

Since 1 May 2004, the European Union (EU) has had 25 members, and 12 new neighbours. The EU's members differ in their populations' health status and their health systems' patterns of development. How does each of the neighbouring countries compare in terms of health to the EU – its members before and after May 2004 and the 25 countries as a whole?

This book offers a quick and easy way to grasp the essential features of health and health systems in the EU's neighbours. Each chapter provides a concise overview of key health indicators in 1 of the 12, comparing them to 3 averages for the EU: for its 25 current members, the 15 members before May 2004 and the 10 new members. Each chapter also summarizes the key features of the country's health system and describes the results of more than a decade of health system reform.

This book is not an in-depth study, but an easy guide to the knowledge available and an entry point to understanding health in the EU's 12 new neighbours.

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# 10 HEALTH QUESTIONS ABOUT THE NEW EU NEIGHBOURS

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10

health questions  
about the new  
EU neighbours

*By: Albena Arnaudova*

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## FOREWORD

*The first book in the “10 health questions” series focused on the 10 countries that joined the European Union (EU) in May 2004. With that enlargement, the geographical borders of the EU changed – 12 countries are now next door. This second book provides information about these countries. For us at the WHO Regional Office for Europe, they are 12 of the 52 Member States in the European Region. We work with all these countries and we are aware of their health situations.*

*Our mission is to share this knowledge. Health trends throughout the Region show both substantial similarities and striking gaps in terms of both population health status and health systems development. This book offers informative and compelling comparisons, giving snapshots of individual countries and groups of countries that exist side by side. We believe this way of presenting information will help health policy-makers better understand some of the similarities and differences, and compare the health situation in their own countries with those elsewhere. In addition, the information could be helpful for our international partner organizations.*

*Exchanging information and knowledge is a means for the Regional Office to support progress on the health agenda, to stimulate health action and to play a role in improving health throughout the Region.*

**Marc Danzon**

*WHO Regional Director for Europe*

A handwritten signature in blue ink that reads "Marc Danzon". The signature is written in a cursive style and is underlined with a single horizontal line.

## ACRONYMS

<b>BMI</b>	body mass index
<b>CIDA</b>	Canadian International Development Agency
<b>CIS</b>	Commonwealth of Independent States
<b>CoE</b>	Council of Europe
<b>DALY</b>	disability-adjusted life-year
<b>DFID</b>	United Kingdom Department for International Development
<b>DOTS</b>	directly observed treatment, short-course (WHO tuberculosis control strategy)
<b>DTP3</b>	three doses of diphtheria toxoid, tetanus toxoid and pertussis vaccine
<b>EU</b>	European Union
<b>G8</b>	Group of Eight (major industrialized democracies)
<b>GAVI</b>	Global Alliance for Vaccines and Immunization
<b>GDP</b>	gross domestic product
<b>GP</b>	general practitioner
<b>HALE</b>	healthy life expectancy
<b>IMF</b>	International Monetary Fund
<b>NATO</b>	North Atlantic Treaty Organisation
<b>NGO</b>	nongovernmental organization
<b>OECD</b>	Organisation for Economic Co-operation and Development
<b>OSCE</b>	Organization for Security and Co-operation in Europe
<b>SO<sub>2</sub></b>	sulfur dioxide
<b>WB</b>	World Bank
<b>WTO</b>	World Trade Organization
<b>UN</b>	United Nations
<b>UNDP</b>	United Nations Development Programme
<b>UNFPA</b>	United Nations Population Fund
<b>UNICEF</b>	United Nations Children's Fund
<b>USA</b>	United States of America
<b>USAID</b>	United States Agency for International Development



## TECHNICAL NOTES

The data in this book were compiled from a wide range of sources. Health data often vary from one source to another, and, due to different methodological approaches, are not always fully compatible. As one of the key aims of the book is to draw the health picture of each of 12 countries in comparison to other countries in the WHO European Region, priority was given to figures that lend themselves to reliable and meaningful comparisons. Data on certain indicators may therefore not reflect the latest available national statistics because earlier years were chosen to allow the linking of national and international data. Even then, comparisons were not always possible.

Throughout the book, three abbreviations are used in reference to the European Union (EU). EU25 is used to refer to the enlarged European Union, consisting of 25 Member States since 1 May 2004. EU15 refers to the 15 Member States before 1 May 2004, and EU10 refers to the 10 Member States that joined the EU on that date. These groups are used to make interesting and meaningful comparisons that often highlight certain variations in health status and other core public health indicators.

The source numbers at the end of each question denote items in the numbered list of references.

Most data refer to the years 2001–2003, and they originate from the European health for all database of the WHO Regional Office for Europe. There are two sources for mortality data. The national data come from statistics on the causes of death in 2003 for all 12 countries, except Bosnia and Herzegovina (no recent data), Romania (2002), Serbia and Montenegro (2002) and Turkey (no data). The WHO estimates on causes of death and the probability of dying take account of underreporting and misclassifications of national data, and therefore differ from countries' data.

The Regional Office uses different mortality and morbidity data to achieve reliable and comparable estimates of the burden of disease and healthy life expectancy for

WHO Member States. The time spent in poor health is measured by combining condition-specific estimates from the WHO Global Burden of Disease 2000 study with estimates of the prevalence of different health states by age and sex derived from health surveys carried out by WHO.

The financial indicators are based on WHO data from 2005. These figures are updated estimates. Foreign aid to health budgets is normally included in the figure for public expenditure for health as a percentage of the total expenditure for health. In describing health financing in the 12 countries, the book also brings together the Regional Office's abundant internal knowledge of and evidence on this area.

For immunization, DPT3 is used as an indicator of vaccination coverage.

The obesity figures are 2005 estimates from the WHO global programme on noncommunicable diseases.

Most figures have been approximated for ease of reading. A list of acronyms and a glossary provide further help for the reader.

## ACKNOWLEDGEMENTS

This book is the second in a series published by the WHO Regional Office for Europe. Developing it was the joint work of many people with different expertise.

My particular gratitude goes to two people outside the Regional Office: the data researcher Tine Rikke Jørgensen, public health specialist, Denmark, and the technical editor Mika Gissler, Development Manager, Information Division, National Research and Development Centre for Welfare and Health (STAKES), Finland. Their work was indispensable.

Many WHO staff contributed to the book. In the office of the WHO Regional Director for Europe, Yves Charpak supported the project and facilitated the

process. WHO professionals working in the Division of Country Support gave much time and effort to reviewing the chapters and provided valuable comments based on their knowledge of particular countries. Without their contribution the book would not be what it is, so thanks are due to:

- staff of country offices: Haris Hajrulahovic (Bosnia and Herzegovina), Antoinette Kaic-Rak (Croatia), Marija Kisman (The former Yugoslav Republic of Macedonia), Y. Mehmet Kontas (Turkey), Vasil Miho (Albania), Victor Olsavszky (Romania), Emilia Tontcheva (Bulgaria), Pavel Ursu (Republic of Moldova), Melita Vujnovic (Serbia and Montenegro) and Egor Zaitsev (Belarus);
- Mary Collins, Nata Menabde, Elena Potapchik and Mikko Vienonen, who contributed to the chapter on the Russian Federation;
- Rasul Baghirov and Nina Sautenkova, who provided advice on the chapter on Ukraine (with Nina Sautenkova also providing information on pharmaceuticals in several countries); and
- Joe Kutzin, who provided extensive input on the issue of financing health systems all 12 countries in the book.

The WHO team in the area of information, evidence and communications supported the work of creating and producing the book from start to finish. Special thanks are due to Mary Stewart Burgher, who supervised the production process and ensured editorial support and quality control. Pamela Charlton, Anca Dumitrescu, Marina Ghitoc, Kim Moesgaard Iburg and Remigijus Prochorskas also gave their time and effort to the product. The administrative support for the work was provided by Niels Eriksen, Olga Safronova and Valerie Rasmussen.

**Albena Arnaudova**

# ALBANIA



## REPUBLIKA E SHQIPERISE

### AREA (km<sup>2</sup>)

28 748

Slightly smaller than Belgium

**0.7% of the EU25 area**

**EU25: 3 970 000, EU15: 3 200 000,**

**EU10: 738 000**

### POPULATION

3 166 000

Slightly smaller than Lithuania's population

**0.7% of the EU25 population**

**EU25: 455 532 896, EU15: 380 962 720,**

**EU10: 74 570 192**

*EU25: current members of the EU. EU15: members of the EU*

*Note. The country is part of the EU's Stabilization and Association Process, started in 1999 – an individually tailored programme designed to pave the way for gradual integration into EU structures. This Process recognizes the countries of Albania, Bosnia and Herzegovina, Croatia, Serbia and Montenegro and The former Yugoslav Republic of Macedonia as potential candidates for EU accession, a prerequisite for which is improved regional cooperation.*

<b>THE PEOPLE</b>	Albanian 97%, Greek 2%, Macedonian, Roma 1.3%
<b>LANGUAGE</b>	Albanian
<b>FORM OF GOVERNMENT</b>	Democratic republic
<b>RELIGIONS</b>	Sunni Muslim 70%, Albanian Orthodox 20%, Roman Catholic 10%
<b>INDEPENDENCE</b>	1912
<b>GDP PER CAPITA</b>	€1 535 = <b>8% of the EU25 average</b> <b>EU25: €20 400, EU15: €22 750, EU10: €5 530</b> In purchasing power parities: €4 830 = <b>20% of the EU25 average (€24 480)</b>
<b>REGIONS</b>	12 prefectures, including 42 municipalities divided into 315 communes
<b>CURRENCY</b>	lek: 1 lek = €0.008, €1 = 125 lek
<b>HUMAN DEVELOPMENT INDEX</b>	0.78
<b>UNEMPLOYMENT RATE</b>	15% <b>EU25: 9%, EU15: 8%, EU10: 14%</b>
<b>MEMBER OF</b>	CoE, IMF, OSCE, WB, WTO, UN

Sources: 1-7.

before 1 May 2004. EU10: countries that joined the EU on 1 May 2004.

# HEALTH SHËNDET



Albania



Belarus



Bosnia and Herzegovina



Bulgaria



Croatia



Republic of Moldova



Romania



Russian Federation



Serbia and Montenegro



The former Yugoslav Republic of Macedonia



Turkey



Ukraine

# THE 10 HEALTH QUESTIONS

## What are the demographic essentials on the Albanians?

### POPULATION PROFILE

Gender ratio 1.01 females per male

Urban 45% *EU25: 77%, EU15: 79%, EU10: 65%*

Age structure: 0–14 years 28%

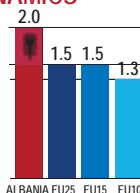
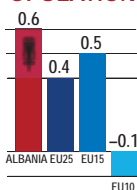
*EU25: 17%, EU15: 17%, EU10: 17%*

≥ 65 years 8%

*EU25: 16%, EU15: 17%, EU10: 14%*

Dependency ratio 52 *EU25: 49, EU15: 50, EU10: 47*

### POPULATION DYNAMICS

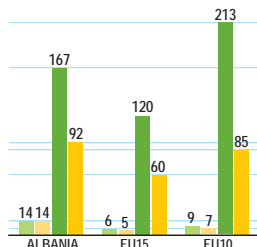


*Annual growth rate (%)*

*Fertility rate (children born per woman)*

*Birth rate (live births per 1000 population)*

### PROBABILITY OF DYING (per 1000 population)



*Under 5 years old, males*

*Under 5 years old, females*

*15–60 years old, males*

*15–60 years old, females*

*EU25: current members of the EU. EU15: members of the EU*

## LIFE EXPECTANCY AT BIRTH (years)

Total population:	76	<i>EU25: 78, EU15: 79, EU10: 74</i>
Males:	73	<i>EU25: 75, EU15: 76, EU10: 70</i>
Females:	78	<i>EU25: 81, EU15: 82, EU10: 78</i>

## HEALTHY LIFE EXPECTANCY (HALE)

	HALE (years)					Total life expectancy lost (%)	
	At birth			At age 60		Males	Females
	Total	Males	Females	Males	Females		
Albania	61	60	63	11	14	12	15
EU15	72	68	72	15	18	9	11
EU10	66	61	67	12	15	12	14

### Points to remember *demographic trends*

Over the past decade there have been:

- a demographic transition, from high to low birth rate
- a fertility rate higher than the population replacement rate
- an increase in the population over 60 years old
- fast economic growth.

Poverty and migration affect the structure of the population.

Sources: 2, 5, 8, 9.

# What do the Albanians suffer from?

## CARDIOVASCULAR DISEASES

- The leading cause of death: 52% of the total number of deaths.
  - Within this group, the major killers are:
    - ischaemic heart disease: cause of 7% of the disease burden and 15% of all deaths: 128 deaths per 100 000
- EU25: 104, EU15: 94, EU10: 168***

before 1 May 2004. EU10: countries that joined the EU on 1 May 2004.



Albania



Belarus



Bosnia and Herzegovina



Bulgaria



Croatia



Republic of Macedonia



Romania



Russian Federation



Serbia and Montenegro



The former Yugoslav Republic of Macedonia



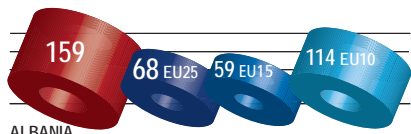
Turkey



Ukraine



– cerebrovascular disease: cause of 7% of the disease burden and 19% of all deaths: 159 deaths per 100 000



- High blood pressure is estimated to cause 22% of the disease burden.

### CANCER/MALIGNANT NEOPLASMS

- Cancer is responsible for 14% of all deaths: 132 deaths per 100 000 population.  
*EU25: 192, EU15: 185, EU10: 227*
- There are 96 new cases of cancer per 100 000 per year, a quarter of the rate in the EU25.  
*EU25: 462, EU15: 468, EU10: 427*
- There are 4.2 new cases of cervical cancer per 100 000 per year: a rate slightly higher than that in the EU25. *EU25: 3.2*
- There are 20 new cases of breast cancer and 13 new cases of lung cancer per 100 000 per year.

### MENTAL HEALTH

- Neuropsychiatric disorders account for 20% of the total disease burden and 3% of all deaths. *EU25: 4%*
- There are 4 suicides or self-inflicted injuries per 100 000.  
*EU25: 12, EU15: 10, EU10: 18*

### UNINTENTIONAL INJURIES

- They are responsible for 43 deaths per 100 000 per year.  
*EU25: 45, EU15: 39, EU10: 13*
- Injuries from road traffic accidents cause 12 deaths per 100 000.



*EU25: current members of the EU. EU15: members of the EU*




## RESPIRATORY DISEASES

- Respiratory diseases cause 6% of all deaths: 47 deaths per 100 000 population.  
*EU25: 47, EU15: 48, EU10: 40*

## INFECTIOUS AND PARASITIC DISEASES

- These diseases cause 0.5% of all deaths.
- There are 18 new cases of tuberculosis per 100 000.  
*EU25: 13, EU15: 11, EU10: 26*
- There are 0.7 new cases of HIV infection per 100 000.
- The rates of sexually transmitted infections (per 100 000 per year) are low compared to EU figures:
  - 0.2 new cases of syphilis *EU25: 3, EU10: 5*
  - 0.6 new cases of gonococcal infection *EU25: 9, EU10: 6*
- Viral hepatitis is a concern.

## CHILD AND ADOLESCENT HEALTH

- Infant mortality: 9 deaths per 1000 live births (WHO and UNICEF estimate: 28 in 2000).  

- Immunization coverage is 97%. *EU25: 95%, EU15: 95%, EU10: 96%*
- A number of vaccine-preventable diseases (for example, measles) are still common in Albania.
- The rate of children under 5 dying from diarrhoea is 0.4 per 100 000. *EU25: 0.4*



before 1 May 2004. EU10: countries that joined the EU on 1 May 2004.



## TOP 10 CAUSES OF DEATH IN ALBANIA

Cause	Total deaths (%)
1. Cerebrovascular disease	19
2. Ischaemic heart disease	18
3. Lower respiratory disease	4
4. Tracheal, bronchial, lung cancer	4
5. Stomach cancer	3
6. Liver cancer	3
7. Perinatal conditions	2
8. Hypertensive heart disease	2
9. Nephritis and nephrosis	2
10. Chronic obstructive pulmonary disease	1

## DISEASE BURDEN IN ALBANIA AND THE EU

Cause	Share of disease burden (%)		
	Albania	EU15	EU10
Cardiovascular diseases	19	17	22
Neuropsychiatric disorders	20	27	21
Cancer/Malignant neoplasms	9	17	16
Unintentional injuries	16	6	9
Non-infectious respiratory diseases	2	7	3
Infectious and parasitic diseases	2	1	2
Respiratory infections	4	1	1
Perinatal conditions	4	1	1
Intentional injuries	2	2	3
Diabetes	1	2	2
Sensory organ disorders	4	5	5
Total communicable diseases	14	5	4
Total noncommunicable diseases	69	87	83
Total injuries	18	8	12

EU25: current members of the EU. EU15: members of the EU

## Points to remember

health status

The epidemiological profile is evolving.

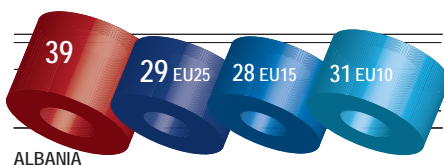
- The burden of communicable diseases, including outbreaks of food- and waterborne diseases, is high.
- Levels of cardiovascular diseases, cancer and external causes of death are increasing.
- Infant mortality is decreasing.
- Maternal and child health continues to be a concern.

Sources: 5, 10.

## Where do the risks lie?

### SMOKING

• Adult smoking prevalence is 39% (60% for males and 18% for females).



- Smoking accounts for 22% of the disease burden.

### ALCOHOL CONSUMPTION

- Total reported alcohol consumption is 2 litres per person per year. **EU25: 9.4, EU15: 9.4, EU10: 8.9**
- Alcohol consumption causes 6% of the disease burden.

### ILLEGAL DRUG USE

- Cannabis is the most common illegal drug, with 2.6% having used it during the last year.
- Annual prevalence of opiate and amphetamine abuse is 0.5% and 0.4%, respectively.

before 1 May 2004. EU10: countries that joined the EU on 1 May 2004.



Albania



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Croatia



Republic of Moldova



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Ukraine

## OBESITY

- 24% of men and 19% of women are obese.
- Among the population aged 55–64 years, 26% of men and 35% of women are clinically obese (BMI  $\geq 30$ ).
- The mean BMI for those aged 35–44 years is 28 for both men and women, indicating overweight.
- Obesity causes an estimated 10% of the disease burden, and physical inactivity, 5.3%.

## FOODBORNE INFECTIONS

- There are 8 new cases of reported *Salmonella* infection per 100 000 population. *EU25: 44, EU15: 37, EU10: 99*

Sources: 2, 10–13.



# Who's who in the Albanian public health sector?

## PUBLIC ADMINISTRATION

Ministry of Health

## INSTITUTIONS UNDER THE HEALTH MINISTRY

Institute of Public Health

National Centre of Drug Control

National Blood Transfusion Centre

National Centre of Well-being, Growth, Development and Rehabilitation of Children

National Centre of Biomedical Engineering

## PARLIAMENT

Parliamentary Commission of Health

*EU25: current members of the EU. EU15: members of the EU*

## INSURANCE STRUCTURE

Health Insurance Institute

## PROFESSIONAL ASSOCIATIONS

Order of Physicians

Nurses' Association

Paediatric Association

Perinatology Association

Dentists' Association

Family Doctors' Association

## ACADEMIC INSTITUTIONS

Tirana University Faculty of Medicine, Faculty of Nurses

## REGIONAL ADMINISTRATION

District public health directorates

# How are services provided?

The Ministry of Health is the main funder and provider of health care and de facto owner of most services in both primary and secondary care.

## PRIMARY CARE

Primary health care teams, led by GPs, provide primary health care in health centres and health posts. Patients have the right to choose their GP, who is then paid by the Health Insurance Institute. There is an ongoing process of integrating some health services (such as mental health, tuberculosis prevention and health education and disease prevention) into the work of these teams. The system of referral through GPs does not prevent

*before 1 May 2004. EU10: countries that joined the EU on 1 May 2004.*



Albania



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Croatia



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Ukraine


patients from contacting specialists directly, paying for services in cash. Either the national or local government owns the primary health care facilities.

## SECONDARY AND TERTIARY CARE

Hospitals are mainly publicly owned, mostly by the Ministry of Health. They are organized at the national, regional and municipal levels. Many poor and small hospitals, mainly in rural areas, have been closed and acute hospital beds drastically decreased. Some district hospitals have been upgraded to regional. The national hospitals remain highly specialized. The hospital admission rate is quite low due to the extra costs patients face after admission. The Tirana University Hospital is the biggest in the country (1442 beds) and is among the few providing tertiary care.

## PUBLIC/PRIVATE MIX

The private sector provides drug distribution, dentistry, medical care, mainly through diagnostic outpatient clinics in urban areas, some run by religious or other NGOs. There are no mechanisms to monitor the quality of the services in the private specialized outpatient facilities.



### Points to remember *service provision*

- The practice of bypassing the primary health care services is common and difficult to change.
- The primary health care network needs to expand its patient base beyond the vulnerable groups.
- The hospital network was especially vulnerable during the times of political crisis and the influx of refugees from Kosovo (Serbia and Montenegro).
- Improving access to and the quality of services remains a challenge.



*EU25: current members of the EU. EU15: members of the EU*



# What resources are available?

## HUMAN RESOURCES FOR HEALTH

Health care professionals are too few and unevenly distributed, with most concentrated in hospitals and close to more urban areas. The private sector (dentistry and pharmaceuticals) employs 11.5% of the health workforce. Nurses and midwives are decreasing in number, in spite of the increasing need for their skills.

### HEALTH PROFESSIONALS (per 100 000)

Physicians	133	EU25: 343, EU15: 356, EU10: 278
Dentists	41	EU25: 62, EU15: 66, EU10: 43
Nurses	370	EU25: 779, EU15: 818, EU10: 642
Pharmacists	40	EU25: 78, EU15: 81, EU10: 60
GPs	50	EU25: 99, EU15: 102, EU10: 64

### HOSPITALS

Hospitals per 100 000  
1.6



Hospital beds per 100 000 306

EU25: 611, EU15: 600, EU10: 661

Annual inpatient admissions per 100 8.7

EU25: 18.5, EU15: 18.4, EU10: 19.5

Average length of stay (days) 6.6

EU25: 9.5, EU15: 9.7, EU10: 8.7


### PHARMACEUTICALS

Domestic drug manufacturing has been privatized, but imports comprise the largest share of drugs used in the country. Essential drugs are provided free to infants, disabled people and war

before 1 May 2004. EU10: countries that joined the EU on 1 May 2004.



veterans. Other subsidies for medicines are categorized according to diseases. Private pharmacies are very well developed, but a good legal base is still needed to regulate their work.



### Points to remember *resources for health*

- The continuous brain drain of health personnel is a major challenge.
- Schemes for new skills acquisition and career development could ease the human resource situation.
- The Ministry of Health works to ensure that the regulations for drug distribution are respected.
- Doctors, not managers, usually lead and run health institutions.

*Sources: 5, 14.*

## Who pays for what?



Health services are funded from two sources.

The main source is the state budget (general taxation), which is augmented by the payroll tax earmarked for the Health Insurance Institute.

The Institute is the national statutory fund, accountable to the parliament, that covers special groups (children, pensioners, etc.). Responsibilities are divided between the Institute and the Ministry of Health. The Institute pays doctors' salaries and for some essential drugs in primary care. Local governments also subsidize the primary care facilities in their regions.

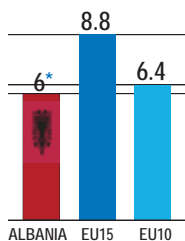
The Ministry receives funds from the state budget, which it allocates to secondary and tertiary care facilities that it owns and

*EU25: current members of the EU. EU15: members of the EU*

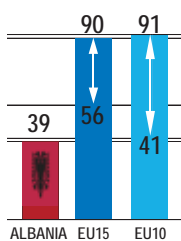


manages directly. It also pays for some items in primary care not funded by the Institute or local governments. Since 2000, pilot initiatives have been undertaken to extend coverage: for instance, a pilot project to purchase care directly from hospitals in the Durres region. Insurance contributions have been kept low, but there are some inequalities, with certain rural groups being unable to afford insurance. Overall, out-of-pocket payments are often made at the point of service.

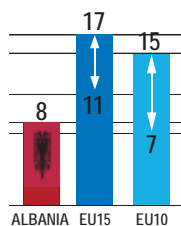
## THE ECONOMIC PICTURE



*Total expenditure on health (% of GDP)*



*Public expenditure on health (% of total expenditure on health)*



*General government expenditure on health (% of total government expenditure)*

\* Based on all existing sources, including foreign aid; government spending per se is 2.9%.


**Out-of-pocket expenditure on health 99.7**  
(% of total private health spending)

**Population below the national poverty line 25%**  
(30% in rural areas, 15% in urban areas); 12% live on less than US\$ 2 per day



before 1 May 2004. EU10: countries that joined the EU on 1 May 2004.





## Points to remember

*health financing*

- Financing levels for health care remain low in absolute terms.
- Enrolment in the national insurance scheme varies among different population groups, even within the active workforce. All population groups could benefit from better information.
- Responsibilities are split between various institutions. This is a challenge to coordinating service delivery and effectively implementing reforms.
- Out-of-pocket payments account for an increasing part of health care revenues and remain a risk factor for financial protection and solidarity.
- The quality and efficiency of services may be further improved, especially if there are incentives in the way providers are paid for their services.
- Health financing is the key to the ongoing health reform.
- Since 1999, 25 governments, international organizations and NGOs have supported the health reform process in Albania by providing technical assistance and funding 133 projects worth over US\$ 143 million.

*Sources: 2, 8, 15.*



## How have the Albanians reformed their health care system?

The health system has undergone a number of reforms. While the political crises of the 1990s interrupted the implementation of planned reforms, some sectoral plans for action were developed. Helping the Ministry of Health to become a key policy-making body has been a major challenge. The international community has strongly supported the country in carrying out some reforms.

- Since 1992, hospitals have been restructured and closed.
- Some partial decentralization delegated more managerial autonomy to district administrations.

*EU25: current members of the EU. EU15: members of the EU*

- A national pharmaceutical policy was launched in 1993 and an essential drugs list was developed in 1994.
- Social health insurance and the national Health Insurance Institute were started in 1995.
- Private medical practice, dentistry and pharmacy have been introduced.
- A position paper on policies and strategies for reforming the Albanian health system was published in 1999 (without an action plan), proposing to change the role of the Ministry of Health from management to policy-making.
- In 2000 the Ministry of Health created its Department for Policy and Planning, mandated to plan the restructuring and rehabilitation of the health care system, to develop capacities for better use of donor interventions and to ensure continuity of the reform efforts.
- 2004 saw the adoption of a long-term strategy for the development of the health system.

### Points to remember

### health reforms

- Government and international investments in the health care sector need to take account of the system's capacity to deliver services.
- The absence of a clear regulatory framework contributes to difficulties in monitoring the work of the private providers, setting standards, defining roles and responsibilities.
- Further decentralization requires clear goals.
- Reforms need to be completed and made sustainable.
- The government has increasingly taken responsibility for domestic funding of the health sector (sharing of funds with international donors).
- An improved system for collecting and disseminating health information would greatly facilitate the reforms.
- Skills and culture need to be developed for monitoring and evaluating policy implementation.
- The government has approved a long-term strategy for the development of the health system.

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Albania



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# What is one of the things the Albanians have learned by doing?



## IMPROVING HOSPITALS WITH THE SUPPORT OF DONORS

Tirana University Hospital has benefited from substantial sums allocated by the government for its rehabilitation; the World Bank plans to provide additional resources for its restructuring. The Government of France is investing in the construction of a new inpatient facility with departments in otorhinolaryngology, ophthalmology and maxillofacial surgery. Two governments are supporting paediatric services: Germany has allocated funds for renovating the infrastructure and Japan will help pay for modern equipment. The International Organization for Migration is investing in haemodialysis services and equipment for cardiac surgery. All these investments are being made according to the master plan for the Hospital, developed in 1997 with the help of Assistance Publique des Hopitaux de Paris.



## What has the Regional Office been doing in Albania?

The WHO Country Office, Albania opened in Tirana in 1991. In the period 2004–2005, the Regional Office supported the country in:

- policy development in tobacco control, alcohol and drugs and health promotion;
- system development in primary care, hospital restructuring and health information systems;

*EU25: current members of the EU. EU15: members of the EU*

- technical areas such as environment and health and maternal and child health.

Some priority areas for the collaboration in 2006–2007 are:

- health systems: finance reform, performance assessment;
- environmental safety;
- improving emergency health services;
- a communicable disease surveillance system;
- strengthening the capacity of primary health care to address mother and child health, mental health and addictions, among others.

## OTHER SOURCES OF INFORMATION ON ALBANIA

President of Albania (<http://www.president.al>)

Assembly of Albania (<http://www.parlament.al>)

Council of Ministers (<http://www.albgovt.gov.al>)

Department of Information (<http://mininf.gov.al>)

Albanian Institute of Statistics (<http://www.instat.gov.al>)

National Agency of Environment (<http://www.nea.gov.al>)

Ministry of Agriculture and Food (<http://www.mbu.gov.al>)

Ministry of Foreign Affairs (<http://www.mfa.gov.al>)

Ministry of Labour and Social Affairs (<http://www.molsa.gov.al>)

Gazeta shqiptare (<http://www.balkanweb.com/gazeta/gazeta.htm>, in Albanian)

UNDP (<http://www.undp.org.al>)

UNICEF (<http://www.unicef.org/infobycountry/albania.html>)

WB (<http://www.worldbank.org/al>)

*before 1 May 2004. EU10: countries that joined the EU on 1 May 2004.*



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# BELARUS



# РЕСПУБЛІКА БЕЛАРУСЬ

## AREA (km<sup>2</sup>)

207 600

Slightly smaller than the United Kingdom

*5% of the EU25 area*

*EU25: 3 970 000, EU15: 3 200 000,*

*EU10: 738 000*

## POPULATION

9 895 000

Equal to Belgium's population

*2.2% of the EU25 population*

*EU25: 455 532 896, EU15: 380 962 720,*

*EU10: 74 570 192*

*EU25: current members of the EU. EU15: members of the EU*

<b>THE PEOPLE</b>	Belarusian 78%, Russian 13%, Ukrainian 4%, Polish
<b>LANGUAGE</b>	Belarusian, Russian
<b>FORM OF GOVERNMENT</b>	Republic
<b>RELIGIONS</b>	Eastern Orthodox, Roman Catholic
<b>INDEPENDENCE</b>	1991
<b>GDP PER CAPITA</b>	€1 441 = <i>7% of the EU25 average</i> <i>EU25: €20 400, EU15: €22 750,</i> <i>EU10: €5 530</i> In purchasing power parities: €5 520 = <i>23% of the EU25 average (€24 480)</i>
<b>REGIONS</b>	6 regions, 143 districts
<b>CURRENCY</b>	ruble: 1 rouble = €0.00036, €1 = 2775 roubles
<b>HUMAN DEVELOPMENT INDEX</b>	0.79
<b>UNEMPLOYMENT RATE</b>	3% <i>EU25: 9%, EU15: 8%, EU10: 14%</i>
<b>MEMBER OF</b>	CIS, CoE, IMF, OSCE, WB, UN

Sources: 1–6, 16, 17.

before 1 May 2004. EU10: countries that joined the EU on 1 May 2004.

# HEALTH

# ЗДОРОВЬЕ



Belarus



Bosnia and Herzegovina



Bulgaria



Croatia



Republic of Moldova



Romania



Russian Federation



Serbia and Montenegro



The Former Yugoslav Republic of Macedonia



Turkey



Ukraine

# THE 10 HEALTH QUESTIONS

## What are the demographic essentials on the Belarusians?

### POPULATION PROFILE

Gender ratio 1.14 females per male

Urban 71% *EU25: 77%, EU15: 79%, EU10: 65%*

Age structure: 0–14 years 17%

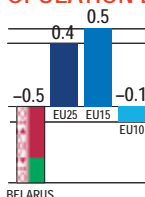
*EU25: 17%, EU15: 17%, EU10: 17%*

≥ 65 years 14%

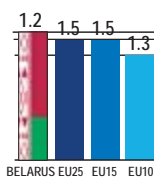
*EU25: 16%, EU15: 17%, EU10: 14%*

Dependency ratio 45 *EU25: 49, EU15: 50, EU10: 47*

### POPULATION DYNAMICS



*Annual growth rate (%)*

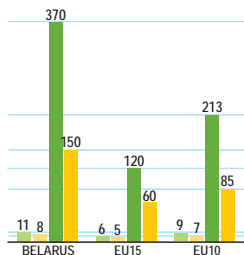


*Fertility rate (children born per woman)*



*Birth rate (live births per 1000 population)*

### PROBABILITY OF DYING (per 1000)



- *Under 5 years old, males*
- *Under 5 years old, females*
- *15–60 years old, males*
- *15–60 years old, females*

*EU25: current members of the EU. EU15: members of the EU*



## LIFE EXPECTANCY AT BIRTH (years)

Total population:	69	<i>EU25: 78, EU15: 79, EU10: 74</i>
Males:	63	<i>EU25: 75, EU15: 76, EU10: 70</i>
Females:	75	<i>EU25: 81, EU15: 82, EU10: 78</i>

## HEALTHY LIFE EXPECTANCY (HALE)

	HALE (years)					Total life expectancy lost (%)	
	At birth			At age 60		Males	Females
	Total	Males	Females	Males	Females		
Belarus	61	57	65	11	15	10	13
EU15	72	68	72	15	18	9	11
EU10	66	61	67	12	15	12	14

### Points to remember *demographic trends*

Over the past decade, there have been:

- decreases in the population growth rate and in total population;
- one of the WHO European Region's lowest levels for HALE for men.

Sources: 2, 5, 8, 9.

## What do the Belarusians suffer from?

### CARDIOVASCULAR DISEASES

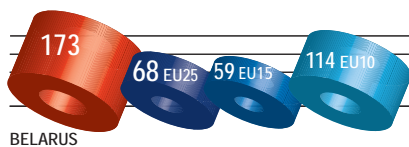
- Cardiovascular diseases are the leading cause of death: 52% of all deaths.
- Within this group, the two major killers are:
  - ischaemic heart disease: cause of 17.4% of the disease burden and 34% of all deaths: 457 deaths per 100 000  
*EU25: 104, EU15: 94, EU10: 168*

before 1 May 2004. EU10: countries that joined the EU on 1 May 2004.





– cerebrovascular disease: cause of 8.6% of the disease burden and 13% of all deaths; 173 deaths per 100 000.



- High blood pressure causes 17% of the disease burden and high cholesterol, 14.1%.

### CANCER/MALIGNANT NEOPLASMS

- Cancer is the second leading cause of death, accounting for 13% of total deaths and 9% of the disease burden.
- The number of new cases of cancer is 352 per 100 000 per year. *EU25: 462, EU15: 468, EU10: 427*
- There are 15 new cases of cervical cancer per 100 000 each year. *EU25: 3.2*
- There were 61 new cases of breast cancer and 45 new cases of lung cancer per 100 000 in 2003.

### DIABETES

- Diabetes prevalence is 1.5%.

### MENTAL HEALTH

- Neuropsychiatric disorders account for 1% of all deaths. *EU25: 4%*
- There are 33 deaths from suicide or self-inflicted injuries per 100 000: 2.5% of all deaths. *EU25: 12, EU15: 10, EU10: 18*
- There are 128 new cases of mental disorders per 100 000 reported per year. *EU10: 777*

### UNINTENTIONAL AND INTENTIONAL INJURIES

- Injuries cause 163 deaths per 100 000 per year. *EU25: 45, EU15: 39, EU10: 73*

*EU25: current members of the EU. EU15: members of the EU*

- Road traffic accidents injure 73 people per 100 000.



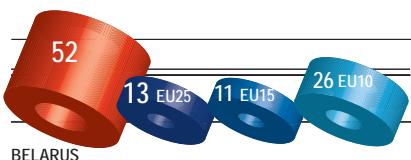
## RESPIRATORY DISEASES

- Respiratory diseases cause 3% of all deaths, or 45 per 100 000. **EU25: 47, EU15: 48, EU10: 40**

## INFECTIOUS AND PARASITIC DISEASES

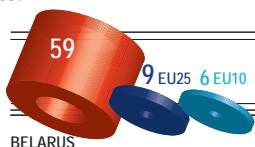
- Only 13 per 100 000 die from infectious diseases, or 1% of all deaths.

- There are 52 new cases of tuberculosis per 100 000.



- There are 7.2 new cases of HIV infection per 100 000.
- The rates of sexually transmitted infections (per 100 000 per year) are high compared to EU figures:

- 49 new cases of syphilis  
**EU25: 3, EU10: 5**
- 59 new cases of gonococcal infection.



## CHILD AND ADOLESCENT HEALTH

- The infant mortality rate is 8 deaths per 1000 live births.  
**EU25: 4.6, EU15: 5, EU10: 7**
- Immunization coverage is 99%.  
**EU25: 95%, EU15: 95%, EU10 96%**



before 1 May 2004. EU10: countries that joined the EU on 1 May 2004.



Belarus



Bosnia and Herzegovina



Bulgaria



Croatia



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Romania



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Turkey



Ukraine

## TOP 10 CAUSES OF DEATH IN BELARUS

Cause	Total deaths (%)
1. Ischaemic heart disease	41
2. Cerebrovascular disease	16
3. Chronic obstructive pulmonary disease	4
4. Poisoning	3
5. Self-inflicted injuries	3
6. Tracheal, bronchial, lung cancer	3
7. Stomach cancer	2
8. Colon and rectal cancer	2
9. HIV/AIDS	2
10. Drowning	1

*Note. These statistics are based on WHO estimates, not on official mortality statistics.*

## DISEASE BURDEN IN BELARUS AND THE EU

Cause	Share of disease burden (%)		
	Belarus	EU15	EU10
Cardiovascular diseases	30	17	22
Neuropsychiatric disorders	15	27	21
Cancer/Malignant neoplasms	9	17	16
Unintentional injuries	14	6	9
Non-infectious respiratory diseases	4	7	3
Infectious and parasitic diseases	5	2	2
Respiratory infections	< 1	1	1
Perinatal conditions	1	1	1
Intentional injuries	6	2	3
Diabetes	2	2	2
Sense organ disorders	4	5	5
Total communicable diseases	7	5	4
Total noncommunicable diseases	74	87	83
Total injuries	20	8	12

*EU25: current members of the EU. EU15: members of the EU*

## Points to remember

health status

- Over the past decade, malignant neoplasms have increased by one third.
- Infant mortality is low, while infant morbidity remains high.
- While some health indicators have improved during the past decade, unfavourable socioeconomic factors still affect the population's health.
- Reproductive health faces the challenge of a very high rate of abortions (the second highest in the WHO European Region).

Sources: 2,10.

## Where do the risks lie?

### SMOKING

• Adult smoking prevalence is 27%: 53% for males and 7% for females.



- Smoking is responsible for 11.6% of the disease burden.

### ALCOHOL CONSUMPTION

- Total reported alcohol consumption is 4.9 litres per person per year. **EU25: 9.4, EU15: 9.4, EU10: 8.9**
- There are 28 new cases of alcohol psychosis per 100 000 per year.
- Alcohol consumption is the cause of 14% of the disease burden.

### ILLEGAL DRUG USE

- Among adults, the annual prevalence of abuse is 2.6% for cannabis and 0.4% for opiates.

before 1 May 2004. EU10: countries that joined the EU on 1 May 2004.



Belarus



Bosnia and Herzegovina



Bulgaria



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The Former Yugoslav Republic of Macedonia



Turkey



Ukraine

- Illicit drug use causes 2.2% of the total disease burden.

## OBESITY

- Obesity causes 10% of the disease burden, and physical inactivity, 5.5%.
- Obesity rates are 16% for men and 32% for women.

## FOODBORNE INFECTIONS

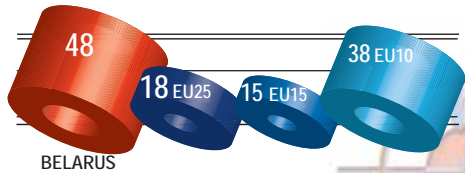
- There are 40 reported cases of *Salmonella* infection per 100 000.  
*EU25: 44, EU15: 37, EU10: 99*

## OCCUPATIONAL HEALTH

- There are 3 new cases of occupation-related disease per 100 000. *EU25: 42, EU15: 42, EU10: 19*
- Work-related injuries cause 2.2 deaths per 100 000.  
*EU25: 1.4, EU15: 1.4, EU10: 1.6*

## AIR QUALITY

- SO<sub>2</sub> emissions were 48 kg per capita in 2000.



Sources: 2, 10–13.



# Who's who in the Belarusian public health sector?

## PUBLIC ADMINISTRATION

Ministry of Health

State Interministerial Committee for Population Health Care

*EU25: current members of the EU. EU15: members of the EU*

## INSTITUTIONS UNDER THE HEALTH MINISTRY

Hygiene and Epidemiology National Service  
Centre for Expertise in Nutrition  
Centre for Expertise and Clinical Trials  
Centre for Medical Technologies

## PARLIAMENT

Committee on health and physical activity

## INSURANCE STRUCTURE

BelGosStrah

## PROFESSIONAL ASSOCIATIONS

Association of Health Care Workers  
Association of General Practitioners

## ACADEMIC INSTITUTIONS

State medical universities in Minsk, Vitebsk, Grodno and Gomel

## REGIONAL ADMINISTRATION

Health departments of the local authorities at the regional and district levels

# How are services provided?

Health care standards and regulations for service delivery at all levels are defined at the national level, but local authorities are responsible for monitoring compliance. Decentralization has seen mixed results. Some improvement can be observed in the coordination of local providers, while the new autonomy may sometimes hamper the implementation of priority national programmes.

*before 1 May 2004. EU10: countries that joined the EU on 1 May 2004.*



Belarus



Bosnia and Herzegovina



Bulgaria



Croatia



Republic of Moldova



Romania



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The former Yugoslav Republic of Macedonia



Turkey



Ukraine

## PRIMARY CARE

Primary care is available to the entire population, but is delivered through different routes. In rural areas, there is a huge network of health posts (staffed by nurses, feldshers and midwives) or health stations (staffed by doctors). In urban settings, primary care is provided through polyclinics. Patients are assigned to a primary care doctor regardless of their preferences. Primary care physicians are supposed to be the entry point of the system, but in practice their gatekeeping function is not fully exercised. Workplace polyclinics are still common. A national action plan is being developed for transferring to general practice both in rural and urban areas.

## SECONDARY AND TERTIARY CARE

Patients are used to referring themselves directly to specialists, and the constitution guarantees their right to do so. Specialized outpatient clinics and hospital inpatient/outpatient services provide secondary care. This care is organized on a territorial basis, so hospitals are funded through the local authorities, which are also the employers of all staff. Inpatient services are predominant, and there is excess capacity for secondary and tertiary care. This is the root cause of a national tendency to fill the available beds, exacerbated by the provision of free drugs to inpatients.

## PUBLIC/PRIVATE MIX

All secondary and tertiary care units are publicly owned. Physicians have made some attempts to offer private consultations, and some successful schemes for quasi-private polyclinics have been established. The emerging private sector still lacks a formal legal framework.



*EU25: current members of the EU. EU15: members of the EU*



## Points to remember *service provision*

- Health care delivery has basically remained unchanged since the country's independence, with the status quo preserved to prevent disruption of services.
- In spite of the political commitment to general practice, the main challenge for primary care is to act as the gatekeeper to specialist services.
- The planned shift from inpatient to outpatient care will be carried out on the basis of the existing network of polyclinics.
- The social care sector needs to meet the needs of the ageing population.
- The traditional network of the Hygiene and Epidemiology National Service is responsible for health and safety inspections, environmental monitoring and control of infectious disease outbreaks.
- Supervision of service provision is increasingly devolved to the local level.
- There are parallel health care networks, sustained by state-owned enterprises or non-health ministries, often leading to duplication of facilities.



## What resources are available?

### HUMAN RESOURCES FOR HEALTH

The number of health personnel is excessive and increasing in all categories, in part because staff numbers are linked to existing beds or projected visits. Managers of health facilities have been given some autonomy to make decisions, but the limited funding does not allow them to fully exercise this new mandate.

*before 1 May 2004. EU10: countries that joined the EU on 1 May 2004.*



## HEALTH PROFESSIONALS (per 100 000)

Physicians	456	EU25: 343, EU15: 356, EU10: 278
Dentists	44	EU25: 62, EU15: 66, EU10: 43
Nurses	1166	EU25: 779, EU15: 818, EU10: 642
Pharmacists	29	EU25: 78, EU15: 81, EU10: 60
GPs	30	EU25: 99, EU15: 102, EU10: 64

## HOSPITALS

Hospital bed closures have been insufficient, and admissions and utilization are very high. Efforts have been made to transform some general hospitals into day hospitals. Most of the facilities have old or scarce equipment.

Hospitals per 100 000 **7.4**  
*EU25: 3.2, EU15: 3.3, EU10: 2.8*

Hospital beds

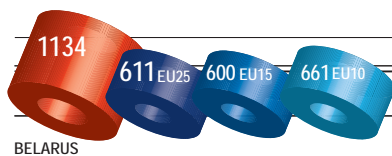
per 100 000 **1134**

Annual inpatient admissions per 100 **29**

*EU25: 18.5, EU15: 18.4, EU10: 19.5*

Average length of stay (days) **12.2**

*EU25: 9.5, EU15: 9.7, EU10: 8.7*



## PHARMACEUTICALS

About 70% are imported. The Ministry of Health is responsible for defining, importing and setting the prices of essential drugs. Increasing attention is being paid to quality assurance, and serious efforts made to meet international requirements. A persistent problem is that regulatory functions (such as licensing) are still not delegated to the specialized regulatory body: the State Committee of Expertise in Health Care. This may compromise the effort to introduce quality assurance.

*EU25: current members of the EU. EU15: members of the EU*

## Points to remember *resources for health*

- The oversupply of health personnel is a major challenge.
- Developing national policy and planning for human resources remains on the agenda.
- Training and retraining is available for all who wish to start in general practice.
- The health authorities recognize the need for more rational and cost-effective consumption of medicines.
- Hospital managers and local government employees need training and empowerment in independent decision-making for health.

Sources: 2, 14.

## Who pays for what?

The population is entitled to universal and free coverage. The health system is funded from compulsory general taxation; no payroll or compulsory health insurance contributions are made. Local governments are responsible for collecting these taxes, agreeing on the health-sector allocations and distributing the revenues to providers. Some key enterprises contribute through work-based polyclinics. Some central funding is available for priority programmes that tackle diseases of major social impact (such as cancer, diabetes and tuberculosis). Of late, state financing for regional health care is allocated per capita, creating conditions for hospitals bed restructuring and the shift from inpatient to outpatient facilities. Nevertheless, the bulk of the budget is still devoted to inpatient care.

Voluntary health insurance is allowed only for non-essential medical services. The real balance between the complementary

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Bulgaria



Bosnia and Herzegovina



Romania



Croatia



Republic of Moldova



Romania



Russian Federation



Serbia and Montenegro



The Former Yugoslav Republic of Macedonia

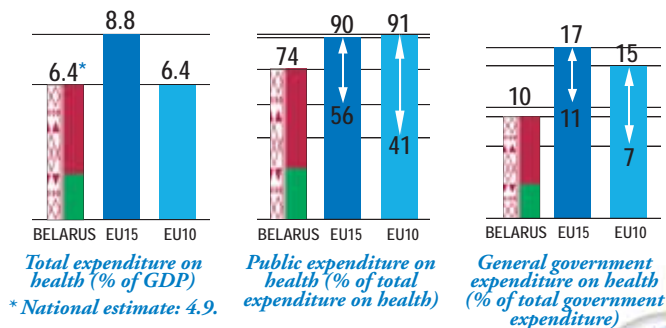


Turkey



Ukraine

sources of financing is difficult to evaluate because nine ministries and many enterprises run parallel health services. Besides, there are no formal arrangements in the country for official hospital charges or any cost-sharing schemes. In 2000, out-of-pocket payments by individuals accounted for about 15% of all sources of health financing.



Population below the national poverty line 42%;  
under 2% live on less than US\$ 4 per day

### Points to remember

### health financing

- The relatively high growth rate in recent years has not resulted in improved economic conditions for the population.
- The share of health spending is relatively high but providing unlimited health services is increasingly difficult.
- The main step ahead in reform is clearly to define the package of free services.
- There are uncertainties and differences in the estimates of health care expenditures.

Sources: 2, 8, 15.

EU25: current members of the EU. EU15: members of the EU

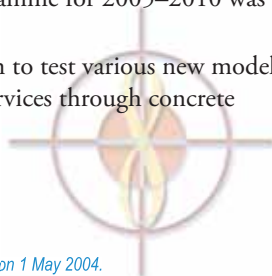


## How have the Belarusians reformed their health care system?

In the 1990s, the status quo was preserved and the inherited infrastructure maintained as far as possible. In general, there were legislative changes but adjustment in the management and financing schemes was relatively small scale. There is a strong trend towards decentralizing authority from the Ministry of Health to the executive committees at the regional and district levels.

- In 1992 and 1996/1997, there were attempts to introduce a social health insurance system. Since 1998, all the plans for health sector development have been based on the assumption that the key source of funding for health care will be general taxation.
- In 1998, the national strategy for the development of health care (“Conception”) was adopted as a decree of the Council of Ministers.
- In 1999, the state programme Population Health 1999–2005 was adopted, underlining the need to work across all sectors to address the key determinants of health.
- In 2004, a working group on primary health care was set up in preparation for the state village revival programme for 2005–2010, and regional per capita financing was adopted.
- In 2005, the village revival programme for 2005–2010 was adopted.


A country-specific approach has been to test various new models of financing and managing health services through concrete pilot projects.



*before 1 May 2004. EU10: countries that joined the EU on 1 May 2004.*



Lithuania



## Points to remember

*health reforms*

- In the recent years of stability, there have been increased awareness of the health system's problems and a strong commitment to maintaining a free and equitable service for all.
- The Ministry of Health is committed to introducing reforms that will extend the role of primary care and a new scheme for the compensation of GPs. General practice is seen as the cornerstone of change.
- Some reform efforts focused on encouraging performance-related payment of health personnel.
- So far, the system has coped. There has been no significant disruption of its ability to deliver services. Nevertheless, the improving economic climate sets the stage for further, much needed developments in the health care system. The key challenges are efficiency, coordination and financing.



## What is one of the things the Belarusians have learned by doing?

### ACCUMULATING KNOWLEDGE

To bring in additional funding for health services, the country tried several times to introduce a system for statutory insurance, based on payroll contributions. A first attempt in 1992 did not get the support of the parliament. A second one came in 1996/1997 in response to insufficient public funding for health care. A draft law was presented again to the parliament. Far from perfect, it nevertheless contained some promising solutions. It safeguarded the principles of equity, solidarity and universal coverage while proposing a basket of services for

*EU25: current members of the EU. EU15: members of the EU*

basic health needs, addressing public health issues and giving priority to primary care. Deputies did not approve this draft, however. Since 1998, there have been no new attempts and it is commonly assumed that health care will rely on general taxation as a key source of funding. Nevertheless, the debate and efforts to introduce social health insurance had a significant positive impact in increasing awareness that realistic alternatives must be sought. Various ideas have been tested case by case since then, some of them suggesting a way to a quasi-market arrangement between providers and payers. None of these proposals undermines the commitment to free, universal health care or challenges the role of the state as the main provider. There is overarching political support for introducing health reforms, but the difficulties in the past 13 years have brought much knowledge about the potential constraints, latent resistance and risk of a breakdown in health care provision if reforms are not introduced cautiously. This accumulated knowledge is a valuable resource for finding near- or long-term solutions.



## What has the Regional Office been doing in Belarus?

The WHO Country Office, Belarus opened in Minsk in 1994. In the period 2004–2005, the Regional Office's collaboration with the country focused on:

- designing strategies to improve the delivery and quality of health services;
- reforming health financing ;
- developing national databases of health indicators;
- assessing the environmental risks for children;

*before 1 May 2004. EU10: countries that joined the EU on 1 May 2004.*



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- improving reproductive health services for young people ;
- controlling tuberculosis via DOTS in some pilot regions;
- HIV/AIDS.

For the period 2006–2007, the Regional Office for Europe’s work with the country will have such priorities as:

- improving the delivery of health services at both the primary and hospital levels, for instance, by better integrating vertical services such as tuberculosis control and reduction of child and maternal mortality into primary health care;
- strengthening the regulatory framework of the pharmaceutical sector;
- improving the quality and safety of blood services;
- scaling up health promotion and prevention of noncommunicable diseases;
- fostering environmental safety, including injury and traffic accident prevention.

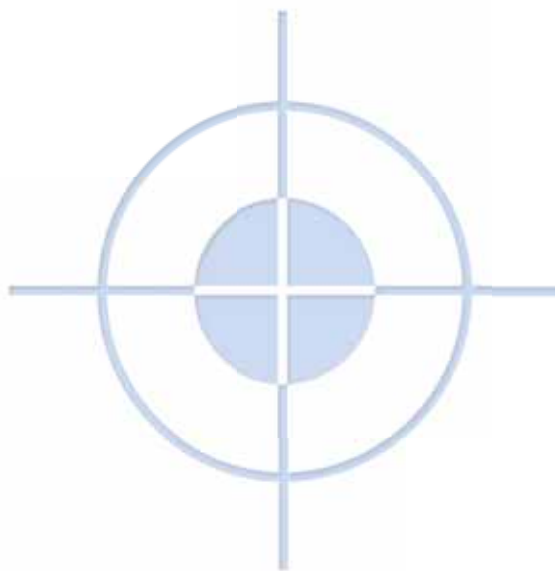
## OTHER SOURCES OF INFORMATION ON BELARUS

Health care in Belarus: catalogue of organizations and specialists (<http://healthcare.by>, in Russian, in Russian)

United Nations in Belarus (<http://www.un.minsk.by>)

Information portal for Belarusian non-governmental organisations (<http://www.ngo.by>)





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# BOSNIA AND HERZEGOVINA



# BOSNA I HERCEGOVINA БОСНА И ХЕРЦЕГОВИНА

*EU25: current members of the EU. EU15: members of the EU*

*Note. The country is part of the EU's Stabilization and Association Process, started in 1999 – an individually tailored programme designed to pave the way for gradual integration into EU structures. This Process recognizes the countries of Albania, Bosnia and Herzegovina, Croatia, Serbia and Montenegro and The former Yugoslav Republic of Macedonia as potential candidates for EU accession, a prerequisite for which is improved regional cooperation.*

AREA (km <sup>2</sup> )	51 130 25% larger than Denmark <b>1.3% of the EU25 area</b> <b>EU25: 3 970 000, EU15: 3 200 000,</b> <b>EU10: 738 000</b>
POPULATION	3 810 000 (post-war estimate) Equal to Ireland's population <b>0.8% of the EU25 population</b> <b>EU25: 455 532 896, EU15: 380 962 720,</b> <b>EU10: 74 570 192</b>
THE PEOPLE LANGUAGES	Bosnian 48%, Serbian 37%, Croatian 17% Bosnian, Croatian, Serbian (in alphabetical order)
FORM OF GOVERNMENT	The state consists of the Federation of Bosnia and Herzegovina and Republika Srpska, as well as the Brčko District. At the state level, there is a bicameral parliamentary assembly ( <i>Skupština</i> ) with a House of Representatives and House of the People.
RELIGIONS	Muslim 40%, Orthodox 31%, Roman Catholic 15%, Jewish
INDEPENDENCE	1992

before 1 May 2004. EU10: countries that joined the EU on 1 May 2004.

# HEALTH ZDRAVLJE ЗДРАВЉЕ



Bosnia and Herzegovina



Bulgaria



Croatia



Republic of Moldova



Romania



Russian Federation



Serbia and Montenegro



The former Yugoslav Republic of Macedonia



Turkey



Ukraine

<b>GDP PER CAPITA</b>	€1 362 = <i>7% of the EU25 average</i> <i>EU25: €20 400, EU15: €22 750,</i> <i>EU10: €5 530</i> In purchasing power parities: €5 970 = <i>24% of the EU25 average (€24 480)</i>
<b>REGIONS</b>	2 first-order administrative divisions, 1 internationally supervised district
<b>CURRENCY</b>	convertible mark (BAM): 1 BAM = €0.51, €1 = 1.96 BAM
<b>HUMAN DEVELOPMENT INDEX</b>	0.78
<b>UNEMPLOYMENT RATE</b>	18–22% <i>EU25: 9%, EU15: 8%, EU10: 14%</i>
<b>MEMBER OF</b>	CoE, IMF, OSCE, WB, UN

### **SOME MILESTONES IN THE RELATIONS BETWEEN THE EU AND BOSNIA AND HERZEGOVINA**

- In 1997, the EU Council of Ministers established a regional approach to setting political and economic conditions for the development of bilateral relations.
- In 1998, a Consultative Task Force was established as a joint vehicle of the country and the EU for technical and expert advice in the field of administration, regulatory framework and policies.
- In 1999, the Stabilization and Association Process was launched, offering a clear prospect of integration into EU structures.
- In 2000, the EU Road Map was published, which set out 18 essential steps to be taken by the country before work on a feasibility study for the opening of negotiations on a stabilization and association agreement could begin. The European Council stated that all the countries covered by the Process were potential candidates for EU membership.

*EU25: current members of the EU. EU15: members of the EU*

- 2001 was the first year of the Community Assistance for Reconstruction, Development and Stabilization assistance programme specifically designed for the countries in the Stabilization and Association Process, and the Country Strategy Paper for 2002–2006 was adopted.
- In 2003, following substantial completion of the Road Map, work was underway on a feasibility study for the opening of negotiations on a stabilization and association agreement.

## NOTE

*In 1992 Bosnia and Herzegovina was recognized by the EU and the USA as a sovereign independent nation and became a member of the UN. The war that followed ended with the Dayton Peace Agreement of 1995, which recognized the existence of two entities – the Federation of Bosnia and Herzegovina and Republika Srpska – each with its own president and government. The executive branch of the central government is represented by a three-member presidency, with a rotation of the chairman and the cabinet (the Council of Ministers). The country is strengthening its democratic central government, which is in charge of foreign policy, foreign trade, human rights and refugees, civil affairs, security and the treasury. Governmental structures are also being strengthened at the entity level.*

*There are certain differences between entities. Republika Srpska has a unicameral national assembly (People's Assembly), and an elected president and vice-president chair the executive branch. Upon election, the president appoints a prime minister. The Federation of Bosnia and Herzegovina has a bicameral parliamentary assembly with a Federation House of Representatives and Federation House of the People. The president and vice-president of the Federation are nominated by the House of the People and elected by the House of Representatives. The Brčko District has a District Assembly and a District Government.*

*The Federation of Bosnia and Herzegovina is divided into 10 autonomous cantons, each with its own legislative and executive bodies. This model was chosen to prevent the dominance of one ethnic group by another. Republika Srpska has a north-western part with two regions and a an eastern part with five regions. Since 2000, the city of Brčko has been an autonomous district.*

*All population-based data in Bosnia and Herzegovina are estimates, since no official census has been made since the end of the war.*

Sources: 2–6, 16, 17.

before 1 May 2004. EU10: countries that joined the EU on 1 May 2004.



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# THE 10 HEALTH QUESTIONS

## What are the demographic essentials on the people?

### POPULATION PROFILE

Gender ratio 1.02 females per male

Urban 44% *EU25: 77%, EU15: 79%, EU10: 65%*

Age structure: 0–14 years 24%

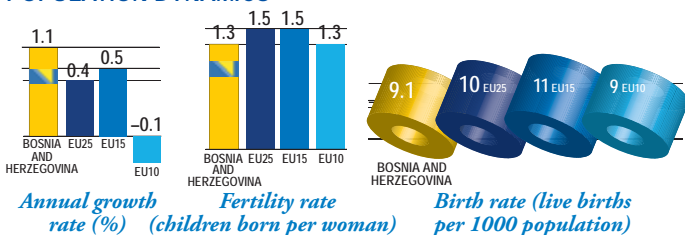
*EU25: 17%, EU15: 17%, EU10: 17%*

≥ 65 years 6%

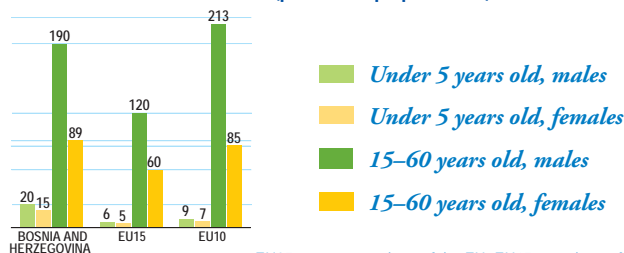
*EU25: 16%, EU15: 17%, EU10: 14%*

Dependency ratio 39 *EU25: 49, EU15: 50, EU10: 47*

### POPULATION DYNAMICS



### PROBABILITY OF DYING (per 1000 population)



*EU25: current members of the EU. EU15: members of the EU*

## LIFE EXPECTANCY AT BIRTH (years)

Total population:	73	<i>EU25: 78, EU15: 79, EU10: 74</i>
Males:	69	<i>EU25: 75, EU15: 76, EU10: 70</i>
Females:	76	<i>EU25: 81, EU15: 82, EU10: 78</i>

## HEALTHY LIFE EXPECTANCY (HALE)

	HALE (years)					Total life expectancy lost (%)	
	At birth			At age 60		Males	Females
	Total	Males	Females	Males	Females		
Bosnia and Herzegovina	64	62	66	12	15	10	13
EU15	72	68	72	15	18	9	11
EU10	66	61	67	12	15	12	14

### Points to remember *demographic trends*

Over the past decade, there has been a decreasing fertility rate, but still a positive population growth rate.

The socioeconomic and demographic trends still show the impact of the war. The return of refugees and internally displaced people continues. The last seven years of reconstruction and growth have brought some improvement. Overall, the processes of reconciliation, political stabilization and democratization are continuing, with the decisive support of the international community. Along with ensuring equity and tackling corruption, they are the major sociopolitical issues facing the country.

Sources: 2, 5, 8, 9.

## What do the people suffer from?

### CARDIOVASCULAR DISEASES

- They are the leading cause of death. Within this group, the two major killers are:

before 1 May 2004. EU10: countries that joined the EU on 1 May 2004.



- ischaemic heart disease (8% of disease burden)
- cerebrovascular disease (10% of disease burden).
- High blood pressure causes 29% of the total disease burden.

## CANCER/MALIGNANT NEOPLASMS

- Cancer is responsible for 11% of the disease burden.

## DIABETES

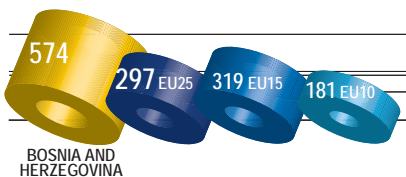
- Diabetes affects 1.2% of the population

## MENTAL HEALTH

- Neuropsychiatric disorders accounts for 20% of the total disease burden.
- Mental disorder prevalence is 2%. **EU15: 2.5%, EU10: 3%**

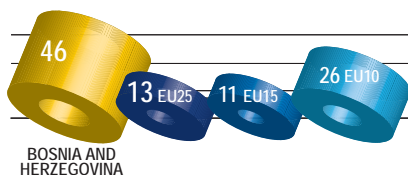
## UNINTENTIONAL AND INTENTIONAL INJURIES

- Road traffic accidents injure 574 people per 100 000.



## INFECTIOUS AND PARASITIC DISEASES

- These diseases cause 2% of the total disease burden.
- There are 46 new cases of tuberculosis per 100 000.
- There are 0.3 new cases of HIV infection per 100 000.
- The rates of sexually transmitted infections (per 100 000 per year) are low compared to EU figures:
  - under 1 new case of syphilis **EU25: 3, EU10: 5**
  - under 1 new case of gonococcal infection **EU25: 9, EU10: 6**

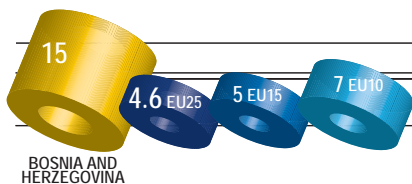


EU25: current members of the EU. EU15: members of the EU



## CHILD AND ADOLESCENT HEALTH

- Infant mortality: 15 deaths per 1000 live births.
- WHO, UNICEF and UNFPA estimate that the maternal mortality rate is 32 per 100 000 live births.
- Immunization coverage is 87%.  
*EU25: 95%, EU15: 95%, EU10: 96%*



## TOP 10 CAUSES OF DEATH IN BOSNIA AND HERZEGOVINA

Cause	Total deaths (%)
1. Cerebrovascular disease	19
2. Ischaemic heart disease	16
3. Inflammatory heart disease	10
4. Tracheal, bronchial, lung cancer	5
5. Diabetes	2
6. Colon and rectal cancer	2
7. Self-inflicted injury	2
8. Liver cancer	2
9. Nephritis and nephrosis	2
10. Cirrhosis of the liver	2

*Note. These figures are based on WHO estimates, not on official mortality statistics.*



*before 1 May 2004. EU10: countries that joined the EU on 1 May 2004.*



Bosnia and Herzegovina



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Turkey



Ukraine

## DISEASE BURDEN IN BOSNIA AND HERZEGOVINA AND THE EU

Cause	Share of disease burden (%)		
	Bosnia and Herzegovina	EU15	EU10
Cardiovascular diseases	30	17	22
Neuropsychiatric disorders	20	27	21
Cancer/Malignant neoplasms	11	17	16
Unintentional injuries	7	6	9
Non-infectious respiratory diseases	4	7	3
Infectious and parasitic diseases	2	2	2
Respiratory infections	1	1	1
Perinatal conditions	3	1	1
Intentional injuries	3	2	3
Diabetes	2	2	2
Sense organ disorders	5	5	5
Total communicable diseases	7	5	4
Total noncommunicable diseases	83	87	83

### Points to remember

*health status*

- Noncommunicable diseases dominate the epidemiological profile of the country.
- Communicable diseases remain high on the agenda.
- Mental health problems are predominantly a consequence of the war.

Sources: 5,10.

*EU25: current members of the EU. EU15: members of the EU*

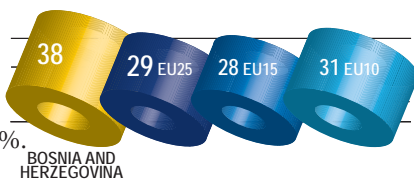


# Where do the risks lie?

## SMOKING

- Adult smoking prevalence is 38%.

- Tobacco use causes 21% of the disease burden.



## ALCOHOL CONSUMPTION

- Total reported alcohol consumption is 10 litres per person per year. **EU25: 9.4, EU15: 9.4, EU10: 8.9**
- Alcohol consumption causes 4% of the disease burden.

## ILLEGAL DRUG USE

- Illicit drug use causes 0.5% of the total disease burden.

## OBESITY

- 14% of men and 21% of women are obese.
- Obesity (BMI  $\geq$  30) affects 12% of males and 7% of females aged 25–34 years and 21% of males and 40% of females aged 55–64 years.
- Obesity causes 10% of the disease burden and physical inactivity, 5%.

## FOODBORNE INFECTIONS

- The reported *Salmonella* infection rate is 14 per 100 000.



### Points to remember

*lifestyles*

- Lifestyle risk factors, especially smoking, obesity and sedentariness, are traditionally widespread. Risk behaviours are on the rise.
- Unexploded mines and other explosive devices, estimated at about 1 million, are a health threat for the country; children are particularly vulnerable.

Sources: 2, 10, 11, 13.

before 1 May 2004. EU10: countries that joined the EU on 1 May 2004.





# Who's who in the public health sector of Bosnia and Herzegovina?

## PUBLIC ADMINISTRATION

According to the Dayton Peace Agreement, the country's health system is divided into separate systems. Organizing, financing and delivery of health care are the sole responsibility of each entity. Overall, the country has three health care systems for its 4 million people, administered by 13 health ministries.

The Brčko District directly provides primary and secondary care through its Department of Health, Public Safety and Community Services. The health care system of the Federation of Bosnia and Herzegovina is highly decentralized, with a Federal Ministry of Health, Federal Health Insurance and Reinsurance Fund and Public Health Institute and branches of these in each of the 10 cantons. Republika Srpska has a Ministry of Health and Social Welfare, which supervises the Health Insurance Fund, the health care network and the public health institutes.

At the state level, the Ministry of Civil Affairs is responsible for defining the underlying principles, coordinating activities and defining strategy in the fields of health and social care, pensions, labour and employment.

## PROFESSIONAL ASSOCIATIONS

The Federation of Bosnia and Herzegovina and Republika Srpska each have medical chambers, professional associations and health professionals' unions.

*EU25: current members of the EU. EU15: members of the EU*

# How are services provided?



The fragmentation of the country severely affects people's access to services. In 2000, the entities' two health ministries carried out a survey, according to which at least 48% of the population was unemployed and had serious problems with access to health care. A 1999 WB study found that only 28% of the people in rural areas had access to basic health services.

The design of the health care system makes it difficult to achieve efficiency and quality. In the Federation of Bosnia and Herzegovina, health care is organized at the canton level and coordinated at the federal level. The cantons have had major operational difficulties in providing health services. Republika Srpska manages health institutions at both the entity level and the municipal level; it currently has two parallel systems of primary health care delivery – the former (pre-war) system and the new and reformed system based on family medicine.

## PRIMARY CARE

Both health ministries have committed themselves to adopting the family medicine approach and reforming primary health care. Reform, however, needs to be balanced against the expected changes in the hospital sector. Developing a health information system will be decisive for the ability of primary care to perform the gatekeeping function, offer scheduled appointments, etc.

Primary care is provided by health centres (*dom zdravlijas* – “houses of health”). In principle, each has a team of GPs, office nurses and visiting nurses. Primary health care in these centres is, on average, divided into seven distinct functions: general practice, occupational medicine, schoolchildren, preschool

*before 1 May 2004. EU10: countries that joined the EU on 1 May 2004.*



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children, women's protection, tuberculosis protection and epidemiological surveillance. Under the same roof and with the same administrative structure, specialized care units for specific population groups often coexist. Within the sphere of each health centre there are several subsidiary health stations (*ambulancias*) for local communities. These are small, staffed by a GP and a few nurses, and provide basic first-line care and refer people to other health care facilities.

In the reformed system, all patients are supposed to enter through the family medicine team at the community health station level. The family medicine team provides basic health care to all patient groups, including health promotion and disease prevention activities, basic diagnostic and therapeutic services, and follow-up or rehabilitation activities at home after treatment at higher levels of care. The family doctor is responsible for referring patients for additional testing or treatment. The family medicine model was tested and the country aims at 100% coverage with in the next 5–7 years.

## SECONDARY AND TERTIARY CARE

Inpatient services are provided in a general/cantonal hospital with a catchment population of about 70 000–150 000 and at least four departments: internal medicine, surgery, paediatrics and gynaecology/obstetrics. Complex medical specialities are exclusively confined to clinical centres (there are four in the country), with a catchment population of over 500 000.

There are four types of hospitals: clinical centres, general acute hospitals, specialized hospitals and small district hospitals.

Given the low level of hospital occupancy, one may conclude that there is no lack of hospital beds. The problem seems to be more with the composition and quality of services, which are generally deemed to be unsatisfactory.

## PUBLIC/PRIVATE MIX

Private practice and private ownership of health care facilities have been enacted in both entities, but proper stewardship of the public/private mix remains a challenge. Privately delivered care is increasing and health professionals often practise in both public and private settings.

### Points to remember *service provision*

- The planned reforms in primary health care continue to be implemented.
- Public health services are underfunded and need to be supported.
- Existing inequities in access to care need to be recognized.
- Carrying out a systematic, in-depth assessment remains high on the agenda to measure the effectiveness of current services.
- Hospital directors should demonstrate proper competence in health management.

## What resources are available?

### HUMAN RESOURCES FOR HEALTH

The war, migration and cultural preferences have influenced the availability and distribution of health professionals. Overspecialization is traditionally a key feature that affects the desired introduction of primary care. The existence of five medical schools contrasts with the considerable shortages of health funding. Salaries are in general low. In the Federation of Bosnia and Herzegovina, most physicians are specialists and the proportion of nurses with higher education is low.

*before 1 May 2004. EU10: countries that joined the EU on 1 May 2004.*



## HEALTH PROFESSIONALS (per 100 000)

Physicians	146	<i>EU25: 343, EU15: 356, EU10: 278</i>
Dentists	18	<i>EU25: 62, EU15: 66, EU10: 43</i>
Nurses	450	<i>EU25: 779, EU15: 818, EU10: 642</i>
Pharmacists	10	<i>EU25: 78, EU15: 81, EU10: 60</i>
GPs	21	



## HOSPITALS

Hospitals per 100 000	0.9	<i>EU25: 3.2, EU15: 3.3, EU10: 2.8</i>
Hospital beds per 100 000	314	<i>EU25: 611, EU15: 600, EU10: 661</i>
Annual inpatient admissions per 100	7.9	<i>EU25: 18.5, EU15: 18.4, EU10: 19.5</i>
Average length of stay (days)	10.3	<i>EU25: 9.5, EU15: 9.7, EU10: 8.7</i>

## PHARMACEUTICALS

During and immediately after the war, the supply of drugs was mostly channelled through humanitarian aid. At present, the country does not manufacture sufficient drugs to cover its needs. While the availability of medicines and medical devices in the country seems to be satisfactory, accessibility of drugs varies significantly among cantons and between entities. In many cases patients have to pay for medicines from their own pockets.

In 2005, a draft national drug policy was developed, through an EU-funded project and with the assistance of WHO, which has also assisted both entities to develop and update their essential drugs lists since 1995.

The current Law on Medicines and Medical Devices was adopted in 2001. In the Federation of Bosnia and Herzegovina, the Federal Ministry has established a Pharmaceutical Department; implementation of the regulations is mostly left at cantonal level. Republika Srpska has established a Drug Agency.

*EU25: current members of the EU. EU15: members of the EU*



WHO and the EU assisted national authorities in drafting the Law on Medicines and Medical Devices and the Law on the Federal Drug Agency.

### Points to remember *resources for health*

- With externally funded projects being planned and launched, new human resources are needed to carry out reforms, with a wider range of experts, not solely those working on the projects.
- Decisions about medical training need to reflect the country's population, the need for high-quality training and the financial constraints.
- Country-wide benefits can be achieved by strategic human resources planning.

Sources: 2, 14.

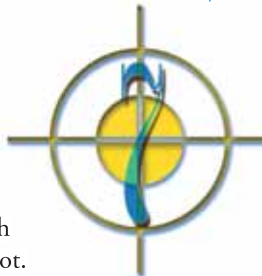
## Who pays for what?

By law, most citizens should be entitled to health care and have compulsory health insurance coverage. In reality, many are not. Health care financing is seriously complicated by the administrative structure of the country.

In the Federation of Bosnia and Herzegovina:

- the cantonal health insurance funds finance health services, and the Federal Health Insurance and Reinsurance Fund, founded in January 2002, addresses the problems of the highly decentralized system;
- the collection of funds is low and the movement of funds and patients is obstructed;
- the scope for redistribution of resources to those in need is greatly limited;
- the current average contribution rate of 18% of salary is split between the employee (13%) and the employer (5%).

*before 1 May 2004. EU10: countries that joined the EU on 1 May 2004.*





In Republika Srpska:

- the system is relatively centralized;
- around 70% of the population contributes to the Health Insurance Fund (with rates for different groups) in the compulsory social health insurance system;
- there is no option for voluntary insurance but supplementary (extended) insurance is allowed for some extra benefits.

Both health ministries are developing a basic benefit package to be provided through compulsory social health insurance. The fragmentation between the entities and within the Federation, however, is an obstacle to risk pooling. This is one of the reasons why the entitlements promised by publicly financed health care exceed the resources of the various funds.

In both entities, the main sources of health care financing are the health insurance funds, which derive 75–80% of their resources from wage taxes. Compliance rates are relatively low, however, leaving the public sector as the main source of funds for health insurance. This creates inequities, hampers competitiveness between health enterprises, encourages the proliferation of the informal sector and undermines the sustainability of the social insurance system.

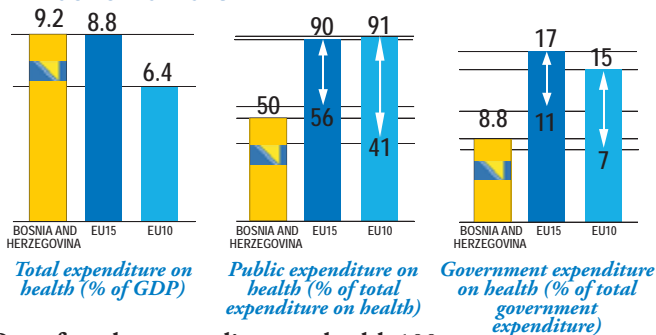
In both entities, health insurance fund revenues fall significantly short of covering all legislated entitlements, and as a result the funds have little control over budget-item spending or its impact on the quality and scope of services. The main shortcomings of the health financing system are:

- the low tax base and high tax burden, particularly in the Federation;
- ineffective inclusion of the self-employed and farmers as contributors to the funds;
- the large number of beneficiaries excluded from making personal contributions, and the widespread failure of intended contributors (extrabudgetary funds and government budget) to do so;

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- the increasingly large share of people who are not covered;
- low tax collection rates;
- highly skewed ability to generate revenues across cantons;
- small risk pools and inability to exploit economies of scale.

## THE ECONOMIC PICTURE



**Out-of-pocket expenditure on health 100**  
(% of total private health spending)

**Population below the national poverty line 20%**; an additional 30% live just above the poverty line and 16% on less than US\$ 2 per day

### Points to remember *health financing*

- The economic impact of the war on the whole country is estimated at US\$ 50–60 billion.
- The health sector is supported by the international donor community. While this is commendable, it may also have an unintended effect: diminishing the incentive to take up health reforms at the national level.
- The main challenge for the country as a whole is solidarity.
- A national, non-fragmented mandate for health care financing is still lacking. As a result, citizens of one entity are left without protection when they need health care in the other. Under-the-table payments are not officially reported, but both health ministries recognize this practice as a big challenge.
- Overall EU assistance to the country is €2.164 billion.

Sources: 2, 8, 15, 18, 19.

before 1 May 2004. EU10: countries that joined the EU on 1 May 2004.





## How has the country reformed its health care system?

The country is still seeking a way out of the political crisis, reconciliation and stabilization, and establishing a sustainable economy and a functioning state administration. The international community has supported national policy development. The EU carried out a functional review of the health sector administration in 2004.

There have been some country-wide efforts for health reform; in 1997:

- the two health ministries signed an agreement to implement primary health care reform, with a family medicine approach;
- both entities developed strategic plans for reform and reconstruction of the health sector.

With the assistance of WHO, a primary health care strategy is being developed. In 2005, a project was launched to scale up family medicine throughout the country.

In the post-war period, a number of new laws and policies have been adopted. Accrediting agencies were created in both entities to improve the quality of care. Developing new, modern health information systems has attracted a lot of external funding and support.

The reform processes have been largely supported by the international community. WB has completed its support for rehabilitation of war victims, development of essential hospital services and the Basic Health Project. Currently, it focuses on investment support for health insurance to be able to respond to post-war decentralization. UNICEF and UNFPA are also

*EU25: current members of the EU. EU15: members of the EU*

delivering health programmes. Bilateral donors, such as the governments of Canada, Italy, Japan and Switzerland are also present in health sector reform. For instance, CIDA is preparing a major investment in the health sector focusing on primary health care, youth and health and strengthening civil society's voice for public health. GAVI is providing a five-year supply of hepatitis B vaccine and support for injection safety and training activities. The Global Drug Facility is providing a three-year supply of tuberculosis drugs.

### Points to remember

*health reforms*

- Health system reforms continue. Both health ministries, together with the Ministry of Civil Affairs, support this effort, but they need to strengthen their own abilities to enforce the laws and carry out policies.
- Implementation of the laws and regulations is the key challenge for the country.
- Among the most important developments are the efforts to develop the family medicine system at the community level, throughout the country.
- Health information remains to be used as a tool for a culture of transparent and goal-oriented decision-making.

## What is one of the things learned by doing?

### HEALTHY MINDS, HEALTHY COMMUNITIES

Bosnia and Herzegovina is leading the mental health project of the South-eastern European Health Network, which was established in 2001 by the WHO Regional Office for Europe and the CoE as part of the Stability Pact initiative for south-

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eastern Europe. Funded by the governments of Belgium, Greece, Hungary, Italy, Slovenia and Sweden, the project aims to support countries in working in partnership to develop their mental health services.

Bosnia and Herzegovina has taken a ground-breaking approach, with the vision that no success is possible if the countries themselves do not have ownership and responsibility for the project. According to the project leaders, this is the only way to ensure that outcomes will be sustained even after the project's international assistance expires. To make this happen, Bosnia and Herzegovina has supported countries in exchanging information and working together to develop solutions. Ten technical workshops have been held in less than three years (2002–2005), gradually building up a unique regional alliance. The project evolved step by step:

- making a situation analysis and mapping the problems;
- drafting standards for mental health services at the community level;
- introducing international and EU standards;
- drafting and reviewing national mental health policies;
- introducing international mental health legislation and human rights;
- making a joint statement about the south-eastern European dimension of the problem with recommendations to governments;
- piloting mental health centres at the community level in each country;
- adopting a south-eastern European model of community mental health services;
- building the capacity for managing mental health services;
- developing the information systems in the area of mental health.



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## What has the Regional Office been doing in Bosnia and Herzegovina?

A WHO humanitarian assistance office was established in the country in 1992. During the war, WHO's main activities were assistance and relief. A liaison office started to function in 1993, and in 1998 it was integrated into the WHO Country Office, Bosnia and Herzegovina, in Sarajevo.

WHO's involvement in the country focuses on supporting the development of the health system. WHO seeks to provide a forum for international exchange and learning that will enhance the abilities of senior staff in the health ministries. Other areas of interest are developing a health financing policy and confronting the existing inequities of access to health care. Currently, WHO is implementing a major EU-funded project with a budget of €2 million. For 2004–2005, the priorities were:

- mental health;
- health policy with focus on management, primary health care and nursing;
- development of the pharmaceutical sector;
- accreditation and quality assurance;
- public health management and planning, with focus on communicable diseases;
- immunization and vaccine-preventable diseases;
- noncommunicable diseases;
- food safety;
- tuberculosis.



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For the period 2006–2007, some priorities for collaboration are:

- strengthening the capacity of the health ministries to assess the performance of health systems and to regulate the pharmaceutical sector;
- scaling up the prevention and control of communicable diseases;
- mental health and drug abuse.

## OTHER SOURCES OF INFORMATION ON BOSNIA AND HERZEGOVINA



Bosnia and Herzegovina Council of Ministers

(<http://www.vijeceministara.gov.ba/>)

Government of Federation of Bosnia and Herzegovina

(<http://www.fbihvlada.gov.ba/>)

Government of Republika Srpska (<http://www.vladars.net>)

World Bank's Mission in Bosnia and Herzegovina

(<http://www.worldbank.ba>)

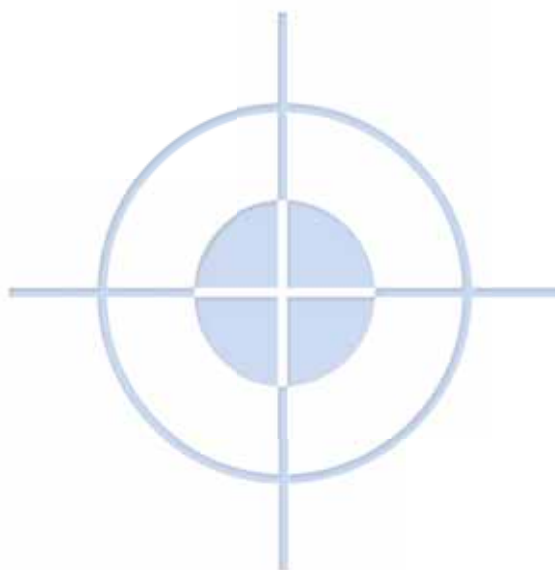
Office of the High Representative (<http://www.ohr.int>)

OSCE Mission to Bosnia and Herzegovina

(<http://http://www.oscebih.org/>)

European Union in Bosnia and Herzegovina (<http://www.eubih.org/>)





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# BULGARIA



# РЕПУБЛИКА БЪЛГАРИЯ

## AREA (km<sup>2</sup>)

110 910

A third the size of Portugal

*2.6% of the EU25 area*

*EU25: 3 970 000, EU15: 3 200 000,*

*EU10: 738 000*

## POPULATION

7 890 000

1 million less than Sweden's population

*1.7% of the EU25 population*

*EU25: 455 532 896, EU15: 380 962 720,*

*EU10: 74 570 192*

*EU25: current members of the EU. EU15: members of the EU*

<b>THE PEOPLE</b>	Bulgarian 88%, Turkish 8%, Roma 3%, Armenian and Russian 1%
<b>LANGUAGE</b>	Bulgarian
<b>FORM OF GOVERNMENT</b>	Parliamentary democracy, unicameral National Assembly
<b>RELIGIONS</b>	Eastern Orthodox 83%, Muslim 12%, Roman Catholic, Protestant, Jewish
<b>INDEPENDENCE</b>	1878
<b>GDP PER CAPITA</b>	€1 944 = <b>10% of the EU25 average</b> <b>EU25: €20 400, EU15: €22 750,</b> <b>EU10: €5 530</b> In purchasing power parities: €7 130 = <b>29% of the EU25 average (€24 480)</b>
<b>REGIONS</b>	28 provinces ( <i>oblasti</i> )
<b>CURRENCY</b>	lev: 1 lev = €0.51, 1€= 1.96 lev
<b>HUMAN DEVELOPMENT INDEX</b>	0.8
<b>UNEMPLOYMENT RATE</b>	16% <b>EU25: 9%, EU15: 8%, EU10: 14%</b>
<b>MEMBER OF</b>	CoE, IMF, NATO, OSCE, WB, WTO, UN 1 January 2007 is the date set by the 2002 Copenhagen European Council for Bulgaria to join the EU.

Sources: 1-7, 17, 20.

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# HEALTH

# ЗДРАВЕ



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Moldova



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Serbia and  
Montenegro



The former  
Yugoslav Republic  
of Macedonia



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# THE 10 HEALTH QUESTIONS

## What are the demographic essentials on the Bulgarians?

### POPULATION PROFILE

Gender ratio 1.06 females per male

Urban 69% *EU25: 77%, EU15: 79%, EU10: 65%*

Age structure: 0–14 years 14%

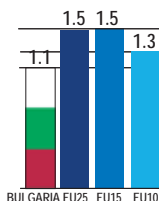
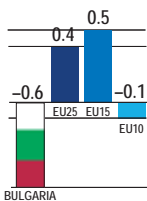
*EU25: 17%, EU15: 17%, EU10: 17%*

≥ 65 years 17%

*EU25: 16%, EU15: 17%, EU10: 14%*

Dependency ratio 44 *EU25: 49, EU15: 50, EU10: 47*

### POPULATION DYNAMICS

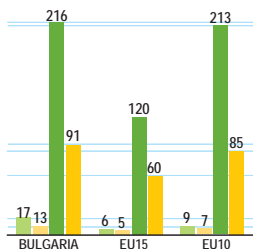


*Annual growth rate (%)*

*Fertility rate (children born per woman)*

*Birth rate (live births per 1000 population)*

### PROBABILITY OF DYING (per 1000 population)



- *Under 5 years old, males*
- *Under 5 years old, females*
- *15–60 years old, males*
- *15–60 years old, females*

*EU25: current members of the EU. EU15: members of the EU*

## LIFE EXPECTANCY AT BIRTH (years)

Total population:	72	<i>EU25: 78, EU15: 79, EU10: 74</i>
Males:	69	<i>EU25: 75, EU15: 76, EU10: 70</i>
Females:	76	<i>EU25: 81, EU15: 82, EU10: 78</i>

## HEALTHY LIFE EXPECTANCY (HALE)

	HALE (years)					Total life expectancy lost (%)	
	At birth			At age 60		Males	Females
	Total	Males	Females	Males	Females		
Bulgaria	65	63	67	12	15	9	11
EU15	72	68	72	15	18	9	11
EU10	66	61	67	12	15	12	14

### Points to remember *demographic trends*

Over the past decade, there have been:

- a negative population growth rate;
- a fertility rate below population replacement;
- an increasing number of people over 60 years old.

Sources: 2, 5, 8, 9.

## What do the Bulgarians suffer from?

### CARDIOVASCULAR DISEASES

- These are the leading cause of death, accounting for 65% of all deaths and 36% of the disease burden.
- Within this group, the two major killers are:
  - ischaemic heart disease, which causes 12.3% of the disease burden and 17% of all deaths: 184 deaths per 100 000 *EU25: 104, EU15: 94, EU10: 168*

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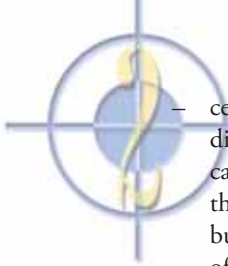
The former Yugoslav Republic of Macedonia



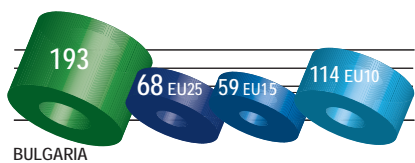
Turkey



Ukraine



— cerebrovascular disease, which causes 11% of the disease burden and 18% of all deaths: 193 deaths per 100 000



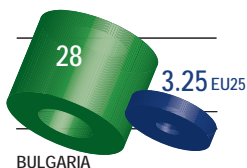
- High blood pressure is the cause of 40% of the total disease burden, the highest in the WHO European Region. In addition, high cholesterol causes 14.3% of the total disease burden.

### CANCER/MALIGNANT NEOPLASMS

- Cancer is responsible for 11% of the disease burden and 14% of all deaths: 153 deaths per 100 000 population. *EU25: 192, EU15: 185, EU10: 227*

- There are 376 new cases of cancer per 100 000 people per year. *EU25: 462, EU15: 468, EU10: 427*

- There are 28 new cases of cervical cancer per 100 000 each year, almost 10 times the EU25 rate.



- There were 88 new cases of breast cancer per 100 000 in 2003.

### DIABETES

- Diabetes prevalence was 1.7% in 2000.

### MENTAL HEALTH

- Neuropsychiatric disorders are responsible for 18% of the disease burden and 1% of all deaths. *EU25: 4%*
- There are 12 deaths from suicide or self-inflicted injuries per 100 000. *EU25: 12, EU15: 10, EU10: 18*
- Almost 3% live with a mental health diagnosis. *EU15: 2.5%, EU10: 3%*

*EU25: current members of the EU. EU15: members of the EU*

## UNINTENTIONAL AND INTENTIONAL INJURIES

- Injuries cause 46 deaths per 100 000. **EU25: 45, EU15: 39, EU10: 73**
- Road traffic accidents injure 89 people per 100 000.



## RESPIRATORY DISEASES

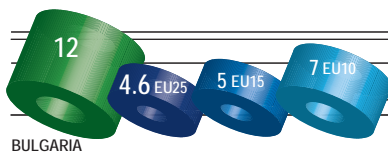
- Respiratory diseases cause 3% of all deaths (36 per 100 000). **EU25: 47, EU15: 48, EU10: 40**

## INFECTIOUS AND PARASITIC DISEASES

- Only 7 people per 100 000 die of infectious diseases.
- There are 39 new cases of tuberculosis per 100 000. **EU25: 13, EU15: 11, EU10: 26**
- There are 0.8 new cases of HIV infection per 100 000.
- The rates of sexually transmitted infections (per 100 000 per year) are:
  - 18 new cases of syphilis **EU25: 3, EU10: 5**
  - 5 new cases of gonococcal infection **EU25: 9, EU10: 6**

## CHILD AND ADOLESCENT HEALTH

- The infant mortality rate is 12 deaths per 1000 live births, although the WHO and UNICEF estimate is higher.
- Immunization coverage is 95%. **EU25: 95%, EU15: 95%, EU10: 96%**
- Diarrhoeal diseases kill 5 children aged under 5 years per 100 000. **EU25: 0.4, EU15: 0.4, EU10: 0.4**



before 1 May 2004. EU10: countries that joined the EU on 1 May 2004.



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## TOP 10 CAUSES OF DEATH IN BULGARIA

Cause	Total deaths (%)
1. Ischaemic heart disease	25
2. Cerebrovascular disease	20
3. Hypertensive heart disease	4
4. Tracheal, bronchial, lung cancer	3
5. Colon and rectal cancer	2
6. Diabetes	2
7. Stomach cancer	2
8. Lower respiratory infections	2
9. Cirrhosis of the liver	1
10. Self-inflicted injury	1

*Note. These statistics are based on WHO estimates, not official mortality statistics.*

## DISEASE BURDEN IN BULGARIA AND THE EU

Cause	Share of disease burden (%)		
	Bulgaria	EU15	EU10
Cardiovascular diseases	36	17	22
Neuropsychiatric disorders	19	27	21
Cancer/Malignant neoplasms	11	17	16
Unintentional injuries	6	6	9
Non-infectious respiratory diseases	2	7	3
Infectious and parasitic diseases	1	2	2
Respiratory infections	1	1	1
Perinatal conditions	1	1	1
Intentional injuries	2	2	3
Diabetes	3	2	2
Sense organ disorders	5	5	5
Total communicable diseases	5	5	4
Total noncommunicable diseases	88	87	83
Total injuries	8	8	12

*EU25: current members of the EU. EU15: members of the EU*



## Points to remember

health status

- The number of people suffering from mental disorders is on the rise.
- Cardiovascular diseases, respiratory diseases, neoplasms, injuries and poisoning are the country's main concerns.
- Maternal and child health indicators give reason for concern. The maternal mortality rate is decreasing but remains a challenge.
- The high burden of noncommunicable diseases is associated with unhealthy lifestyles and a worsening environment.
- The health status of rural populations is deteriorating overall.

Sources: 5, 10, 17.

## Where do the risks lie?

### SMOKING

- Adult smoking prevalence is 33%: 52% for males and 30% for females. **EU25: 29%, EU15: 28% (males 32%, females 23%), EU10: 31%**
- 13.5% of the disease burden is due to smoking.

### ALCOHOL CONSUMPTION

- Total reported alcohol consumption is 5 litres per person per year, nearly half the EU25 level.
- The rate of alcohol psychosis is 0.3 per 100 000 per year.
- A school-based survey among 15-year-olds showed that 26% of the boys and 11% of the girls drank alcohol weekly.
- Alcohol consumption causes 7% of the disease burden.



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## ILLEGAL DRUG USE

- Cannabis is the most common illegal drug, with 1.2% of young people having used it during the last year. For adults, the annual prevalence of abuse is 4% for cannabis and 0.5% for opiates.
- 0.3% of the disease burden is due to illicit drug use.

## OBESITY

- Obesity causes 14% of the total disease burden (16% for women and 12% for men), and physical inactivity, 7%.
- 19% of males and 17% of female are obese (BMI  $\geq 30$ ). The obese percentage of the population is stable for men from age 20, but increases for women (10% for the group aged 25–34 years, but 44% for those aged 55–64).

## FOODBORNE INFECTIONS

- The reported rate of *Salmonella* infection is 15 per 100 000. *EU25: 44, EU15: 37, EU10: 99*

## OCCUPATIONAL HEALTH

- There are 1.5 deaths due to occupational injuries per 100 000 population. *EU15: 1.4, EU10: 1.6*

## AIR QUALITY

- SO<sub>2</sub> emissions were 105 kg per capita in 2000.



Sources: 2, 10–13, 21, 22.



EU25: current members of the EU. EU15: members of the EU



# Who's who in the Bulgarian public health sector ?

## PUBLIC ADMINISTRATION

Ministry of Health

## INSTITUTIONS UNDER THE HEALTH MINISTRY

Executive Agency for Pharmaceuticals

Executive Agency for Transplantations

National centres for: communicable and parasitic diseases, public health protection, health informatics, radiology, narcotics, haemotransfusiology

28 emergency health centres

Fund for the treatment of children

## COUNCIL OF MINISTERS

National Council on Drug Use

National Committee on HIV/AIDS and Sexually Transmitted Infections

## PARLIAMENT

Standing Committee on Health

## INSURANCE STRUCTURE

National Health Insurance Fund, with 28 regional health insurance funds

11 private voluntary insurance funds

## PROFESSIONAL ASSOCIATIONS

Bulgarian Medical Association

Union of Dentists

Health Professionals Association

Bulgarian Health Managers Association

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## ACADEMIC INSTITUTIONS

Medical universities in Sofia, Varna and Plovdiv  
Medical school in Pleven and medical faculty in Stara Zagora

## REGIONAL ADMINISTRATION

28 regional health centres  
28 regional inspectorates for public health protection



# How are services provided?



Diagnostic and consultation centres, registered as trade companies, provide primary and outpatient specialized care through single or group practices. The main innovation was the change of the form of ownership and legal status. All types of institutions, whether state-owned, municipal or private, have equal status and rights. The so-called national framework contract is a package of services guaranteed by statutory insurance and negotiated by all the providers (through their professional organizations) and the National Health Insurance Fund. It also specifies the clinical protocols and procedures to be applied by providers and sets the baseline payment for family doctors.

Different ministries fund and run some parallel networks for health care services.

## PRIMARY CARE

GPs (family doctors) provide a comprehensive package of services: diagnostic-therapeutic, preventive, rehabilitative and medicosocial. They are also the gatekeepers to the higher levels of care.

*EU25: current members of the EU. EU15: members of the EU*

## SECONDARY AND TERTIARY CARE

There is an extensive hospital network, with sometimes excessive use of hospital beds (253 multipurpose or specialized hospitals at the national, regional and municipal levels). Thus, the government programme for bed reduction and more efficient use of inpatient care was made a cornerstone of health reform. In only three years, a 28% decline in bed numbers was achieved. A new system of accreditation was introduced and the number of substandard hospitals decreased. Hospitals were given financial autonomy in 2001, and can function as commercial enterprises; however, they are contracted and financed by the National Health Insurance Fund and the Ministry of Health.

## PUBLIC/PRIVATE MIX

Many single and group practices function as private entrepreneurs, signing contracts with the Health Insurance Fund. Private practice encompasses dental offices, physicians' consultative offices and surgeries, pharmacies, outpatient clinics and 18 inpatient establishments. Private hospitals comprise 6% of hospitals.

### Points to remember *service provision*

- Most outpatient care is privately provided but funded with public money.
- There is free choice of family physicians and inpatient facilities.
- Some services have become less affordable. This has resulted in fewer visits to ambulatory care, fewer preventive check-ups and declining rates of hospital utilization.
- Coordination between primary, emergency and inpatient care could improve further.
- Hospital bed reduction has been successful, but the results of the hospitals' financial independence are yet to be seen.
- The overall network of health care facilities has been rationalized.

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# What resources are available?

## HUMAN RESOURCES FOR HEALTH

Doctors are trained in 5 institutions; paramedical specialists receive training in 14 medical colleges. Over the last decade, the number of physicians has remained stable while the number of nurses has decreased. There have been major efforts to restructure medical education, with a new focus on general medicine. The new curricula include general medicine, health care management and informatics in medicine. A general policy trend is to work for a gradual reduction of health personnel to avoid oversupply, especially of doctors. The payment of health care staff has increased to the average public sector salary levels. Significant differences can be observed between the level of payment of GPs and hospital specialists.

### HEALTH PROFESSIONALS (per 100 000)

Physicians	360	<i>EU25: 343, EU15: 356, EU10: 278</i>
Dentists	83	<i>EU25: 62, EU15: 66, EU10: 43</i>
Nurses	379	



Pharmacists	12	<i>EU25: 78, EU15: 81, EU10: 60</i>
GPs	68	<i>EU25: 99, EU15: 102, EU10: 64</i>

### HOSPITALS

There has been an oversupply of hospital beds; bed occupancy is relatively low and the length of stay is high. To address this, a process of hospital accreditation was started in 1997. About one third of the municipal and regional hospitals were closed. A lack of managerial and administrative skills has led to the

*EU25: current members of the EU. EU15: members of the EU*

accumulation of large debts by inpatient facilities. During the 1990s, the constraints on the health budgets meant low allocations for capital investment; however, in 1999–2000, the government increased the funds available for technology renewal and adopted a general investment programme.

Hospitals per 100 000 3.8

*EU25: 3.2, EU15: 3.3, EU10: 2.8*

Hospital beds per 100 000 629

*EU25: 611, EU15: 600, EU10: 661*

Annual inpatient admissions per 100 17.5

*EU25: 18.5, EU15: 18.4, EU10: 19.5*

Average length of stay (days) 8.8

*EU25: 9.5, EU15: 9.7, EU10: 8.7*

## PHARMACEUTICALS

The prices of drugs are constantly rising and the share of pharmaceuticals in overall government health spending has increased. The framework contract between the Ministry of Health and the Insurance Fund sets a positive list of medicines that are covered fully or partially. During the accession period, the drug regulatory system developed quickly, with the support of the EU, and national legislation was fully harmonized with the EU's. Twenty-eight regional state-owned companies (some partially privatized) produce, supply and distribute pharmaceuticals.

### Points to remember *resources for health*

- The training of GPs has improved.
- Refurbishing and equipping facilities remain a major challenge.
- A new national policy on medicines has been developed; it needs to be adopted, followed by a comprehensive implementation plan.
- Human resources for health need to adapt to the new economic and professional challenges.

Sources: 2, 14.

before 1 May 2004. EU10: countries that joined the EU on 1 May 2004.



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## Who pays for what?

Bulgaria has compulsory health insurance.

Contributions are made either by or on behalf of different population groups to the National Health Insurance Fund. For the employed, the contribution is 6% of income, and the shares of the employer and employee are expected to be equal by 2007. The self-employed are supposed to insure themselves. Socially vulnerable groups (the unemployed, poor, pensioners, students, soldiers, etc.) are covered by transfers to the Fund from public budgets. Overall, public sources of financing (general tax revenues, payroll tax revenues and compulsory contributions) comprise about 45% of all health spending.

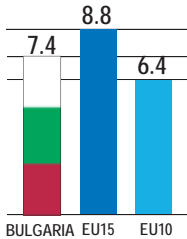
The National Health Insurance Fund accumulates funds from these sources and contracts providers. It defines the list of services, with the agreement of providers. This basic package covers primary, outpatient and inpatient care. The Fund pays for all outpatient care and about 20% of inpatient costs at the contracted hospitals, according to defined diagnoses and clinical pathways. It also exercises medical and financial control over providers. For services not included in the package, users pay providers either directly or through voluntary private insurance provided by private health insurance funds. The Health Insurance Law determines the size of co-payments. Non-contracted hospitals are paid by the respective municipalities or, as in the case of regional hospitals, directly by the Ministry of Health.

Although health insurance is meant to be mandatory, certain underprivileged ethnic minority groups, the unemployed and citizens permanently living abroad do not participate equally in the system.

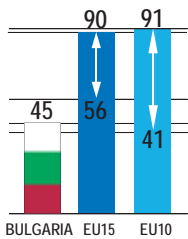
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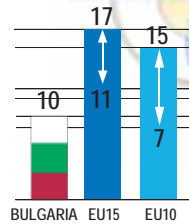
## THE ECONOMIC PICTURE



*Total expenditure on health (% of GDP)*



*Public expenditure on health (% of total expenditure on health)*



*General government expenditure on health (% of total government expenditure)*

**Out-of-pocket expenditure on health 98.9**  
(% of total private health spending)

**Population below the national poverty line 13%**  
(according to WB, 2001); 16% live on less than US\$ 2 per day.

### Points to remember *health financing*

- The drop in the share of public health care expenditure in GDP is due to economic difficulties in the 1990s and the relatively low priority given to health.
- The population needs to receive clear information about the cost of health services. In general, the package of services covered by public health insurance needs to be communicated clearly.
- Although the constitution guarantees the whole population's right to health care, the current contribution rates are estimated to be insufficient to cover the necessary expenditure.
- Co-payments are increasing and informal payments are common. Making the health system more transparent continues to be a challenge.

*Sources: 2, 8, 15.*

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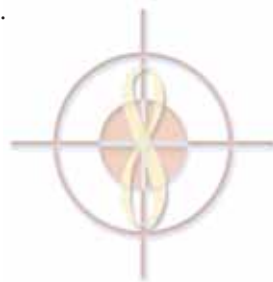


# How have the Bulgarians reformed their health care system?


Structural reforms aim at rationalizing the health system and increasing the resources for health.

- In 1991, private medical practice was legalized.
- In 1995, the health administration was decentralized to the regional level.
- In 1997, health facilities were allowed to become independent legal and financial entities.
- In 1998–1999, three new laws (on health insurance, professional organization of doctors and dentists, and health care establishments) were adopted in an overall reform of outpatient care.
- In 2001, the National Health Strategy 2001–2010 was launched, with a concrete action plan, prioritizing structural and institutional changes in the health system, consolidation of public health functions, establishment of new entrepreneurial relations within the system and incentives for high quality and promoting multisectoral cooperation.
- In 2002, the Council of Ministers adopted a national strategy for restructuring hospital care.
- In 2004, a new public health law was adopted.

WB provided two loans to support the reforms.



*EU25: current members of the EU. EU15: members of the EU*



## Points to remember

### health reforms

- The major challenges for continued reforms are securing financing, restructuring services and reducing the growing share of out-of-pocket payments.
- The three main areas of reform have been health insurance, reorganizing primary care and optimizing the network of inpatient and outpatient facilities.
- There is serious political commitment to completing the reforms; the challenges are: limited funding and the need for better managerial experience.



## What is one of the things the Bulgarians have learned by doing?

### MAPPING HEALTH

Bulgaria has an original tool to work for an optimal distribution of inpatient and outpatient facilities and health personnel throughout the country. This is the National Health Map, developed by the Ministry of Health and endorsed by the Council of Ministers. The national and regional health maps are instruments of structural reform, for regulating investments and improving planning at the national and regional levels. The Map is instrumental in adjusting the numbers of practices in urban and rural areas according to a range of demographic, social and health indicators. WHO and WB have been key partners in this innovative approach. The core components of WB projects are GP training and information systems development. The indicators of the National Health Map's success include the filling of about 40% of the practice vacancies in undesirable areas.

*before 1 May 2004. EU10: countries that joined the EU on 1 May 2004.*



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Turkey



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## What has the Regional Office been doing in Bulgaria?

The WHO Country Office, Bulgaria, in Sofia has functioned since 1991. The Regional Office has supported the country in developing its health policy and systems in concert with overall health reform. In 2004–2005, cooperation focused on:

- development of community mental health centres;
- appropriate use and reimbursement for medicines;
- review of existing food control legislation and training;
- adoption and implementation of the Food and Nutrition Action Plan;
- blood safety and promotion of voluntary non-remunerated blood donation;
- strengthening administrative capacity for tobacco control, updating legislation in the light of the WHO Framework Convention for Tobacco Control;
- better surveillance, response and reporting of infectious diseases, using geographic information systems;
- recommendations for hospital restructuring;
- updating of reproductive health services for young people.

In 2006–2007, the Regional Office will support the country in:

- strengthening the delivery of health services;
- scaling up health promotion and noncommunicable disease prevention;
- improving the safety of blood services;
- building capacity in pharmaceuticals;
- improving preparedness for health emergencies;
- fostering environmental safety;
- scaling up communicable disease prevention and control.

*EU25: current members of the EU. EU15: members of the EU*

## OTHER SOURCES OF INFORMATION ON BULGARIA

Ministry of Health (<http://www.mh.government.bg>)

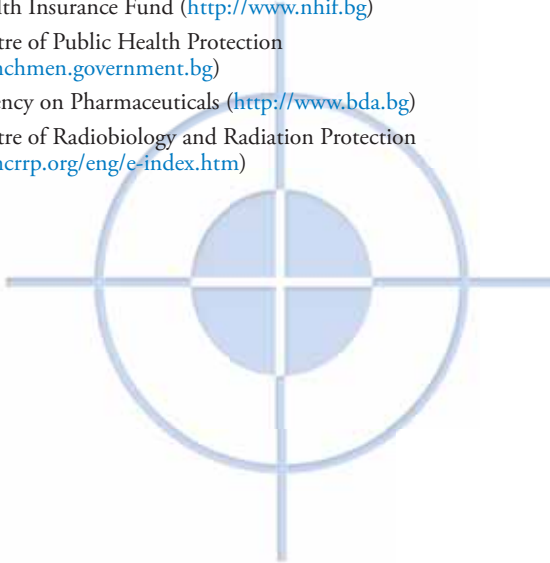
National Centre on Health Information  
(<http://www.nchi.government.bg>)

National Health Insurance Fund (<http://www.nhif.bg>)

National Centre of Public Health Protection  
(<http://www.nchmen.government.bg>)

Executive Agency on Pharmaceuticals (<http://www.bda.bg>)

National Centre of Radiobiology and Radiation Protection  
(<http://www.ncrrp.org/eng/e-index.htm>)



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# CROATIA



# HRVATSKA

## AREA (km<sup>2</sup>)

56 538

About twice the size of Belgium

**1.4% of the EU25 area**

**EU25: 3 970 000, EU15: 3 200 000,**

**EU10: 738 000**

## POPULATION

4 440 000

Half of Belgium's population

**1% of the EU25 population**

**EU25: 455 532 896, EU15: 380 962 720,**

**EU10: 74 570 192**

*EU25: current members of the EU. EU15: members of the EU*

*Note: The country is part of the EU's Stabilization and Association Process, started in 1999 – an individually tailored programme designed to pave the way for gradual integration into EU structures. This Process recognizes the countries of Albania, Bosnia and Herzegovina, Croatia, Serbia and Montenegro and The former Yugoslav Republic of Macedonia as potential candidates for EU accession, a prerequisite for which is improved regional cooperation.*

<b>THE PEOPLE</b>	Croatian 89%, Serbian 4.5%, Slovenian, Roma, Bosnian
<b>LANGUAGES</b>	Croatian, Serbian, Italian, Slovene
<b>FORM OF GOVERNMENT</b>	Parliamentary democracy
<b>RELIGIONS</b>	Roman Catholic 88%, Eastern Orthodox 4%
<b>INDEPENDENCE</b>	1991
<b>GDP PER CAPITA</b>	€5 025 = <b>24,6% of the EU25 average</b> <b>EU25: €20 400, EU15: €22 750, EU10: €5 530</b> In purchasing power parities: €10 600 = <b>42% of the EU25 average (€24 480)</b>
<b>REGIONS</b>	20 counties ( <i>zupanije</i> ) and the capital (Zagreb)
<b>CURRENCY</b>	kuna: 1 kuna = €0.136, €1 = 7.37 kuna
<b>HUMAN DEVELOPMENT INDEX</b>	0.83
<b>UNEMPLOYMENT RATE</b>	17% <b>EU25: 9%, EU15: 8%, EU10: 14%</b>
<b>MEMBER OF</b>	CoE, IMF, OSCE, WB, WTO, UN

Sources: 1–7, 16, 17, 23, 24.

before 1 May 2004. EU10: countries that joined the EU on 1 May 2004.

# HEALTH ZDRAVLJE



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# THE 10 HEALTH QUESTIONS

## What are the demographic essentials on the Croatians?

### POPULATION PROFILE

Gender ratio 1.08 females per male

Urban 59% *EU25: 77%, EU15: 79%, EU10: 65%*

Age structure: 0–14 years 16%

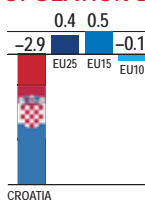
*EU25: 17%, EU15: 17%, EU10: 17%*

≥ 65 years 16%

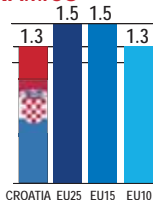
*EU25: 16%, EU15: 17%, EU10: 14%*

Dependency ratio 50 *EU25: 49, EU15: 50, EU10: 47*

### POPULATION DYNAMICS



*Annual growth rate (%)*

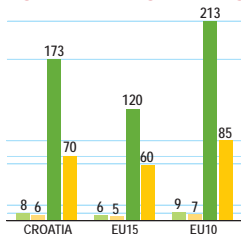


*Fertility rate (children born per woman)*



*Birth rate (live births per 1000 population)*

### PROBABILITY OF DYING (per 1000 population)



- *Under 5 years old, males*
- *Under 5 years old, females*
- *15 – 60 years old, males*
- *15 – 60 years old, females*

*EU25: current members of the EU. EU15: members of the EU*



## LIFE EXPECTANCY AT BIRTH (years)

Total population:	75	<i>EU25: 78, EU15: 79, EU10: 74</i>
Males:	71	<i>EU25: 75, EU15: 76, EU10: 70</i>
Females:	78	<i>EU25: 81, EU15: 82, EU10: 78</i>

## HEALTHY LIFE EXPECTANCY (HALE)

	HALE (years)					Total life expectancy lost (%)	
	At birth			At age 60		Males	Females
	Total	Males	Females	Males	Females		
Croatia	67	64	69	13	16	10	12
EU15	72	68	72	15	18	9	11
EU10	66	61	67	12	15	12	14

### Points to remember *demographic trends*

Over the past decade, there have been:

- a rapid decline in population growth;
- ageing of the population
- an increase in life expectancy and a decrease in infant mortality.

Sources: 5, 8, 9, 24.

## What do the Croatians suffer from?

### CARDIOVASCULAR DISEASES

- They are the leading cause of death: 53% of total deaths.
- Within this group, the two major killers are:
  - ischaemic heart disease: cause of 10% of the disease burden and 20% of all deaths: 156 deaths per 100 000  
*EU25: 104, EU15: 94, EU10: 168*

before 1 May 2004. EU10: countries that joined the EU on 1 May 2004.



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The former Yugoslav Republic of Macedonia



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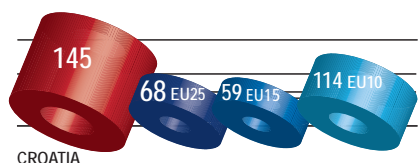


Ukraine



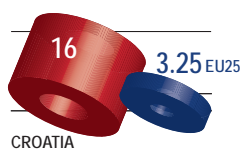


— cerebrovascular disease: cause of 11% of the disease burden and 16% of all deaths: 145 deaths per 100 000



### CANCER/MALIGNANT NEOPLASMS

- Cancer is the second leading cause of death: responsible for 23% of all deaths.
- The number of new cases of cancer is 442 per 100 000 population per year. **EU25: 462, EU15: 468, EU10: 427**
- Cancer prevalence is 3% in the general population.
- There are 16 new cases of cervical cancer per 100 000 each year.
- There were 89 new cases of breast cancer and 65 new cases of lung cancer per 100 000 in 2002.

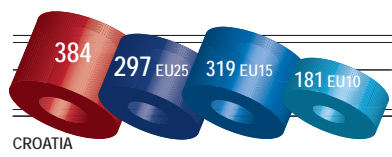


### MENTAL HEALTH

- Neuropsychiatric disorders account for 2% of all deaths. **EU25: 4%**
- There are 20 deaths from suicide or self-inflicted injuries per 100 000. **EU25: 12, EU15: 10**

### UNINTENTIONAL INJURIES

- Injuries are responsible for 58 deaths per 100 000. **EU25: 45, EU15: 39, EU10: 73**
- Road traffic accidents injure 384 people per 100 000.



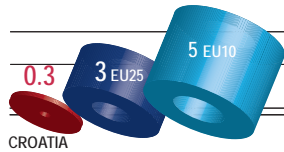
EU25: current members of the EU. EU15: members of the EU

## RESPIRATORY DISEASES

- Respiratory diseases cause 4.8% of all deaths: 46 per 100 000 population. *EU25: 47, EU15: 48, EU10: 40*

## INFECTIOUS AND PARASITIC DISEASES

- Infectious diseases kill only 9 people per 100 000, accounting for 1% of all deaths.
- There are 31 new cases of tuberculosis per 100 000. *EU25: 13, EU15: 11, EU10: 26*
- The rate of new cases of HIV infection is 1 per 100 000.
- The rates of sexually transmitted infections (per 100 000 per year) are low compared to EU figures:
  - 0.3 new cases of syphilis
  - 0.6 new cases of gonococcal infection *EU25: 9, EU10: 6*



## CHILD AND ADOLESCENT HEALTH

- The infant mortality rate is 6 deaths per 1000 live births. *EU25: 4.6, EU15: 5, EU10: 7*
- Immunization coverage is 94%. *EU25: 95%, EU15: 95%, EU10: 96%*
- Diarrhoeal diseases kill 0.5 children aged under 5 years per 100 000.
- A school-based survey revealed that 11% of schoolchildren are overweight, and 5% obese.



before 1 May 2004. EU10: countries that joined the EU on 1 May 2004.



Ukraine

## TOP 10 CAUSES OF DEATH IN CROATIA

Cause	Total deaths (%)
1. Ischaemic heart disease	20
2. Cerebrovascular disease	16
3. Heart failure	7
4. Tracheal, bronchial, lung cancer	5
5. Colon and rectal cancer	3
6. Chronic liver diseases, fibrosis and cirrhosis	2
7. Bronchitis, emphysema, asthma	2
8. Diabetes	2
9. Atherosclerosis	2
10. Stomach cancer	2

## DISEASE BURDEN IN CROATIA AND THE EU

Cause	Share of disease burden (%)		
	Croatia	EU15	EU10
Cardiovascular diseases	27	17	22
Neuropsychiatric disorders	23	27	21
Cancer/Malignant neoplasms	16	17	16
Unintentional injuries	6	6	9
Non-infectious respiratory diseases	4	7	3
Infectious and parasitic diseases	2	2	2
Respiratory infections	1	1	1
Perinatal conditions	1	1	1
Intentional injuries	3	2	3
Diabetes	2	2	2
Sense organ disorders	4	5	5
<b>Total communicable diseases</b>	<b>4</b>	<b>5</b>	<b>4</b>
<b>Total noncommunicable diseases</b>	<b>87</b>	<b>87</b>	<b>83</b>
<b>Total injuries</b>	<b>9</b>	<b>8</b>	<b>12</b>

EU25: current members of the EU. EU15: members of the EU

## Points to remember

health status

- Over the past decade, the infant mortality rate has decreased significantly.
- Maternal mortality has been brought down to sporadic cases.

Sources: 2, 24, 25.

## Where do the risks lie?

### SMOKING

- In 2002, adult smoking prevalence was 30%: 34% for males and 27% for females. **EU25: 29%, EU15 28% (males 32%, females 23%), EU10: 31%**
- The prevalence of daily smoking is 1% for girls and 3% for boys aged 13, but 17% for both sexes at age 15.

### ALCOHOL CONSUMPTION

- Total reported alcohol consumption is 11 litres per person per year.
- A school-based survey showed that, among 15-year-olds, 25% of girls and 36% of boys drink alcohol weekly.
- There are 22 new cases of alcohol psychosis per 100 000 per year.



### ILLEGAL DRUG USE

- The most commonly used illegal drug is cannabis; 16% of older teenage boys and 12% of girls have used it at least

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once. Among adults, the annual prevalence of abuse is 4% for cannabis and 0.7% for opiates.

- There were 1840 first admissions to drug treatment centres in 2002; the number has doubled since 1995.

## OBESITY

- 17% of men and 15% of women are obese.

## FOODBORNE INFECTIONS

- There are 109 new cases of *Salmonella* infection reported per 100 000. **EU25: 44, EU15: 37, EU10: 99**

## OCCUPATIONAL HEALTH

- There are 4 new cases of occupation-related disease per 100 000. **EU25: 42, EU15: 42, EU10: 19**
- There is 1 death due to occupational injuries per 100 000. **EU15 1.4, EU10: 1.6**

## AIR QUALITY

- SO<sub>2</sub> emissions were 16 kg per capita in 2000.



Sources: 2, 10-13, 21, 25.



**PUBLIC ADMINISTRATION**

Ministry of Health and Social Welfare

# Who's who in the Croatian public health sector ?

EU25: current members of the EU. EU15: members of the EU



## INSTITUTIONS UNDER THE HEALTH MINISTRY

- Croatian National Institute of Public Health
- Croatian Radiation Protection Institute
- Croatian Institute of Transfusion Medicine
- Office of Drug Control and Substance Abuse
- Agency for Medicinal Products and Medical Devices

## INSURANCE STRUCTURE

- Croatian Institute for Health Insurance

## PROFESSIONAL ASSOCIATIONS

- Croatian Physicians' Chamber
- Croatian Medical Association
- Croatian Medical Biochemists' Chamber
- Croatian Chamber of Pharmacists
- Croatian Dental Chamber
- Croatian Nurses Association

## ACADEMIC INSTITUTIONS

- Croatian Academy of Medical Sciences
- Medical faculties in Osijek, Rijeka, Split, Zagreb
- Dental faculty, Zagreb
- Health polytechnic, Zagreb
- Andrija Štampar School of Public Health
- Institute of Immunology, Zagreb
- Institute for Medical Research and Occupational Health

## REGIONAL ADMINISTRATION

- 20 county institutes of public health, coordinated by the Croatian National Institute of Public Health



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# How are services provided?

## PRIMARY CARE

The core of the primary health services is general (family) medicine and paediatrics, delivered through health centres (with GPs, health visitors, diagnosticians), private practice units (with GPs, paediatricians, gynaecologists), emergency care centres, home care centres (with visiting nurses) and pharmacies. The numbers of teams or specialists have not changed significantly in the last decade. Doctors from some other services also deliver primary health care.

## SECONDARY AND TERTIARY CARE

Most of the hospitals are publicly owned; there are very few private hospitals. All confront the lack of financial resources and reliable mechanisms for quality assurance. Resources, particularly high-technology equipment and hospital beds, are concentrated in large cities. Hospitals provide about 70–80% of secondary care. In 2003, almost 55% of all physicians in health institutions worked in hospitals. As a result, the number of beds in all hospital-type facilities has steadily declined since 1990. In Croatia, specialist care is organized as part of the hospital system.

## PUBLIC/PRIVATE MIX

Facilities providing health care are owned by the state or county; few are privately owned. In 2003, out of 73 hospitals and health resorts, only 3 special hospitals and 4 health resorts were privately owned. Teaching hospitals, clinical health centres and state institutes are state owned. The decentralization of governance brought most institutions (health centres, general and special hospitals, polyclinics, emergency medical services, pharmacies, home care and county institutes of public health)

*EU25: current members of the EU. EU15: members of the EU*



under county ownership. In 2003, 6598 private practice units were registered; 2827 were private physicians' practices. There were also 2400 private dentists' offices. More than half of the 1061 pharmacies are privately owned.

### Points to remember *service provision*

- Long waiting lists for hospital admission are still a problem.
- Long-term patients are being shifted out of hospitals and outpatient facilities strengthened.
- Primary and specialized outpatient services are often delivered by private providers.
- Control and enhancement the quality of health care remain high on the agenda for action.
- Availability of care varies significantly according to place of residence and economic status.
- It is planned that all family medicine personnel will undergo specialist training by 2014, to bring their work in line with medical practices in the EU.

## What resources are available?

### HEALTH PROFESSIONALS (per 100 000)

Physicians	244	EU25: 343, EU15: 356, EU10: 278
Dentists	69	EU25: 62, EU15: 66, EU10: 43
Nurses	504	EU25: 779, EU15: 818, EU10: 642
Pharmacists	53	EU25: 78, EU15: 81, EU10: 60
GPs	68	EU25: 99, EU15: 102, EU10: 64

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## HOSPITALS

Hospitals per 100 000

*EU25: 3.2, EU15: 3.3, EU10: 2.8*

Hospital beds per 100 000

*EU25: 611, EU15: 600, EU10: 661*

Annual inpatient admissions per 100

*EU25: 18.5, EU15: 18.4, EU10: 19.5*

Average length of stay (days)

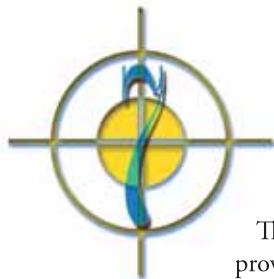
*EU25: 9.5, EU15: 9.7, EU10: 8.7*



### Points to remember *resources for health*

- New ways of categorizing and accrediting hospitals are being established. All hospital services are being reorganized.
- Specialized medicine is highly concentrated in the big cities, especially the capital.

*Sources: 2, 14, 24.*



## Who pays for what?

The new Health Insurance Act of 2001 provides for three different insurance schemes.

The basic one is compulsory for the whole population, with no opt-outs, and includes a basic basket of services, covered by the Croatian Institute for Health Insurance. Complementary insurance is voluntary and offered by the Institute and private companies. Contributions to the Institute are made by or on behalf of the population. Universal coverage for Croatian citizens has been achieved through this mechanism. Apart from the compulsory contributions to the Institute, other sources of

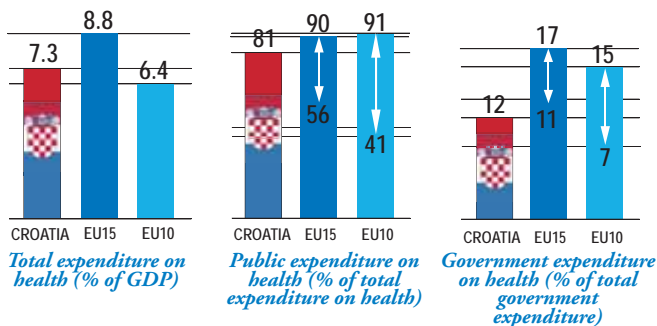
*EU25: current members of the EU. EU15: members of the EU*

finance are the central government budget, the county budgets, voluntary health insurance and co-payments.

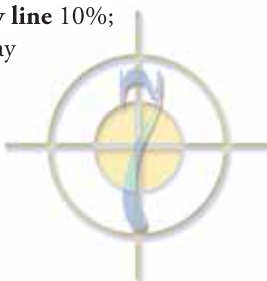
Parliament approved additional (voluntary) health insurance in 2002, expanding coverage to all types of co-payment for drugs, diagnostic services, hospital treatment, appliances and other risks not covered by the basic insurance. There are also direct private payments to providers with no contract with the public or the private insurance institutions.

The structure of health expenditures has been changing. The share of primary care is decreasing while the share of specialist care and drugs is increasing. Almost 55% of the total health expenditure is spent within the hospital system.

## THE ECONOMIC PICTURE



**Population below the national poverty line 10%;**  
under 2% live on less than US\$ 2 per day



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## Points to remember

*health financing*

- The public-sector deficit is large and deficits in the health sector are among the main contributors. This deficit needs to be reduced as part of the EU accession process, which means that there will be strong pressure to reduce government spending on health.
- Public and private insurers offer voluntary complementary insurance.
- Health care costs have risen rapidly. To deal with this challenge, the country needs more accountability of public-sector providers and greater efficiency in the way the Institute for Health Insurance pays for services.
- There is currently some pressure to shift more of the financing burden directly to patients through increased co-payments or complementary insurance. This measure needs to be balanced against increased accountability and cost control on the side of the providers.

*Sources: 2, 8, 15.*



## How have the Croatians reformed their health care system?

The following are some recent highlights of Croatia's efforts to reform its health sector.

- In 1999, a WB-funded project – “New Direction of the Health Policy” – was launched, to be completed by December 2005.
- In 2000, the Health Care Reform Plan was adopted, with three main objectives: increasing life expectancy, improving the health-related quality of life and reducing inequalities in health and access to health care.
- In 2001, new health insurance legislation was adopted as part of the health care and health insurance reforms. The insurance administration was centralized and central decision-making bodies replaced 113 semiautonomous units.

*EU25: current members of the EU. EU15: members of the EU*

- In 2004, the new Health Insurance Act was approved, clarifying the state and county budgets and the responsibility of the Health Insurance Fund for subsidizing the coverage of specific population groups and introducing a new scheme of user charges.

### Points to remember

*health reforms*

- The Reform Plan identifies the need to strengthen institutional capacity and financial sustainability in the health sector.
- Applying and scaling up the public health approach remain the challenge.
- An integrated health information system is one of the key commitments of the government; modern information technologies will be introduced in primary health, the hospitals and a central system of monitoring financing.
- Telemedicine centres are seen as an interesting future development.

## What is one of the things the Croatians have learned by doing?

### REGIONAL ACTION TO ADDRESS A NATIONAL PROBLEM

While cardiovascular diseases are the leading cause of death, reliable data on the risk factors have only recently become available. In 2003, a study was carried out among citizens aged 18 years and older, stratified by regions. This was the first representative population survey conducted in Croatia. It identified six major cardiovascular risk factors – obesity, high blood pressure, smoking, physical inactivity, high alcohol consumption and inadequate nutrition. It also revealed, however, striking variations in the distribution of these risk

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factors across the country. Inadequate nutrition proved to be a grave problem in the east, but almost no problem in the south. In Zagreb, physical inactivity was the leading risk factor – almost double the rates in other regions; high alcohol consumption was a particular problem in the south.

While the country has a national programme and national guidelines to prevent cardiovascular diseases, the evidence clearly calls for decentralized implementation and the involvement of local governments. This is already happening. Istria County developed its own health policy, which includes cardiovascular diseases as one of its key priorities. Leading health stakeholders in Istria – the county institute of public health and hospital – developed the county's action plan for prevention of these diseases and published it in the Croatian electronic journal for public health.

The immediate results of this work can be seen in the increased interest in the regional approach. For instance, the Croatian Academy of Medical Sciences held a symposium on the territorial distribution of cardiovascular risks in the population. Important advances in monitoring population health in different regions have been made; this enables national and regional policy-makers to take action to adjust their programmes and choose priorities for health care interventions in line with the evidence on risk factors.

*Source: 26.*



## What has the Regional Office been doing in Croatia?

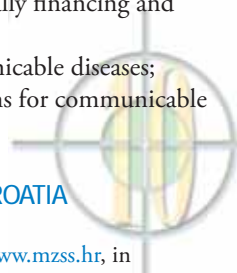
The WHO Country Office, Croatia opened in Zagreb in 1993. Some of the key activities for the country and the Regional Office in 2004–2005 were in the areas of:

*EU25: current members of the EU. EU15: members of the EU*

- prevention of noncommunicable diseases (cancer, diabetes, mental disorders);
- lifestyle issues: smoking and tobacco control, nutrition, drug abuse and health behaviour of young people;
- water safety;
- health financing;
- development of a national policy on medicines.

For 2006–2007, the following areas of collaboration have been identified:

- strengthening the health system, especially financing and training in primary health care;
- scaling up work to prevent noncommunicable diseases;
- improving the alert and response systems for communicable diseases.



## OTHER SOURCES OF INFORMATION ON CROATIA

Ministry of Health and Social Welfare (<http://www.mzss.hr>, in Croatian)

Croatian Academy of Medical Sciences  
(<http://www.amzh.hr/eng/index-eng.htm>)

Croatian National Institute of Public Health (<http://www.hzjz.hr>)

Croatian Institute for Health Insurance (<http://www.hzzo-net.hr>)

Office of Drug Control and Substance Abuse  
(<http://www.uredzadroge.hr>, in Croatian)

Agency for Medicinal Products and Medical Devices  
(<http://www.almp.hr>)

Croatian Physicians' Chamber (<http://www.hlk.hr>, in Croatian)

Croatian Medical Association (<http://hlz.mef.hr>)

Croatian Medical Biochemists' Chamber (<http://www.hkmb.hr>, in Croatian)

Croatian Chamber of Pharmacists (<http://www.hljik.hr/>)

Croatian Dental Chamber (<http://www.hsk.hr/engl>)

Croatian Nurses Association (<http://www.hums.hr>, in Croatian)

*before 1 May 2004. EU10: countries that joined the EU on 1 May 2004.*



Croatia



Republic of Moldova



Romania



Russian Federation



Serbia and Montenegro



The former Yugoslav Republic of Macedonia



Turkey



Ukraine

# THE FORMER YUGOSLAV REPUBLIC OF MACEDONIA



## РЕПУБЛИКА МАКЕДОНИЈА

**AREA (km<sup>2</sup>)**

25 333

Slightly smaller than Belgium

***0.6% of the EU25 area***

***EU25: 3 970 000, EU15: 3 200 000,***

***EU10: 738 000***

*EU25: current members of the EU. EU15: members of the EU*

*Note: The country is part of the EU's Stabilization and Association Process, started in 1999 – an individually tailored programme designed to pave the way for gradual integration into EU structures. This Process recognizes the countries of Albania, Bosnia and Herzegovina, Croatia, Serbia and Montenegro and The former Yugoslav Republic of Macedonia as potential candidates for EU accession, a prerequisite for which is improved regional cooperation.*



<b>POPULATION</b>	2 063 000 A quarter of Austria's population <b>0.45% of the EU25 population</b> <b>EU25: 455 532 896, EU15: 380 962 720,</b> <b>EU10: 74 570 192</b>
<b>THE PEOPLE</b>	Macedonian 64%, Albanian 25%, Turkish 4%, Roma 3%, Serbian 1.8%
<b>LANGUAGES</b>	Macedonian, Albanian, Turkish, Roma
<b>FORM OF GOVERNMENT</b>	Parliamentary republic
<b>RELIGIONS</b>	Eastern Orthodox 67%, Muslim 30%
<b>INDEPENDENCE</b>	1991
<b>GDP PER CAPITA</b>	€1 860 = <b>9% of the EU25 average</b> <b>EU25: €20 400, EU15: €22 750,</b> <b>EU10: €5 530</b> In purchasing power parities: €6 470 = <b>26% of the EU25 average (€24 480)</b>
<b>REGIONS</b>	85 municipalities ( <i>opštini</i> ) and the capital, Skopje (a single entity with 10 municipalities)
<b>CURRENCY</b>	denar: 1 denar = €0.016, €1 = 61.4 denars
<b>HUMAN DEVELOPMENT INDEX</b>	0.79
<b>UNEMPLOYMENT RATE</b>	37% <b>EU25: 9%, EU15: 8%, EU10: 14%</b>
<b>MEMBER OF</b>	CoE, IMF, OSCE, WB, WTO, UN

Sources: 1-7, 17.

before 1 May 2004. EU10: countries that joined the EU on 1 May 2004.

# HEALTH

# ЗДРАВЈЕ



# THE 10 HEALTH QUESTIONS

## What are the demographic essentials on the people?

### POPULATION PROFILE

Gender ratio 0.99 females per male

Urban 59.4% *EU25: 77%, EU15: 79%, EU10: 65%*

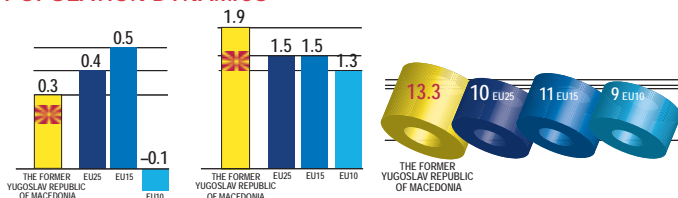
Age structure: 0–14 years 21%

*EU25: 17%, EU15: 17%, EU10: 17%*  
 ≥ 65 years 11%

*EU25: 16%, EU15: 17%, EU10: 14%*

Dependency ratio 48 *EU25: 49, EU15: 50, EU10: 47*

### POPULATION DYNAMICS

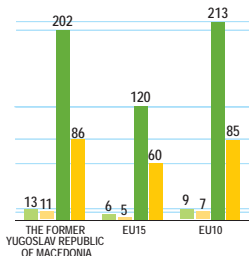


*Annual growth rate (%)*

*Fertility rate (children born per woman)*

*Birth rate (live births per 1000 population)*

### PROBABILITY OF DYING (per 1000 population)



- *Under 5 years old, males*
- *Under 5 years old, females*
- *15–60 years old, males*
- *15–60 years old, females*

*EU25: current members of the EU. EU15: members of the EU*

## LIFE EXPECTANCY AT BIRTH (years)

Total population:	74	<i>EU25: 78, EU15: 79, EU10: 74</i>
Males:	71	<i>EU25: 75, EU15: 76, EU10: 70</i>
Females:	76	<i>EU25: 81, EU15: 82, EU10: 78</i>

## HEALTHY LIFE EXPECTANCY (HALE)

	HALE (years)					Total life expectancy lost (%)	
	At birth			At age 60		Males	Females
	Total	Males	Females	Males	Females		
The former Yugoslav Republic of Macedonia	63	62	65	12	14	10	14
EU15	72	68	72	15	18	9	11
EU10	66	61	67	12	15	12	14

### Points to remember *demographic trends*

Over the past decade, life expectancy has increased and the population's annual growth rate has been low.

Sources: 2, 5, 8, 9.

## What do the people suffer from?

### CARDIOVASCULAR DISEASES

- These disease are the leading cause of death, causing 58% of all deaths.
- Within this group, the two major killers are:
  - ischaemic heart disease: cause of 11% of all deaths: 112 per 100 000 *EU25: 104, EU15 94, EU10: 168*

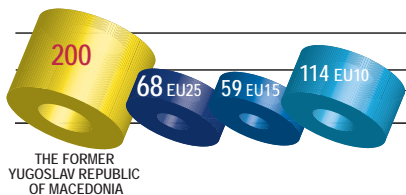
before 1 May 2004. EU10: countries that joined the EU on 1 May 2004.





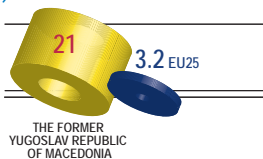
— cerebrovascular diseases: cause of 19% of all deaths: 200 per 100 000.

- High blood pressure accounts for 24% of the disease burden, and high cholesterol for 9%.



### CANCER/MALIGNANT NEOPLASMS

- Cancer is the second leading cause of death, responsible for 16% of all deaths: 200 per 100 000 population. **EU25: 187, EU15: 183, EU10: 223**
- The rate of new cancer cases is 306 per 100 000 per year. **EU25: 462, EU15: 468, EU10: 427**
- The rate of new cases of cervical cancer – 21 cases per 100 000 per year – is much higher than that in the EU25.
- There are 59 new cases of breast cancer and 47 new cases of lung cancer per 100 000 per year.



### MENTAL HEALTH

- Neuropsychiatric disorders account for 19.4% of the disease burden and 1% of all deaths. **EU25: 4%**
- There are 7 deaths from suicide or self-inflicted injuries per 100 000. **EU25: 12, EU15: 10, EU10: 18**

### UNINTENTIONAL AND INTENTIONAL INJURIES

- Injuries are responsible for 33 deaths per 100 000. **EU25: 45, EU15: 39, EU10: 73**
- Road accidents injure 95 people per 100 000.



EU25: current members of the EU. EU15: members of the EU

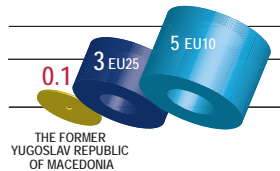
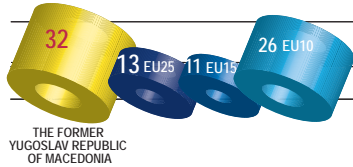
## RESPIRATORY DISEASES

- These diseases account for 42 deaths per 100 000 population. **EU25: 47, EU15: 48, EU10: 40**

## INFECTIOUS AND PARASITIC DISEASES

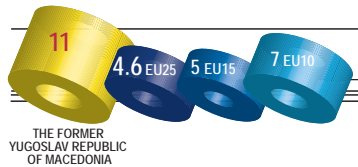
- Only 8 out of 100 000 die from infectious diseases, less than 1% of all deaths.
- There are 32 new cases of tuberculosis per 100 000.
- Between 1997 and 2001, the number of patients with active tuberculosis dropped by half.
- There are 0.05 new cases of HIV infection per 100 000.
- The rates of sexually transmitted infections (per 100 000 per year) are low compared to EU figures:

- fewer than 0.1 new cases of syphilis
- fewer than 0.1 new cases of gonococcal infection **EU25: 9, EU10: 6**



## CHILD AND ADOLESCENT HEALTH

- The infant mortality rate is 11 per 1000 live births.
- Immunization coverage is 94%. **EU25: 95%, EU15: 95% EU10: 96%**
- Diarrhoeal diseases kill 9 children aged under 5 per 100 000.
- A school-based survey showed that 13% of boys are overweight and 3% obese, and 6% of girls are overweight and 1% obese.



before 1 May 2004. EU10: countries that joined the EU on 1 May 2004.



## TOP 10 CAUSES OF DEATH IN THE FORMER YUGOSLAV REPUBLIC OF MACEDONIA

Cause	Total deaths (%)
1. Cerebrovascular disease	20
2. Inflammatory heart disease	17
3. Ischaemic heart disease	13
4. War	4
5. Tracheal, bronchial, lung cancer	4
6. Diabetes	3
7. Hypertensive heart disease	3
8. Stomach cancer	2
9. Colon and rectal cancer	2
10. Chronic obstructive pulmonary disease	2

## DISEASE BURDEN IN THE FORMER YUGOSLAV REPUBLIC OF MACEDONIA AND THE EU

Cause	Share of disease burden (%)		
	The former Yugoslav Republic of Macedonia	EU15	EU10
Cardiovascular diseases	25	17	22
Neuropsychiatric disorders	20	27	21
Cancer/Malignant neoplasms	12	17	16
Unintentional injuries	6	6	9
Non-infectious respiratory diseases	2	7	3
Infectious and parasitic diseases	3	2	2
Respiratory infections	1	1	1
Perinatal conditions	3	1	1
Intentional injuries	10	2	3
Diabetes	2	2	2
Sense organ disorders	5	5	5
<b>Total communicable diseases</b>	<b>7</b>	<b>5</b>	<b>4</b>
<b>Total noncommunicable diseases</b>	<b>77</b>	<b>87</b>	<b>83</b>
<b>Total injuries</b>	<b>16</b>	<b>8</b>	<b>12</b>

EU25: current members of the EU. EU15: members of the EU

## Points to remember

health status

- Over the past decade, infant mortality has decreased, although it is still high, as is maternal mortality.
- The rates of communicable diseases have steadily decreased.
- Family planning and women's reproductive health in rural areas are of particular concern.
- External causes of death (all injuries and poisoning) are the third leading cause of death.

Sources: 2, 10

## Where do the risks lie?

### SMOKING

- Adults smoking prevalence is 35% (40% for males and 32% for females). **EU25: 29%, EU15: 28% (males 32%, females 23%), EU10: 31%**
- Smoking prevalence among 13-year-olds is 1.6% for boys and 0.7% for girls, but among 15-year-olds these figures increase to 11% for boys and 7% for girls.
- Smoking accounts for 15.9% of the total disease burden.

### ALCOHOL CONSUMPTION

- Total reported alcohol consumption is 2 litres per person per year.
- Alcohol consumption accounts for 4% of the disease burden.



before 1 May 2004. EU10: countries that joined the EU on 1 May 2004.

## ILLEGAL DRUG USE

- A school-based survey showed that 3.9% of boys and 2.2% of girls used cannabis during the previous year.
- Illicit drug use causes 0.2% of all deaths.

## OBESITY

- Obesity (BMI  $\geq 30$ ) causes 12% of the disease burden, and physical inactivity, 5%.
- 6% of men and 24% of women are obese.

## FOODBORNE INFECTIONS

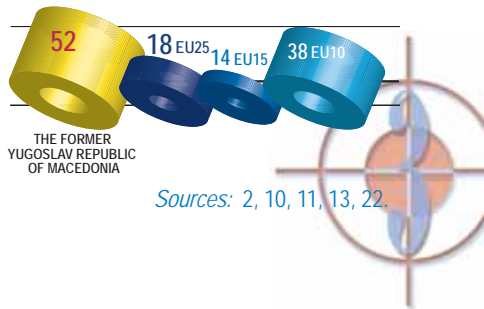
- The *Salmonella* infection rate is 40 per 100 000. **EU25: 44, EU15: 37, EU10: 99**

## OCCUPATIONAL HEALTH

- The mortality rate for occupational injury is 0.2 per 100 000. **EU25: 1.4, EU15: 1.4, EU10: 1.6**
- Occupational carcinogens cause 0.4% of the total disease burden.

## AIR QUALITY

- SO<sub>2</sub> emissions were 52 kg per capita per year in 2000.



Sources: 2, 10, 11, 13, 22.



# Who's who in the public health sector?

## PUBLIC ADMINISTRATION

Ministry of Health

EU25: current members of the EU. EU15: members of the EU



## INSTITUTIONS UNDER THE HEALTH MINISTRY

National Drug Bureau  
Directory for Food  
State Sanitary and Health Inspectorate

## PARLIAMENT

Parliamentary Commission on Health

## INSURANCE STRUCTURE

Health Insurance Fund

## PROFESSIONAL ASSOCIATIONS

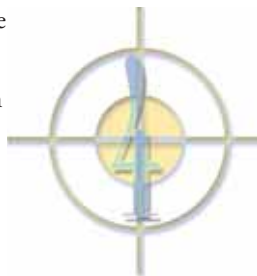
Macedonian Doctors' Association  
Macedonian Dental Association  
Macedonian Pharmaceutical Association  
Association of Nurses, Midwives and Medical Technicians  
Medical, dental and pharmaceutical chambers

## ACADEMIC INSTITUTIONS

Faculties of Medicine, Dental Medicine and Pharmacology,  
Skopje University  
Macedonian Academy of Sciences and Arts

## REGIONAL ADMINISTRATION

10 regional institutes for health protection under the central  
Republic Institute for Health Protection



## How are services provided?

Care is delivered through different public health organizations. Sixteen medical centres provide both primary and secondary care.

*before 1 May 2004. EU10: countries that joined the EU on 1 May 2004.*



Ukraine

## PRIMARY CARE

Primary health care is delivered through more than 1200 units. A quarter of them are in rural areas, and employ around half of all physicians in the country. Primary health care is delivered through specific departments – general medicine, occupational medicine, children’s health care, school medicine and women’s health care – which may also be supplemented by primary dental care. Primary health care also includes tuberculosis prevention, nurses’ home visits and general dental care.

The head office of a health care centre is based in the main city of the area it covers, while services may be provided in rural settlements. As a rule, smaller rural settlements have only general medicine services.

General practice is organized through units usually comprising a GP and a nurse, and is complemented by some specialized services for specific population groups (children, adolescents, women, workers, tuberculosis patients). The units are designed to be the entry points of the health system. In reality, specialists’ consultative services are the backbone of service provision, even in primary health care, where the ratio of specialists to GPs is 1.4:1.

## SECONDARY AND TERTIARY CARE

The distinction between institutions at the different levels is not very clear. Specialist outpatient consultative services deal with patients referred to them by primary carers. Inpatient secondary care is provided through a network of 16 general hospitals (often within medical centres), 6 specialized hospitals, 6 rehabilitation centres, and 1 general and 1 university hospital. All the technologically advanced tertiary care facilities are concentrated in Skopje. A referral by a primary care physician gives access to secondary and tertiary care.



*EU25: current members of the EU. EU15: members of the EU*

## PUBLIC/PRIVATE MIX

A private market in primary and outpatient specialist health care is emerging. Relations between the public and the private sector are not well regulated.

The private sector is less controlled and there is a risk that access is limited to the richer groups in the population. It is concentrated in urban areas and focuses on the most used specialties. There are some private hospitals, mainly in Skopje and the western part of the country. The 2005 amendments to the Law for Health Care privatized all the pharmacies, which had been publicly owned. Most of the dental services have become private, except the primary and preventive child dental service and the University of Skopje Dental Clinical Centre.

### Points to remember *service provision*

- An urban/rural gap exists in the provision of health services.
- Preventive and curative health care are widely divided, with a marked preference for the latter.
- The increasing inequity in access to services should be taken into account in the choice of methods to introduce market incentives and private health care.
- Primary health care still needs to be promoted, through targeted policies in training, regulation and incentives.
- The practice of most hospitals' offering almost all specialties should be examined and evaluated for its efficiency.
- The quality and efficiency of service delivery are expected to be strengthened when the Insurance Fund modernizes its service procurement.

before 1 May 2004. EU10: countries that joined the EU on 1 May 2004.



The former  
Republic of Macedonia



Turkey



Ukraine



# What resources are available?

## HUMAN RESOURCES FOR HEALTH

Health care professionals are unevenly distributed in the country. Medical education is more tailored to theoretical knowledge than to practical skills. In recent years, admissions to university education in medicine have been restricted, to limit the surplus of health personnel in the country. Plans are underway to introduce a new system of licensing and accreditation of doctors, to encourage improvement of their professional skills. There are about 4500 medical doctors in the public sector, more than 500 in the private sector and around 1000 are unemployed.

### HEALTH PROFESSIONALS (per 100 000)

Physicians	219	<i>EU25: 343, EU15: 356, EU10: 278</i>
Dentists	55	<i>EU25: 62, EU15: 66, EU10: 43</i>
Nurses	519	<i>EU25: 779, EU15: 818, EU10: 642</i>
Pharmacists	15	<i>EU25: 78, EU15: 81, EU10: 60</i>
GPs	85	<i>EU25: 99, EU15: 102, EU10: 64</i>

### HOSPITALS

Hospitals per 100 000	2.7
<i>EU25: 3.2, EU15: 3.3, EU10: 2.8</i>	
Hospital beds per 100 000	494
<i>EU25: 611, EU15: 600, EU10: 661</i>	
Annual inpatient admissions per 100	9
<i>EU25: 18.5, EU15: 18.4, EU10: 19.5</i>	
Average length of stay (days)	11.8
<i>EU25: 9.5, EU15: 9.7, EU10: 8.7</i>	



*EU25: current members of the EU. EU15: members of the EU*

## PHARMACEUTICALS

Domestic production meets only a quarter of the demand for drugs. Rational and evidence-based prescription still needs to be achieved. Drug registration is done under the supervision of the Ministry of Health. Drugs from a positive list are supplied for the insured through public procurement. During the preparation of the new national drug policy, it was observed that the Health Insurance Fund's pharmaceutical costs can be significantly reduced, to the retail price level.

### Points to remember *resources for health*

- Hospital care is responsible for the largest share of health care costs: 54%.
- Staff such as nurses and midwives need better training, more professional recognition and a greater role, especially in primary care.
- The way primary care favours specialists over GPs makes the skill mix uneven.
- Improving the management capacity in health facilities is on the agenda.
- Effective incentives are needed for qualified staff to relocate to the underserved regions of the country.



## Who pays for what?

Compulsory health insurance, based on earmarked payroll tax, is the main source of health care revenues. The national Health Insurance Fund is the sole health service procurement agency, and is directly responsible to the parliament. The compulsory health insurance arrangement covers most of the population: the employed, retirees,

*before 1 May 2004. EU10: countries that joined the EU on 1 May 2004.*

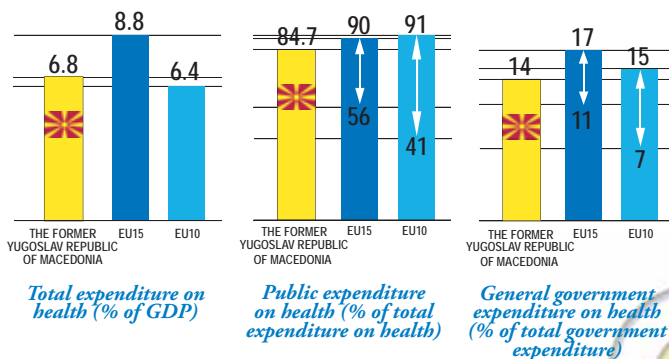


Ukraine

agricultural workers, the disabled and their dependents, and students. These contributions ensure 63% of revenues. For those who are not employed, the Fund collects contributions from the unemployment fund (11%) or the pension fund (20%), for example.

The insured are entitled to a very broad basic package of health services, including almost all preventive, ambulatory and hospital care. As a result, public funds are not sufficient and additional co-payments have been introduced to fill the gap. There are fixed tariffs for various services with pre-established maximum amounts as a percentage of the total costs. Insured people with lower incomes are supposed to make lower co-payments. A number of priority programmes are directly financed by the government, free of co-payments. Voluntary health insurance is allowed but has only a negligible role in health insurance coverage.

## THE ECONOMIC PICTURE




**Population below the national poverty line** 30%  
(according to WB); 4% live on less than US\$ 2 per day

EU25: current members of the EU. EU15: members of the EU

## Points to remember *health financing*

- The value of broad, free, constitutionally mandated health coverage needs to be reconciled with the macroeconomic realities of the country.
- The collapsed labour market and the large share of the informal economy impede the collection of revenue for the Insurance Fund.
- The health needs of the population require the Insurance Fund to be more flexible in reallocating resources.
- Improved health financing would come not so much from introducing competing schemes, as from increasing the capacity of the existing insurance structures.
- It is believed that the available data do not report the extent of out-of-pocket payments. The financial demands on vulnerable groups and the need to preserve social solidarity are causes for concern.

Sources: 5, 8, 15.



## How has the country reformed its health care system?

Independence resulted in great regional autonomy in The former Yugoslav Republic of Macedonia. Then came more centralized planning and control, owing to the country's limited capacities. In 2001, the country opted to decentralize again. Some key reform developments include:

- in 1991: adoption of a health care law that serves as the framework for the national health policy, establishment of the Health Insurance Fund;
- in 1994: adoption of national programmes for various preventive care activities, subject to annual update and state budget financing;
- in 1995, 1997: adoption of a law allowing the free choice of primary care physician;

*before 1 May 2004. EU10: countries that joined the EU on 1 May 2004.*



- in 1996–2002: WB health sector transition project;
- in 2000: adoption of the Law on Health Insurance;
- in 2001: adoption of the national drug policy;
- in 2003: adoption of new regulations on payment for specialized, consultative and hospital care;
- in 2004: second WB health sector transition project;
- in 2005: amendments to and revisions of the Law on Health Care (mainly on privatization) and the Law on Health Insurance (mainly on operational issues).

In 2003, the Macedonian Academy of Sciences and Arts issued a strategic document on health, which is being considered by the Ministry of Health and various other stakeholders.

### Points to remember

### *health reforms*

- Developing a pragmatic health strategy is the country's main priority.
- Applying a systematic approach to health policy remains a challenge.
- A coherent national strategy is needed to address the two leading causes of death (cardiovascular diseases and cancer) and the main risk factors.
- The key players in the strategic planning of the health system still need to build mechanisms for cooperation.
- Developing a national system for health information needs higher priority, particularly to analyse and disseminate data to service providers and decision-makers.



*EU25: current members of the EU. EU15: members of the EU*





## What are some of the things the country has learned by doing?

### MANAGING CRISES WHILE PURSUING LONG-TERM GOALS

The main challenge of health reform was the introduction of the Health Insurance Fund, which revealed a need to anticipate persistent or likely problems, such as how to ensure transparency in the Fund or guarantee the health care package. Privatizing health service delivery was also a painful process that demanded solutions in the doing.

The health sector has faced two major crises: the massive influx of refugees from Kosovo (Serbia and Montenegro) in 1999, which demanded coordination of health services with international agencies, and the country's own armed conflict in 2001, which hampered access to health care.

## What has the Regional Office been doing in The former Yugoslav Republic of Macedonia?



A country WHO office for disaster preparedness and response opened in 1993, and the WHO Country Office, The former Yugoslav Republic of Macedonia opened in Skopje in 1996.

*before 1 May 2004. EU10: countries that joined the EU on 1 May 2004.*



The two have been combined in a single office. Its core priority is to work with senior government officials, in the health and other sectors, to enable them to deal better with reforms in areas such as privatization, civil service, poverty reduction and migration. In 2004–2005, joint activities of the country and Regional Office included:

- discussing health policies and strategy, and decentralization with international partners;
- developing a national policy on pharmaceuticals;
- training national experts in communicable disease surveillance and the use of early response systems;
- developing a national policy on mental health, with related legislation, action plans and pilot projects for communities;
- using new approaches to controlling environmental hazards, particularly to protect children's health;
- running an occupational health programme;
- managing disasters;
- supporting disabled people.

In 2006–2007, collaborative work will focus on:

- reorganization of health services (decentralization, hospital reform, essential drugs);
- maternal and child health;
- noncommunicable diseases, substance abuse and tobacco control;
- HIV/AIDS, tuberculosis, vaccine-preventable diseases and blood safety;
- strengthening of the capacity of the health system to respond to emergencies;
- the environment and health, including occupational health;
- gender violence and injury prevention.

## OTHER SOURCES OF INFORMATION ON THE COUNTRY

Official Government web site

([http://www.vlada.mk/english/index\\_en.htm](http://www.vlada.mk/english/index_en.htm))

*EU25: current members of the EU. EU15: members of the EU*

Ministry of Health (<http://www.zdravstvo.gov.mk/index.php>)

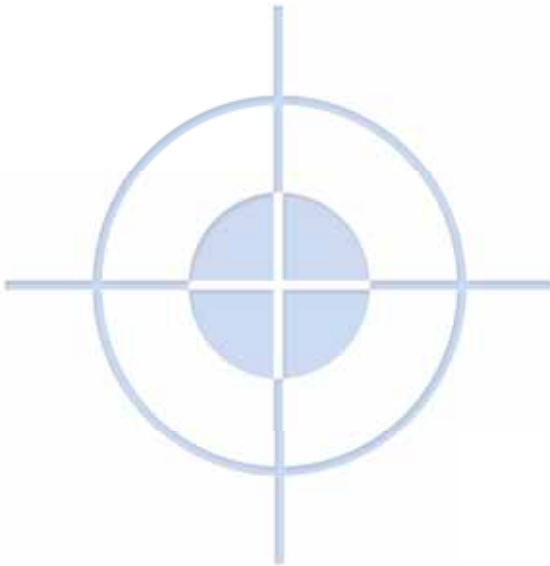
Ministry of Environment and Physical Planning  
(<http://www.vlada.mk/english/ministries.htm#14>)

State Statistical Office ([http://www.stat.gov.mk/english/glavna\\_eng.asp](http://www.stat.gov.mk/english/glavna_eng.asp))

Republic Institute for Health Protection  
([http://www.unet.com.mk/rzzz/index\\_m.htm](http://www.unet.com.mk/rzzz/index_m.htm), in local language)

Doctors' Chamber (<http://www.lkm.org.mk>, in local language)

Dental Chamber  
(<http://www.skm.org.mk/default.asp?nka=zaskm&jazik=en>)



*before 1 May 2004. EU10: countries that joined the EU on 1 May 2004.*



Ukraine

# REPUBLIC OF MOLDOVA



## REPUBLICII MOLDOVA

### AREA (km<sup>2</sup>)

33 843

Half the size of Ireland

*0.8% of the EU25 area*

*EU25: 3 970 000, EU15: 3 200 000,*

*EU10: 738 000*

### POPULATION

4 446 455

Equal to Ireland's population

*1% of the EU25 population*

*EU25: 455 532 896, EU15: 380 962 720,*

*EU10: 74 570 192*

*EU25: current members of the EU. EU15: members of the EU*

THE PEOPLE	Moldovan/Romanian 64.5%, Ukrainian 14%, Russian 13%
LANGUAGES	Moldovan/Romanian, Russian
FORM OF GOVERNMENT	Parliamentary republic, unicameral parliament
RELIGIONS	Eastern Orthodox 98%, Jewish 1.5%
INDEPENDENCE	1991
GDP PER CAPITA	€382 = <b>1,9% of the EU25 average</b> <b>EU25: €20 400, EU15: €22 750, EU10: €5 530</b> In purchasing power parities: €1 470 = <b>1% of the EU25 average (€24 480)</b>
REGIONS	32 regions, 3 municipalities, 1 autonomous territorial unit, and 1 territorial unit
CURRENCY	leu: 1 leu = €0.06, €1 = 16.5 leu
HUMAN DEVELOPMENT INDEX	0.68
UNEMPLOYMENT RATE	2% <b>EU25: 9%, EU15: 8%, EU10: 14%</b>
MEMBER OF	CIS, CoE, IMF, OSCE, WB, UN

Sources: 1–7, 16, 17.

before 1 May 2004. EU10: countries that joined the EU on 1 May 2004.

# HEALTH SĂNĂTATE



Republic of  
Moldova



Romania



Russian  
Federation



Serbia and  
Montenegro



The former  
Yugoslav Republic  
of Macedonia



Turkey



Ukraine

# THE 10 HEALTH QUESTIONS

## What are the demographic essentials on the Moldovans?

### POPULATION PROFILE

Gender ratio 1.09 females per male

Urban 45.9% *EU25: 77%, EU15: 79%, EU10: 65%*

Age structure: 0–14 years 20.5%

*EU25: 17%, EU15: 17%, EU10: 17%*

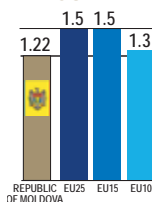
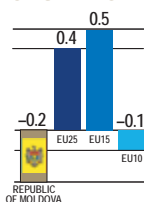
≥ 65 years 9.8%

*EU25: 16%, EU15: 17%, EU10: 14%*

Dependency ratio 43

*EU25: 49, EU15: 50, EU10: 47*

### POPULATION DYNAMICS



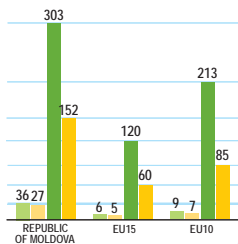
*Annual growth rate (%)*

*Fertility rate*

*(children born per woman)*

*Birth rate (live births per 1000 population)*

### PROBABILITY OF DYING (per 1000 population)



*Under 5 years old, males*

*Under 5 years old, females*

*15–60 years old, males*

*15–60 years old, females*

*EU25: current members of the EU. EU15: members of the EU*

## LIFE EXPECTANCY AT BIRTH (years)

Total population:	68	<i>EU25: 78, EU15: 79, EU10: 74</i>
Males:	34	<i>EU25: 75, EU15: 76, EU10: 70</i>
Females:	72	<i>EU25: 81, EU15: 82, EU10: 78</i>

## HEALTHY LIFE EXPECTANCY (HALE)

	HALE (years)					Total life expectancy lost (%)	
	At birth			At age 60		Males	Females
	Total	Males	Females	Males	Females		
Republic of Moldova	60	57	62	11	13	11	13
EU15	72	68	72	15	18	9	11
EU10	66	61	67	12	15	12	14

### Points to remember *demographic trends*

Over the past decade, there have been:

- low life expectancy for men
- negative annual population growth
- a falling birth rate and a fertility rate below the replacement rate
- economic challenges, poverty and social inequity.

Sources: 2, 5, 8, 9.

## What do the Moldovans suffer from?

### CARDIOVASCULAR DISEASES

- Cardiovascular diseases are the leading cause of death (59% of the total) and the disease burden (23% of the total).
- Within this group, the two major killers are:

*before 1 May 2004. EU10: countries that joined the EU on 1 May 2004.*



Republic of Moldova



Romania



Russian Federation



Serbia and Montenegro



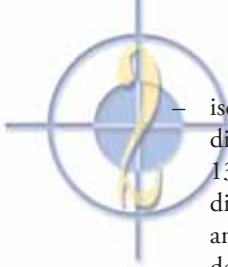
The former Yugoslav Republic of Macedonia



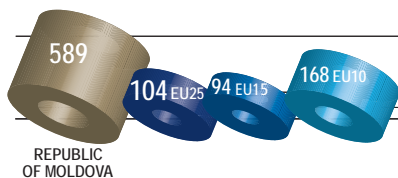
Turkey



Ukraine



– ischaemic heart disease, cause of 13% of the disease burden and 41% of all deaths: 589 deaths per 100 000



– cerebrovascular disease, cause of 8% of the disease burden and 16% of all deaths: 236 deaths per 100 000

***EU25: 68, EU15: 59, EU10: 114***

- High blood pressure causes 13% of the disease burden and high cholesterol, 11%.

### CANCER/MALIGNANT NEOPLASMS

- Cancer is responsible for 8% of the disease burden and 10% of all deaths: 155 deaths per 100 000 population.  
***EU25: 192, EU15: 185, EU10: 227***
- Cancer prevalence is 1%, with 177 new cases per 100 000 per year. ***EU25: 462, EU15: 468, EU10: 427***
- There are 16 new cases of cervical cancer per 100 000 each year, five times the rate in the EU25. ***EU25: 3.2***
- There were 40 new cases of breast cancer per 100 000 in 2003.

### DIABETES

- 1% of the population live with diabetes and 11 out of 100 000 die from it.

### MENTAL HEALTH

- Neuropsychiatric disorders account for 20% of the disease burden and 1% of all deaths. ***EU25: 4%***
- Suicide and self-inflicted injuries account for 1.2% of deaths, or 18 per 100 000. ***EU25: 12, EU15: 10, EU10: 18***
- There are 568 reported new cases of mental disorders per 100 000 per year. Their prevalence is 4%.  
***EU15: 2.5%, EU10: 3%***

### UNINTENTIONAL AND INTENTIONAL INJURIES

- Injuries are responsible for 111 deaths per 100 000.  
***EU25: 45, EU15: 39, EU10: 73***

*EU25: current members of the EU. EU15: members of the EU*



- Road traffic accidents injure 65 people per 100 000.



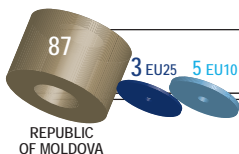
## RESPIRATORY DISEASES

- Respiratory diseases cause 7% of all deaths: 97 per 100 000.  
*EU25: 47, EU15: 48, EU10: 40*

## INFECTIOUS AND PARASITIC DISEASES

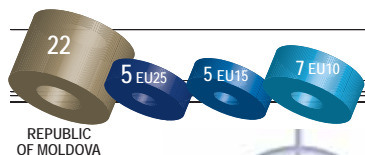
- Infectious diseases kill 20 people per 100 000 per year: 1.4% of all deaths.
- There are 115 new cases of tuberculosis per 100 000.  
*EU25: 13, EU15: 11, EU10: 26*
- There are 7 new cases of per HIV infection 100 000 population.
- The rates of sexually transmitted infections (per 100 000 per year) are very high compared to EU figures:

- 87 new cases of syphilis
- 35 new cases of gonococcal infection *EU25: 9, EU10: 6*



## CHILD AND ADOLESCENT HEALTH

- The infant mortality rate is 14 deaths per 1000 live births (WHO and UNICEF estimate: 24 in 2000).  
*EU25: 4.6, EU15: 5, EU10: 7*
- Immunization coverage is 98%.  
*EU25: 95%, EU15: 95%, EU10: 96%*
- Diarrhoeal diseases kill 10 children under 5 years per 100 000.
- The maternal mortality rate is 22 per 100 000 live births (WHO, UNICEF and UNFPA estimate: 36 in 2000).



before 1 May 2004. EU10: countries that joined the EU on 1 May 2004.



## TOP 10 CAUSES OF DEATH IN THE REPUBLIC OF MOLDOVA

Cause	Total deaths (%)
1. Ischaemic heart disease	39
2. Cerebrovascular disease	16
3. Cirrhosis of the liver	8
4. Chronic obstructive pulmonary disease	4
5. Tracheal, bronchial, lung cancer	2
6. Lower respiratory infections	2
7. Self-inflicted injury	2
8. Tuberculosis	1
9. Colon and rectal cancer	1
10. Road traffic accidents	1

## DISEASE BURDEN IN THE REPUBLIC OF MOLDOVA AND THE EU

Cause	Share of disease burden (%)		
	Republic of Moldova	EU15	EU10
Cardiovascular diseases	23	17	22
Neuropsychiatric disorders	20	27	21
Cancer/Malignant neoplasms	8	17	16
Unintentional injuries	9	6	9
Non-infectious respiratory diseases	4	7	3
Infectious and parasitic diseases	4	2	2
Respiratory infections	2	1	1
Perinatal conditions	2	1	1
Intentional injuries	4	2	3
Diabetes	1	2	2
Sense organ disorders	4	5	5
<b>Total communicable diseases</b>	<b>10</b>	<b>5</b>	<b>4</b>
<b>Total noncommunicable diseases</b>	<b>77</b>	<b>87</b>	<b>83</b>
<b>Total injuries</b>	<b>13</b>	<b>8</b>	<b>12</b>

EU25: current members of the EU. EU15: members of the EU

## Points to remember

health status

- The transition period has brought deterioration in the overall health status of the population.
- Republic of Moldova has a dual health profile – that of a developing and a developed country.
- Communicable diseases remain a serious concern. The country remains vulnerable in its ability to react to both known and unknown health risks.
- Noncommunicable diseases are rising sharply.
- The sustainable provision of vaccine depends heavily on international humanitarian assistance.
- Rates of mortality in children under 1 year of age are high, especially in rural areas.
- Pregnancy-related pathologies and maternal mortality are a serious problem.
- HIV/AIDS, tuberculosis and sexually transmitted infections are the most urgent public health problems.

Sources: 2, 8, 10, 17.

## Where do the risks lie?

### SMOKING

- Adult smoking prevalence is 16%:  
34% for males and 2% for females.
- Smoking causes 9.7% of the disease burden.



### ALCOHOL CONSUMPTION

- Total alcohol consumption is 10 litres per person per year.  
**EU25: 9.4, EU15: 9.4, EU10: 8.9**
- There are 8 cases of alcohol psychosis per 100 000 per year.

before 1 May 2004. EU10: countries that joined the EU on 1 May 2004.



Republic of Moldova



Romania



Russian Federation



Serbia and Montenegro



The former Yugoslav Republic of Macedonia



Turkey



Ukraine

- Alcohol consumption contributes 21% of the disease burden.

### ILLEGAL DRUG USE

- Cannabis is the most common illegal drug, with 1.8% having used it during the last year.
- Illicit drug use causes 0.8% of the disease burden.

### OBESITY

- Obesity causes 8% of the disease burden, and physical inactivity, 4%.
- Of the adult population, 4% of men and 13% of women are obese, among the lowest levels in the WHO European Region.

### FOODBORNE INFECTIONS

- There are 16 new cases of *Salmonella* infection reported per 100 000. **EU25: 44, EU15: 37, EU10: 99**

### OCCUPATIONAL HEALTH

- There are 1.4 new cases of occupation-related disease per 100 000. **EU25: 42, EU15: 42, EU10: 19**
- Occupational injuries cause 1.2 deaths per 100 000. **EU25: 1.4, EU15: 1.4, EU10: 1.6**

### AIR QUALITY

- SO<sub>2</sub> emissions were 32 kg per capita per year in 2000.



Sources: 2, 10–13.



EU25: current members of the EU. EU15: members of the EU



## Who's who in the Moldovan public health sector ?

### PUBLIC ADMINISTRATION

Ministry of Health and Social Protection

### INSTITUTIONS UNDER THE HEALTH MINISTRY

National Centre for Public Health and Health Management

Republican Institute for Mother and Child Health

National Centre for Preventive Health Medicine

### INSURANCE STRUCTURE

National Health Insurance Company

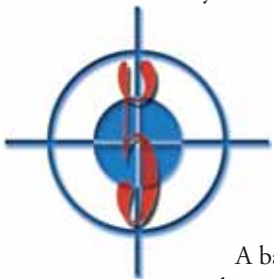
### ACADEMIC INSTITUTIONS

Medical university

School of public health

### REGIONAL ADMINISTRATION

Eleven regional health administrations supervised by the Ministry of Health and Social Protection



## How are services provided?

A basic package of services is provided through the compulsory health insurance scheme.

Additionally, the state provides a minimum package of medical assistance for the uninsured. GPs provide primary health care, and refer patients for consultation with specialists.

*before 1 May 2004. EU10: countries that joined the EU on 1 May 2004.*



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## PRIMARY CARE

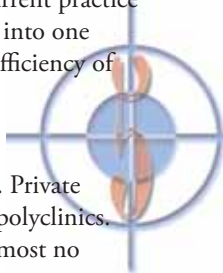
Primary care is used more as a point of referral to higher levels than as a full range of services. Its provision is the responsibility of the regional administration, through clinics and health centres offering a limited range of diagnostic, immunization, acute and emergency services. They are expected to deliver a minimum package of services, but this is still to be achieved. A number of doctors have already undergone some training in family medicine.

## SECONDARY AND TERTIARY CARE

At the start of the transition period, there was a huge network of ambulatory services and basic-care and specialized hospitals. This network dominated the health sector, providing even primary care services, but large reductions were made. The current practice is to unite all health care facilities at the district level into one legal entity; this is not beneficial for the funding or efficiency of primary health care.

## PUBLIC/PRIVATE MIX

The delivery of private health care is still fragmented. Private outpatient care is provided in some public facilities: polyclinics. Only 6% of the hospitals are private and there are almost no private clinics, laboratories or other institutions.



### Points to remember *service provision*

- Primary health care is a cornerstone of the government's reform plan. Primary care facilities need to be provided with adequate equipment, drugs and salaries for staff.
- The priority given to family medicine needs to be reflected in the education and training of health professionals.
- Specialist care remains highly concentrated in the capital, Chisinau, and duplication of services raises the issue of quality.
- Apart from the Ministry of Health and Social Protection, other ministries run parallel health care facilities.
- The reforms in health financing have created incentives for restructuring service delivery.

*EU25: current members of the EU. EU15: members of the EU*



# What resources are available?

## HUMAN RESOURCES FOR HEALTH

During the last decade, the migration of health personnel to other professions or countries has been a serious problem. Getting the right skill mix is the core challenge. Changing the profiles and training of health personnel, especially nurses, may help to establish primary health care.

### HEALTH PROFESSIONALS (per 100 000)

Physicians	311	<i>EU25: 343, EU15: 356, EU10: 278</i>
Dentists	39	<i>EU25: 62, EU15: 66, EU10: 43</i>
Nurses	715	<i>EU25: 779, EU15: 818, EU10: 642</i>
Pharmacists	57	<i>EU25: 78, EU15: 81, EU10: 60</i>
GPs	68	<i>EU25: 99, EU15: 102, EU10: 64</i>

### HOSPITALS

Hospitals per 100 000	3.1
<i>EU25: 3.2, EU15: 3.3, EU10: 2.8</i>	
Hospital beds per 100 000	667
<i>EU25: 611, EU15: 600, EU10: 661</i>	
Annual inpatient admissions per 100	16.9
<i>EU25: 18.5, EU15: 18.4, EU10: 19.5</i>	
Average length of stay (days)	10.8
<i>EU25: 9.5, EU15: 9.7, EU10: 8.7</i>	

Each region has a hospital; at the national level, state institutes provide specialized care. In 2004 hospitals were given the status of non-profit-making autonomous institutions contracted by the National Health Insurance Company, enabling them to design and manage their own activities. The quality of the available equipment is a problem. While some national and city hospitals have renewed at least parts of their equipment, that

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Ukraine

in the district hospitals needs upgrading. There is no policy for investment in technology and facilities' infrastructure.

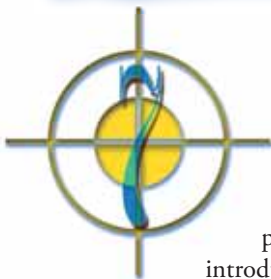
## PHARMACEUTICALS

The Republic of Moldova imports 95% of its drugs. Distribution and retailing have been private, since a 1994 decision. Drugs are not readily available in public health facilities, and are overpriced in the private sector. Privatization has helped ensure the drug supply, but has also created a potential for conflicts of interest. Humanitarian agencies continue to play a major role in providing basic drugs, especially for children and other vulnerable groups.

### Points to remember *resources for health*

- The number of facilities has drastically decreased; previously, the Moldovan network for health care delivery was one of the most extensive in the world.
- The closing or consolidation of hospitals has been carried out only at the district level, and not yet at the national level.
- A balance needs to be struck in the availability of human resources in urban and rural areas.
- Knowledge needs to be developed about the actual demand for drugs in the country. Drug price regulation is on the agenda.
- Experts in public health, health management and health economics are in high demand. Medical training at all levels needs to include problem solving

*Sources: 2, 14.*



## Who pays for what?

Compulsory health insurance was first pilot-tested in one of the regions and then introduced at the national level in January 2004 as the main scheme for financing the health system.

*EU25: current members of the EU. EU15: members of the EU*

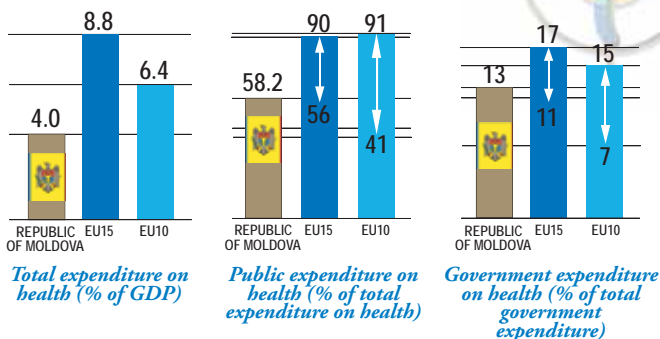


The National Health Insurance Company is accountable to the government, with the Minister of Health and Social Protection as its chairperson. Before the reform, entitlement to services was based on citizenship; now it is based contributions made by or on behalf of people. For the employed, 4% of the payroll tax is deducted, but this still makes up only 30% of the Company's funds. Most of the rest (60–65% in 2004) comes as transfers from the general budget to insure specific population groups: children, the unemployed, pensioners, etc. Ensuring payments from the self-employed presents difficulties.

The system of health financing is no longer fragmented; the National Health Insurance Company accumulates money at the national level and makes contracts with providers. Some positive results are an increase and stabilization of public funding. In return, the legal status of public care providers has been changed to afford them more financial and managerial autonomy.

A major positive development has been the easier transfer of funds to health facilities. For instance, transactions that formerly took 2–3 weeks are now completed in 1–2 days. The system still relies on direct payments and informal contributions by users, however.

## THE ECONOMIC PICTURE



before 1 May 2004. EU10: countries that joined the EU on 1 May 2004.



Republic of Moldova



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Turkey



Ukraine



**Out-of-pocket expenditure on health 100**  
(% of total private health spending)

**Population below the national poverty line** 23%;  
64% live on less than US\$ 2 per day.



**Points to remember** *health financing*

- The government has demonstrated a firm commitment to health system finance reform, allocating more of its funds to health than any other country in the eastern part of the Region. Senior public health administrators also welcome it.
- Compared to other countries with similar income per capita, the share of out-of-pocket spending is relatively small in the Republic of Moldova. Informal payments are supposed to have been reduced after the 2004 reform.
- Some major public health programmes rely on external sources of funding (international assistance).
- Local authorities' use of resources accumulated from the hospital closures needs regulation.
- Citizens are increasingly vulnerable to financial disaster due to inability to cover health care costs.
- Citizens need to be well-informed about their rights and entitlements within the compulsory health insurance system.

*Sources: 5, 8, 15.*



## How have the Moldovans reformed their health care system?

Health sector reform is given priority, but social, political and macroeconomic factors have constrained progress. Decision-making and planning are being shifted to the regional health administrations, but their capacity needs to be improved.

*EU25: current members of the EU. EU15: members of the EU*

There is a national action plan for modernizing the infectious disease surveillance system, but no national policy to tackle lifestyle risk factors.

- In 1995, the health care law was adopted, which postulates the need for health reforms, new financial mechanisms and better management of services, and provides for some privatization.
- In 1997–2003, a national strategy for health care reform and development was made, and practical steps added through agreements with the WB.
- In 1999, the state-guaranteed minimum package of free medical assistance was adopted and health service fees were regulated. Decentralization of service provision started, and a plan for hospital restructuring was endorsed, with efforts to reduce the weight of secondary and tertiary care.
- In 2001, funding changed from a system based on bed numbers to per capita estimates.

### Points to remember

### *health reforms*

- The government has demonstrated a strong commitment to health reform.
- The aims of the reforms are to achieve a new balance between primary health care and hospital services and to ensure better utilization of the available funding.
- Health policy development needs to continue in a sustainable manner.
- The Ministry of Health and Social Protection has developed a national health policy, which remains to be formally approved and adopted by the government.
- Further building of consensus and coordination among decision-makers is a core goal.
- Sustaining political commitment is essential to prevent the further emergence of informal payments.
- Monitoring and evaluation of the health reforms needs to be formalized.

*before 1 May 2004. EU10: countries that joined the EU on 1 May 2004.*



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Romania



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Serbia and Montenegro



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Turkey



Ukraine



## What is one of the things the Moldovans have learned by doing?

### THINKING STRATEGICALLY

In May 2004, Parliament made into law the Strategy Paper for Economic Growth and Poverty Reduction, which covers 2004–2006 and is the overarching policy framework for the country's sustainable development. The funds needed for its implementation are estimated at US\$ 750 million, 60% of which is expected to be ensured through loans and grants. Based on the political commitment to this strategy, the WB developed its new plan for assisting the country for 2005–2008. The primary objectives are to improve access to and the quality of health services, to use financial resources more efficiently, to guarantee the implementation of compulsory health insurance and to develop primary and emergency care. Ensuring coordination and synergy among different donors' contributions remains a major challenge.



## What has the Regional Office been doing in the Republic of Moldova?

The WHO Country Office, Republic of Moldova was established in Chisinau in 1994. The main areas of the WHO Regional Office for Europe's cooperation with the country in the period up to 2005 were:

*EU25: current members of the EU. EU15: members of the EU*

- reproductive health and maternal and child health;
- control and prevention of noncommunicable diseases and impact assessment of water safety;
- certification of the country as polio free;
- creation of a national list of essential drugs;
- creation of a national health information system and training of decision-makers to use data;
- tuberculosis and HIV/AIDS.

For 2006–2007, the main planned joint activities are in the areas of:

- policy recommendations on health financing reforms;
- performance assessment for the health system;
- human resources planning;
- the Making Pregnancy Safer initiative, linked to the national reproductive health strategy;
- strengthening of the national system for reporting and surveillance of HIV/AIDS, and improvement of prevention and care;
- strengthening of the use of DOTS for tuberculosis control;
- noncommunicable diseases: tobacco control, cervical cancer screening, suicide prevention, violence and injury prevention, involvement of primary health care in treating the most common conditions;
- safe drinking-water;
- strengthening of the country's capacity to respond to health crises;
- blood safety.

## OTHER INFORMATION ON THE REPUBLIC OF MOLDOVA

Official government web site (<http://www.moldova.md>, in Moldovan/Romanian and Russian)

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Republic of Moldova



Romania



Russian Federation



Serbia and Montenegro



The former Yugoslav Republic of Macedonia



Turkey



Ukraine

# ROMANIA



# ROMANIA

## AREA (km<sup>2</sup>)

237 500

40% the size of France

*6% of the EU25 area*

*EU25: 3 970 000, EU15: 3 200 000,*

*EU10: 738 000*

## POPULATION

21 670 000

A third of France's population

*5% of the EU25 population*

*EU25: 455 532 896, EU15: 380 962 720,*

*EU10: 74 570 192*

*EU25: current members of the EU. EU15: members of the EU*

<b>THE PEOPLE</b>	Romanian 90%, Hungarian 7%, Roma 2%
<b>LANGUAGES</b>	Romanian, Hungarian
<b>FORM OF GOVERNMENT</b>	Democratic republic, with a bicameral National Assembly
<b>RELIGIONS</b>	Romanian Orthodox 87%, Roman Catholic 5%, Protestant 3%
<b>INDEPENDENCE</b>	1878
<b>GDP PER CAPITA</b>	€2 052 = <b>10% of the EU25 average</b> <b>EU25: €20 400, EU15: €22 750, EU10: €5 530</b> In purchasing power parities: €7 000 = <b>29% of the EU25 average (€24 480)</b>
<b>REGIONS</b>	41 counties, 2686 communes
<b>CURRENCY</b>	lei: 1 lei = €0.27, €1 = 3.46 lei
<b>HUMAN DEVELOPMENT INDEX</b>	0.78
<b>UNEMPLOYMENT RATE</b>	7.2% <b>EU25: 9%, EU15: 8%, EU10: 14%</b>
<b>MEMBER OF</b>	CoE, IMF, NATO, OSCE, WB, WTO, UN 1 January 2007 is the date set by the 2002 Copenhagen European Council for Romania to join the EU.

Sources: 1–7, 16, 17.

before 1 May 2004. EU10: countries that joined the EU on 1 May 2004.

# HEALTH

# SĂNĂTATE



Romania



Russian Federation



Serbia and Montenegro



The former Yugoslav Republic of Macedonia



Turkey



Ukraine

# THE 10 HEALTH QUESTIONS

## What are the demographic essentials on the Romanians?

### POPULATION PROFILE

Gender ratio 1.05 females per male

Urban 55% *EU25: 77%, EU15: 79%, EU10: 65%*

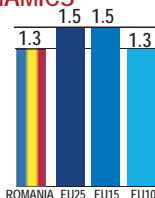
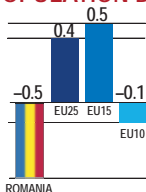
Age structure: 0–14 years 17%

*EU25: 17%, EU15: 17%, EU10: 17%*  
 ≥ 65 years 14%

*EU25: 16%, EU15: 17%, EU10: 14%*

Dependency ratio 48 *EU25: 49, EU15: 50, EU10: 47*

### POPULATION DYNAMICS

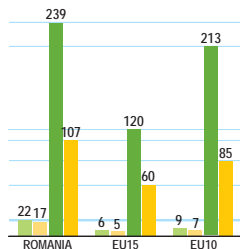


*Annual growth rate (%)*

*Fertility rate (children born per woman)*

*Birth rate (live births per 1000 population)*

### PROBABILITY OF DYING (per 1000 population)



*Under 5 years old, males*

*Under 5 years old, females*

*15–60 years old, males*

*15–60 years old, females*

*EU25: current members of the EU. EU15: members of the EU*



## LIFE EXPECTANCY AT BIRTH (years)

Total population:	71	<i>EU25: 78, EU15: 79, EU10: 74</i>
Males:	67	<i>EU25: 75, EU15: 76, EU10: 70</i>
Females:	75	<i>EU25: 81, EU15: 82, EU10: 78</i>

## HEALTHY LIFE EXPECTANCY (HALE)

	HALE (years)					Total life expectancy lost (%)	
	At birth			At age 60		Males	Females
	Total	Males	Females	Males	Females		
<b>Romania</b>	63	61	65	12	15	10	13
EU15	72	68	72	15	18	9	11
EU10	66	61	67	12	15	12	14

### Points to remember *demographic trends*

Over the past decade, there have been:

- a decreasing annual population growth rate
- a fertility rate under population replacement
- an increase in the population aged over 60 years.

*Sources: 2, 5, 8, 9.*

## What do the Romanians suffer from?

### CARDIOVASCULAR DISEASES

- Cardiovascular diseases are the leading cause of death; they account for 61% of all deaths and 26.6% of the total disease burden.
- Within this group, the two major killers are:

*before 1 May 2004. EU10: countries that joined the EU on 1 May 2004.*



Romania



Russian Federation



Serbia and Montenegro



The former Yugoslav Republic of Macedonia



Turkey



Ukraine





– ischaemic heart disease causes 10% of the disease burden and 21% of deaths: 236 deaths per 100 000

– cerebrovascular disease causes 10% of the disease burden and 20% of all deaths: 255 deaths per 100 000

*EU25: 68, EU15: 59, EU10: 114*

- High blood pressure causes 32% of the total disease burden, and high cholesterol, 14.4%.



## CANCER/MALIGNANT NEOPLASMS

- Cancer is the second leading cause of death, responsible for 11.6% of the total disease burden and 15.5% of all deaths: 179 deaths per 100 000 population. *EU25: 192, EU15: 185, EU10: 227*
- The number of new cases of cancer is 258 per 100 000 population per year. *EU25: 462, EU15: 468, EU10: 427*
- About 1.3% of the population lives with cancer.
- There are 32 new cases of cervical cancer per 100 000 per year: 10 times the EU25 rate. *EU25: 3.2*
- There were 58 new cases of breast cancer and 32 new cases of lung cancer per 100 000 in 2003.

## DIABETES

- 2% of the population lives with diabetes.

## MENTAL HEALTH

- Neuropsychiatric disorders account for 18% of the disease burden and 1.2% of all deaths. *EU25: 4%*
- Suicide and self-inflicted injuries account for 14 deaths per 100 000. *EU25: 12, EU15: 10, EU10: 18*
- There are 1018 new cases of mental disorders per 100 000 per year. *EU10: 777*

*EU25: current members of the EU. EU15: members of the EU*

- About 1% of the population lives with a mental health disorder. **EU15: 2.5%, EU10: 3%**

## UNINTENTIONAL AND INTENTIONAL INJURIES

- Injuries are responsible for 65 deaths per 100 000 per year. **EU25: 45, EU15: 39, EU10: 73**
- Road traffic accidents injure 31 people per 100 000.
- Physical abuse of children is a serious problem.

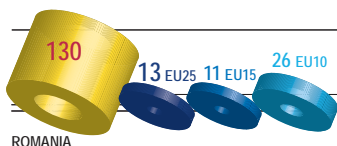


## RESPIRATORY DISEASES

- Respiratory diseases cause 6% of all deaths: 69 per 100 000 population. **EU25: 47, EU15: 48, EU10: 40**

## INFECTIOUS AND PARASITIC DISEASES

- Infectious diseases cause 1.3% of all deaths: 15 per 100 000.
- Romania has the second highest incidence of tuberculosis in the WHO European Region, with 130 new cases per 100 000.
- There are 1.1 new cases of HIV infection per 100 000, mostly in children aged 0–14 years (owing to mother-to-child transmission).
- The rates of sexually transmitted infections (per 100 000 per year) are high compared to EU figures:
  - 45 new cases of syphilis **EU25: 3, EU10: 5**
  - 11 new cases of gonococcal infection **EU25: 9, EU10: 6**

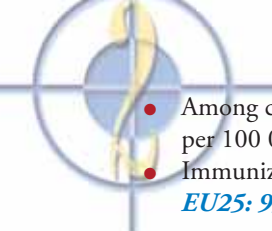


## CHILD AND ADOLESCENT HEALTH

- The infant mortality rate is 17 per 1000 live births. **EU25: 4.6, EU15: 5, EU10: 7**

before 1 May 2004. EU10: countries that joined the EU on 1 May 2004.



- 
- Among children under 5, 22 males and 18 females per 100 000 die.
  - Immunization coverage is 97%.
- EU25: 95%, EU15: 95%, EU10: 96%**

## TOP 10 CAUSES OF DEATH IN ROMANIA

Cause	Total deaths (%)
1. Ischaemic heart disease	24
2. Cerebrovascular disease	20
3. Hypertensive heart disease	7
4. Cirrhosis of the liver	4
5. Tracheal, bronchial, lung cancer	3
6. Lower respiratory infections	3
7. Chronic obstructive pulmonary disease	2
8. Colon and rectal cancer	2
9. Stomach cancer	2
10. Breast cancer	1

## DISEASE BURDEN IN ROMANIA AND THE EU

Cause	Share of disease burden (%)		
	Romania	EU15	EU10
Cardiovascular diseases	27	17	22
Neuropsychiatric disorders	18	27	21
Cancer/Malignant neoplasms	12	17	16
Unintentional injuries	9	6	9
Non-infectious respiratory diseases	3	7	3
Infectious and parasitic diseases	3	2	2
Respiratory infections	3	1	1
Perinatal conditions	2	1	1
Intentional injuries	2	2	3
Diabetes	2	2	2
Sense organ disorders	5	5	5
<b>Total communicable diseases</b>	<b>8</b>	<b>5</b>	<b>4</b>
<b>Total noncommunicable diseases</b>	<b>81</b>	<b>87</b>	<b>83</b>
<b>Total injuries</b>	<b>11</b>	<b>8</b>	<b>12</b>

EU25: current members of the EU. EU15: members of the EU

## Points to remember

health status

- Romania has the epidemiological profile of all developed countries, with low prevalence of communicable diseases and an increasing share of noncommunicable diseases.
- There is particular concern about maternal and child health, tuberculosis and sexually transmitted infections. A public health approach is needed to tackle these problems.

Sources: 2, 10, 17.

## Where do the risks lie?

### SMOKING

- Adult smoking prevalence is 21%: 32% for males and 10% for females. **EU25: 29%, EU15: 28% (males 32%, females 23%), EU10: 31%**
- Smoking causes 16.3% of the disease burden.

### ALCOHOL CONSUMPTION

- Total alcohol consumption is 6.2 litres per person per year.
- There are 45 cases of alcohol psychosis per 100 000 per year.
- Alcohol consumption causes 12.4% of the total disease burden.



### ILLEGAL DRUG USE

- Cannabis is the most commonly used illegal drug with 1.7% having used it within the last year.
- Opiates are used by 0.3% of the population.
- Injecting drug users comprise 1.3% of the citizens of the capital, Bucharest.
- Illicit drug use causes 0.1% of the total disease burden.

before 1 May 2004. EU10: countries that joined the EU on 1 May 2004.



## OBESITY

- Obesity (BMI  $\geq 30$ ) causes 15% of the disease burden, and physical inactivity, 6.6%.
- 12% of men and 5.5% of women are obese.

## FOODBORNE INFECTIONS

- There are 5 new cases of *Salmonella* infection reported per 100 000. *EU25: 44, EU15: 37, EU10: 99*

## OCCUPATIONAL HEALTH

- There are 17 new cases of occupation-related disease per 100 000 per year. *EU25: 42, EU15: 42, EU10: 19*
- Occupational injuries cause 1.8 deaths per 100 000. *EU25: 1.4, EU15: 1.4, EU10: 1.6*
- Occupational carcinogens cause 0.4% of the disease burden.

## WASTE

- Over 93% of all waste products are disposed of in landfills. Only 6% of total waste is recycled, and only 1% is incinerated.

Sources: 2, 10–13.



### PUBLIC ADMINISTRATION

Ministry of Health

### INSTITUTIONS UNDER THE HEALTH MINISTRY

Institute of Public Health (in Bucharest, Cluj, Iași)

National Drug Agency

# Who's who in the Romanian public health sector ?

*EU25: current members of the EU. EU15: members of the EU*

## PARLIAMENT

Chamber of Deputies Health Commission  
Senate Health Commission

## INSURANCE STRUCTURE

National Health Insurance Fund

## PROFESSIONAL ASSOCIATIONS

College of Physicians  
College of Dentists  
College of Pharmacists  
Order of Nurses



## ACADEMIC INSTITUTIONS

Universities of medicine in Bucharest, Constanta, Craiova,  
Cluj, Iași, Oradea, Sibiu, Tîrgu Mureș, Timișoara

## REGIONAL ADMINISTRATION

District public health directorates  
District health insurance funds



## PRIMARY CARE

Family doctors – independent practitioners on contract with the National Health Insurance Fund but operating in their own offices or clinics – deliver primary health care. They are paid through a mixed scheme of weighted capitation and fee-for-service payments. Patients' right to choose their family doctor encourages competitiveness.

# How are services provided?

*before 1 May 2004. EU10: countries that joined the EU on 1 May 2004.*



Romania



Russian Federation



Serbia and Montenegro



The former Yugoslav Republic of Macedonia



Turkey



Ukraine

## SECONDARY AND TERTIARY CARE

Ambulatory secondary care is delivered by a network of hospital outpatient departments, diagnostic centres and specialists in their own offices. Inpatient and tertiary care is provided by four types of hospitals: rural, municipal, district and teaching or specialized. The number of hospital admissions is very high, while the average length of stay is quite low. This is a result of the arrangements with the health insurance sector, whereby admissions are an important factor for the service contract, while hospitals are not reimbursed for stays longer than the periods determined for the different treatments.

Reform of the emergency medical service is continuing, aimed at putting it in line with EU standards.

## PUBLIC/PRIVATE MIX

The health care system is almost entirely owned by the state, and comprises a network of hospitals, polyclinics, dispensaries and other health institutions and facilities. The Ministry of Health supervises them through the district directorates. Some small health service networks are owned and run by other state bodies. Private practice has been legal since 1990, with licensing under the auspices of the Ministry of Health.



### Points to remember

*service provision*

- Family doctors act as gatekeepers for the health system. Patients need referral from them to gain access to outpatient clinics and hospitals.
- Primary care in rural areas is not satisfactory.
- The constitution guarantees the right to health; the whole population has access to a basic package of services.



*EU25: current members of the EU. EU15: members of the EU*





# What resources are available?

## HEALTH PROFESSIONALS (per 100 000)

Physicians	196	<i>EU25: 343, EU15: 356, EU10: 278</i>
Dentists	23	<i>EU25: 62, EU15: 66, EU10: 43</i>
Nurses	399	<i>EU25: 779, EU15: 818, EU10: 642</i>
Pharmacists	6	<i>EU25: 78, EU15: 81, EU10: 60</i>
GPs	81 (1998)	<i>EU25: 99, EU15: 102, EU10: 64</i>

## HOSPITALS

Hospitals per 100 000	1.9
<i>EU25: 3.2, EU15: 3.3, EU10: 2.8</i>	
Hospital beds per 100 000	656
<i>EU25: 611, EU15: 600, EU10: 661</i>	
Annual inpatient admissions per 100	25
<i>EU25: 18.5, EU15: 18.4, EU10: 19.5</i>	
Average length of stay (days)	8
<i>EU25: 9.5, EU15: 9.7, EU10: 8.7</i>	

## PHARMACEUTICALS

Pharmacies and pharmacists were among the first in the health sector to be privatized. There is no formal national drug policy, but legislation controls the manufacturing, distribution and quality of pharmaceuticals. The share of locally produced medicines decreased to 40% of the whole market value, owing to takeovers of domestic producers by foreign companies. Nevertheless, domestic producers supply 60% of the market by volume. Three levels of reimbursement are established for different categories of drugs.



*before 1 May 2004. EU10: countries that joined the EU on 1 May 2004.*



Romania



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Serbia and Montenegro



The former Yugoslav Republic of Macedonia



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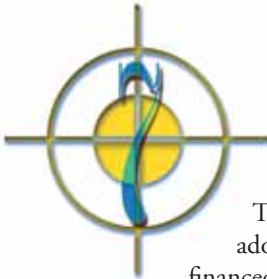
Ukraine



## Points to remember *resources for health*

- Most hospitals are publicly owned and administered by the state. Hospital reform needs to be completed.
- Achieving balance in geographical distribution and specialization of doctors remains a significant problem.
- New approaches to training are needed that incorporate the specialty of family medicine and enhance the professional development of nurses. A reformed policy on the training of health professionals would be beneficial.
- A more rational mode of prescribing and using medicines can be put into practice through explicit, legally binding rules.

*Sources: 2, 14.*



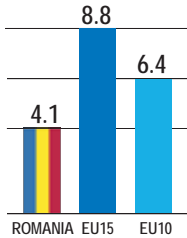
## Who pays for what?

The Law on Social Health Insurance was adopted in 1997, shifting from the state-financed model to a social insurance model. In reality, the system is a mix of social insurance (revenues collected through contributions) and public management (the state still has a decisive role in the allocation of funds).

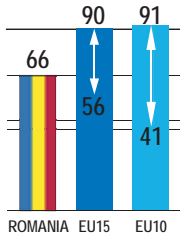
Health insurance is mandatory and linked to employment, with employee and employer paying equal shares of the payroll tax. The coverage of certain vulnerable groups, including children and young people, is funded by transfers from the state budget to the National Health Insurance Fund. District health insurance funds make contracts with health care providers to deliver services. This decentralized system is intended to make purchasing decisions more responsive and accountable to the demands of the insured population. The extent to which this objective has been realized is not yet fully understood.

*EU25: current members of the EU. EU15: members of the EU*

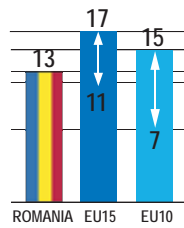
## THE ECONOMIC PICTURE



*Total expenditure on health (% of GDP)*



*Public expenditure on health (% of total expenditure on health)*



*Government expenditure on health (% of total government expenditure)*

**Out-of-pocket expenditure on health 89**  
(% of total private health spending)

**Population below the national poverty line 22%;**  
14% live on less than US\$ 2 per day

### Points to remember *health financing*

- The very high incidence of cardiovascular diseases and cancer indicates that resources have not been adequately allocated to public health programmes and action.
- The health insurance based on payroll tax, introduced in 1997, brought revenue to the health sector. Nevertheless, at least half of the users of services report making additional, out-of-pocket payments. This suggests that financial protection and solidarity remain causes for concern.
- Since Romania is in the process of accession to the EU, one of its main objectives is to maintain the balance between public revenue and public expenditure, so a large increase in government health spending is not likely to occur in the near future.

*Sources: 2, 8, 15.*

*before 1 May 2004. EU10: countries that joined the EU on 1 May 2004.*



Romania



Russian Federation



Serbia and Montenegro



The former Yugoslav Republic of Macedonia



Turkey



Ukraine



## How have the Romanians reformed their health care system?

The political process of EU accession has dominated reform. No major changes are expected in health policy in the coming years. The process emphasizes the enforcement of the EU *acquis* in the relevant health areas. The reform efforts so far have incorporated all key stakeholders, both within and outside the health system. A key characteristic is that many steps – such as resolving the issues of orphanages, handicapped people or children with AIDS – were carried to successful conclusions with the help of international organizations.

In 2004, the Ministry of Health launched its two new strategies on public health and on rationalizing the hospital sector. A series of interventions is planned for 2006–2007 to increase and rationalize access to medicines.

The frequent change of cabinets – and consequently of health ministers and Insurance Fund presidents – has been a problem for maintaining consistency in the reforms, hampering implementation of adopted legislation and leading to continual necessity to change existing legislation. For instance, the consensus is that the new Law on Social Health Insurance needs to be adapted to the rapidly changing political and economic context.

### Points to remember

### *health reforms*

- Political changes have made the reform process fragmented and uneven. Reforms have therefore focused mainly on concrete technical intervention, but their impact has yet to be seen.
- Reforms in certain areas – surveillance of communicable diseases or mental health – need to be completed.
- Better coordination between national and international investment is needed.

*EU25: current members of the EU. EU15: members of the EU*



# What is one of the things the Romanians have learned by doing?

## WORKING WITH THE INTERNATIONAL COMMUNITY

A distinctive feature of Romania's transition period has been the priority given to the health sector by international development assistance. In practice, cooperation with external partners and funding institutions has driven most public health reforms.

- Progress reports on Romania's accession to the EU always mention public health as a priority area. EU-funded projects include those to strengthen communicable disease surveillance and reform mental health care (2005).
- A loan of US\$ 60 million from the WB supports a project for developing health services: upgrading some district hospitals, developing primary care and emergency medical services, and enhancing the public health approach to disease control. A new loan of US\$ 80 million matches the US\$ 47 million given by the government to improve maternal and child health, a project started in September 2005.
- Several UN agencies fund and implement health-related projects in Romania. UNICEF works on child protection, women's and children's health and family education. UNFPA supports family planning, reproductive health and sex education for adolescents, and training in reproductive health for health care professionals.
- As to bilateral cooperation, some of the major foreign actors investing in health projects in Romania are the British Council, DFID, the Soros Foundation and USAID, and the governments of Germany, Japan and Switzerland.

*before 1 May 2004. EU10: countries that joined the EU on 1 May 2004.*



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Serbia and Montenegro



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## What has the Regional Office been doing in Romania?

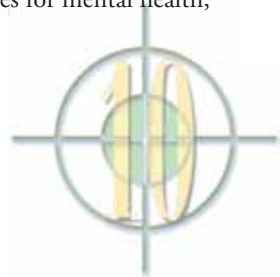
The WHO Country Office, Romania opened in Bucharest in 1990. For 2002–2003, the main areas of joint work were mental health, communicable diseases and maternal and child health, as well as the possibilities for new policies on nursing and drugs. The implementation of DOTS started in 1997 and spread throughout the country. The WHO Regional Office for Europe has provided significant support in tobacco control. Romania ratified the WHO Framework Convention for Tobacco Control and has introduced regulations and a multisectoral policy for tobacco control.

In 2004–2005, the priority areas of cooperation were:

- improving infectious disease surveillance and response;
- reforming mental health services in line with EU standards;
- improving the regulatory framework of pharmaceuticals in line with EU standards;
- interventions in maternal and perinatal health care;
- implementing some health-related articles of the UN Convention on the Rights of the Child.

For 2006–2007, the main areas of cooperation will be:

- prevention and control of noncommunicable diseases;
- community-level and primary care services for mental health;
- tobacco control;
- violence prevention;
- emergency health care services;
- blood safety;
- the role of nursing care in primary care;
- tuberculosis, HIV/AIDS;
- maternal and child health;
- food and drinking-water safety.



*EU25: current members of the EU. EU15: members of the EU*

## OTHER SOURCES OF INFORMATION ON ROMANIA

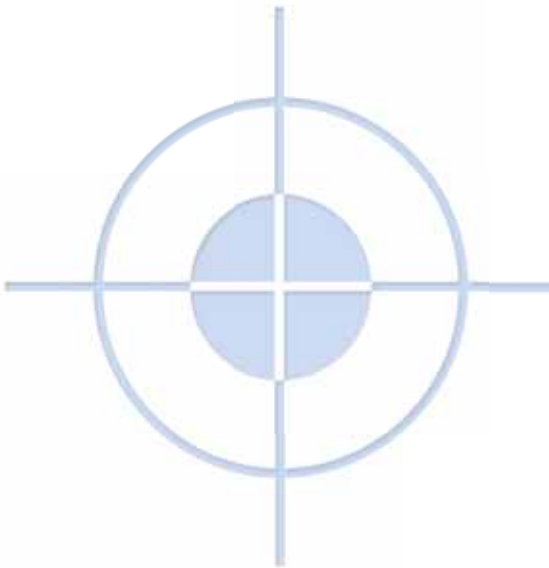
Ministry of Health (<http://www.ms.ro>, in Romanian, in Romanian)

Anti-Poverty and Social Inclusion Commission  
(<http://www.caspis.ro/pagini/en/prezentare.php>)

National Institute for Statistics (<http://www.insse.ro>, in Romanian, in Romanian)

*Rapport CNAS 2004* [National Health Insurance Fund 2004 report].  
Bucharest, National Health Insurance Fund, 2004  
(<http://www.casan.ro>, in Romanian).

Shakarishvili G, ed. *Decentralization in healthcare: analysis and experiences in central and eastern Europe in the 1990s*. New York, Open Society Institute, 2005.



before 1 May 2004. EU10: countries that joined the EU on 1 May 2004.



Romania



Russian Federation



Serbia and Montenegro



The former Yugoslav Republic of Macedonia



Turkey



Ukraine

# RUSSIAN FEDERATION



# РОССИЙСКАЯ ФЕДЕРАЦИЯ

## AREA (km<sup>2</sup>)

17 080 000

30 times the size of France

*430% of the EU25 area*

*EU25: 3 970 000, EU15: 3 200 000,*

*EU10: 738 000*

## POPULATION

143 500 000

About equal to France and Germany's  
combined

*EU25: current members of the EU. EU15: members of the EU*



*32% of the EU25 population*

*EU25: 455 532 896, EU15: 380 962 720,*

*EU10: 74 570 192*

**THE PEOPLE**

Russian 80%, Tatar 4%, Ukrainian 2%, and over 100 ethnic minority groups

**LANGUAGE**

Russian

**FORM OF GOVERNMENT**

Democratic federal republic

**RELIGIONS**

Russian Orthodox, Muslim, Jewish

**INDEPENDENCE**

1990

**GDP PER CAPITA**

€2 405 = *12% of the EU25 average*

*EU25: €20 400, EU15: €22 750,*

*EU10: €5 530*

In purchasing power parities: €8 950

= *37% of the EU25 average (€24 480)*

**REGIONS**

Three administrative levels: federal, regional and municipal; 89 federal entities with different names (*oblasts*, republics, autonomous *okrugs*, *krais*, etc.), but equal status

**CURRENCY**

ruble: 1 rouble = €0.028, €1 = 35.9 roubles

**HUMAN DEVELOPMENT INDEX** 0.8

**UNEMPLOYMENT RATE** 8% *EU25: 9%, EU15: 8%, EU10: 14%*

**MEMBER OF**

CIS, CoE, IMF, G8, OSCE, WB, UN

*Sources: 1-4, 7, 16, 17, 27, 28.*

*before 1 May 2004. EU10: countries that joined the EU on 1 May 2004.*

HEALTH

ЗДОРОВЬЕ



Russian Federation



Serbia and Montenegro



The former Yugoslav Republic of Macedonia



Turkey



Ukraine

# THE 10 HEALTH QUESTIONS

## What are the demographic essentials on the Russians?

### POPULATION PROFILE

Gender ratio 1.15 females per male

Urban 73% *EU25: 77%, EU15: 79%, EU10: 65%*

Age structure: 0–14 years 16%

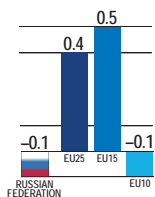
*EU25: 17%, EU15: 17%, EU10: 17%*

≥ 65 years 13%

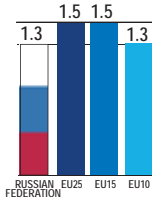
*EU25: 16%, EU15: 17%, EU10: 14%*

Dependency ratio 41 *EU25: 49, EU15: 50, EU10: 47*

### POPULATION DYNAMICS



*Annual growth rate (%)*

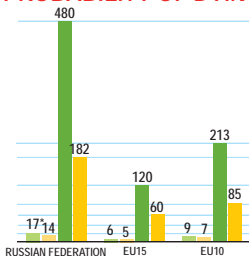


*Fertility rate (children born per woman)*



*Birth rate (live births per 1000 population)*

### PROBABILITY OF DYING (per 1000 population)



\* WHO estimate: 18 per 1000.

- *Under 5 years old, males*
- *Under 5 years old, females*
- *15–60 years old, males*
- *15–60 years old, females*

*EU25: current members of the EU. EU15: members of the EU*

## LIFE EXPECTANCY AT BIRTH (years)

Total population:	65	<i>EU25: 78, EU15: 79, EU10: 74</i>
Males:	59	<i>EU25: 75, EU15: 76, EU10: 70</i>
Females:	72	<i>EU25: 81, EU15: 82, EU10: 78</i>

## HEALTHY LIFE EXPECTANCY (HALE)

	HALE (years)					Total life expectancy lost (%)	
	At birth			At age 60		Males	Females
	Total	Males	Females	Males	Females		
Russian Federation	59	53	64	10	14	10	13
EU15	72	68	72	15	18	9	11
EU10	66	61	67	12	15	12	14

### Points to remember *demographic trends*

Over the past decade, the country has experienced a serious demographic crisis, with a decline of about 800 000 in population per year. There have been:

- ageing of the population;
- a decreasing fertility rate and negative population growth;
- increasing mortality in all age groups, except infants, whose mortality rate has decreased;
- low life expectancy for men.

Sources: 2-4, 8, 9.

## What do the Russians suffer from?

### CARDIOVASCULAR DISEASES

- Cardiovascular diseases are the leading cause of death, accounting for 56% of the total number of deaths.
- Within this group, the two major killers are:

*before 1 May 2004. EU10: countries that joined the EU on 1 May 2004.*





– ischaemic heart disease, which causes 14% of the disease burden and 26% of all



deaths: 415 per 100 000 per year

– cerebrovascular disease, which causes 10% of the disease burden and 20% of all deaths: 317 per 100 000 per year  
**EU25: 68, EU15: 59, EU10: 114**

- High blood pressure accounts for 14% of the disease burden high cholesterol, 11%.

### CANCER/MALIGNANT NEOPLASMS

- Cancer is responsible for 8% of the total disease burden and 12% of all deaths: 187 deaths per 100 000 population.  
**EU25: 192, EU15: 185; EU10: 227**
- There are 317 new cases of cancer per 100 000 per year.  
**EU25: 462, EU15: 468, EU10: 427**
- There are 16 new cases of cervical cancer per 100 000, five times the EU25 rate. **EU25: 3.2**
- There are 60 new cases of breast cancer and 40 new cases of lung cancer per 100 000.
- Cancer prevalence is 1.6%.

### DIABETES

- Diabetes prevalence is 1.6%.

### MENTAL HEALTH

- Neuropsychiatric disorders account for 14% of the total disease burden and 1% of all deaths. **EU25: 4%**
- Suicide or self-inflicted injuries cause 1.8% of all deaths: 34 per 100 000 per year. **EU25: 12, EU15: 10, EU10: 18**
- There are 378 new cases of mental disorders per 100 000.  
**EU10: 777**

*EU25: current members of the EU. EU15: members of the EU*

## UNINTENTIONAL AND INTENTIONAL INJURIES

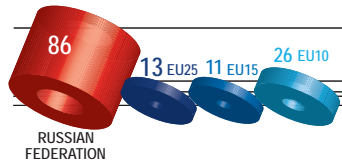
- Injuries are responsible for 226 deaths per 100 000 per year.  
*EU25: 45, EU15: 39, EU10: 73*
- Road traffic accidents injure 142 people per 100 000.  
*EU25: 297, EU15: 319, EU10: 181*
- Homicides make up 5% of all deaths.

## RESPIRATORY DISEASES

- Respiratory diseases cause 4% of deaths: 67 per 100 000.  
*EU25: 47, EU15: 48, EU10: 40*

## INFECTIOUS AND PARASITIC DISEASES

- Infectious diseases cause 1% of deaths: 25 per 100 000 per year.
- There are 86 new cases of tuberculosis per 100 000.
- Multidrug-resistant tuberculosis continues to be a problem. For instance, about 10% of prison inmates suffer from it.
- There are 27.5 new cases of HIV infection per 100 000, the highest incidence in the WHO European Region. The number of people with HIV is 300 000 according to official statistics from the end of 2004, but 0.8–1 million according to the Federal AIDS Centre. The incidence of HIV is highest in the group aged 17–23 years.
- The rates of sexually transmitted infections (per 100 000 per year) are very high:
  - 121 new cases of syphilis
  - 109 new cases of gonococcal infection*EU25: 9, EU10: 6*



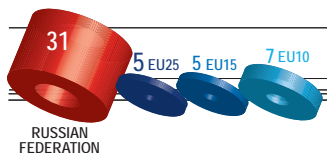
before 1 May 2004. EU10: countries that joined the EU on 1 May 2004.



Ukraine

## CHILD AND ADOLESCENT HEALTH

- The infant mortality rate is 12 per 1000 live births (WHO and UNICEF estimate: 16 in 2000). **EU25: 4.6, EU15: 5, EU10: 7**
- Maternal mortality is down (WHO, UNICEF and UNFPA estimated it as high as 65 in 2000), but is still 31 per 100 000 live births.
- Immunization coverage is 97%. **EU25: 95%, EU15: 95%, EU10: 96%**
- Among children under 5, 22 males and 18 females per 100 000 die.
- Immunization coverage is 97%. **EU25: 95%, EU15: 95%, EU10: 96%**



## TOP 10 CAUSES OF DEATH IN THE RUSSIAN FEDERATION

Cause	Total deaths (%)
1. Ischaemic heart disease	30
2. Cerebrovascular disease	22
3. Poisoning	3
4. Self-inflicted injuries	3
5. Tracheal, bronchial, lung cancer	2
6. Violence	2
7. Road traffic accidents	2
8. Stomach cancer	2
9. Colon and rectal cancer	2
10. Cirrhosis of the liver	2

*Note. In total, external causes (accidents, poisoning and injuries) are the second largest cause of death, accounting for 14% of the total, and malignant neoplasms are responsible for 12%. These statistics are based on WHO estimates, not official mortality statistics.*

EU25: current members of the EU. EU15: members of the EU

## DISEASE BURDEN IN THE RUSSIAN FEDERATION AND THE EU

Cause	Share of disease burden (%)		
	Russian Federation	EU15	EU10
Cardiovascular diseases	29	17	22
Neuropsychiatric disorders	14	27	21
Cancer/Malignant neoplasms	8	17	16
Unintentional injuries	15	6	9
Non-infectious respiratory diseases	2	7	3
Infectious and parasitic diseases	4	2	2
Perinatal conditions	1	1	1
Intentional injuries	8	2	3
Diabetes	1	2	2
Sense organ disorders	3	5	5
<b>Total communicable diseases</b>	<b>8</b>	<b>5</b>	<b>4</b>
<b>Total noncommunicable diseases</b>	<b>69</b>	<b>87</b>	<b>83</b>
<b>Total injuries</b>	<b>23</b>	<b>8</b>	<b>12</b>

### Points to remember

*health status*

- Living standards vary widely across the country, and there are considerable differences in all indicators of the health, economic and social status of the population.
- The rate of cardiovascular diseases is among the highest in the WHO European Region.
- In the 1990s, communicable diseases such as tuberculosis and diphtheria re-emerged, primarily owing to immigration.
- The country has the world's highest increase in HIV incidence rates.
- A large number of children live in disadvantaged social and economic conditions.
- Adult men of working age have suffered the most severe deterioration in health status in the past 15 years, with the largest increase in mortality from cardiovascular diseases and external causes, mostly due to unhealthy lifestyles and risk-taking behaviour.

Sources: 2, 7, 10, 21, 28.

before 1 May 2004. EU10: countries that joined the EU on 1 May 2004.

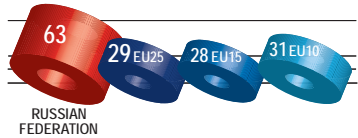




# Where do the risks lie?

## SMOKING

- Adult smoking prevalence is 63% for males and 10% for females.



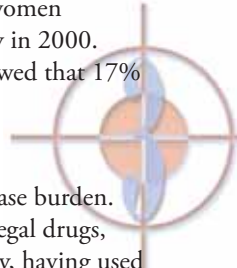
- Smoking causes 12% of the disease burden.
- Cigarette consumption increased by 90% from 1995 to 2001.
- A school-based survey of 15-year-olds showed that 12% of girls and 20% of boys smoke daily.

## ALCOHOL CONSUMPTION

- Total reported alcohol consumption is 8.9 litres per person per year, not counting beer and home-made alcohol.  
*EU25: 9.4, EU15: 9.4, EU10: 8.9*
- Alcohol consumption accounts for 15% of the disease burden.
- There are 56 cases of alcohol psychosis per 100 000 per year.
- Around 71% of adult men and 47% of adult women consume alcohol regularly, according to a study in 2000.
- A school-based survey among 15-year-olds showed that 17% of girls and 28% of boys drink alcohol weekly.

## ILLEGAL DRUG USE

- Illicit drug use contributes 2% of the total disease burden.
- Cannabis and opiates are the most common illegal drugs, with 4% and 2% of the population, respectively, having used them during the last year. Amphetamine, ecstasy and cocaine use is less common: 0.2%, 0.1% and 0.2%, respectively.
- Among 15-year-olds, 12% of boys and 5% of girls have used cannabis within the last year, according to a school-based survey.



*EU25: current members of the EU. EU15: members of the EU*



## OBESITY

- Obesity (BMI  $\geq 30$ ) causes 8% of the total disease burden, and physical inactivity, 4%.
- 10% per cent of men and 24% women are obese: 3% and 4%, respectively, of those aged 25–34 years and 16% and 23%, respectively, of those aged 55–64 years.
- Among 13-year-olds, a school-based survey found that 6% of boys and 4% of girls are overweight.

## FOODBORNE INFECTIONS

- Less than 1 new case of *Salmonella* infection is reported per 100 000 per year. **EU25: 44, EU15: 37, EU10: 99**

## OCCUPATIONAL HEALTH

- Occupational injuries cause 3 deaths per 100 000. **EU25: 1.4, EU15: 1.4, EU10: 1.6**

## AIR QUALITY

- Urban outdoor air pollution causes 0.7% of the total disease burden.
- SO<sub>2</sub> emissions were 30 kg per capita in 2000. **EU25: 18, EU15: 14, EU10: 38**

### Points to remember

*lifestyles*

- The decline in life expectancy over the last decade is mainly due to the impact of unstable economic conditions, unhealthy lifestyles and widespread neglect of risk factors.
- Poverty and especially the disparity in income between different social groups are significant determinants of ill health, although levels of education also play a major role.
- More than two thirds of the Russian population lives in areas affected by air pollution.

Sources: 2, 10–13, 21, 29.

before 1 May 2004. EU10: countries that joined the EU on 1 May 2004.



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## Who's who in the Russian public health sector?

### PUBLIC ADMINISTRATION

Ministry of Health and Social Development of the Russian Federation (federal level)

### INSURANCE STRUCTURES

Mandatory Health Insurance Fund (federal, with territorial/ regional branches)

### PROFESSIONAL ASSOCIATION

Russian Medical Association

### ACADEMIC INSTITUTIONS

Russian Academy of Medical Sciences  
Medical institutes

### REGIONAL ADMINISTRATION

Health departments of the 89 regional governments



## How are services provided?

The health care system follows the administrative structure of the country, with federal, regional and municipal levels of responsibility. Care continues to focus on specialized inpatient services, mainly in secondary and tertiary care facilities. Also, other organizations than the Ministry of Health and Social Development, including ministries and public

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enterprises, run 18 or more parallel health systems. These have both polyclinics and inpatient facilities, accounting for 15% of all outpatient and 6% of all inpatient facilities. Many of these facilities have more equipment and a better quality of services than some public institutions.

The population-based public health services are organized through the sanitary–epidemiological service system. It functions at the regional and municipal levels but reports to the federal level, performing core public health services in such areas as the prevention and control of communicable diseases, immunization, child and adolescent hygiene, food and radiation safety and occupational disease prevention.

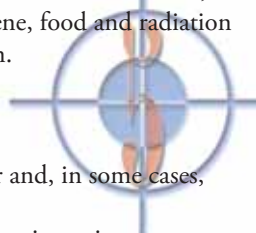
### PRIMARY CARE

The hierarchy of facilities is as follows:

- rural health posts, staffed by a feldsher and, in some cases, a midwife;
- health centres, staffed by a paediatrician, internist, gynaecologist and nurses;
- urban polyclinics, staffed by a variety of specialists;
- independent dispensaries, specialized polyclinics and enterprise-based polyclinics.

The family medicine approach is in its early stages and applied only in some parts of the country. The specialty of general practice is just starting to be developed, primarily in rural areas. In 2000, the Ministry of Health and Social Development launched regulations covering the training requirements, rights and obligations of GPs. Attempts are consistently made to place them in primary care settings to replace catchment-area physicians. In some regions, the gatekeeping function of primary care is well established. On average, about 30% of the initial contacts with the health care system are made higher than the primary level, while the corresponding figure in the EU is 8–10%.

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## SECONDARY AND TERTIARY CARE

The attempts to shift care to an outpatient basis have not been entirely successful. The system remains favourable to secondary and tertiary care, especially through impatient facilities. There is a long tradition of tying hospital funding to bed numbers, so more incentives are needed to reduce these and shorten the average length of stay. Acute hospital beds are often used for elderly and chronically ill people, who should fall under the social care sector. The conditions in hospitals and polyclinics, especially in terms of maintenance and equipment, remain a big challenge.

Most outpatient clinics, specialist ambulatory centres, sanatoria and rural, regional and federal hospitals are publicly owned. Their staff have contracts with local governments, which also subsidize the secondary and tertiary facilities. These facilities also enter into contracts with insurance funds for the treatment they provide. The role of insurance funds in financing varies widely throughout the country; in some regions, the insurance scheme plays no significant role in financing secondary provision, while in other regions it contributes up to 80%.

## PUBLIC/PRIVATE MIX

The health sector was not included in the country's efforts towards rapid privatization, in order to sustain equality of access. Nevertheless, private and semi-private services are common. Some privately owned health facilities and private physicians' practices have emerged in recent years, especially in urban areas. Private markets have also started to develop in health insurance, drug supply, medical equipment, dentistry and ophthalmology. Private health care institutions operate without a well-developed legal basis.



*EU25: current members of the EU. EU15: members of the EU*

## Points to remember *service provision*

- There are several parallel systems of service provision, causing duplication and competition for federal funding.
- The medical establishment tends to resist change.
- Efforts to restructure in- and outpatient services are often carried out separately, not linked in any overarching strategy.
- Inpatient care consumes about 65% of the Russian Federation's resources for public health care, while the average in the EU is about 40%.
- Norms and standards for the quality of care need to be updated.
- Real competition between service providers remains to be developed as a possible way of improving access to services. Citizens still need education, however, to understand what to buy.

## What resources are available?

### HUMAN RESOURCES FOR HEALTH

The country has a long-established tradition of solid medical and public health science. Overall, the health workforce is substantial in size and has high professional qualifications. The medical and other health professions are still very popular, despite the low pay, poor working conditions and the general feeling of dissatisfaction among health workers. Medical education remains the responsibility of the Ministry of Health and Social Development. The functions and the profile of the available health workforce are quite different from those in other countries. For instance, specialists are relatively more numerous than primary care physicians. This is expected to change gradually with the new federal programme for general practice (family medicine) as a separate specialty. Another positive development is the strong priority given at the federal level to

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developing managerial skills. Very few graduates in medicine, however, find it easy to find positions in public hospitals. In addition, attempts are being made to improve the status of nurses.

Physicians formerly earned as much as everyone else with a similar degree of qualification, but since 1991 their salaries have not kept pace with increases in other sectors or with other European countries. The latest reform efforts aimed to overcome this problem.

### HEALTH PROFESSIONALS (per 100 000)\*

Physicians	480	EU25: 343, EU15: 356, EU10: 278
Dentists	32	EU25: 62, EU15: 66, EU10: 43
Nurses	1085	EU25: 779, EU15: 818, EU10: 642
Pharmacists	8	EU25: 78, EU15: 81, EU10: 60
GPs	22	EU25: 99, EU15: 102, EU10: 64

\* 2003 data of the Federal Services of State Statistics, including data on the Ministry of Health and Social Development system and the parallel systems, both of which are public.

### HOSPITALS

Hospitals per 100 000 **6.6**  
*EU25: 3.2, EU15: 3.3, EU10: 2.8*

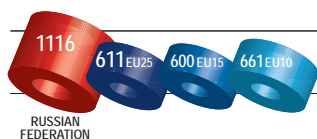
Hospital beds per 100 000  
**1116**

Annual inpatient admissions per 100  
**23**

*EU25: 18.5, EU15: 18.4, EU10: 19.5*

Average length of stay (days) **14.5**

*EU25: 9.5, EU15: 9.7, EU10: 8.7*



### PHARMACEUTICALS

The Federal Service on Surveillance in Health Care was established in March 2004; since then, it has been the sole institution supervising the overall quality assurance of medicines

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(including registration, licensing of manufacturers, distribution and retail chain, inspection and quality control). In 2005, the federal government allocated 52 billion roubles to cover medicines for primary health care for the whole entitled population in the country. This was introduced by Federal Law 122, which was heavily criticized, but was the first real effort to increase the availability of essential medicines in primary care at the federal level. Major efforts are now aimed to implement a presidential programme called Health, which requires as a first step the elaboration of quality standards for the provision of primary care services.

Regions in the country still differ widely in the availability and affordability of essential medicines. Generic prescribing was recently introduced by law, but is not fully applied by prescribers or the population.

### Points to remember *resources for health*

- Many initiatives are under way to help health workers adapt to the new challenges facing the Russian health system.
- Reduction of the number of inpatient hospital beds is continuing.
- Narrow, sophisticated clinical specialties are often more attractive to physicians than general medicine.
- Further research and evidence are needed in areas such as outpatient methods for disease management, technology assessment and quality improvement, health economics, and healthy lifestyles.
- The effort to introduce good manufacturing practice in pharmaceuticals continues.
- Most medical institutions are under the regulatory power of local authorities.
- A process of empowering individual managers of health facilities has taken place; the development of managerial skills needs to follow.
- For certain population groups, the increased availability of drugs (because of imports) is neutralized by decreasing affordability.

Sources: 2, 14.

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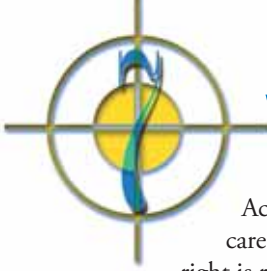
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## Who pays for what?

According to the constitution, all health care is free at the point of consumption. This right is realized through the Guaranteed Package Programme that concentrates on the most essential health care services. This was initiated by the Ministry of Health and Social Development, in consultation with the Mandatory Health Insurance Fund, and taken up by the regional health authorities in 2000. The programme aims to balance the commitment to free care with the available resources. It is recalculated every year at the federal level.

There are three sources of health financing: public budgets, employers' wage-based social insurance contributions and individual citizens' voluntary insurance or out-of-pocket payments.

The main public source of funding is the 3.6% payroll tax paid by employers to the Mandatory Health Insurance Fund. This is a countrywide entity with a branch in each region. It receives money from the state at both the regional and federal levels, though the share of federal funding is limited (5% in 1999). The Fund and its regional branches are independent, non-profit-making institutions. Each regional fund accumulates money from tax revenues and the funds that regional governments give for the non-working population: children, pensioners, the unemployed, etc.

Actual arrangements differ considerably between different regions. In 1999, it was estimated that, on average, about 45% of total government health spending came from regional governments, but only about 5% of this was transferred to regional health insurance funds to insure non-contributors.

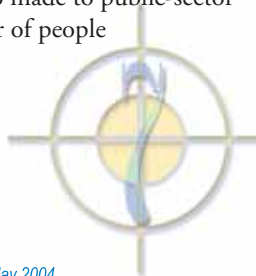
*EU25: current members of the EU. EU15: members of the EU*



Instead, most of these funds were simply allocated directly to service providers. The extent to which regional governments make such transfers for non-working people varies greatly from region to region. In some regions, private insurance organizations compete to enrol citizens directly; consequently, the regional mandatory health insurance funds distribute funds to the private insurers on the basis of the number of the enrolled. Then the private insurers contract the service providers to guarantee services for the insured. This is often done in the parallel health service networks. In other regions, however, private insurance organizations are not active, so the mandatory health insurance funds make contracts with providers directly, managing a single-payer system on behalf of the region's population. In addition, the level of public funding tends to reflect the relative economic strength of each region.

Purchasing services on behalf of the population is done in two ways. Regional governments tend to allocate budgets to providers according to the traditional schemes in place prior to 1990. The mandatory health insurance funds or private insurers tend to pay hospitals according to the number of treated cases, usually adjusted for the severity of the health problem or complexity of treatment. Physicians working in the public sector receive fixed salaries.

Private spending is an important source of funding for the health system. Much of this comprises out-of-pocket payments for privately provided services and medicines, but formal co-payments and informal payments are also made to public-sector providers. In addition, a growing number of people have voluntary private health insurance.



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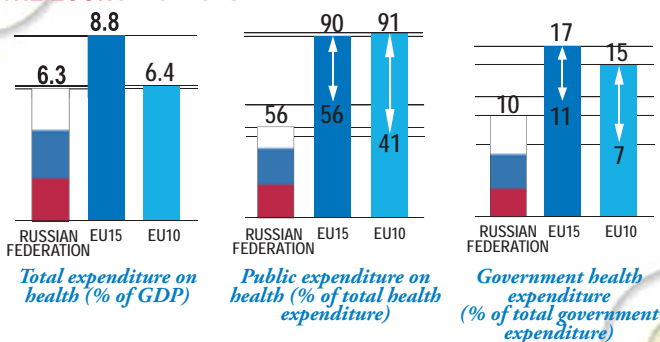


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## THE ECONOMIC PICTURE\*



### Population below the national poverty line 20.4%

In rural areas, 31–35%; in urban areas, 15% (WB figures); 8% live on less than US\$ 2 per day.

The poverty line is defined as subsistence minimum level for the country as a whole: that is, a value estimate of the consumer basket, with a minimum set of food and non-food goods and services necessary to protect people's health and ensure their activities. The size of the subsistence minimum is reviewed and fixed quarterly by the federal government.

According to the OECD Development Assistance Committee Database on Aid Activities database, the annual amount of developmental support to the Russian Federation is US\$ 1.1 billion; the health share is about 4% and the social sector share about 44%

\* Because of the huge size and diversity of the country, national average figures on various measures of health expenditure (such as the share of funding coming from out-of-pocket payments) must be interpreted carefully, as any estimated national average masks a great deal of variation across the country. There are also differences in the estimates of health care spending, due to the different methodologies used and incomplete reporting. The data given in this chapter are WHO estimates, which may differ substantially from some sets of national data.

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## Points to remember *health financing*

- There are gross inequalities in income. The poor are especially vulnerable because of the increased frequency of additional charges for services that are supposed to be free.
- The recently introduced health insurance system has yet to meet the expectations of sufficient funding, streamlined procedures and improved management.
- There are significant threats to equity due to the economic differences between regions. With the decentralized nature of the government's public finance system, the Ministry of Health and Social Development has a narrow range of tools to promote a more efficient and more equitable distribution of funds within the limits of the basic package.
- Health insurance financing does not replace budget financing, but there is a certain confusion because both are in use.
- Efficiency-oriented incentives for providers need to be further developed. Nevertheless, the new payment methods have some positive effects: new clinical and financial information systems are being developed, and data on hospital utilization, patient diagnostic groups and costs are more often used for decision-making.
- A major challenge is to achieve complete reporting of the financial flows, so that the whole picture of the health financing in the country can be seen.

Sources: 5, 8, 15, 28.



## How have the Russians reformed their health care system?

Since 1991, there has been a considerable effort to create new legislation related to health and health care. New federal and regional legal instruments of various kinds have proliferated. Health reforms, however, have been hampered by the difficulties accompanying the changes in the political system. All reform initiatives need to be carried out further, in better synergy. The underlying concept of all reform efforts has been to preserve

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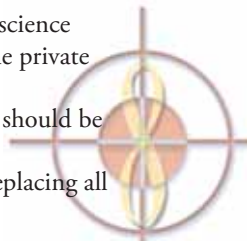
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the whole population's access to a basic package of care. The following are some milestones of the recent reforms.

- In 1991 and 1993, health insurance laws were passed and mandatory health insurance introduced.
- In 1997, a concept of health care and medical science development identified the development of the private sector as the most important structural transformation that should be pursued.
- In 2000, a unified social tax was introduced, replacing all separate contributions to different funds.



In addition, separating purchasers and providers of health care is a key structural change that is expected to increase the efficiency and quality of care. Computerized systems of information on patients, providers, insurers, services and standards are being developed. Performance-related methods of payments are increasingly being applied. Patients' rights to choose health care providers and patients' awareness of their rights have increased.

The health sector was restructured as a result of the massive, rapid decentralization of the country. Thus, regulatory powers were devolved to the health departments or committees of the regional and local authorities. Decentralization is believed to have brought not only better knowledge of the needs of local populations and more efficient decision-making but also inconsistencies and large inequalities among regions.

Decentralization also led to the regional and local focus of numerous donors. While this led to some success stories in specific areas, it had little impact on health policy development at the federal level or on other regions. It is essential that international assistance be well coordinated and the results from each concrete project be sustainable and transferrable.

The country's cooperation with the WB covers a number of projects in the area of health reform, most recently one on tuberculosis and HIV/AIDS. A number of projects in the health sector are bilaterally implemented by DFID (United Kingdom),

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USAID, the EU Tacis programme and the Nordic countries. The Global Fund to Fight AIDS, Tuberculosis and Malaria invests a lot in the country, working through a consortium of NGOs and with the government of the country, to tackle HIV/AIDS and tuberculosis, respectively.

### Points to remember

### health reforms

- Strategic reform documents usually succeed in outlining the problems and defining the goals; these need to be followed by setting priorities and identifying means of implementation.
- The past problem of overcentralization has been addressed by establishing the regional health insurance funds. The challenge is to develop and maintain efficient interrelations between the new regional structures.
- The responsibility for making progress towards good governance lies at both the local and federal levels. A national approach to public health is clearly needed. Regional autonomy and long-term national planning are not mutually exclusive.
- The roles and responsibilities of federal and regional actors need to be further clarified. Lines of accountability for reforms should remain clear.
- The financing and purchasing mechanisms envisaged by the law need to be fully implemented in all regions.
- So far, the leading actors in the reforms have been the state authorities and the research community. Physicians and other care providers have not participated actively in the process.

## What is one of the things the Russians have learned by doing?

### A SUCCESS STORY: REFORM IN A REGION

The Chuvash Republic is a relatively small part of the Russian Federation, located about 630 km from Moscow, with a

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population of 1.3 million. It is often cited as an example of how positive changes in regional health care systems can be made. Behind these successful changes lie strong political leadership and stability in the Republic. In 2004, the new position of Deputy Minister of Strategic Planning and Health Care Reform was created, focusing attention within the Chuvash Ministry of Health on strengthening the health care system.

Some years before, the Ministry had published a plan for strengthening health systems, emphasizing the development of a stronger primary health care system. By April 2005, 267 GPs were practicing in a variety of settings and playing a much broader role, including health promotion and close cooperation with community services.

To reduce inpatient hospital beds, the Chuvash Republic is developing five daycare surgery centres and has already closed or downsized some rural hospitals. Interregional medical centres are planned, to increase the efficiency of hospital services. In addition, health care professionals were trained in strategic planning, working with public involvement, and financial and human resource management to prepare them to assume leadership roles in the restructured health system.

Recognizing that health care is only one part of the work for a healthier population, the Chuvash Republic has moved ahead with health promotion. It adopted a plan that identifies the most prevalent health problems in the population and includes specific targets for improvement in health indicators, for example, a long-term strategy to combat tobacco use. Based on the Health for All principles and information on the social determinants of health, intersectoral teams for health promotion were established throughout the Republic. These teams are responsible for analysing the issues in their own districts and preparing health profiles and local health plans to respond to them. Plans are underway to disseminate these experiences to other regions in the Russian Federation.

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Several partners worked with the Republic on the project. The WHO Regional Office for Europe contributed to the stewardship and health policy development elements. The EU TACIS programme assisted with health care management and training. The WB provided a loan to assist with restructuring. CIDA laid the groundwork for the WB loan.



## What has the Regional Office been doing in the Russian Federation?

As one of the ways to respond to the large scale of the country, the WHO Office for the Russian Federation, in Moscow, has 45 staff. In 1997, it initiated an interagency group to coordinate donor work in the health sector. Since 1999, WHO has cooperated with the Ministry of Health and Social Development and with other agencies in several areas: tuberculosis, HIV/AIDS, health care policy and stewardship. Humanitarian assistance to the northern Caucasus has been WHO's second largest activity in the country. There are 27 WHO collaborating centres.

In 2004–2005, the WHO Regional Office for Europe focused its cooperation with the Russian Federation on 30 different aspects of strengthening health systems, including:

- health policy and stewardship;
- maternal and child health;
- tuberculosis control and HIV/AIDS prevention;
- a national health indicators database ;
- nutrition, smoking and drug abuse among adolescents;
- prevention of violence and stress-related mental health problems;

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- emergency medical services;
- essential medicines;
- environmental risk analysis;
- food safety.



The total operational budget for WHO's country work in the Russian Federation in 2005 was about US\$ 6 million.

For 2006–2007, some of the areas of planned cooperation are:

- developing sustainable health systems through a streamlined national health policy;
- creating and using financing mechanisms that support access to primary care;
- providing guidance on improving the quality, equity and efficiency of primary health care;
- improving national health statistics;
- working for maternal, child and adolescent health;
- working for environmental safety: air and water quality, food safety, awareness of road traffic injuries;
- developing national policies on noncommunicable diseases and nutrition;
- scaling up the response to HIV/AIDS, including tackling health in prisons.

## OTHER SOURCES OF INFORMATION ON THE RUSSIAN FEDERATION

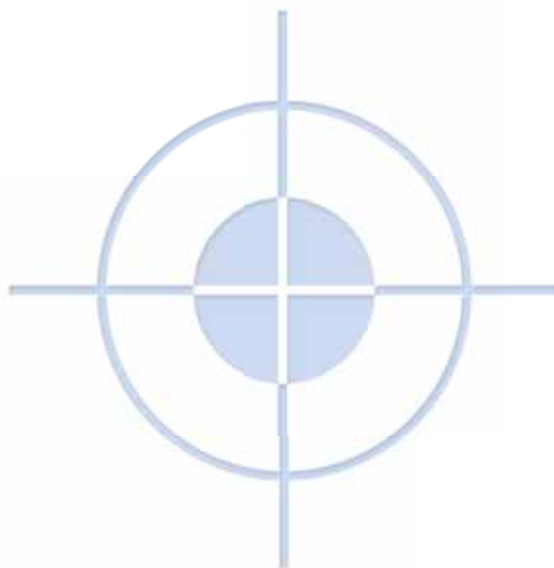
Ministry of Health and Social Development of the Russian Federation  
(<http://www.mzsrff.ru>, in Russian)

Library of Health Reform Projects in Russian Federation  
(<http://www.zdravinform.ru/dev/html/eng/index.php>)

Central Scientific and Research Institution on Organization and Introducing Information Technologies in Health  
(<http://www.mednet.ru>, in Russian)

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# SERBIA AND MONTENEGRO



# СРБИЈА И ЦРНА ГОРА SRBIJA I CRNA GORA

*EU25: current members of the EU. EU15: members of the EU*

<b>AREA (km<sup>2</sup>)</b>	102 173 80% the size of Greece <i>2.6% of the EU25 area</i> <i>EU25: 3 970 000, EU15: 3 200 000,</i> <i>EU10: 738 000</i>
<b>POPULATION</b>	10 530 000 (including Kosovo (Serbia and Montenegro)) Equal to Greece's population <i>2.3% of the EU25 population</i> <i>EU25: 455 532 896, EU15: 380 962 720,</i> <i>EU10: 74 570 192</i>
<b>THE PEOPLE</b>	Serbian 63%, Albanian 16%, Montenegrin 5%, Hungarian 3%, others (Roma, Bosnian, Croatian) 13%
<b>LANGUAGES</b>	Serbian, Albanian
<b>INDEPENDENCE</b>	1992
<b>FORM OF GOVERNMENT</b>	Democratic republic, unicameral parliament
<b>RELIGIONS</b>	Serbian Orthodox, Muslim, Roman Catholic

*before 1 May 2004. EU10: countries that joined the EU on 1 May 2004.*

# HEALTH

# ЗДРАВЉЕ

# ZDRAVLJE



**GDP PER CAPITA** €2 200 = *11% of the EU25 average*  
*EU25: €20 400, EU15: €22 750, EU10: €5 530*  
In purchasing power parities: €7 536  
= *31% of the EU25 average (€24 480)*

**REGIONS** Two republics, two nominally autonomous provinces

**CURRENCY** dinar/€: 1 dinar = €0.01, €1 = 81 dinars

**HUMAN DEVELOPMENT INDEX** 0.78

**UNEMPLOYMENT RATE** 24.7%  
*EU25: 9%, EU15: 8%, EU10: 14%*

**MEMBER OF** CoE, IMF, OSCE, WB, UN

### NOTE

*Serbia and Montenegro is a successor state to the Federal Republic of Yugoslavia. A Constitutional Charter sets the highest legal basis for the union between the two republics. In a period of economic, political and social transition, there have been certain differences in the interpretation of the constitutional arrangements.*

*The country is part of the EU's Stabilization and Association Process, started in 1999 – an individually tailored programme designed to pave the way for gradual integration into EU structures. This Process recognizes Albania, Bosnia and Herzegovina, Croatia, The former Yugoslav Republic of Macedonia and Serbia and Montenegro as potential candidates for EU accession, a prerequisite for which is improved regional cooperation. With the mediation of the EU and facilitated by the work on a joint Stabilization and Association Agreement, reviewed by the CoE in April 2005, the two republics reconfirmed that association with the EU was their main priority and they continued to operate the union as envisaged in the Charter. The top officials in the Republic of Montenegro maintain that the Republic will look for alternative solutions, and a referendum for independence is possible in 2006.*

*The Charter sets the guidelines for the four joint institutions of the country: a state Union Parliament (whose mandate was extended in March 2005), President, Ministerial Council and Court.*

*Kosovo (Serbia and Montenegro) is under UN administration, according to Security Council Resolution 1244 of 1999. Its future status is not yet addressed by any official state document, while political developments are closely monitored by the international community. Data provided for the country of Serbia and Montenegro exclude Kosovo (Serbia and Montenegro), unless otherwise indicated.*

*Sources: 1–7, 16, 17, 30–32.*

*EU25: current members of the EU. EU15: members of the EU*

# THE 10 HEALTH QUESTIONS

## What are the demographic essentials on the people?

### POPULATION PROFILE

Gender ratio 1.01 females per male

Urban 51.7% *EU25: 77%, EU15: 79%, EU10: 65%*

Age structure: 0–14 years 16%

*EU25: 17%, EU15: 17%, EU10: 17%*

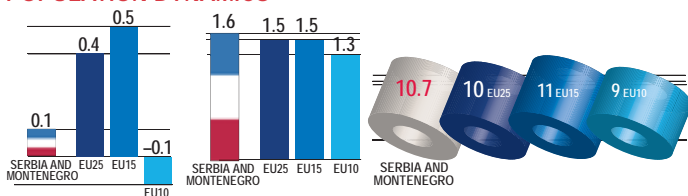
≥ 65 years 17%

*EU25: 16%, EU15: 17%, EU10: 14%*

Dependency ratio 49

*EU25: 49, EU15: 50, EU10: 47*

### POPULATION DYNAMICS

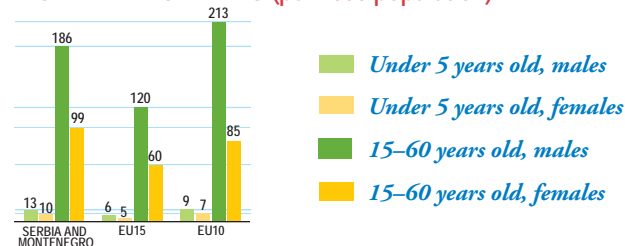


*Annual growth rate (%)*

*Fertility rate (children born per woman)*

*Birth rate (live births per 1000 population)*

### PROBABILITY OF DYING (per 1000 population)



before 1 May 2004. EU10: countries that joined the EU on 1 May 2004.



## LIFE EXPECTANCY AT BIRTH (years)

Total population:	73	<i>EU25: 78, EU15: 79, EU10: 74</i>
Males:	70	<i>EU25: 75, EU15: 76, EU10: 70</i>
Females:	75	<i>EU25: 81, EU15: 82, EU10: 78</i>

## HEALTHY LIFE EXPECTANCY (HALE)

	HALE (years)					Total life expectancy lost (%)	
	At birth			At age 60			
	Total	Males	Females	Males	Females	Males	Females
<b>Serbia and Montenegro</b>	64	63	65	12	14	10	13
<b>EU15</b>	72	68	72	15	18	9	11
<b>EU10</b>	66	61	67	12	15	12	14

### Points to remember *demographic trends*

Over the past decade, there have been:

- negative population growth;
- increasing death rates and decreasing fertility rates (now lower than population replacement level);
- a large influx of refugees from neighbouring countries.

Sources: 2, 5, 8, 9.



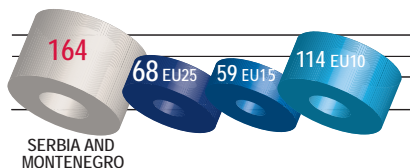
## What do the people suffer from?

### CARDIOVASCULAR DISEASES

- Cardiovascular diseases are the leading cause of death: 54% of the total number of deaths.
- Within this group, the major killers are:
  - ischaemic heart disease: cause of 10% of the disease burden and 11% of all deaths: 121 deaths per 100 000  
*EU25: 104, EU15: 94, EU10: 168*

*EU25: current members of the EU. EU15: members of the EU*

- cerebrovascular disease: cause of 10% of the disease burden and 15% of all deaths: 164 deaths per 100 000.



- High blood pressure is accountable for 34% of the total disease burden, and high cholesterol levels for 12%.

### CANCER/MALIGNANT NEOPLASMS

- Cancer is the second leading cause of death, responsible for 17% of the total: 189 deaths per 100 000 in 2000.  
*EU25: 192, EU15: 185, EU10: 227*
- There are 9.4 new cases of cervical cancer per 100 000 each year. *EU25: 3.2*

### DIABETES

- Diabetes prevalence is 1.3%.

### MENTAL HEALTH

- Neuropsychiatric disorders cause 20% of the disease burden and 1% of all deaths. *EU25: 4%*
- There are 17 deaths from suicide or self-inflicted injuries per 100 000. *EU25: 12, EU15: 10, EU10: 18*

### UNINTENTIONAL AND INTENTIONAL INJURIES

- Injuries are responsible for 46 deaths per 100 000.  
*EU25: 45, EU15: 39, EU10: 73*

- Road traffic accidents injure 739 people per 100 000.



### RESPIRATORY DISEASES

- These cause 4% of the disease burden and 36 deaths per 100 000. *EU25: 47, EU15: 48, EU10: 40*

before 1 May 2004. EU10: countries that joined the EU on 1 May 2004.



## INFECTIOUS AND PARASITIC DISEASES

- Only 6 out of 100 000 die from infectious diseases: 0.5% of all deaths.
- There are 27 new cases of tuberculosis per 100 000.
- There are 0.9 new cases of HIV infection per 100 000.
- The rates of sexually transmitted infections (per 100 000 per year) are low compared to EU figures:
  - 0.7 new cases of syphilis **EU25: 3, EU10: 5**
  - 1.2 new cases of gonococcal infection **EU25: 9, EU10: 6**



## CHILD AND ADOLESCENT HEALTH

- The infant mortality rate is 10 deaths per 1000 live births (WHO and UNICEF estimate: 13 per 1000 in 2000).
- Immunization coverage is 89%. **EU25: 95%, EU15: 95%, EU10: 96%**
- Diarrhoeal diseases kill 0.3 children under 5 per 100 000.



## TOP 10 CAUSES OF DEATH IN SERBIA AND MONTENEGRO

Cause	Total deaths (%)
1. Ischaemic heart disease	20
2. Cerebrovascular disease	18
3. Tracheal, bronchial, lung cancer	4
4. Inflammatory heart disease	4
5. Diabetes	3
6. Chronic obstructive pulmonary disease	2
7. Colon and rectal cancer	2
8. Breast cancer	2
9. Cirrhosis of the liver	2
10. Other genitourinal-system diseases	2

*Note. These figures are based on WHO estimates, not on official mortality statistics.*

*EU25: current members of the EU. EU15: members of the EU*



## DISEASE BURDEN IN SERBIA AND MONTENEGRO AND THE EU

Cause	Share of disease burden (%)		
	Serbia and Montenegro	EU15	EU10
Cardiovascular diseases	29	17	22
Neuropsychiatric disorders	20	27	21
Cancer/Malignant neoplasms	13	17	16
Unintentional injuries	5	6	9
Non-infectious respiratory diseases	4	7	3
Infectious and parasitic diseases	2	2	2
Respiratory infections	1	1	1
Perinatal conditions	2	1	1
Intentional injuries	2	2	3
Diabetes	2	2	2
Sense organ disorders	5	5	5
Total communicable diseases	6	5	4
Total noncommunicable diseases	87	87	83
Total injuries	7	8	12

### Points to remember

*health status*

- Mortality rates are rising.
- The burden of noncommunicable diseases is increasing.
- Maternal mortality has decreased.
- Mental health problems increased owing to the adverse circumstances caused by the war.
- Vaccine-preventable diseases are still an issue for some marginalized population groups.
- Kosovo (Serbia and Montenegro) has worse health indicators than most of Europe.

Sources: 2, 10

before 1 May 2004. EU10: countries that joined the EU on 1 May 2004.



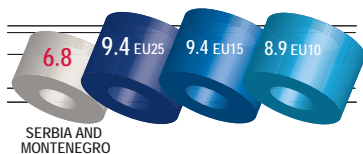


## Where do the risks lie?

- Adult smoking prevalence is 47% (52% for males and 42% for females). **EU25: 29%, EU15: 28% (males 32%, females 23%), EU10: 31%**
- Smoking causes an estimated 360 deaths per 100 000, and 20% of the total disease burden.
- In the Republic of Serbia, 16% of schoolchildren are smokers.

### ALCOHOL CONSUMPTION

- Total reported alcohol consumption is 6.8 litres per person per year.
- There are 66 alcohol-related deaths per 100 000.
- Alcohol consumption causes for 4% of the disease burden.



### OBESITY

- Obesity accounts for 12% of the disease burden, and physical inactivity, 6%.
- Obesity affects 21% of men and 18% of women.
- In the Republic of Serbia, 42% of men and 54% of women are physically inactive.

### FOODBORNE INFECTIONS

- The reported *Salmonella* infection rate was 36 per 100 000 in 1998. **EU25: 44, EU15: 37, EU10: 99**

### OCCUPATIONAL HEALTH

- There were 8 new cases of occupational diseases per 100 000 in 1999. **EU25: 42, EU15: 42, EU10: 19**
- Occupational injuries cause 0.8 deaths per 100 000. **EU15: 1.4, EU10: 1.6**

*EU25: current members of the EU. EU15: members of the EU*

## AIR QUALITY

- SO<sub>2</sub> emissions were 107 kg per capita in 1999.
- Urban outdoor air pollution causes 1.9% of the disease burden.



Sources: 2, 10, 11, 13, 33, 34.



# Who's who in the public health sector of Serbia and Montenegro?

## PUBLIC ADMINISTRATION

Ministries of health (in both republics)

## INSTITUTIONS UNDER THE HEALTH MINISTRY

Institutes of public health (in both republics)

## INSURANCE STRUCTURES

Health insurance funds (in both republics)

## PROFESSIONAL ASSOCIATIONS

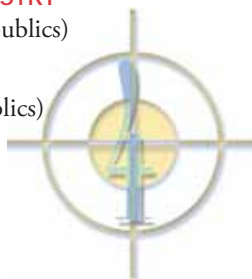
Serbian Medical Society

Society of Doctors of Montenegro

## ACADEMIC INSTITUTIONS

Faculties of medicine in universities in Belgrade, Kragujevac, Niš and Novi Sad, Republic of Serbia

School of medicine at the university in Podgorica, Republic of Montenegro



before 1 May 2004. EU10: countries that joined the EU on 1 May 2004.

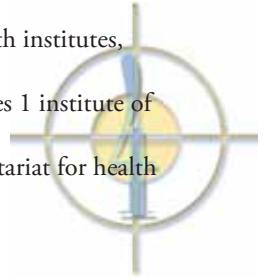
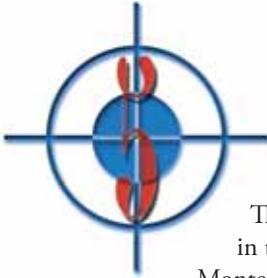


## REGIONAL ADMINISTRATION

Republic of Serbia: 22 district public health institutes,  
with a solely technical role

Republic of Montenegro: 21 municipalities 1 institute of  
public health

Autonomous province of Vojvodina: secretariat for health



## How are services provided?

Three separate health systems provide services in the Republic of Serbia, the Republic of Montenegro and Kosovo (Serbia and Montenegro).

There is no joint mandate for health issues; responsibility is devolved to the public ministries of health of the Republic of Serbia and of the Republic of Montenegro, which have established technical coordination on important public health issues. In Kosovo (Serbia and Montenegro), the transitional local government and the United Nations Interim Administration Mission in Kosovo share responsibility for health.

The Republic of Serbia has an integrated model of health care provision, with publicly owned providers and facilities contracted by the Republic's Health Insurance Fund. According to a WHO survey in 2000, there were large differences in access to and utilization of health services among the different population groups (residents, refugees and internally displaced people). In the Republic of Montenegro, the health system is organized as a single region and is predominantly based on public service provision.

## PRIMARY CARE

Primary health centres – one for each municipality – are the initial point of contact with the health system. They are usually

*EU25: current members of the EU. EU15: members of the EU*

group public practices, contracted by the republics' health insurance funds, employing GPs, specialists, paediatricians, dentists and nurses. In the Republic of Serbia, a primary health centre is formally one institution but may be located in various decentralized facilities; some units may be in dispensaries, schools or factories.

## SECONDARY AND TERTIARY CARE

The Republic of Serbia has 45 general hospitals and 57 specialized inpatient institutions for tertiary care. They are evenly distributed throughout the regions, with Belgrade considered a separate region. Along with the primary care facilities, hospitals are managed by health centres, which are complex regional institutions comprising at least one district hospital and several primary health centres.

In the Republic of Montenegro, there are seven general hospitals, three specialized hospitals and one clinical centre in Podgorica. The utilization of hospitals beds is relatively low, while the average length of stay is high.

## PUBLIC/PRIVATE MIX

Private polyclinics, dental offices and pharmacies are increasing in both republics. They are not integrated into the public health system or regulated, and do not have contracts with the public health insurance funds.



### Points to remember *service provision*

- The health centres in the Republic of Serbia that supervise primary, secondary and tertiary care facilities are designed to provide continuity and consistency between these different levels of service.
- The Roma population has low utilization of basic health services.

*before 1 May 2004. EU10: countries that joined the EU on 1 May 2004.*



Ukraine



# What resources are available?

## HEALTH PROFESSIONALS (per 100 000)

Physicians	268	<i>EU25: 343, EU15: 356, EU10: 278</i>
Dentists	47	<i>EU25: 62, EU15: 66, EU10: 43</i>
Nurses	603	<i>EU25: 779, EU15: 818, EU10: 642</i>
Pharmacists	24	<i>EU25: 78, EU15: 81, EU10: 60</i>
GPs	55	<i>EU25: 99, EU15: 102, EU10: 64</i>

## HOSPITALS

Hospitals per 100 000	0.4
<i>EU25: 3.2, EU15: 3.3, EU10: 2.8</i>	
Hospital beds per 100 000	599
<i>EU25: 611, EU15: 600, EU10: 661</i>	
Annual inpatient admissions per 100	9.3
<i>EU25: 18.5, EU15: 18.4, EU10: 19.5</i>	
Average length of stay (days)	12.1
<i>EU25: 9.5, EU15: 9.7, EU10: 8.7</i>	



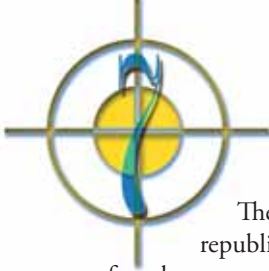
## PHARMACEUTICALS

In the Republic of Montenegro, there is a certain vacuum in the regulation of pharmaceuticals and all medicinal products. Pharmaceutical expenditures have grown rapidly as a portion of Health Insurance Fund spending since 2002, as a result of reductions in donated supplies and price increases due to procurement abroad, as well as the lack of a national positive list of drugs.

### Points to remember *resources for health*

- Newly appointed health facility managers in the Republic of Montenegro need to improve their knowledge and skills.
- Both republics try to ensure education and training of such managers.

*EU25: current members of the EU. EU15: members of the EU*

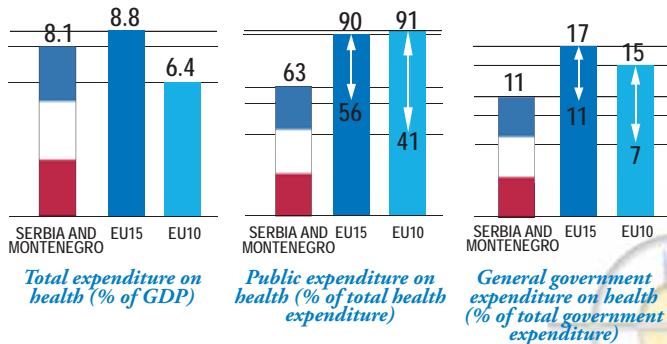


# Who pays for what?

The health systems are funded through republic-based social health insurance funds, out-of-pocket payments and international donations. In both republics, entitlement to benefits is based on contributions made by or on behalf of the population.

There is compulsory social health insurance. The health insurance funds are responsible for the collection and distribution of funds, and make contracts with providers directly. Employers and employees make equal monthly payroll tax contributions. The self-employed, pensioners and farmers are responsible for insuring themselves under different schemes, while the state budget of each republic transfers revenues to its health insurance fund to insure the unemployed and vulnerable groups. Frequently, however, there is a gap between the promised entitlements (including nominal co-payments) and the funds' available revenues. Informal payments, made directly to providers at the point of service, are therefore common.

## THE ECONOMIC PICTURE



before 1 May 2004. EU10: countries that joined the EU on 1 May 2004.



## POVERTY

In April 2005, the WB reclassified Serbia and Montenegro as having a lower-middle-income economy. Nevertheless, the macroeconomic situation is stabilizing, owing to strict fiscal policies and reforms.

There are large differences in poverty levels between regions and age groups. 11% of the population lives under the national poverty line: 800 000 people in the Republic of Serbia and 87 000 in the Republic of Montenegro. Small changes in average income and external shocks would produce large changes in the poverty rate. For instance, a 22% fall in real income would double the poverty rate in the Republic of Serbia. In the Republic of Montenegro, raising the poverty line by 20% would double the number of the poor.

### Points to remember

### *health financing*

- No services are explicitly excluded from the statutory health system and no basic package of services has been defined. This results in a gap between public revenue and available funds.
- The shortage of public funds has spurred the growth of private expenditure.
- Improving the official co-payment system is a challenge.
- The share of health spending in GDP is already higher than the average for lower-middle-income economies, implying that the scope for increased government spending on health is limited.
- In this context, addressing the rising costs of care and the efficiency of the health system is a priority.

Sources: 5, 8, 30, 35.



EU25: current members of the EU. EU15: members of the EU





## How has the country reformed its health care system?

The health systems of the two republics function separately. This is reflected in separate legislation, stewardship, financing and resource generation. Although interventions and reform efforts are similar, they need to be replicated in each republic. In both republics, laws are being prepared on food safety and state statistics.

### REPUBLIC OF MONTENEGRO

With a population of 620 000, it faces difficulties in developing capacities for governance, policy, planning and regulation in the health sector. The legislative basis is provided by the new Law on Health Protection and Health Insurance, embodying health reform objectives. The transition period, sanctions and war, however, have hampered the Republic's efforts to build adequate mechanisms for managing the health system. The Health Policy Strategy, adopted in 2004, identifies some issues of major concern: imbalance between determined rights and the financial capacity to ensure them, too much focus on curative care at the expense of disease prevention, and inadequate attention to local priorities and to information systems and data management. Key challenges are to change citizens' perceptions in order to help them overcome unrealistic expectations and take better responsibility for their health, to stabilize the health system and harmonize it with EU trends, and to focus on quality and efficiency. Legislation has addressed tobacco control, communicable diseases and pharmaceuticals; strategies were adopted for HIV/AIDS and mental health.

*before 1 May 2004. EU10: countries that joined the EU on 1 May 2004.*



Serbia and Montenegro



The former Yugoslav Republic of Macedonia



Turkey



Ukraine

## REPUBLIC OF SERBIA

It continues intensive legislative reform in all sectors. Laws have been adopted on pharmaceuticals, communicable diseases and sanitary inspection. Pending legislation addresses health care, health workers' organizations and patients' rights. The 2004 document, *Vision of the health care system*, was adopted, and others are underway on mental health, public health, HIV/AIDS strategy (2005), blood safety and tobacco control.

## KOSOVO (SERBIA AND MONTENEGRO)

In 1999, WHO and donor organizations coordinated the Public Health and Environmental Health Agenda.

### Points to remember

*health reforms*

- Medical professionals and experts from the two health ministries are willing to coordinate their work, despite having no formal institutional mechanism for it. The ministries exchange technical information intensively, thanks to WHO's efforts.
- The health reform debates in each republic seek to define a basic public sector benefits package. New insurance laws will include options for voluntary health insurance.



### TOBACCO CONTROL

What is one of the things the people have learned by doing?

There is a strong partnership for tobacco control, in which various international and national actors have joined to deal with the biggest health risk in the country: smoking. The

*EU25: current members of the EU. EU15: members of the EU*

cooperation was enhanced by the tobacco project of the South-eastern Europe Health Network, which was established within the Stability Pact initiative, as part of the WHO partnership with the CoE.

There are project managers in the two capitals and excellent collaboration has been achieved between the tobacco counterparts in the republics, who support each other and receive equal support from the WHO Country Office, Serbia and Montenegro. Both republics have succeeded in introducing legislation to limit tobacco advertising and smoking in public. Both ministries enjoy high visibility and public recognition owing to their political commitment to tobacco control, and their representatives are working on ratification of the WHO Framework Convention for Tobacco Control. Such a joint response is especially valuable in light of the fact that some of the biggest global tobacco companies entered the national cigarette market in the process of privatization. They now dominate the sector and the tobacco control campaign faces enormous challenges, because these companies are seen as serious investors.



## What has the Regional Office been doing in Serbia and Montenegro?

WHO set up an office for humanitarian assistance in 1992 that gradually shifted its focus to development by 2001. WHO support to the country shifted from direct humanitarian aid to developmental assistance – policy advice and counselling on how to strengthen the country's health systems – working in parallel

*before 1 May 2004. EU10: countries that joined the EU on 1 May 2004.*



Serbia and Montenegro



The former Yugoslav Republic of Macedonia



Turkey



Ukraine

with the health ministries as part of the devolution of authority from the federal to the republic level. WHO still assists in coordinating international health aid. The mandate of the WHO Country Office, Serbia and Montenegro changed into that of a unified office for the whole country.

The Regional Office's core principle has been equal representation and equal benefit in its support for the entire country. In 2004–2005, cooperation focused on:

- developing national databases of health indicators;
- regulating pharmaceuticals;
- making a national action plan on tobacco control;
- updating legislation on communicable disease control, mental health and food safety.

Some of the priorities of Regional Office collaboration with the country in 2006–2007 are:

- building capacity and training in rational use of medicines;
- improving the coordination, integration and harmonization of health data;
- improving the quality of health systems, with a focus on blood safety;
- preparing a national framework for work on noncommunicable diseases, tobacco control, mental health, injuries and violence;
- strengthening surveillance and response systems for communicable diseases;
- fostering environmental safety.

## OTHER SOURCES OF INFORMATION ON SERBIA AND MONTENEGRO

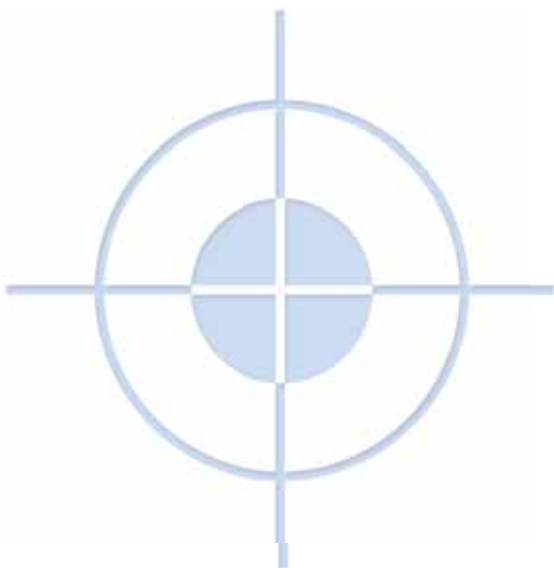
Ministry of Health Republic of Serbia

(<http://www.zdravlje.sr.gov.yu/default.asp?lang=2&poe=30>)

Ministry of Health Republic of Montenegro

(<http://www.vlada.cg.yu/eng/minzdr>)

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Serbia and  
Montenegro



The former  
Yugoslav Republic  
of Macedonia



Turkey



Ukraine

# UKRAINE



# УКРАЇНА

## AREA (km<sup>2</sup>)

603 700

About the size of Spain and Portugal

*15% of the EU25 area*

*EU25: 3 970 000, EU15: 3 200 000,*

*EU10: 738 000*

## POPULATION

48 050 000

About equal to Spain and Portugal's combined

*10.5% of the EU25 population*

*EU25: 455 532 896, EU15: 380 962 720,*

*EU10: 74 570 192*

*EU25: current members of the EU. EU15: members of the EU*

THE PEOPLE	Ukrainian 73%, Russian 22%
LANGUAGES	Ukrainian, Russian, Romanian, Polish, Hungarian
FORM OF GOVERNMENT	Parliamentary republic: unicameral Parliament ( <i>Verkhovna rada</i> )
RELIGIONS	Ukrainian Orthodox, Ukrainian Autocephalous Orthodox, Ukrainian
INDEPENDENCE	1991
GDP PER CAPITA	€851 = <b>4.2% of the EU25 average</b> <b>EU25: €20 400, EU15: €22 750, EU10: €5 530</b> In purchasing power parities: €4 870 = <b>20% of the EU25 average (€24 480)</b>
REGIONS	24 regions ( <i>oblasts</i> with 490 districts – <i>rayons</i> ), 2 municipalities with <i>oblast</i> status (Kiev and Sevastopol), Autonomous Republic of Crimea
CURRENCY	hryvna: 1 hryvna = €0.16, €1 = 6.33 hryvna
HUMAN DEVELOPMENT INDEX	0.78
UNEMPLOYMENT RATE	9.1% <b>EU25: 9%, EU15: 8, EU10: 14%</b>
MEMBER OF	CIS, CoE, IMF, OSCE, WB, UN (applying for WTO membership)

Sources: 1–6, 17.

before 1 May 2004. EU10: countries that joined the EU on 1 May 2004.

# HEALTH

# ЗДОРОВ'Я



# THE 10 HEALTH QUESTIONS

## What are the demographic essentials on the Ukrainians?

### POPULATION PROFILE

Gender ratio 1.4 females per male

Urban 67% *EU25: 77%, EU15: 79%, EU10: 65%*

Age structure: 0–14 years 16%

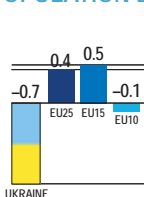
*EU25: 17%, EU15: 17%, EU10: 17%*

≥ 65 years 15%

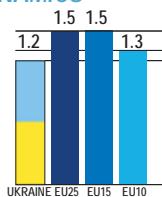
*EU25: 16%, EU15: 17%, EU10: 14%*

Dependency ratio 45 *EU25: 49, EU15: 50, EU10: 47*

### POPULATION DYNAMICS



*Annual growth rate (%)*

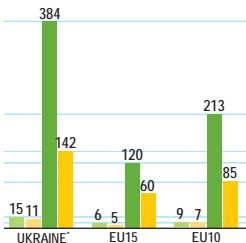


*Fertility rate (children born per woman)*



*Birth rate (live births per 1000 population)*

### PROBABILITY OF DYING (per 1000 population)



- *Under 5 years old, males*
- *Under 5 years old, females*
- *15–60 years old, males*
- *15–60 years old, females*

*\* WHO estimate: 23 per 1000 for males and 18 for females. EU25: current members of the EU. EU15: members of the EU*



## LIFE EXPECTANCY AT BIRTH (years)

Total population:	68	<i>EU25: 78, EU15: 79, EU10: 74</i>
Males:	65	<i>EU25: 75, EU15: 76, EU10: 70</i>
Females:	74	<i>EU25: 81, EU15: 82, EU10: 78</i>

## HEALTHY LIFE EXPECTANCY (HALE)

	HALE (years)					Total life expectancy lost (%)	
	At birth			At age 60			
	Total	Males	Females	Males	Females	Males	Females
Ukraine	59	55	64	10	14	11	13
EU15	72	68	72	15	18	9	11
EU10	66	61	67	12	15	12	14

### Points to remember *demographic trends*

Over the past decade, there have been:

- a sharp drop in population growth, to a negative rate;
- a fertility rate below population replacement;
- for the WHO European Region, very low male life expectancy at birth;
- a very high dependency ratio, making most social and health programmes financially unsustainable and posing a potential threat to the whole pension system.

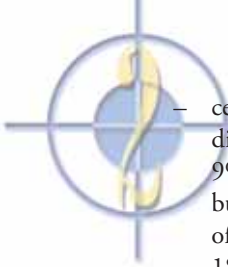
Sources: 2, 8, 9, 30.

## What do the Ukrainians suffer from?

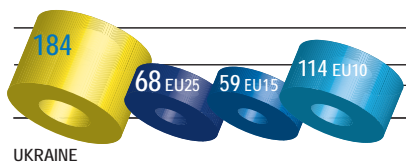
### CARDIOVASCULAR DISEASES

- Cardiovascular diseases are the leading cause of death, accounting for 60% of all deaths and 30% of the disease burden. Within this group, the two major killers are:
  - ischaemic heart disease (664 new cases per 100 000 per year), causing 18% of the disease burden and 43% of all deaths

before 1 May 2004. EU10: countries that joined the EU on 1 May 2004.

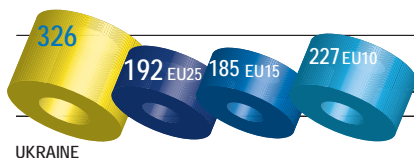


— cerebrovascular diseases, causing 9% of the disease burden and 13% of all deaths: 184 per 100 000.



## CANCER/MALIGNANT NEOPLASMS

- Cancer is the second leading cause of death, accounting for 12% of the total: 326 deaths per 100 000.
- There are 326 new cases of cancer per 100 000 per year.
- Cancer prevalence is 1.7%.
- There are 18.4 new cases of cervical cancer per 100 000, much higher than the EU25 rate. **EU25: 3.2**
- There are 59 new cases of breast cancer and 41 new cases of lung cancer per 100 000.



## DIABETES

- Diabetes prevalence was 2% in 2003, with 5 deaths per 100 000.

## MENTAL HEALTH

- Neuropsychiatric disorders account for 14% of the total disease burden and 1% of all deaths. **EU25: 4%**
- Suicide or self-inflicted injuries cause 24 deaths per 100 000. **EU25: 12, EU15: 10, EU10: 18**
- There are 628 reported cases of mental disorders per 100 000. **EU10: 777**

## UNINTENTIONAL AND INTENTIONAL INJURIES

- Injuries are responsible for 146 deaths per 100 000. **EU25: 45, EU15: 39, EU10: 73**

*EU25: current members of the EU. EU15: members of the EU*

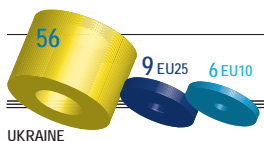
- Road traffic accidents injure 89 people per 100 000.  
*EU25: 297, EU15: 319, EU10: 181*

## RESPIRATORY DISEASES

- Respiratory diseases cause 4% of both the disease burden and all deaths: 54 deaths per 100 000.  
*EU25: 47, EU15: 48, EU10: 40*

## INFECTIOUS AND PARASITIC DISEASES

- Infectious diseases cause 2% of all deaths, and 5% of the total disease burden.
- There are 78 new cases of tuberculosis per 100 000.  
*EU25: 13, EU15: 11, EU10: 26*
- There are 21 new cases of HIV infection per 100 000.
- The rates of sexually transmitted infections (per 100 000 per year) are high compared to EU figures:
  - 49 new cases of syphilis  
*EU25: 3, EU10: 5*
  - 56 new cases of gonococcal infection.



## CHILD AND ADOLESCENT HEALTH

- The infant mortality rate is 9.5 per 1000 live births (WHO and UNICEF estimate: 16). *EU25: 4.6, EU15: 5, EU10: 7*
- The maternal mortality rate is 19 per 100 000 live births (WHO estimate: 38 in 2000).
- Immunization coverage is 97%. *EU25: 95%, EU15: 95%, EU10: 96%*
- Diarrhoea kills 3 children aged under 5 years per 100 000.
- A national school-based survey showed that 5% of boys and 3% of girls aged 13 years are overweight.



before 1 May 2004. EU10: countries that joined the EU on 1 May 2004.

## TOP 10 CAUSES OF DEATH IN UKRAINE

Cause	Total deaths (%)
1. Ischaemic heart disease	43
2. Cerebrovascular disease	16
3. Chronic obstructive pulmonary disease	3
4. Tracheal, bronchial, lung cancer	2
5. Self-inflicted injuries	2
6. Poisoning	2
7. Stomach cancer	2
8. Cirrhosis of the liver	2
9. Colon and rectal cancer	2
10. HIV/AIDS	2

*Note. These statistics are based on WHO estimates, not on official mortality statistics.*

## DISEASE BURDEN IN UKRAINE AND THE EU

Cause	Share of disease burden (%)		
	Ukraine	EU15	EU10
Cardiovascular diseases	30	17	22
Neuropsychiatric disorders	14	27	21
Cancer/Malignant neoplasms	10	17	16
Unintentional injuries	11	6	9
Non-infectious respiratory diseases	4	7	3
Infectious and parasitic diseases	5	2	2
Respiratory infections	1	1	1
Perinatal conditions	1	1	1
Intentional injuries	5	2	3
Diabetes	1	2	2
Sense organ disorders	4	5	5
<b>Total communicable diseases</b>	<b>9</b>	<b>5</b>	<b>4</b>
<b>Total noncommunicable diseases</b>	<b>74</b>	<b>87</b>	<b>83</b>
<b>Total injuries</b>	<b>16</b>	<b>8</b>	<b>12</b>

*EU25: current members of the EU. EU15: members of the EU*



## Points to remember

*health status*

- Over the past 15 years, health status has changed rapidly, with periods of improvement followed by periods of drastic deterioration, as a result of the socioeconomic crisis.
- Over the past five years, deaths from cardiovascular diseases and related problems have increased by 40%.
- Maternal mortality has declined by half since the 1980s, but remains a concern.
- Ukraine has one of the fastest-growing HIV/AIDS epidemics in the WHO European Region.

Sources: 2, 10, 22.



## Where do the risks lie?

### SMOKING

- The prevalence of smoking in people aged 18–29 years is 43%.
- Smoking causes 13% of the disease burden.
- The prevalence of smoking among 13-year-olds is 9% for boys and 4% for girls, according to a school-based survey.

### ALCOHOL CONSUMPTION

- Total reported alcohol consumption 4.8 litres per person per year. **EU25: 9.4, EU15: 9.4, EU10: 8.9**
- There are 22 cases of alcohol psychosis per 100 000 per year.
- Alcohol causes 12% of the disease burden.
- Among 15-year-olds, 19% of girls and 29% of boys drink alcohol weekly, according to a school-based survey.

### ILLEGAL DRUG USE

- Cannabis is the most commonly used illegal drug, with a prevalence of 3.6%. Annual prevalence of abuse is 0.8% for before 1 May 2004. **EU10: countries that joined the EU on 1 May 2004.**

opiates, 0.2% for amphetamines, and 0.1% for both ecstasy and cocaine.

- Illicit drug use causes 3% of the total disease burden.
- The number of first admissions to drug treatment centres was 133 394 in 2003.
- A school-based survey of 15-year-olds showed that 8% of girls and 21% of boys had used cannabis during the previous year.

## OBESITY

- Obesity (BMI  $\geq 30$ ) causes 9% of the disease burden, and physical inactivity, 6%.
- 7% of men and 19% of women are obese.
- A school-based survey of 13-year-olds showed that 5% of boys and 3% of girls are overweight.

## FOODBORNE INFECTIONS

- There are 18 new cases of *Salmonella* infection reported per 100 000 per year. **EU25: 44, EU15: 37, EU10: 99**

## OCCUPATIONAL HEALTH

- There are 22 new cases of occupation-related diseases per 100 000 per year.
- Occupational injuries cause 2.6 deaths per 100 000. **EU25: 1.4, EU15: 1.4, EU10: 1.6**
- Occupational carcinogens cause 0.4% of the total disease burden.



## AIR QUALITY

- Urban outdoor air pollution causes 0.5% of the disease burden.
- SO<sub>2</sub> emissions were 47 kg per capita in 2000. **EU25: 18, EU15: 14, EU10: 38**

Sources: 2, 10–12, 22.

EU25: current members of the EU. EU15: members of the EU



# Who's who in the Ukrainian public health sector?

## PUBLIC ADMINISTRATION

Ministry of Health of Ukraine

State Sanitary and Epidemiological Service

## INSTITUTIONS UNDER THE HEALTH MINISTRY

Directorate of Socially Dangerous Diseases and AIDS

## How are services provided?



The 1996 constitution stipulates that ensuring health care for the whole population is one of the key functions of the state. Ukraine still retains an integrated health system model. The health institutions at the national and community levels are the owners and funders. The health care system is completely supervised by the state. Medical and preventive services are provided by publicly owned institutions.

Since 2000, national legislation has given priority to primary health care as family medicine, but this is still at an initial stage of development. Primary care is provided in many settings: outpatient clinics for adults and children, women's counselling centres, village primary care centres. The concept of primary care includes a range of options; for instance, an outpatient clinic does provide primary care only. The qualification of GP at an outpatient clinic does not allow for a response to emerging health problems within primary medical care. Patients may see specialists independently, without referral from their GPs.

*before 1 May 2004. EU10: countries that joined the EU on 1 May 2004.*

The salaries of GPs at outpatient clinics do not depend on the scope and quality of their work. As a result, in 66% of cases the level of service does not match the patient's condition and case history, while in 43% of cases medical services are delivered at a higher level than needed.

### Points to remember *service provision*

- The introduction of primary health care schemes will require education of family doctors, administrative and funding mechanisms, information plans, etc.
- The health system is regulated at the central and local levels.



## What resources are available?

### HEALTH PROFESSIONALS (per 100 000)

Physicians	300	<i>EU25: 343, EU15: 356, EU10: 278</i>
Dentists	41	<i>EU25: 62, EU15: 66, EU10: 43</i>
Nurses	766	<i>EU25: 779, EU15: 818, EU10: 642</i>
GPs	29	<i>EU25: 99, EU15: 102, EU10: 64</i>

### HOSPITALS

Hospitals per 100 000	5.7
	<i>EU25: 3.2, EU15: 3.3, EU10: 2.8</i>
Hospital beds per 100 000	881
	<i>EU25: 611, EU15: 600, EU10: 661</i>

*EU25: current members of the EU. EU15: members of the EU*



Annual inpatient admissions per 100 20.5

*EU25: 18.5, EU15: 18.4, EU10: 19.5*

Average length of stay (days) 14.2


*EU25: 9.5, EU15: 9.7, EU10: 8.7*



There are too many hospitals and hospital beds, and hospitals are overspecialized. At the various levels of the system, hospitals are not well differentiated in functions, so there are parallel systems of treatment and service. In specialized medical institutions, inpatient treatment is preferred and stays are extended.

### PHARMACEUTICALS

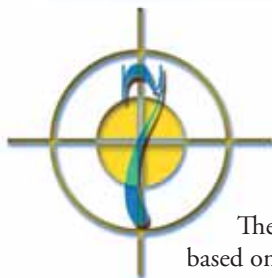
Ukraine has a very well-developed pharmaceutical industry, but its excessive capacity was counterbalanced by a lack of quality assurance. The recently established State Drug Quality Service is to address this issue.



#### Points to remember *resources for health*

- Planning of hospital beds and personnel has not changed since the 1980s.
- Budget allocation for state-run medical facilities needs to shift its aims more towards ensuring higher-quality services
- The human resources for health need new skills and knowledge. Their wages remain low.

*Sources: 2, 14.*



## Who pays for what?

The government system of health financing, based on general taxation, has remained unchanged since the 1980s. The population is entitled to universal free coverage. Different levels of government remain the official

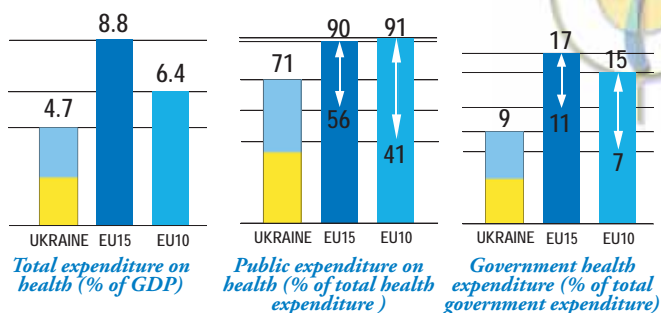
*before 1 May 2004. EU10: countries that joined the EU on 1 May 2004.*

source of health sector funding, accumulating and distributing funds, owning health facilities and managing the provision of services. This contributes to some duplication: for instance, both the municipal and the regional governments can have their own maternity hospitals, children's hospitals, etc. Public funding is further fragmented because, apart from the Ministry of Health, other ministries run parallel health systems.

The lack of government funds leads to substituting paid services for free medical care, and the boundaries between free and paid medical care tend to become somewhat blurred. Although government spending on health (as share of GDP) is among the highest among the CIS, there is still an imbalance between the broad package of benefits to which citizens are entitled and the available public funding.

Health facilities are financed depending on their capacity (number of beds or visits). A broad network of health facilities forms a high-capacity public health infrastructure. The existing financing mechanisms encourage its expansion, while budgetary financing is decreasing, bringing the system's accessibility and affordability into question.

## THE ECONOMIC PICTURE



### Out-of-pocket expenditure 96 (% of total private health spending)

EU25: current members of the EU. EU15: members of the EU

**Population below the national poverty line** 32% (1995); 46% live on less than US\$ 2 per day, and 76% on less than US\$ 4 per day.

### Points to remember *health financing*

- Spending on health services is one of the biggest items on the state budget; the system is deeply in debt.
- Financing for health care comes from state and local budgets.
- New legislation on compulsory social health insurance has not yet resulted in full implementation.
- The key issue is the duplication of financial arrangements, especially between the regions and the capital.
- A single national funding source might help resolve the problem of excessive infrastructure and eliminate the traditionally hierarchical relationship between health facilities and local governments.
- The structural reforms in health care are yet to be taken up after years of delay and a very slow pace.

*Sources: 2, 8.*



## How have the Ukrainians reformed their health care system?

A Health for the Nation programme was adopted for 2002–2011; while it has a number of valuable assets and goals, funds still need to be allocated for its implementation. The new government is developing schemes for structural reforms of the health system. There is sufficient legal basis for changing the approach to planning and regulating public health.

Efforts to optimize structural efficiency and to improve quality have included:

- reforming higher medical education;

*before 1 May 2004. EU10: countries that joined the EU on 1 May 2004.*



- establishing a primary care system based on family medicine (2000);
- implementing the plans to shift the focus to outpatient service delivery;
- developing standards for medical technology;
- initiating accreditation for medical institutions (1998);
- establishing the family planning service.

### Points to remember

### *health reforms*

- Ukraine faces a health care crisis accelerated by poverty. The solution is not more money, because government expenditure on health is already far higher than the country can afford. The main challenge is to use the available resources more efficiently.
- Major structural reforms need to be supported by political commitment.
- The contradiction between guaranteed, universal and free-of-charge health care and limited public financial resources needs to be addressed.
- Public health reforms need to be sustainable. Respect for equity and solidarity should be maintained.
- There is scope for greater involvement in health care reform by the various stakeholder groups: health professionals, health sector managers, pharmaceutical companies, employers, etc.
- Economic incentives should be found to achieve efficiency gains in the health care system.

## What is one of the things the Ukrainians have learned by doing?

### TACKLING HIV/AIDS

In January 2003, Ukraine applied to the Global Fund for AIDS, Tuberculosis and Malaria. Three grants worth a total of

*EU25: current members of the EU. EU15: members of the EU*

US\$ 25 million over two years were approved, with a possible continuation for the next three years and a total budget US\$ 92 million. The three principal recipients of the grants were the Ministry of Health (for a treatment and care component), UNDP (for a vulnerable groups component) and an NGO, the Ukrainian Fund to Fight HIV Infection and AIDS (for information activities). In January 2004, however, the Global Fund decided to withdraw support of its grant temporarily. The main concerns were slow implementation and certain degree of mismanagement, although the withdrawal was clearly stated not to be related to embezzlement or theft. On 24 February 2004, a portion of the grant was re-launched by designating a new sole principal recipient – the NGO International HIV/AIDS Alliance, which undertook the task of administering US\$ 15 million over 12 months. After this period, Ukraine had to reapply for funding. The key areas of intervention were to expand the number of people receiving highly active antiretroviral treatment from 137 to 2600 by the end of 2005 and to improve the coordination of partners.

The implementation of the project faced many challenges from the beginning. The procurement of antiretroviral drugs took almost six months; the training of health care providers was not completed; the procurement of laboratory equipment was not synchronized with the treatment scale-up; the collaboration between the government and NGOs was not very strong; substitution therapy was not available to injecting drug users; and monitoring and evaluation were concerns. Despite these numerous challenges, the implementation of phase 1 of the project brought together many partners and, by August 2005 (in 11 months of scaling up), the number of patients on highly active antiretroviral treatment was over 2000.

During the spring of 2005, a proposal for phase 2 of the project was developed. The WHO Regional Office for Europe actively participated in developing the proposal and provided technical

*before 1 May 2004. EU10: countries that joined the EU on 1 May 2004.*

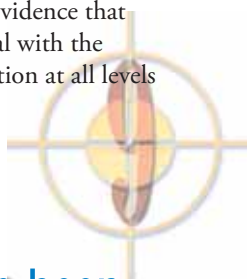


assistance. Ultimately, the proposal was endorsed by all partners and later approved by the board of the Global Fund. Ukraine will receive continued funding of up to US\$ 67 million for 2005 to 2008, which will allow the country to continue to scale up treatment and prevention interventions to mitigate the HIV/AIDS epidemic.

The process of consolidating partners' efforts and developing the proposal in a transparent way by employing the capacities and technical expertise of all partners provides strong evidence that the country can quickly increase its capacity to deal with the epidemic, and has expanded a culture of collaboration at all levels among key stakeholders in Ukraine and abroad.



## What has the Regional Office been doing in Ukraine?



The WHO Country Office, Ukraine and a WHO Technical Adviser on Antiretrovirals were established in Kiev in 1994. WHO's work with the country for the period until 2005 included:

- training national experts in assessment of the performance of the health system and health care management;
- improving the national drug legislation;
- developing a model for implementing the DOTS strategy specifically for local conditions and pilot-testing it;
- revising the treatment guidelines for sexually transmitted infections and harmonizing them with European standards;
- supporting the Ministry of Health in developing a comprehensive HIV treatment plan;

*EU25: current members of the EU. EU15: members of the EU*

- certifying the country as polio free;
- developing a national tobacco control plan.

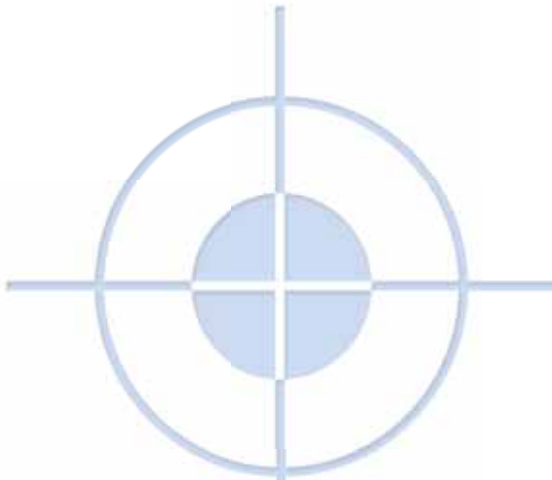
In 2006–2007, collaboration will focus on:

- development of family medicine with emphasis on service quality;
- pharmaceuticals;
- blood safety;
- noncommunicable diseases;
- communicable diseases (with an emphasis on HIV/AIDS and tuberculosis, and communicable disease surveillance);
- immunization and vaccine development;
- reproductive health, the Making Pregnancy Safer initiative, and child and adolescent health.

## OTHER INFORMATION ON UKRAINE

Ministry of Health of Ukraine

(<http://www.moz.gov.ua/en/main/siterubr>)



*before 1 May 2004. EU10: countries that joined the EU on 1 May 2004.*

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Albania



Belarus



Bosnia and Herzegovina



Bulgaria



Croatia



Republic of Moldova



Romania



Russian Federation



Serbia and Montenegro



The former Yugoslav Republic of Macedonia



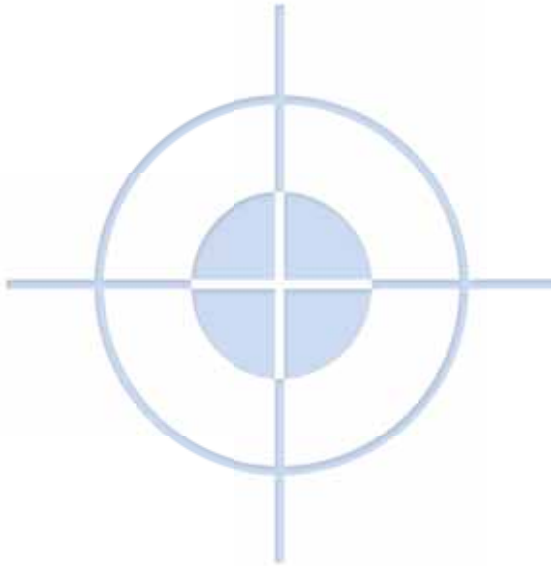
Turkey



Ukraine

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Albania



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Serbia and Montenegro



The former Yugoslav Republic of Macedonia



Turkey



Ukraine

## GLOSSARY

### **Annual population growth rate (%)**

Indicator used in population studies to assess average change in the size of a population from one year to the next.

### **Burden of disease**

Estimates of the burden of disease are based on mortality and morbidity data by age, gender and region, summarized to the single measures healthy life-years and disability-adjusted life-years.

### **Dependency ratio**

An indicator used in population studies to measure the portion of the population economically dependent on the active age group, it is calculated as the sum of those aged 0–14 years and those aged 60 or 65 years and over, depending on the working-age limit considered, divided by the number of people aged 15 to 59 or 64 years, respectively. For the purpose of the *World health report 2005* (the source used in this book), it is calculated as the sum of those aged 0–14 years and 65 years and over, divided by the number of people aged 15–64.

### **Disability-adjusted life-years**

A summary measure combining the impact of illness, disability and mortality on population health.

### **GDP per capita**

Gross domestic product (GDP) per capita is the market value of the total final output of goods and services produced in a country over a specific period per person. It is expressed in international dollars, a common currency unit that takes account of differences in the relative purchasing power of currencies, but is given in euro (€) equivalents in this book. Figures expressed

in international dollars are calculated using purchasing power parities, which are conversion rates accounting for differences in price levels among countries.

### General government expenditure on health (% of total government expenditure)

Public health expenditure is the sum of outlays on health from taxes, social security contributions and external resources (without double-counting government transfers to social security and extra-budgetary funds). General government expenditure corresponds to the consolidated outlays of all levels of government, territorial authorities (central/federal government, provincial/regional/state/district authorities, municipal/local governments), social security institutions and extrabudgetary funds, including capital outlays.

### Healthy life expectancy (years), total population

Healthy life expectancy (HALE) is based on life expectancy adjusted for time spent in poor health. It measures the equivalent number of years in full health that a person (a newborn or 60-year-old) can expect to live based on the current mortality rates and prevalence distribution of health states in the population.

### Human development index

The human development index is a summary composite index that measures a country's average achievements in three basic aspects of human development: longevity, knowledge and a decent standard of living. Longevity is measured by life expectancy at birth; knowledge is measured by a combination of the adult literacy rate and the combined primary, secondary, and tertiary gross enrolment ratios; and standard of living, by GDP per capita.



Albania



Belarus



Bosnia and Herzegovina



Bulgaria



Croatia



Republic of Moldova



Romania



Russian Federation



Serbia and Montenegro



The former Yugoslav Republic of Macedonia



Turkey



Ukraine

### **Infant mortality**

The number of deaths per 1000 children under 1 year old in the population.

### **Life expectancy**

The average number of years a person can expect to live if he or she embodies the current mortality rate of the population at each age.

### **Obesity**

Obesity is the accumulation of adipose tissue to an extent that health is impaired. It is usually determined using the body mass index (BMI), the standard of choice for many health professionals, based on a weight-to-height ratio. Overweight is defined as a BMI of 25–29 kg/m<sup>2</sup>. Obesity is defined as a BMI of  $\geq 30$  kg/m<sup>2</sup>. Obesity correlates strongly with co-morbid conditions and mortality. The current obesity pandemic reflects profound social changes over the last 20–30 years that have promoted a sedentary lifestyle and the consumption of a high-fat, energy-dense diet.

### **Percentage of total life expectancy lost**

Expressed as a percentage of total life expectancy, this represents the proportion of total life expectancy lost through states of less-than-full health.

### **Public expenditure on health**

Public health expenditure is the sum of outlays on health from taxes, social security contributions and external resources (without double-counting government transfers to social security and extrabudgetary funds).

### **Standardized death rate**

Number of deaths (usually per 100 000 population) adjusted to the age structure of a standard European population.

### Total expenditure on health (% of GDP)

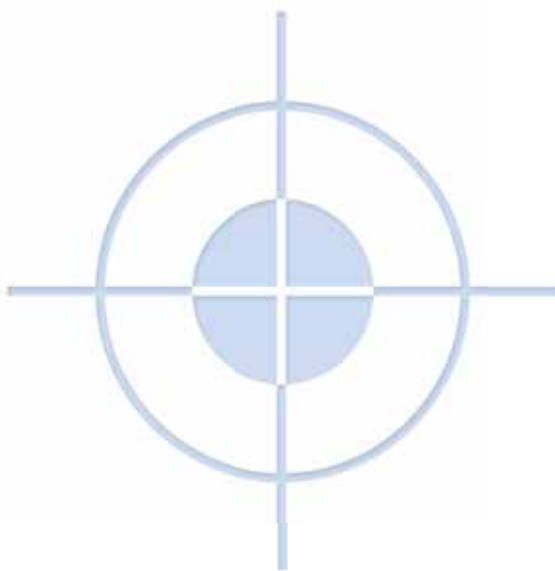
Total health expenditure is the sum of public and private expenditure on health.

### Total fertility rate

The average number of children a hypothetical cohort of women would have at the end of their reproductive years if they were constantly subject to the fertility rates of a given period and did not die, expressed as children per woman.

### Total unemployment rate

Unemployed people as a share of the total active population, as a percentage of the total active population aged 15–64 years.



Albania



Belarus



Bosnia and Herzegovina



Bulgaria



Croatia



Republic of Moldova



Romania



Russian Federation



Serbia and Montenegro



The former Yugoslav Republic of Macedonia

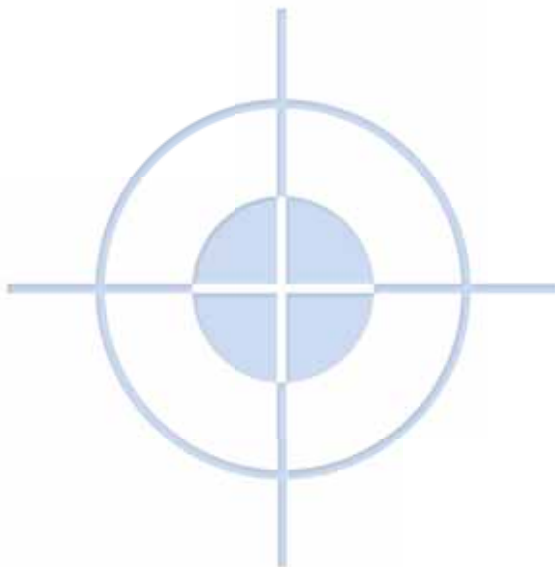


Turkey



Ukraine

## NOTES







Albania



Belarus



Bosnia and  
Herzegovina



Bulgaria



Croatia



Republic of  
Moldova



Romania



Russian  
Federation



Serbia and  
Montenegro



The former  
Yugoslav Republic  
of Macedonia



Turkey



Ukraine

Since 1 May 2004, the European Union (EU) has had 25 members, and 12 new neighbours. The EU's members differ in their populations' health status and their health systems' patterns of development. How does each of the neighbouring countries compare in terms of health to the EU – its members before and after May 2004 and the 25 countries as a whole?

This book offers a quick and easy way to grasp the essential features of health and health systems in the EU's neighbours. Each chapter provides a concise overview of key health indicators in 1 of the 12, comparing them to 3 averages for the EU: for its 25 current members the 15 members before May 2004 and the 10 new members. Each chapter also summarizes the key features of the country's health system and describes the results of more than a decade of health system reform.

This book is not an in-depth study, but an easy guide to the knowledge available and an accurate entry point to understanding health in the EU's 12 new neighbours.

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ISBN 92 890 1381 8  
(NLM Classification : WA 900)



# TURKEY



# TURKIYE

**AREA (km<sup>2</sup>)**

779 452

Twice the size of the Netherlands and Germany

*20% of the EU25 area*

*EU25: 3 970 000, EU15: 3 200 000,*

*EU10: 738 000*

*EU25: current members of the EU. EU15: members of the EU*

<b>POPULATION</b>	71 700 000 86% of Germany's population <i>16% of the EU25 population</i> <i>EU25: 455 532 896, EU15: 380 962 720,</i> <i>EU10: 74 570 192</i>
<b>LANGUAGE</b>	Turkish
<b>FORM OF GOVERNMENT</b>	Parliamentary democracy, with Grand National Assembly
<b>RELIGION</b>	Muslim
<b>INDEPENDENCE</b>	1923
<b>GDP PER CAPITA</b>	€2 638 = <i>9.5% of the EU25 average</i> <i>EU25: €20 400, EU15: €22 750,</i> <i>EU10: €5 530</i> In purchasing power parities: €6 650 = <i>29% of the EU25 average (€24 480)</i>
<b>REGIONS</b>	81 provinces ( <i>İller</i> )
<b>CURRENCY</b>	lira: 1 lira = €0.56, €1 = 1.67 liras
<b>HUMAN DEVELOPMENT INDEX</b>	0.751
<b>UNEMPLOYMENT RATE</b>	9.2% <i>EU25: 9%, EU15: 8%, EU10: 14%</i>
<b>MEMBER OF</b>	CoE, IMF, NATO, OSCE, OECD, WTO, WB, UN

Sources: 1-7, 16, 17.

before 1 May 2004. EU10: countries that joined the EU on 1 May 2004.

# HEALTH

# SAĞLIK



# THE 10 HEALTH QUESTIONS

## What are the demographic essentials on the Turks?

### POPULATION PROFILE

Gender ratio 1 female per male

Urban 66% *EU25: 77%, EU15: 79%, EU10: 65%*

Age structure: 0–14 years 37%

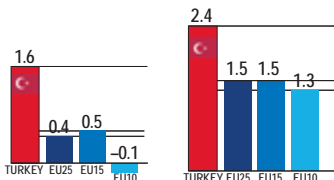
*EU25: 17%, EU15: 17%, EU10: 17%*

≥ 65 years 5%

*EU25: 16%, EU15: 17%, EU10: 14%*

Dependency ratio 56 *EU25: 49, EU15: 50, EU10: 47*

### POPULATION DYNAMICS

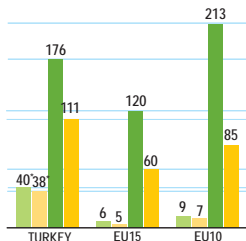


*Annual growth rate (%)*

*Fertility rate (children born per woman)*

*Birth rate (live births per 1000 population)*

### PROBABILITY OF DYING (per 1000 population)



- *Under 5 years old, males*
- *Under 5 years old, females*
- *15–60 years old, males*
- *15–60 years old, females*

\* WHO estimates.

*EU25: current members of the EU. EU15: members of the EU*

## LIFE EXPECTANCY AT BIRTH (years)

Total population:	70	<i>EU25: 78, EU15: 79, EU10: 74</i>
Males:	68	<i>EU25: 75, EU15: 76, EU10: 70</i>
Females:	73	<i>EU25: 81, EU15: 82, EU10: 78</i>

## HEALTHY LIFE EXPECTANCY (HALE)

	HALE (years)					Total life expectancy lost (%)	
	At birth			At age 60			
	Total	Males	Females	Males	Females	Males	Females
Turkey	62	61	63	13	14	10	13
EU15	72	68	72	15	18	9	11
EU10	66	61	67	12	15	12	14

### Points to remember *demographic trends*

Over the past decade, there have been:

- a positive population growth rate
- a fertility rate above population replacement
- longer HALE for men and women.

Sources: 2, 5, 8, 30.

## What do the Turks suffer from?

### CARDIOVASCULAR DISEASES

- Cardiovascular diseases are the leading cause of death, accounting for 13% of all hospital admissions and 18% of the disease burden.
- Within this group, the two major killers are:

*before 1 May 2004. EU10: countries that joined the EU on 1 May 2004.*



- ischaemic heart disease, which causes 3% of hospital admissions, 7% of the disease burden and 14% of all deaths;
- cerebrovascular disease, which causes 7.4% of the disease burden and 14.4% of all deaths.
- High blood pressure accounts for 21% of all deaths: 17% in men, 25% in women.

### CANCER/MALIGNANT NEOPLASMS

- Cancer causes 6% of the total disease burden, the lowest level in the WHO European Region, and 5% of hospital admissions.
- Lung cancer causes 2.3% of all deaths.

### DIABETES

- Diabetes prevalence is 2%, and it causes 1% of the disease burden.

### MENTAL HEALTH

- Neuropsychiatric disorders cause 18% of the disease burden.
- 2% of the population lives with a mental disorder.

### UNINTENTIONAL AND INTENTIONAL INJURIES

- Road traffic accidents injure 95 people per 100 000 per year.
- Injuries and poisoning cause 5% of hospital admissions.



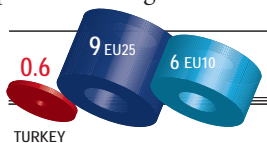
### RESPIRATORY DISEASES

- Respiratory diseases account for 12% of all hospital admissions.

*EU25: current members of the EU. EU15: members of the EU*

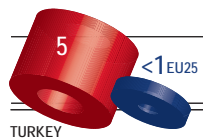
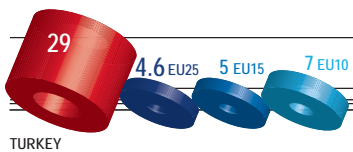
## INFECTIOUS AND PARASITIC DISEASES

- Infectious diseases cause 9% of the disease burden, the highest level in the Region.
- Infectious and parasitic diseases cause 4% of all hospital admissions.
- There are 0.3 new cases of HIV infection per 100 000. One third are in people aged 25–34 years, and two thirds are in males.
- The rates of sexually transmitted infections (per 100 000 per year) are low compared to EU figures:
  - 5 new cases of syphilis  
*EU25: 3, EU10: 5*
  - 0.6 new cases of gonococcal infection.
- Diarrhoeal diseases cause 1.6% of all deaths.



## CHILD AND ADOLESCENT HEALTH

- The infant mortality rate is 29 per 1000 live births (WHO and UNICEF estimate: 36).
- Immunization coverage is 85%. *EU25: 95%, EU15: 95%, EU10: 96%*
- Diarrhoeal diseases cause 0.3 deaths per 100 000 children aged under 5.
- Perinatal conditions cause almost 5% of all deaths in Turkey, much more than in the EU25.
- Infant and child mortality are twice as high in the east than in the west of the country and in rural than in urban areas.



before 1 May 2004. EU10: countries that joined the EU on 1 May 2004.



## TOP 10 CAUSES OF DEATH IN TURKEY

Cause	Total deaths (%)
1. Ischaemic heart disease	24
2. Cerebrovascular disease	14
3. Perinatal conditions	5
4. Chronic obstructive pulmonary disease	4
5. Lower respiratory diseases	3
6. Hypertensive heart disease	3
7. Tracheal, bronchial, lung cancer	2
8. Meningitis	2
9. Diarrhoeal diseases	2
10. Congenital abnormalities	2

## DISEASE BURDEN IN TURKEY AND THE EU

Cause	Share of disease burden (%)		
	Turkey	EU15	EU10
Cardiovascular diseases	18	17	22
Neuropsychiatric disorders	18	27	21
Cancer/Malignant neoplasms	6	17	16
Unintentional injuries	9	6	9
Non-infectious respiratory diseases	6	7	3
Infectious and parasitic diseases	9	2	2
Respiratory infections	4	1	1
Perinatal conditions	7	1	1
Intentional injuries	2	2	3
Diabetes	1	2	2
Sense organ disorders	3	5	5
<b>Total communicable diseases</b>	<b>24</b>	<b>5</b>	<b>4</b>
<b>Total noncommunicable diseases</b>	<b>65</b>	<b>87</b>	<b>83</b>
<b>Total injuries</b>	<b>114</b>	<b>8</b>	<b>12</b>

EU25: current members of the EU. EU15: members of the EU

## Points to remember

health status

- Turkey suffers a double burden of diseases typical of transitional and middle-income countries: an unfinished agenda in infectious diseases and child and maternal health, in parallel with the growing impact of noncommunicable diseases.
- There are significant inequalities within the country: between the east and west, rural and urban areas and the poor and the rich.

Sources: 5, 20, 35

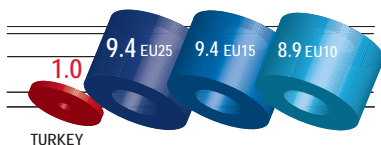
## Where do the risks lie?

### SMOKING

- Adult smoking prevalence is 31%: 49% for males and 17% for females. **EU25: 29%, EU15: 28% (males 32%, females 23%), EU10: 31%**
- Tobacco is estimated to cause 12% of the disease burden.

### ALCOHOL CONSUMPTION

- Total reported alcohol consumption is 1.0 litres per person per year.
- Alcohol consumption causes 4% of the disease burden.



### ILLEGAL DRUG USE

- Illicit drug use causes 0.2% of the disease burden.

### OBESITY

- Obesity (BMI  $\geq$  30) causes 12% of the total disease burden, and physical inactivity, 6%.
- 11% of men and 32% of women are obese.

before 1 May 2004. EU10: countries that joined the EU on 1 May 2004.

- A national survey showed that the average BMI for Turkish women increased steadily with age.

## FOODBORNE INFECTIONS

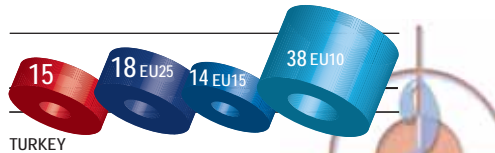
- There are 39 new cases of *Salmonella* infection reported per 100 000 per year. **EU25: 44, EU15: 37, EU10: 99**

## OCCUPATIONAL HEALTH

- Occupational injuries cause 1.2 deaths per 100 000. **EU25: 1.4, EU15: 1.4, EU10: 1.6**

## AIR QUALITY

- SO<sub>2</sub> emissions were 15 kg per capita in 2000.



Sources: 2, 10, 11, 13.



## PUBLIC ADMINISTRATION

Ministry of Health

## PARLIAMENT

Health, Family, Labour and Social Affairs Commission

## PROFESSIONAL ASSOCIATIONS

Turkish Medical Association

## REGIONAL ADMINISTRATION

Provincial health directorates in each of the 81 provinces, accountable to the provincial governors

# Who's who in the Turkish public health sector?

EU25: current members of the EU. EU15: members of the EU



## How are services provided?

Health care is provided by public, quasi-public, private and philanthropic organizations. Their interrelations are not yet well regulated and structured. At the central level, the Ministry of Health operates a system providing primary, secondary and tertiary care, and is the only provider of preventive health services. This network has recently started to serve patients insured by the Social Security Insurance Organization. The Ministry of Defence and some other institutions also provide health care. There is a certain fragmentation of service provision; vertical programmes – on tuberculosis, cancer control or diabetes – exist in parallel to the regular health care system.

### PRIMARY CARE

Primary care is provided in health centres, health posts, child and family planning centres and tuberculosis dispensaries. Data suggest that, in spite of some health gains, primary services for maternal care and immunization can improve the efficiency of their delivery. The referral system is hampered by the lack of coordination across the different levels of care; there are no constraints on hospitals' accepting patients who approaching them without referral.

### SECONDARY AND TERTIARY CARE

The Ministry of Health owns and operates 61% of the hospitals and 50% of the beds, and the Social Security Insurance Organization another 10% and 16%, respectively. The Ministry of Health also runs some specialized hospitals, while university hospitals often serve as referral centres for their region. Almost all patients visit outpatient facilities without any referral from the primary care level. In general, hospitals lack professionalism


*before 1 May 2004. EU10: countries that joined the EU on 1 May 2004.*



in management. The appointment of chief doctors can depend on factors other than their managerial experience or skills; almost all of them are also in private practice.

### **PUBLIC/PRIVATE MIX**

There are 257 private hospitals, offering diagnostic, outpatient and inpatient services, as well as a number of private polyclinics and diagnostic centres. Many doctors employed by the public health sector also work privately, to add to their income. Private entities are more responsive to demand. Some government agencies purchase their services in private hospitals. The private health care sector has expanded rapidly in recent years. The expectations of those with high incomes provide incentives for further expansion and encourage the private sector to play a larger role in the health care system. This process is likely to worsen existing inequalities in access to care, however, and raises concerns about quality and service outcomes.



#### **Points to remember**

*service provision*

- The health care system is centralized, yet fragmented. Decision-making and implementation bodies vary in form, structure, status, objectives and achievements.
- A national primary health care network is still to be fully created.
- There is an imbalance in the availability and quality of health services in the eastern and the western parts of the country.
- The better-off groups of the population are increasingly turning to private-sector providers.
- The Ministry of Health is the leading national institution in communicable disease control. It is also the leader in putting noncommunicable diseases, such as hypertension or mental disorders, on the agenda.
- The coordination of maternal and child health activities remains a challenge, as is the improvement of the national system for communicable disease surveillance.

*EU25: current members of the EU. EU15: members of the EU*



# What resources are available?

## HUMAN RESOURCES FOR HEALTH

The number of health personnel per capita in Turkey is the lowest in the WHO European Region, but has steadily increased. The western regions and urban areas have many more doctors and nurses per capita than the rest of the country.

### HEALTH PROFESSIONALS (per 100 000)



Physicians	137			
Dentists	23	EU25: 62,	EU15: 66,	EU10: 43
Nurses	235	EU25: 779,	EU15: 818,	EU10: 642
Pharmacists	32	EU25: 78,	EU15: 81,	EU10: 60
GPs	74	EU25: 99,	EU15: 102,	EU10: 64

### HOSPITALS

Hospitals per 100 000	1.7
<i>EU25: 3.2, EU15: 3.3, EU10: 2.8</i>	
Hospital beds per 100 000	256
<i>EU25: 611, EU15: 600, EU10: 661</i>	
Annual inpatient admissions per 100	8
<i>EU25: 18.5, EU15: 18.4, EU10: 19.5</i>	
Average length of stay (days)	5.8
<i>EU25: 9.5, EU15: 9.7, EU10: 8.7</i>	

### PHARMACEUTICALS

Turkey is both an importer and an exporter of medicines, although imports dominate the market. The Ministry of Health has some regulatory functions, but policies often have the effect of increasing prices.

*before 1 May 2004. EU10: countries that joined the EU on 1 May 2004.*





## Points to remember *resources for health*

- Ensuring balance in the distribution of health personnel is a challenge.
- Work continues on the regulatory system and the national policy on medicines. Priority areas are: ensuring the rational use of drugs, the use of generic drugs and linking the unofficial list of essential drugs to pharmaceutical market practice.
- Human resources planning needs to address the geographical distribution and adequate practical training of staff.
- Giving more autonomy and managerial responsibility to hospitals is on the reform agenda.

*Sources: 2, 14.*



## Who pays for what?

Turkey's health financing system has historically been fragmented into a variety of compulsory health insurance schemes for different populations. The largest scheme (SSK) serves civil servants and workers in the private sector. It is funded by employee–employer payroll taxes and is accountable to the Ministry of Labour and Social Security. A scheme for retired civil servants (GERF) is accountable to the Ministry of Finance and funded from general budget revenues. A scheme for self-employed people (Bag-Kur) is funded from their contributions. In the early 1990s, a budget-funded scheme (Green Card) was introduced to provide coverage for low-income people.

In addition to these schemes, the Ministry of Health allocates funds directly to its own health service providers throughout the country. Until 2005, SSK also funded and operated its own network of health facilities, while also making contacts with private providers. Bag-Kur and GERF do not operate any services and must contract for them.

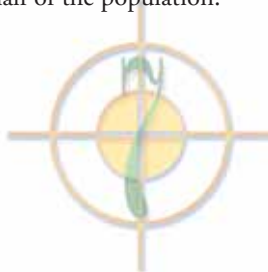
*EU25: current members of the EU. EU15: members of the EU*

Official statistics show that the schemes cover about 95% of the population. Many people are part of more than one system, however, and survey-based estimates suggest that about one third of the population is not covered by any scheme.

Health financing is fragmented, with multiple sources. General government funds generated from tax revenue, social insurance and out-of-pocket payments are the source of health care financing. Private payments account for about one third of total health spending, according to estimates from a 2000 national health accounts study. The latest WB estimates suggest that direct out-of-pocket payments account for up to 50% of total health spending in the country. Some relatively wealthy people have private health insurance, but most of the private spending takes the form of direct payments by patients to providers.

In theory, Turkish citizens have access to primary care that is meant to be free at the point of use. In practice, however, both formal and informal payments exist in public facilities (mostly for medicines). The lack of coherence poses obstacles to effective planning, to competition among providers and mostly to equity of access to care and protection against impoverishment due to increasing health care costs.

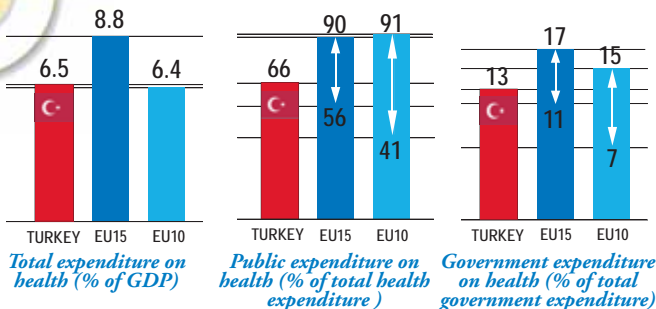
The purchasing of services has remained driven largely by historical patterns and government regulation of public-sector salaries. Moreover, the fragmentation of the financing system into schemes limits the potential effectiveness of more strategic approaches to purchasing services on behalf of the population.



*before 1 May 2004. EU10: countries that joined the EU on 1 May 2004.*



## THE ECONOMIC PICTURE



**Out-of-pocket expenditure 88**  
(% of total private health spending)

**Population below the national poverty line 42%;**  
10.3% live on less than US\$ 2 a day.

### Points to remember *health financing*

- Introducing universal social health insurance has been on the agenda since the early 1960s, and is now set for implementation in January 2006.
- A clear understanding of the financial implications of health financing reforms is needed. Benefit entitlements for most citizens are likely to be expanded, so addressing existing inefficiencies is essential.
- With some uncertainty due to the difficulties in data collection, it is estimated that about one third of the population lacks coverage by any of the social health insurance schemes.

Sources: 2, 8, 15.

EU25: current members of the EU. EU15: members of the EU

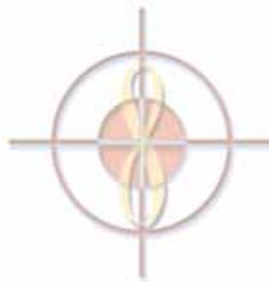


## How have the Turks reformed their health care system?

The Health Transformation Programme is the national strategy for health reform. It is a result of more than a decade of learning, debate and policy design. The current government has publicly declared its commitment to the health reform agenda. A WB project with a budget of US\$ 200 million is defined as an investment in the Programme. The reforms envisage:

- streamlining the health financing system;
- increasing managerial autonomy of public-sector providers;
- integrating primary care through systematized family medicine and well-functioning referral schemes;
- eliminating fragmentation of policy responsibility;
- setting national norms to minimize the health effects of natural disasters.

Efforts have been made to decrease the discrepancies between investment planning and strategic planning. A government white paper on social security reform is in the works, and legislation on health insurance and social security has been drafted.




*before 1 May 2004. EU10: countries that joined the EU on 1 May 2004.*



## Points to remember

*health reforms*

- The next step in reform is to separate purchasers from providers, so that hospitals are publicly owned and autonomously managed.
- Implementing some core components of the reforms needs to be synchronized with the country's political calendar.
- The short-term success stories in reform implementation should be underpinned by a coherent overall agenda.
- The Ministry of Health needs to reposition itself as the steward of the system.
- Communication between the Ministry of Health and the provincial health directorates needs improvement.
- The general health insurance reform is only one part of the government's Health Transformation Programme, and implementation of financing reforms needs to be coordinated with changes in the organization of service delivery.



## What is one of the things the Turks have learned by doing?

### NGO PROVIDERS OF HEALTH CARE

In the 1980s, a package of new laws laid the foundation for economic liberalization; part of the new provisions opened new opportunities for NGOs to provide social services, which were previously in the domain of government agencies. As a result, many new foundations emerged in the field of health care. They deal mainly with public health issues, such as family planning, or with specific diseases, such as diabetes, cancer or AIDS. The Red Crescent of Turkey provides an especially interesting example of how an NGO delivers health and social services. With its large network of 648 local branches reporting to the general headquarters in Ankara, it runs activities for blood donation, disaster relief and first aid, and operates a number of dispensaries, nurseries and homes for elderly people.

*EU25: current members of the EU. EU15: members of the EU*

# What has the Regional Office been doing in Turkey?



A Liaison Officer was appointed to the WHO Country Office, Turkey, in 2004 and there are plans to recruit a WHO Representative. Faced with great need and limited resources, one approach is to support the development of health policy on specific aspects of the health system or specific technical areas. Another is to assist the Ministry of Health in coordinating the flow of international aid for health, and to provide information to decision-makers within and outside the health sector. In addition, the WHO disaster preparedness and response programme is present in Turkey. Some other areas of cooperation are tobacco control (developing a national action plan) and strengthening and integrating the country's reproductive health services.

For the period until 2010, WHO support will focus on the development and implementation of the Health Transformation Programme and, more concretely:

- enhancing the stewardship role of the Ministry of Health;
- developing a national package of indicators for monitoring health system performance;
- supporting reforms in service delivery and health financing;
- mitigating the effects of natural disasters;
- improving capacity to control communicable diseases.

## OTHER INFORMATION ON TURKEY

Ministry of Health (<http://www.saglik.gov.tr/eng>)

*before 1 May 2004. EU10: countries that joined the EU on 1 May 2004.*

