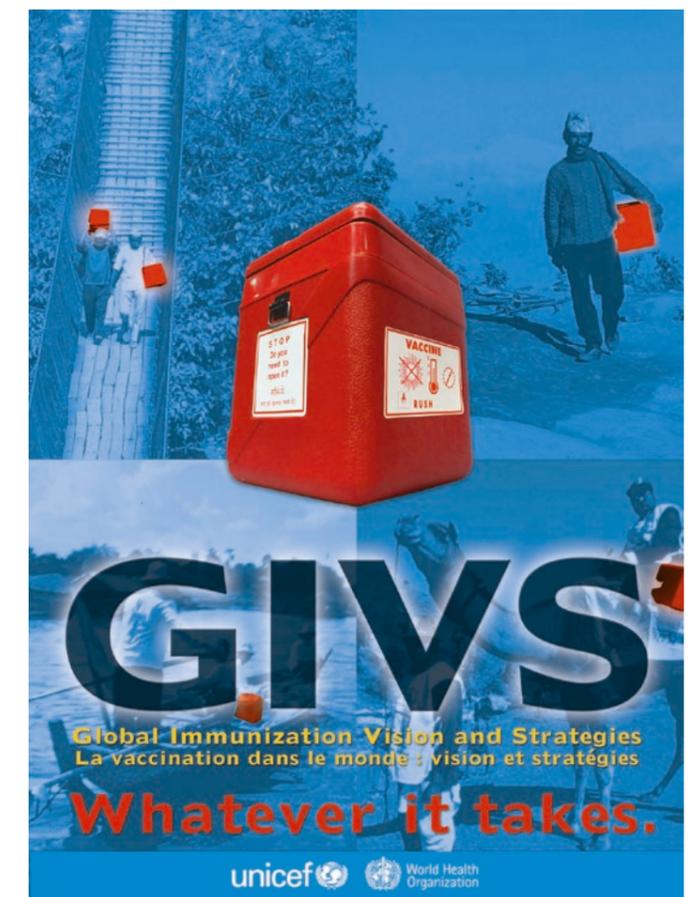
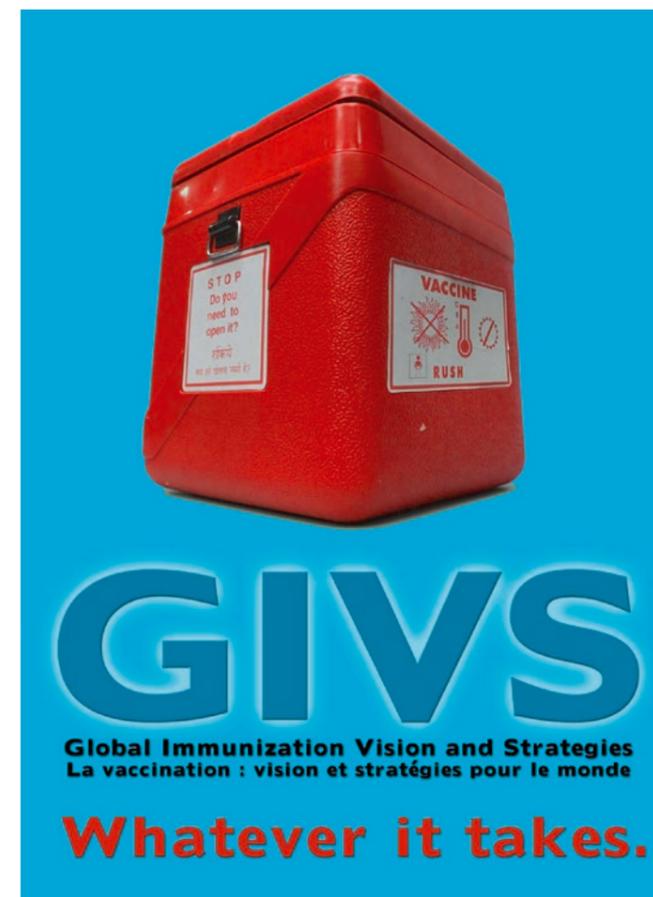


Poster design

Global Immunization Vision and Strategies, poster proposal.



Advocacy campaign
Visual identity system

Stop the Global Epidemic of Chronic Disease: A Practical Guide to Successful Advocacy. Selected components of the Chronic diseases advocacy tool kit, in English and French.

Powerful advocacy is essential to build commitment for action to stop the global epidemic of chronic disease. This handbook shows the way forward.

DEVELOPING KEY MESSAGES TO INFLUENCE YOUR TARGET AUDIENCE

ISBN 92 4 159446 2

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STOP

THE GLOBAL EPIDEMIC OF CHRONIC DISEASE

A PRACTICAL GUIDE TO SUCCESSFUL ADVOCACY

World Health Organization

MISUNDERSTANDINGS US. REALITY

MARIAM JOHN, 13, HAD BIG PLANS FOR THE FUTURE – to become the health minister of her country, the United Republic of Tanzania. Her dream was to be able to help others and spare them from going through an experience similar to her own.

Mariam was diagnosed with bone cancer in February 2005, soon after her knees had swollen to the point that she could barely walk. She was able to receive chemotherapy and radiotherapy treatment, but even this treatment was almost unbearable. "I am willing to have my leg amputated if it can take my pain away," she said.

One of Mariam's legs was amputated in December 2005. Three months later, she lost her battle to cancer, passing away in March 2006.

Contrary to common perceptions of chronic diseases, cases like Mariam's are not exceptional. Cardiovascular diseases, cancer, chronic respiratory diseases and diabetes are not just diseases of the elderly and the wealthy in developed countries. They mostly affect poor people and half of all chronic disease deaths occur in people under 70 years of age.

Chronic disease is responsible for 60% of all deaths worldwide

80% of chronic disease deaths occur in low and middle income countries

Almost half of chronic disease deaths occur in people under the age of 70

Mariam John battles bone cancer in Tanzanian hospital

CHRONIC DISEASE AND POVERTY

A VICIOUS CYCLE

WHAT CAN YOU DO TO PREVENT CHRONIC DISEASE? 5 easy suggestions

WHERE ARE THE DEATHS HAPPENING? Projected deaths by major cause 2012

PHYSICAL ACTIVITY THROUGH THE built environment

THE poverty-obesity paradox

Physical activity through the built environment

NEWSLETTER THE obesity CRISIS

Menaka Seni, 60, has lived with diabetes for almost 30 years and like many with the disease, has high blood pressure. But it took the death of her husband and bypass surgery for Menaka herself to make her appreciate that being overweight was one of the main reasons for their health problems.

Menaka's husband died of a heart attack. A year later, Menaka also suffered a heart attack and was unable to be taken to hospital by ambulance because of her weight. She underwent bypass surgery and learned, while recovering at the hospital, that it would take more than just medication to lower her health risks. Ever since, Menaka has been able to make positive changes to her life, taking daily walks and eating more fish, fruit and vegetables. "Taking medication for my heart and diabetes helps, but I learnt that you also need to change behaviour to lower your health risks," she explains.

Millions of people around the world share Menaka's physical profile. The World Health Organization estimates that there are more than one billion people – 1 in 6 of the world's population – who are overweight. Unfortunately, many of these people are like Menaka before her heart attack – unaware of the true risks they are running.

Projections show an even gloomier picture – if current trends continue, it is estimated that by 2015 over 1.5 billion people will be overweight. "The sheer magnitude of the overweight and obesity problem is staggering," says Dr Catherine Le Gales-Camus, WHO Assistant Director-General of Noncommunicable Diseases and Mental Health. "The rapid increase of overweight and obesity in many low and middle income countries presages an overwhelming chronic disease burden in these countries in the next 10 to 20 years, if action is not taken now." So far, not one country in the world has been able to turn back the rising trend.

Overweight and obesity are major risk factors for chronic diseases such as cardiovascular disease and diabetes. Cardiovascular disease (mainly heart disease and stroke) is already the world's number one cause of death, killing 17 million people each year. Once considered a problem only in high income countries, estimates show that overweight and obesity are dramatically on the rise in low and middle income countries. WHO estimates that over the next 10 years cardiovascular diseases will increase most notably in the Eastern Mediterranean and African Regions, where cardiovascular disease-related deaths are predicted to rise by over 25%.

One doesn't even have to be overweight to be at risk. Evidence shows that the risks caused by excessive weight increase from a body mass index (BMI) of 21, which is well below overweight (BMI >25), let alone obese (BMI >30).

Over the past few years, a new frightening trend has begun to take shape – the rapid rise of overweight and obesity in children. Unlike most adults, children cannot choose the environment in which they live or the food they eat. They also have a limited ability to understand the long-term consequences of their choices.

Overweight and obesity are known risk factors for type 2 diabetes. Until recently, this type of diabetes almost only affected adults, hence the commonly used term "adult-onset diabetes". Fifteen years ago, type 2 diabetes accounted for less than 5% of all cases of newly diagnosed diabetes in children and adolescents, whereas today in some countries it accounts for more than 45% of newly-diagnosed cases. Studies carried out in Asia and Europe also show an increase of type 2 diabetes in children.

If the current trend continues, some researchers have suggested that this generation of children may be the first to die at a younger age than their parents.

The good news is that overweight and obesity, and their related chronic diseases, are largely preventable," said Dr Robert Beaglehole, WHO Director of Chronic Diseases and Health Promotion. "Approximately 80% of premature heart disease, stroke, and type 2 diabetes, and 40% of cancer could be avoided through healthy diet, regular physical activity and avoidance of tobacco use."

Recognizing this, many countries have adopted the WHO Global Strategy on Diet, Physical Activity and Health which describes the actions needed to support the adoption of healthy diets and regular physical activity.

At an individual level, people can reduce fat and salt in their diet while increasing fruit and vegetable consumption. Individuals can also increase physical activity to at least 30 minutes per day and stop

how your country is doing

Find specific data related to your country on the WHO Global Infobase. WHO Global Infobase: <http://infobase.who.int> - on this link, click on "country profiles" to see how your country is doing. You can see country levels of overweight and obesity as well as data related to diabetes, blood pressure, physical inactivity and tobacco use. Information on some countries can also be found on the chronic diseases and health promotion site: http://www.who.int/chp/chronic_disease_report/media/impact/en/

<http://infobase.who.int>

LOVING HIM TO DEATH

Mairi Twalib is a five-year-old boy living in a poor rural area of the Kilimanjaro District of the United Republic of Tanzania. Health workers from a nearby medical centre spotted his weight problem last year during a routine community outreach activity. The diagnosis was clear: childhood obesity. One year later, Mairi's weight hasn't changed for the better and neither has his excessive consumption of porridge and animal fat. His fruit and vegetable intake also remains seriously insufficient – "It is just too hard to find reasonably priced products during the dry season, so I can't manage his diet," his mother Fadhlila complains.

The community health workers who recently visited Mairi for a follow-up also noticed that he was holding the same flat football as before – with the word "health" stamped on it. Mairi's neighbourhood is littered with sharp and rusted construction debris and the courtyard is too small for him to be able to play ball games. In fact, he merely plays outside. "It is simply too hazardous. He could get hurt," his mother says.

Fadhlila, who is herself obese, believes that there are no risks attached to her son's obesity and that his weight will naturally go down one day. "Rounded forms run in the family and there's no history of chronic diseases, so why make a big fuss of all this," she argues with a smile on her face. In fact, Mairi and Fadhlila are at risk of developing a chronic disease as a result of their obesity.

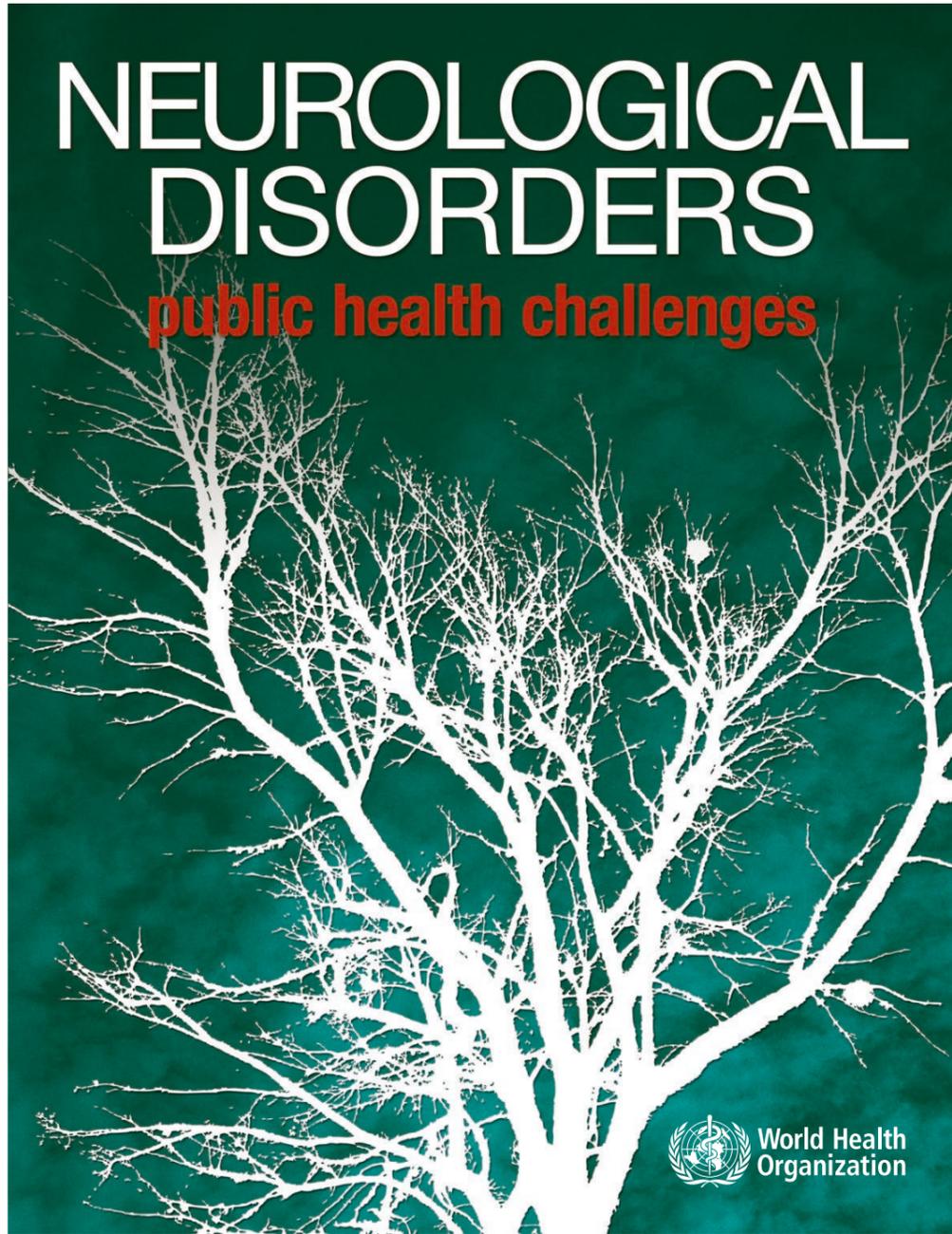
For further information, visit www.who.int/chp.

WHAT WORKS?

SÃO PAULO, BRAZIL – "Agião São Paulo" is an innovative plan developed by the State of São Paulo to encourage people to be more physically active. It promotes messages about the health benefits of physical activity through partner institutions and their networks and coordinates activities and large-scale events for the 37 million people living in the state. The government has invested the equivalent of only US\$ 0.5 per inhabitant per year – and yet the programme has already shown positive results.

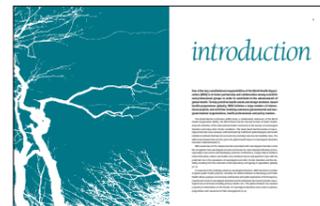
BOGOTÁ, COLOMBIA – Bogotá has made significant improvements in the physical environment and infrastructure of the city in order to promote physical activity. Some 120 km of streets are closed to traffic on Sundays and holidays and turned into recreational spaces. The city has implemented policies to reduce the use of cars and has built an extensive network of bike paths.

UNITED KINGDOM – The "Feed Me Better" school meals campaign led to greater national awareness and action that resulted in a major budget increase and the setting of national standards for school meals. Consumption of fruit and vegetables will be given priority, and junk food will be banned from schools.



Book design
Table design
Graphs and Maps

Neurological Disorders:
Public Health Challenges,
228 pages.



CHAPTER 1
public health
principles
and
neurological disorders

In this chapter

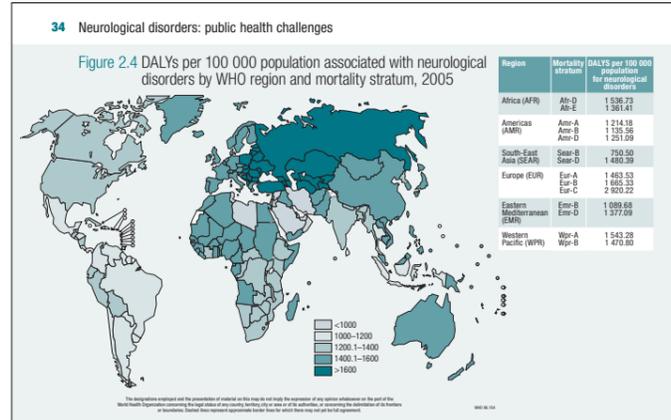
- 8 Principles of public health
- 9 Epidemiology and burden
- 9 Health promotion and disease prevention
- 12 Health policy
- 14 Service provision and delivery of care
- 16 Disability and rehabilitation
- 20 Stigma
- 22 Education and training
- 23 Conclusions

This chapter explains briefly the principles of public health, epidemiology and the burden of disease, and the ways in which health promotion and disease prevention are achieved. It looks at risks to health and prevention strategies, and explains what health policy means. It then describes the goals and functions of health systems and in particular considers service provision for neurological disorders.

As many neurological disorders result in considerable morbidity, special attention is paid to disability and rehabilitation. The all-important part played by stigma in neurological disorders is assessed and, finally, education and training in neurology are discussed.

Many distinctions can be made between the practice of public health and that of clinical neurology. Public health professionals approach neurology more broadly than neurologists by monitoring neurological disorders and related health concerns of entire communities and promoting healthy practices and behaviours among them to ensure that populations stay healthy. Public health specialists focus on health and disease of entire populations rather than on individual patients, whereas neurologists usually

global burden of neurological disorders: estimates and projections **35**



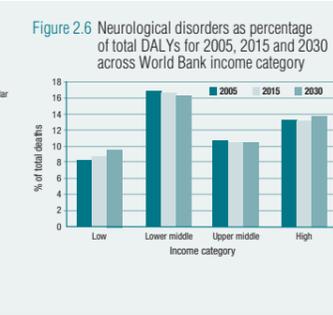
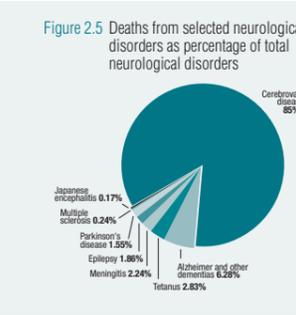
Estimates of deaths
Neurological disorders are an important cause of mortality and constitute 12% of total deaths globally (see Table 2.7). Within these, cerebrovascular diseases are responsible for 85% of the deaths due to neurological disorders (see Figure 2.5). Neurological disorders constitute 16.8% of the total deaths in lower middle income countries compared with 13.2% of the total deaths in high income countries (Figure 2.6). Among the neurological disorders, Alzheimer and other dementias are estimated to constitute 2.84% of the total deaths in high income countries in 2005. Cerebrovascular disease constitute 15.8%, 9.6%, 9.5% and 6.4% of the total deaths in lower middle, upper middle, high and low income countries respectively (Table 2.8).

Table 2.7 Deaths attributable to neurological disorders as percentage of total deaths, 2005, 2015 and 2030

Cause category	2005 (%)	2015 (%)	2030 (%)
Epilepsy	0.22	0.21	0.19
Alzheimer and other dementias	0.73	0.81	0.92
Parkinson's disease	0.18	0.20	0.23
Multiple sclerosis	0.03	0.03	0.02
Migraine	0.00	0.00	0.00
Cerebrovascular disease	9.90	10.19	10.63
Polio/myelitis	0.00	0.00	0.00
Tetanus	0.33	0.23	0.13
Meningitis	0.26	0.17	0.10
Japanese encephalitis	0.02	0.01	0.01
Total	11.67	11.84	12.22

Table 2.6 Neurological disorders as percentage of total DALYs by WHO region, 2005

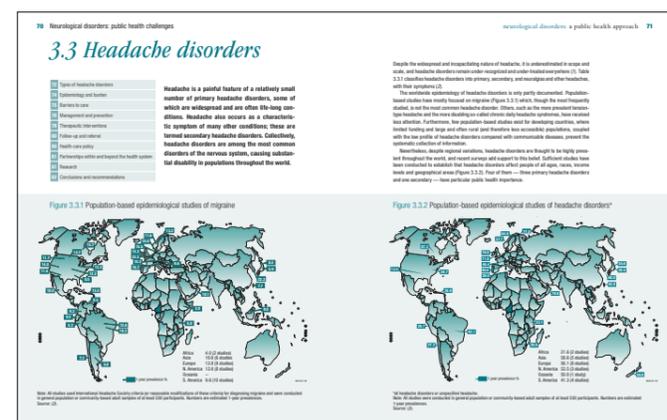
Cause category	World (%)	WHO region					
		AFR (%)	AMR (%)	SEAR (%)	EUR (%)	EMR (%)	WPR (%)
Epilepsy	0.50	0.46	0.73	0.46	0.40	0.54	0.44
Alzheimer and other dementias	0.75	0.10	1.47	0.26	2.04	0.42	1.32
Parkinson's disease	0.11	0.02	0.22	0.07	0.30	0.06	0.15
Multiple sclerosis	0.10	0.03	0.17	0.08	0.20	0.09	0.15
Migraine	0.52	0.13	0.97	0.41	0.80	0.51	0.73
Cerebrovascular disease	3.46	1.11	3.10	1.93	7.23	2.69	6.81
Polio/myelitis	0.01	0.00	0.00	0.01	0.00	0.01	0.01
Tetanus	0.44	0.77	0.01	0.81	0.00	0.54	0.10
Meningitis	0.36	0.24	0.39	0.81	0.24	0.43	0.24
Japanese encephalitis	0.04	0.00	0.00	0.05	0.00	0.06	0.09
Total	6.29	2.86	7.06	4.90	11.23	5.34	10.04



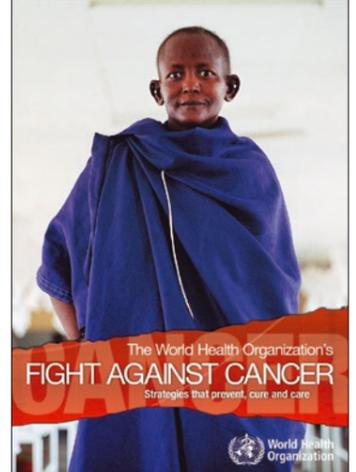
184 Neurological disorders: public health challenges

Table A.4.3 Deaths attributable to neurological disorders, by cause, WHO region and mortality stratum, projections for 2005, 2015 and 2030

Cause category	World	WHO region					
		AFR	AMR	SEAR	EUR	EMR	WPR
Epilepsy	1 100	1 000	1 100	1 000	1 000	1 000	1 000
Alzheimer and other dementias	1 500	1 500	1 500	1 500	1 500	1 500	1 500
Parkinson's disease	200	200	200	200	200	200	200
Multiple sclerosis	100	100	100	100	100	100	100
Migraine	100	100	100	100	100	100	100
Cerebrovascular disease	10 000	10 000	10 000	10 000	10 000	10 000	10 000
Polio/myelitis	100	100	100	100	100	100	100
Tetanus	1 000	1 000	1 000	1 000	1 000	1 000	1 000
Meningitis	1 000	1 000	1 000	1 000	1 000	1 000	1 000
Japanese encephalitis	100	100	100	100	100	100	100
Total	15 000						



The World Health Organization's *Fight Against Cancer: Strategies That Prevent, Cure and Care.* Cover and inside pages.



GLOBAL ACTION PLAN AGAINST CANCER CAN SAVE MILLIONS OF LIVES

WHO knows how to stop millions of people dying needlessly from cancer. Our task is to support Member States to make this happen.

PREVENT

WHO develops and guides to reduce cancer deaths by 40% and prevent untold suffering and cost to communities, especially in the developing world. This brochure examines each WHO programme dealing with cancer prevention and how they go about it: reducing tobacco and alcohol use and how they go about it; promoting physical activity; safeguarding workplaces against carcinogens; and advocating immunization against the hepatitis B virus play enormous roles in reducing the cancer burden. They are all discussed in the Prevention section.

CARE

WHO provides vital support and guidance to cancer care pathways for various parts of the world. Good clinical practice, technical support and training are all given to provide the best possible palliative care services. WHO's work is particularly seen in the 'Cure and Care' section.

MANAGE

Providing information on cancer burden for strengthening evidence-based policy is a core WHO function. We assist countries to assess, implement and measure the success of their NCCPs. Each work also helps identify challenges and direct resources towards effective cancer prevention and control activities. This brochure examines the different, yet coordinated, approaches being used in developing necessary data and providing policy options to ensure people benefit from NCCPs.

WHO CANCER FIGHTERS

Dr Catherine Le Galbo-Camus, Assistant Director-General for Noncommunicable Diseases and Mental Health

Tobacco use and exposure caused 1.5 million cancer deaths annually. Chronic hepatitis B infection kills 340 000 from liver cancer and cirrhosis. A quarter of a million women die from cervical cancer. Vaccines need to prevent most of these deaths. Occupational carcinogens kill at least 152 000 people. Some 274 000 people who are overweight, obese or physically inactive die from cancer. Hereditary alcohol causes 202 000 cancer deaths. Indoor and outdoor air pollution leads to 71 000 cancer deaths, according to WHO's Comparative Risk Assessment publications www.who.int/healthtopics/diseases.

The human price is not the only loss caused by cancer. It is responsible for economic costs to health systems, insupportable economic and emotional burdens on families and irreplaceable losses for communities.

WHO CANCER FIGHTERS

Dr Andrea Uthoff, Medical Officer, Cancer Control

But WHO's many departments and experts have developed a wide range of strategies to find the neediest suffering. These measures prevent and cure many cancers, provide palliative care for the terminally ill. All these efforts are being consolidated in WHO's Global Action Plan Against Cancer.

This multi-faceted approach will ensure that these strategies are addressed at every level within national cancer control programmes. To ensure that these strategies succeed, WHO must keep working closely with global partners, ranging from collaborating centres (especially with governmental and managerial organizations in cancer-related fields like tobacco and immunization. We also work hand-in-hand with a host of UN bodies, like the International Atomic Energy Agency on the past Program of Action for Cancer Therapy (PACT) in Albania, Nicaragua, Sri Lanka and the United Republic of Tanzania.

WHO has also formed a Commission on Social Determinants of Health to promote equal access to preventive and curative health services for all people, irrespective of their social or economic backgrounds.

In Albania, a WHO cancer control medical officer within the Department of Chronic Diseases and Health Promotion, says the Action Plan has helped governments prevent deaths from cancer by advocating prevention and control programmes at the highest political level.

Every country, regardless of resource level, can confidently take steps to curb the cancer epidemic," Uthoff says. "They can save lives and prevent unnecessary suffering caused by cancer."

Years of work have resulted in global strategies being crafted and implemented to improve health, and prevent and control cancer.

These strategies, requested by the World Health Organization's own Member States, provide a strong foundation for a determined fight against the disease. Jointly, they will form the basis of our Global Action Plan Against Cancer.

Despite these efforts, WHO and its Member States still face great challenges to defeat the global burden of cancer. Greater investment in prevention, cure and care, closer collaboration with international partners and stronger determination to defeat cancer are needed to fuel what must be a continuous, sustainable campaign.

Cancer is the world's second biggest killer after cardiovascular diseases, but one of the most preventable noncommunicable chronic diseases. Cancer killed 7.6 million people in 2005, three quarters of whom were in low- and middle-income countries. By 2015, that number is expected to rise to 9 million and increase further to 11.5 million in 2020.

Up to 40% of all cancer deaths can be avoided by reducing tobacco use, improving diets and physical activity, lowering alcohol consumption, eliminating workplace carcinogens and immunizing against hepatitis B virus and the human papillomavirus.

A large proportion of cancer can be cured and all cancer patients deserve care. WHO provides support to strengthen health services to cure and care for cancer patients by improving primary and specialized health care. WHO makes essential medicines and technologies available for cancer treatment and palliative care. Our strategies and policy guidelines help governments in all countries to improve population health standards and reduce national cancer burdens.

40%

of all cancer deaths can be prevented

Cancer killed 7.6 million people in 2005, three quarters of whom were in low- and middle-income countries

www.who.int/cancer/en/

CURE & CARE

WHO CANCER FIGHTERS

Prof. Charles Gilks, Coordinator, Antiretroviral Treatment and HIV Care

VICTORIES OVER AIDS BRING CANCER BURDEN INTO FOCUS

Success in scaling up access to HIV/AIDS treatment has set the world a new challenge: protecting people with the virus from succumbing to long-term chronic diseases like cancer.

Combination antiretroviral therapies work by suppressing the AIDS virus, in turn enabling people with the disease to enjoy longer and more productive lives.

"We are getting lots of people on treatment, thereby lengthening their lives," says Prof. Charles Gilks, Coordinator of Antiretroviral Treatment and HIV Care for WHO's HIV/AIDS Department. "But the consequence is that HIV-associated cancers become more and more important."

With this in mind, WHO is focusing more on chronic disease prevention for people living with HIV/AIDS.

Primary prevention measures like recommending people living with HIV/AIDS use condoms have led to a reduction in Kaposi sarcoma, a common form of cancer in HIV-positive people linked with a sexually-transmitted herpes-like virus.

WHO CANCER FIGHTERS

Dr Andrea Uthoff, Medical Officer, Cancer Control

WHO NATIONAL CANCER CONTROL PROGRAMMES PROVIDE HOLISTIC CANCER GUIDANCE

Many countries are already putting WHO's cancer-fighting tools to use in their efforts to reduce the cancer burden.

Albania has achieved WHO's goal of reducing the cancer burden by 40% through a series of steps: reducing tobacco use, promoting physical activity, and immunizing against hepatitis B virus and the human papillomavirus.

WHO's National Cancer Control Programmes (NCCPs) provide a holistic approach to cancer control, covering prevention, cure and care, and palliative care. They are designed to be adapted to the needs and resources of each country.

In Albania, the NCCP has been successful in reducing the cancer burden by 40% through a series of steps: reducing tobacco use, promoting physical activity, and immunizing against hepatitis B virus and the human papillomavirus.

WHO REDUCES IONIZING RADIATION-RELATED CANCER

WHO's efforts to reduce harmful exposure to ionizing radiation, from radon to nuclear emergencies, are preventing cancer.

WHO CANCER FIGHTERS

Dr Robert Smith, Specialist, Radiation and Environmental Health

WHO is a key player in helping countries to prevent cancer caused by exposure to ionizing radiation. This includes radon, nuclear accidents, and nuclear emergencies.

WHO has developed guidelines for radon, nuclear accidents, and nuclear emergencies. These guidelines help countries to reduce the cancer burden by 40% through a series of steps: reducing radon exposure, nuclear accidents, and nuclear emergencies.

PREVENT

WHO TOBACCO CONVENTION CRUCIAL TO CANCER PREVENTION

Quitting tobacco is the best way to reduce cancer. To help make this happen, WHO develops and helps implement worldwide tobacco control.

WHO CANCER FIGHTERS

Dr Douglas Kessler, Acting Director, Tobacco Free Initiative

WHO's tobacco control efforts are helping countries to reduce the cancer burden by 40% through a series of steps: reducing tobacco use, promoting physical activity, and immunizing against hepatitis B virus and the human papillomavirus.

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MANAGE

WHO SUPPORTS ALBANIA IN LAUNCHING ITS OWN NCCP

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WHO CANCER FIGHTERS

Dr Andrea Uthoff, Medical Officer, Cancer Control

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PALLIATIVE CARE FOR CANCER PATIENTS

WHO PROMOTES PALLIATIVE CARE FOR CANCER PATIENTS

Whoever suffers from cancer needs care. WHO provides support to strengthen health services to cure and care for cancer patients by improving primary and specialized health care. WHO makes essential medicines and technologies available for cancer treatment and palliative care. Our strategies and policy guidelines help governments in all countries to improve population health standards and reduce national cancer burdens.

WHO CANCER FIGHTERS

Dr Andrea Uthoff, Medical Officer, Cancer Control

Color and tonal variations

Newborn Health

The first few days and weeks of life are among the most critical for child survival. Every year, an estimated 4 million children die during the first month of life. Almost all of these deaths (98%) occur in developing countries. Most neonatal deaths are due to low birth weight, asphyxia and infections such as sepsis, tetanus and pneumonia. An estimated two-thirds of these deaths could be prevented or treated with proven, cost-effective interventions that already exist. About half of these deaths occur at home, often among newborns who have had no contact with a health care provider.

KEY AREAS OF WORK
 Causes of death ■ Breast feeding ■ HIV and infant feeding ■ Millennium Development Goals ■ 10 years of IMCI strategy ■ Newborn guidelines

Causes of deaths of newborns, developing countries, 2004-2007

Millennium Development Goals: How are we doing?
 Tracking of global progress towards the MDGs reveals that seven of the 60 highest-mortality rate countries are on track to meet MDG4 (Bangladesh, Brazil, Egypt, Indonesia, Mexico, Nepal and the Philippines). 39 countries are making some progress but they need to accelerate, and 14 are cause for serious concern (see Figure). Although rates of coverage for some interventions are improving, for many interventions it remains low, and coverage rates for the most part have no indication of the quality of the interventions.

HIV and infant feeding
 In October 2006, on behalf of the Inter-agency Task Team (IATT) on Prevention of HIV Infections in Pregnant Women, Mothers and their Infants, WHO held a technical consultation in Geneva on HIV and infant feeding. The participants included researchers, programme managers, infant feeding experts, representatives of relevant UN agencies, AFRO, and six WHO departments. The aim was to review the substantial body of new evidence and most recent experience regarding HIV and infant feeding and to clarify and refine the existing UN recommendations.

Child and Adolescent Health and Development Progress Report 2007

Breastfeeding

While evidence of the short-term benefits of breastfeeding – a reduction in early childhood illness and deaths due to infectious diseases – is well-established, the jury was still out on the long-term protective health benefits. However, a new analysis carried out in 2006 suggests that adults who were breastfed as children may be healthier and more intelligent than adults who were not. While evidence of the short-term benefits of breastfeeding – a reduction in early childhood illness and deaths due to infectious diseases – is well-established, the jury was still out on the long-term protective health benefits. However, a new analysis carried out in 2006 suggests that adults who were breastfed as children may be healthier and more intelligent than adults who were not. While evidence of the short-term benefits of breastfeeding – a reduction in early childhood illness and deaths due to infectious diseases – is well-established, the jury was still out on the long-term protective health benefits. However, a new analysis carried out in 2006 suggests that adults who were breastfed as children may be healthier and more intelligent than adults who were not.

Guidelines for planning based on Newborn Health Framework

In 2006, WHO worked in collaboration with UNICEF and the Saving Newborn Lives initiative to develop tools to build the capacity of national programme managers to strengthen the newborn health component in maternal and child health programmes and in related programmes including family planning, nutrition, malaria and HIV. The tools – which are based on the steps outlined in the recently revised Newborn Health Framework and Guidelines for Planning – are used during a one-week workshop for programme managers.

This includes a focus on situation analysis, prioritizing and packaging interventions; setting realistic coverage targets; and planning for implementation. During 2006, two capacity development workshops, involving 14 African countries, were held. During 2006, two capacity development workshops, involving 14 African countries, were held. During 2006, two capacity development workshops were held.

10 years of IMCI Strategy

The Multi-Country Evaluation (MCE) of IMCI is designed to evaluate the impact, cost and effectiveness of the IMCI strategy. The results of MCE support planning and advocacy for child health interventions by ministries of health in developing countries, and by national and international partners in development. To date, MCE has been conducted in Brazil, Bangladesh, Peru, Uganda and the United Republic of Tanzania.

The results of MCE indicate that:

- IMCI improves health worker performance and their quality of care;
- IMCI can reduce under-five mortality and improve nutritional status, if implemented well;
- IMCI is worth the investment, as it costs up to six times less per child correctly managed than current care;
- child survival programmes require more attention to activities that improve family and community behaviour;
- the implementation of child survival interventions needs to be complemented by activities that strengthen system support;
- a significant reduction in under-five mortality will not be attained unless large-scale intervention coverage is achieved.

New approaches to training health workers
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 Tracking of global progress towards the MDGs reveals that seven of the 60 highest-mortality rate countries are on track to meet MDG4 (Bangladesh, Brazil, Egypt, Indonesia, Mexico, Nepal and the Philippines). 39 countries are making some progress but they need to accelerate, and 14 are cause for serious concern (see Figure). Although rates of coverage for some interventions are improving, for many interventions it remains low, and coverage rates for the most part have no indication of the quality of the interventions.

HIV and infant feeding
 In October 2006, on behalf of the Inter-agency Task Team (IATT) on Prevention of HIV Infections in Pregnant Women, Mothers and their Infants, WHO held a technical consultation in Geneva on HIV and infant feeding. The participants included researchers, programme managers, infant feeding experts, representatives of relevant UN agencies, AFRO, and six WHO departments. The aim was to review the substantial body of new evidence and most recent experience regarding HIV and infant feeding and to clarify and refine the existing UN recommendations.

Child and Adolescent Health and Development Progress Report 2007

Breastfeeding

While evidence of the short-term benefits of breastfeeding – a reduction in early childhood illness and deaths due to infectious diseases – is well-established, the jury was still out on the long-term protective health benefits. However, a new analysis carried out in 2006 suggests that adults who were breastfed as children may be healthier and more intelligent than adults who were not. While evidence of the short-term benefits of breastfeeding – a reduction in early childhood illness and deaths due to infectious diseases – is well-established, the jury was still out on the long-term protective health benefits. However, a new analysis carried out in 2006 suggests that adults who were breastfed as children may be healthier and more intelligent than adults who were not.

Guidelines for planning based on Newborn Health Framework

In 2006, WHO worked in collaboration with UNICEF and the Saving Newborn Lives initiative to develop tools to build the capacity of national programme managers to strengthen the newborn health component in maternal and child health programmes and in related programmes including family planning, nutrition, malaria and HIV. The tools – which are based on the steps outlined in the recently revised Newborn Health Framework and Guidelines for Planning – are used during a one-week workshop for programme managers.

This includes a focus on situation analysis, prioritizing and packaging interventions; setting realistic coverage targets; and planning for implementation. During 2006, two capacity development workshops, involving 14 African countries, were held. During 2006, two capacity development workshops, involving 14 African countries, were held. During 2006, two capacity development workshops were held.

10 years of IMCI Strategy

The Multi-Country Evaluation (MCE) of IMCI is designed to evaluate the impact, cost and effectiveness of the IMCI strategy. The results of MCE support planning and advocacy for child health interventions by ministries of health in developing countries, and by national and international partners in development. To date, MCE has been conducted in Brazil, Bangladesh, Peru, Uganda and the United Republic of Tanzania.

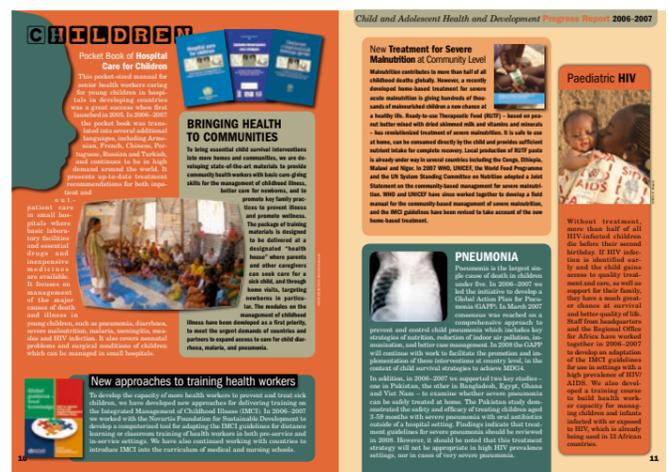
The results of MCE indicate that:

- IMCI improves health worker performance and their quality of care;
- IMCI can reduce under-five mortality and improve nutritional status, if implemented well;
- IMCI is worth the investment, as it costs up to six times less per child correctly managed than current care;
- child survival programmes require more attention to activities that improve family and community behaviour;
- the implementation of child survival interventions needs to be complemented by activities that strengthen system support;
- a significant reduction in under-five mortality will not be attained unless large-scale intervention coverage is achieved.

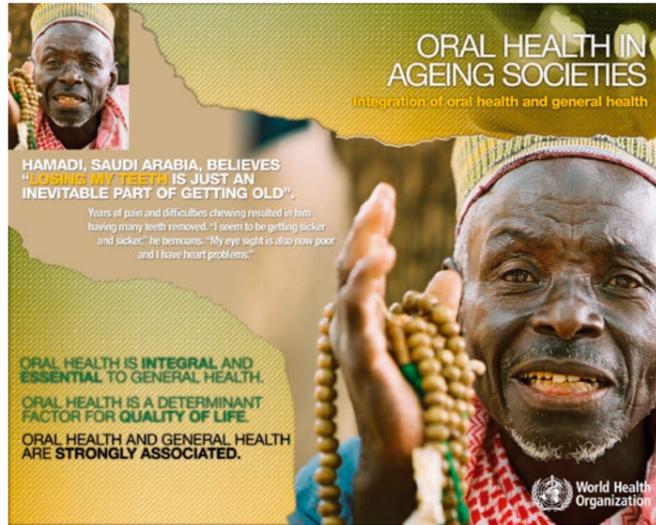
New approaches to training health workers
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Brochure design Visual identity system

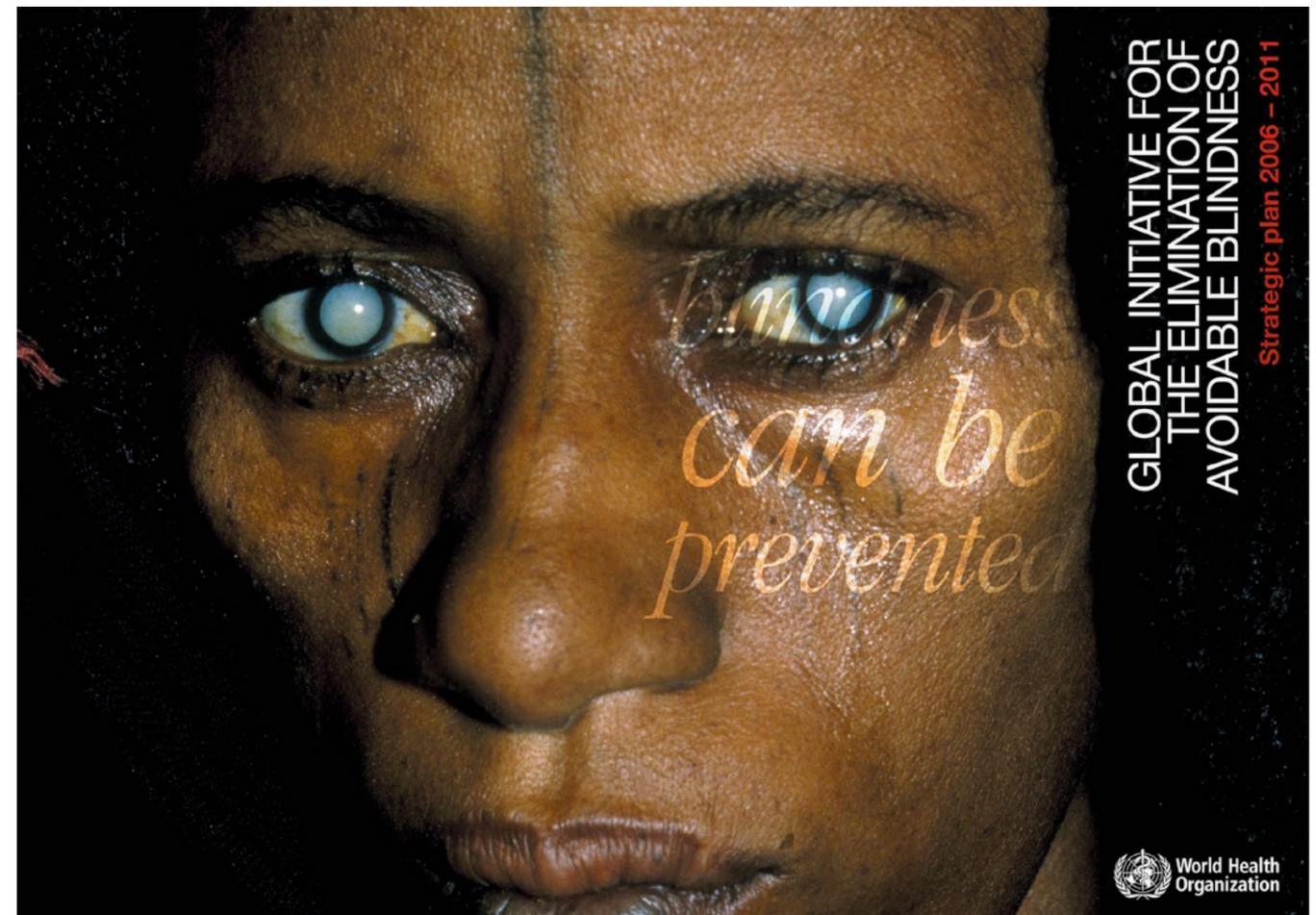
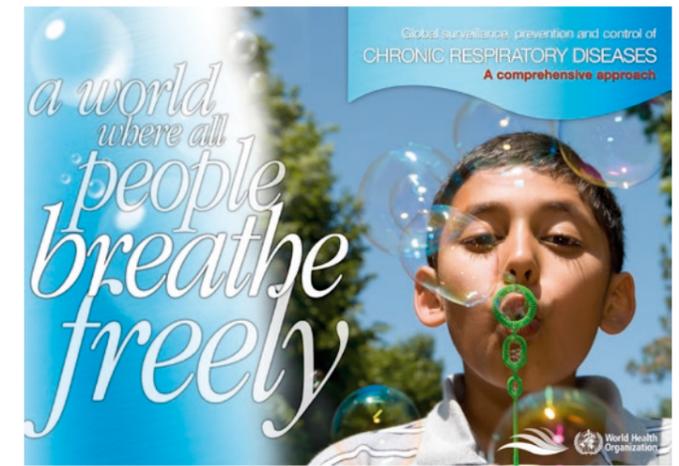
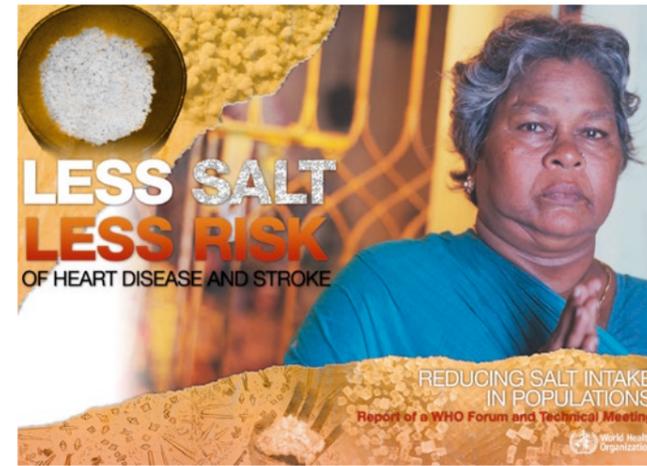
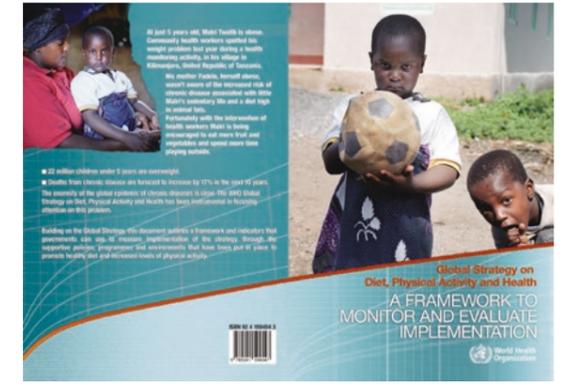
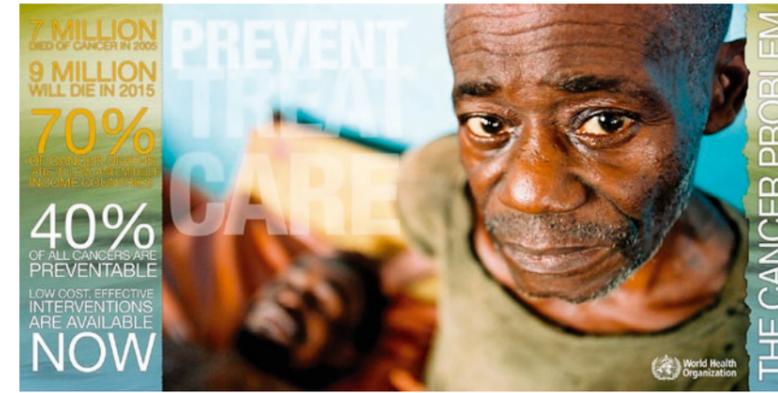
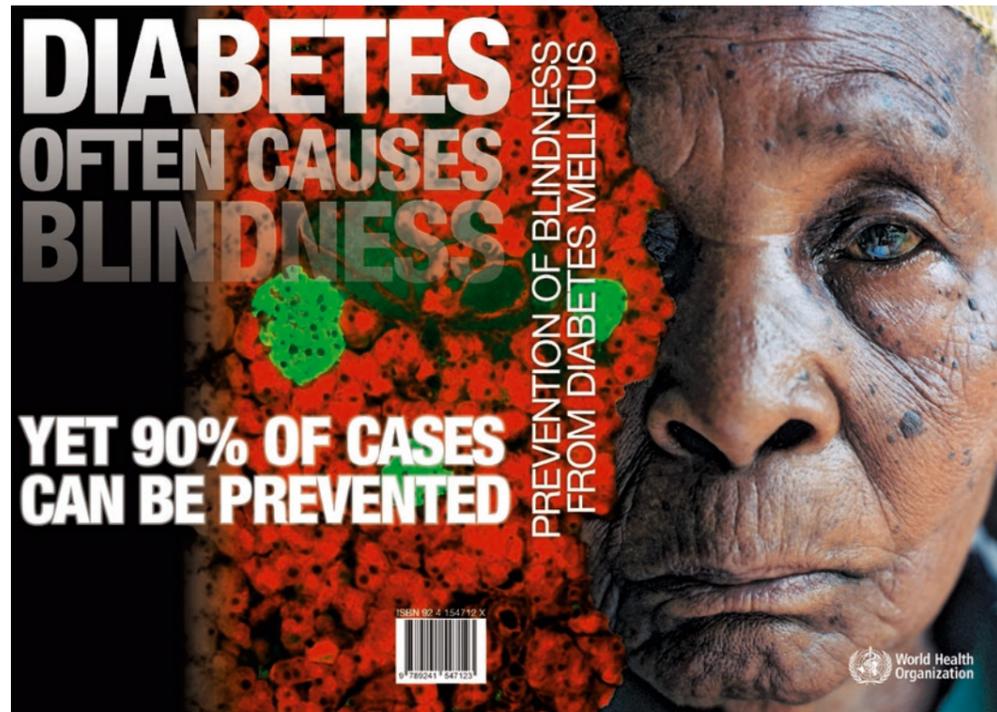
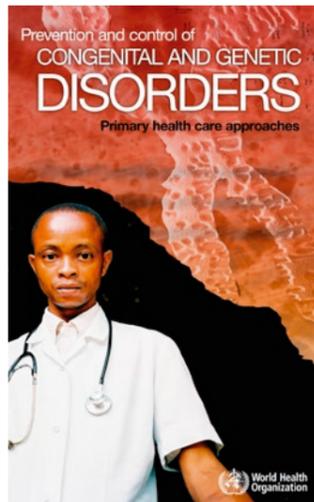
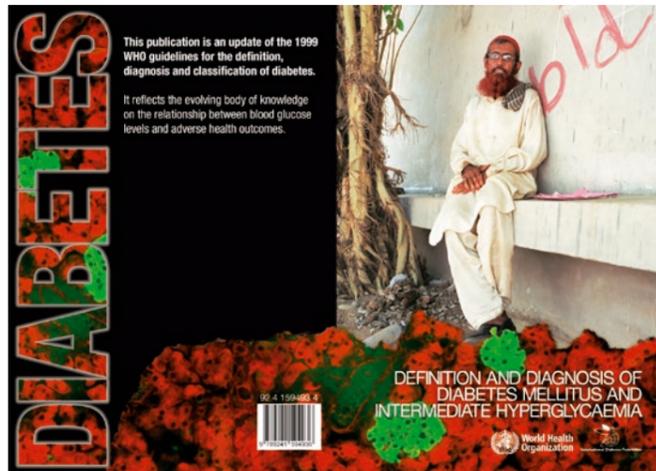
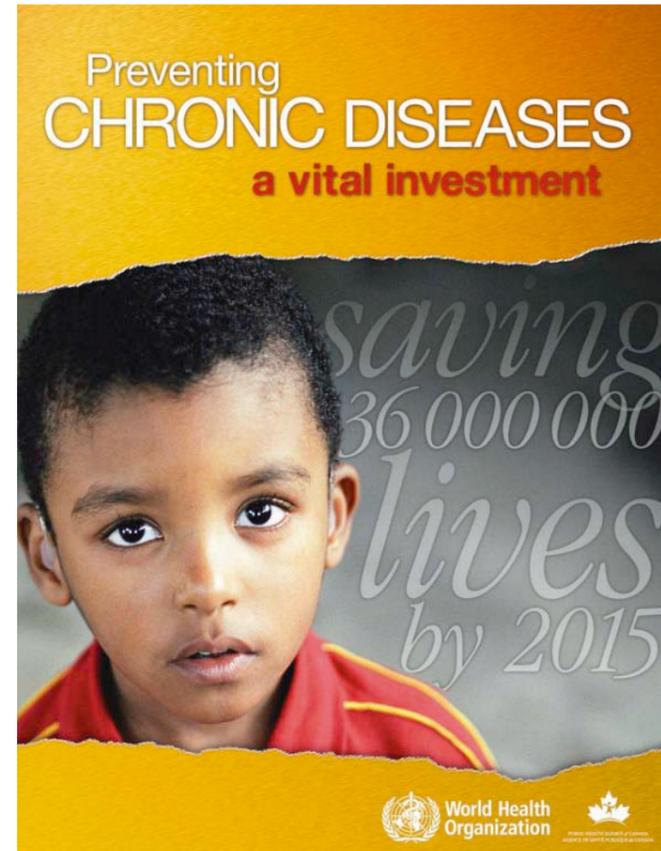
Child and Adolescent Health and Development: Progress Report 2006-2007, 2008, design development for the Department's new visual identity.



Cover design
Visual identity system



Cover series for the Department of Chronic diseases and health promotion (CHP).



Brochure design

Milestones of a Global Campaign for Violence Prevention, 32 pages, in English and French.

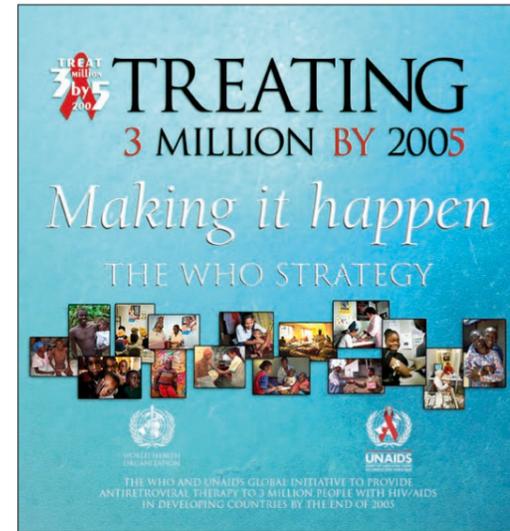


RECOMMENDATION 1 Create, implement and monitor a national action plan for violence prevention

National planning to prevent violence should be based on a consensus developed by a wide range of governmental and non-governmental actors. It should enable collaboration between sectors that might contribute to preventing violence, such as the criminal justice, education, labour, health and social welfare sectors. As a follow up to the launch of the *World report on violence and health*, the following steps have been taken:

1 2 3
4 5 6
7 8 9

THE GLOBAL CAMPAIGN FOR VIOLENCE PREVENTION SERVES AS THE MAIN PLATFORM FOR IMPLEMENTING THE RECOMMENDATIONS OF THE WORLD REPORT ON VIOLENCE AND HEALTH. APART FROM THE INITIATIVES ALREADY MENTIONED, THE FOLLOWING GIVES A BRIEF OVERVIEW OF SOME OF THE ADDITIONAL ACTIVITIES THAT HAVE TAKEN PLACE IN THE CONTEXT OF THE IMPLEMENTATION OF EACH OF THE REPORT'S RECOMMENDATIONS.



Brochure design

Treating 3 Million by 2005, 2003, 32 pages, in 6 official languages.

2 MILESTONES OF A GLOBAL CAMPAIGN FOR VIOLENCE PREVENTION

Violence cuts short the lives of millions of people across the world each year, and damages the lives of millions more. It knows no boundaries of geography, race, age or income. It strikes at children, young people, women and the elderly. It finds its way into homes, schools and the workplace. Men and women everywhere have the right to live their lives and raise their children free from the fear of violence. We must help them enjoy that right by making it clearly understood that violence is preventable, and by working together to identify and address its underlying causes.

— Kofi Annan, Secretary-General, United Nations, Nobel Peace Laureate, 2001

The *World report on violence and health* is the result of three years of work, involving more than 170 experts from approximately 60 countries, led by an Editorial Committee composed of Drs Etienne Krug, Linda Dahlberg, James Mercy, Anthony Zwi and Rafael Lozano. The report shows that, in the year 2000, an estimated 815,000 people died by suicide, 520,000 people by homicide, and 310,000 people as a direct result of war-related injuries. Among people aged 15-44, violence accounted for 14% of male deaths and 7% of female deaths. Keeping in mind that one of the most common settings for violence is the home, studies suggest that approximately:

- 40-70% of female murder victims are killed by their husband or boyfriend.
- 545 children and young people aged 10-29 years die violently each day.
- 4-6% of older people experience some form of abuse in the home.
- 20% of women and 5-10% of men have suffered sexual abuse as children.

A major finding of the report is that no single factor explains why one individual, community or society is more or less likely to experience violence. Instead, it shows that violence is rooted in the interaction of factors, ranging from the biological to the political. The report captures this in an ecological model that organizes the risk factors for violence into four interacting levels: the individual, close relationships, community contexts and societal factors. Individual-level risks include demographic factors such as age, income and education, psychological and personality disorders, alcohol and substance abuse, and a history of engaging in violent behaviour or experiencing abuse. Relationship-level risk factors include poor parenting practices and family dysfunction, marital conflict around gender roles and resources, and associating with friends who engage in violent or delinquent behaviour. At the community level, some of the risk factors are poverty, homelessness, unemployment, and the social isolation resulting from these issues and also affecting people who have to move frequently and thus have little sense of belonging to a community. The existence of a local drug trade, and weak police and programmes within institutions are also risk factors at this level. Societal level risks include economic, social, health, and education policies that maintain or increase economic and social inequalities, social and cultural norms which support the use of violence, the availability of firearms and other weapons, and weak criminal justice systems that leave perpetrators immune to prosecution. Interventions at all levels of the model are needed to prevent violence.

This report makes a major contribution to our understanding of violence and its impact on societies. It illuminates the different faces of violence, from the "invisible" suffering of society's most vulnerable individuals to the all-too-visible tragedy of societies in conflict. It advances our analysis of the factors that lead to violence, and the possible responses of different sectors of society. And in doing so, it reminds us that safety and security don't just happen: they are the result of collective consensus and public investment.

— Nelson Mandela, Former President of South Africa

4 TREATING 3 MILLION BY 2005: MAKING IT HAPPEN

Of the 6 million people who currently urgently need antiretroviral therapy in developing countries, fewer than 8% are receiving it. Without rapid access to properly managed treatment, these millions of women, children and men will die. This human toll and the accompanying social and economic devastation can be averted. The delivery of antiretroviral therapy in resource-poor settings, once thought impossible, has been shown to be feasible. The prices of antiretroviral

ESTIMATED PERCENTAGE OF ADULTS COVERED AMONG THOSE IN NEED OF ANTIRETROVIRAL TREATMENT, SITUATION AS OF NOVEMBER 2003

5 BACKGROUND

COVERAGE OF ADULTS IN DEVELOPING COUNTRIES WITH ANTIRETROVIRAL THERAPY, BY WHO REGION, 2003

REGION	NUMBER OF PEOPLE ON TREATMENT	ESTIMATED NEED	COVERAGE
Africa	100 000	4 400 000	2%
Americas	210 000	250 000	84%
Europe (Eastern Europe, Central Asia)	15 000	80 000	19%
Eastern Mediterranean	5 000	100 000	5%
South-East Asia	60 000	900 000	7%
Western Pacific	10 000	170 000	6%
ALL WHO REGIONS	400 000	5 900 000	7%

drugs, which until recently put them far beyond the reach of low-income countries, have dropped sharply. A growing worldwide political mobilization, led by people living with HIV/AIDS, has educated communities and governments, affirming treatment as a human right. The World Bank has channelled increased funding into HIV/AIDS. New institutions such as the Global Fund to Fight AIDS, Tuberculosis and Malaria and ambitious bilateral programmes, including the United States Presidential Emergency Plan for AIDS Relief, have been launched, reflecting an exceptional level of political will and unprecedented resources for the HIV/AIDS battle. This unique combination of opportunity and political will must now be seized with urgent action.

In 2001, partners within the Joint United Nations Programme on HIV/AIDS (UNAIDS) and other organizations along with scientists at WHO calculated that, under optimal conditions, 3 million people living in developing countries could be provided antiretroviral therapy and access to medical services by the end of 2005. Nevertheless, treatment enrolment in afflicted countries continued to lag. On 22 September 2003, LEE Jong-wook, Director-General of WHO, joined with Peter Piot, Executive Director of UNAIDS and Richard Feachem, Executive Director of the Global Fund to Fight AIDS, Tuberculosis and Malaria to declare

34 TREATING 3 MILLION BY 2005: MAKING IT HAPPEN

PILLAR ONE GLOBAL LEADERSHIP, STRONG PARTNERSHIP AND ADVOCACY

STRATEGIES	ACTION STEPS	VERIFIABLE INDICATORS	ASSUMPTIONS
1. Visible WHO leadership and commitment to urgent action to reach the goal of universal access to antiretroviral therapy	<p>1a WHO exercises its leadership role in care and treatment within UNAIDS and sets an ambitious, time-bound numerical target</p> <p>1b WHO highlights the need for urgent action</p> <p>1c WHO identifies the 3 by 5 target as an institutional priority and realigns expertise and activities across the Organization to achieve this target</p> <p>1d WHO commits additional resources to 3 by 5, while maintaining full support for its overall programme in HIV/AIDS, including prevention</p> <p>1e WHO establishes internal mechanisms for coordination and connectivity across the Organization to support the 3 by 5 Initiative</p> <p>1f WHO enables all staff to access antiretroviral therapy</p>	<p>1a Announcement of 3 by 5 target</p> <p>1b Declaration that the antiretroviral therapy gap is a global health emergency</p> <p>1c Commitment to 3 by 5 in all relevant fora, documents and policy statements New budget and appropriate resources devoted to 3 by 5, with more than 75% allocated to the regional and country levels</p> <p>1d WHO HIV/AIDS budget for 2004-2005 Outputs and deliverables specific to HIV/AIDS</p> <p>1e Establishment and activities of the internal steering group and cross-cluster task force Adequate information technology systems to connect WHO</p> <p>1f Revision of staff treatment policy</p>	<ul style="list-style-type: none"> ■ WHO leadership endorsed and supported by UNAIDS and partners ■ 3 by 5 target adopted by UNAIDS and partners ■ Declaration of emergency accepted and acted on by WHO and UNAIDS ■ WHO commitment to 3 by 5 is maintained at the highest level and is manifested by concrete support from the entire Organization ■ Additional funding (US\$ 350 million) is secured for the 3 by 5 Initiative to be fully implemented
2. Locate the 3 by 5 Initiative within the broader development context	<p>2a Develop guidelines for the ethical and equitable scaling up of antiretroviral therapy programmes in accordance with the 3 by 5 Initiative</p> <p>2b Work with UNAIDS and partners to develop principles for implementing 3 by 5 programmes that promote gender equality, are inclusive of children and marginalized groups and maintain an overt pro-poor approach</p> <p>2c Identify ways to link progress on 3 by 5 and beyond with relevant Millennium Development Goals and targets</p>	<p>2a Publication and use of ethics and equity guidelines</p> <p>2b Publication and use of principles for 3 by 5 programmes Programme monitoring includes data on gender, age, socioeconomic status and marginalization</p> <p>2c Progress on achieving relevant Millennium Development Goals is related and attributable to progress in 3 by 5 and beyond</p>	<ul style="list-style-type: none"> ■ Equitable and pro-poor approaches are formulated that high-burden countries can adopt and act upon ■ All donors recognize the importance of accelerated responses to scaling up antiretroviral therapy to mitigate the impact of HIV and to reverse declines in development indicators in high-burden countries ■ The specific contribution of 3 by 5 to achieving relevant Millennium Development Goals can be disaggregated and highlighted

35 ANNEX ONE

QUICK CHECK, RAPID ASSESSMENT AND MANAGEMENT OF WOMEN OF CHILDBEARING AGE

Quick check B2

Quick check

A person responsible for initial reception of women of childbearing age and newborns seeking care should:

- assess the general condition of the woman(s) immediately on arrival
- intentionally request this position if not the 1st being
- If a woman is very sick, talk to her companion.

ASK, CHECK RECORD, LOOK, LISTEN, FEEL, SIGNS, CLASSIFY, TREAT

ASK	CHECK RECORD	LOOK	LISTEN	FEEL	SIGNS	CLASSIFY	TREAT
Why did you come? or - for the baby? - for the baby? - for the baby?	Why did you come? - for the baby? - for the baby? - for the baby?	Is the woman being checked or checked? - for the baby? - for the baby? - for the baby?	Is the woman being checked or checked? - for the baby? - for the baby? - for the baby?	Is the woman being checked or checked? - for the baby? - for the baby? - for the baby?	Is the woman being checked or checked? - for the baby? - for the baby? - for the baby?	Is the woman being checked or checked? - for the baby? - for the baby? - for the baby?	Is the woman being checked or checked? - for the baby? - for the baby? - for the baby?

Quick check, rapid assessment and management of women of childbearing age B1

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Quick check, rapid assessment and management of women of childbearing age B1

Technical report design and layout

Pregnancy, Childbirth, Postpartum and Newborn Care: A guide for essential practice, 180 pages.

Rapid assessment and management (RAM) • Emergency signs

B6

EMERGENCY SIGNS	MEASURE	TREATMENT
CONVULSIONS OR UNCONSCIOUS	<ul style="list-style-type: none"> Measure blood pressure Measure temperature Assess pregnancy status 	<ul style="list-style-type: none"> Protect woman from fall and injury. Get help. Manage airway. After convulsion, help woman onto her left side. Insert an IV line and give fluids slowly (30 drops/min). Give respiratory support. If early pregnancy, give diazepam IV or rectally. If diabetic, BP > 120mm of Hg, give antihypertensive. If temperature > 38°C, or history of fever, also give treatment for dangerous fever (fever). Refer woman urgently to hospital.
SEVERE ABDOMINAL PAIN	<ul style="list-style-type: none"> Measure blood pressure Measure temperature 	<ul style="list-style-type: none"> Insert an IV line and give fluids. Refer woman urgently to hospital.
DANGEROUS FEVER	<ul style="list-style-type: none"> Measure temperature 	<ul style="list-style-type: none"> Insert an IV line. Give fluids slowly. Give first dose of appropriate IM/IV antibiotics. Give antipyretic IM (if not available, give paracetamol) and glucose. Refer woman urgently to hospital.
LABOUR		<ul style="list-style-type: none"> Manage as for Childbirth.
OTHER DANGER SIGNS OR SYMPTOMS	<ul style="list-style-type: none"> Measure blood pressure Measure temperature 	<ul style="list-style-type: none"> If pregnant (and not in labour), provide antenatal care. If early pregnancy, provide obstetric care. If early pregnancy or not aware of pregnancy, check for ectopic pregnancy.
IF NO EMERGENCY OR PRIORITY SIGNS, NON URGENT		<ul style="list-style-type: none"> If pregnant (and not in labour), provide antenatal care. If recently given birth, provide postpartum care.

Rapid assessment and management (RAM) • Priority signs B7

Emergency treatments for the woman

B8

EMERGENCY TREATMENTS FOR THE WOMAN
AIRWAY, BREATHING AND CIRCULATION
BLEEDING (1)
BLEEDING (2)
BLEEDING (3)
ECLAMPSIA AND PRE-ECLAMPSIA (1)
ECLAMPSIA AND PRE-ECLAMPSIA (2)
ECLAMPSIA AND PRE-ECLAMPSIA (3)
INFECTION
MALARIA
BEYOND THE WOMAN URGENTLY TO THE HOSPITAL

Airway, breathing and circulation B9

Airway, breathing and circulation

B9

Manage the airway and breathing

If the woman has great difficulty breathing and if you suspect obstruction:

- Try to clear the airway and dislodge obstruction.
- Help the woman to sit up and lean forward for breathing.
- Urgently refer the woman to hospital.

Insert IV line and give fluids

- Wash hands with soap and water and put on gloves.
- Give woman's vital signs with left and right arm.
- Insert an intravenous line (IV line) using a 18-18 gauge needle.
- Administer 100ml of 0.9% saline (0.9% NaCl) solution.
- Monitor the woman's vital signs and repeat IV fluids if necessary.
- Refer woman to hospital.

Airway, breathing and circulation B9

Technical report design and layout

Framework for developing health-based EMF standards

FRAMEWORK FOR DEVELOPING HEALTH-BASED EMF STANDARDS

World Health Organization

Public Health and Environment
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Email: emfproject@who.int

1 WHY A STANDARDS FRAMEWORK?

With the growth of electric power generation and transmission, the development of new telecommunication systems and advances in medical and industrial applications, humans are increasingly exposed to electromagnetic fields (EMF). The need to understand the potentially harmful effects of EMF on human health has been met by several decades of research, but the development of exposure standards is more recent and a variety of national standards now exist.

Globalization of trade and the rapid expansion in the use of technologies emitting EMF have focused attention on the differences that exist in exposure guidelines or standards in various countries. In some cases, these differences are large. Some of the disparities in EMF standards around the world have arisen from the use of only national databases, different criteria for accepting or assessing individual studies, varying interpretations of the scientific data on different philosophies for public health standards development. Such differences in EMF exposure guidelines might reflect, in part, deficiencies in communication among scientists between different regions as well as certain social differences.

Large disparities between national limits and international guidelines can foster confusion for regulators and policy makers, increase public anxiety and provide a challenge to manufacturers and operators of communication systems who need to tailor their products to each market. These factors have motivated the World Health Organization (WHO) to build a framework for developing health-based EMF exposure standards using a rational, scientifically-driven process.

1.1 GUIDING PRINCIPLES

WHO encourages the establishment of exposure limits and other control measures that provide the same or similar level of health protection for all people. It endorses the guidelines

FRAMEWORK GUIDING PUBLIC HEALTH POLICY OPTIONS IN AREAS OF SCIENTIFIC UNCERTAINTY WITH PARTICULAR REFERENCE TO ELECTROMAGNETIC FIELDS

World Health Organization

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Fax: +41 22 791 4123
Email: emfproject@who.int

MODEL LEGISLATION FOR ELECTROMAGNETIC FIELDS PROTECTION

World Health Organization

Public Health and Environment
World Health Organization
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Switzerland
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Fax: +41 22 791 4123
Email: emfproject@who.int

4 KEY ELEMENTS OF EMF STANDARD SETTING

Exposure limits are intended to protect against adverse health effects of EMF exposure across the entire frequency range.

4.1 THRESHOLD LEVELS

There are a number of approaches that can be taken to determine threshold levels. First, a threshold exposure level may be derived on the basis of a health risk assessment of the scientific data. The threshold is judged as being the lowest exposure level, below which no health hazards have been found. Since there will be some imprecision in determining this threshold, primarily because of an incomplete knowledge of the biological effects, a range of uncertainty will exist. The degree of uncertainty will then be directly proportional to the value of a safety factor that should then be incorporated to arrive at the final exposure limit (Figure 2). This approach has been the basis of most western standards, and in particular the ICNIRP international guidelines (ICNIRP, 1998) and the IEEE/ACSES standards (IEEE, 2004, 2005).

This approach requires a good understanding of the interaction mechanisms involved and supposes that a true threshold exists. It also assumes that cumulative effects do not occur. Evidence for cumulative damage would need to show that small amounts of damage may be occurring from low level (sub-threshold) exposure and that an accumulation of this damage is necessary before it becomes detectable. Further, there is a dependence on information from extensive research, including long-term follow-up studies. Without such studies, it is possible that illnesses or effects which manifest themselves after a long latency period would be excluded from consideration.

Another way of determining exposure limits is to adopt a "biological approach" (Figure 2). From the scientific database, a threshold exposure level is determined below which no biological effect is observed. This method alleviates the necessity of making a

Figure 2 - Determination of exposure limits using the hazard threshold and biological approaches (Repachou, 1985)

Figure 2 shows a graph of Exposure Level versus Frequency. The y-axis is labeled 'Exposure Level' and the x-axis is labeled 'Frequency'. A horizontal line represents the 'Hazard Threshold'. A lower horizontal line represents the 'Biological Threshold'. A vertical line labeled 'Safety factor' indicates the distance between the biological threshold and the exposure limit. The exposure limit is shown as a horizontal line below the hazard threshold. A legend indicates: 'x = biological effect assessed as a health hazard' and 'o = biological effect assessed as having no apparent health hazard'.

4.2 SAFETY FACTORS

Identification and quantification of various adverse effects of EMF exposure on health are difficult at best, and such judgements require extensive experience and expertise. Once the threshold exposure level that produces an adverse health effect at the lowest exposure level has been identified, exposure limits may be derived by reducing this

Figure 1 - Procedure for developing EMF exposure standards

Procedure	Considerations
Select Scientific Database	Types of studies Criteria for inclusion
Perform Risk Assessment	Hierarchy of studies Criteria for evaluation Weight of evidence
Determine Threshold Levels	Interpretation of threshold Biological effects Interaction mechanisms
Select Safety Factors	Multiple tiers/different populations Level of scientific uncertainty
Set Exposure Limits	Basic restrictions Reference levels Frequency extrapolation
Ensure Overall Practicability	Explanatory supporting document Compliance measures Monitoring system

