

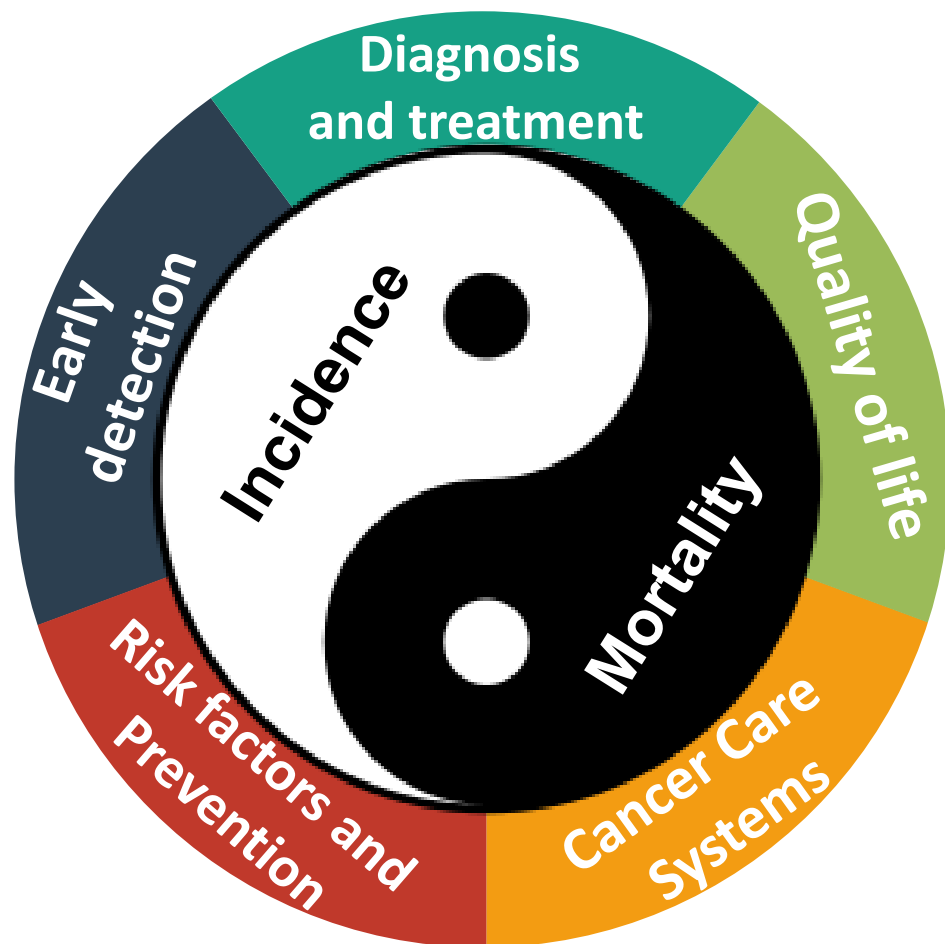


# Policy Advocacy and Healthcare Reform: A Roadmap to Reducing Cancer Inequalities in Europe

**Marek Svoboda**  
**OECD Oncology Days,**  
**Helsinki, 13. 6. 2024**

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# BEATING INEQUALITIES IN THE WHOLE CONTINUUM OF THE CANCER CARE



- **In 2022**, there were about **2,78 million new cancer cases** (excl. non-melanoma skin cancer) in the **27 EU MS + Iceland and Norway (EU+2)** → **5 people dg. every minute / 1 cancer every 11 seconds.**
- It is estimated that **by 2040 new cancer diagnoses will increased by around 18 %** in the EU (compared to 2022).
- While the mortality is decreasing, **1.17 million cancer-related deaths occurred in the EU27** (22.5% of all deaths), in 2020
- **Without decisive action**, including beating inequalities, **cancer will be the leading cause of death** in the EU by 2035, **and its burden will critically strain health and social systems.**

# IDENTIFICATION OF INEQUALITIES IN THE WHOLE CONTINUUM OF THE CANCER CARE

## • National cancer registries

- National cancer registries, **covering entire population**, have been established in **24** of the 29 (EU+2) **countries**.
- The scope of information, the timeliness, quality and use of **data vary widely between countries**.
- **Expanding the scope gives the potential** to yield stronger epidemiological insights and **identify factors contributing to the inequalities**.

Population coverage and type of data directly contained or linked in European cancer registries

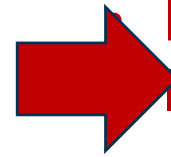
Country	National coverage	Incidence (new cases)	Screening (Screen detected)	Cancer stage data	Genetic information	Treatment data	Survival data	Patient-reported indicators	Population mortality rate
Austria	Total	Yes	No	Yes	No	Yes	Yes	No	Yes
Belgium	Total	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes
Bulgaria	Total	Yes	No	Yes	No	Yes	Yes	No	Yes
Croatia	Total	Yes	Yes	Yes	No	Yes	Yes	No	Yes
Cyprus	Total	Yes	No	Yes	No	Yes	Yes	No	Yes
Czechia	Total	Yes	Yes	Yes	No	Yes	Yes	No	Yes
Denmark	Total	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Estonia	Total	Yes	Yes	Yes	No	Yes	Yes	No	Yes
Finland (*)	Total	Yes	Yes	Yes	NA/NC	Yes	Yes	Yes	Yes
France	Partial (23%)	Yes	No	Yes	No	Yes	Yes	No	Yes
Germany	Total	Yes	Yes	Yes	No	Yes	Yes	No	Yes
Greece	No registry	No	No	No	No	No	No	No	No
Hungary	Total	NA/NC	NA/NC	NA/NC	NA/NC	NA/NC	NA/NC	NA/NC	NA/NC
Iceland	Total	Yes	Yes	Yes	No	Yes	Yes	No	Yes
Ireland	Total	Yes	Yes	Yes	No	Yes	Yes	No	Yes
Italy	Partial (70%)	Yes	Yes	Yes	No	Yes	Yes	No	Yes
Latvia	Total	Yes	No	Yes	No	Yes	Yes	No	Yes
Lithuania	Total	Yes	No	Yes	No	No	Yes	No	Yes
Luxembourg	Total	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes
Malta	Total	Yes	Yes	Yes	No	Yes	Yes	No	Yes
Netherlands	Total	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Norway	Total	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes
Poland	Total	Yes	Yes	Yes	No	Yes	Yes	No	Yes
Portugal	Total	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes
Romania	NA/NC	NA/NC	NA/NC	NA/NC	NA/NC	NA/NC	NA/NC	NA/NC	NA/NC
Slovak Republic	Total	Yes	No	Yes	No	Yes	Yes	No	Yes
Slovenia	Total	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes
Spain	Partial (28%)	Yes	Yes	No	No	No	Yes	No	Yes
Sweden	Total	Yes	No	Yes	No	Yes	Yes	No	Yes

→ the most comprehensive registries,   collecting PROMs

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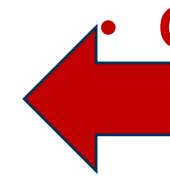


## ECIR - European Cancer Inequalities Registry

- ECIR is a **flagship initiative of the Europe's Beating Cancer Plan**.
- It provides reliable data on cancer prevention and care to **identify trends, disparities and inequalities** between EU+2 countries and regions.



**Cancer Inequalities Factsheets**



## • Other sources

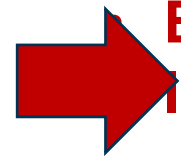
### EUROSTAT

- National official statistics
- **OECD**
- **WHO/IARC**
- **IAEA**
- **EU's Joint Research Centre**
- **European Cancer Patient Digital Centre**
- **Cancer Mission, EU4Health JA & other collaborative initiatives (e.g. DigiCore)**

# IDENTIFICATION OF INEQUALITIES IN THE WHOLE CONTINUUM OF THE CANCER CARE

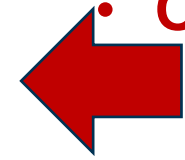
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**ECIR - European Cancer Inequalities Registry**

• ECIR is a flagship initiative



• **Other sources**

**EUROSTAT**

- National official statistics

**EUROPEAN HEALTH DATA SPACE**

**Establishing standards for electronic medical record systems will enable greater interoperability and secondary use of health data**

*...also in order to make data-driven decisions to improve outcomes and close gaps*

- **Expanding the potential of epidemiological data to identify factors contributing to the inequalities.**

**Cancer Profile**

(e.g. DigiCore)

**Cancer Inequalities Factsheets**

# IDENTIFICATION OF INEQUALITIES IN THE WHOLE CONTINUUM OF THE CANCER CARE

OECD Health Policy Studies



## Beating Cancer Inequalities in the EU

SPOTLIGHT ON CANCER PREVENTION AND EARLY  
DETECTION

European Cancer  
Inequalities Registry



OECD iLibrary

31 Jan 2024 / 261 pages

[https://www.oecd-ilibrary.org/social-issues-migration-health/beating-cancer-inequalities-in-the-eu\\_14fdc89a-en](https://www.oecd-ilibrary.org/social-issues-migration-health/beating-cancer-inequalities-in-the-eu_14fdc89a-en)

OECD (2024), *Beating Cancer Inequalities in the EU: Spotlight on Cancer Prevention and Early Detection*, OECD Health Policy Studies, OECD Publishing, Paris, <https://doi.org/10.1787/14fdc89a-en>.

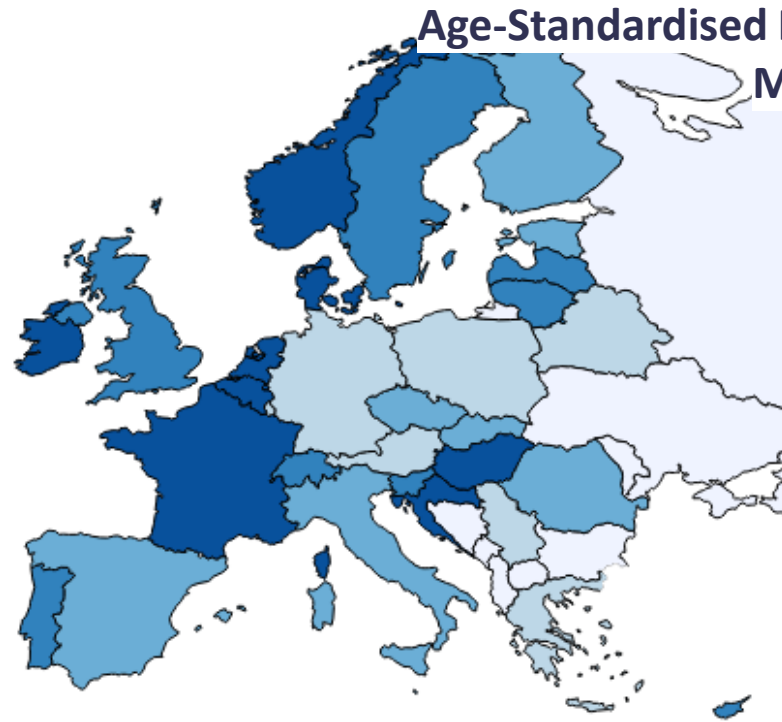
Source: OECD Beating Cancer Inequalities in the EU, 2024



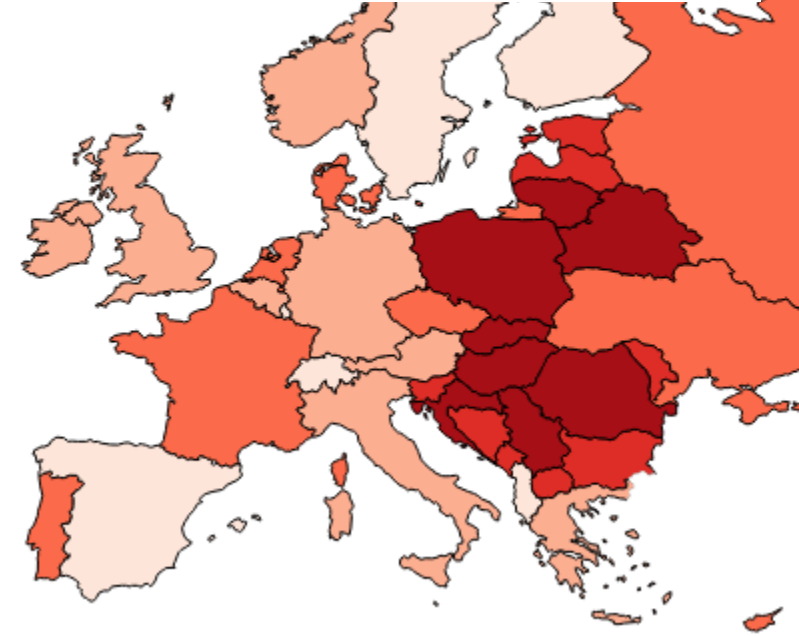


# CANCER BURDEN

- **Cancer incidence and mortality rates vary across EU+2 countries** (2- and 1.6-fold respectively).



Age-Standardised Rate (World) per 100 000, Incidence and Mortality, Both sexes, All cancers, in 2022



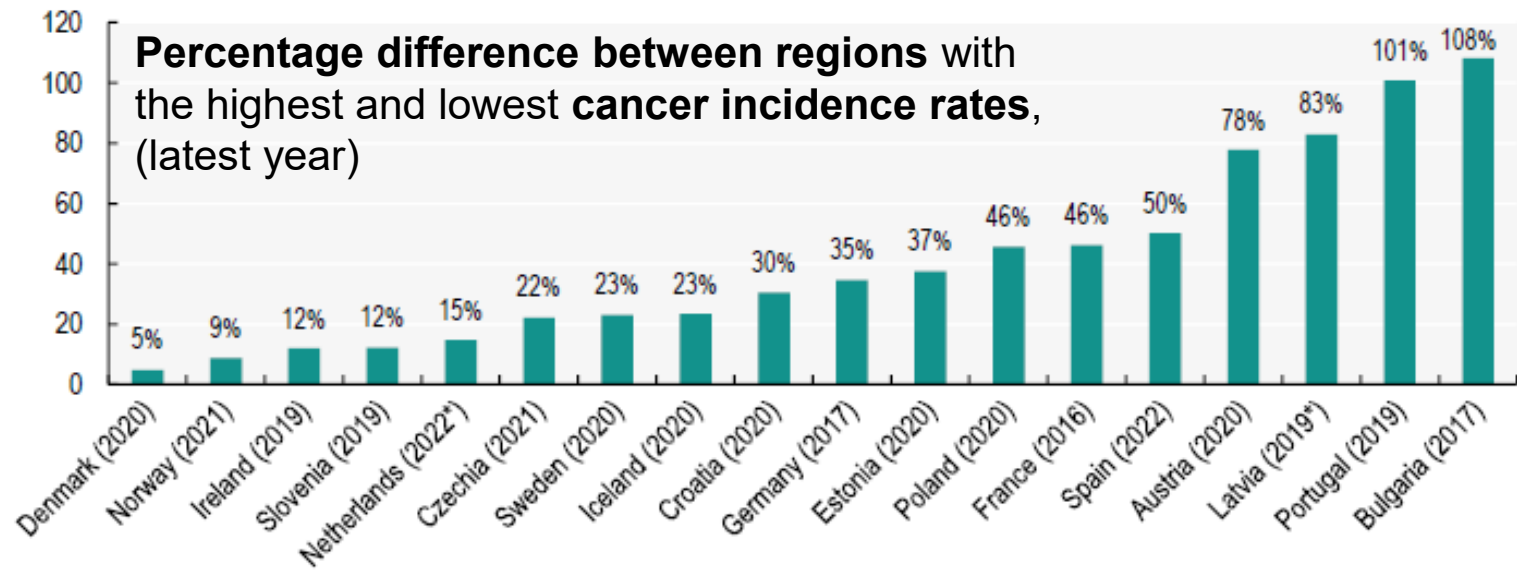
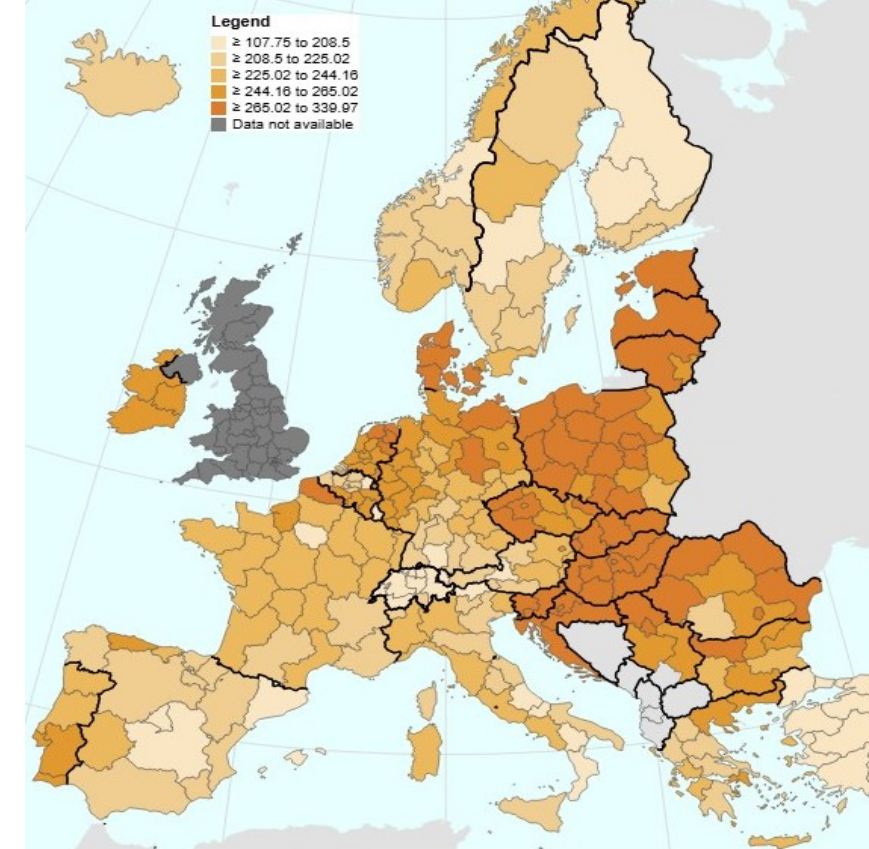


# CANCER BURDEN

- **Cancer incidence and mortality rates vary across EU+2 countries** (2- and 1.6-fold respectively).
- The burden of cancer also **differs widely** within countries **between regions**. Cancer incidence vary by up to 108 % and mortality by up to 37%.
- **This reflects variations in the prevalence of risk factors, social and economic conditions, and access to the cancer screening programmes...**

Sources: IARC, EUROSTAT and OECD Beating Cancer Inequalities in the EU, 2024

## Age-Standardised death rate by region of residence, All Cancers, 2021





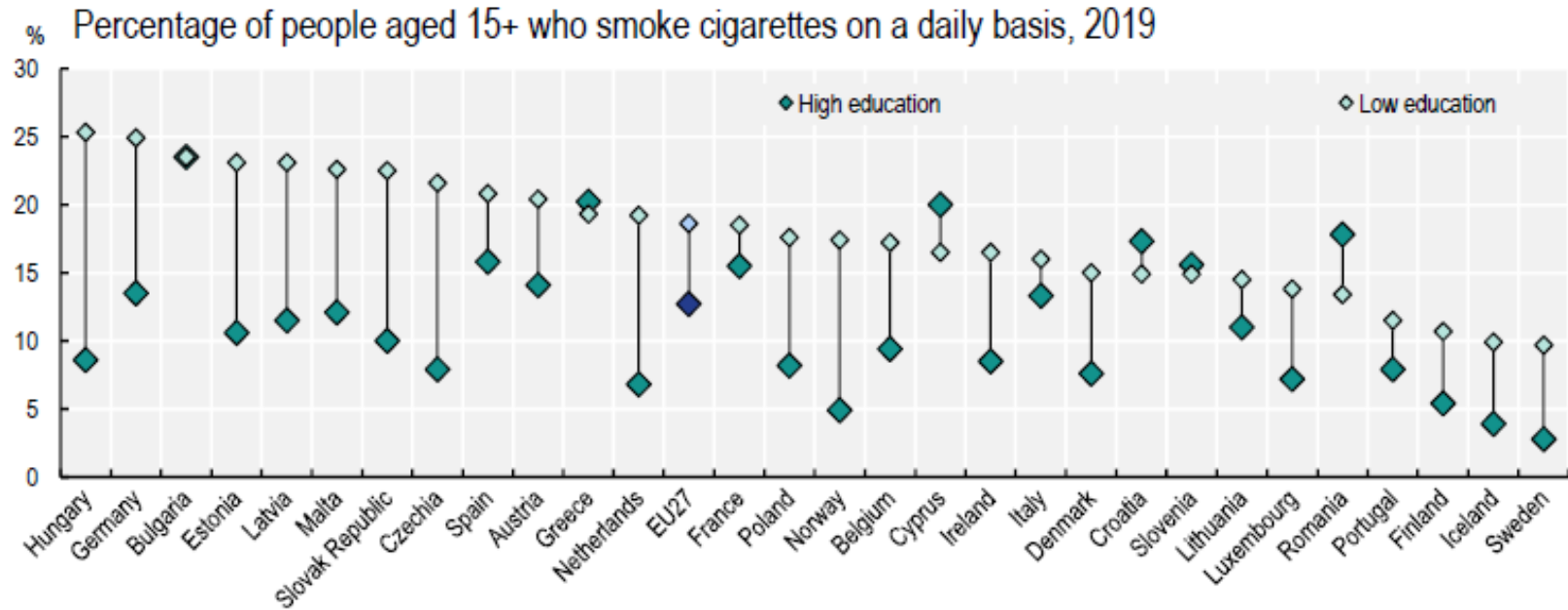
- Worldwide, over half (50,6 %) of cancer deaths among men and one-third (36,3 %) of cancer deaths among women are attributable to modifiable risk factors, in 2019.
- Around 51,9 % of all cancer deaths are due to tobacco (26,9 %), alcohol (6,3%) and metabolic cancer risk factors\* (18,7 %) \*\*.

numbers of cancer deaths attributed to leading risk factors in EU+2 countries in 2019

Category	Tobacco	Alcohol	Dietary risk	Occupational risks	Overweight and obesity	High blood sugar	Air pollution	Physical inactivity	HPV infection (cervical cancer)	All cancer deaths
Men	266 398	60 718	46 429	69 733	39 087	41 910	19 191	6 140	N/A	773 124
Women	102 273	25 898	38 463	11 706	39 574	35 126	8 300	9 906	15 931	596 727
Total	368 671	86 616	84 892	81 439	78 661	77 036	27 491	16 046	15 931	1 369 851
Of all cancer deaths	26.9%	6.3%	6.2%	5.9%	5.7%	5.6%	2.0%	1.2%	1.2%	

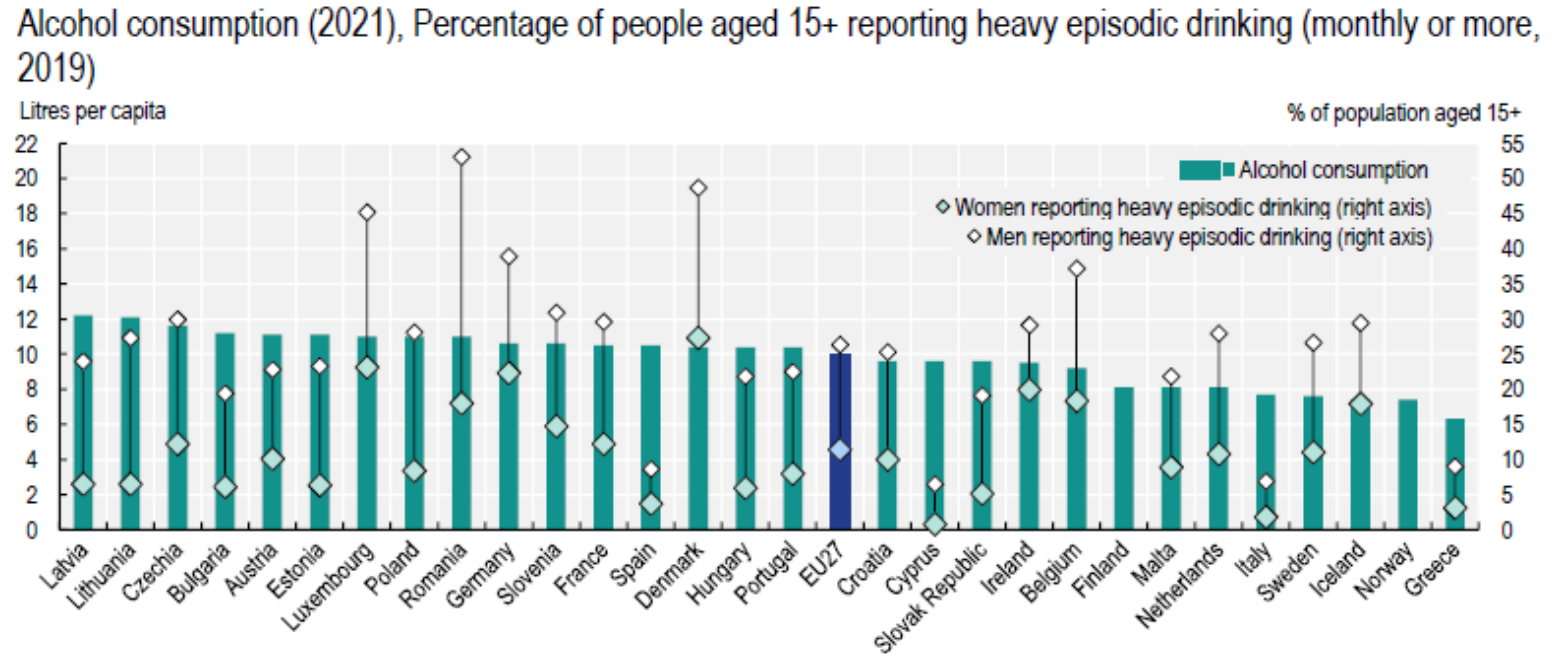
Note: \* dietary risk, overweight and obesity, high blood sugar, physical inactivity. \*\* their combined effect

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  - Around 51,9 % of all cancer deaths are due to tobacco (26,9 %), alcohol (6,3%) and metabolic cancer risk factors\* (18,7 %) \*\*.**
  - Daily smoking rates vary almost three-fold across EU+2 countries, and are about 50 % higher among people with low levels of education and/or in the lowest income group**



Note: \* dietary risk, overweight and obesity, high blood sugar, physical inactivity. \*\* their combined effect

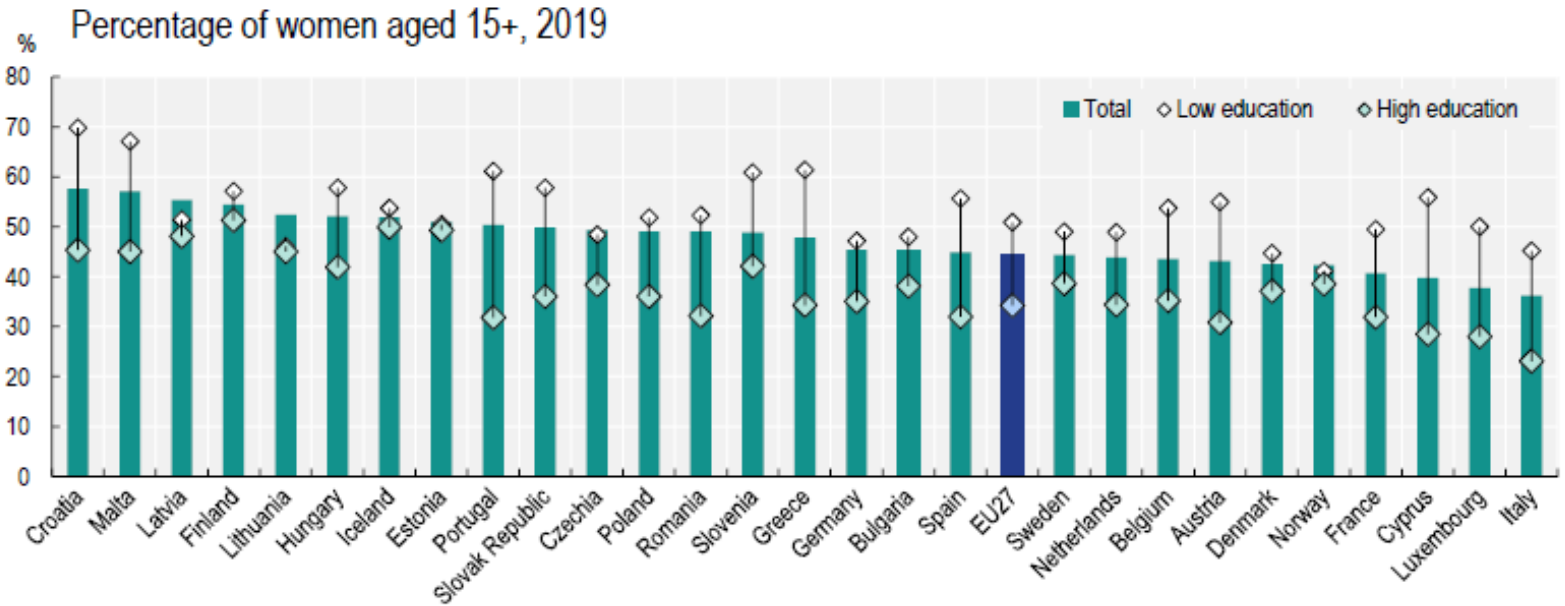
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- More than half of adults were **overweight or obese** in 2019 (EU+2)

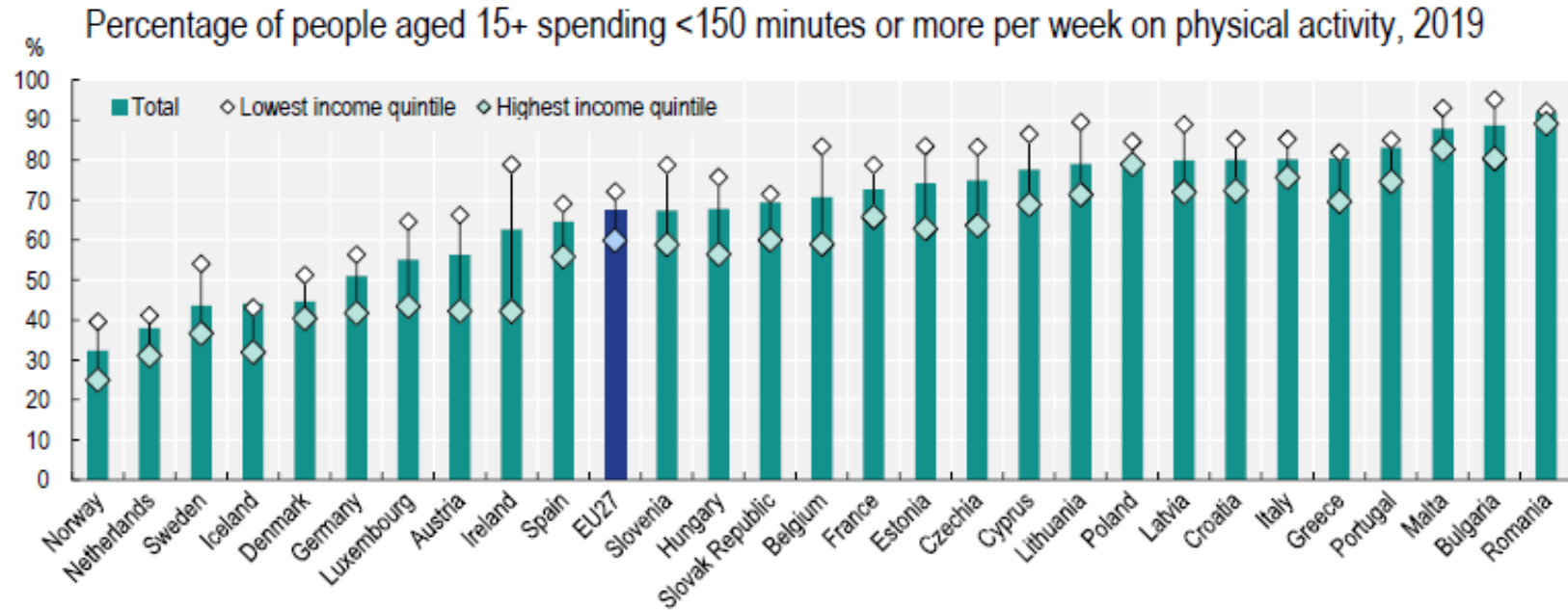
prevalence of overweight and obesity among women in all EU+2 countries



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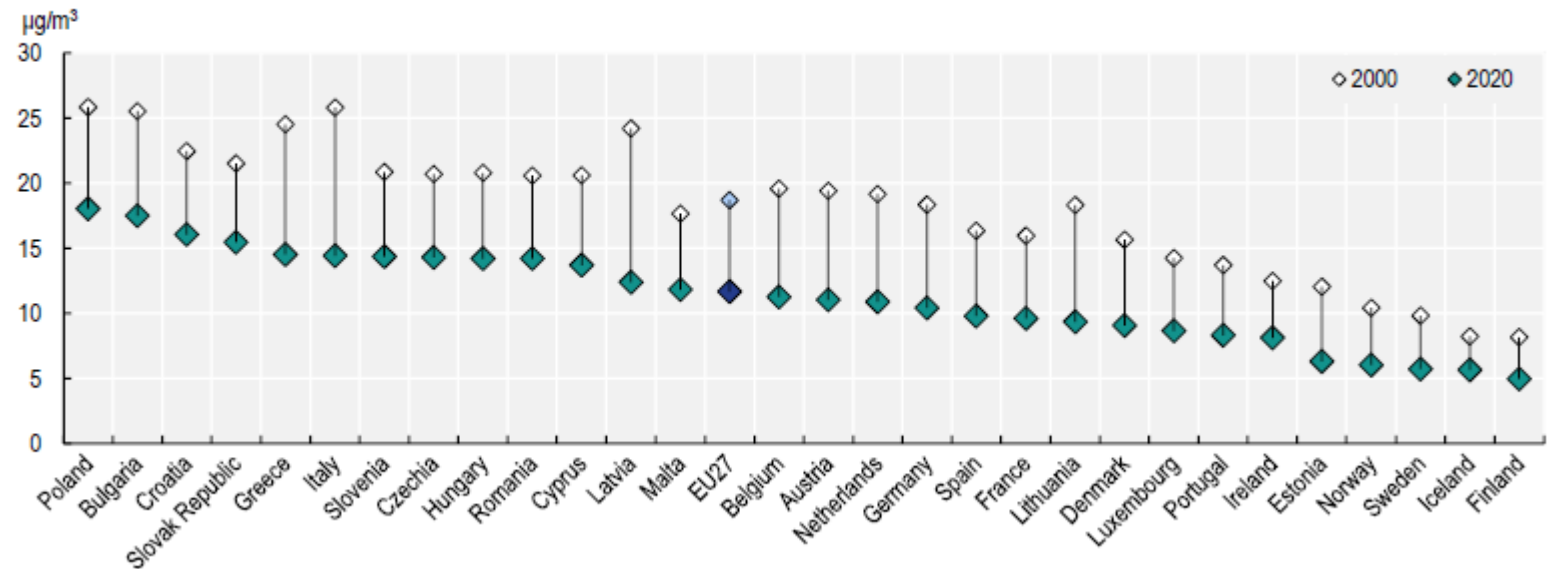


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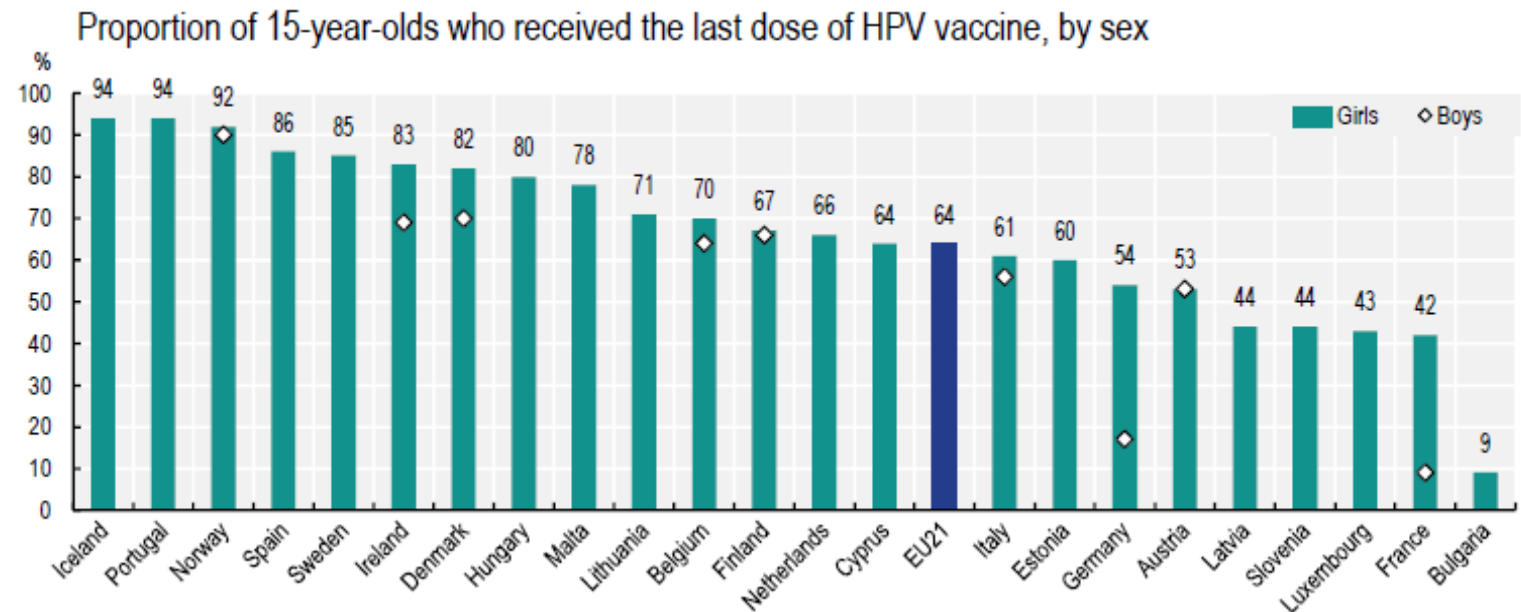
PM<sub>2.5</sub> exposure in micrograms per cubic metre (µg/m<sup>3</sup>), in 2000 and 2020



- 67% of people report less than 150 min. of **physical activity** per week (3-fold difference)
- Average outdoor **air pollution** varies almost four-fold across EU+2 countries, and except Finland all EU+2 countries exceed the WHO limit threshold for PM<sub>2.5</sub> (5µg/m<sup>3</sup>)

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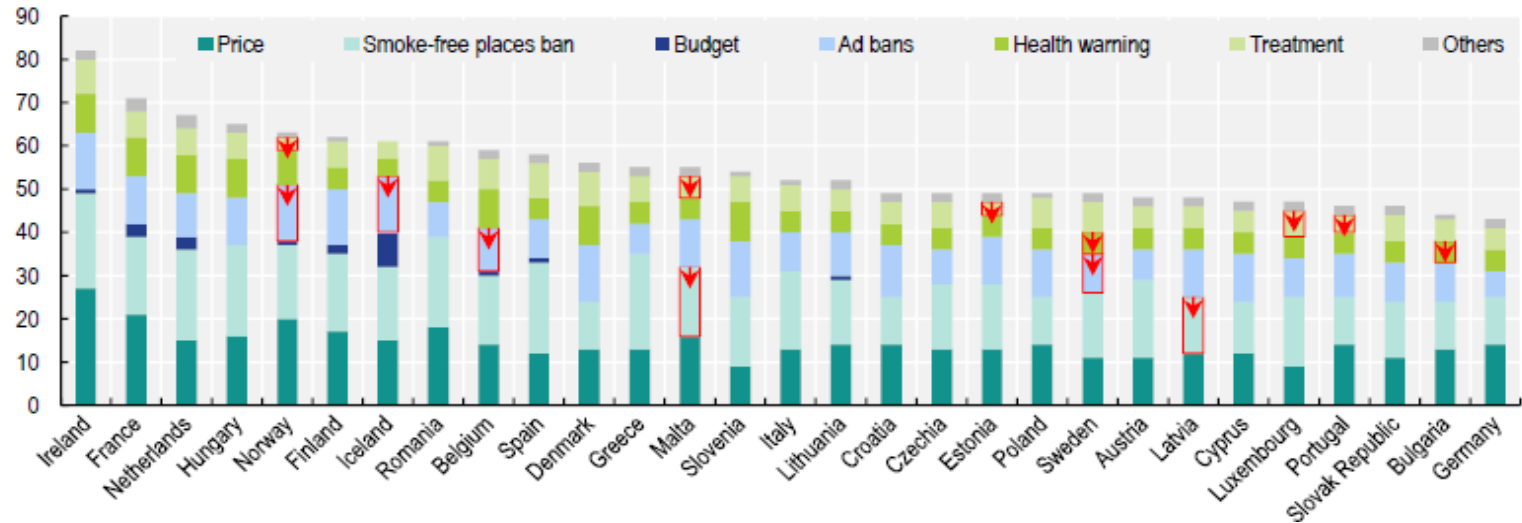


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- Prevalence of **HPV infection** varies greatly by country. It is estimated about 14.4% for women in the EU countries and is substantially higher in C&E EU MS (about 23.4%).

## Policy actions to reduce risk factors for cancer and target at-risk population

- **Europe’s Beating Cancer Plan** aims to create a **“Tobacco-Free Generation” by 2040** (with the goal to reduce use of tobacco to less than 5% of the population)

Tobacco Control Scale (TCS) scores by category in 2021, red arrows indicating a decline from 2010



### The most effective tobacco control policies:

- **Taxing tobacco (incl. novel tobacco products)** (10% price increase can reduce consumption by about 4%)
- **Standardised packaging and/or large, visual health warnings** covering most of the cigarette package
- **Smoke-free environments, comprehensive bans on promotion of tobacco** across all media and **access to smoking cessation support**

# MO **CANCER PREVENTION**

**Policy actions to reduce risk factors for cancer and target at-risk population**

**A comprehensive package of prevention policies is necessary to address harmful alcohol consumption**

- **WHO's Global Action Plan for the Prevention and Control of Noncomm. Disease & WHO's Global Strategy to Reduce the Harmful Use of Alcohol (20 % reduction by 2030)**
- **Implementation differs across EU+2 countries:**

The lowest level of implementation: Austria, Belgium, Croatia, Cyprus, Denmark, Greece, Hungary

Source: OECD Beating Cancer Inequalities in the EU, 2024

	Pricing policies		Availability restrictions		Marketing regulations		Consumer information		
	Taxation adjusted for inflation	Minimum unit pricing	Minimum legal age for purchasing	Restrictions on sales by premise type (on- or off-premise)	Restrictions on density of alcohol outlets	Advertising on national television	Advertising on social media	Health warning labels	Guidelines for school-based prevention
<b>important strategies</b>									
<b>best examples</b>									
Austria	X	X	16-18 <sup>1</sup>	Both types	None	Partial	Voluntary	X	X
Belgium	✓	X	16-18 <sup>1</sup>	None	Off-premise	Partial	Voluntary	X	✓
Bulgaria	X	X	18	None	Off-premise	Partial	Partial	X	X
Croatia	X	X	18	None	None	None <sup>2</sup>	None	X	✓
Cyprus	X	X	18	Both types	Both types	Partial	Voluntary	X	✓
Czechia	X	X	18	None	None	Partial	Partial	X	✓
Denmark	X	X	16-18 <sup>1</sup>	None	None	Partial	Voluntary	X	X
Estonia	X	X	18	Off-premise	None	Ban	Partial	X	X
Finland	X	X	18	Both types	Off-premise	Partial	Partial	X	X
France	✓	X	18	Both types	On-premise	Ban	Partial	✓	✓
Germany	N/A	X	16-18 <sup>1</sup>	None	None	Partial	Voluntary	X	X
Greece	X	X	18	None	None	Voluntary	Voluntary	✓	X
Hungary	X	X	18	None	None	Partial	Partial	X	✓
Iceland	X	✓	20	Both types	Off-premise	Ban	None	X	✓
Ireland	X	✓	18	Both types	Both types	Partial	Voluntary	X	✓
Italy	✓	X	18	Both types	None	Partial	None	X	✓
Latvia	X	X	18	Off-premise	None	Partial	Partial	X	X
Lithuania	X	X	20	Both types	None	Ban	Ban	X	✓
Luxembourg	X	X	16	On-premise	On-premise	Partial	Partial	X	X
Malta	X	X	17	Off-premise	None	Partial	None	X	✓
Netherlands	X	X	18	None	None	Partial	Voluntary	X	X
Norway	X	X	18-20 <sup>1</sup>	Both types	Off-premise	Ban	Ban	X	X
Poland	X	X	18	None	None	Partial	Partial	X	X
Portugal	X	X	18	Both types	None	Partial	Partial	✓	✓
Romania	✓	X	18	None	None	Partial	Partial	X	X
Slovak Republic	X	✓	18	None	None	Partial	Voluntary	X	X
Slovenia	X	X	18	Off-premise	None	Partial	Partial	X	✓
Spain	✓	X	18	Both types	None	Partial	None	X	X
Sweden	X	X	18-20 <sup>1</sup>	Both types	Off-premise	Ban	Partial	X	X

## Policy actions to reduce risk factors for cancer and target at-risk population

- All 29 EU+2, except Greece have an **adult obesity strategy**, and all except Austria, Croatia, France, Greece and Portugal have a **child obesity strategy**.
- **Other policies** to improve diets, increase physical activity and address metabolic risk factors:
  - **Health-related food taxes** (e.g. on sugar-sweetened beverages: B, HR, DK, FIN, F, P, PL..)
  - **Regulation of advertising of unhealthy food and beverages** to young people
  - **Front-of-Pack labeling** (e.g. Nutri-Score: Belgium, France, Germany, Luxembourg, NL)
  - **Regulation of type of food and drink available in schools**
  - **Physical activity and nutrition counselling and physical activity prescription in primary care** (exist in 10 EU+2 countries, e.g. EUPAP model in Sweden)
  - Country and local policies promoting **public transport, walking and cycling infrastructures**





# CANCER PREVENTION

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	Economic tools	Marketing	Labelling	Schools		Healthcare	
	Health-related food taxes or tariffs	Regulation of direct advertising to young people (unhealthy food and beverages) <sup>1</sup>	Voluntary Front-of-Pack labelling (positive and/or negative)	Regulation of type of food and drink available in schools	Restrictions on SSBs in schools	Nutrition advice and counselling in healthcare, by target group	Physical activity counselling, assessment, and prescriptions in primary care
Austria	No	No	No	Voluntary	No	No	General public
Belgium	Excise tax soft drinks	Co-regulation	Both	Voluntary	No	No	General public
Bulgaria	No	Legislation	No	Mandatory	No	No	General public
Croatia	Excise tax SSBs	Legislation	Positive only	Mandatory	No	General public	General public
Cyprus	No <sup>2</sup>	N/A	No <sup>2</sup>	Mandatory <sup>2</sup>	No <sup>2</sup>	N/A	No <sup>2</sup>
Czechia	No	No	No	Mandatory	No	No	No
Denmark	Excise tax sugar	Self-regulation	Positive only	Voluntary	No	No	Targeted groups
Estonia	No	Self-regulation	No	Mandatory	No	Targeted groups	No
Finland	Excise tax soft drinks	Self-regulation <sup>2</sup>	Both <sup>3</sup>	Mandatory	Mandatory	General public	Yes
France	Excise tax SSBs	Legislation	Both	Mandatory	Mandatory	General public	No
Germany	No	No	Both	Voluntary	Voluntary	No	Targeted groups
Greece	No	No	No	Mandatory	Mandatory	General public	Yes
Hungary	Excise tax multiple <sup>4</sup>	Legislation	No	Mandatory	Voluntary	No	General public
Iceland	No <sup>2</sup>	N/A	Positive only <sup>2</sup>	N/A	N/A	N/A	N/A
Ireland	Excise tax SSBs	Self-regulation	No	N/A	Voluntary	Targeted groups	No
Italy	No	Self-regulation	No	Mandatory	No	Targeted groups	General public
Latvia	Excise tax SSBs	Co-regulation <sup>2</sup>	No	Mandatory	Mandatory	General public	No
Lithuania	No	Legislation	Positive only	Mandatory	No	General public	General public
Luxembourg	No <sup>2</sup>	N/A	Both <sup>2</sup>	Mandatory <sup>2</sup>	Mandatory <sup>2</sup>	N/A	N/A
Malta	No	Legislation	No	Mandatory	No	No	No
Netherlands	No	Self-regulation	No	Voluntary	No	Targeted groups	General public
Norway	Ad valorem tax sugar	Legislation	Positive only	Voluntary	Voluntary	Targeted groups	Targeted groups
Poland	Excise tax SSBs	Legislation	No	Voluntary	No	No	No
Portugal	Excise tax SSBs	Legislation	No	Mandatory	Mandatory	Yes	General public
Romania	VAT soft drinks <sup>2</sup>	Legislation	No	Mandatory	No	No	No
Slovak Republic	No	N/A	No	Mandatory	Mandatory	No	Targeted groups
Slovenia	No	Co-regulation	Positive only	Mandatory	Voluntary <sup>2</sup>	General public	General public
Spain	VAT soft drinks <sup>2,5</sup>	Co-regulation	No	Voluntary	No	General public	General public
Sweden	No	Legislation	Positive only	Mandatory	No	Targeted groups	General public

## Policy actions to reduce risk factors for cancer and target at-risk population

### Prevention of cancers caused by HPV and hepatitis B and C

- Nearly all EU+2 countries have a **national policy** of universal vaccination against HBV and HPV vaccination. HPV vaccination is offered free of charge for both girls and boys in most EU+2 countries

### Strategies to raise HPV vaccination rates:

- **Extend the age category** (9-14) and „catch-up“ vaccinations for older individuals (in Portugal and Netherlands up to age 26)
- **School-based vaccination** programmes (e.g. Nordic countries,
- **Healthcare provider recommendations** (GPs, pharmacists)
- **Education and information campaigns** (National campaigns: e.g. Portugal, hotline for parent's questions, e.g. DK)
- **One-dose régime** (UK-England, Ireland)
- **JA Project PERCH** (The PartnErship to Contrast HPV, 18 EU MS)



# CANCER PREVENTION

## Policy actions to reduce risk factors

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- Extend the age category (9-14) and „catch-up“ programmes (e.g. Austria and Netherlands up to age 26)
- School-based vaccination programmes (e.g. Ireland, Norway, Poland)
- Healthcare provider recommendations (e.g. France, Germany, Portugal)
- Education and information campaigns (Netherlands, Norway, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden)
- One-dose régime (UK-England, Ireland)
- JA Project PERCH (The PartnErship to Contrast HPV, 18 EU MS)

Country	All children included in vaccination strategy	Targeted age (primary vaccination)	Catch-up	Vaccine registry	National school-based vaccination programme
<b>best examples</b>					
Austria	✓	9-12	Up to age 21	✗	✓
Belgium	✓	11-12 (Flanders) 13-14 (Wallonia, Brussels)	12-18 (in Wallonia and Brussels regions) <sup>1</sup>	✓	✗ (Flanders) ✓ (Wallonia, Brussels)
Bulgaria	Girls only	12-13		✗	✗
Croatia	✓	14-15		✗	✓
Cyprus	✓	11-12	Up to age 13	✗	✓
Czechia	✓	13-14		✗	✗
Denmark	✓	12	Up to age 17	✓	✗ <sup>1,2</sup>
Estonia	Girls only <sup>3</sup>	12-14		✓	✓
Finland	✓	10-12	13-16 (boys)	✓	✓
France	✓	11-14	Up to age 19; 26 for MSM	✗ <sup>1</sup>	✓
Germany	✓	9-14	Up to age 18	✗ <sup>1</sup>	✗
Greece	✓	9-12	Up to age 15	✗	✗
Hungary	✓	13		✓	✓
Iceland	✓	12		✓	✓
Ireland	✓	12	Up to age 25	✓	✓
Italy	✓	11-12	Differs by region	✓	✗
Latvia	✓	12-17		✓	✗
Lithuania	✓	11-12		✓ <sup>1</sup>	✗
Luxembourg	✓	9-14	Up to age 20	✓	✗
Malta	✓	9-14		✓	✗
Netherlands	✓	10	Up to age 26	✓	✗
Norway	✓	12-13	Up to age 20	✓	✓
Poland	✓	12-13		✗	✗
Portugal	✓	10	Up to age 17 (to initiate schedule) up to age 26 (to finalise schedule) <sup>1</sup>	✓	✗
Romania	✓	11-18		✓	✗
Slovak Republic	✓	12-15 <sup>1</sup>		✗	✗
Slovenia	✓	12-13		✓	✓
Spain	✓	11-12		✓	✓
Sweden	✓	11-12	Up to age 18 (girls)	✓	✓

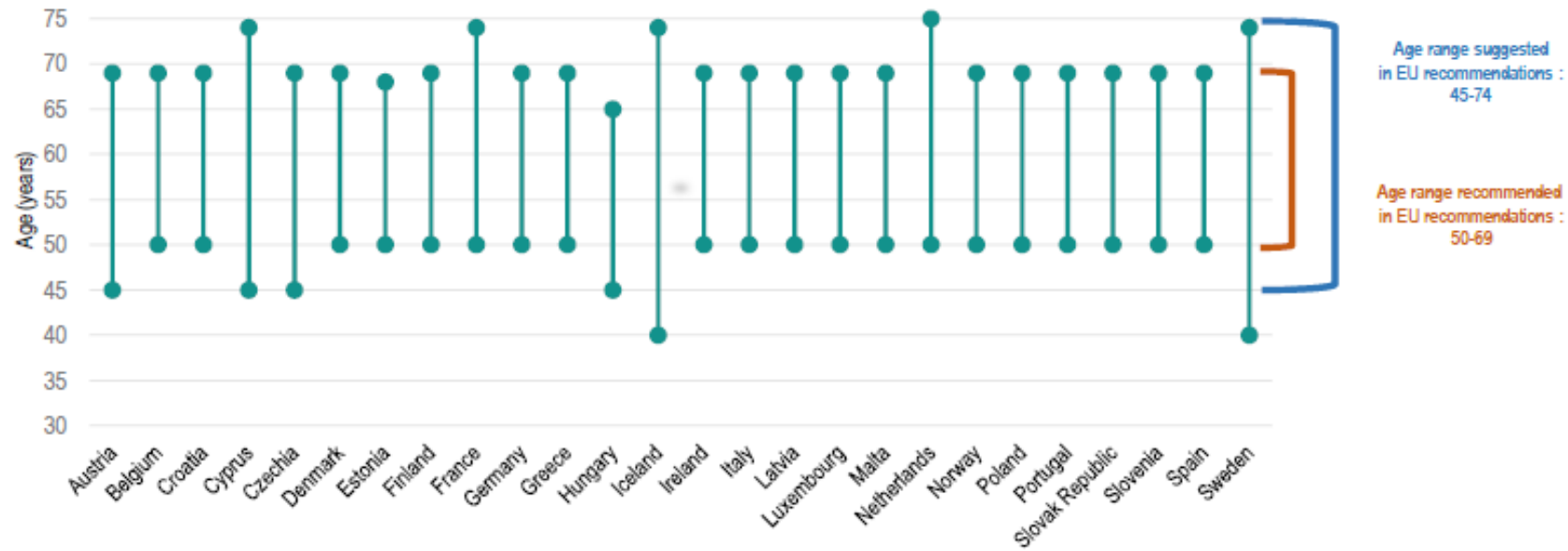
## Screening and cancer early detection programmes and policy actions

- **WHO's Principles and Practice of Screening for Disease (1968)**
- **New EU Council Recommendation on Cancer Screening (12/2022)**
  - **Aims to ensure that 90% of the EU population who qualify for breast, cervical and colorectal cancer screening are offered these by 2025 (also EBCP goal).**
  - **It suggests mammography for women aged 45-74** (recommends for 50-69)
  - **It recommends** quantitative faecal immunohistochemical test (**FIT**) for colorectal and **HPV testing** for cervical screening
  - It furthermore calls for **extending screening programmes for:**
    - **Lung** (8 / EU+2 countries, mostly pilot projects: B, CZ, I, N, SLO, E, S; EU4Health project SOLACE - trial in 10 EU countries)
    - **Prostate** (7 countries preparing pilot project: HR, CZ, EST, F, IRL, M, RO, S; 12 countries developing national cost-effective algorithms for early detection of prostate cancer within PRAISE-U project)
    - **Gastric cancer** (under certain circumstances, EU funded projects: TOGAS and EUROHELICAN)

## Screening programmes

- **Most EU+2 countries have implemented population-based screening programmes** at the national or regional level, but with variations in age ranges, screening intervals and methods, **and wide variation in participation:**
  - **Breast (26 / 29 countries, exl. Bulgaria, Lithuania, Romania: non-population based)**

Target age range of population-based breast cancer screening programmes among EU+2 countries

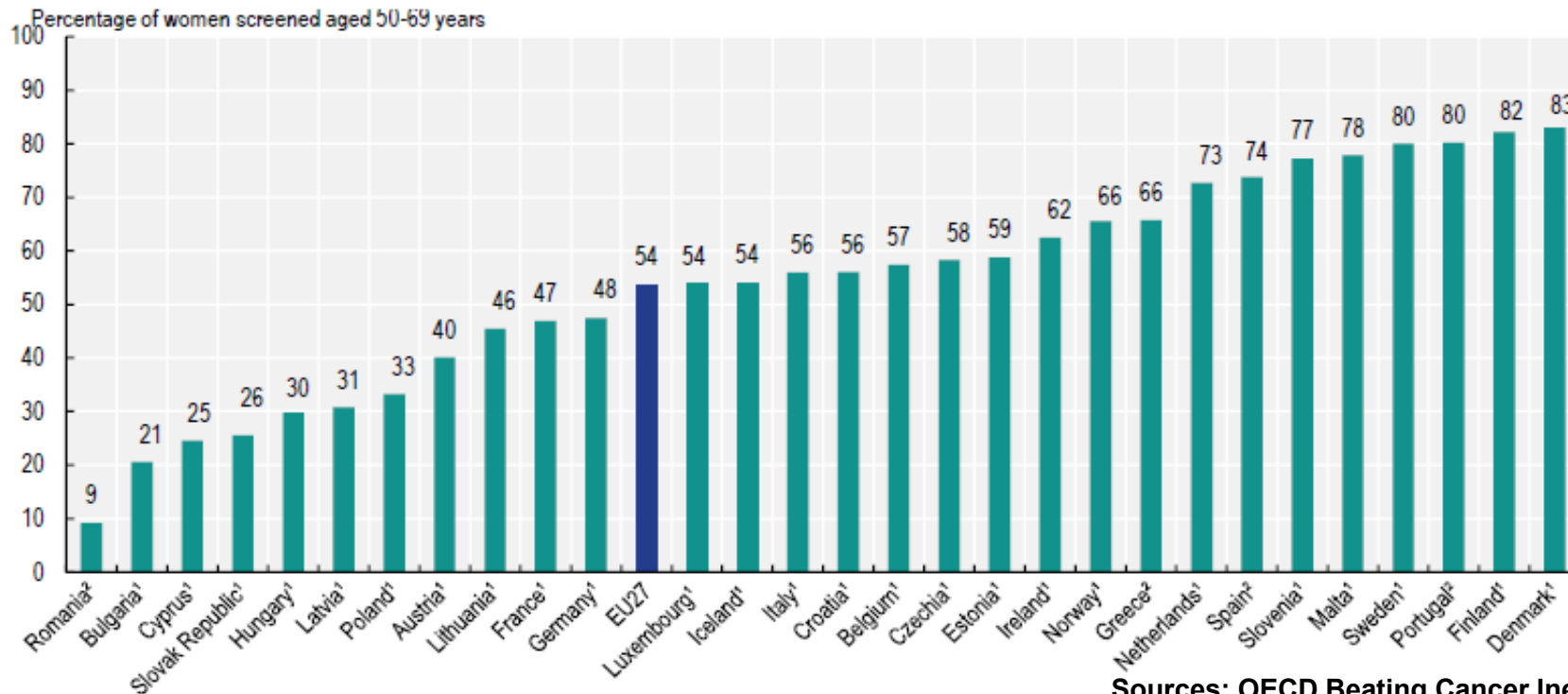




## Screening programmes

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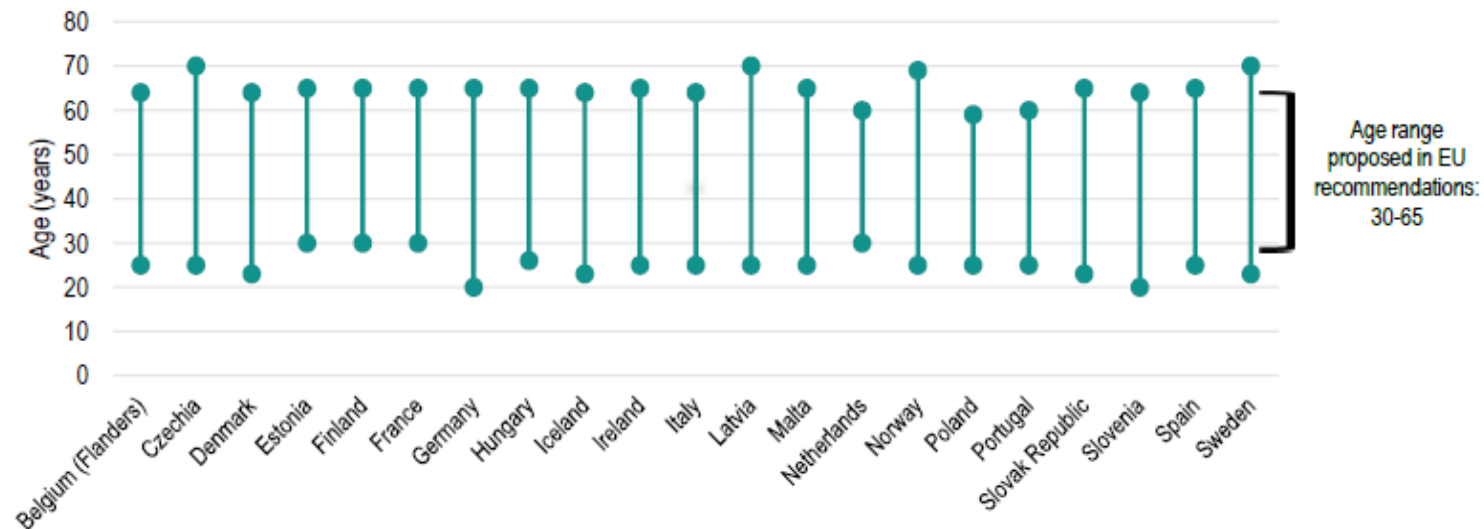
In 11 EU+2 countries, participation in breast cancer screening is lower than 50% of women aged 50-69



## Screening programmes

- **Most EU+2 countries have implemented population-based screening programmes** at the national or regional level, but with variations in age ranges, screening intervals and methods, **and wide variation in participation:**
  - **Cervical cancers (21 of the 29 EU+2 countries, exl. Austria, Bulgaria, Croatia, Cyprus, Greece, Lithuania, Luxembourg, Romania: non-population based; 18 with HPV testing)**

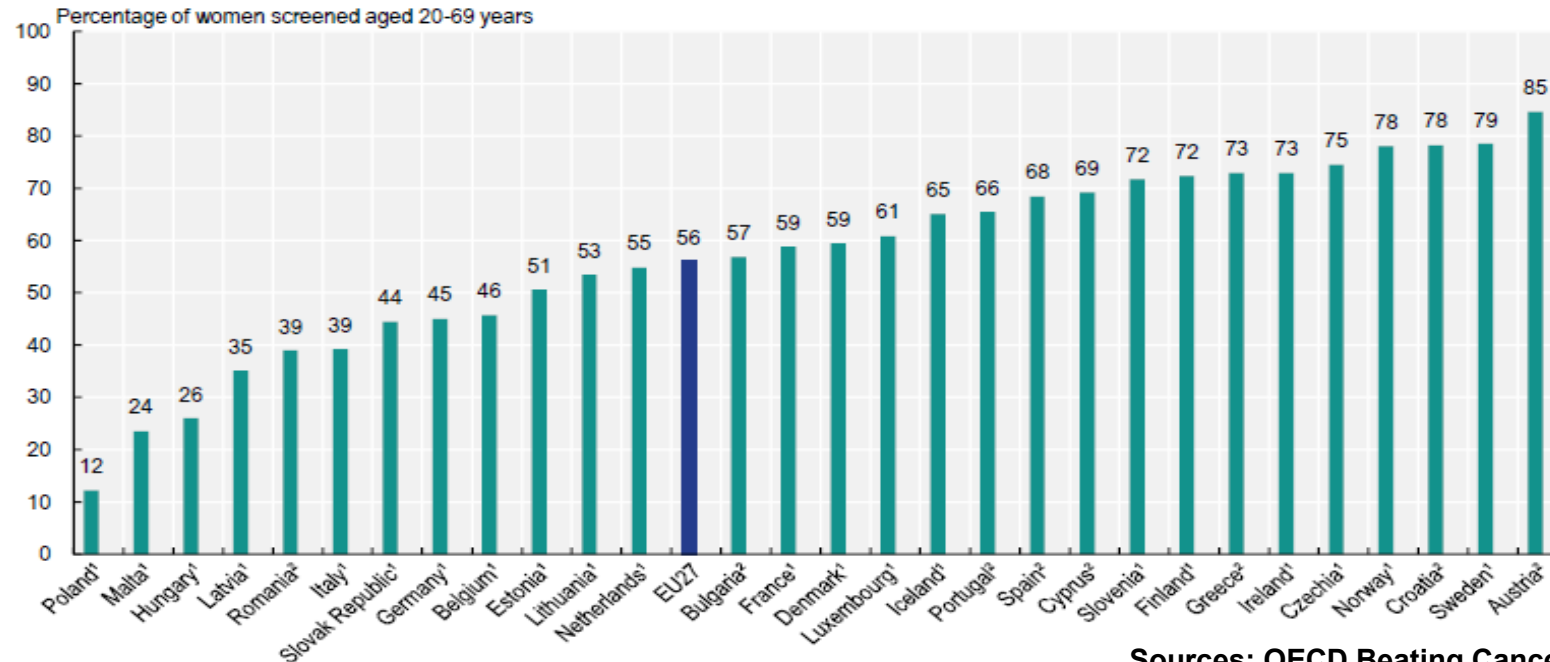
The target age of population-based cervical cancer screening programmes differs among EU+2 countries



## Screening programmes

- **Most EU+2 countries have implemented population-based screening programmes** at the national or regional level, but with variations in age ranges, screening intervals and methods, and **wide variation in participation:**
  - **Cervical cancers (21 of the 29 EU+2 countries, exl. Austria, Bulgaria, Croatia, Cyprus, Greece, Lithuania, Luxembourg, Romania: non-population based; 18 with HPV testing)**

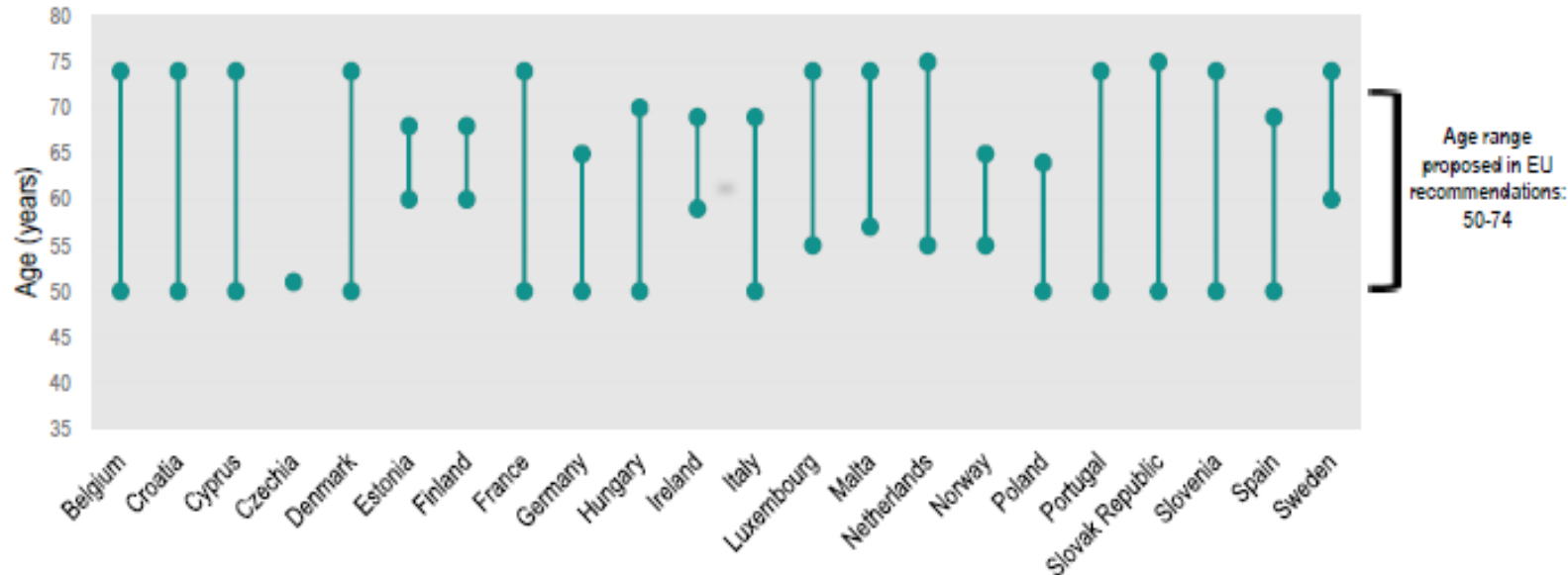
In 9 EU+2 countries, participation in cervical cancer screening is lower than 50% of women aged 20-69



## Screening programmes

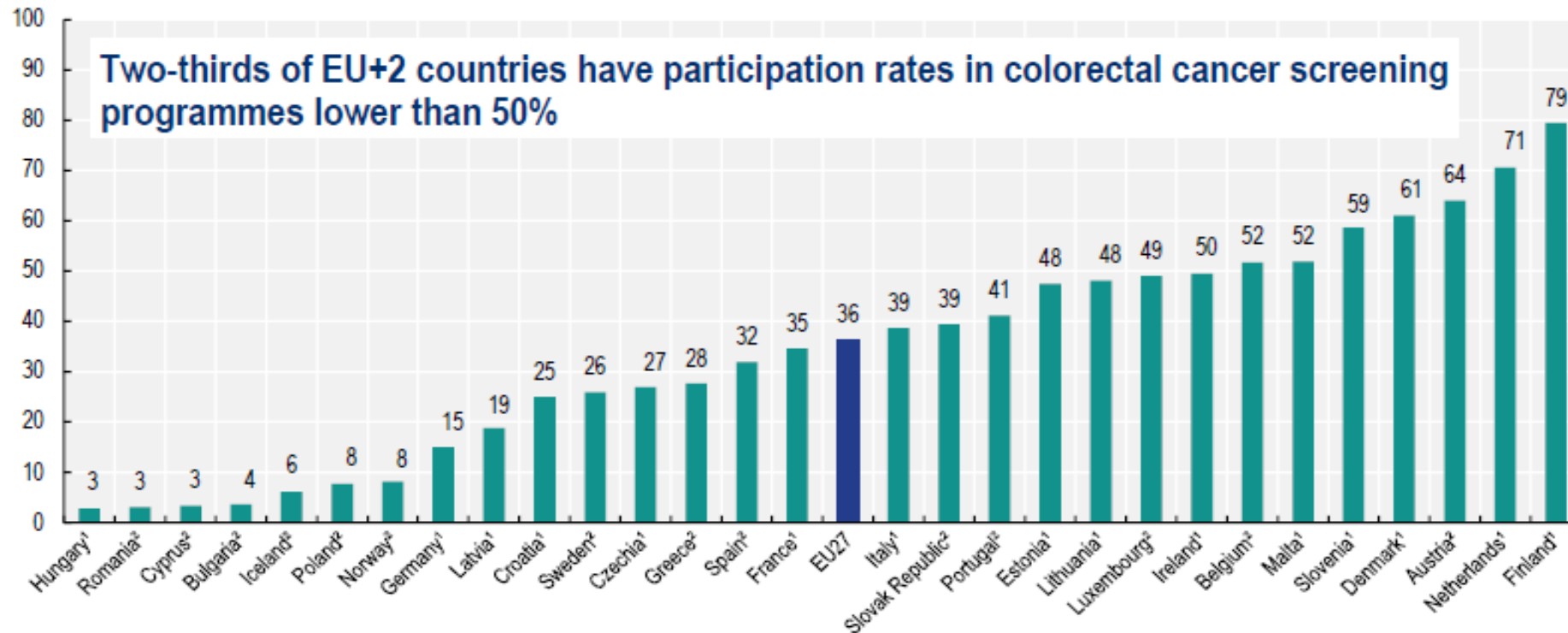
- **Most EU+2 countries have implemented population-based screening programmes** at the national or regional level, but with variations in age ranges, screening intervals and methods, **and wide variation in participation:**
  - **Colorectal (22 / 29, exl. Bulgaria, Iceland: non; Austria, Greece, Latvia, Lithuania, Romania: non-population based, 9 with option of initial colonoscopy)**

Target age of population-based colorectal cancer screening programmes differs among EU+2 countries



## Screening programmes

- **Most EU+2 countries have implemented population-based screening programmes** at the national or regional level, but with variations in age ranges, screening intervals and methods, **and wide variation in participation:**
  - **Colorectal (22 / 29, exl. Bulgaria, Iceland: non; Austria, Greece, Latvia, Lithuania, Romania: non-population based, 9 with option of initial colonoscopy)**



## Screening programmes

**Uptake of cancer screening varies according to individual socio-economic characteristics including education, income and citizenship:**

- **For breast cancer screening**, the likelihood of having received a mammogram is about **10% higher among women with higher education levels**
- The likelihood of receiving **colon cancer screening** is **higher among the citizens in higher education levels (about 7 %)** and the **highest income quartile (about 6 %)**.

Income and education are significant predictors of cancer screening participation in EU+2 countries

Individual characteristics	Likelihood of breast cancer screening		Likelihood of colorectal cancer screening	
	Age, sex, household	All socio-economic characteristics	Age, sex, household	All socio-economic characteristics
Non-citizen (compared to citizen)	↓ (*)	↓ (NS)	↓ (NS)	↓ (NS)
Rural areas (compared to urban areas)	↓ (***)	↓ (***)	↓ (***)	↓ (**)
Highest income quartile (compared to lowest quartile)	↑ (***)	↑ (***)	↑ (***)	↑ (***)
High education (compared to lowest education)	↑ (***)	↑ (***)	↑ (***)	↑ (***)



## Screening programmes

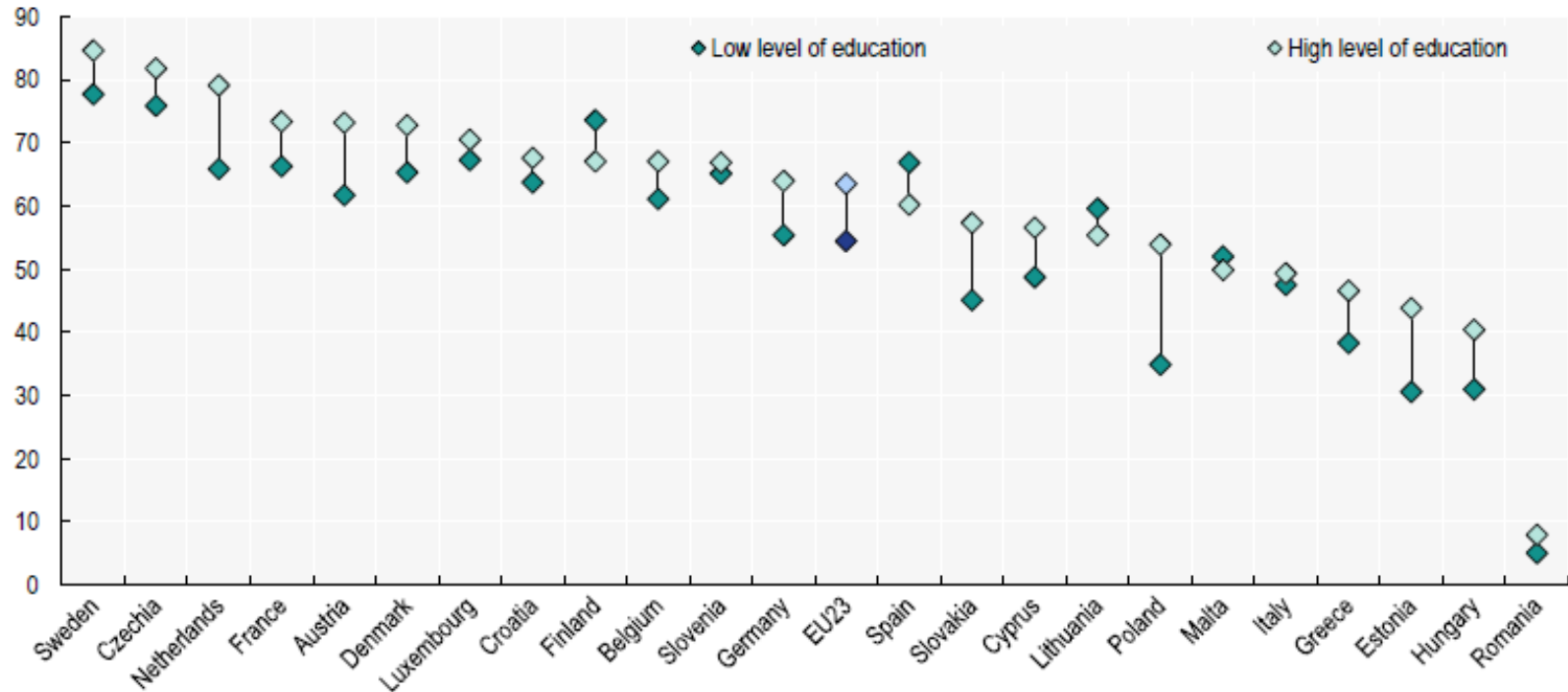
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**Women with low education levels are less likely to receive a mammogram in 19 EU+2 countries**

Indirectly age-standardised probability of having had a mammogram, by country and education level

Percentage of women screened



## Screening and cancer early detection programmes and policy actions

Several policy actions are being explored to improve the reach and effectivity of screening and early diagnosis programmes

- **Evidence based best practices:**

- **Intervention to improve cancer awareness** (21 / 26 responded EU countries), and specific **initiatives to reach vulnerable populations** (18 / 26 EU countries)
- To involve **primary healthcare providers** (15 / 26 EU countries)
- **Sending personal invitation letter accompanied by background material for informed decision making** (CRC screening: 19/22)
- **Provide options to self-test at home** (CRC screening: 14/22, invitation with attached test - Belgium, NL, DK; in pharmacies or by on-line order - Hungary, HPV screening: self-sampling tests sent to women in deprived areas - Czech Rep.)

## Screening and cancer early detection programmes: strategies to improve their effectivity

- **Evidence based best practices:**
  - Use **artificial intelligence** for cancer screening (Norway and Germany - implemented policies on use of AI applications as part of their screening programmes, e.g. double reading supported by AI)
    - Supported by EU AI Act, European Cancer Imaging Initiative, EUCAIM (European Federation for Cancer Images), eCAN - JA on strengthening eHealth
  - **Fast-track pathways** / referral mechanisms to help reduce the time between cancer suspicion, cancer diagnosis and start of initial treatment (Denmark, Ireland, Latvia, Lithuania, Poland, Slovenia, Spain, Sweden, UK).
    - In Denmark, the fast-track pathway significantly improved relative survival rates. For all cancer patients, 3-year relative survival increased from 45% to 54%)

## Screening and cancer early detection programmes: research and strategies to improve their effectivity

- **Other strategies/activities:**

- To conduct **RESEARCH** on personalised, risk-stratified and more effective approaches to improve cancer screening and early detection

- **EU Mission on Cancer** - supporting research projects in 4 clusters:

- **Understanding** (e.g. UNCAN, GENIAL, DISCERN, LUCIA)

- **Prevention & early detection** (e.g. PIECES, 4P-CAN, PREVENT, CPW, ONCODIR, CO-CAPTAIN, ONCOSCREEN, MAMMOSCREEN, PANCAID)

- **Diagnosis and Treatment** (PRIME-ROSE,....)

- **Quality of Life** (2023 call to „Establish best practices and tools to improve the quality of life for childhood cancer patients, survivors and their families in European regions“)



- **International studies** (e.g. MyPeBS, PERSPECTIVE)

- **EU4Health supported JA** (e.g. JA-PreventNCD using genetic (e.g. PRS), and non-genetic factors (e.g. breast density) to tailor the screening)

## Screening and cancer early detection programmes: research and strategies to improve their effectivity

The 15 EU Widening countries under Horizon Europe

Research is the right way, but Widening countries continue to perform worse than non-Widening EU countries in winning grants through the framework programme (e.g. Horizon Europe)



Horizon Europe			Horizon Europe		
Country Name	Eligible Proposals	Retained Proposals	Country Name	Eligible Proposals	Retained Proposals
Total	59.580	9.917	Israel	2.602	481.000
Germany	17.849	3.704	Romania	2.577	462.000
Spain	16.204	3.042	Türkiye	2.265	339.000
Italy	15.962	2.921	Slovenia	2.147	473.000
United Kingdom	13.212	2.588	Cyprus	2.109	384.000
France	13.113	2.807	United States	1.988	440.000
Netherlands	10.540	2.394	Hungary	1.812	404.000
Belgium	9.206	2.153	Estonia	1.554	338.000
Greece	6.966	1.374	Bulgaria	1.342	257.000
Sweden	6.015	1.196	Luxembourg	1.273	251.000
Portugal	5.932	1.072	Lithuania	1.181	253.000
Austria	5.854	1.218	Croatia	1.141	217.000
Denmark	4.932	1.083	Serbia	1.089	219.000
Switzerland	4.633	1.069	Slovakia	933.000	213.000
Finland	4.598	973.000	Latvia	857.000	195.000
Ireland	4.351	899.000	Ukraine	685.000	127.000
Poland	4.224	806.000	Canada	524.000	123.000
Norway	4.007	894.000	Malta	507.000	104.000
Czechia	2.960	605.000			



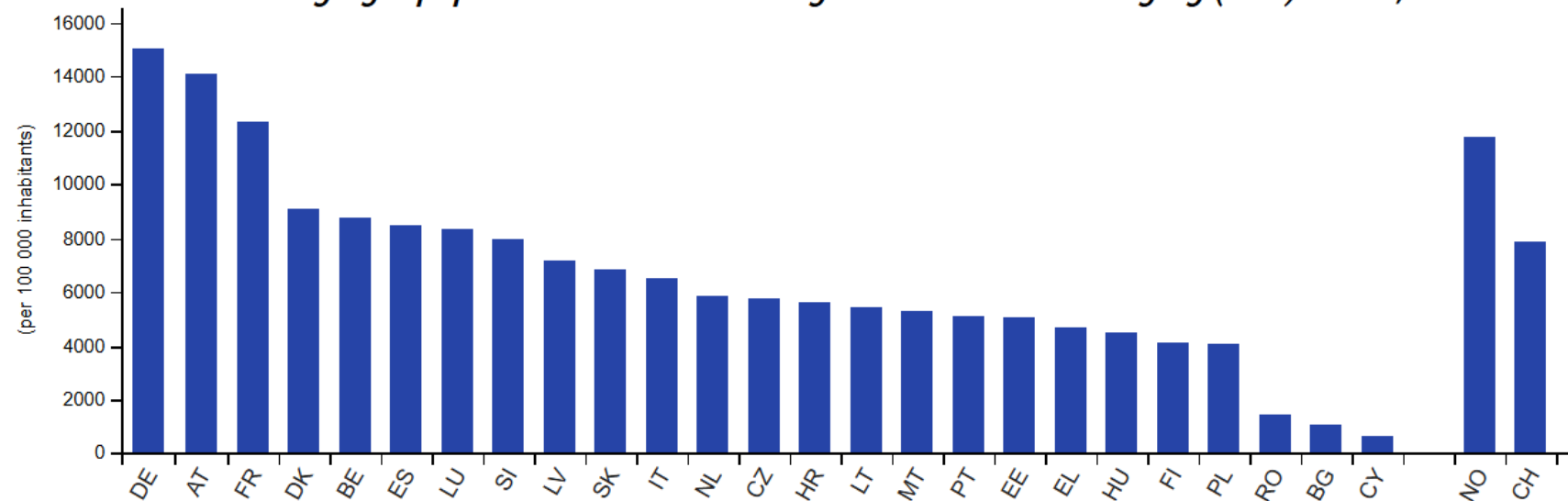


## Inequalities in patient access to cancer medicines and medical equipment

- **CT, MRI and PET scanners**

- **The availability of CT, MRI and PET scanner has increased in almost all EU+2 countries over the last 10 years** (MRI: Romania 2-fold, Latvia - 1,8-fold, Norway 7-fold, PET: Czech Rep. 2-fold: 1 per 500 000 inh.), **but the numbers of MRI and PET scans performed vary widely across the EU+2 countries\*** (even though the most common indication for PET scans is cancer).

*Use of imaging equipment – number of magnetic resonance imaging (MRI) scans, 2020*

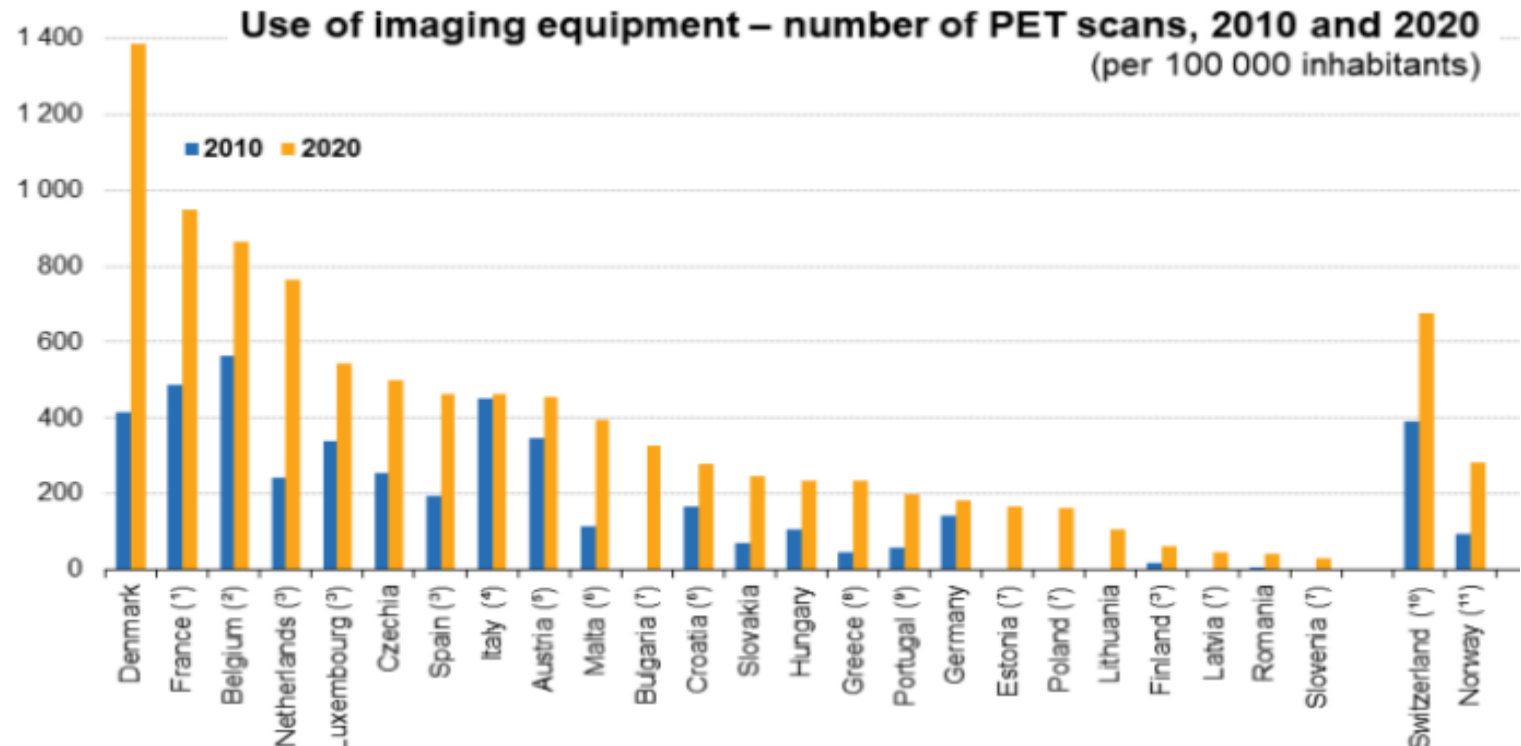


Sources:  
 OECD Beating Cancer Inequalities in the EU, 2024;  
 \* EUROSTAT - Health Care Resource statistics,  
 \*\* Self-investigation - data as of January 2024

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- **Robotic surgery**

- **21 of the 26 responding EU+2 countries used robotic or robot-assisted surgery** (exl. EU MS: Croatia, Estonia and Lithuania) and **the availability of robots has increased in almost all EU+2 countries over last 5 years, but still vary \*\*** (Czech Rep. 3-fold: 31 systems, 1 system per 340 000 inhabitants, Slovakia 2-fold: 4 systems, 1: 1,36 mil. inh., Poland + 53 %: 26 systems, 1:1,46 mil. inh.)

Sources:

OECD Beating Cancer Inequalities in the EU, 2024;

\* EUROSTAT - Health Care Resource statistics,

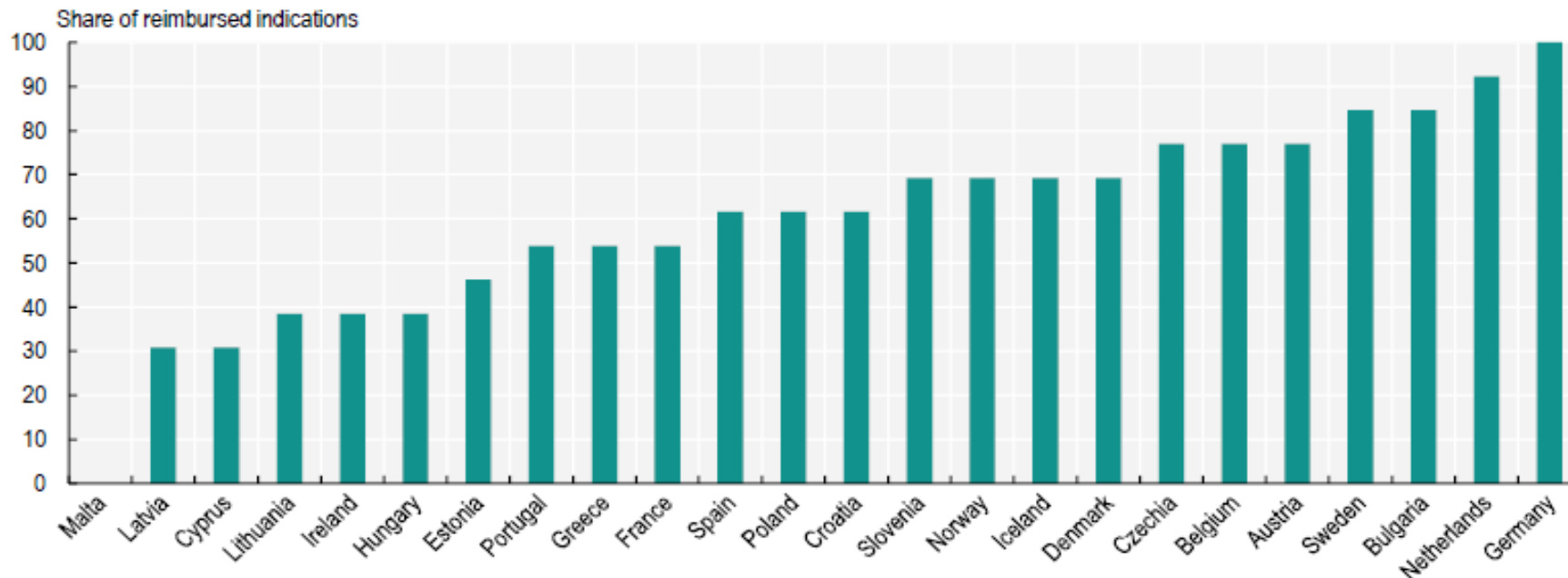
\*\* Self-investigation - data as of January 2024

## Inequalities in patient access to cancer medicines and medical equipment

- **Cancer medicines**

- There is a **three-fold difference** in public coverage of cancer medicines with a high clinical benefit across EU+2 countries ... and coverage does not mean that all eligible patients may have access in real clinical practice

The share of selected indications of newer cancer medicines with public reimbursement/coverage varies widely



**Central and Eastern European countries tend to have lower use of novel cancer medicines as measured in both cost and volume**

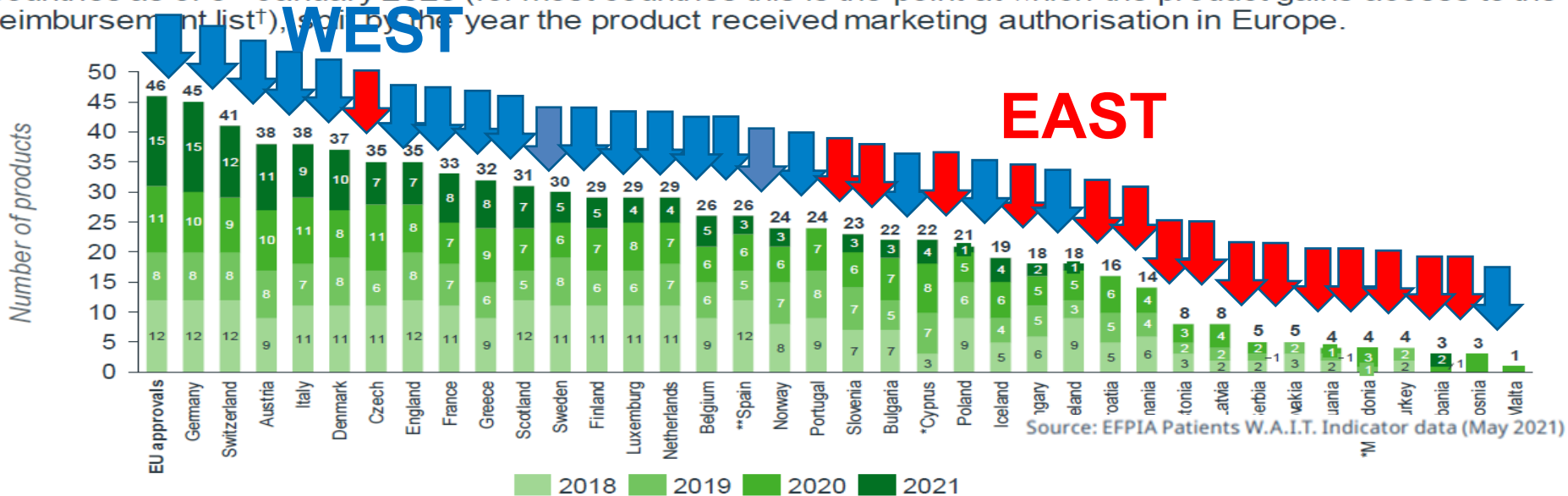
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- Cancer medicines**

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### Oncology availability by approval year (2018-2021)

The **total availability by approval year** is the number of medicines available to patients in European countries as of 5<sup>th</sup> January 2023 (for most countries this is the point at which the product gains access to the reimbursement list), split by the year the product received marketing authorisation in Europe.



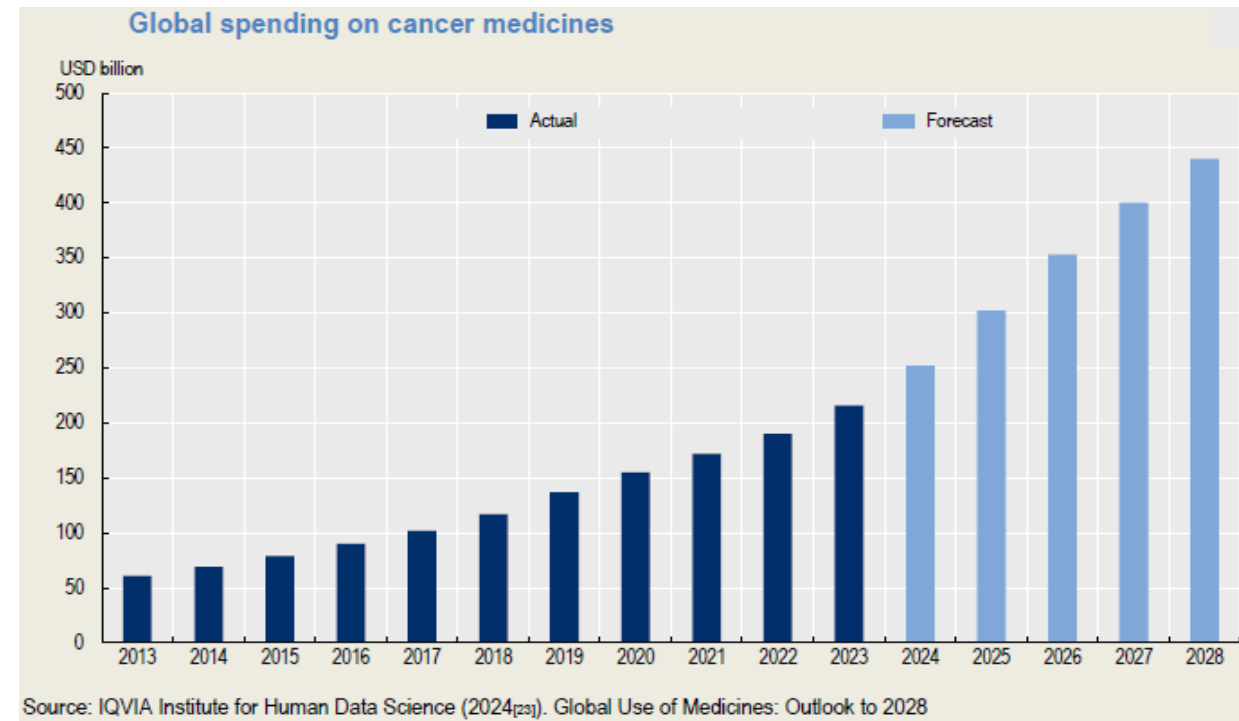
*Central and Eastern European countries tend to have lower use of novel cancer medicines as measured in both cost and volume*

- **Organisation of cancer care delivery is improving through care concentration, structured networks, multidisciplinary teams and better availability of home care**
- **Over two-thirds of 26 EU+2 countries** (responding to related questions of 2023 OECD Policy Survey) use **multidisciplinary teams (21/26)** and **clinical guidelines (20/26)** for high standards of cancer care ...why not all?
- **Half of EU+2 countries have concentrated cancer care delivery** vertically (national, regional and county centres) and/or horizontally structured cancer care delivery systems (cancer care networks) and **over half of EU+2 countries have established cancer care networks** to provide high-quality care
  - Centralisation of cancer care in sites has been credited with great improvements in **paediatric cancer** outcomes over the last decades
- **In most EU+2 countries** (excl. Slovakia and Bulgaria), their cancer centres are involved in **ERN networks** for international collaboration to care for patients with rare cancers (e.g. EURACAN)
- **A few countries use mobile palliative care** for patients at home (B,CZ,NL,SLO)



- **Organisation of cancer care delivery is improving through care concentration, structured networks, multidisciplinary teams and better availability of home care**
  - **Provider accreditation/certification is commonly used to ensure high-quality cancer care in 16 EU+2 countries**
  - **Over 65 cancer care centres in EU+2 countries are also accredited at the international level** (in 2023, incl. OECD A&D Programme)
  - **To reduce waiting times, at least one-third of EU+2 countries have set targets** (Denmark, Estonia, Finland, Iceland, Ireland, Latvia, Lithuania, Luxembourg, Portugal)
  - **Over half of EU+2 countries monitor quality of cancer care for continuous quality improvement**

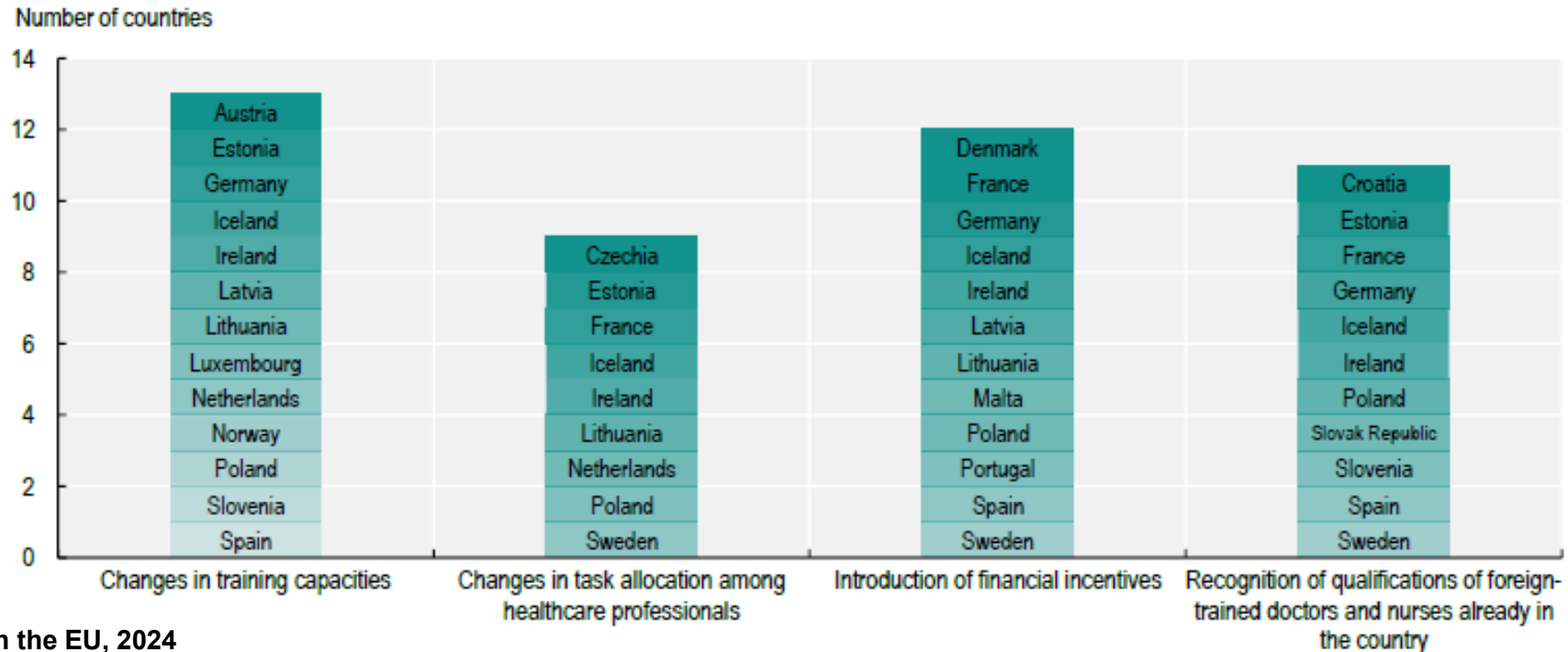
- **Sustainability of the cancer care delivery system has several critical areas**
- **The rising cost of cancer drugs**
  - **There has been a marked increase in the number of approved cancer medicines and extensions of indications in the past two decades**
  - **Global spending on oncology drugs is expected to grow by 14 to 17% per year**
  - **Providing access to expensive new treatments is a challenge to even the wealthiest countries. Out of 28 OECD countries, 23 indicate that the budget impact is increasingly influencing their coverage/reimbursement decisions of new cancer medicines.**



- **Sustainability of the cancer care delivery system has several critical areas**
- **Workforce shortage**
  - **Over three-quarters of EU+2 face workforce shortages in cancer care** (Austria, Estonia, Latvia and Norway reported general shortages of nurses and a **resulting negative impact on the delivery of cancer care**).
  - To tackle workforce shortages, EU+2 countries have **increased training capacity** (e.g. Slovenia), encouraged **task substitutions** among healthcare professionals (e.g. Ireland), provided **financial incentives** (e.g. Malta) and **recruited foreign-trained health professionals** (e.g. Iceland).

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- To tackle workforce capacity (€ professionals recruited for EU+2 countries have adopted a range of policies to address health workforce shortages in oncology



- **Central and Eastern European countries** dealing with a **greater number of inequalities** in the provision of cancer care and prevention.
- **Stronger action on prevention is urgently needed** to attenuate the burden of cancer on individuals, health expenditure and society.
- Alongside national cancer control plans, the **Europe's Beating Cancer Plan** defines an overarching **strategic vision** to help the EU27 tackle cancer.
- In order to make data-driven decisions to improve outcomes and close gaps, countries need to link socio-economic data to **high-quality cancer registries**.
- **Building a strong community** where experiences are effectively shared (e.g. **OECI**) is a proven way to overcome obstacles and address challenges.





Thank you for your attention

