



FACTS AND FIGURES  
 CAUSES OF CANCER  
 PREVENTION  
 EARLY DETECTION  
 CURE AND CARE  
 CONTACTS

“

Statistics are people  
 with the tears wiped  
 away.

Professor Irving Selikoff

”

ISBN 92 4 159072 6



# GLOBAL ACTION AGAINST CANCER



*Think of the people you know. How many of them  
 have had cancer? How many more will get it?*



**We can save two million lives  
 in our lifetime**

TITLE : GLOBAL ACTION AGAINST CANCER

WHO Library Cataloguing-in-Publication Data

Global action against cancer.

1.Neoplasms – epidemiology 2.Neoplasms – mortality 3.Neoplasms – prevention and control 4.World health 5.International cooperation  
I.World Health Organization II.International Union against Cancer

ISBN 92 4 159072 6

(NLM classification: QZ 200)

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Design : Helena Zanelli Création ; Printed by WHO



World Health  
Organization



International Union  
Against Cancer

**Publications** of the World Health Organization can be obtained from Marketing and Dissemination, WHO, 20 Avenue Appia, 1211 Geneva 27, Switzerland  
tel: +41 22 791 21 11  
fax: +41 22 791 31 11  
<http://bookorders.who.int>  
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6 million  
deaths

10 million  
new cases

22 million  
living with cancer

GLOBAL ACTION  
AGAINST CANCER

**O**ur knowledge about the prevention and treatment of cancer is increasing, yet the number of new cases grows every year. If the trend continues, 15 million people will discover they have cancer in 2020, two-thirds of them in newly-industrialized and developing countries.

**It is time to put current knowledge into action in order to save lives and prevent suffering. This requires concerted action between international organizations, governments, institutions and individuals. Public and private sectors.**

**That action has already begun. We each have an important role to play.**

**This booklet presents the challenge.**

# Year 2000: Cancer killed more than

# 6.2 million people around the world

## Cancer deaths

Cancer knows no borders. It is the second leading cause of death in developed countries and is among the three leading causes of death for adults in developing countries.

12.6% of all deaths are caused by cancer. That's more than the percentage of deaths caused by HIV/AIDS, tuberculosis, and malaria put together.

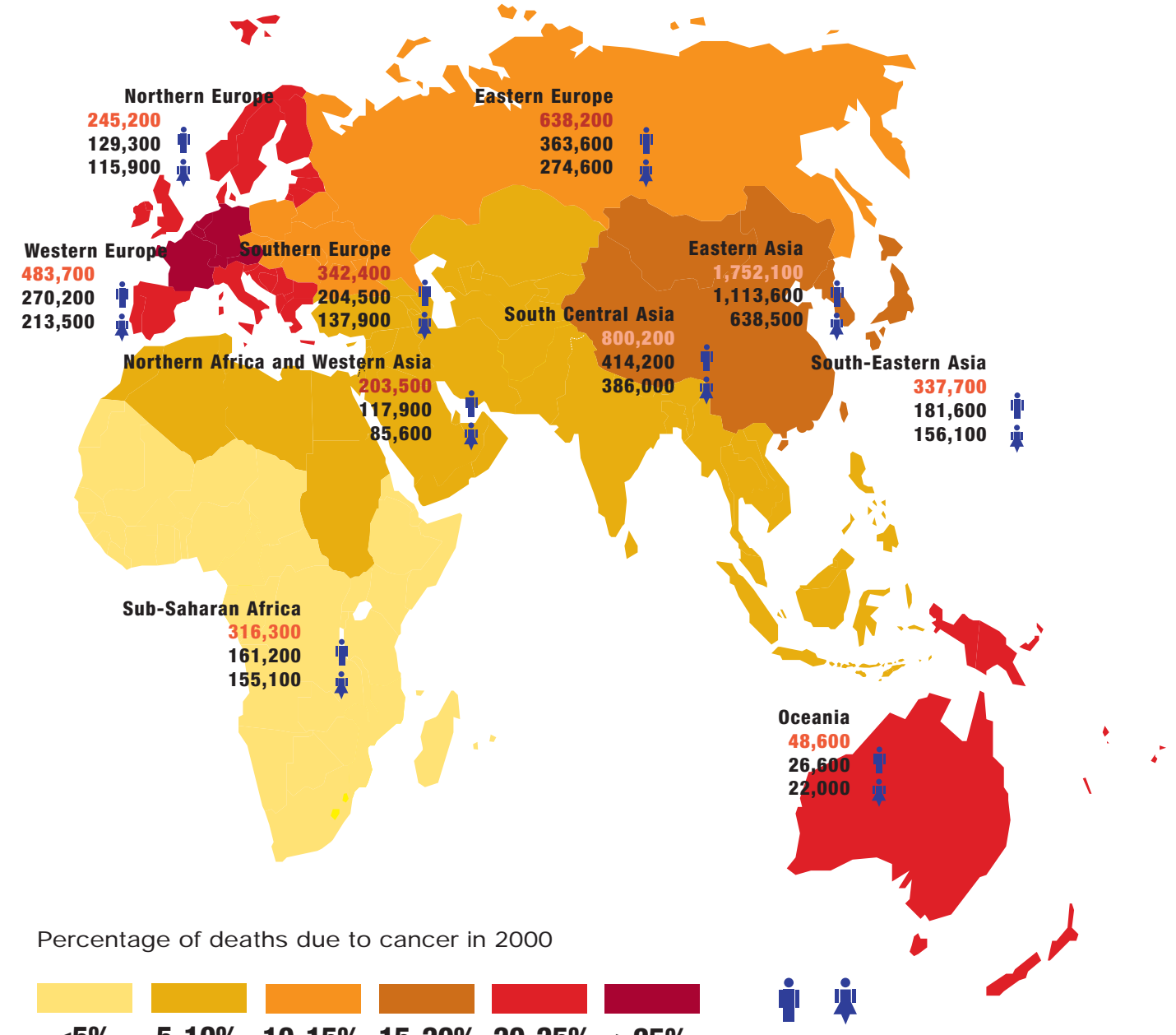
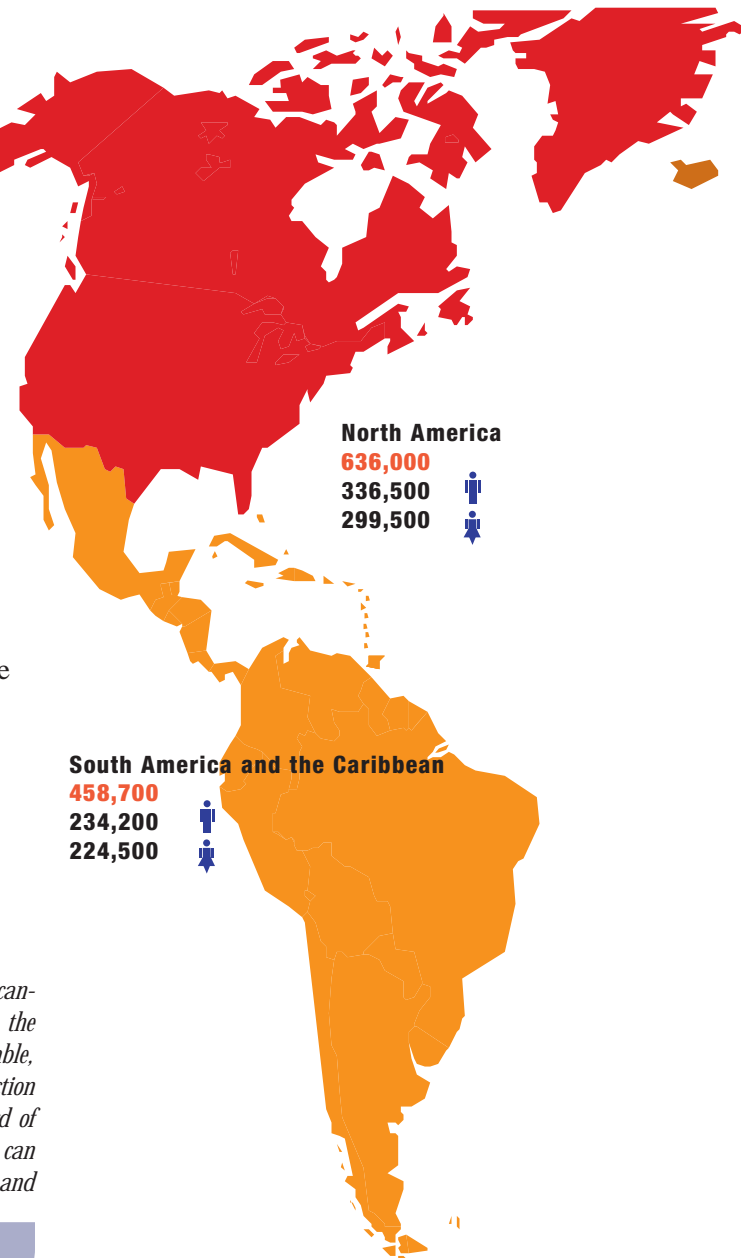
Cancer is a public health problem worldwide. It affects all people: the young and old, the rich and poor, men, women, and children.



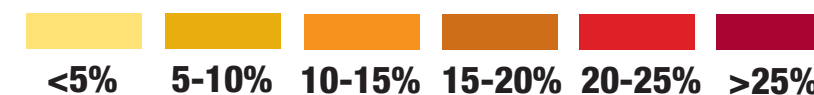
*With existing knowledge, it is possible to prevent at least one-third of the 10 million cancer cases that occur annually throughout the world. Where sufficient resources are available, current knowledge also allows the early detection and effective treatment of a further one-third of those cases. Pain relief and palliative care can improve the quality of life of cancer patients and their families.*



Dr. Gro Harlem Brundtland  
Director-General WHO



Percentage of deaths due to cancer in 2000



Globocan 2000 IARC, WHO 2003

Year 2000:  
**10.1 million**  
 new cases around the world

**22.4 million**  
 people living with cancer

### Types of cancer

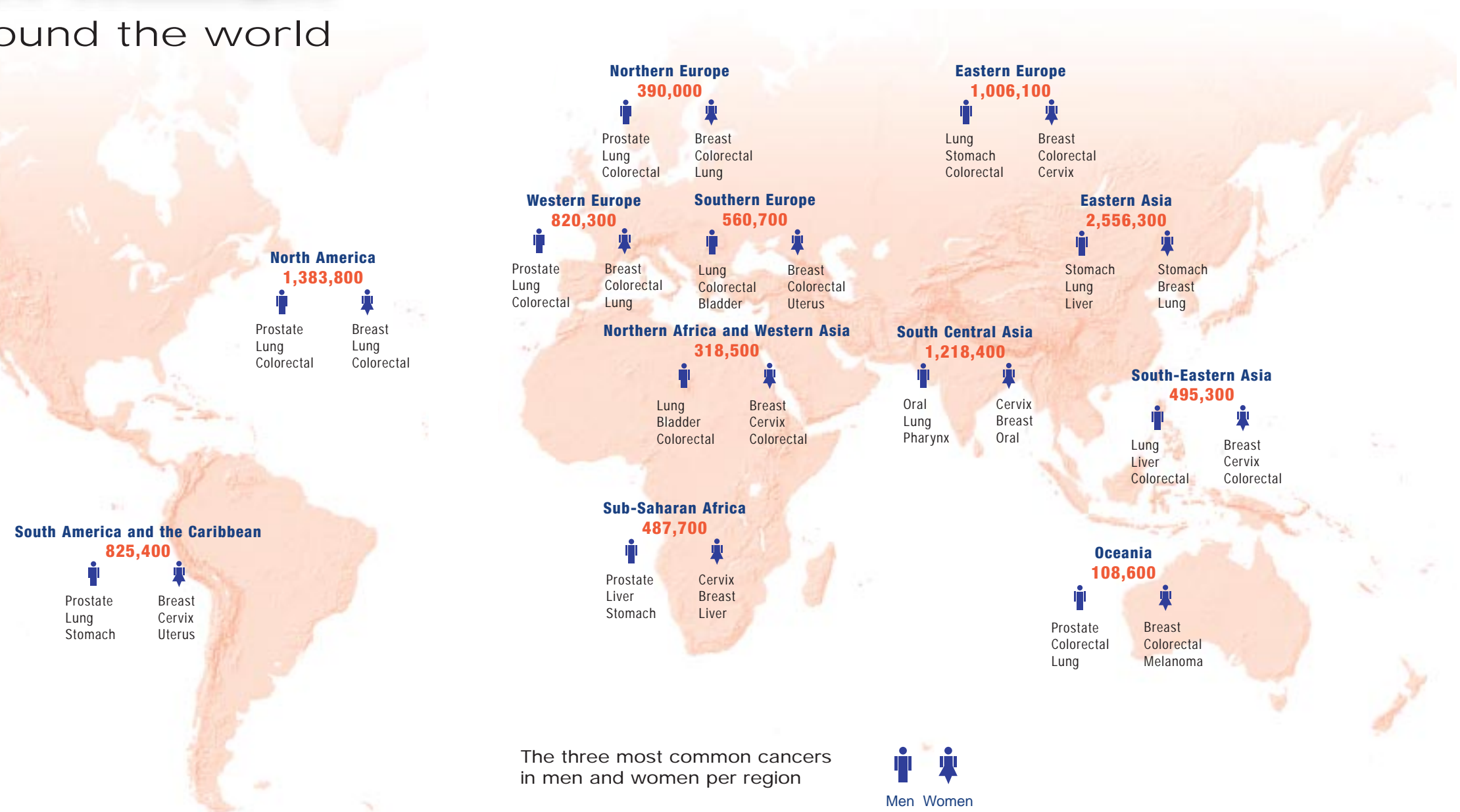
Lung cancer kills more people than any other cancer.

More men than women get cancer of the lung, stomach, throat, and bladder.

Cancers triggered by infections—liver, stomach and cervix cancers – are more prevalent in the developing world.

In richer countries, prostate, breast and colon cancers are more common than in poorer countries.

Cancers that are most often cured are breast, cervix, prostate, colon and skin, if they are diagnosed early.



The three most common cancers in men and women per region



Globocan 2000 IARC

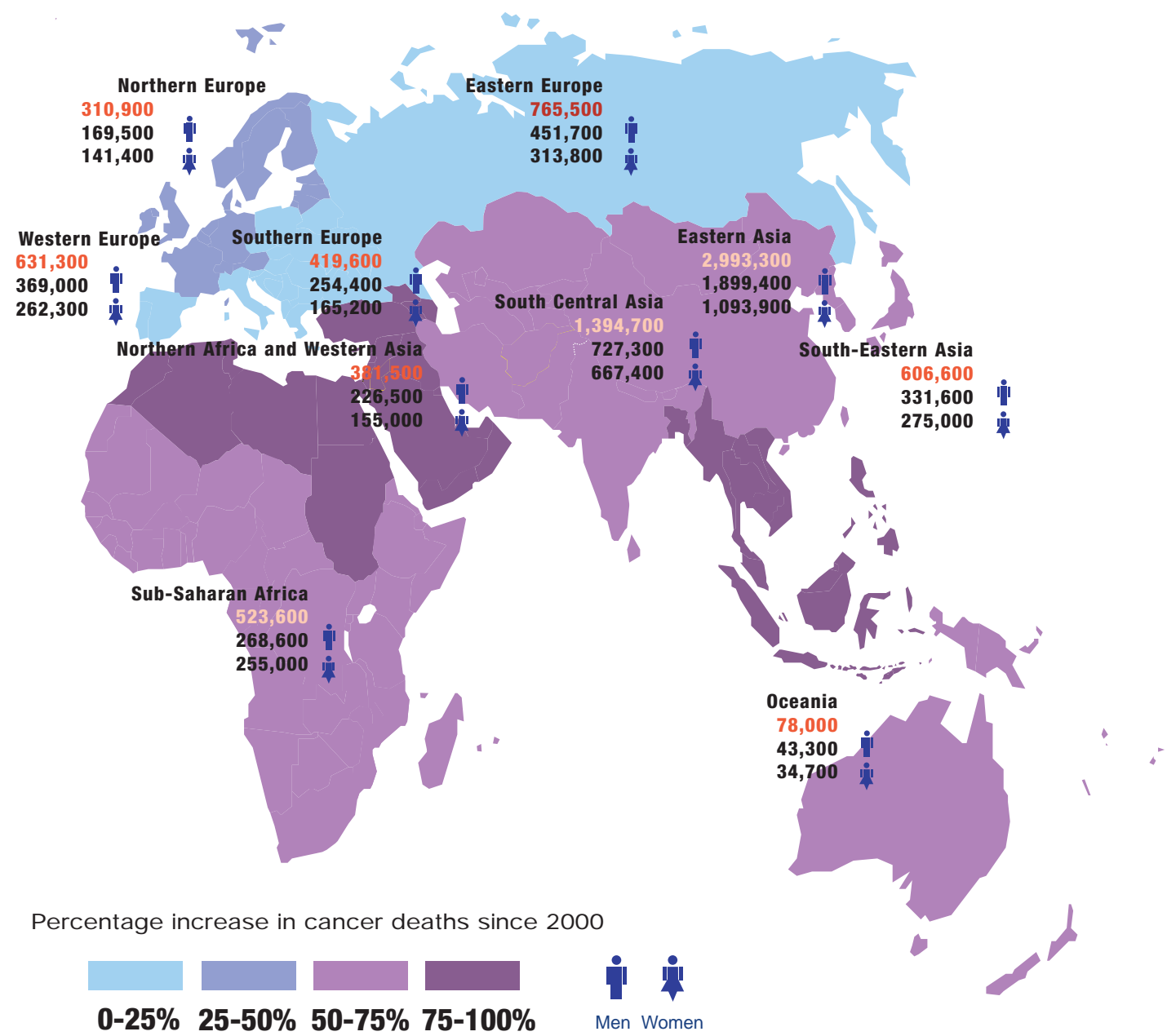
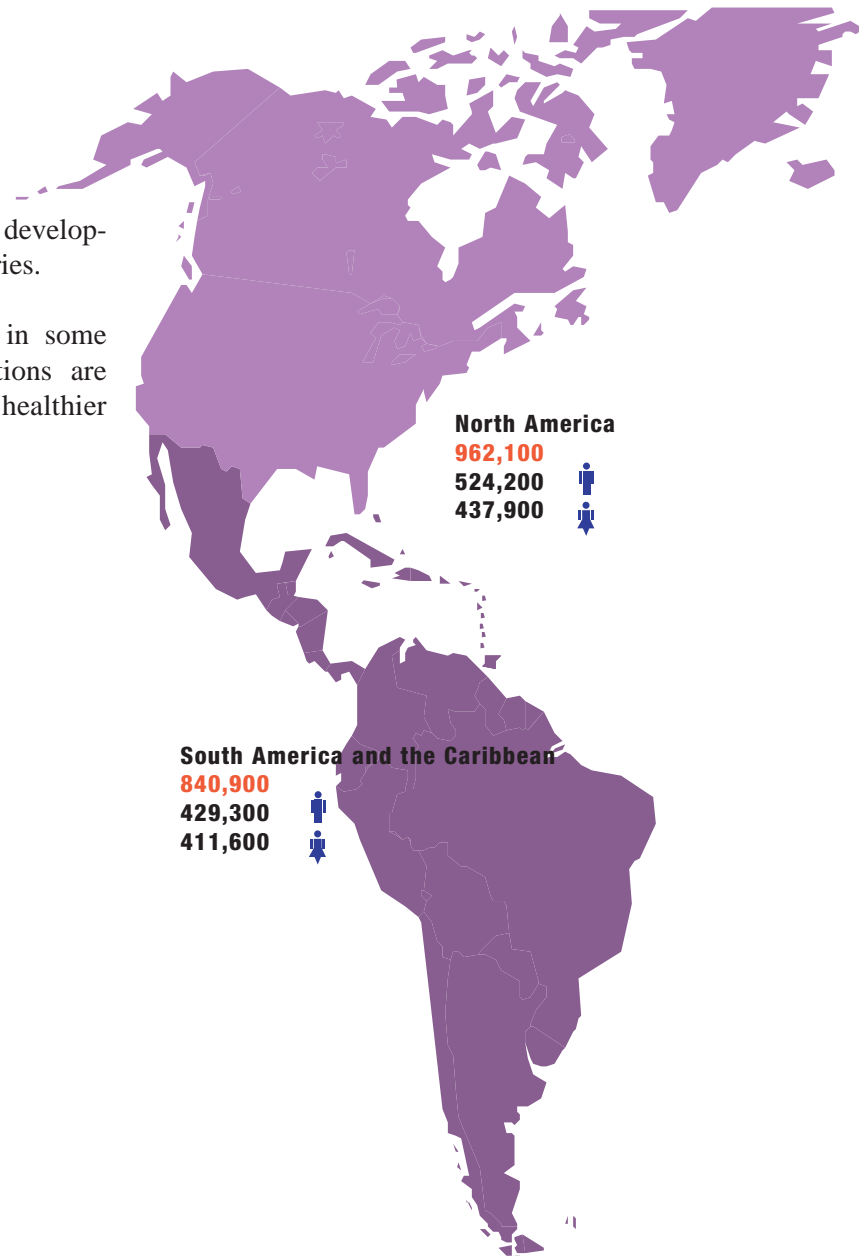
By **2020**, cancer **could kill**

**10 million**  
people per year unless we act

### Trends

The biggest rates of increase are in developing and newly industrialized countries.

The relative increase is smallest in some Western countries where populations are rejecting tobacco and adopting healthier lifestyles.



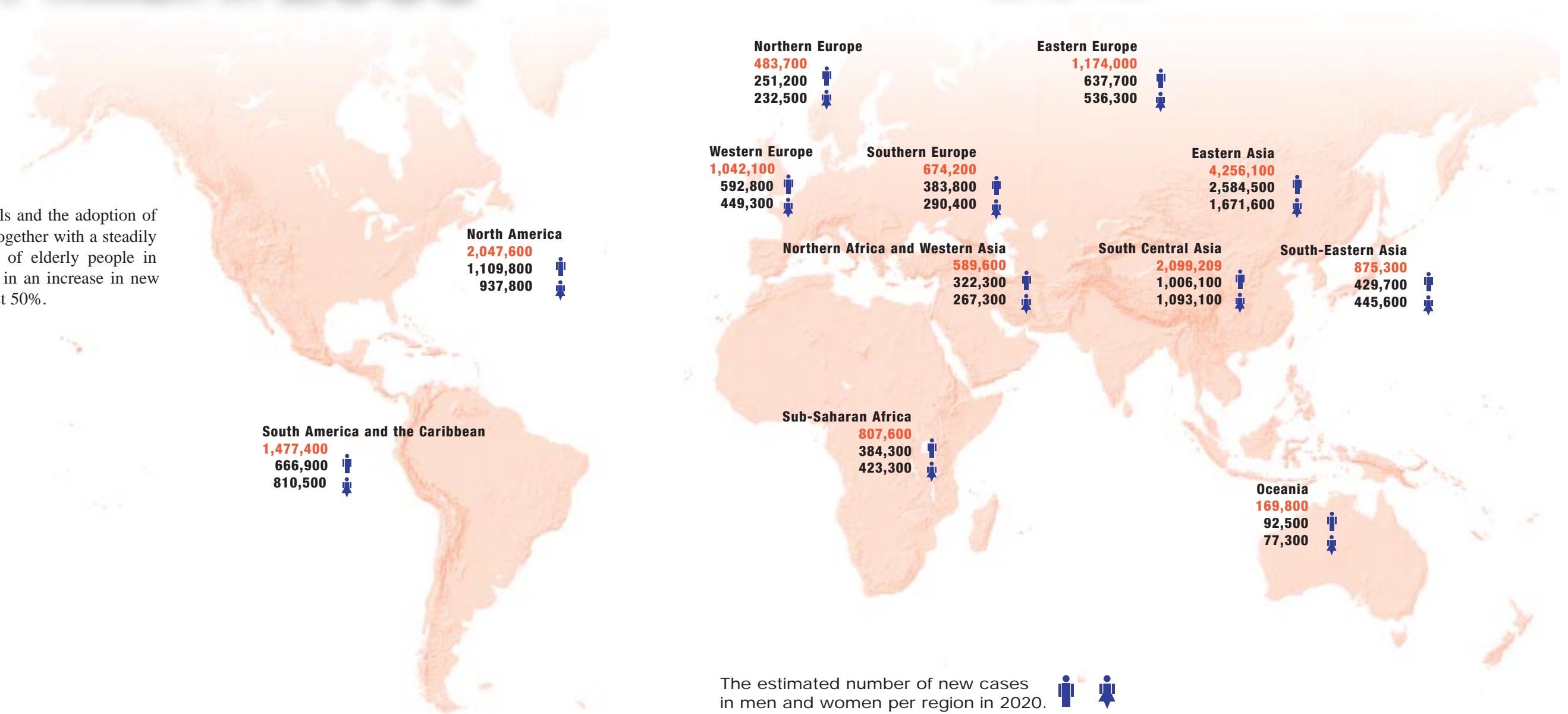
Globocan 2000 IARC



The number of new cases each year could rise from **10.1 million in 2000**

to **15.7 million in 2020**  
a **50%** increase

### Trends

Current smoking levels and the adoption of unhealthy lifestyles, together with a steadily increasing proportion of elderly people in the world, will result in an increase in new cancer cases of at least 50%.



The estimated number of new cases in men and women per region in 2020.    
Men Women

Globocan 2000 IARC

What will the **future**  
picture **be** if we act  
**NOW?**



*Cancer is potentially the most preventable and most curable of the major life-threatening diseases facing humankind. By applying existing knowledge and promoting evidence-based actions in cancer control, we will turn this truth into reality for all people everywhere.*

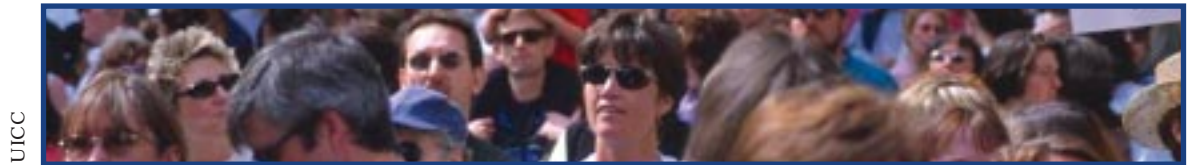
Dr. John R. Seffrin  
President UICC



We can save  
**2 million lives**  
by 2020,  
and **6.5 million lives**  
by 2040.

43% of cancer deaths are due to tobacco, diet and infection.

These factors were responsible for 4 million new cancer cases in 2000



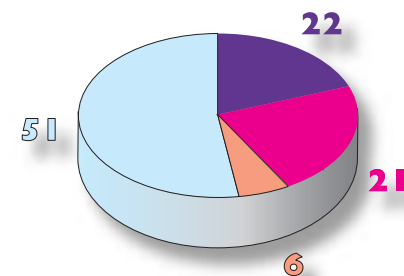
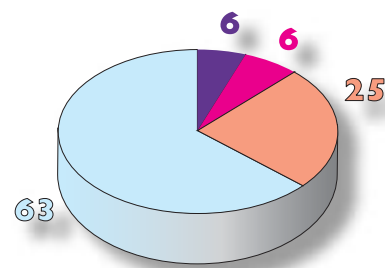
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Sub-Saharan Africa

Europe (Northern, Southern and Western)

Total: 37%

Total: 49%



tobacco
  diet
  infection
  other

From a global perspective, there is strong justification for focusing cancer prevention activities on these three main cancer-causing factors.

Tobacco

Tobacco consumption is the world's most avoidable cause of cancer. In most developed countries, smoking is responsible for up to 30% of all cancer cases and up to 90% of lung cancer cases.

Tobacco causes cancer at many sites including lung, throat, mouth, pancreas, bladder, stomach, liver, and kidney cancers.



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Diet

In developed countries, almost as many cancer cases are attributable to an unhealthy diet and an inactive lifestyle as to smoking.

Overweight and obesity are associated with high incidences of cancers including colon, breast, uterus, oesophagus, and kidney cancers.

Excessive alcohol consumption increases the risks of cancers of the oral cavity, pharynx, larynx, oesophagus, liver and breast. For some of these cancers, the risks are even greater if you smoke.

The incidence of stomach cancer has gone down because of reduced intake of salt and improved living conditions.

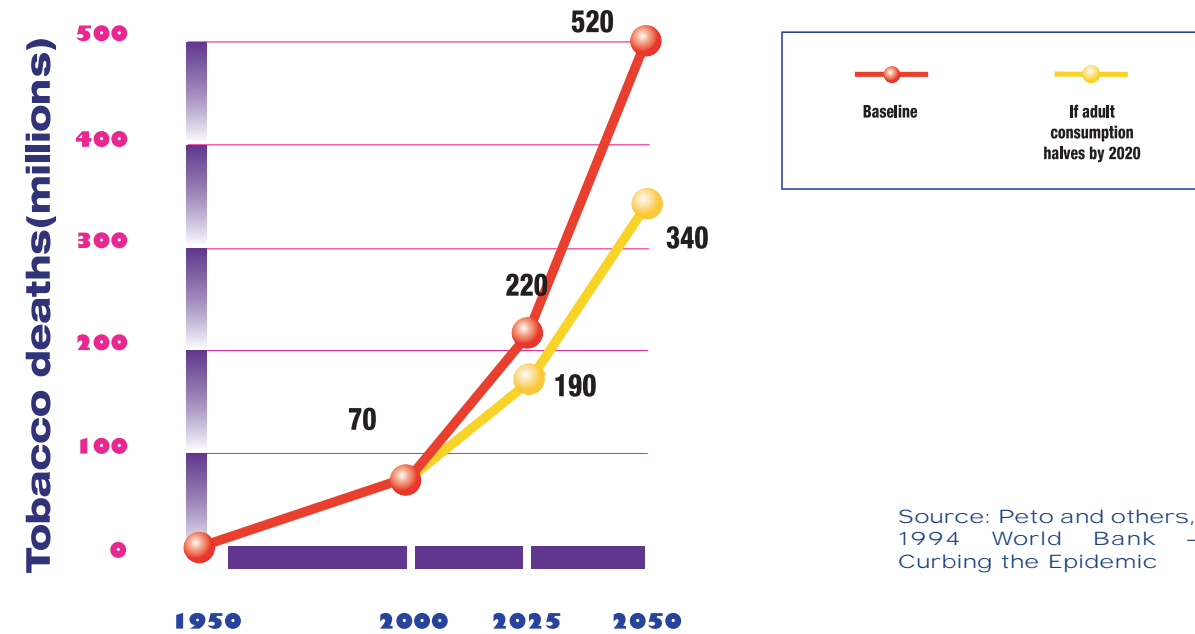
Infection

One-fifth of cancers worldwide are due to chronic infections, mainly from hepatitis viruses (liver), papillomaviruses (cervix), Helicobacter pylori (stomach), schistosomes (bladder), and the liver fluke (bile duct).



WHO P. Viro

# The battle against tobacco



“ If current trends persist, about 500 million people alive today will eventually be killed by tobacco, half of them in productive middle age losing 20-25 years of life. World Bank, **Curbing the Epidemic** ”



## Make this the **last** generation that smokes

Tobacco use is the most preventable cause of death. Halving tobacco consumption now would prevent 20-30 million people from dying before 2025 and 170-180 million people from dying before 2050 from all tobacco-related diseases including cancer.

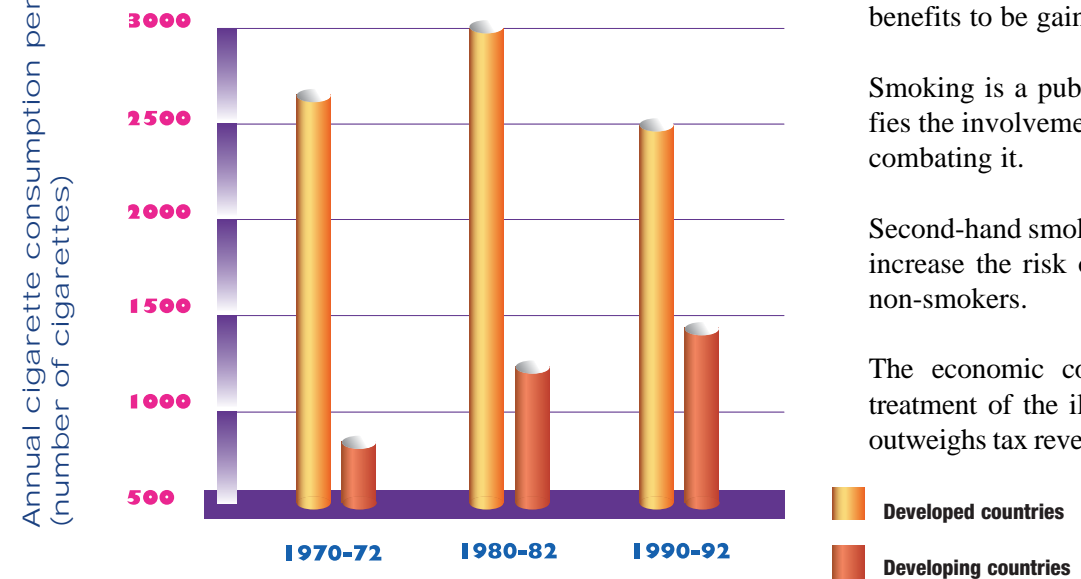
To quit smoking, or even better, to avoid starting to smoke, is the single best thing a person can do for his or her health. For those who do smoke, there are immediate health benefits to be gained from quitting.

Smoking is a public health threat and justifies the involvement of society as a whole in combating it.

Second-hand smoke is carcinogenic and may increase the risk of lung cancer by 20% in non-smokers.

The economic cost of tobacco, including treatment of the ill and loss of productivity, outweighs tax revenues derived from tobacco.

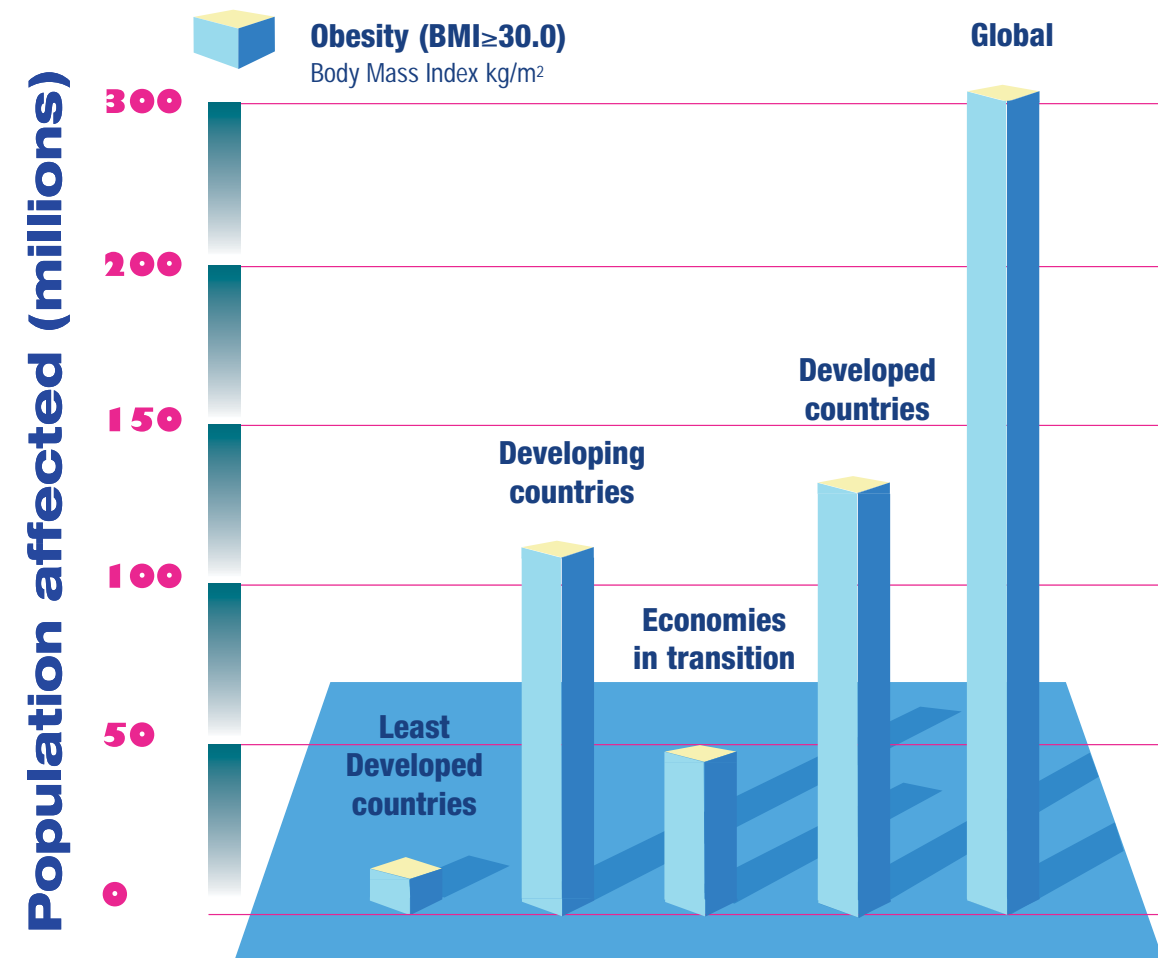
Smoking is increasing in the developing world. Trends in per capita adult cigarette consumption



Source: WHO 1997 Tobacco or Health a Global Status Report Geneva, Switzerland

In high income countries, people are eating **more** and exercising **less**.

## Promoting a healthy diet and an active lifestyle



And there is a potential danger for other countries adopting this lifestyle



UTCC

In high income countries, people are eating more and exercising less – with resulting increases in body weight. In many developed countries, as much as half of the adult population may be overweight and more than 25% obese.

Societies reliant on salted and pickled food have higher incidences of gastric cancers.

Through diet and exercise, we can prevent up to a third of cancer cases. Physical activity, avoidance of overweight and frequent daily intake of fresh fruits and vegetables reduce the risk of breast, colon, oral cavity, lung, cervix, and other cancers.



WHO P. Viro

# Preventing cancers caused by infection...



Chronic infection with Hepatitis B virus (HBV) increases risk of liver cancer by at least 40-fold. In the Gambia, where infection with this virus is endemic, a programme is underway to vaccinate children against HBV – during 1986-1991 some 60,000 children were vaccinated.

This study has already shown that 90 to 95% of chronic HBV infection can be prevented. In the years to come researchers will be watching these children to see whether the expected decrease in liver cancer also results.

The sexually-transmitted human papillomavirus (HPV) can increase the risk of cervical cancer 100-fold. Vaccines against HPV are being developed and tested. Early results look promising.

Prevention of HIV infection will also reduce the incidence of related cancers such as Kaposi sarcoma and lymphoma.

# by preventing the infection

# Screening and early detection can save lives



The chances of surviving the onset of some common cancers depend largely on how early they are detected and how well they are treated.

Pap tests for cervical cancer have substantially checked the mortality rates in most developed countries and the programmes in developing countries using pap tests are working.

In many developing countries, where these are not feasible, several other low technology approaches are being studied and look promising.

The success of public health programme in detecting cancer early depends on the allocation of resources, availability of qualified specialists, and access to follow-up treatment.



*In May 2000, our Institute took part in establishing the first inter-institutional committee for the prevention of cervical cancer in El Salvador, which led to the official launch, in January 2003, of the National cervical cancer control program. This is a wonderful example of successful coordination and unification of efforts from all sectors of society (political, institutional, private and NGO) towards strengthening preventive and control aspects of cervical cancer.*



Dr. Ignacio Diaz Bazan,  
Director Instituto des  
Cancer de El Salvador



# The best treatment for all

In high income countries the 5-year survival rate is between 50% to 60%



WHO P. Vitrot

## Survival strategies

Effective treatment exists for many cancers. Optimal treatment combined with early detection leads to a high rate of cure for cancers of the cervix, breast, oral cavity and colon.

For some cancer sites such as the oesophagus, treatment has limited effectiveness regardless of country. However, there are significant inequalities between countries treating the more curable cancers such as breast and leukaemia.

The success of public health systems in treating potentially curable cancers depends on the appropriate allocation of resources and equal access to good quality care and information for all cancer patients.

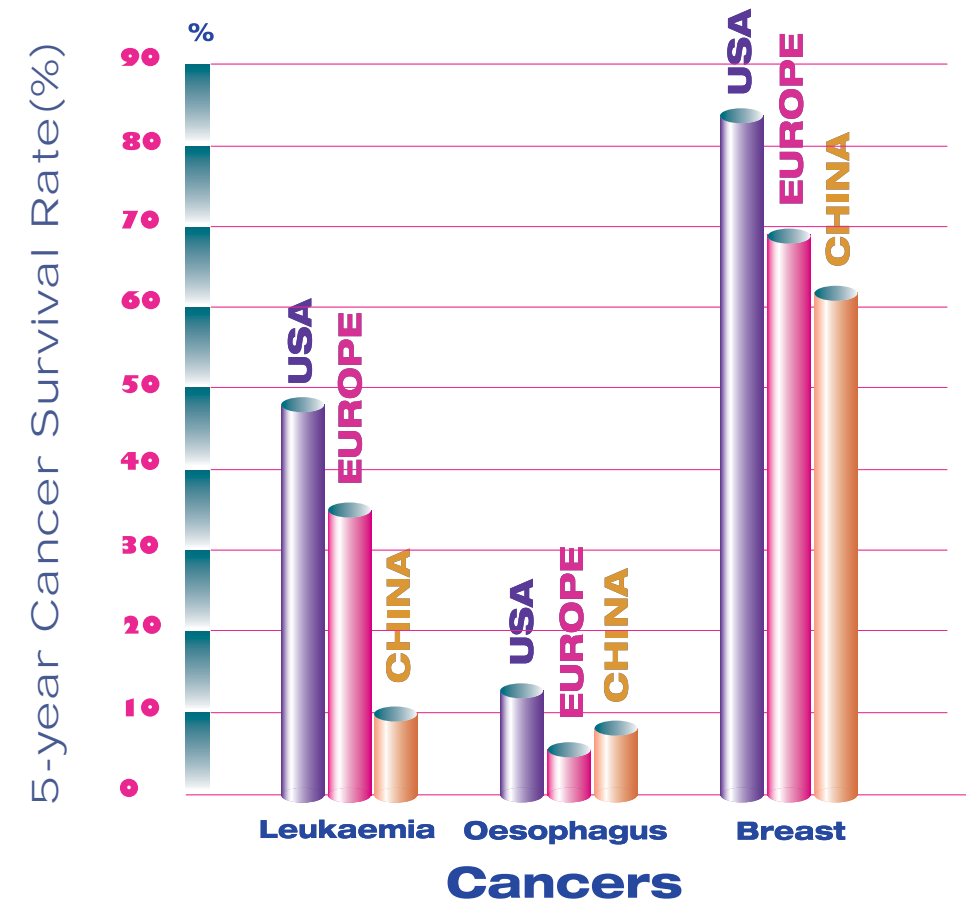


*Survival outcomes vary dramatically throughout the world – not just between countries, not just between cities, but even between institutions within the same city. Wide variation in access to quality cancer care is a major cause of these discrepancies.*

Dr. Ketayun A. Dinshaw  
Director, Tata Memorial Centre



The world average is between 30 to 40%



Today, **22.4** million people  
are living with **cancer**

### Improving systems to meet patient needs

Patients, their families, their caregivers, and survivors have a number of needs: emotional, physical, spiritual, and financial.

They are part of the concerted action against cancer. They provide understanding of the strengths and weaknesses in relation to prevention and care strategies as well as more clarity on their specific needs.

“

*Our team identified 200 ways of improving services for patients – many of the improvements have been made with relatively little new resources. We estimate that we've saved 400 years of waiting time for patients with breast, lung, bowel, prostate, and ovarian cancer since 1999.*

Ms. Janet Williamson  
National Director  
Cancer Services Collaborative  
NHS, United Kingdom

”

“

*In Guatemalan culture, it is taboo to speak about cervical cancer, and there is little to no education about the disease. Husbands are reluctant to bring their wives to doctors for screening or treatment. And often, when they do, it is too late. Today, midwives, nurses and social workers are succeeding in breaking taboos, establishing a system of trust. With the husbands' approval we accompany the women from the home to the doctor so that they receive the care they need.*



Magdalena Tepou  
Midwife, PIENSA  
San Juan Sacatepequez, Guatemala

”

and **1.5** million are dying  
of cancer

“

*The International Narcotics Control Board data shows that several countries are far from achieving the rational use of essential drugs to alleviate pain. Only 48% of countries have morphine available in all of their cancer treatment hospitals. Even where morphine is available, periodic shortages often occur. The INCB is calling for governments to revise their stance on relevant opioid drugs for pain relief.*



Ms. Carmen Selva  
Chief, Psychotropics Control Unit  
International Narcotics Control Board Secretariat

”

# Global action against Cancer



UICC

The World Health Organization and the International Union Against Cancer are working together to address the cancer situation at a global level and to promote concerted action against cancer.

The challenge is clear and many possible solutions - prevention, early detection, cure and care - are well known to us. So why haven't we achieved greater success in reversing the trends? Perhaps partly because cancer is only one of the many challenges to health - people around the world are also dealing with other diseases, war, famine and political instability. Partly because cancer is a complex disease with many forms. There is no one answer. There is no one solution.

Each individual has a role to play. Health care professionals, patients, survivors, policy makers, journalists, researchers and donors can each contribute to the global effort against cancer. The strategies are available and the tools ready - the science, the legislative frameworks, the programmes and an enormous body of information on one of the world's most studied diseases.

We've tried working alone, and we have had limited success. Now is the time for a new approach - all sectors, public and private, working together to achieve a common goal - the control of cancer.

We know the facts. The inexorable rise of a largely avoidable disease is exacting an unacceptable human and social cost in every country. Every year more than 6 million people die of cancer worldwide.

We know what can be done. We can save 2 million lives by 2020. A great deal has already been done but it's not enough.



*Cancer has emerged as a major public health problem in developing countries for the first time, matching its effect in industrialized nations. This is a global problem, and it's growing. But, we can take steps to slow this growth.*

Dr. Paul Kleihues, MD  
Director of IARC



## Contacts

### World Health Organization

For more information contact:  
Programme for Cancer Control  
Management of Noncommunicable Diseases  
20, avenue Appia CH-1211 Geneva 27  
Tel: +41 22 791 2111  
Fax: +41 22 791 3111

### International Union Against Cancer

For more information contact:  
Communications Department  
3, rue du Conseil Général  
1205 Geneva Switzerland  
Tél : +41 22 809 1811  
Fax: +41 22 809 1810

## Further Reading

**National cancer control programmes: policies and managerial guidelines**  
2nd edition Geneva, World Health Organization, 2002.

**World cancer report**  
Lyon, International Agency for Research on Cancer, 2003.

**Curbing the epidemic: governments and the economics of tobacco control**  
World Bank, 1999.

## Web sites

World Health Organization:	<a href="http://www.who.int/cancer">www.who.int/cancer</a>
WHO Tobacco Free Initiative:	<a href="http://www.who.int/tobacco">www.who.int/tobacco</a>
International Agency for Research on Cancer:	<a href="http://www.iarc.fr">www.iarc.fr</a>
International Union Against Cancer:	<a href="http://www.uicc.org">www.uicc.org</a>
UICC GLOBALink Tobacco:	<a href="http://www.globalink.org">www.globalink.org</a>

## Acknowledgements

The following people have provided valuable input to this publication:

Raphael Bengoa	<b>WHO</b>	Paola Pisani	<b>IARC</b>
Brooke Girard	<b>UICC</b>	Cecilia Selpúlveda	<b>WHO</b>
Nancy Lins	<b>UICC/ACS</b>	Andreas Ullrich	<b>WHO</b>
Amanda Marlin	<b>WHO</b>	Elizabeth Ward	<b>ACS</b>
Colin Mathers	<b>WHO</b>	Derek Yach	<b>WHO</b>
Isabel Mortara	<b>UICC</b>		