



1.1 Cervical cancer screening (% women aged 20-69 years) (P-8)

1.1.1 Documentation sheet

Description	<p>Primary indicator</p> <p>Proportion of women aged 20-69 years screened for cervical cancer within the last three years without medical exclusions</p> <p>Secondary indicator</p> <p>Proportion of women aged 20-69 years screened for cervical cancer within the last three years with medical exclusions</p>
Calculation	<p>Primary indicator</p> <p><u>Numerator</u>: Number of women in the denominator, having received a screening smear test within the last three years</p> <p><u>Denominator</u>: Number of women aged 20-69 years during the reference period</p> <p>Secondary indicator</p> <p><u>Numerator</u>: Number of women in the denominator, having received a screening smear test within the last three years</p> <p><u>Denominator</u>: Number of women aged 20-69 years during the reference period minus women excluded for medical reasons</p>
Rationale	<p>Cervical cancer is a rare cancer (641 new cervical cancers in 2021 in Belgium) with a medium to poor prognosis, and affects rather young women.¹ Cervical cancer is the 12th most common cancer in women Belgium. In 2021, the age-standardised incidence rates of cervical cancer in Belgium was 9.7 per 100 000 women (using European standard population).² Cervical cancer can largely be detected at a curable stage by an accessible and harmless test, the smear test which can substantially decrease the incidence and mortality.³ Since 2013, the smear test is reimbursed once every three years. In Flanders, there is an official cervical screening program since 01/06/2013. Women aged between 25 and 64 years receive a letter of invitation if they have not been screened in the last 3 years, either on their own initiative or at the request of their doctor. In Wallonia, there is no official program, but there are awareness campaigns and a pilot project has been launched.</p> <p>In December 2022, the Health Minister announced that soon women aged between 30 and 64 years will be invited for an HPV (human papillomavirus) test every five years, instead of a smear test every three years, as part of the their cervical screening.⁴ The European guidelines recommend a 70% (acceptable) to 85% (desirable) cervical cancer screening rate every three years.⁵ To reach the WHO cervical cancer incidence rate target of less than four new cases of cervical cancer per 100 000 women, WHO recommends 70% coverage of cervical cancer screening at ages 35 and 45 years.⁶</p>
Data sources	<p>Multiple data sources were used, including:</p> <ul style="list-style-type: none"> Belgian Statistical Office (Statbel) for data on the number of women aged 20-69 years.



-
- Centrum voor Kankeropsporing (CvKO): for data on the target population of the screening program in Flanders.
 - Central cyto-histopathological register of the Belgian Cancer Registry (CHP): for cyto-histopathological data from the laboratories.
 - Cancer database of the Belgian Cancer Registry (CIB): for data of the cancer registration.
 - Intermutualist Agency (IMA – AIM): for data of the reimbursed care and medicines.
-

Technical definitions The age of women is determined based on the date of birth. The calculations by region are based on the postal code of the woman's residence at the time of the smear test (only available in the CHP data). Therefore, tests for which results in the CHP are lacking could not be redistributed by region.

Only one smear test, the most recent one, is considered for each woman per three-year period. The available data do not allow to distinguish between screening and follow-up tests.

Currently, Flanders is the only region with an organised cervical cancer screening program. The target population of the program for Flanders is women residing in Flanders, aged between 25 and 64 years for a given year.

Women excluded for medical reasons: women from the Statbel population or from the target population of the screening program in Flanders who are not eligible for screening due to their medical history:

- Permanent exclusion: removal of the cervix, hysterectomy, invasive cervical or endometrial cancer
- Temporary exclusion (3 years): in situ cancer of the cervix

The exclusions are calculated only for the general population of Belgium (using the CHP and IMA – AIM data) and for Flanders (using CvKO data). As Flanders is the only region for which the Belgian Cancer Registry receives individual target population data that allow individual linkage, exclusions for medical reasons can only be implemented in Flanders.

Limitations Only Flanders currently has a systematic screening program in place. The age range used in the screening program in Flanders (25-64 years old) is different from the age range used for this indicator (OECD definition). The Walloon region is currently developing a project to set up a program. A large proportion of cervical cancer screening is therefore carried out at the initiative of the woman and/or her physician; with regional variations. Considering insurers can reimburse a medical service up to two years after the date of the service, that a certain period of time is required for administrative processing, and that the database closure is completed quarterly, the IMA – AIM database for a given calendar year will not be complete until 30 months after that year. This may affect both the denominator (exclusion for medical reasons) and the numerator (smear tests) in the years 2020 and 2021, but the impact is likely to be limited. Exclusions for medical reasons cannot be implemented in regional calculations for Wallonia and Brussels.

As the method to calculate cervical cancer screening rate was updated in 2020, data for the years before 2020 using the same methodology are not available. Data by socioeconomic status were not available.



The calculations by region are based on the postal code of the woman's residence at the time of the smear test, which is only available in the CHP. Therefore, when the postal code associated with a test is missing or when the smear test is missing for a woman in the CHP (exhaustivity of the CHP is not 100%), the woman is not counted as screened in the regional figures, even if she is counted as screened in the national figure (based on IMA – AIM data). This explains the discrepancy between the coverage rate with medical exclusions in Belgium (53.5%) and in the regions (<53%).

International comparability

This is an international indicator reported by the OECD. International comparisons were limited to countries that use organised screening programme data, rather patient survey-base data (generally overestimated). The definition used by the OECD is: the number of women aged 20-69 years 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 years eligible for an organised screening programme. Comparisons should be performed with caution as the specific age groups and frequency may vary across national programmes.

Cervical cancer screening programme data are not available in Austria (no organised programme), Greece, Poland, Spain and Croatia.

Dimension

Accessibility of preventive care

Related indicators

Reviewer

Koen Van Herck (BCR)

1.1.2 Results

Belgium

The cervical cancer screening coverage, defined as the proportion of women aged 20-69 years who had a smear test in the last 3 years, was 53.5% in 2020 to 53.7% in 2021 without medical exclusions and 57.2% and 57.4% with medical exclusions (see Table 1).

Analysis by demographic characteristics

In 2021, the coverage rate in Belgium with medical exclusions is highest in women aged 25-64 years (63.3%), then in women aged 65-69 years (51.7%) and lowest in women aged 20-24 years (11.9%). In the different regions the coverage rate without medical exclusions is also highest in women aged 25-64 years (see Table 2).

Regional comparison

The coverage of cervical cancer screening without medical exclusions is approximately 52% for the three regions in 2021 (see Table 1). The coverage rate reaches almost 59% in Flanders when using the target population of the program (women aged 25-64 years) and is even higher with medical exclusions (62.7%) in 2021.



Table 1 – Coverage of cervical cancer screening in women aged 20-69 years, by patient characteristics (2020 and 2021)

Variable	Category	Coverage rate (%) without medical exclusions		Coverage rate (%) with medical exclusions	
		2020	2021	2020	2021
Age (years)	20-24	17.1	11.9	17.2	11.9
	25-64	58.7	59.5	62.5	63.3
	65-69	42.4	42.6	50.4	51.7
	Total (20-69)	53.5	53.7	57.2	57.4
Region of residence	Brussels	52.0	52.0		
	Walloon region	52.4	51.8		
	Flanders	51.2	52.0		
	Flanders*: target population of the program	57.2	58.5	61.4	62.7

*Data used comes from CvKO. See Limitations in the Documentation Sheet for explanations on the discrepancy between the national and regional coverage rates without medical exclusions.

Table 2 – Coverage rate (%) of cervical screening in women aged 20-69 years without medical exclusions, by age category and region (2021)

Age categories	Brussels	Walloon region	Flanders
20-24 years	6.3	16.2	9.5
25-64 years	57.5	57.0	57.8
65-69 years	48.5	41.7	39.7
Total (20-69 years)	52.0	51.8	52.0

Impact of the COVID-19 pandemic

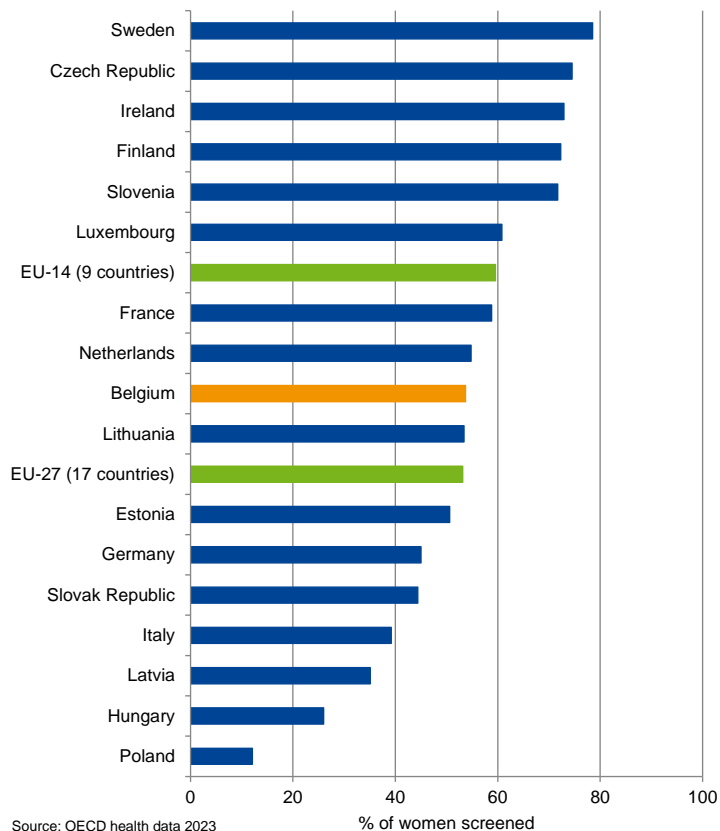
Without data before 2020, it was not possible to evaluate the impact of the COVID-19 pandemic on cervical cancer screening coverage.

International comparison

The Belgian cervical cancer screening rate was lower than the EU-14 average (59.6%), but similar to the EU-27 average (53.2%) in 2021 (see Figure 1). None of the EU countries with data available reached the desirable cervical cancer screening rate of 85% and five countries (Sweden, Czech Republic, Ireland, Finland and Slovenia) reached the acceptable coverage rate of 70%.



Figure 1 – Coverage of cervical cancer screening: international comparison (2021)



Key points

- In 2021, the coverage of cervical cancer screening was 53.7% without medical exclusions and 57.4% with medical exclusions.
- The coverage without medical exclusions is similar across regions (52%).
- The coverage rate with medical exclusions is almost 63% in Flanders when using the target population of the program (women aged 25-64 years) in 2021.
- The Belgian cervical cancer screening rate was lower than the EU-14 average (60%), but similar to the EU-27 average (53%) in 2021.
- The cervical cancer screening rate in Belgium was also below the 70% acceptable rate recommended by European guidelines.



References

1. IMA-AIM. Dépistage du cancer du col de l'utérus 2008-2017. 2019. Available from: https://ima-aim.be/IMG/pdf/depistage_du_cancer_du_col_de_l_uterus_rapport_aim_4_2017_-_fr.pdf
2. Belgian Cancer Registry. Annual tables [Web page]. Belgian Cancer Registry;2021 [cited 12/07/2023]. Available from: <https://kankerregister.org/Annual%20Tables>
3. Hulstaert F AM, Huybrechts M, Vinck I, Puddu M, Ramaekers D. Dépistage du cancer du col de l'utérus et recherche du Papillomavirus humain (HPV). Bruxelles: Centre Fédéral d'Expertise des Soins de Santé (KCE); 2006. Health Technology Assessment (HTA) KCE Reports 38B
4. Vandenbroucke F. Décision de la CIM sur le nouveau dépistage du cancer du col de l'utérus [Web page].2022 [cited 12/07/2023]. Available from: <https://vandenbroucke.belgium.be/fr/d-cision-de-la-cim-sur-le-nouveau-d-pistage-du-cancer-du-col-de-lut-rus>
5. European Commission. European guidelines for quality assurance in cervical cancer screening. European Commission, Directorate-General for Health and Food Safety; 2015. Available from: https://health.ec.europa.eu/publications/european-guidelines-quality-assurance-cervical-cancer-screening_en
6. World Health Organization. Global strategy to accelerate the elimination of cervical cancer as a public health problem. Geneva: World Health Organization; 2020.