



Adapting the cancer prevention recommendations to Latin America and the Caribbean

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1. Background and rationale

2. Methodology

3. Dissemination

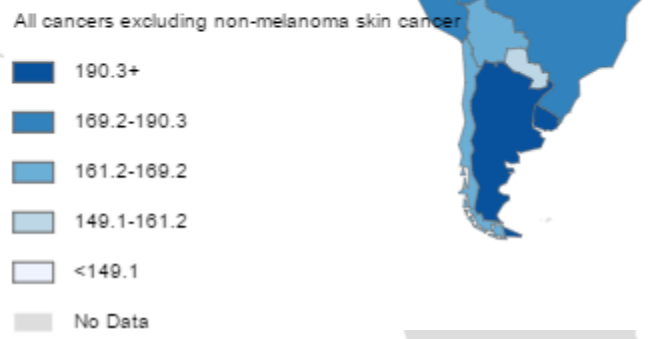
Rationale

- ❑ 1.1 million people were diagnosed with cancer and 0.6 millions dead in Latin America and the Caribbean in 2012 (all cancers excl. non-melanoma)
- ❑ Expected increase until 2030: > 65% (to 1.8 million new cases)
> 75% (to 1.06 million deaths)
- ❑ Demographic changes (world's most urbanized region):
40% (1950) -> 70% (1990) -> 80% (2014) -> 90% (2050)
74% in EU (2014) urban population
Brazil and the southern cone may reach 90% by 2020

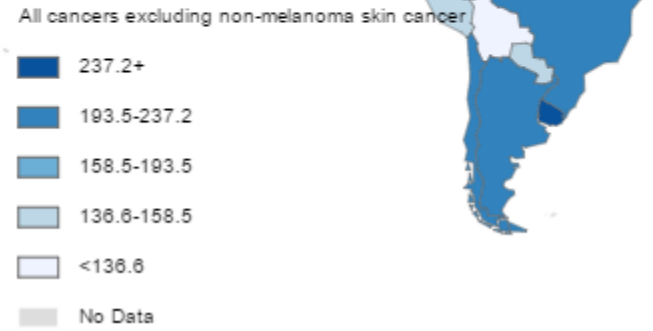
Cancer Incidence and Mortality in Latin America and the Caribbean

Source: Globocan 2012

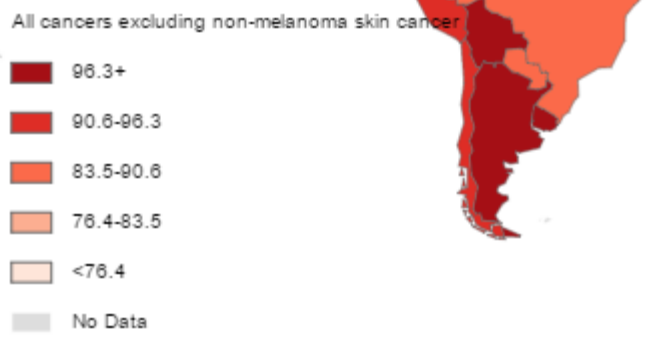
Female incidence



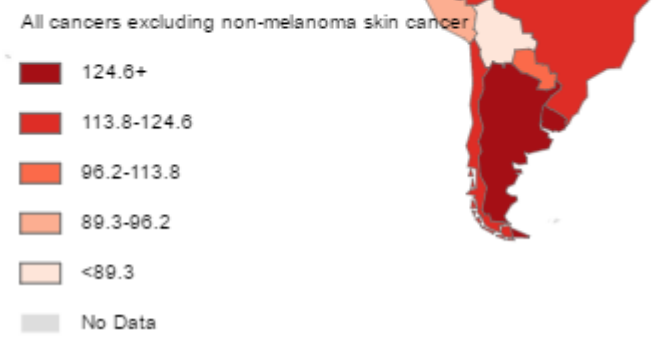
Male incidence

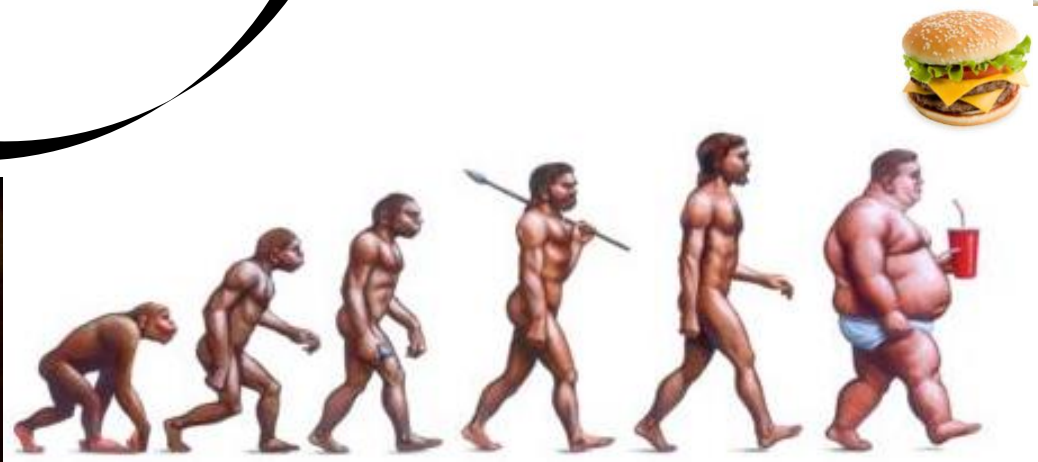
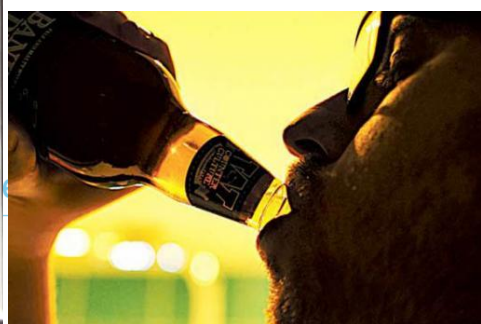


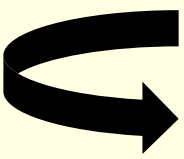
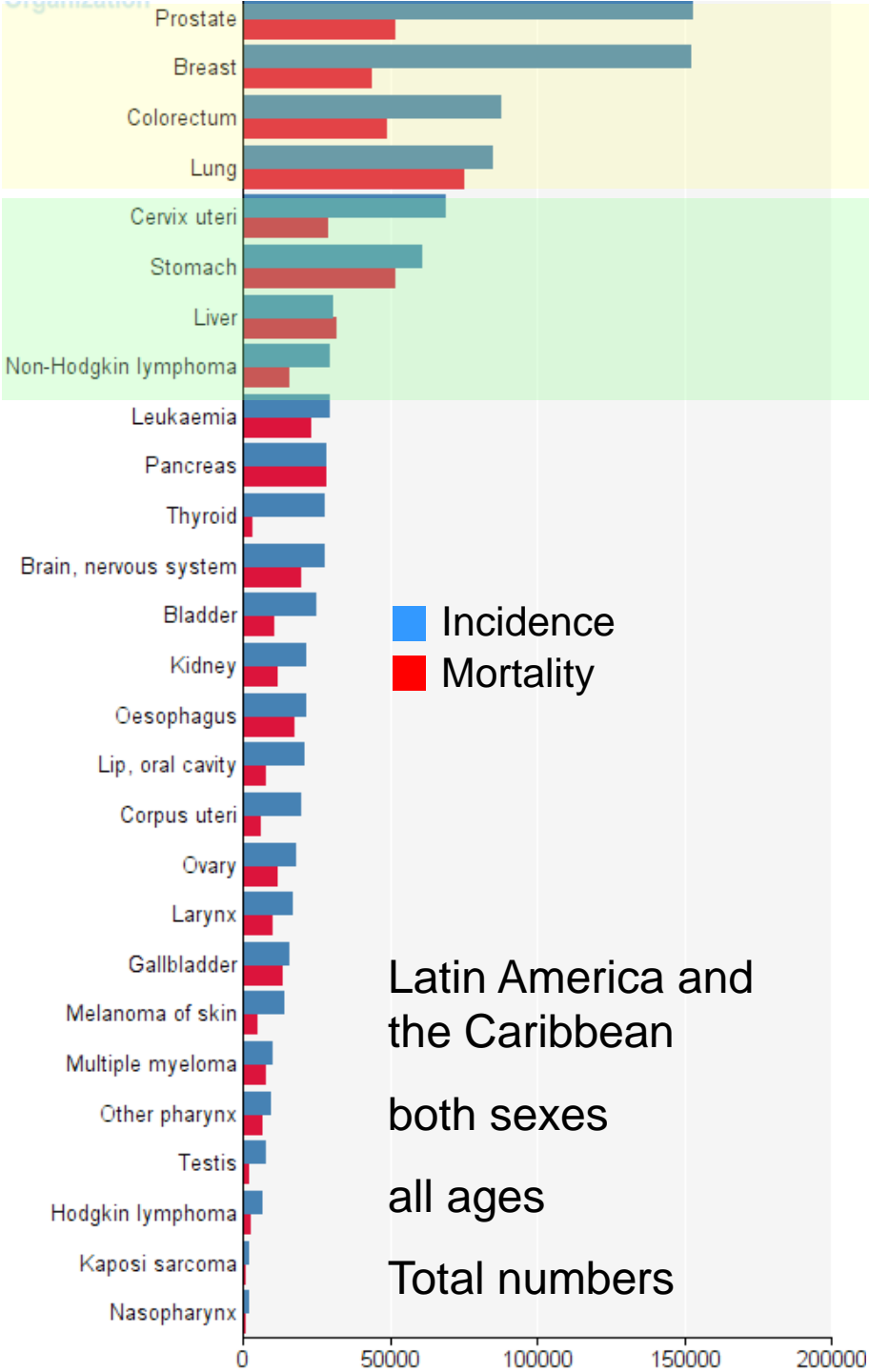
Female mortality



Male mortality





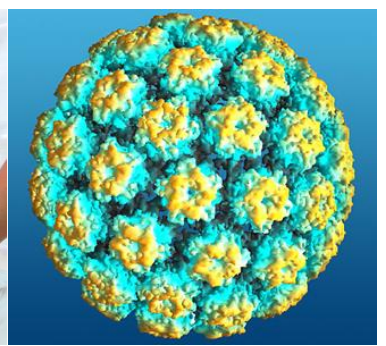


**Socioeconomic transition
epidemiologic transition**

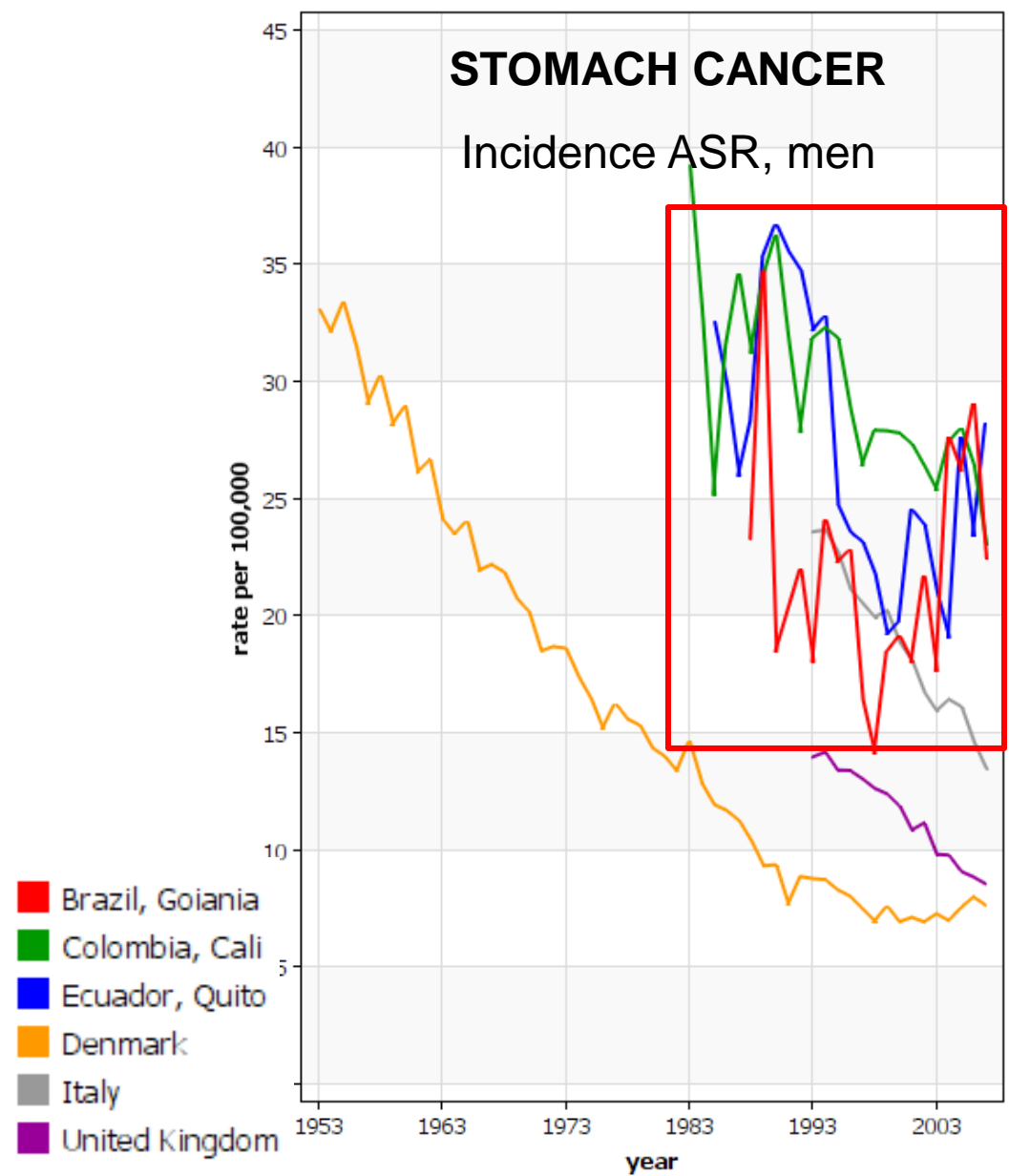
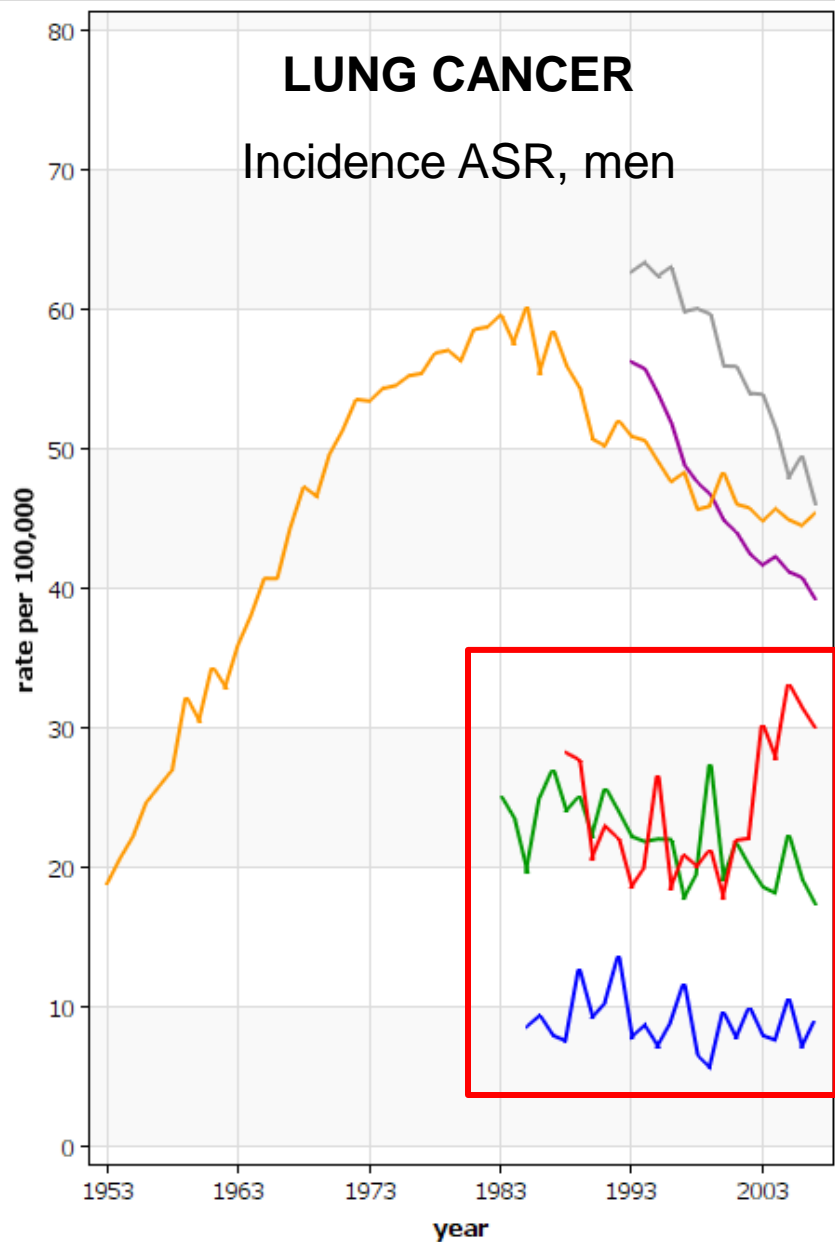
But *double* burden of cancer!

■ Incidence
■ Mortality

Latin America and
the Caribbean
both sexes
all ages
Total numbers



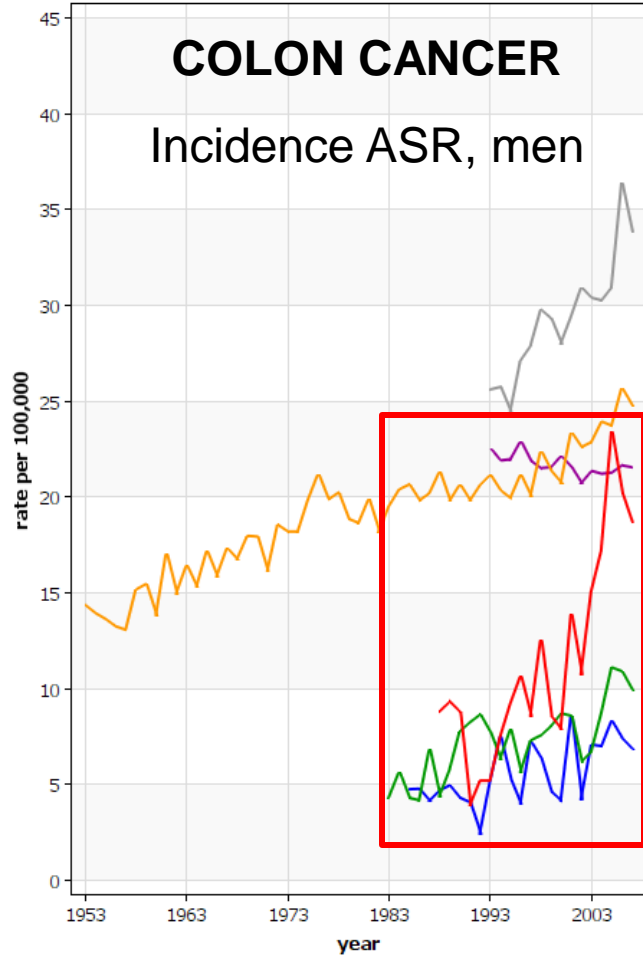
Time trends Incidence in comparison to Europe



- Brazil, Goiania
- Colombia, Cali
- Ecuador, Quito
- Denmark
- Italy
- United Kingdom

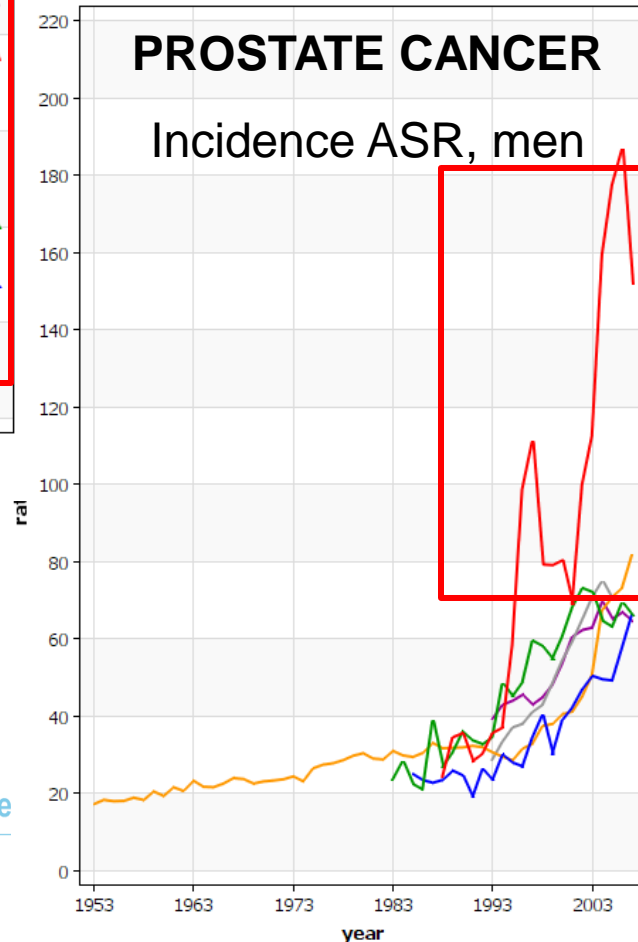
COLON CANCER

Incidence ASR, men



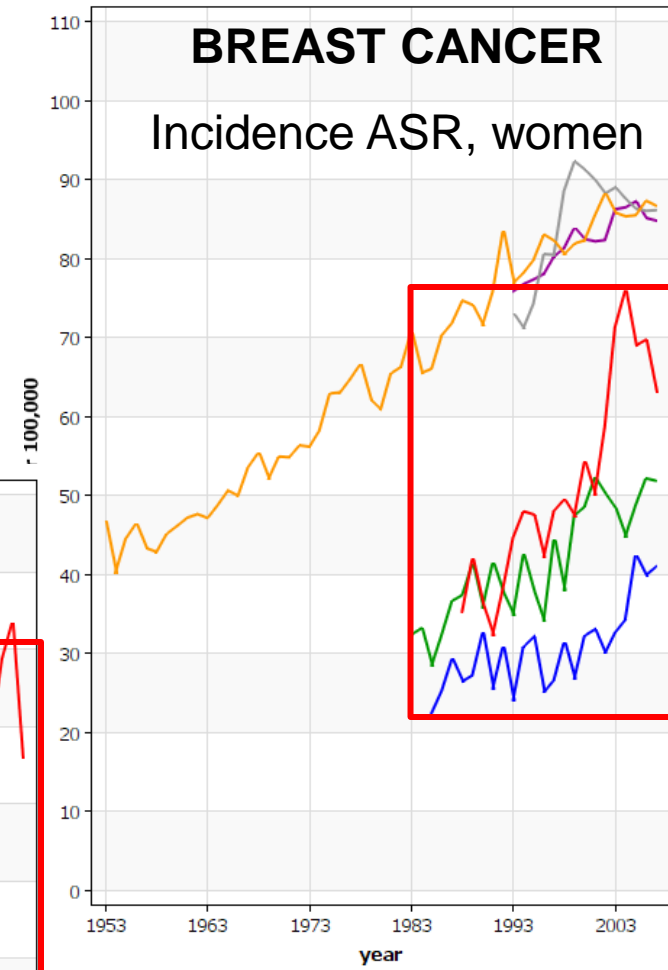
PROSTATE CANCER

Incidence ASR, men



BREAST CANCER

Incidence ASR, women



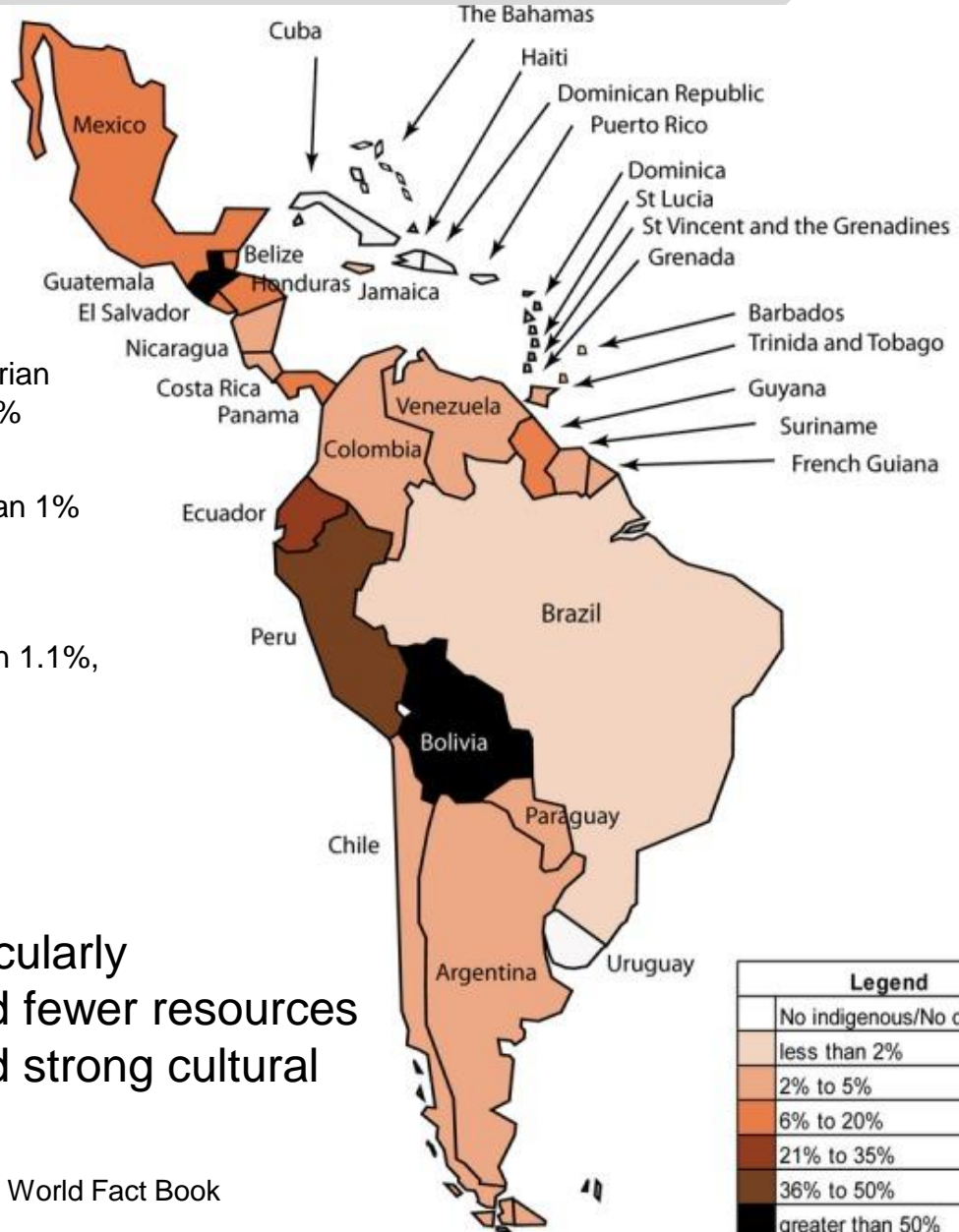
Ethnic diversity

❑ Roughly 10% of the total population are indigenous:

- ✓ Bolivia = Quechua 30%, mestizo 30%, Aymara 25%, white 15%
- ✓ Ecuador = mestizo 71.9%, Montubio 7.4%, Afroecuadorian 7.2%, Amerindian 7%, white 6.1%, other 0.4%
- ✓ Colombia = mestizo 58%, white 20%, mulatto 14%, black 4%, mixed black-Amerindian 3%, Amerindian 1%
- ✓ Argentina = white 97%, mestizo, Amerindian, or other non-white groups 3%
- ✓ Brazil = white 47.7%, mulatto 43.1%, black 7.6%, Asian 1.1%, indigenous 0.4%

❑ Geographically isolated populations

❑ Poor and rural populations are particularly disadvantaged (less information and fewer resources available, fewer healthy choices and strong cultural traditions)



Risk factors



Tobacco



Second-hand smoke



Healthy body weight



Physical activity



Diet



Alcohol



Sun / UV

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- ✓ 26% of all cancer deaths related to tobacco and 84% of lung cancer deaths in Latin America
- ✓ Increasing smoking rates among young people and women
- ✓ Despite smoke free policies, SHS exposure at workplace, restaurants, public transport, etc.
- ✓ High BMI is a leading risk factor for disease:
50 - >60% prevalence of overweight and
20 - >30% obesity (both sexes, 2010)
- ✓ Predicted to rise by 2030: 60% of women
overweight/obese (90% in Cuba and Panama)
- ✓ 15% of the incident cancers can be attributed to obesity
- ✓ 12% of all the postmenopausal breast cancer cases
attributed to overweight/obesity
- ✓ Increasing problem in children
- ✓ 14% of all the breast cancer cases attributed to physical
inactivity (2008)
- ✓ Most countries have implemented WHO
recommendations for tobacco and alcohol control policies
- ✓ Second highest alcohol consumption per capita in the
world, after Europe



Occupational chemicals



Radon



Breastfeeding

Hormonal therapy



Vaccination



Screening

- ✓ Exposures to environmental and occupational cancer risk factors related to rapid urbanisation are rising
- ✓ Exposures to pesticides, industrial waste or arsenic in drinking water
- ✓ 87 million people exposed to household air pollution from biomass (cooking and heating)
- ✓ Changing patterns of childbearing and breastfeeding
- ✓ Around 14% of cancers are attributable to HBV & C, HPV, *H. pylori* and others (7% in Europe)
- ✓ Low prevalence of HBV & C; 2% aflatoxin-related liver cancers (except Mexico, 11-times higher than HBV-related liver cancers)
- ✓ 18 countries offered the HPV vaccine via public immunization programs (2014)
- ✓ Mammography screening rates much lower than recommended by WHO (low participation rates; unequitable access)
- ✓ Cervical cancer mortality not decreased despite cervical screening programmes (constraints: coverage, quality of tests, access to diagnosis and treatment, social and cultural barriers)
- ✓ New cervical cancer screening technologies and clinical breast examination may be considered for some populations
- ✓ CRC screening guidelines in most countries but only Uruguay and Argentina have national programs

Q&A



Tobacco

- What types of tobacco products are used in Europe?
- What can I do to quit smoking?
- Are e-cigarettes less harmful than conventional cigarettes?
- What percentage of people in Europe are exposed to tobacco smoke inside the home?



Second-hand smoke

- What are the benefits of a smoke-free home?



Healthy body weight

- What do “overweight” and “obesity” mean?
- If I am overweight or obese, is it worth losing weight?



Physical activity

- What types of cancer may be prevented by physical activity?
- How do I become more physically active?



Diet

- What is meant by “fatty and sugary foods”?
- Which foods have a high salt content?



Alcohol

- Do all types of alcoholic drinks increase the risk of cancer?
- Is drinking small amounts of alcohol good for my heart?

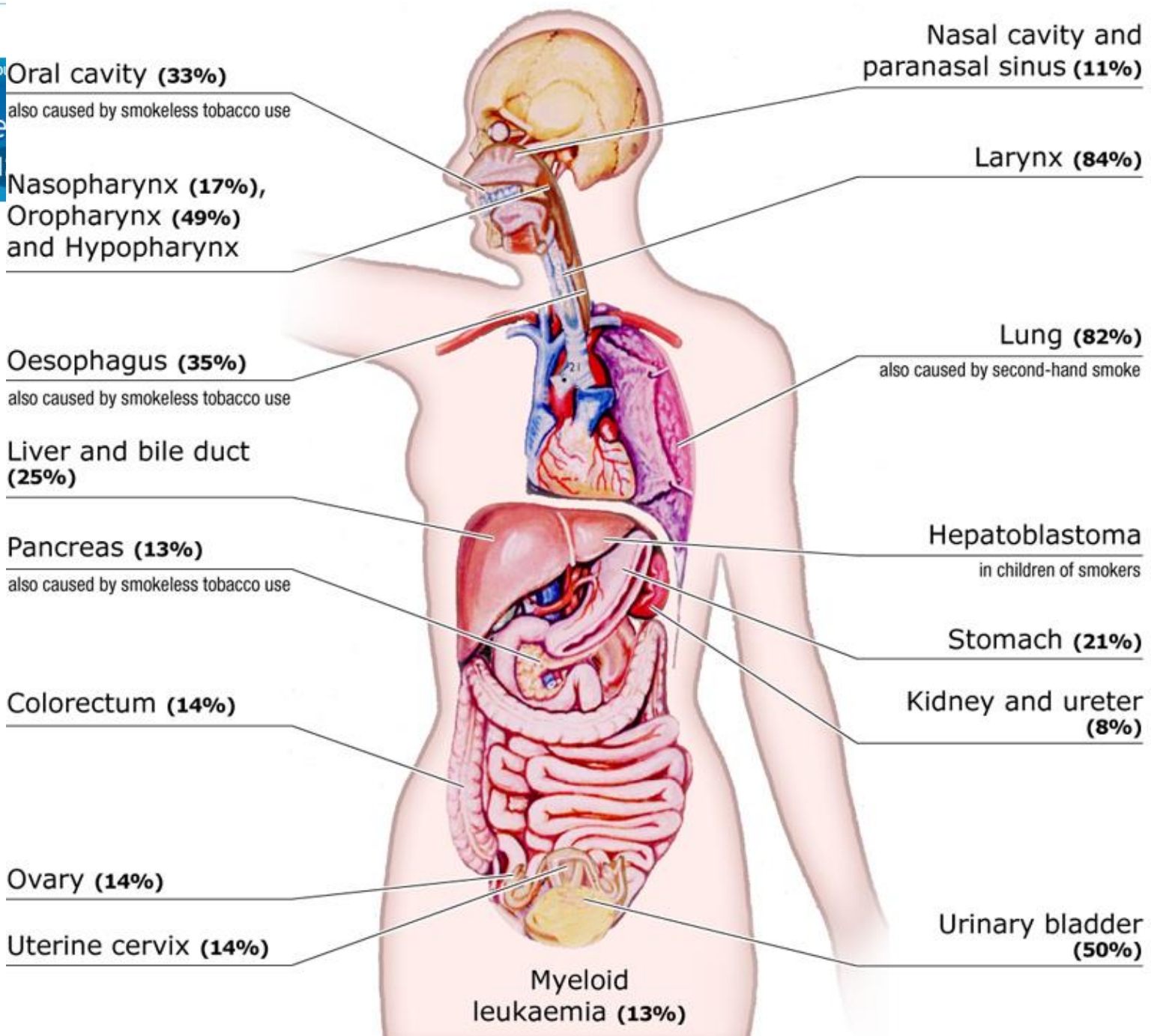


Sun / UV

- Is there such a thing as a “healthy tan”?
- Why should I not use sunbeds?

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- Questions & Answers
- Tobacco
 - Second-hand smoke
 - Healthy body weight
 - Physical activity
 - Diet
 - Alcohol
 - Sun/UV exposure
 - Pollutants
 - Radiation
 - Breastfeeding
 - Hormonal therapy
 - Vaccination and infections
 - Screening
- OTHERS
- Pharmaceutical drugs



Oral cavity (33%)

also caused by smokeless tobacco use

Nasal cavity and paranasal sinus (11%)

Larynx (84%)

Nasopharynx (17%), Oropharynx (49%) and Hypopharynx

Lung (82%)

also caused by second-hand smoke

Oesophagus (35%)

also caused by smokeless tobacco use

Liver and bile duct (25%)

Hepatoblastoma

in children of smokers

Pancreas (13%)

also caused by smokeless tobacco use

Stomach (21%)

Kidney and ureter (8%)

Colorectum (14%)

Ovary (14%)

Uterine cervix (14%)

Urinary bladder (50%)

Myeloid leukaemia (13%)

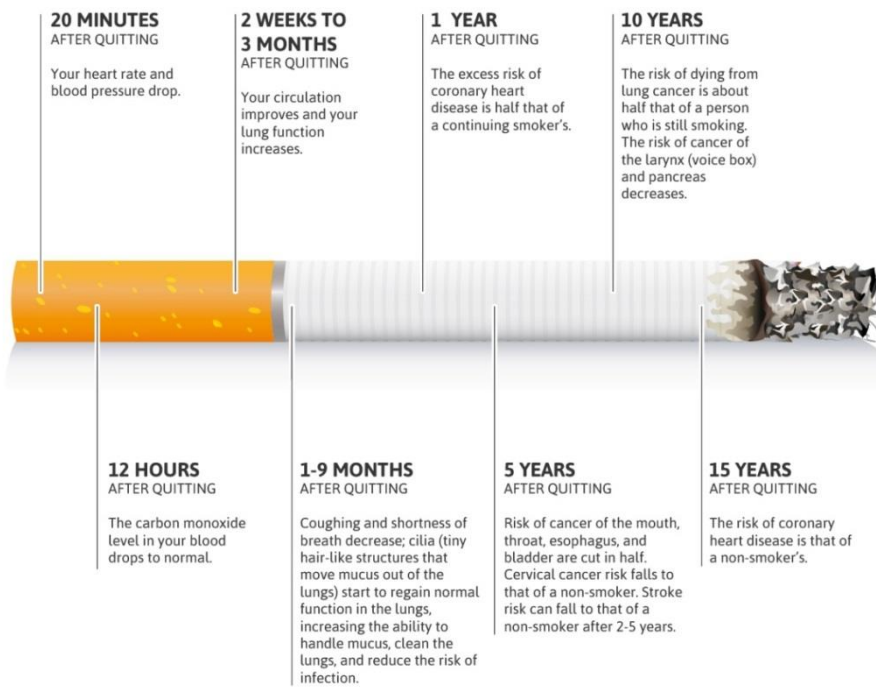
Can I reduce my risk of developing cancer or dying of cancer if I quit smoking?

Yes. The scientific evidence conclusively shows that the risk of cancer decreases after quitting smoking at any age, but the younger the age when stopping, the greater the benefit.

On average, smokers lose at least 10 years of life compared with those who have never smoked. **Quitting smoking before the age of 40 years reduces the risk of a smoking-related death by about 90%.**

It is never too late to stop smoking; quitting at any age lowers the risk of smoking-related death compared with those who continue to smoke. Quitting smoking also has other health benefits that you can see immediately (see Figure 5). What smokers can do to quit is described here in Q&A 9.

Figure 5.: Short- and long-term beneficial health effects observed after quitting smoking.





Occupational chemicals

- Which are the most important chemical substances in the environment that may cause cancer, and which cancers do they cause?
- Is there adequate control (...)? Am I adequately protected?
- Is there adequate control of workplace cancer-causing substances, and what actions can I take to protect myself and my family?



Radon

- Should I be concerned about cancer risk from X-rays?
- Is there any cancer risk from (...) the electromagnetic fields from power lines, the microwaves (...), and the radio waves (...) (mobile phones, Wi-Fi, television, and radio)?



Breastfeeding

Hormonal therapy

- May use of oral contraceptives increase my risk of cancer?
- Are there other drugs that may increase my risk of cancer?
- Are there any drugs, such as aspirin, that I can take to reduce my risk of cancer?

OTHERS

- Pharmaceutical drugs



Vaccination

- How common is hepatitis C virus (HCV) infection in EU?
- What are the side-effects of hepatitis C treatment?
- Can *H. pylori* infection be prevented?



Screening

- What is an “organized” screening programme?
- Why is quality important in cancer screening?
- Why is prostate cancer screening not recommended?

What actions can I take to protect myself and my family?

For most cancer-causing chemical substances in the environment, the most effective measures are regulations and community actions aimed at reducing or eliminating these substances, rather than personal actions. However, it **is important to know what you are being exposed to, so that you can make informed decisions about your health**. Here are some examples of personal interventions:

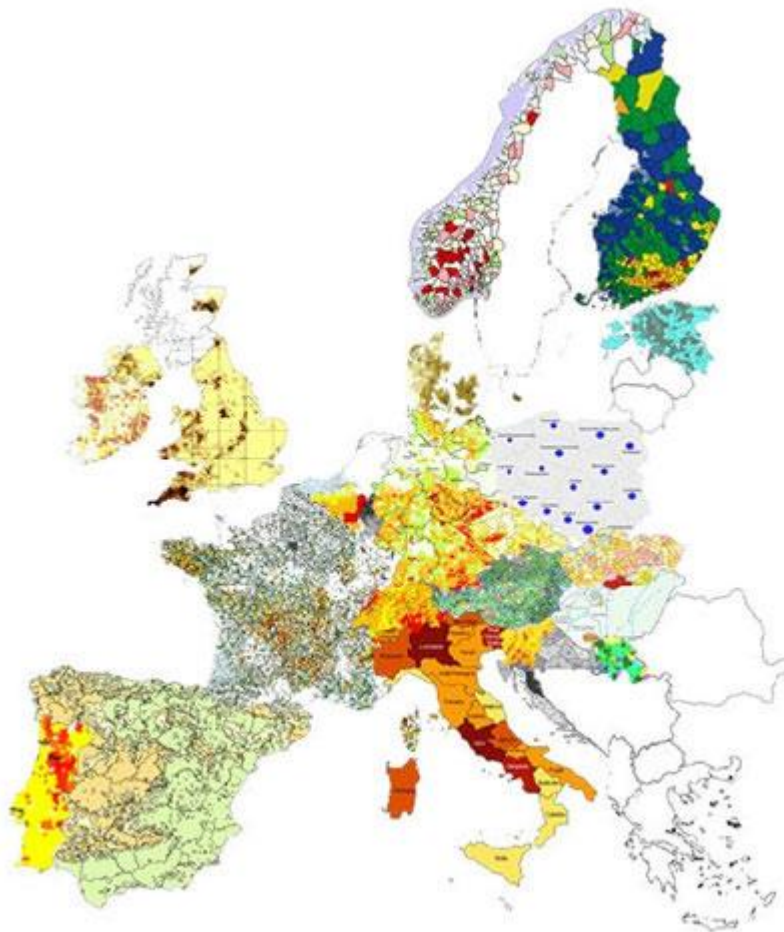
- You can make your home and immediate environment smoke-free by not allowing others to smoke indoors or in vehicles.
- Be aware of the chemicals in the products you buy for private use; read instructions for safe and proper use, if available, and follow the directions carefully.
- You can reduce indoor air pollution by ensuring adequate ventilation (...)
- Individual actions (such as limiting the use of cars and properly maintain these, or using a bicycle or public transportation) can contribute to reduce air pollution.
- You can contribute to minimizing contamination of drinking-water and soil by properly disposing of household chemicals (e.g. pesticides, paints) or pharmaceuticals, and by reducing waste.
- You can also contribute to a healthier environment by contributing to raise public awareness, which may result in general public or community actions.

How do I find out about radon exposure in my home?

Radon concentration is measured as (...)

Your country may have maps (often available online) that you can use to see whether homes in your area are at more or less risk of having high radon levels.

If your home is in an area of increased radon risk, you are advised to have your home tested for radon levels.



What is breast cancer screening?

Breast cancer screening uses an X-ray image called a mammogram to check the breasts for signs of cancer. It can find cancers that are too small to be felt. The earlier a breast cancer is found, the more effective treatment may be. Screening does not prevent breast cancer from developing, but it may find a breast cancer sooner, when the chance of successful treatment is higher. **Mammography is currently the only screening method that has been proven to help prevent deaths from breast cancer.**

When should I participate in breast cancer screening?

It is recommended that you participate in breast cancer screening every time you receive an invitation and after you have read the information materials provided and carefully considered the potential benefits and harms of screening. **Screening programmes in the European Union vary with respect to the age groups invited and the interval between invitations, depending on each country's breast cancer burden and local resources.**

Most programmes invite women to breast cancer screening **starting at age 40–50 years**, and from then on, **every 2 years** until they reach **age 70–75 years**. If you have any questions, discuss them with your doctor or health-care provider.

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1. Background and rationale

2. Methodology

3. Dissemination

New structure and outcomes

SAME

Special article
European Code Against Cancer and scientific justification: third version (2003)
 P. Bech¹, P. Antea², H. Barakati³, J. Bardiya⁴, P. Boffina⁵, J. Bana⁶, M. J. G. Bana⁷, J. Christensen⁸, J. Duan⁹, M. Duan¹⁰, N. Dudi¹¹, W. Dai¹², S. Franceschi¹³, C. R. Gillis¹⁴, N. Gray¹⁵, L. Guzzetta¹⁶, A. Hackshaw¹⁷, M. Kawanishi¹⁸, M. Kogevinas¹⁹, S. Kravtsovich²⁰, C. La Vecchia²¹, F. Lereu²², J. de Maeyer²³, P. Maffei²⁴, J. M. Martin-Moreno²⁵, J. Newton Bishop²⁶, F. Oishi²⁷, P. Parise²⁸, M. Quinn²⁹, M. Rabinowitz³⁰, J. Rappaport³¹, C. Scally³², E. Shacka³³, H. Steiner³⁴, M. Toffin³⁵, Y. Terao³⁶, U. Nöcker³⁷, S. Wild³⁸, W. Winer³⁹, D. G. Zidarik⁴⁰, W. Zarewki⁴¹ & H. von Hanneberg

Introduction
 Since the previous version of the European Code Against Cancer was issued [1], the European Union has expanded its number of Member States and now over six billion live on a healthy and dynamic continent in three Member States of Latin America (Brazil, Mexico, Chile), India, China, Lithuania, Poland, Slovenia and Slovakia. Additionally, it is currently anticipated that Bulgaria and Romania will be admitted as 2007 candidates for entry into the Union. These expansions enlarge the European continent's general diversity of people with a great range of age, sex, and genetic patterns of genetic make-up and disease risk, and are highly present. The contrast between the Mediterranean climate zone, the Nordic continent and New Zealand is of great and

Scientific justification
 In the European Union in 2003, it is estimated that there were 1.5 million deaths from cancer, of which 500 000 were attributable to the specific risk factors of tobacco, alcohol, diet, and physical inactivity. The specific risk factors of tobacco, alcohol, diet, and physical inactivity are the leading causes of cancer in the European Union. In 2003, it is estimated that there were 1.5 million deaths from cancer, of which 500 000 were attributable to the specific risk factors of tobacco, alcohol, diet, and physical inactivity.

EUROPEAN CODE AGAINST CANCER
 12 ways to reduce your cancer risk

- 1 Do not smoke. Do not use any form of tobacco.
- 2 Make your home smoke free. Support smoke-free policies in your workplace.
- 3 Take action to be a healthy body weight.
- 4 Be physically active in everyday life. Limit the time you spend sitting.
- 5 Have a healthy diet:
 - Eat plenty of whole grains, pulses, vegetables and fruits.
 - Limit high-calorie foods (foods high in sugar or fat) and avoid sugary drinks.
 - Avoid processed meat; limit red meat and foods high in salt.
- 6 If you drink alcohol of any type, limit your intake. Not drinking alcohol is better for cancer prevention.
- 7 Avoid too much sun, especially for children. Use sun protection. Do not use sunbeds.
- 8 In the workplace, protect yourself against cancer-causing substances by following health and safety instructions.
- 9 Find out if you are exposed to radiation from naturally high radon levels in your home. Take action to reduce high radon levels.
- 10 For women:
 - Breastfeeding reduces the mother's cancer risk. If you can, breastfeed your baby.
 - Hormone replacement therapy (HRT) increases the risk of certain cancers. Limit use of HRT.
- 11 Ensure your children take part in vaccination programmes for:
 - Hepatitis B (for newborns).
 - Human papillomavirus (HPV) (for girls).
- 12 Take part in organized cancer screening programmes for:
 - Bowel cancer (men and women).
 - Breast cancer (women).
 - Cervical cancer (women).

The European Code Against Cancer focuses on actions that individual citizens can take to help prevent cancer. Cancer's major prevention requires the combined actions to be supported by governmental policies and actions. Find out more about the European Code Against Cancer at: <http://cancer-code-europe.jarc.fr>

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International Agency for Research on Cancer
 World Health Organization
European Code Against Cancer Search

HOME | 12 WAYS | ABOUT CANCER | SCIENTIFIC JUSTIFICATION | ABOUT THE CODE

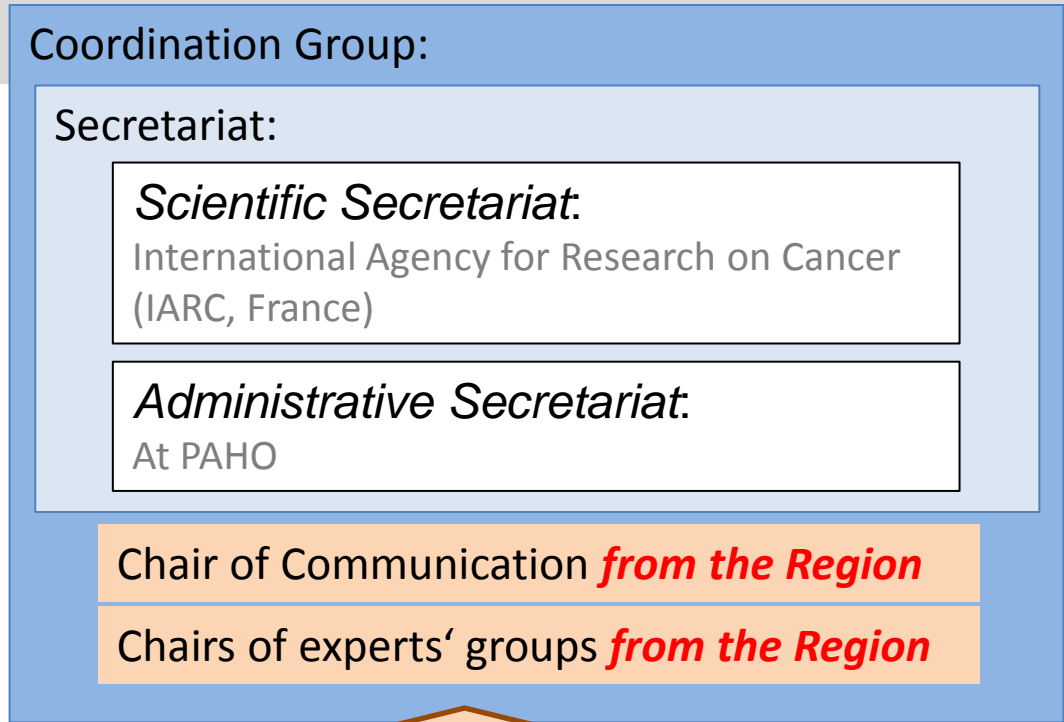
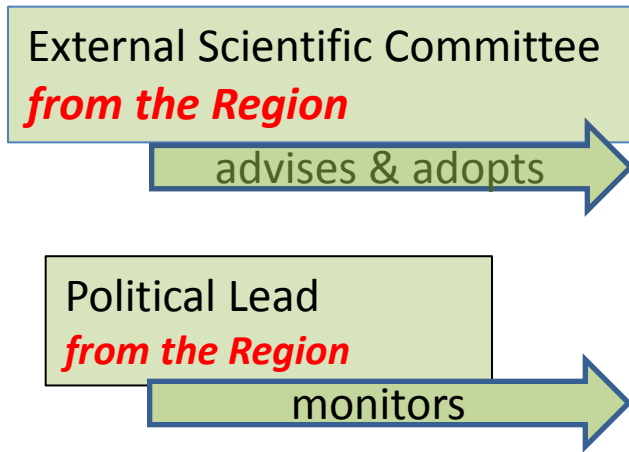
European Code Against Cancer
 12 WAYS TO REDUCE YOUR CANCER RISK

You are here: 12 ways Print Code

FIND OUT MORE ABOUT THE 12 RECOMMENDATIONS:

WHAT IS CANCER?	TOBACCO	SUN/UV EXPOSURE
WHAT CAUSES CANCER?	SECOND-HAND SMOKE	POLLUTANTS
IS CANCER AVOIDABLE?	HEALTHY BODY WEIGHT	RADIATION
WHAT CAN WE DO?	PHYSICAL ACTIVITY	BREASTFEEDING
	DIET	HORMONAL THERAPY
	ALCOHOL	VACCINATION AND INFECTIONS
		SCREENING

Working process



Expert Groups *from the Region*

WG Lifestyle

- Tobacco
- Alcohol
- Diet and beverages
- Body mass
- Physical activity
- Hormonal factors (e.g. breastfeeding, horm. treatment)

WG Environment

- Air, water, soil, waste
- Food contaminants
- Radiation (including UV and medical radiation)
- Occupational

WG Medical interventions

- Vaccination
- Infection-related intervention (e.g. *H. Pylory*, HIV)
- Screening
- Pharmaceuticals



Target group

1. To the individual

What can I do to reduce my risk of cancer?



Same?
Targeting health professionals?

2. To health professionals, educators, etc.



1. Background and rationale

2. Methodology

3. Dissemination

Involving partners
(MoH, cancer
associations, etc.)
from the start

Points for discussion

1. Partners' commitment
2. Risk factor mapping in Latin America and the Caribbean
3. Project and funding:
 - Expected time and kind of resources needed
 - Structure and outcomes
 - Target group(s)
 - Dissemination strategy
 - Working process
 - a. Extensive meetings in the Region and travel budget for SC and WGs
 - b. Scientific Coordinator at IARC
 - c. Operational secretariat in the Region



European Code Against Cancer First Scientific Committee Meeting
25-26 September 2013, IARC, Lyon



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World Health
Organization

¡Gracias por su atención!