Governments and policy-makers in the WHO European Region know that good health is a fundamental resource for social and economic development. While rightly proud of the overall improvement in health in the Region, they still face a widening gap between the western and eastern countries in the Region and between socioeconomic groups in countries. Reducing these inequalities is increasingly vital. The European health report 2005 shows that it is also feasible.

This summary of the report lists the major public health issues facing the Region, and describes effective policy responses. It identifies both noncommunicable diseases as the main cause of the burden of disease on the Region, and communicable diseases as an additional burden on eastern countries. It shows that using well-known, comprehensive interventions to tackle the leading risk factors—tobacco, alcohol, high blood pressure, high cholesterol, overweight, low fruit and vegetable intake, and physical inactivity—would largely prevent the leading conditions—ischaemic heart disease, unipolar depressive disorders, cerebrovascular disease, alcohol-use disorders, chronic pulmonary disease, lung cancer and road traffic injury. This creates a compelling argument for action.

Like the larger report, the summary has a special focus on children’s health, because health in childhood determines health throughout life and into the next generation. It reveals differences between the patterns of ill health in children and in adults, and wide differences in the causes and rates of illness and death in children across the Region. While recognizing that each country must chart its own course, the summary identifies poverty and socioeconomic inequality as the greatest threats to children’s health, calls for renewed effort in protection and promotion, and provides an evidence-based list of the characteristics of the most successful policies and programmes. The summary—a key tool for successful policy development—helps to supply the reliable, evidence-based information needed for sound decision-making on public health.
The European health report 2005

Public health action for healthier children and populations

Summary
Introduction

Good health is a fundamental resource for social and economic development. Higher levels of human development mean that people live longer and enjoy more healthy years of life.

While the health of the 879 million people in the WHO European Region has in general improved over time, inequalities between the 52 Member States in the Region and between groups within countries have widened. In addition to the east–west gap in health, socioeconomic gradients in health have increased in many countries. Reducing inequality is increasingly vital.

The European health report 2005 contributes to this task by summarizing the major public health issues facing the Region, particularly its children, and describing effective policy responses. This helps to supply the reliable, evidence-based information needed for sound decision-making on public health.

This summary describes the main messages of the report and lists some of the most important information sources in three sections:

- the general public health perspective
- children's health
- ingredients in successful health policies and interventions.

Readers should consult the larger book for details on the topics covered and for statistics on health status and the causes of death and ill health in both adults and children in each country in the Region.

Methods

The report presents the latest available figures on a variety of health indicators. Where possible, the results are given for three groups of countries in the European Region: Eur-A, -B and -C. Allocation to these groups is based on mortality in children and adults, rather than geographical or political factors. The report looks at life expectancy and summary measures such as disability-adjusted life-years (DALYs). Combining these measures with traditional indicators, such as mortality rates and disease incidence and prevalence, allows the report to highlight current issues and give a better picture of the situation in the Region.

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2 Eur-A comprises 27 countries with very low mortality in both children and adults: Andorra, Austria, Belgium, Croatia, Cyprus, the Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Israel, Italy, Luxembourg, Malta, Monaco, the Netherlands, Norway, Portugal, San Marino, Slovenia, Spain, Sweden, Switzerland and the United Kingdom. Eur-B includes 16 countries with low mortality in both children and adults: Albania, Armenia, Bosnia and Herzegovina, Bulgaria, Georgia, Kyrgyzstan, Poland, Romania, Serbia and Montenegro, Slovakia, Tajikistan, The former Yugoslav Republic of Macedonia, Turkey, Turkmenistan and Uzbekistan. Eur-C comprises 9 countries with low child mortality and high adult mortality: Belarus, Estonia, Hungary, Kazakhstan, Latvia, Lithuania, the Republic of Moldova, the Russian Federation, Ukraine.
The general public health perspective
While the WHO European Region continues moving towards low levels of fertility and premature death, differences between and within countries have widened. Overall, health – as measured by life expectancy – worsens as one moves From Eur-A to -B and then -C. Fig. 1 shows both the general improvement in life expectancy and the differences between Eur-A, -B and -C, including the differences between males and females, which decreased in Eur-A and -B but increased in Eur-C. In addition to the east–west gap in life expectancy (Table 1), the differences in mortality between socioeconomic groups have increased in many countries.

Further, the combination of declining fertility and mortality has raised the proportion of older people in the population. Practically all Member States have ageing populations. As fewer children are born and people live longer, greater care must be taken to help children not only to avoid sickness but to be resilient to the stresses of life and capable of maintaining good health into very old age.

Fig. 1. Life expectancy at birth by sex and country grouping, 1980–2003

Tackling risk factors to reduce the burden of disease

In terms of DALYs, the most important causes of the burden of disease in the Region are noncommunicable diseases (NCDs – 77% of the total), external causes of injury and poisoning (14%) and communicable diseases (9%). In 2002, NCDs caused 86% of the 9.6 million deaths and 77% of the 150.3 million DALYs in the Region. They originate from complex interactions of genetics, behaviour and the environment, and thus require long-term planning and treatment. In addition, injuries are a particular problem for young people.

<table>
<thead>
<tr>
<th>Country</th>
<th>Life expectancy (years)</th>
<th>Latest available (year)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eur-A</td>
<td>76.3</td>
<td>77.4</td>
</tr>
<tr>
<td>Eur-B</td>
<td>69.5</td>
<td>69.7</td>
</tr>
<tr>
<td>Eur-C</td>
<td>69.6</td>
<td>65.6</td>
</tr>
<tr>
<td>European Region</td>
<td>73.1</td>
<td>72.5</td>
</tr>
</tbody>
</table>

Further, poverty and underfunded services create a double burden of noncommunicable and communicable diseases for some countries in the eastern half of the Region. This double burden is partly responsible for the health gaps between and within countries.

Seven leading conditions – ischaemic heart disease, unipolar depressive disorders, cerebrovascular disease, alcohol use disorders, chronic pulmonary disease, lung cancer and road traffic injury – account for 34% of the DALYs in the Region. Seven leading risk factors – tobacco, alcohol, high blood pressure, high cholesterol, overweight, low fruit and vegetable intake and physical inactivity – account for 60% of DALYs. Using well-known interventions to tackle the risk factors would largely prevent the conditions. This creates a compelling argument for action.

The report highlights success stories from across the Region to illustrate how NCDs and injuries can be attacked by concerted, yet relatively simple measures. The examples include:

- preventing road-traffic accidents in Sweden through the Vision Zero project;
- preventing and reducing harm from HIV in the Russian Federation in the Renewal project in the Republic of Tatarstan;
- preventing NCDs in Finland through the North Karelia Project;
- promoting smoking cessation in Coventry, United Kingdom; and
- promoting walking programmes for elderly people in Israel.

In addition, the report summarizes for decision-makers the evidence synthesized by the Health Evidence Network at the WHO Regional Office for Europe on the effectiveness of various policies and interventions used against such health problems as: tobacco, alcohol, obesity, physical inactivity, injuries in children and teenage pregnancy.

Countries have a choice of measures for certain diseases, and sharing information on the successes and limitations of interventions is vital to their adaptation and use in other countries. For example, the success of Vision Zero has led to its adoption by several other countries. The topics and home countries of the success stories vary; what they share is their involvement of all stakeholders, from patients to health care providers to government and other bodies. These examples prove that simple but comprehensive measures can lead to important benefits for health.
Health in childhood determines health throughout life and into the next generation. The period between birth and 5–6 years of age is critical. Ill health or harmful lifestyle choices in childhood can lead to ill health throughout life, which creates health, financial and social burdens for countries today and tomorrow.

**Health patterns and problems in children**

Overall, the health status of children in the 52 countries in the WHO European Region reflects the widening east–west gap seen in adults. Despite overall improvement, children's health in the European Region shows large differences according to age, gender, geographical location and socioeconomic position, both within and between countries. Social inequalities are increasing in all countries, but particularly in the eastern half of the Region.

The inequalities in children’s health are unacceptably large, and overwhelmingly affect the countries, societies, communities, families and children with the fewest resources to cope with
them. Even in more affluent countries, the poorer members of society carry a disproportionate share of the disease burden.

The rates of illness and death in children vary widely across the Region. In particular, eastern countries have higher morbidity and mortality from respiratory and infectious diseases, and external cause (injuries and poisoning). In the western countries, mortality from these causes is already very low, which means a smaller disease burden overall. Children's disease patterns in western countries therefore include proportionately more NCDs, such as asthma and allergies, diabetes, obesity and neuropsychiatric disorders. Vaccine-preventable diseases remain a worry across the Region.

Children's mortality and morbidity show a different pattern than that of ill health in adults. Owing to respiratory and infectious diseases, which take a particularly high toll among children under 5 (Fig. 2), children aged 0–14 years have worse health in Eur-B than Eur-C. Nevertheless, the differences between these two country groups are less important than the differences between them and Eur-A (Table 2).

All-cause mortality in Eur-B and -C is about 3.4 times and 2.8 times, respectively, that in Eur-A. Respiratory diseases are the main killer of children aged 0–14 years in the Region as a whole; the rate in Eur-B is 47 times that in Eur-A. Next, congenital anomalies still cause very high mortality in most countries, particularly in Eur-C, although occurring mostly in children under 5. At a short distance follow external causes. The rate in Eur-C is five times that in Eur-A.

Poverty is the greatest threat to children's health, regardless of a country’s level of development. Rates of disease, harmful behaviour and other risks to health are closely linked to socioeconomic factors, which are related to, for example, poor neonatal health, lack of access to health care, unhealthy or unsafe environments, and behavioural factors such as poor diet, physical inactivity and early smoking, drinking or drug taking.

The different patterns of child and adult health underline the need for countries to design complementary health strategies for the two. Because working for optimal health and development for all children is an increasingly complex task for countries, the WHO Regional Office for Europe is developing a new approach to assist them: a European Strategy for Child and Adolescent Health and Development. In addition, all countries need better information on and monitoring systems for children's health, particularly in relation to social inequalities.

### Table 2. Mortality in children aged 0–14 years in the WHO European Region, by main causes of death, 2003

<table>
<thead>
<tr>
<th>Causes</th>
<th>Deaths per 100 000</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Eur-A</td>
</tr>
<tr>
<td>All causes</td>
<td>49.4</td>
</tr>
<tr>
<td>Respiratory diseases</td>
<td>1.2</td>
</tr>
<tr>
<td>Congenital malformations</td>
<td>10.8</td>
</tr>
<tr>
<td>Infectious and parasitic diseases</td>
<td>1.3</td>
</tr>
<tr>
<td>Cancer</td>
<td>3.0</td>
</tr>
<tr>
<td>CVD</td>
<td>1.4</td>
</tr>
<tr>
<td>External causes</td>
<td>5.8</td>
</tr>
<tr>
<td>Other diseases</td>
<td>25.9</td>
</tr>
</tbody>
</table>

**Successful policies: applying available knowledge in comprehensive strategies**

Investing in children’s health is the best way of investing in the future, and brings health, financial and social benefits. *The European health report 2005* calls for renewed effort to protect and promote children’s health. While a responsible balance must be struck between current burdens and future benefits for the whole population, investing in children’s health and development not only is a key to a population’s future health but also will reduce today’s inequalities.

Much of the knowledge required to improve health for everyone in the Region is already available; the challenge is transforming it into action. Despite the wide differences in the health problems of children across the WHO European Region, the evidence points to the following ingredients in the success of health promotion and disease prevention programmes. While the main ingredients are similar in both children and adults, children’s health is the focus here.

**Approach and scope**

Two basic approaches to health promotion and disease prevention tackle:

1. the underlying determinants of health, such as poverty and socioeconomic inequality; or
2. specific risk factors for specific health outcomes, such as lack of physical activity, some forms of obesity or lack of blood pressure control (which leads to hypertension), which increase the risk of atherosclerosis and therefore coronary heart disease.

The approaches are interrelated, since poverty and socioeconomic inequality are key underlying determinants of many risk factors. Nevertheless, they call for different types of action. The second approach encourages health education focused on individuals and aimed at increasing their awareness of and involvement in taking proper care of their health. Action on the first approach requires a more comprehensive, societal approach, using the democratic process to foster changes in policy, leading to the fair distribution of resources.

In general, the available evidence suggests that the most effective public health programmes, for children and adults alike, are those carried out by the government – and supported by society in general by promoting policy change – to alleviate the harm done to health by poverty and to increase social equality.

Interventions that address multiple broader issues are more likely to succeed. The health promotion interventions that are least likely to work deal with single issues, deliver a negative message and address only one setting. An example would be campaigns in schools telling students not to smoke.

In addition, effective interventions use the whole array of available policy instruments, either mainly on the responsibility of a country’s government or involving it. There is also evidence that general health promotion campaigns are more effective when they are multifaceted and multilevel: that is, when there are simultaneous, multidimensional efforts at the national, local and individual levels.

**Need for evidence**

Strong and credible scientific evidence that a public health intervention is effective is a prerequisite for success. At least two types of evidence are required:
1. evidence that an intervention in itself works; and
2. evidence that the intervention programme works over time and in different epidemiological circumstances, health systems and cultural contexts.

While there is a good deal of evidence on interventions’ effectiveness, little rigorous research is documented on their adaptability. Such systematic research is urgently needed, as the coverage of effective interventions tends to be lowest in poor countries and the poorest populations.

Because interventions must be adapted to local circumstances, the capacity of the health system at different levels in the country should be assessed. For example, how far are regional needs in child health taken into account at the national level? How are resources redirected to programmes with a high political profile, such as those to prevent AIDS? Other factors to consider include:

- the degree of development and the organization of a country’s health system (for example, national systems versus local, private systems);
- the health system’s strengths, weaknesses, infrastructure, current coverage and utilization;
- the population’s patterns of seeking health care, which are influenced by socioeconomic and cultural factors;
- the various options for financing; and
- the human and financial resources available.

In addition, the availability of relevant and reliable data on the population targeted for intervention is a prerequisite for knowing whether the intervention should be made and determining its effectiveness. Such data need to be collected at the national, regional and/or local levels to assess the epidemiological situation, political willingness to act, the capacity of the health system to take part and the preferences of the community. Only when such data are available are public health interventions justifiable.

**Tactics**

Targeting particular population groups with interventions is key. Certain groups of children and adults are more vulnerable than others to particular hazardous behaviour, such as smoking, alcohol, poor diets and lack of exercise. Such populations include people living in poverty, cultural minority groups, the socially excluded and those with mental health problems.

The people who plan and implement programmes should take account of the age and developmental stage of the target population. In addition, effective interventions take account of cultural, religious and gender factors. For example, different approaches to some issues, such as the prevention of pregnancy, may need to be taken for the male and female populations. The approach to other issues – such as reducing smoking by banning cigarette advertising and increasing the prices of tobacco products – may be the same for both sexes, even though their behaviour may differ.

Further, successful implementation is associated with a perception by the public that the health problem represents significant burden to society, families and individuals, as indicated by prevalence, economic impact and high political profile. In addition, programmes should account for different groups’ varying perceptions of risks. In many societies, for example, adults see smoking as a threat to health, while adolescents value its immediate attractions more than the long-term risks.

There is some evidence for the effectiveness of mass-media involvement. Important factors appear to be the education level of the population, the duration of delivery and the intensity of media programmes, and the credibility of the source of the information given.
Conclusion
To be most successful, public health interventions need to address all the direct and indirect influences on children's health, and take action on many fronts and in many sectors. Implementation strategies are most successful when they are based on comprehensive national planning that:

- involves children themselves;
- utilizes the contributions of families and communities, schools, the mass media, the health system and government; and
- uses such tools as policy, legislation and regulations.

This work can take the form of a national joint plan or programme.

All these elements of success fall under the four guiding principles of the European strategy for child and adolescent health and development: equity; intersectoral action; involvement of the public and young people in the planning, delivery and monitoring of policies and services; and a life-course approach.

In sum, success in the planning, implementation and evaluation of interventions in different contexts requires a broad view of health. This implies that public health authorities must not only look at the known risk factors and interventions but also look beyond them to the underlying environmental, behavioural and social factors that influence health outcomes in different ways in different circumstances. Understanding and applying this knowledge comprise part of the art and science of public health.

While more effort and, naturally, resources are needed for the successful implementation of the interventions known to be effective, action for children's health and development primarily requires the ambition to pursue substantial improvements. Much work is needed, but, as The European health report 2005 shows, today's effort is tomorrow's success.
**Key sources**

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Commission on Social Determinants of Health. Copenhagen, WHO Regional Office for Europe, 2005 (http://www.euro.who.int/socialdeterminants/commision/20050705_1).


Successful policies


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