



# EC Knowledge Centre on Cancer

**European Commission – Joint Research Centre**

*Directorate F – Health, Consumers and Reference Materials*

*SGPP Sub-group Meeting, 03 May, 2021*

# Cancer: the primary cause of death for Europeans under 65

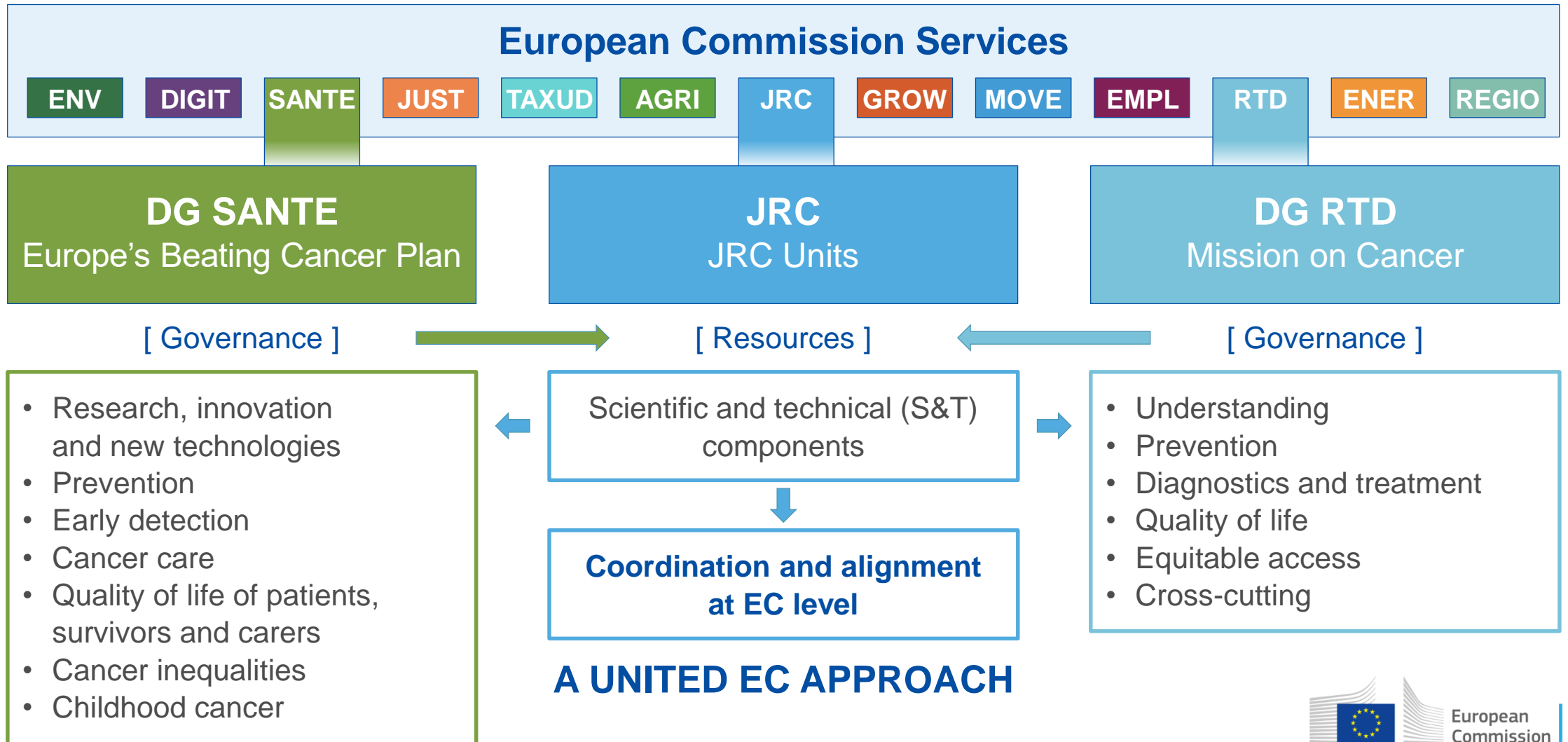
- **2.7 million new cases** and **1.3 million deaths** estimated for 2020 in the EU
- **1 in 2 people** estimated to **develop cancer** and **1 in 5** to **die** because of cancer in the EU
- **Cancer cost** to the EU almost **€97 billion** in 2018

Up to **40%** of cancers **can be prevented**

The **European Union** needs **coordinated actions** in the fight against cancer:

**EC Knowledge Centre on Cancer**

# Cancer-related work in the European Commission



# Why the Joint Research Centre (JRC)?

- **Independent** of commercial, private, and national interests
- Provides **politically neutral, evidence-based** knowledge
- Proven track record in cancer prevention, screening, diagnosis and care
- Proven track record in cancer data, information and knowledge
- Scientifically and technically **embedded in** the **Europe's Beating Cancer Plan** and the new **Mission on Cancer**
- Collaborates with **>1,000 external organisations**, including all main cancer organisations and societies

# Roles of the EC Knowledge Centre on Cancer

- Expand the **European Cancer Information System** which is THE reference point for monitoring the burden of cancer in Europe
- Develop and provide **European Guidelines** and **Quality Assurance schemes** for cancer prevention, screening, diagnosis, treatment and care
- Evidence-clearing house (via the **Knowledge Gateway** and **Best Practices**) for **Cancer Prevention policies**
- An **independent data broker**, fostering interoperability while expanding EC IT cancer systems, gateways, portals, platforms and databases

# ECIS – European Cancer Information System

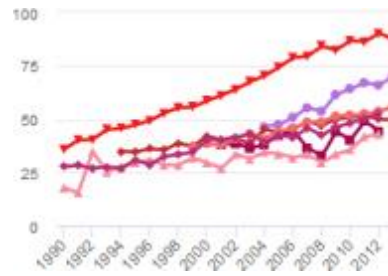
- Provides the **latest information on indicators** that quantify cancer burden across Europe
- Permits the exploration of **geographical patterns and temporal trends** of incidence, mortality and survival data across Europe for the major cancer entities
- Supports **research** and **public-health decision-making** in the field of cancer, and serves as a **point of reference** and information for **European citizens**



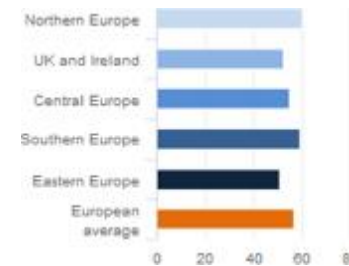
EU Platform  
on Rare Diseases  
Registration



Incidence  
and mortality  
estimates 2020



Incidence  
and mortality  
historical data



Survival estimates

<https://ecis.jrc.ec.europa.eu/>

# European Commission Initiative on Breast Cancer

- Provides **essential levels of quality care**, equally accessible across Europe
- Offers **clear** and **independent guidance** on screening, diagnosis and care to **healthcare providers** and **citizens/patients**, based on the latest scientific evidence available



European guidelines on screening and diagnosis



International guidelines on breast cancer care



European quality assurance scheme



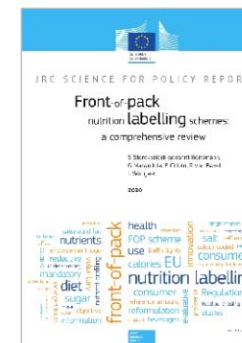
<https://healthcare-quality.jrc.ec.europa.eu/>

# Health promotion and NCDs prevention

- The [Knowledge Gateway](#) – reliable and up-to-date information on cancer determinants and related policies
- Work on [best practices](#) related to cancer determinants
- [A toolkit to limit marketing](#) of unhealthy food, non-alcoholic and alcoholic beverages to minors
- [School Food and Nutrition](#) in Europe: policies, interventions and their impact
- [Front-of-pack nutrition labelling](#) schemes: a comprehensive review



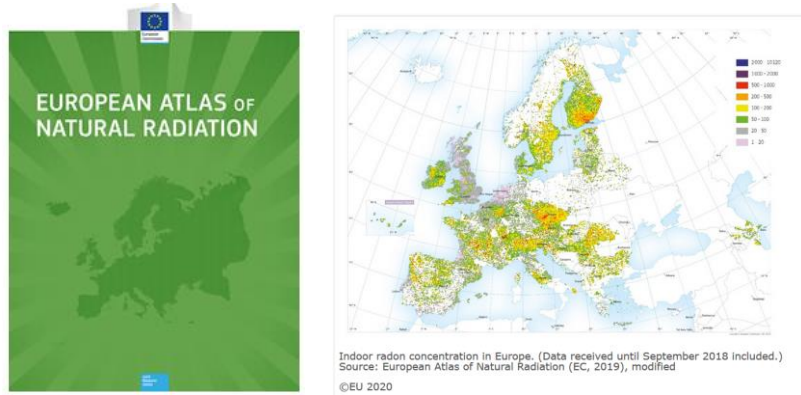
Marketing of unhealthy foods to children can influence their food preferences, diets and health  
© European Union 2019



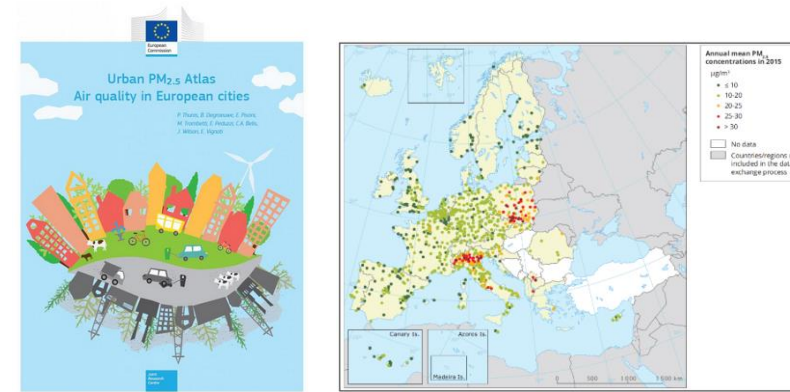


# A holistic approach to tackling cancer will require connecting the datasets

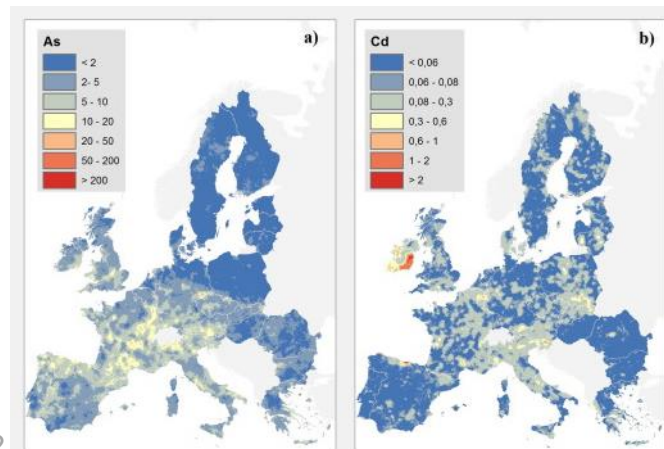
## Radon concentration



## PM2.5 concentration



## Heavy metals in soil



## Chemical occurrence data

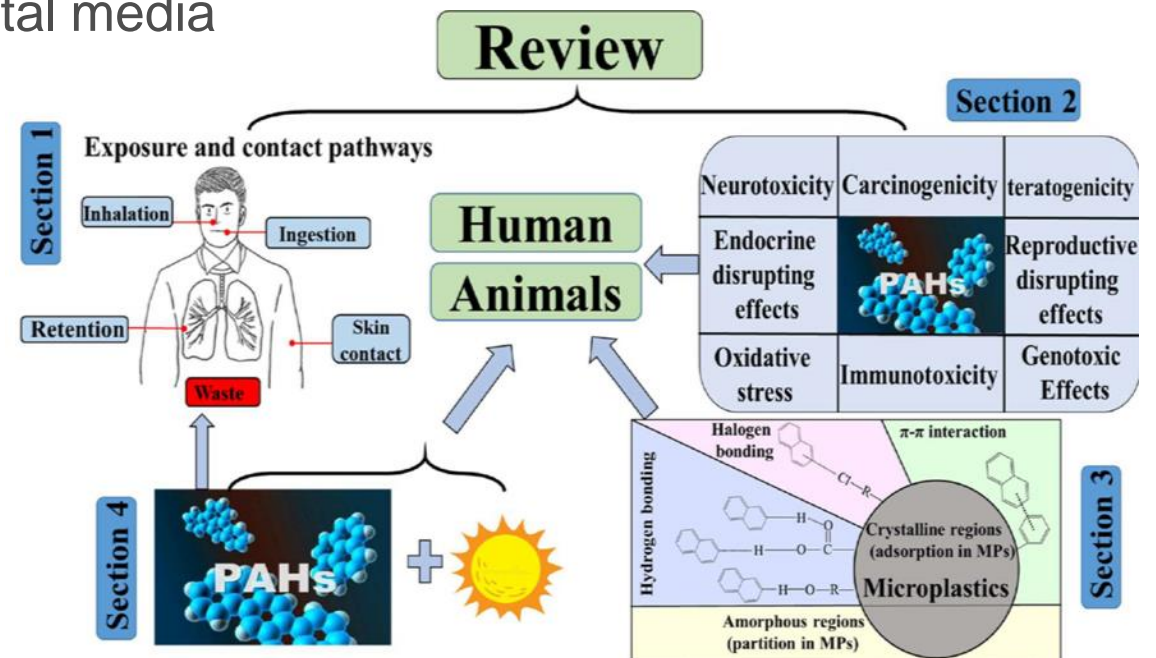
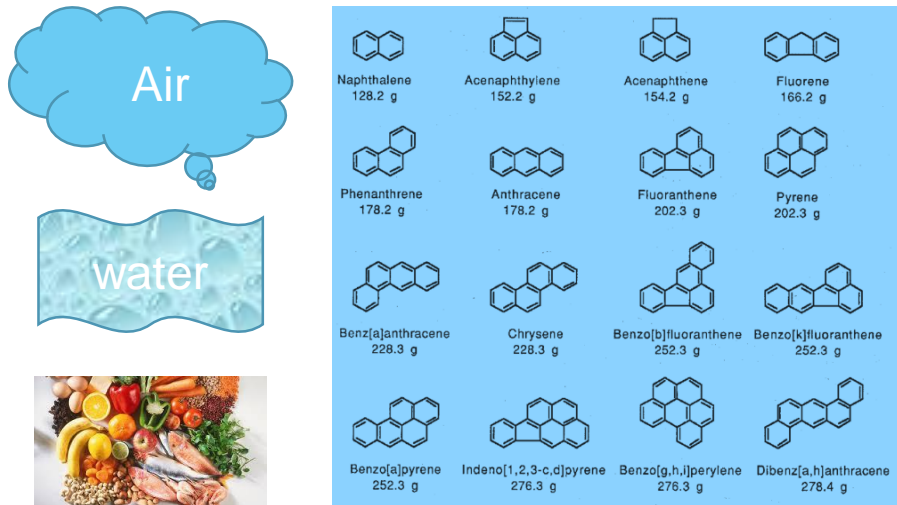


# Looking horizontally for combined exposure

Humans are exposed to carcinogens through different exposure pathways and through different environmental media

- Same carcinogen in different environmental media
- Different carcinogens

E.g. polycyclic aromatic hydrocarbons (PAHs)



# Thank you



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