indicated they had a Cervical smear test within the last 3 years.

- More information on survey can be found in the background notes of the publication: https://www.cso.ie/en/releasesandpublications/ep/p-ihs/irishhealthsurvey2015/bgn/

Programme data
Source of data: National Screening Service - CervicalCheck.

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.
- Cervical cancer screening uptake is measured from September of one year to August of the following year, rather than by calendar year, for example 2016-2017 refers to the uptake between September 2016 and August 2017.
- Numerator: the number of women in the eligible population who have had a satisfactory smear test in the previous five years. Satisfactory smear tests refer to those that had a sufficient number of cells within the test sample to allow for testing to be completed.
- 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.

- More information on cancer screening in Ireland can be found at the following weblink: https://www.screeningservice.ie/screening.html

Greece

Breast cancer screening (mammography)

Survey data
Source of data:
- 2006, 2008: Center for Health Services Research, Medical School, University of Athens, “Hellas Health I” and “Hellas Health II” surveys.

Coverage:
- 2009, 2014: Data refer to women aged 50-69 who have done a mammography within the past two years divided by the number of women aged 50-69 answering survey questions on mammography.
- 2006, 2008: All women aged 15 and over.

- Screening recommendations: Every one or two years for women aged 40 and over.

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

Programme data not available.

Cervical cancer screening

Survey data
Source of data:
- 2006: Center for Health Services Research, Medical School, University of Athens, “Hellas Health I” survey.


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.
Spain

Breast cancer screening (mammography)

Survey data

Source of data: Ministerio de Sanidad (Ministry of Health) and Instituto Nacional de Estadística - INE (National Statistics Institute).
- **2011 and 2017**: data Encuesta Nacional de Salud (ENSE) (National Health Survey).
- **2014 and 2020**: Encuesta Europea de Salud en España (European Health Interview Survey (EHIS).
  http://www.ine.es.
- **2009**: EUROSTAT, European Health Interview Survey 2009 (data extracted in March 2012).

Coverage:
- **Numerator**: Number of women aged 50-69 reporting having received a bilateral mammography in the past two years.
- **Denominator**: Number of women aged 50-69 answering survey questions on mammography.

Note: The 2020 Health interview survey was carried out from July 2019 to July 2020, so the decrease in 2020 data compared with previous years may be explained by the pandemic period.

Programme data are not available.

Screening programme: Every two years for women aged 50-69.

Cervical cancer screening

Survey data

Source of data: Ministerio de Sanidad (Ministry of Health) and Instituto Nacional de Estadística - INE (National Statistics Institute).
- **2014, 2020**: Encuesta Europea de Salud en España (European Health Interview Survey (EHIS).
  http://www.ine.es.
- **2009**: 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.

Note:
- Recommended target population and frequency of screening for cervical cancer in Spain (see below) differ from the definition of the Joint Questionnaire on Non-Monetary Health Care Statistics. Therefore national cervical cancer screening coverage rates are higher than those provided here.
- The 2020 Health interview survey was carried out from July 2019 to July 2020.
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.

France

Breast cancer screening (mammography)

Survey data
Source of data:
- 2014 data: common with EHIS.

Coverage:
- Numerator: Number of women aged 50-69 reporting having received a mammogram during the past two years.
- Denominator: Number of women aged 50-69 answering the survey questions.

Programme data
Source of data: French Institut for public health surveillance.

Coverage:
- Since 2004 there is a countrywide breast cancer screening programme. The French Institut for public health surveillance is in charge of evaluating this programme. The programme is directed to women aged 50-74 but the data have been recalculated in order to match the definition.
- For the 2021 update, data have been updated since 2004 with new denominator estimates, based on census data rather than on projection.

Cervical cancer screening

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:
Source of data: French Institut for public health surveillance.
Deviation from the definition: percentage of women aged 25-65 screened in the past 3.5 years; coverage is calculated over 3.5 years rolling periods.
- Screening is mostly opportunistic: organized programmes exists in a few departments, accounting for about 12% of the 25-65 years female population in France; elsewhere screening is opportunistic. The national screening program has been deployed since 2018.

**Croatia**

**Breast cancer screening (mammography)**

Programme-based data
Source of data: Croatian Institute of Public Health, Epidemiology Service, National Breast Cancer Screening Programme
Coverage: Entire population of women aged 50-69 years residing in Croatia is covered by National Breast Cancer Screening Programme.
Deviation from the definition: This percentage is available only for each cycle of the Screening Programme and not for each year. As Screening programme had five completed cycles so far (2006-2009, 2009-2011, 2011-2014, 2015-2017 and 2016-2018), data for these five cycles are available and we included them in the table as percentages for those years. Starting from 2018, data are more accurate and available more promptly (due to updated IT support), so we were able to include also the data for 2018.

Survey-based data
Source of data: European Health Interview Survey, wave 2

**Cervical cancer screening**

Programme-based data
Source of data: Data from National Cervical Cancer Screening Programme are not available. National Cervical Cancer Screening Programme is on hold since 2017 (only opportunistic screening takes place).
Survey-based data
Source of data: European Health Interview Survey, wave 2

**Italy**

**Breast cancer screening (mammography)**

Survey data
Coverage:
- Numerator: Number of women aged 50-69 (sampled in the survey) reporting a bilateral mammography during the past two years.
- Denominator: Number of resident women aged 50-69 (sampled in the survey).

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:
- **Numerator**: Number of women aged 50-69 who received a mammogram through the organised breast cancer screening programme during the reporting year and up to April of the following year.
- **Denominator**: Number of women aged 50-69 who were invited to the organised breast cancer screening programmes 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 breast cancer.
- **Screening programme**: Screening mammography every two years for women aged 50-69.

**Cervical cancer screening**

Survey data

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:
- **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. To take into account that the majority of Italian Regions are implementing HPV test for women aged 30-35 to 64 years old.

**Cyprus**

**Breast cancer screening (mammography)**

Survey data

Coverage: Government Controlled Area of Cyprus

Deviation from the definition: None

Estimation method: Total number of women aged 50-69 who have received a mammography within the past 2 years as a percentage of the women aged 50-69 who answered by themselves and whose interview was completed.
Break in time series: N/A

Programme data
Source of data: National Population Screening Program
Coverage: Government Controlled Area of Cyprus
Deviation from the definition: All women aged 50-69 are invited for a mammography at the public sector, however not all of them proceed for a mammography. Information covers only the screenings performed through the program, there is no information on the screenings performed at the private sector.
Estimation method: Total number of women aged 50-69 who have received a mammography within a 2-year interval in the public sector through the national program, as a percentage of the women population aged 50-69. The average of the end of the year population of the 2 years has been used.
Break in time series: N/A

Cervical cancer screening

The only available data refers to survey data. Up to 2019, no national screening program in place.
Coverage: Government Controlled Area of Cyprus
Deviation from the definition: None
Estimation method: Total number of women aged 20-69 who have received a cervical cancer screening within the past 3 years as a percentage of the women aged 20-69 who answered by themselves and whose interview was completed.
Break in time series: N/A

Latvia

Breast cancer screening (mammography)

Source of data: National Health Service.
Coverage:
- Data are collected, dividing number of women who have taken tests in current year by the number of sent invitation letters (letter is valid for two years) in current year.
- Age group for breast cancer screening: 50-69.
- Note: Screening programme in Latvia was launched in 2009. Invitation to breast cancer screening is valid for 2 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.

Cervical cancer screening
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.

Lithuania

Breast cancer screening (mammography)

Survey data.
Source of data: Statistics Lithuania, European Health Interview Survey, 2014, 2019
Data coverage national representative
Frequency of survey every 5 years
Numerator women aged 50-69, in the past 2 years

Programme data
Source of data: Health Information Centre of Institute of Hygiene, data from Compulsory Health Insurance Database.
Coverage: National breast cancer screening programme covers women aged 50-69 every 2 years. Programme was started in 2005.

Cervical cancer screening

Survey data.
Source of data: Statistics Lithuania, European Health Interview Survey, 2014, 2019
Data coverage national representative,
Frequency of survey every 5 years
Numerator women aged 25-60, in the past 3 years

Programme data
Source of data: Health Information Centre of Institute of Hygiene, data from Compulsory Health Insurance Database.
Coverage: National cervical cancer screening programme covers women aged 25-60 every 3 years. Programme was started in 2008.
Luxembourg

Breast cancer screening (mammography)

Survey data: EHIS Wave 2 (2014) and Wave 3 (2019).

Programme data
Source of data: Direction de la Santé, Mammography program.
Coverage:
- Inclusion: Invitations are sent to resident women aged 50-69 years covered by the statutory health insurance scheme. Screening is also offered on request to non-resident women covered by the statutory health insurance scheme who commute from neighbouring countries.
- Exclusion: Women who report a previous bilateral mastectomy.
- Numerator: Number of women aged 50-69 who have had a mammography through the organized screening program within the past two years (years X and X+1 and X+2).
- Denominator: Number of invitations sent to resident women aged 50-69 years old covered by the national health insurance during the reporting year (X) and non-resident women covered by the national health insurance during the reporting year and who have requested an invitation for the screening program.
- Target age group is 50-69 years old since 2001, but it was 50-64 years old prior to 2001.
Note:
- Data for years 2000-2014 have been revised in order to better match the OECD definition
- The rates for 2018 and 2019 are preliminary.

Cervical cancer screening

Survey data EHIS Wave 2 (2014) and Wave 3 (2019).

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 2019 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.

**Hungary**

**Breast cancer screening (mammography)**

**Programme data**

**Source of data:**
- From 2006 onwards: National Healthcare Services Center (ÁEEK in Hungarian) [www.aeek.hu](http://www.aeek.hu).

**Coverage:**
- **Numerator**: Number of women aged 50-69 who received a mammogram through the organised breast cancer screening programme during the past two years.
- **Denominator**: Number of women aged 50-69 who were invited to the organised breast cancer screening programme during the past two years.

**Screening programme in Hungary**: Every two years for women aged 45-65. Organised screenings for breast cancer started in January 2002 in Hungary.

**Survey data**

**Source of data:**

**Coverage:**
- **Numerator**: number of women age 50-69 reporting having a mammography within the last two years.
- **Denominator**: number of women age 50-69 answering the survey question.

**Cervical cancer screening**

**Programme data**

**Source of data:**
- From 2006 onwards: National Healthcare Services Center (ÁEEK in Hungarian) [www.aeek.hu](http://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:
- In 2003: National Center of Epidemiology (OEK in Hungarian), EHIS (OLEF 2003 in Hungarian), www.oek.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.

Deviations from the definition:
- In OLEF 2003 the numerator: number of women age 20-69 reporting cervical cancer screening within the last two years.

**Malta**

**Breast cancer screening (mammography)**

**Source of data:**

Survey Data:
European Health Interview Survey (EHIS) 2008 – Directorate for Health Information and Research (DHIR)
2014 updated using European Health Interview Survey (EHIS) 2014/2015 – Directorate for Health Information and Research. This data is preliminary and has not yet been published.

Programme data: National Health Screening Programme

**Coverage:**

Survey data from EHIS 2008 provides the percentage of people aged 50-69 who had a mammography in the past 12 months. This survey is carried out every 5 years and was last carried out between June and August 2008.

Programme data is available for the years 2010, 2011 and 2012 since the National Health Screening Programme began operating during 2009. Data is only available for women aged 50-59 who accepted to carry out a mammography at the National Health Screening Programme. However, this data does not include women who have had a mammography elsewhere.

Survey data: The figure includes the percentage of women aged 50-69 who had a mammography in the previous 3 years (screening frequency recommended in Malta).

Programme data for 2012 and 2013: the percentage of women aged 50-59 who accepted to carry out a bilateral mammography within the previous 3 years (screening frequency recommended in Malta).
rather than within the previous year. Women are re-invited every 3 years until they reach the age of 60. Since programme data began in 2010, data for 2011 has been amended to include women aged 50-59 receiving a bilateral mammography within the previous 2 years and data for 2010 includes women aged 50-59 receiving a bilateral mammography during the previous year.

Programme data for previous years (2010 to 2013) has been updated to reflect the number of women aged 50-59 who have actually attended rather than accepted to carry out a mammography at the National Health Screening Programme, within the previous 3 years (screening frequency recommended in Malta). Moreover, the proportion of attendees is calculated out of the number of eligible women, aged 50-59 (i.e. the denominator excludes those with a previous mammography and wrong demographic data). Therefore, the figures are more accurate. Programme breast screening rates for 2016 and 2017 have been updated.

**Deviation from the definition:**

Programme data is available for women aged 50-59 only. The age group coverage has increased incrementally over the years and the age covered by the Breast Screening programme in 2015 is of women aged 50 to 66 years. The age group coverage has increased incrementally over the years and the age covered by the Breast Screening programme in 2017 is of women aged 50 to 68 years. For 2019 the age covered by the Breast Screening Programme has increased to include all women aged between 50 and 69 years. Figures for 2018 have also been revised. Survey data: this is the total number of female respondents aged 50–69 who report that they had a mammogram in the past 12 months, more than one year but less than 2 years ago or more than 2 years but less than three years ago. Divided by the total number of respondents in EHIS aged 50–69 who are female.

The 2014 figure provided last year for Survey data has been updated to reflect weighting which have been applied to the EHIS dataset.

**Cervical cancer screening**

**Source of data:** Survey Data: European Health Interview Survey (EHIS) 2008 – **Directorate for Health Information and Research (DHIR)**

2014 updated using European Health Interview Survey (EHIS) 2014/2015 – Directorate for Health Information and Research. This data is preliminary and has not yet been published.

**Coverage:** We do not have a cervical cancer screening programme, therefore programme data is not available. A pilot Cervical Screening Programme was started in 2015 and was launched formally in March 2016. Population age groups to be covered by the cervical screening programme are women aged 25-35 years. Roll out of programme is planned over a 3 year period (2016, 2017 and 2018) with a screening interval every 3 years.

Survey data from EHIS 2008 provides the percentage of people aged 20-69 who had a cervical smear test in the past 3 years. This survey is carried out every 5 years and was last carried out between June and August 2008. The figure for 2014 data is the total number of female respondents aged 20 – 69 who report that they had a cervical smear test within the past 12 months, more than 1 but less than 2 years ago or more than two but less than 3 years ago divided by the total number of respondents in EHIS aged 20 – 69 who are female.
The 2014 figure provided last year for Survey data has been updated to reflect weightings which have been applied to the EHIS dataset. Programme cervical screening rates for 2016 and 2017 have been updated. The cervical screening programme currently invites women aged between 28 and 38 years. 2019: The cervical screening programme invited women aged between 25 and 39 years.

**Netherlands**

**Breast cancer screening (mammography)**

**Survey data**

*Source of data:*
- 2005 onwards: Data from the Health Interview Survey.

*Coverage:*
- National representative sample.
- **Numerator:** Number of women aged 50-69 years old reporting having received a mammogram during the past two years.
- **Denominator:** Number of women aged 50-69 years old answering the survey question. The denominator excludes those who answered 'don't know'.
- 2000 data refer to women aged 50-69 years old who had ever had a mammography.
- **Screening programme:** Mammography every two years for women aged 50-75 years old.


**Programme data**


*Coverage:*
- National coverage.
- **Numerator:** Number of women aged 50-69 years old who received a mammogram through the organised breast cancer screening programme during the specific period. The numerator includes the women who were invited to the screening in the reporting year and had a mammogram just before the reporting year or a few months after the end of the reporting year.
- **Denominator:** Number of women aged 50-69 years old who were invited to the organised breast cancer screening during the reporting year. The denominator does not include women not in the Population Registration. Women who declared not wanting an invitation anymore (definite refusers) and women with an interval or carcinoma screening generally do not receive an invitation for subsequent screens, so they are not included in the denominator.
- **Screening programme:** Mammography every two years for women aged 50-75 years old.

**Cervical cancer screening**

**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**: Every 5 years: 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. In case the result is ‘no HPV’, the screening is repeated after 10 years.

**Break in time series**: 2017: different calculation of the screening percentage (now based on the actual number of invitations to take part in the programme; before 2017 this was estimated.) 2010 and 2014. Questionnaire and setup of survey changed in 2010.

**Programme data**


**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.

---

**Austria**

**Breast cancer screening (mammography)**

**Survey data**


**Coverage**:

- National representative sample.
- The survey will be repeated every 5 years.
- **Numerator**: Number of women aged 50-69 reporting to have received a mammogram during the past 2 years (exception: 2006/2007: three years).
- **Denominator**: Number of women aged 50-69 answering the survey.

**Deviation from definition**:
- **Numerator 2006/2007**: Number of women aged 50-69 reporting to have received a mammogram during the past 3 years.
- Covered are all exams not only screening exams.

**Break in time series**: 2014.

**Screening programme data** not available.
Cervical cancer screening

Note: There is no organised cervical cancer screening in Austria, therefore neither survey nor administrative data are available for organised screening. In the course of preventive health check-ups, general practitioners can make a prescription for a smear test. However, this is neither handled systematically nor documented as a screening procedure. Nevertheless ATHIS survey data are delivered in the JQ covering all reported exams (not only screening exams).

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.

Deviation from definition:
- Covered are all exams not only screening exams.

Screening programme data not available.

Poland

Breast cancer screening (mammography)

Survey data
Source of data: Statistics Poland.
- 2004: Health Interview Survey.
Coverage:
- Numerator: Number of women aged 50-69 years old reporting having received their last mammography in the past two years.
- Denominator: Number of women aged 50-69 years old answering the survey question.

Programme data not available.

Cervical cancer screening

Survey data
Source of data: Statistics Poland.
- 2004: Health Interview Survey.
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.
Programme data not available.

**Portugal**

**Breast cancer screening (mammography)**

Survey data  
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.  
- National Heath Survey 2019, 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 breast 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. Data regarding the proportion of female resident population aged between 50 and 69 years old who reported having a mammography in the 2 years preceding the interview.  
- Data collection of National Heath Survey 2019 took place between September 2019 and January 2020. Data regarding the proportion of female resident population aged between 50 and 69 years old who reported having a mammography in the 2 years preceding the interview.

Programme data not available.

**Cervical cancer screening**

Survey data  
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.  
- National Heath Survey 2019, 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. Data regarding the proportion of female resident population aged between 20 and 69 years old who reported having undergone a cervical smear test in the 3 years preceding the interview.
- Data collection of National Heath Survey 2019 took place between September 2019 and January 2020. Data regarding the proportion of female resident population aged between 20 and 69 years old who reported having undergone a cervical smear test in the 3 years preceding the interview.

**Programme data** not available.

### Romania

**Breast cancer screening (mammography)**

**Source of data:** The Ministry of Health doesn’t have these data because in the period 2000-2013 there were no screening programs in Romania.


**Coverage:** includes all mammography, not only bilateral mammography.

For the years 2014 and 2015 were reported data on mammograms through regional projects (in the North-West) carried out by Ministry of Health.

For the years 2016 and 2017 no breast cancer screening (mammography) was conducted through organised programs.

**Cervical cancer screening**

**Source of data:** The Ministry of Health doesn’t have these data because in the period 2000-2011 there were no screening programs in Romania.


Since 2012: Ministry of Health – data from screening programmes (The Annual Health National Programs and the regional projects)

**Coverage:** Data from EHIS wave 1 includes all cervical cancer screenings for women 15 years and older and data from EHIS wave 2 refers to women aged 20-69.

**Deviation from the definition:** Since 2012, programme data from Ministry of Health cover women aged 25-64 with cervical cancer screening. When calculating the indicator for Romania, for 2012, only the women tested in 2012 were taken into account, for 2013 the women tested in 2012 and 2013 were taken into account, and starting with 2014 it was calculated taking into account women tested in the last three years. In Romania, the target population for the cervical cancer screening program are women in the 25-64 age group.

### Slovenia

**Breast cancer screening (mammography)**

**Survey data**

**Source of data:**


**Coverage:**
- National representative sample, population living in private households (persons living in institutions are excluded).
- National representative data.
- The percentage of women aged 50-69 years old who reported having had the last mammography during the past two years.
- **Screening recommendation:** Mammography every two years for women aged 50-69 years old.

**Programme data**

**Source of data:** Breast cancer screening registry DORA, Epidemiology and Cancer Registries, Institute of Oncology Ljubljana.

**Coverage:**
- Geographic coverage is complete; programme is currently covering all eligible population. Pilot programme, which started in April 2008, has been expanding ever since and in 2019 it has covered by invitations 100 % of eligible Slovenian women population.
- **Numerator:** Number of women aged 50-69 years old who had a mammogram through the organised breast cancer screening from invited in the specified time period.
- **Denominator:** Number of women who were invited to the organised breast cancer screening in the specified time period.
- **Screening recommendation:** Mammography every two years for women aged 50-69 years.
- Screening data and data from Central Population Registry is collected in the central database of the Breast Cancer Screening Registry DORA on a daily basis.

**Cervical cancer screening**

**Survey data**

**Source of data:**

**Coverage:**
- National representative sample, population living in private households (persons living in institutions are excluded).
- **Numerator:** Number of women aged 20-64 years old reporting cervical cancer screening at least once in the past 3 years.
- **Denominator:** Number of women aged 20-64 years who participated in the survey.
- **Screening programme:** Every three years for women aged 20-64 years old.

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

**Programme data**


**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).

### Slovakia

#### Breast cancer screening (mammography)

**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) and European Health Interview Survey 2019 (data extracted in August 2020).


**Coverage**:

- **Numerator**: Number of women aged 50-69 reporting having received a bilateral mammography in the past two years.
- **Denominator**: Number of women aged 50-69 answering survey questions on mammography.

**Programme data**

*Source of data*: National health Information Center (NHIC), Annual report on activity of radiology.

Data for years 2006 – 2016 were revised and recalculated in 2018.

**Coverage**:

- In the SR the mammography screening programme is for women aged 40 – 69, and mammography screening programme received only women who participated in the gynaecological preventive care programme examination.

**Calculation for reporting year X**:

- **Numerator**: Number of women aged 40-69 who received preventive mammography in year X plus Number of women aged 40-69 who received preventive mammography in year (X - 1).
- **Denominator**: Average number of women aged 40-69 within the women population in the years X and (X - 1).
- **Screening programme**: Every two years for women aged 40-69.

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

#### Cervical cancer screening

**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) and European Health Interview Survey 2019 (data extracted in August 2020).


**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.

**Finland**

**Breast cancer screening (mammography)**

**Survey data** not available.

**Programme data**

**Source of data**: National screening programme.

**Coverage**:

- National coverage.

- **Numerator**: Number of women aged 50-69 years old who were invited and received a mammogram through the organised breast cancer screening programme during the year.

- **Denominator**: Number of women aged 50-69 years old who received issued personal invitations to undergo organised breast cancer screening during the year. Personal invitations are sent to all women who belong to the target age group.

- **Screening programme**: Mammography every two years (20-26 months) for women aged 50-69 years old. Prior to 2007, for women aged 50-59 years old, and the target population expanded gradually to 50-69 in 2007-2016. Some municipalities have invited women aged 60-64 years old or 65-69 years old already prior to 2007.

**Break in time series**: Since 2007, the target age has been 50-69 years old. Earlier, it was 50-59 years old.

**Cervical cancer screening**

**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 for routine screening and
had a cytological Pap smear or an HPV test 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 routine 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.

**Sweden**

**Breast cancer screening (mammography)**

**Survey data**

Source of 2014 data: EUROSTAT, European Health Interview Survey.


Coverage:

- **Numerator**: Number of women aged 50-69 reporting having received a bilateral mammography in the past two years.

- **Denominator**: Number of women aged 50-69 answering survey questions on mammography.

**Programme data**: not available.

**Cervical cancer screening**

**Survey data** not available.

**Programme data**

2000-2018

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

Coverage:

2000-2015:

- **Screening programme**: A Pap smear every three years for women aged 23-50 years old and every five years for women aged 51-60 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.

2016-2018:

- **Screening programme**: A Pap smear every three years for women aged 23-50 years old and every seven years for women aged 51-64 years old. The last Pap smear are not to be done before the age of 64, therefore one can get an invitation to a Pap smear up until the age of 70 years old.

All female residents in Sweden, aged 23-64 years old (and some of the females aged 65-70 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**: Sweden report age group 23-60 years old for year 2000-2015 and 23-64 (in some cases also age 65-70) years old for year 2016-2018.
Break in time series: 2016. The national recommendations were changed in 2015 and the new recommendations were launched in 2016. Since most of the counties are in the progress of adjusting to the new national recommendations, there is a low number of participants in the age group 61-70 years old for year 2016-2018. By year 2019 the number of participants in the age group 61-70 years is increasing.

See [http://www.nkcx.se/Covr_all.htm](http://www.nkcx.se/Covr_all.htm) and [https://vardenisiffror.se/indikator?datefrom=2003-01-01&metadatameasure=0af2d126-513b-470b-a55c-a940113b34ab&units=se](https://vardenisiffror.se/indikator?datefrom=2003-01-01&metadatameasure=0af2d126-513b-470b-a55c-a940113b34ab&units=se).

**Iceland**

**Breast cancer screening (mammography)**

Survey data not available.

**Programme data**


As of 2021: Directorate of Health.

*Coverage*:

- National coverage.

  - **Numerator**: Number of women aged 40-69 years old who received a mammogram through or outside the organised breast cancer screening programme during the past two years.

  - **Denominator**: Number of women aged 40-69 years old who were invited to the organised breast cancer screening programme during the past two years.

- **Screening programme**: Mammography every two years for women aged 40-69 years old.

*Deviation from the definition*: Age group.

**Cervical cancer screening**

Survey data not available.

**Programme data**


As of 2021: Directorate of Health.

*Coverage*:

- National coverage.

  - **Numerator**: As of 1\textsuperscript{st} 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 1\textsuperscript{st} 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 1\textsuperscript{st} 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.

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

*Break in time series*: 2014.
Liechtenstein

Breast cancer screening (mammography)

Coverage: The trend is explained by more invitations to a mammography sent in 2010 but less participation in the screening than in 2009 and less invitations and more participation in 2011 compared to 2010.
There are data for 2012 and 2013, but they have to be rechecked – delivery will be 2018.
Break in time series: Since 2014, every screening on an invitation is counted.

Cervical cancer screening

Source of data: Office of Public Health (Amt für Gesundheit) and EHIS 2012.
Break in time series: Since 2014, every screening on an invitation is counted.

Norway

Breast cancer screening (mammography)

Survey data not available.

Programme data
Source of data: Norwegian Breast Cancer Screening Programme.
Coverage:
- National coverage.
- Numerator: Number of women aged 50-69 years old who received a mammography through the organised breast cancer screening programme during the past two years.
- Denominator: Number of women aged 50-69 years old who were invited to the organised breast cancer screening programme during the past two years. The denominator excludes those who do not need/decline to participate in the screening because of the prior diagnosis of breast cancer.
- Screening programme: Mammography every two years for women aged 50-69 years old.

Cervical cancer screening

Survey data not available.

Programme data
Source of data: Norwegian Cervical Screening Programme.
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.
Deviation from the definition: Age group.
Switzerland

Breast cancer screening (mammography)

Survey data
Coverage:
- Numerator: Number of women (aged 50-69) reporting having undergone a breast cancer screening test, i.e. mammography, within the past two years.
- Denominator: Number of women aged 50-69 answering the survey questions on mammography.
- Screening programme: mammography every two years for women aged 50-70.

Programme data are not available.

Cervical cancer screening

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.

Montenegro

Breast cancer screening (mammography)

Source of data: the Institute of Public Health of Montenegro
Data coverage (e.g. national, regional (please specify)): Only 4 municipalities included.
Screening method: mammography
Screening interval: every two years
Numerator (please specify target age range, screening methods and time period (e.g. in the past two years, in the past ten years, etc.): target age range 50 to 69
Denominator (please specify target age range, screening methods and time period (e.g. in the past two years, in the past ten years, etc.): target age range 50 to 69, registered at chosen doctors
Deviation from the definition: The period 01st January 2018 – 01st December 2019 was covered.

Cervical cancer screening

Source of data: the Institute of Public Health of Montenegro
Data coverage (e.g. national, regional (please specify)): national
Screening method: molecular HPV DNA testing method as primary screening in the combination with the LBC test
Screening interval: every five years for women aged 30-64
Numerator (please specify target age range, screening methods and time period (e.g. in the past two years, in the past ten years, etc.): target age range 30 to 34 (except in Capital women aged 30-36)
Denominator (please specify target age range, screening methods and time period (e.g. in the past two years, in the past ten years, etc.)): target age range 30 to 34, registered at chosen gynaecologists (except in Capital women aged 30-36).

North Macedonia

Breast cancer screening (mammography)

Source of data: Ministry of health- Early detection of malignant neoplasm’s in Macedonia in 2019 and the activities under the program for the early detection and prevention of breast cancer is a report on the activities realized pilot breast cancer screening in women aged 50-69 year.
http://zdravstvo.gov.mk/programi/

Cervical cancer screening

Source of data: Ministry of health- Early detection of malignant neoplasm’s in Macedonia in 2019 and the activities under the program for the early detection and prevention of cervical cancer is a report on the activities realized pilot cervical cancer screening in women aged 35-45 year.
Early detection of malignant neoplasm’s in the Republic of Macedonia in 2019 and the activities within the program for early detection and prevention of cervical cancer as a report on the activities of organized screening for cervical cancer in women aged 35-45,
http://zdravstvo.gov.mk/programi/
Deviation from the definition: Age group is 35-45

Albania

Breast cancer screening (mammography)
Data not available

Cervical cancer screening
Data not available

Serbia

Breast cancer screening (mammography)


Cervical cancer screening


Turkey

Breast cancer screening (mammography)

Survey data

Coverage:
- Self-reported last breast examination by X-ray among women: Percentage of women aged 50-69 who reported that they had a mammography examination within the past two years.

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

Coverage:
- Throughout the entire country.
- Numerator: Number of women aged 40-69 screened in the past two years taken into account (incl. mammography screenings on biennially basis of public based screening (by invitation) and opportunistic screenings in KETEMs) and number of mammographies performed for women with no age limitation on a year basis as opportunistic screenings in other health institutions.
- Denominator: Number of women aged 40-69 in current year has been used as denominator.
- Screening Programme: Women over 40 have biennial mammography screenings. Screening ends at the age of 69. Screenings performed by invitation are made at the KETEMs (Cancer Early Diagnosis, Screening and Education Centers). Opportunistic screenings are performed among the women aged 40-69 (from 2013 onwards) in KETEMs and among women with no age limitation in other health institutions.

Deviation from the definition: Target population for breast cancer screening in Turkey is 40-69.

Cervical cancer screening

Survey data

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.

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.

**United Kingdom**

**Breast cancer screening (mammography)**

**Survey data**

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

*Coverage*: Percentage of women aged 50-69 who reported to have had a breast examination by X-ray within the past two years.

**Programme data**

*Source of data*:

Calculated by the [NHS Digital](http://content.digital.nhs.uk/) using coverage data from:

- **England**: NHS Digital.
- **Wales**: Public Health Wales.
- **Northern Ireland**: HSCNI.
- *Data for Scotland* are not available.

*Coverage*:

- England only for 2002.
- The time series has been revised in 2015. Coverage is measured over a three year period, which is different to uptake which is measured over a one year period. The other key difference between coverage and uptake is that uptake only looks at women who have been invited for screening whereas coverage looks at those who have been screened through any means (i.e. following an invitation or GP/self-referral). Coverage is defined as the percentage of women in the population who are eligible for screening at a particular point in time, who have had a test with a recorded result within the last three years. Uptake is the percentage of women invited for screening in the year, who were screened adequately within 6 months of invitation.

*Numerator*:

- 2002-2009: Number of women aged 53-64 in England and Wales screened within the last three years.
- 2010: Number of women aged 53-64 in England and 53-70 in Wales screened within the last three years.
- 2010-2013: Number of women aged 53-69 in England and 53-70 in Wales screened within the last three years.
- 2014 onwards: Number of women aged 53-69 in England, 53-70 in Wales and 53-70 in Northern Ireland screened within the last three years.

*Denominator*:

- 2002-2009: Number of women aged 53-64 in England and Wales who have not had a bilateral mastectomy.
- 20010: Number of women aged 53-64 in England and 53-70 in Wales who have not had a bilateral mastectomy.
- 2010-2013: Number of women aged 53-69 in England and 53-70 in Wales who have not had a bilateral mastectomy.
- 2014 onwards: Number of women aged 53-69 in England, 53-70 in Wales and 53-70 in Northern Ireland who have not had a bilateral mastectomy.

Deviation from the definition: Age group. Currently coverage in England is best assessed from 53 years as women may be first called at any time between their 50th and 53rd birthdays.

Cervical cancer screening

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 Office for National Statistics (Health Analysis and Life Events Division) 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.