EU MISSIONS
CANCER
Concrete solutions for our greatest challenges

#EUmissions  #HorizonEU  #MissionCancer
EU Missions are new initiatives rooted in Horizon Europe’s research and innovation programme. Missions will bring concrete solutions to the greatest challenges of our time, such as fighting cancer, adapting to climate change, protecting the oceans, seas and waters, living in greener cities and ensuring healthier soil and food.

Missions will engage all Europeans at EU, national, regional, and local levels.

They are about what we can do together to shape the world that we want to live in.

In 2021, the European Commission launched five EU Missions - including the Mission on Cancer.
The overarching goal of the Mission on Cancer is to improve the lives of more than 3 million people by 2030 through prevention, cures, and for those affected by cancer and their families, to live longer and better.

The Mission will achieve this by addressing four key objectives, to:

1. understand cancer and its risk factors;
2. prevent what is preventable;
3. optimise diagnostics and treatments;
4. support the quality of life of people living with and after cancer, while ensuring equitable access for all.

These objectives fit together holistically under the Mission on Cancer to improve the lives and prospects of millions of Europeans by 2030.
Important synergies link the objectives of the EU Mission on Cancer to the other EU Missions. They enable the different Missions to mutually reinforce one another and improve outcomes. This is especially true when it comes to prevention and improving quality of life:

1. Limiting the use of cars in urban areas, digitalising transport operations or developing public transport, and developing better walking and cycling connections will produce a healthier living environment and more active lifestyles through the **Climate Neutral and Smart Cities Mission**;

2. By preventing, minimising, remediating and monitoring pollution in the ocean and waters, the **Oceans Mission** will support the prevention of cancer;

3. By promoting a pollution-free environment, organic farming, safe non-polluted food and healthier diets, the **Soil Health and Food Mission** will ensure better water and air quality, and reduce food contamination with chemicals, which is key to reducing cancer;

4. Increasing air quality, combating air pollution, improving the quality of life and protecting vulnerable people, including those at higher risk of cancer, are key objectives of the **Adaptation to Climate Change Mission**.

In turn, the Mission on Cancer, through actions on sustainable procurement (e.g. to increase energy efficiency of healthcare services and buildings) and prevention of contamination of food and water with pharmaceuticals/chemicals, will contribute to the other Missions achieving their goals.
Joining forces
to combat cancer

The EU Mission on Cancer makes sure that research and innovation go hand in hand with the policy actions covered by Europe’s Beating Cancer Plan.

The Mission will support Europe’s Beating Cancer Plan by enabling and accelerating new approaches to research and policymaking in the field. This will ensure that the actions proposed under the Plan can be successfully implemented in an integrated approach to increase their impact.

The Cancer Mission secretariat is in constant dialogue with both Members States and stakeholders:

- **HEALTH AND RESEARCH MINISTRIES** meet regularly in the cancer sub-group of the Steering Group on Health Promotion, Disease Prevention and Management of Non-Communicable Diseases;

- **A STAKEHOLDER CONTACT GROUP** created under the Health Policy Platform gathers more than 300 public and private entities. It is a key element of Mission implementation as it enables the involvement of all stakeholders representing a continuum of research, prevention, diagnosis, treatment, care, environment, nutrition, social sciences, engineering, and more.
What challenges does cancer present?

Over 2.7 million people in the EU-27 are diagnosed with cancer every year, with 1.3 million dying from the disease annually.

These numbers are expected to rise considerably in the coming years as a result of ageing populations, unhealthy lifestyles and other unfavourable risk factors and health determinants.

Cancer is a burden for patients but also for their families and caregivers, having wide-reaching societal implications. The economic cost of cancer was €199 billion in 2018*, including healthcare costs, productivity loss and informal care costs.

*Across the EU27, plus Iceland, Norway, Switzerland and the UK.

In addition, there are huge inequalities in terms of access to cancer screening and care in the European Union.
The significant societal impact of cancer is set to worsen as a result of the COVID-19 pandemic.

First of all, because cancer patients have an increased risk of developing severe forms of COVID-19.

In addition, cancer control activities, such as vaccination and screening, have been curtailed due to the pandemic. This has had an impact on the number of people vaccinated against hepatitis B virus, human papilloma virus and the number of patients diagnosed early with and treated on time for cancer, as well as on the quality of life and life expectancy of patients for the years to come.
By adopting a multipronged approach, the Mission will reduce both the individual and societal costs of cancer. It will therefore aim to:

1. Better understand cancer and its causes: through improved research and an accelerated transition from research to public policy, in order to prevent 40% of cancers;

2. Ensure equitable access to diagnosis and treatments: through the development of new methods and technologies for screening and early detection to allow for less invasive treatments, increase chances of survival and improve the quality of life;

3. Improve the lives of patients both during and after treatment: through monitoring programmes for survivors of cancer, a better understanding of and provision for solutions to a range of physical and mental side effects and comorbidities, as well as reducing stigma.
The EU Mission on Cancer requires buy-in across sectors and from stakeholders, focusing on the needs of patients and their families, and giving all involved a stake in its success. Initiatives to make it easier for Europeans to participate in the Mission include:

**The EU Mobile App for Cancer Prevention** - sharing information on how to benefit from new developments in personalised cancer risk assessment, a way to empower people to manage their own health;

**Living Labs** – creating opportunities to enhance cross-sector research, knowledge-sharing and implementation of new technologies;

**The HealthyLifestyle4All initiative** - promoting sport, physical activity and healthy diets;

**The Directive on work-life balance for parents and carers** - introducing leave for informal carers and the possibility to request flexible working time arrangements to reduce the strain on their physical, mental and financial wellbeing;

Supporting **cancer survivors** in returning to work – ensuring EU support for Member State programmes for re-skilling and up-skilling to help cancer survivors re-join the labour market.
To take account of citizens’ views and needs, the Mission involves them in the design, implementation and review of mission actions to ensure they are listened to, represented and engaged with throughout.

Different activities such as workshops, focus groups and surveys will target citizens of different walks of life, including young people, patients and their families and caregivers, and the elderly. To foster participation, each activity will be adapted to its specific audience and national language.
What happens now?

The EU Mission on Cancer benefits from support through a range of sources:

**€255 MILLION**

The Horizon Europe 2021-2022 workplan has assigned €255 million across the four Cancer Mission objectives;

**TOTALLING €1.25 BILLION**

Funding to Europe’s Beating Cancer Plan: the EU4Health programme, totalling €1.25 billion; the Digital Europe Programme, which will provide up to €250 million to cancer-related projects and other digital health investments; the Erasmus+ programme; the Marie Skłodowska-Curie actions, which will provide up to €500 million for projects in education, training and research on cancer; and national funds and private investments.

**STAKEHOLDERS**

Dedicated national cancer mission hubs will connect national, regional and local authorities to public and private stakeholders through policy dialogue, citizen engagement and outreach activities.
In addition to funding research, key actions are undertaken by the EU Mission on Cancer to reach its goal:

1. **Establish a European initiative to understand cancer** (UNCAN.eu platform) to support breakthroughs in cancer care by combining research, patient and other data;

2. **Set up a European Cancer Patient Digital Centre** to help provide personalised care for cancer patients and survivors by the sharing of data and experiences;

3. **Ensure better access to cancer care for patients and survivors through Comprehensive Cancer Infrastructures.**
What have several EU-funded projects achieved so far?

OBJECTIVE: UNDERSTANDING CANCER

BCAST

The B-CAST project aimed to identify women with a moderate to high risk of developing breast cancer by combining genetic and lifestyle information. It helped empower women and doctors with better knowledge of different subtypes of breast cancer and, as a result, to build more individualised strategies for prevention and treatment.


PrECISE

PrECISE developed predictive computational technology that uses molecular and clinical data to improve our understanding of disease mechanisms and to inform clinicians about the best strategies for therapeutic intervention.

https://precise-project.eu/
What have several EU-funded projects achieved so far?

**OBJECTIVE: PREVENTION**

**MyPEBS**
MyPebs is the world’s second-largest risk-based breast cancer screening trial. Personalised screening strategies, based on individual risk levels, could potentially improve the individual benefit/harms ratio of screening - such as earlier cancer detection and less intensive treatments in high-risk women, fewer false positives and over-diagnoses in low-risk ones - and increase the cost-effectiveness for national health insurance.

https://www.mypebs.eu/fr/

**FORECEE**
The FORECEE project was based on Women’s cancer risk Identification (WID) tests that predict a woman’s individual risk of developing female cancers (breast, ovarian, endometrial and cervical cancer). It investigated the best ways of incorporating these WID tests into large-scale and cost-effective screening and prevention programmes for the whole population.

https://cordis.europa.eu/project/id/634570
What have several EU-funded projects achieved so far?

**OBJECTIVE:** DIAGNOSIS AND TREATMENT

**ONCOBIOME**

Using cohorts of more than 3000 patients with cancer across 10 countries, the ONCOBIOME project partners are working to identify microbiome signatures related to cancer occurrence, prognosis and response to therapy. It is hoped that project results will lead to novel diagnostic and prognostic tests for cancer, as well as tailor-made pre- and pro-biotics for patients.

https://www.oncobiome.eu/

**EUROSCARC**

EuroSARC aimed to carry out innovative clinical trials in order to change clinical practice for childhood and adult patients with bone and soft tissue sarcomas. It enabled the development of a unique portfolio of clinical trials on sarcomas, and the development of translational research projects aiming to identify predictive biomarkers and modes of actions of the therapies tested.

https://cordis.europa.eu/project/id/278742/reporting
What have several EU-funded projects achieved so far?

**OBJECTIVE: QUALITY OF LIFE**

**SurPass**

Childhood cancer survivors in Europe continue to have unique health issues as they grow, making long-term follow-up care critical. The Survivorship Passport (SurPass) solution was developed to provide survivors with a complete overview of their treatment and personalised recommendations, to ensure that medical professionals have access to all necessary information in case of future health issues.

https://siope.eu/activities/joint-projects/survivorship-passport/

**eSMART**

The eSMART study focused on evaluating a remote monitoring system for chemotherapy-related symptoms in patients with different kinds of advanced cancer. It positively impacted services and patient outcomes in the five countries of the study by giving patients and professionals virtual means to assess and manage symptoms during chemotherapy in a home care setting.

https://cordis.europa.eu/project/id/602289