

Easy Guide to Cancer Screening in Europe

Lay version of the Cancer
Screening in the EU
report

December 2018

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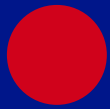


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About ECL & the European Code against Cancer



About the European Code Against Cancer

The European Code Against Cancer (ECAC) is an initiative of the European Commission to inform people about actions they can take for themselves or their families to reduce their risk of cancer. The current fourth edition, which was coordinated by the International Agency for Research on Cancer (IARC), consists of twelve recommendations that most people can follow without any special skills or advice. The more recommendations people follow, the lower their risk of cancer will be.

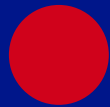


It has been estimated that almost half of all deaths due to cancer in Europe could be avoided if everyone followed the recommendations. Learn more about ECAC by visiting www.cancercode.eu and check the English leaflet and its translated versions in the following [link](#).



About ECL

The Association of European Cancer Leagues (ECL) is a European umbrella organisation of national and regional cancer leagues in the extended European region. Founded in 1980, ECL has been providing a unique and important platform for cancer leagues to foster collaboration and the exchange of best practice.



Background

Introduction

Cancer continues to exert a heavy toll as the 2nd leading cause of death in Europe (1). In 2018, according to the latest available data, there were an estimated 3.7 million new cancer cases and 1.9 million deaths globally. Of this, Europe accounts for 23.4% of the cancer cases and 20.3% of cancer deaths, despite having only 9.0% of the global population (2).

The European Code against Cancer informs us that up to 50% of cancer deaths in Europe could be prevented if current knowledge about cancer prevention was put into practice (3). One of the major interventions to reduce the burden of cancer is to ensure access to quality assured cancer screening programmes, with the European Code against Cancer recommending organised screening for breast, cervical and colorectal cancer (4).

What are the aims of cancer screening?

The main aim of cancer screening is to prevent cancer deaths. For some cancers, such as cervical cancer and colorectal cancer (also known as bowel cancer), screening has the potential to prevent the cancer from developing. If the cancer is detected early enough, screening can also make it possible for less intensive treatment to be used, which can improve a patient's quality of life.

Currently, cancer screening programmes try to reach a specific group within the general public rather than individual people. The people targeted by screening are identified according to specific age ranges and show no current signs or symptoms of the cancer in question.

How is screening organised?

Cancer screening programmes can be organised and delivered in the following ways:

Opportunistic screening – this is where the tool for the early detection of cancer is performed in a diagnostic or clinical setting, independent from the public screening policy (if such a programme exists);

Programme screening – this is where the examinations are financed from public sources and performed in the context of a public screening policy that defines: the screening test (the tool used to screen); intervals (how frequent the screening takes place); and the people eligible to be screened;

Organised screening – a screening programme where procedures are clearly defined and where a team (national, regional or local) is responsible for implementing the screening policy;

Population-based screening – a screening programme where in each round of the screening those people eligible for the screening are individually identified and personally invited (5).



Recommended screening programmes

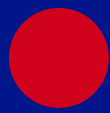
What type of screening is recommended and what isn't?

Organised screening programmes have been recommended in the European Union as they have the best chance to ensure that the service provided is of high quality and performed by a team dedicated to the delivery and monitoring of the programme.

This position is based on the 2003 Recommendation of the Council of the European Union which advises EU member states to implement cancer screening for breast, cervical, and colorectal cancers when offered as part of an organised programme with adequate resources for high quality (6).

Screening is recommended only for those cancers where screening has a proven effect to save lives that substantially outweighs the possible harms of examining vast numbers of people who may never develop the cancer in question.

Currently, only **breast, cervical and colorectal cancer** meet this threshold. When enough proof has been gathered, screening for one or more of the other cancer types may be recommended (7).



Recommended screening programmes

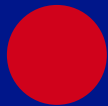
What type of screening is recommended and what isn't?

Europe has gained a lot of experience in the field of screening over the past decades and many countries have developed successful programmes. Currently, all EU countries have either piloted, implemented or are in the process of planning at least one of the three recommended cancer screening programmes.

To help countries develop and run their screening programmes, the EU has brought together experts in screening to produce comprehensive guidelines covering all aspects of breast, cervical and colorectal cancer screening. These guidelines are an essential resource to ensure screening programmes meet essential quality requirements.

Whilst an increasing number of countries are implementing screening for the recommended cancer sites following the EU-developed guidelines, Europe is still far away from having full implementation of organised screening for each of the recommended programmes (8).

These European Guidelines provide guiding principles and detailed protocols, standards and recommendation that, if followed, ensure that screening services of high quality are provided to the public.



Benefits versus harms



Although cancer screening has demonstrated a large positive effect in reducing cancer deaths, in some circumstances, screening can also have negative effects on health.

Because of this, the balance between benefits and harms must be carefully weighed to ensure that screening programmes have a clear positive impact overall. The table below illustrates some of the key issues to consider:

Benefits

Screening may prevent deaths from the cancer the programme is looking to detect

Screening may prevent morbidity (ill-health) caused by late-stage disease, including the use of less intense treatment for disease diagnosed at an early stage

True negative “all clear” results can provide reassurance about health condition

Screening might positively affect risk behaviour (screening offers a teachable moment to inform people about general advice to improve health and reduce risk of illness)

Harms

The screening and/or diagnostic test might cause harms directly to the person e.g. damage caused during colonoscopy, pain during mammogram, etc

Awaiting test results might cause psychological distress

Negative test results might cause false reassurance/ diagnostic delay

False positive test results might result in unnecessary diagnostic tests/treatment

Screening might result in overdiagnosis (identifying something which would never cause harm during a person’s lifetime), which may lead to overtreatment (treatment that is unnecessary for improving health)

Screening might negatively affect risk behaviour (a negative “all clear” result may encourage unhealthy behaviour by giving reassurance of absence of disease)

Cancer Screening in Europe

According to the European Code against Cancer, the following recommendations should be put in place by member states for each screening programme:

Breast cancer screening

- Women starting at age 50 years and not before age of 40 years; and
- From then on, every 2 years until age 70–75 years.

Cervical cancer screening

- Either cytology (Pap) testing or human papillomavirus (HPV);
- If cytology is used for screening, women starting at age 25–30 years and from then on, every 3 or 5 years;
- If HPV testing is used for screening, women starting at age 35 years (usually not before age 30 years) and from then on, every 5 years.

Colorectal cancer screening

- Men and women starting at age 50–60 years, and from then on,
- Every 2 years if the screening test is the guaiac-based faecal occult blood test (gFOBT) or the fecal immunochemical test (FIT), or
- Every 10 years or more if the screening test is flexible sigmoidoscopy (FS) or colonoscopy (TC).

Most programmes continue sending invitations to screening up to age 70–75 years.

Source: P. Armaroli et al. / *Cancer Epidemiology* 39S (2015) S139–S152

Cancer Screening in Europe

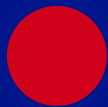
The 2003 Recommendation on Cancer Screening requested the European Commission to report back on the status of cancer screening in Europe on a regular basis.

The first such report was published in 2007 and highlighted the progress made by EU member states in adopting the recommendation to plan and deliver population-based screening for breast, cervical and colorectal cancer. According to data contained in the first report:

- 18 member states had population-based breast screening programmes (11 of them completed nationwide rollout);
- 17 member states had population-based cervical screening programmes (7 of them completed nationwide rollout);
- 12 member states had population-based cervical screening programmes (none of them had completed nationwide rollout).

The second report on the implementation status of cancer screening in European Union was published in 2017. The report described the status, protocols and types of organisation (accurate as of 2016) of the breast, cervical and colorectal cancer screening programmes in the EU.

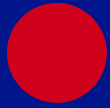
The report demonstrates the substantial progress made by countries to ensure access to organised, quality-assured screening for breast, cervical and colorectal cancers in the 10 years since first report was published.



Breast screening



- All the EU Member States except Bulgaria, Greece and Slovak Republic have population-based breast cancer screening programmes. Bulgaria conducted a pilot project that was completed in 2014. Slovakia is expected to launch a pilot programme in 2019.
- Mammography is the screening test used by all the population-based programmes. For the 16 out of 25 programmes, the target age group is women in the aged 50-69 years.
- The interval between two rounds of screening is 2 years for most of the countries. Only Malta and United Kingdom have intervals of up to 3 years.



Cervical screening



- Population-based cervical cancer screening programmes is present in 22 Member States. In several cases these are organised on a regional rather than national basis. Germany and Slovak Republic were in the process of introducing nationwide population-based programmes in 2016.
- As recommended in the European guidelines most countries have stopped cervical screening before the age of 25 and increased screening intervals to between 3-5 years.
- The introduction of the HPV test as the main tool for screening has been reported to be offered in Denmark, Finland, Italy, Sweden, Romania and Portugal. HPV-based programmes tend to start at a later age and are performed at intervals of 5 years interval.



Colorectal screening



- Population-based colorectal cancer screening programmes were being rolled out (ongoing, or completed) in 17 Member States, of which seven Member States have completed nationwide roll out.
- The programmes targeted only certain regions in Austria (Burgenland region), Portugal (Alentejo and Center regions) and Sweden (Stockholm region). In addition, Germany and Luxembourg were planning to start very shortly with population-based programmes on a nationwide basis.
- Different screening tests used in the various programmes across the different Member States. Home-based, self-sample kits (either "guaiac" or "immunochemical" faecal tests) are offered to men and women every 2 years in all the countries, except Austria having yearly screening.



Contact us!

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