

The burden of cancer in Europe - what fraction is preventable?

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Available Cancer Registry and Mortality Data on the Web.

International Agency for Research on Cancer



CANCER*Mondial*



ABOUT **CANCER***Mondial*

DATABASES

GLOBOCAN

Ci5

WHO

ACCIS

IICC

ECO

NORDCAN

SurvCan

RESOURCES

GLOSSARY

USEFUL LINKS

■ ABOUT **CANCER***Mondial*

Welcome to **CANCER***Mondial*. This website provides access to various databases containing information on the occurrence of cancer worldwide held and managed by the Section of Cancer Information (CIN) of IARC.

CIN databases:

- ▶ **GLOBOCAN** provides access to the most recent *estimates* (for 2008) of the cancer **incidence**, **mortality** and **prevalence** for 27 cancers **worldwide**.
- ▶ **Ci5** (Cancer Incidence in Five Continents) provides access to detailed information on the **incidence** of cancer recorded by **cancer registries** (regional or national) worldwide. Please note that
- ▶ **WHO** presents long time series of selected cancer **mortality** recorded in selected **countries** of the world, together with advanced prediction and trends analysis facilities.

<http://www-dep.iarc.fr/>



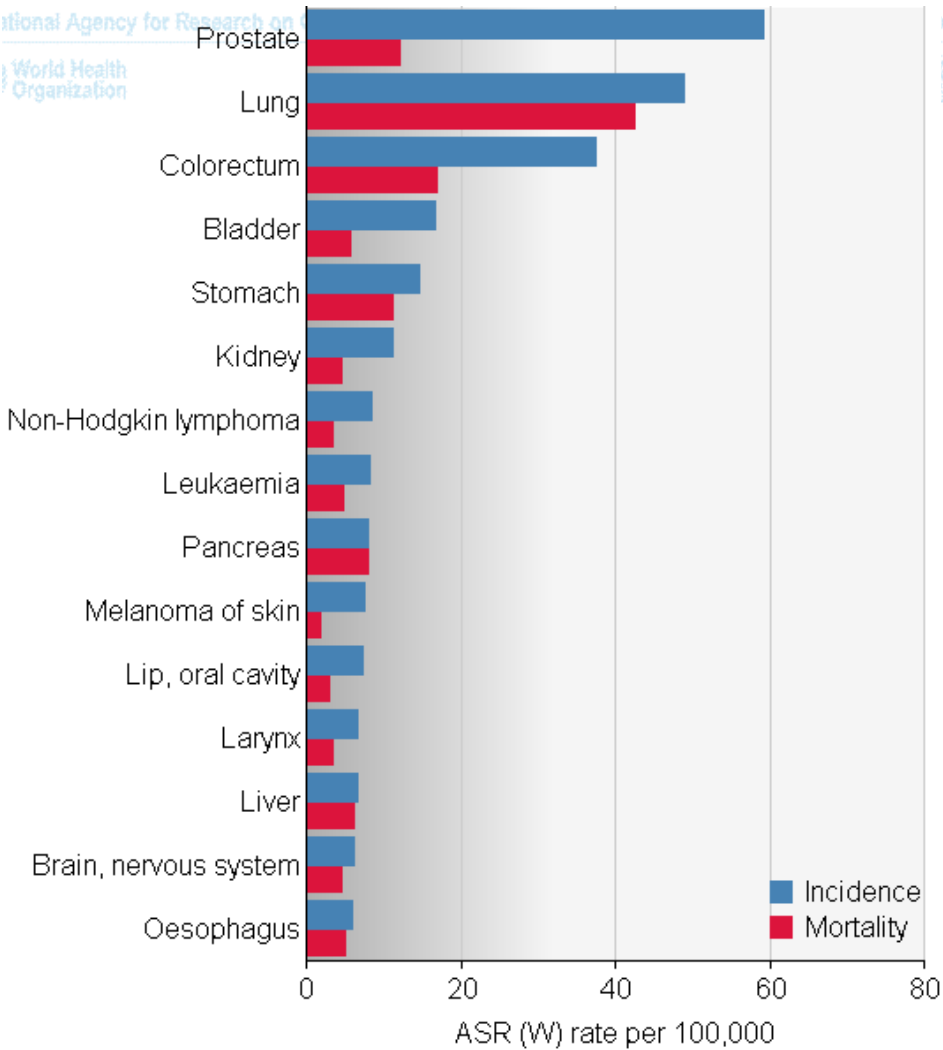
Magnitude of problem - 2008!

EUROPE	Male	Female	Both sexes
Population (thousands)	352515	379915	732430
Number of new cancer cases (thousands)	1700.5	1508.4	3208.9
Age-standardised rate (W)	292.9	217.2	246.9
Risk of getting cancer before age 75 (%)	29.5	21.4	25.0
Number of cancer deaths (thousands)	956.3	759.0	1715.2
Age-standardised rate (W)	155.3	89.8	117.3
Risk of dying from cancer before age 75 (%)	16.2	9.4	12.5

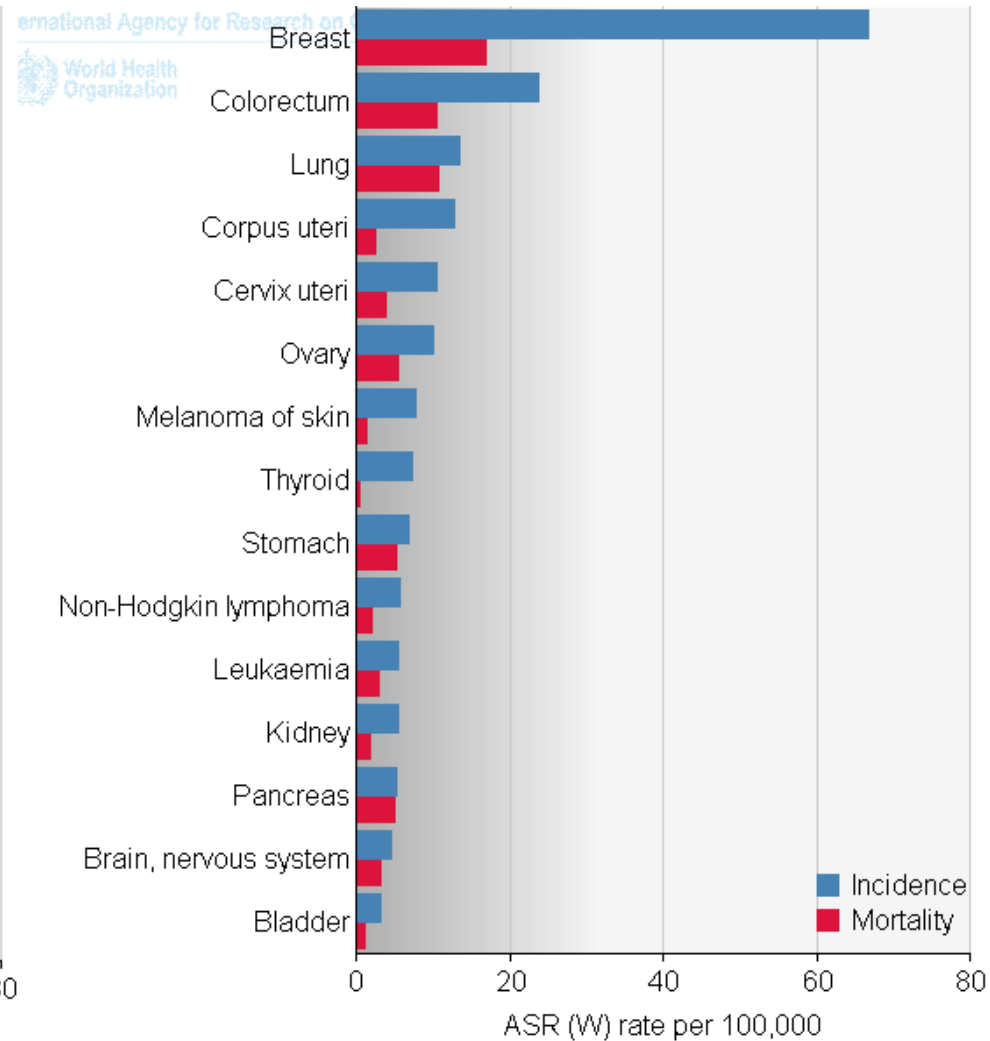


Estimated age-standardised incidence and mortality rates in Europe

men

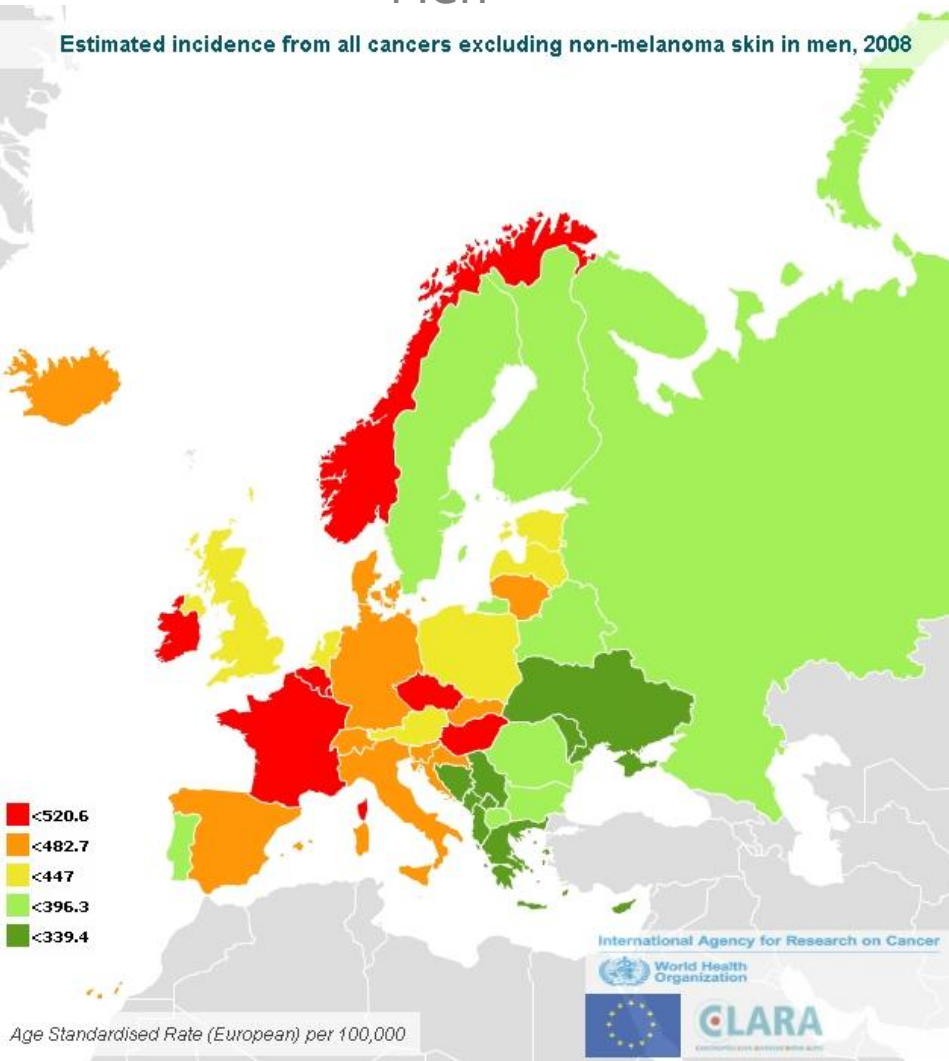


women



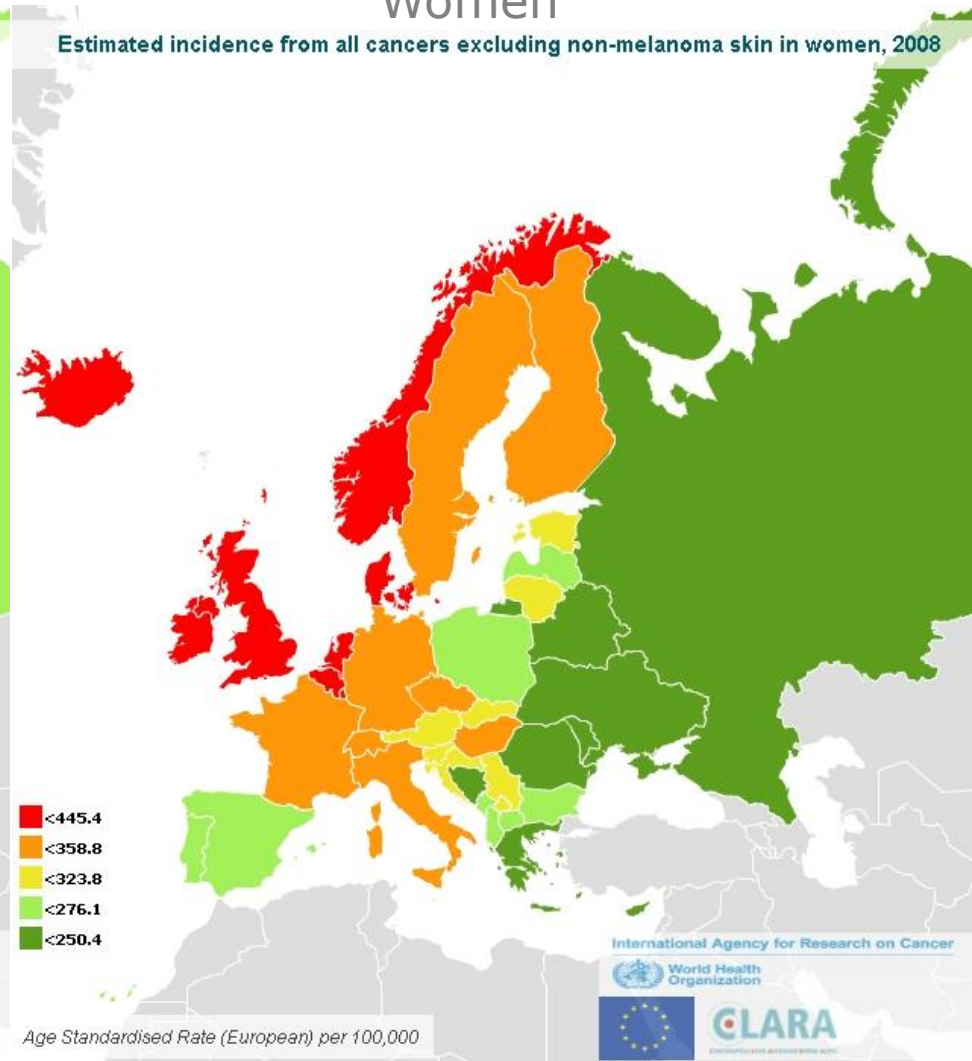
Men

Estimated incidence from all cancers excluding non-melanoma skin in men, 2008



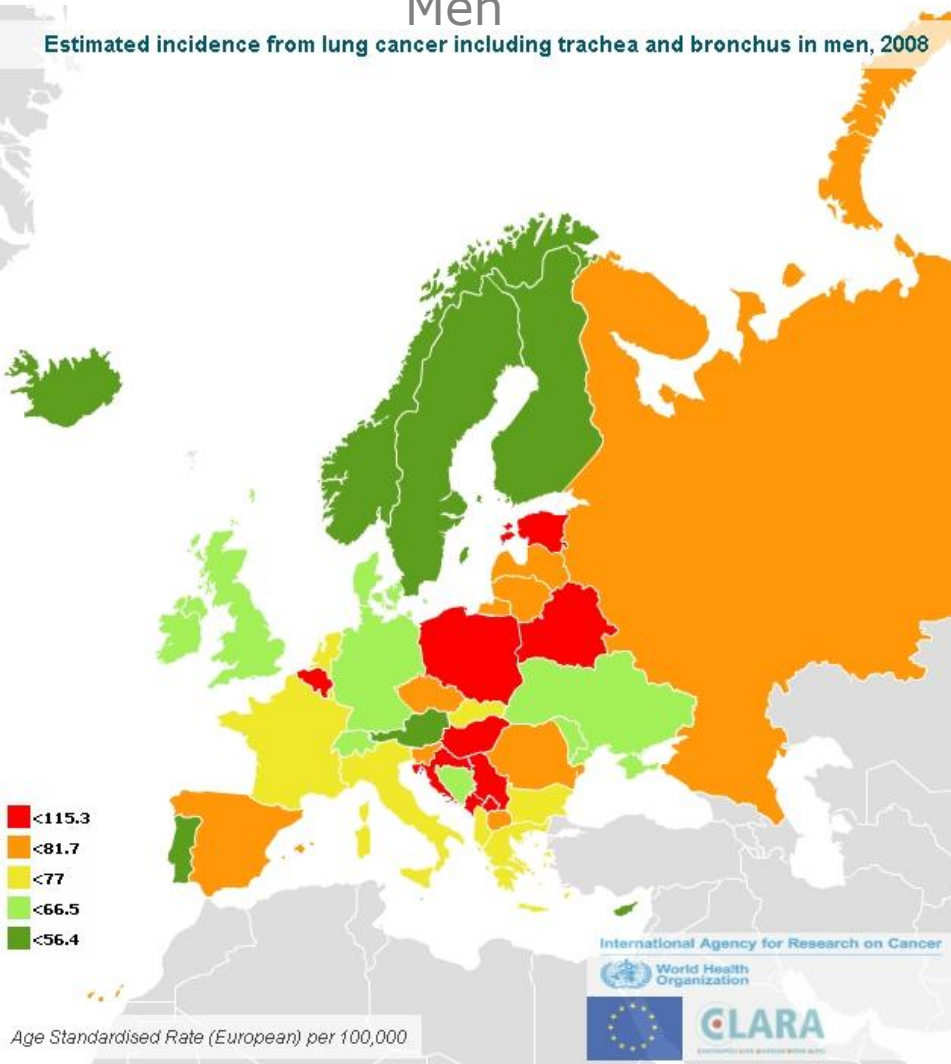
Women

Estimated incidence from all cancers excluding non-melanoma skin in women, 2008



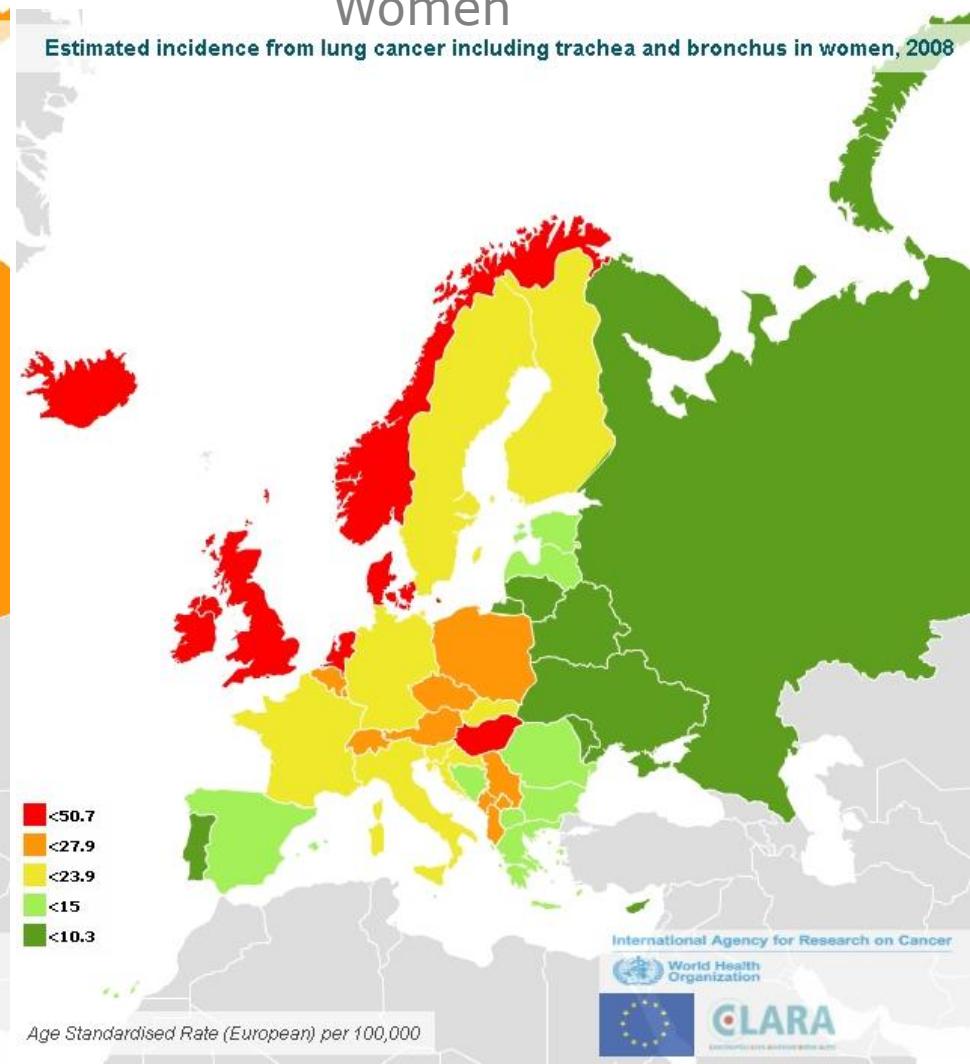
Men

Estimated incidence from lung cancer including trachea and bronchus in men, 2008



Women

Estimated incidence from lung cancer including trachea and bronchus in women, 2008



Magnitude of problem - 2025!

Excluding "risk"

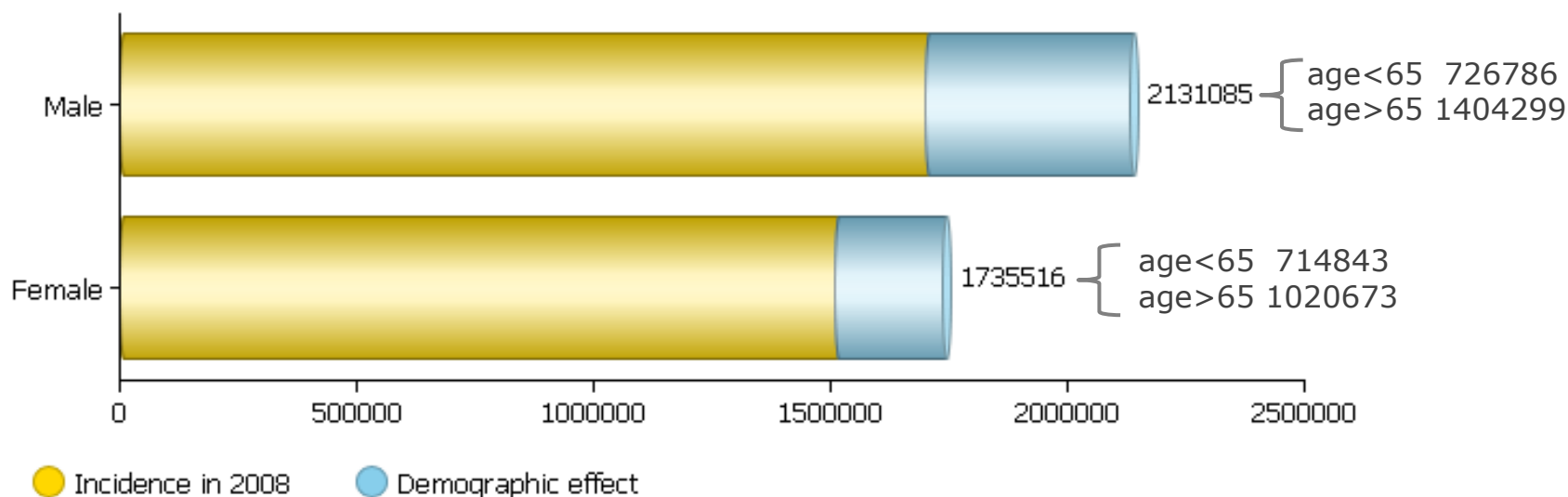
International Agency for Research on Cancer



Europe

All cancers excl. non-melanoma skin cancer

Number of new cancers in 2025 (all ages)



GLOBOCAN 2008 (IARC) (26.9.2012)



"Risk" the proportion we can influence

Colorectal cancer Nordic countries 2009 vs 2025

Women

Average annual number	10122	
Overall change	2181	
Change due to change in population	1687	77 %
Change due to change in risk	493	23 %

Men

Average annual	11648	
Overall change*	3318	
Change due to change in population	2678	81 %
Change due to change in risk	639	19 %



Avoidable cancers by preventive measures

EUROPEAN JOURNAL OF CANCER 44 (2008) 1390-1403

Table 1b – Recent estimates by the IARC from a sample European country⁷³

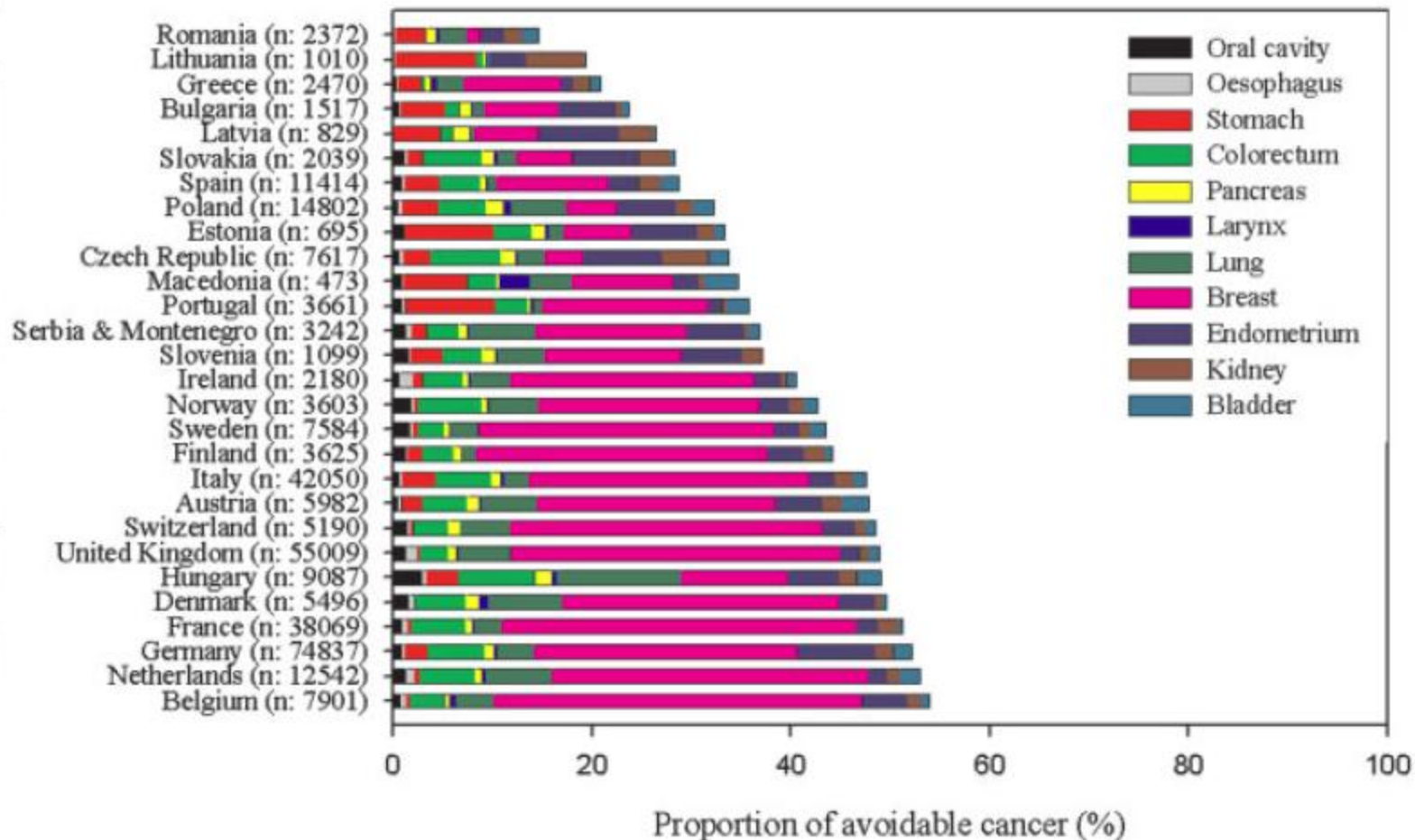
Factors	Men (%)	Women (%)
Smoking	27	6
Alcohol	11	5
Overweight	<p>"Avoidable" of 2025 incidence: 980.000 among men in 2025+ 430.000 among women in 2025+ ~ 36%</p>	
Physical activity		
Infection		
Sunlight		
Occupational exposure	3	<1
Environmental exposure	<1	<1



b

Women

Countries (number of avoidable cancer cases)





Available at www.sciencedirect.com

SciVerse ScienceDirect

journal homepage: www.ejconline.com



How many deaths would be avoidable if socioeconomic inequalities in cancer survival in England were eliminated? A national population-based study, 1996–2006

*Libby Ellis *, Michel P. Coleman, Bernard Rachet*

Cancer Research UK Cancer Survival Group, London School of Hygiene and Tropical Medicine, UK

About 11% if difference to the most affluent group was eliminated



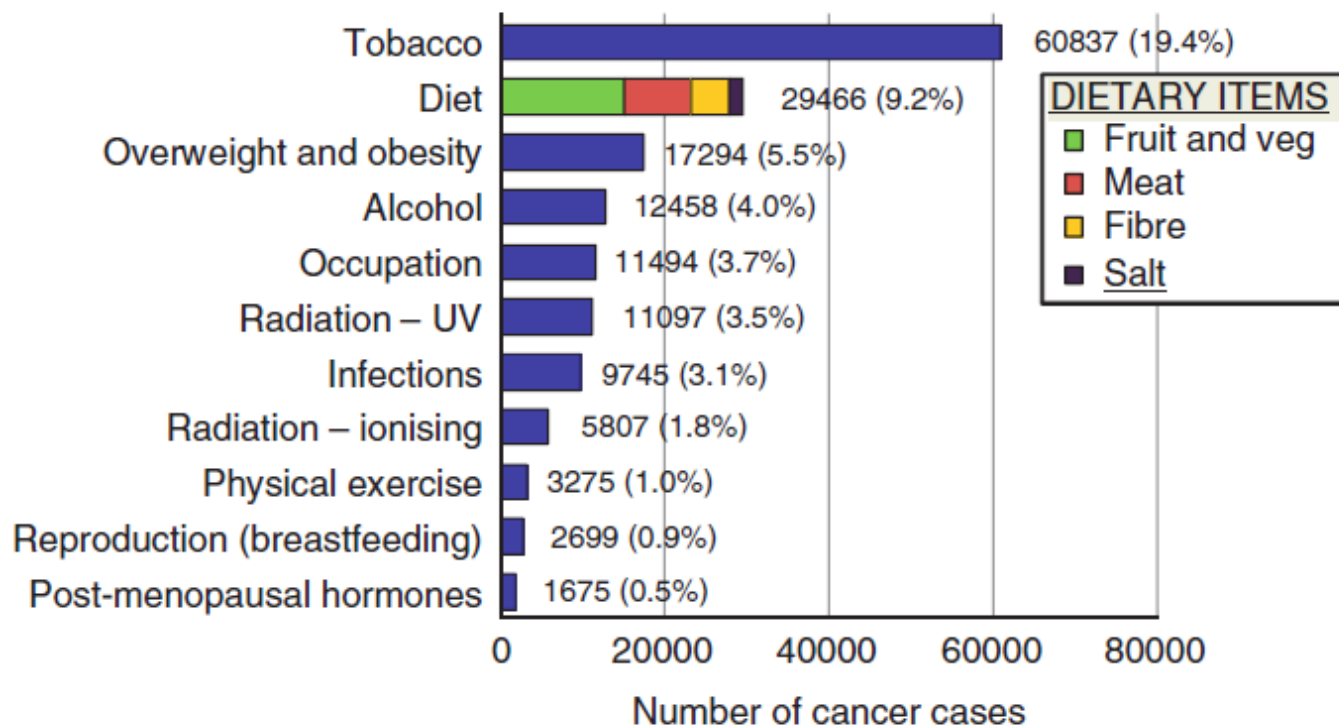


Figure 1 Number and percentage of cancer cases in the UK attributable to different exposures.

DM

¹ Cen² Can



available at www.sciencedirect.com



journal homepage: www.ejconline.com



Impact of a smoking and alcohol intervention program on lung and breast cancer incidence in Denmark: An example of dynamic modeling with Prevent

Isabelle Soerjomataram ^{a,b,*}, Esther de Vries ^{a,b}, Gerda Engholm ^c, Georg Paludan-Müller ^c, Henrik Brønnum-Hansen ^d, Hans H. Storm ^c, Jan J. Barendregt ^e

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Prevention – by tax/price increase

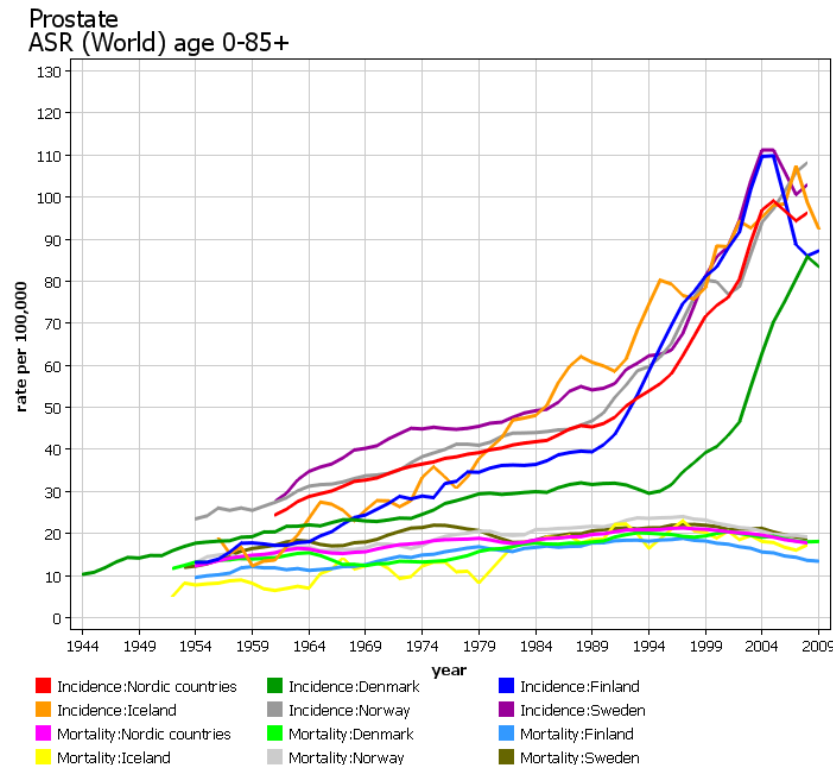
PREVENT PGM

- 49% less lung cancer cases in 2050 if tobacco was eliminated to day.
- 21% less lung cancer cases in 2050 by 10% price increase on tobacco every 5th year.
- 7% less breast cancer cases in 2050 by reduction of alcohol intake to 2g/day (\sim 0-7 drinks/week).
- 4% less breast cancer cases by a 10% price increase for alcohol every 5th year.



Prevention of cancer deaths -

- Reduce incidence
- Screening -early detection - treatment



Data protection regulation

Viviane Reding :



New Regulation – law in 2015

Heterogeneity – research obstacles – definition problems improved?

Can we monitor populations and link large data bases on screening and vaccination ?

Will we sail the “health ship” without a chart and a compass?

