

# Healing the Crisis



## A Prescription for Public Health Action in South Eastern Europe

Information Review

Bernd Rechel and Martin McKee

# **Healing the Crisis: A Prescription for Public Health Action in South Eastern Europe**

**Information Review**

**Bernd Rechel and Martin McKee**

**London School of Hygiene & Tropical Medicine  
Open Society Institute  
UK Department for International Development  
United Nations Children's Fund Regional Office  
for CEE/CIS and Baltic States**

© 2003 by the Open Society Institute. All rights reserved.

ISBN 0 902657 73 9

Published by the London School of Hygiene & Tropical Medicine

For more information, contact:  
European Centre on Health of Societies in Transition  
London School of Hygiene & Tropical Medicine  
Keppel Street  
London WC1E 7HT  
United Kingdom

The opinions expressed in this document do not necessarily reflect the policies of the London School of Hygiene & Tropical Medicine, the Open Society Institute, the UK Department for International Development, or the United Nations Children's Fund.

Designed by Jeanne Criscola | Criscola Design



South Eastern Europe

## **Acknowledgements**

This document is the outcome of a project undertaken in 2003 by the London School of Hygiene and Tropical Medicine (LSHTM), the Open Society Institute (OSI), UNICEF Regional Office for Central and Eastern Europe, the Commonwealth of Independent States and the Baltic States (UNICEF), and the United Kingdom Department for International Development (DFID). The project's core team included Bernd Rechel and Martin McKee of LSHTM, Persephone Harrington, Nina Schwalbe, Laura Silber, Emilia Tontcheva, and Mabel Wisse Smit of OSI, Mary Black and Ann-Lis Svensson of UNICEF, and Alison Forder, Jürgen Schmidt, and Rebecca Terzeon of DFID.

The core team would also like to thank the following individuals for their efforts in gathering, annotating, and contributing to the project's relevant documents: Ilir Begolli, Vesna Bjegovic, Ivana Bozicevic, Ledia Çurri, Lucica Ditiu, Anca Dumitrescu, Arjan Gjonca, Dragan Gjorgjev, Dominic Haazen, Amela Lolic, Stipe Oresokovic, Viorel Soltan, Ozren Tosic, Fimka Tozija, Christian Vladescu, and Caroline White.

The team is especially grateful to Will Kramer for his help in editing this report.

The summary report of the project was developed in consultation with stakeholders at the national level. A draft of the summary report was also presented at the sixth meeting of the National Health Coordinators from South Eastern Europe, organized by the Stability Pact's Initiative for Social Cohesion, where participants provided invaluable feedback. We are deeply grateful to all the individuals and organizations that gave their time and energy to this project.

Funding for this project was provided by the Open Society Institute.

# Contents

List of Tables .....	vi
List of Figures.....	vi
<b>1 The Urgent Need to Improve Public Health.....</b>	<b>1</b>
1.1 Albania .....	5
1.2 Bosnia and Herzegovina .....	6
1.3 Bulgaria.....	6
1.4 Croatia.....	6
1.5 UN-administered province of Kosovo .....	7
1.6 Macedonia.....	7
1.7 Moldova .....	7
1.8 Romania.....	8
1.9 Serbia and Montenegro .....	8
<b>2 The Challenges of Assessing Health.....</b>	<b>9</b>
<b>3 Patterns of Ill Health in South Eastern Europe.....</b>	<b>11</b>
3.1 Trends in Life Expectancy: Increasing Mortality Gaps.....	11
3.2 Immediate Causes of Mortality and Morbidity .....	14
3.3 Infants and Children.....	22
3.4 Adolescents.....	26
3.5 Women .....	28
3.6 Lack of micronutrients .....	33
3.7 Specific Diseases.....	35
<b>4 Promoting Healthy Societies .....</b>	<b>41</b>
4.1 The Risk Factors .....	41
4.2 Underlying Factors .....	48
<b>5 Country Responses.....</b>	<b>69</b>
5.1 Health Care Reforms .....	69
5.2 Public Health Interventions .....	70
<b>6 The Scale and Nature of International Assistance.....</b>	<b>77</b>
6.1 World Bank .....	78
6.2 European Union.....	78
6.3 Other Donors.....	80
6.4 Stability Pact for South Eastern Europe .....	80
6.5 Examples .....	81
<b>7 Best Practices from the Region.....</b>	<b>89</b>
7.1 Fostering a Multisectoral Approach .....	89
7.2 Reorienting Training .....	89
7.3 Investing in People .....	90
7.4 Implementing Reliable Surveillance/health Information Systems.....	90

<b>7.5</b>	<b>Targeting Health Promotion Efforts</b> .....	90
<b>7.6</b>	<b>Improving Health Care Delivery Systems</b> .....	91
<b>7.7</b>	<b>Investing in Services for the Most Vulnerable</b> .....	91
<b>7.8</b>	<b>Regional Cooperation</b> .....	92
<b>7.9</b>	<b>Encouraging Increased Commitment and Coordination by Donors and International Finance Institutions</b> .....	94

## **8 The Need for Sustained Public Health Action.....95**

<b>Bibliography</b> .....	<b>97</b>
---------------------------	-----------

### **List of Tables**

Table 1	Real GDP per capita in 2000 as % of Value in 1989.....	4
Table 2	GDP per capita in U.S.\$ at Exchange Rate (a).....	5
Table 3	Leading Causes of Death for all Ages, as % of all deaths (a).....	15
Table 4	Prevalence of Hypertension in South Eastern Europe.....	17
Table 5	Malnutrition among Children Under 5 Years Old.....	24
Table 6	Prevalence of Contraception in South Eastern Europe.....	32
Table 7	Prevalence of Iodine Deficiency Disorders in South Eastern Europe.....	34
Table 8	Prevalence of Anaemia in South Eastern Europe.....	35
Table 9	Reported Number of Cigarettes Consumed per person/year.....	42
Table 10	Prevalence of Tobacco Use in South Eastern Europe.....	43
Table 11	Total Health Expenditure in PPP\$ per capita in Selected South Eastern European Countries.....	50
Table 12	Extent of Poverty in Selected South Eastern European Countries.....	58
Table 13	Unemployment Rates in South Eastern Europe, in %, end of period (a).....	59
Table 14	Real Wages for Selected South Eastern European Countries (index, base year = 100).....	60
Table 15	International Financial Assistance to Albania, Bosnia and Herzegovina, Macedonia, Serbia and Montenegro, and Kosovo, 2001-2002.....	77

### **List of Figures**

Figure 1	Life Expectancy at Birth for Males.....	12
Figure 2	Life Expectancy at Birth for Females.....	12
Figure 3	Age Standardised Death Rate from Diseases of the Circulatory System, per 100,000, age 0-64.....	16
Figure 4	Age Standardised Death Rate from Cancers, per 100,000 population, age 0-64.....	18
Figure 5	Age Standardised Death Rate from Injuries and Violence, per 100,000, all ages.....	20
Figure 6	Infant Mortality per 1,000 Live Births.....	23
Figure 7	Maternal Mortality per 100,000 Live Births.....	29
Figure 8	Abortions per 1,000 Live Births.....	30
Figure 9	Tuberculosis Incidence per 100,000 Population.....	37
Figure 10	Changes in Income Inequality in Selected South Eastern European Countries.....	56

# 1 The Urgent Need to Improve Public Health

South Eastern Europe — Albania, Bosnia and Herzegovina, Bulgaria, Croatia, the Former Yugoslav Republic of Macedonia<sup>1</sup>, Moldova, Romania, Serbia and Montenegro, and the UN administered province of Kosovo — is emerging from more than a decade of war and economic, social and political transformation<sup>2</sup>. The transition in the region ushered in both nationalism and war and the opening of borders with the West. It was also accompanied by a sudden rise in unemployment, poverty, corruption, and inflation. Organised crime networks — trafficking in humans, drugs and tobacco — gained hold, as social protection and health systems collapsed when they were most needed.

The challenges of political and economic transition were magnified by the outbreak of conflict in former Yugoslavia. The wars brought violence and destruction on a scale not seen in Europe since the Second World War. The human cost was enormous — deaths, injuries, and the consequences of physical and psychological trauma. In many places, infrastructure, houses, schools and transport links were destroyed, leading to mass population movements and emigration.

These developments had a major and lasting impact on the health of the people who live in these countries. Many of the health consequences have been documented, but often in official working documents that are not publicly accessible. This information review compiles the findings of work undertaken since 1998 in this region and is an attempt to draw attention to challenges to health as well as the potential for reform in South Eastern Europe. The goal in assembling this material was to cover the main issues related to health to the fullest extent possible. This review should be used with the searchable bibliography cataloguing the references cited here. While this project will inevitably become outdated as more material becomes available, it does provide the most detailed review of what is known about health in this region at the beginning of 2003.

The countries of South Eastern Europe face numerous problems as they emerge from major political and economic transition and recover from the direct and indirect consequences of war. Basic infrastructure has been damaged, large population movements and mass emigration have taken place, and economies and social safety nets have undergone massive change. These disruptions have had a profound impact on health in this region. Yet surprisingly little is documented about the scale of health problems, the policy responses they have attracted, and the results of investment so far. Despite the presence of many donor agencies, aid programmes, and the reform processes underway at country level, relatively little has been invested in public health and the health systems in several countries are under serious threat. There is an urgent need to review public health investment priorities at country and regional level. This will enable international donor assistance and national resources to be targeted to where they are most needed.

---

<sup>1</sup> Officially recognized as Former Yugoslav Republic of Macedonia, henceforth will be referred to as Macedonia.

<sup>2</sup> Slovenia, which was part of the former Yugoslavia, is about to join the European Union, and has not been included in this review.

In the first part of 2003, the London School of Hygiene and Tropical Medicine, the Open Society Institute, the United Kingdom Department for International Development, and the UNICEF Regional Office for Europe, CEE/CIS and the Baltic states, undertook a detailed assessment of challenges to health in this region, coupled with an inventory of relevant policy initiatives. The London School of Hygiene and Tropical Medicine's website ([www.lshtm.ac.uk/ecohost/see](http://www.lshtm.ac.uk/ecohost/see)) presents the following outputs from the project:

**Summary report:** A document summarizing the findings of the information review and making the case for increased investment in health in the immediate, medium, and long term.

**Information review:** Summarizes existing evidence, highlights gaps, and reviews donor and other priorities in public health investment. The sources of data include published studies, health statistics, reports from governments, development agencies, and NGOs.

**Country profiles:** Country analysis giving more detail of the local context and noting key public health issues for the country or territory..

**Annotated bibliography:** Database of identified literature and other sources of information.

The project's annotated bibliography uses standard bibliographic sources to identify all documents published on health in the region since 1998. In addition, individuals identified through the project partners acted as country focal points. They collected national policy documents, publications of national statistical offices, articles in academic and medical journals, survey data, and information about international assistance projects. The most relevant documents were annotated in English. The project established a database of all identified documents, including bibliographic information and annotations.

Overall, this review provides an illustrative overview of what has been documented on health in South Eastern Europe. It gives as much information about each of the countries as possible. However, it was impossible to give all available information on each country in each of the sections. Some of the sections are selective in the information they provide due to the fact that more documentation exists for some countries than others. In addition, while every effort was made to collect all available material, documents collection was much more comprehensive in some countries than others.

A note on terminology is necessary because of the change in the status of the country now named Serbia and Montenegro, which until February 2003 was called the Federal Republic of Yugoslavia, comprised of what are now Serbia, Montenegro, and the UN administered province of Kosovo. Some of the reports included in this review examine the Federal Republic of Yugoslavia, while others look at the Republic of Serbia, the Republic of Montenegro, or Kosovo separately.

The term "South Eastern Europe" also requires clarification. The region is most commonly referred to as the "Balkans," but this expression has negative connotations

in Western Europe, where it is often associated with ancient hatreds [1; 2]. This review uses the more neutral term “South Eastern Europe”.

However, there is no consensus on the exact boundaries of South Eastern Europe and some of the countries have on occasion disassociated themselves from the region, not wanting to be associated with the “Balkans” [2]. This review applies the term South Eastern Europe to the core countries of the Stability Pact for South Eastern Europe, which will be described in more detail in a later section.

The material included in this review does not represent work commissioned by the sponsor institutions of this report. The time-frame for this project precluded the verification of each report included in this study. Wherever possible, interpretations inconsistent with contemporary knowledge of health and disease have been noted.

Two notes of caution are required. First, while there are numerous published studies from this region, often they indulge in sweeping statements, sometimes with little supporting evidence, about issues such as the effects of war, economic transition, or pollution. This tendency highlights the importance of strengthening public health capacity in the region. Second, there is a considerable degree of selectivity about the topics of reports, with an inevitable emphasis on areas where problems exist. This risks painting a pessimistic picture, and although the findings reviewed clearly demonstrate the need for change, it is also true that many examples of success may have gone undocumented.

The break up of Yugoslavia, the wars, and the ensuing social and political transition led to tremendous economic decline across the region in the 1990s (Table 1). By 2000, only Albania had managed to return to the level of Gross Domestic Product (GDP) that it had prior to transition. By 1999, Moldova’s real GDP had fallen to 31.2 percent of its 1989 level, while in Serbia and Montenegro it had declined to 41.6 percent. In Bosnia and Herzegovina estimates indicate that, at current growth rates, it will take at least seven more years before that fractured country regains its pre-war level of per capita GDP [3]. An entire generation of development has been lost.

**Table 1 Real GDP per capita in 2000 as % of Value in 1989**

	<b>Real GDP in 2000 as % of value in 1989 (a)</b>
Albania	101.7
Bosnia and Herzegovina (c)	35 (in 2001 compared to 1990)
Bulgaria	69.6
Croatia	80.4
Macedonia	77.4
Moldova	30.6
Romania	76.8
Serbia and Montenegro (d)	41.6
EU average (b)	156

*Sources:* a) UNICEF 2001: A Decade of Transition; b) WHO 2003: HFA Database; c) UNDP 2001: Human Development Report 2002, Bosnia and Herzegovina.

*Notes:* (d) from 1999 do not include data from Kosovo

Even before the wars in former Yugoslavia, South Eastern Europe was the poorest region of Europe. The former Yugoslavia had seemed best placed to make a successful transition to a market economy, but Serbia and Montenegro, and Bosnia and Herzegovina have now joined Albania and Moldova as the poorest countries of Europe. Croatia has the highest GDP per capita of the region (Table 2).

**Table 2 GDP per capita in U.S.\$ at Exchange Rate (a)**

	1990 (b)		1998	1999	2000	2001
Albania			908	1,090	1,103	1,218
Bosnia and Herzegovina	4,780					1,180
Bulgaria	2,214		1,543	1,577	1,542	1,690
Croatia	5,186		4,805	4,399	4,344	4,566
Kosovo (c)					764	904
Macedonia	2,165		1,784	1,821	1,771	1,674
Moldova (b)			449	255		
Romania			1,872	1,585	1,644	1,772
Serbia and Montenegro (d)			1,715	976	970	1,260
EU average (b)	19,419		22,812	22,706	20,844	

Sources: (a) WIIW Balkan Observatory 2002/03; (b) WHO/Europe, HFA Database, January 2003; (c) UNDP 2002 HDR Kosovo.

Notes: (d) from 1999 do not include data from Kosovo

Table 2 illustrates the large economic gap between the countries of South Eastern Europe and those of the European Union. In 2000, GDP per capita of all South Eastern European countries (with the exception of Croatia) was lower than 10 percent of the EU average GDP per capita.

These changes have created new and significant marginalised groups. These groups are often effectively invisible, and little is known about their health needs. They include street children, children who live in state institutions, victims of domestic violence, women forced into prostitution, drug users, growing numbers of isolated elderly people, and the Roma population. All of these groups have received relatively little attention and often have poor access to social support [4].

The economic decline has a direct adverse effect on health care. In several countries, access to essential drugs worsened at a time when need was increasing. In Bosnia and Herzegovina and Kosovo, public health services suffered an almost complete breakdown [5]. Real expenditures on health declined dramatically in all countries of the region, while costs of drugs escalated. The volume of service provided was reduced and medicines became increasingly unaffordable. The burden of health care costs has shifted from the public sector to households and individuals, undermining equitable access to care.

The following sections look briefly at some of the key features of each country that have an effect on health or health care.

## 1.1 Albania

Albania has long been one of the poorest countries in Europe. When communism collapsed, the country emerged from more than five decades of isolation. As in other

countries in this part of Europe, Albania's economy suffered from the indirect effects of wars in neighbouring countries, as trading links were disrupted and inward investors were deterred.

Albania held its first free elections in 1992, and has since been plagued by widespread corruption, organised crime, and political instability. The Albanian economy virtually collapsed in the beginning of the 1990s. Although it later recovered somewhat, there was a huge setback in 1997 when a network of pyramid investment schemes collapsed, leading to widespread violence and precipitous economic decline. More than 2,000 civilians were killed in the ensuing disturbances and an estimated 600,000 weapons were seized by civilians [4]. During the NATO bombing of the FR Yugoslavia in 1999, about 500,000 Kosovars fled to Albania. An estimated 20 percent of Albania's population emigrated in the 1990s. The economy is heavily dependent upon remittances from Albanians working abroad, who constitute the largest source of foreign exchange and 20-22 percent of GDP [4; 6].

## **1.2 Bosnia and Herzegovina**

Bosnia and Herzegovina is still struggling to recover from the effects of the war from 1992 to 1995, which left some 250,000 people dead [3]. The 1995 Dayton Agreement, which ended the Bosnian war, created Bosnia and Herzegovina as a union divided along ethnic lines into two entities, the Federation of Bosnia and Herzegovina and the Republika Srpska. Each part has its own government and with overarching institutions aimed at joining the two halves together. Currently, the country is burdened with 13 conflicting constitutions. It has 13 assemblies passing conflicting laws, and 13 administrations drawing up reams of conflicting regulations. A NATO-led Stabilization Force, SFOR, is responsible for safeguarding peace and stability, but ethnic tensions persist and the country remains fragmented. The deep divisions are reflected in Bosnia's health care system, which has proven almost impossible to coordinate at the national level. Hundreds of thousands of people remain internally displaced. The economy has been severely damaged by the war, and crime and corruption have flourished.

## **1.3 Bulgaria**

The first seven years after 1989 in Bulgaria were marked by political instability and the continued influence of the former Communist Party. There was little progress with privatisation and economic reforms, and corruption was widespread. In 1996 and early 1997, Bulgaria faced a severe banking and foreign exchange crisis. Since 1997, when a currency board was set up, the economic and political situation has stabilised, although unemployment and poverty remain major problems. In June 2001, the coalition between the Simeon II National Movement and the Movement for Rights and Freedoms gained a comfortable majority and the former king Simeon Saxe Coburg was elected prime minister. In November 2001, the leader of the opposition Socialist Party, Georgi Parvanov, was elected president. Bypassed in the first round of EU enlargement mainly on economic grounds, Bulgaria is now expected to join in 2007. In 2003, it was, along with Romania, invited to join NATO.

## **1.4 Croatia**

War broke out in Croatia in 1991 when the Serb-led Yugoslav army moved to stop the republic from breaking away from the Federation of six republics. By the end of the

war in 1992, rebel Serbs had declared their own state covering more than a quarter of Croatian territory. The Croatian army gained control over the Serb-held territory in 1995. The war hit Croatia hard — more than 16,000 people were killed and over 30,000 were disabled [7]. Over 300,000 Serbs fled Croatia during the war and one million refugees fled from Bosnia to Croatia. In 1997, there were still 300,000 refugees living in Croatia [8]. The years of authoritarian nationalism under Franjo Tudjman came to an end with his death in 1999. The economy faced a severe recession in the beginning of the 1990s, but is slowly recovering.

## **1.5 UN-administered province of Kosovo**

The UN-administered province of Kosovo continues, formally, to be part of the territory of Serbia and Montenegro. Since the war in 1999 Kosovo has been administered by the United Nations. Albanians in Kosovo suffered systematic discrimination throughout the 1990s, after the province was stripped of its autonomy in 1989. The conflict escalated in 1998 and NATO intervention started in March 1999. About 840,000 Albanians fled Kosovo during the crisis, and 540,000 were internally displaced [16]. Most sought refuge in Albania and Macedonia and returned soon after the conflict ended. An estimated 10,000 people were killed in the conflict [5]. Under the terms of UN Resolution 1244, a United Nations Interim Administrative Mission in Kosovo (UNMIK) was established in 1999 to provide an interim government. Following elections in 2001, Kosovo formed a government which is progressively taking over the functions of UNMIK. The future status of Kosovo, however, remains unresolved.

## **1.6 Macedonia**

Macedonia declared independence from Yugoslavia in 1991, and was spared the bloodshed that followed elsewhere. In addition to the challenges of economic transition and nation building, the Macedonian economy suffered from the disintegration of Yugoslavia, the wars, international sanctions against Yugoslavia, and a two-year trade blockade from Greece, which objected to the name of the Macedonian state. The controversy over the name led to its international recognition as the Former Yugoslav Republic of Macedonia. Living standards declined sharply in the first half of the 1990s. In 1996, 20 percent of the population was below the national poverty line [9]. During the humanitarian crisis in Kosovo in 1999, there was a sudden influx of about 350,000 refugees from Kosovo. Effective humanitarian intervention by the international community ensured that levels of health were not as adversely affected as they might have been, but the crisis nevertheless undercut economic recovery [10]. The official unemployment rate was 30.5 percent in 2001 [11]. In early 2001, Macedonia came close to civil war, when members of the Albanian population demanded greater rights for the Albanian minority. After months of skirmishes, a peace agreement was reached guaranteeing greater recognition of the Albanian population, a situation formalised in a new constitution in 2001.

## **1.7 Moldova**

Moldova became independent from the USSR in August 1991. Soon afterwards, the predominantly Ukrainian Transdnister region declared independence, but this move has not been recognised nationally or internationally. Conflict soon broke out, leading to a secessionist war in 1992. At present, the region remains outside the

control of the Moldovan government, and the political situation is one of stalemate. Despite the signing of an agreement on the withdrawal of Russian forces in 1994 and commitments made by Russia at the 1999 OSCE summit in Istanbul, there are still around 2,600 Russian soldiers in the region. The area has become a base for illegal arms dealing and organised crime [12]. The Gagauz region in the southwest of Moldova, with a large Turkish-speaking minority, was granted autonomy in 1994. In the last decade, Moldova has seen a rapid change of governments and a severe economic and social decline. Trading arrangements with other republics collapsed after 1991 and resulted in a loss of export markets. The conflict in Transdnier and the economic crisis in Russia in 1997 further weakened the economy. Moldova remains one of the poorest countries in Europe, and has a large foreign debt. In February 2001, the Communist Party came to power in a landslide victory, making Moldova the first former Soviet country to return to full communist rule [13]. At the same time, changes introduced to the Moldovan Constitution in 2000 reduced the powers of the president and strengthened the Moldovan Parliament greatly, in contrast with most other former Soviet republics where powers remain vested in strong presidents [12].

## **1.8 Romania**

Romania is the largest country of South Eastern Europe, with a population of around 22 million. At the start of the transition, the Romanian economy was on the verge of collapse. Former communists dominated Romanian politics until a centre-right election victory in 1996. The pace of structural reforms remained slow throughout the 1990s. Inflation rates remained high in the second half of the 1990s, but in 2001 Romania's GDP grew again after three years of decline. As with Bulgaria, Romania was not included in the first round of EU enlargement, but is expected to join in 2007 and was invited to become member of NATO in 2003.

## **1.9 Serbia and Montenegro**

After the violent disintegration of Yugoslavia in 1991, the two remaining republics formed a federation, the Federal Republic of Yugoslavia, one year later. The FR Yugoslavia, dominated by Slobodan Milosevic's regime, did not undergo economic reforms or transition. The break up of trading links within former Yugoslavia, the cost of waging war in Bosnia, Croatia, and Kosovo, international sanctions, an influx of some 800,000 refugees and displaced persons, and the NATO bombing led to economic collapse. It is now estimated that some 570,000 refugees and displaced persons remain in Serbia and Montenegro. The country is additionally burdened with a high foreign trade deficit and foreign debt [14; 15]. The fall of Milosevic finally opened the way for economic and political reform. In an EU-brokered deal, the union of Serbia and Montenegro was created in March 2002. The arrangement was to remain in place for a minimum of three years. After the assassination of Prime Minister Zoran Djindjic in March 2003, leaders in Serbia are trying to push through reforms while breaking the hold of organised crime.

## 2 The Challenges of Assessing Health

Any attempt to assess the health of populations in South Eastern Europe faces major obstacles because of the absence or unreliability of data. One of the greatest problems is the scale of population movement that has taken place since 1989. The wars in Bosnia, Croatia, Kosovo, and Moldova, the civil unrest in Albania and Macedonia, and the economic decline throughout the region triggered population movements that can only now be quantified following recent censuses. As a result, until now most population estimates have been largely speculative. Because population size is used as the denominator when calculating rates, the quality of all indicators is impaired by the lack of accurate population estimates. Consequently, data series frequently show large, otherwise inexplicable fluctuations, linked to changing population estimates.

In the former Yugoslavia, the last census was conducted in 1991, but even then rising political tension was beginning to make the gathering of accurate data impossible. In Kosovo, the 1991 census was boycotted by the majority of ethnic Albanians, rendering statistics for the province and thus the whole of Serbia incomplete [17]. The last reliable census in Kosovo was conducted in 1981, with a new census planned for 2004. Current estimates by the World Bank, UNFPA and the International Organisation for Migration of the size of the population in Kosovo in 2001 differ considerably, ranging from 1.61 million to 1.96 million people [5]. Similarly, estimates of the size of the population in Bosnia and Herzegovina in 2001 range from 3,365,000 to 3,759,000, a difference of 394,000 people [18].

The lack of data on population size has thus been a major obstacle to the development of adequate policy responses. Censuses have been conducted in 2001 in Albania, Bulgaria, and Croatia, and in 2002 in Serbia and Macedonia. The resulting data will allow a more accurate calculation of health indicators for some of the countries of the region. However, some censuses have faced problems capturing population groups, such as refugees, minorities, those without papers and citizenship, and homeless people. The Albanian census in 2001 was boycotted by the Greek minority [19]. Unregistered migration is an additional problem.

A second challenge in assessing population health is that existing health information systems have been weakened or collapsed entirely. Thus, collection of routine data on mortality has become fragmentary in several countries. The last year in which comprehensive and comparable data on mortality and causes of death are available for all countries of South Eastern Europe is 1990 [20]. Data on morbidity are even more problematic.

The deficits in available data are especially large in Bosnia and Herzegovina and Serbia and Montenegro. Data for Kosovo are either missing or considered problematic [21]. Data from the semi-autonomous Transdniestrian region in Moldova are also lacking, thus compromising the data for the whole of Moldova [22].

In addition, there is limited capacity in the countries of the region to undertake meaningful analysis of health data. A study in Croatia identified many problems in the presentation and interpretation of data, with the population denominator used before 1996 including not only people living in Croatia, but also Croatian citizens living permanently abroad. Until 1998, the denominator (population) was not consistent with the numerator (deaths). As a result, Croatian mortality data are unreliable for the 1990s [23; 24].

Despite gaps and inconsistencies in government data, there are other sources for useful health information. Multilateral and bilateral donor organisations, as well as national and international NGOs, have undertaken a number of important studies looking at health and socio-economic conditions. In this report we have sought to bring together as much information as exists, using published studies, health statistics, and reports from governments, development agencies, and NGOs.

The picture, however, remains incomplete. Far too little is known about the health of the people in this region, particularly the most vulnerable groups of the population. On the national level, disaggregated data on parameters such as gender or ethnicity are often missing. There is an urgent need for better and more reliable information about population health trends.

### **3 Patterns of Ill Health in South Eastern Europe**

The available data show that health problems in South Eastern Europe are considerable. Economic transition and the direct and indirect consequences of war have led to a widespread deterioration in the health status of the population in the last decade. The transition brought a sudden rise in poverty, and disrupted social security and health care systems when they were most needed. There is a growing disparity in health status between the region and the rest of Europe, as well as between and within the countries of South Eastern Europe [25].

While recognising the limits of available data, it is apparent that a decade of conflict and difficult economic transition has had an adverse impact on many aspects of health. Adult mortality rates have increased and life expectancy has fallen or stagnated in most countries of the region in the 1990s. Tuberculosis re-emerged in the wake of poverty and collapsing health care systems. The use of illicit drugs has increased rapidly. Other effects will only become clear in the future. Aggressive marketing by the trans-national tobacco industry is increasing smoking, which will inevitably lead to increases in deaths from many cancers and from cardiovascular disease. Although HIV rates are still comparatively low, they are expected to rise rapidly if effective preventive measures are not taken soon. Poor nutrition, especially among pregnant women and children will impair the health of future generations. A decline in educational provision will accentuate this, reducing the ability of people in the region to participate in an increasingly skills-based global economy. Growing levels of obesity in adulthood will increase rates of many non-communicable diseases.

Yet transition has also had positive implications for health. As has been observed in Central Europe, the opening of borders and the reform of the retail distribution system has led to major improvements in diet [26]. It has also led to a greater sense of empowerment in many people, who are better able to take individual responsibility for their health.

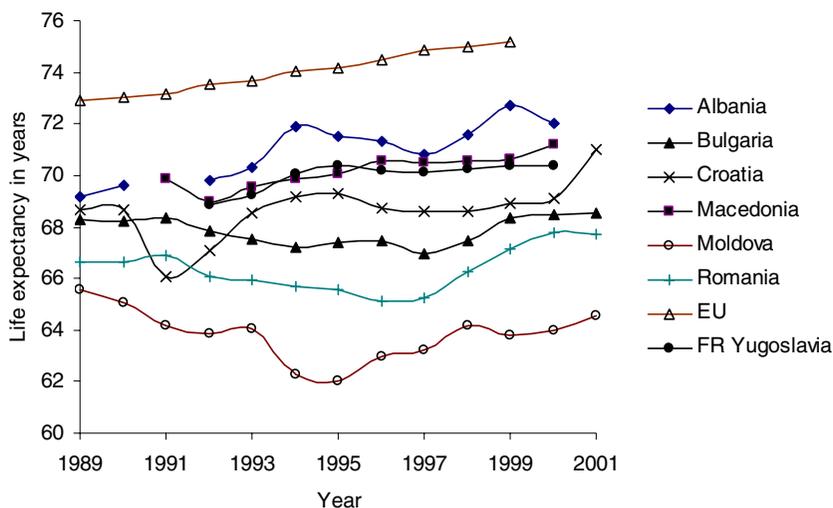
#### **3.1 Trends in Life Expectancy: Increasing Mortality Gaps**

Life expectancy is the most commonly used indicator of population health. However, as discussed in Chapter 2, all health data for most countries in the region have to be treated with considerable caution. As indicated in Figure 1 and Figure 2, using data of the WHO/Europe HFA database, life expectancy in most countries of the region has not significantly improved during the 1990s. In contrast, life expectancy in the countries of the European Union has shown steady improvement for both sexes. Starting in the 1970s, a health gap between Eastern and Western Europe emerged. By the 1990s, the gap in life expectancy between the EU average and the countries of South Eastern Europe increased further. For those 5 countries, for which data are available for this period (Albania, Bulgaria, Croatia, Moldova, and Romania), the gap in life expectancy has increased from 5.25 years in 1989 to 7 years in 1999 for men and from 5.47 to 6.08 years for women. For both sexes combined, the life expectancy gap between the EU average and all South Eastern European countries except Bosnia and Herzegovina was 6 years for the latest available year.

Going beyond this general statement, however, the countries of South Eastern Europe exhibit a considerable and growing divergence in life expectancy. Albania has the highest life expectancy at birth, at 78.04 years for women and 72.03 years for men in 2000. Life expectancy is lowest in Moldova, at only 64.54 years for men and 71.94

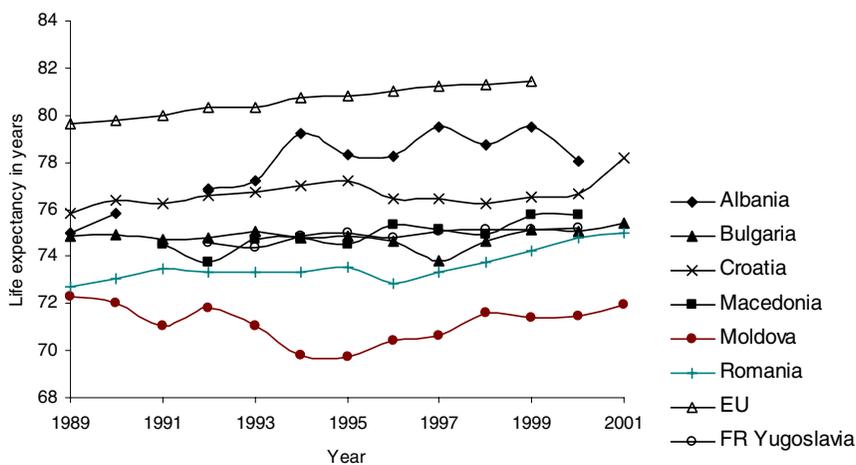
for women in 2001. The difference between Albania and Moldova increased significantly from 3.57 years for men and 2.71 years for women in 1989 to 8.04 years for men and 6.59 years for women in 2000.

**Figure 1** Life Expectancy at Birth for Males\*



Source: WHO HFA database, January 2003.

**Figure 2** Life Expectancy at Birth for Females



Source: WHO HFA database, January 2003.

\* Data for Bosnia and Herzegovina are missing since 1992 in most figures in this review.

Much of the difference in life expectancy between countries can be attributed to differences in adult mortality. As in all countries undergoing transition, the mortality crisis has affected both sexes, but premature mortality increased in particular among middle-aged men. As a result, the difference between male and female life expectancy has increased in most countries in Eastern Europe [27], including South Eastern Europe. In Croatia, Bulgaria, and Romania, life expectancies for men fell significantly after 1989, but stagnated or increased slightly for women. In Croatia, some of the increase in mortality rates for men in 1991 was a direct result of the war. In Bulgaria, Moldova, and Romania, rising premature mortality rates for men can be attributed substantially to cardiovascular diseases [28; 29]. A similar trend is reported for Serbia, where life expectancy at birth during the last decade decreased in particular for men between 45 and 64 years, while mortality among those over 65 years old declined [30].

As has already been noted, data for most countries of the region are highly problematic. The sudden increase in life expectancy for men in Croatia by about 2 years between 2000 and 2001, for example, is unlikely to reflect real improvements.

So far, little research has been undertaken on the causes of mortality patterns in the countries being considered, compared with some of their northern neighbours [20], where the determinants of mortality are better understood [31; 27] and where economic decline and increasing income inequalities have been shown to correlate with an increase in premature mortality among men [32; 33].

In Moldova, trends in life expectancy have closely followed those of the former Soviet Union as a whole. Mikhail Gorbachev's anti-alcohol campaign led to an increase in life expectancy in 1986, but the socioeconomic decline after 1989 was followed by a reversal in the years from 1989 to 1995 [22]. In both Moldova and the former Soviet Union, life expectancy improved from 1996 onwards, but has still not reached the level of 1989. In Moldova in 2001, it was 64.54 years for males and 71.94 years for females. This was 1.05 years for males and 0.38 years for females below the level of 1989 [34]. Death rates among elderly women are particularly high. Life expectancy for women at age 65 in Moldova is the lowest in the WHO European Region. As a result, the difference in life expectancy between men and women is substantially lower than the average in the Newly Independent States (NIS) [22]. In 2001, Moldovan women had the shortest life expectancy in Europe [34].

Mortality trends in Romania and Bulgaria have been broadly similar since the 1970s. Overall life expectancy has stagnated, with a slight increase for women and a slight decrease for men. In both countries, male life expectancy declined moderately since the 1970s, and sharply after 1991, recovering again after 1996. In Romania, the overall decline in life expectancy between 1990 and 1996 can be largely attributed to increased mortality in men, whose life expectancy decreased by 1.71 years, compared with 0.54 years for women. The decline in male life expectancy between 1990 and 1996 was mainly due to an increase in mortality from cardiovascular diseases and diseases of the digestive system, in particular cirrhosis, among the middle aged and elderly. Conversely, the improvement between 1996 and 1998 was mainly due to a reduction in deaths from cardiovascular disease among the middle aged and elderly [31]. In 2001, male life expectancy in Romania was only insignificantly higher than in 1975 [34].

In Bulgaria, age-specific mortality for all age groups above 30 years has increased since 1970, especially in rural areas [35]. Between 1989 and 1997, life expectancy for

men declined by 1.32 years, particularly for men aged 40-69 [36]. Life expectancy for men was lower in 2001 than in 1970. Bulgaria and Romania have both effectively suffered a setback of three decades [37].

In stark contrast to the situation in Bulgaria, Moldova, and Romania, life expectancy appears to have improved in Albania, and, to a lesser degree, in Macedonia and the FR Yugoslavia, although for the reasons given earlier, these figures must be treated with extreme caution because of problems with the population denominators. In Macedonia, life expectancy at birth for both sexes is estimated to have slightly increased from 72.2 in 1991 to 73.4 in 2000, whilst the gap between the sexes remained almost unchanged [34; 38].

The health situation in Albania is noteworthy. Although it has long been one of the poorest countries of Europe, and has suffered considerable political turmoil and economic difficulties in the 1990s, mortality for ages over 15 years in Albania is among the lowest in Europe. A likely factor will be the consumption of a Mediterranean diet, characterised by high intakes of olive oil and fresh fruits and vegetables. A further factor, until recently, was the low level of motor transport, and thus road traffic injuries. Alcohol consumption and smoking were also low in the past, but are reported to be rising steeply [39; 20; 40].

The most recent estimate of life expectancy in Kosovo in 1995-96 was 76.6 years for females and 71.5 years for males [5]. Historical data are not, however, available. In the whole of FR Yugoslavia, life expectancy at birth has remained almost unchanged in recent years, although this obscures an increase in mortality in adulthood that was compensated for by a decline in mortality rate among under 5 year olds [15]. Data on life expectancy in Bosnia and Herzegovina is still based on pre-war data [18].

In all countries of the region, important sub-national variations in life expectancy exist, although these have received insufficient attention so far. In Bulgaria in 2002, the difference in life expectancy between districts with the highest life expectancy (Smolyan) and the lowest life expectancy (Sliven) was six years. Higher life expectancy was found in mountainous districts and areas with good physical infrastructure such as running water and sanitation systems and in-house lavatories, as well as in locations close to municipal centres [41].

In all South Eastern European countries, women can expect to live longer than men, but female life expectancy showed only a moderate increase in most countries during the 1990s, which should be a serious cause for concern. Furthermore, women appear to spend a greater proportion of their life in poor health. A study in Bulgaria indicates that, at all ages, the probability of being free from disability, handicap or in perceived good health was substantially less for women than for men [42].

### **3.2 Immediate Causes of Mortality and Morbidity**

There is even less information on specific causes of death available than data on overall mortality. Reporting of causes of death is not standardised and the quality of the reported causes of death is often poor. Few autopsies are done and there is little training, incentive or quality control. In Macedonia in 2001, 7.5 percent of deaths remained undefined as to cause, indicating a poor performance by the death registration system [43; 44]. In the Republika Srpska and in Bosnia and Herzegovina this number was even higher, with 15.4 percent of causes of death in 2001 undefined [45].

**Table 3**      **Leading Causes of Death for all Ages, as % of all deaths (a)**

	Year	Circulatory diseases	Cancer	External cause injury & poison	Digestive tract disorders	Respiratory system
Albania	2000	51.6%	13.7%	5.9%	2%	6.5%
Bosnia and Herzegovina						
Federation of Bosnia and Herzegovina (b)	2000	53%	17%	4%		
Republika Srpska (c)	2001	53.6%	16.8%	4.9%	2.5%	2.3%
Bulgaria	2001	64.4%	13.8%	4.5%	2.7%	3.5%
Croatia	2001	52.8%	23.1%	6.1%	4.9%	3.8%
Macedonia	2000	57.4%	16.1%	3.7%	1.9%	3.6%
Moldova	2001	58.7%	10.7%	7.6%	9.2%	5.7%
Romania	2001	60.4%	16%	5.7%	6.1%	5.7%
Serbia and Montenegro	2000	55.4%	16.6%	4.1%	2.7%	4.4%
EU average	1999	38%	27.2%	5.9%	4.6%	8.9%

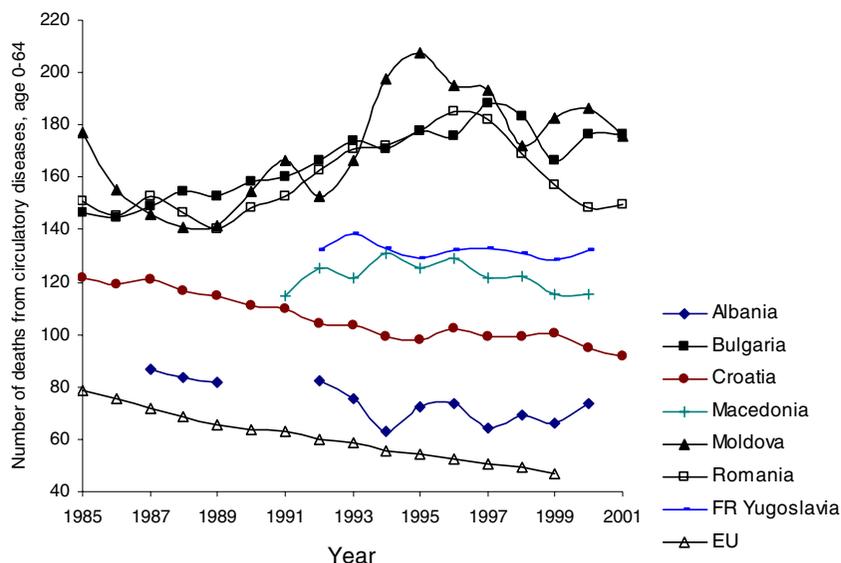
Sources: (a) WHO/Europe, HFA database, January 2003; (b) World Bank 2002: Interim Poverty Reduction Strategy Paper Bosnia and Herzegovina; (c) Republika Srpska Institute of Statistics 2002: Demographic Statistics.

As shown in Table 3, the most common causes of death in all countries of the region are cardiovascular diseases, followed by cancer, and then external causes of death, or diseases of the digestive or respiratory system. Deaths from communicable diseases declined throughout the region in the decades after the Second World War although there has been a resurgence in deaths from some communicable diseases in recent years.

### **Cardiovascular diseases**

As in Western European countries, cardiovascular diseases are the main cause of mortality in South Eastern Europe. However, in the West, mortality from cardiovascular diseases declined significantly during the last 20-25 years, reflecting a variety of factors including improved nutrition, reductions in smoking, and enhanced health care. In contrast, mortality from cardiovascular diseases in Eastern Europe increased in the 1980s and, although they have subsequently fallen in many countries, several countries and territories in the region now have some of the world's highest mortality rates from heart attack and stroke [46]. Cardiovascular diseases still accounted for more than half of the six year gap in life expectancy between Western and Eastern Europe in the mid 1990s [28].

**Figure 3 Age Standardised Death Rate from Diseases of the Circulatory System, per 100,000, age 0-64**



Source: WHO HFA database, January 2003.

As can be seen in Figure 3, premature mortality from cardiovascular diseases increased significantly after 1989 in countries that experienced a decline in life expectancy like Bulgaria, Moldova, and Romania, making rising mortality from cardiovascular diseases a major factor in the decreasing life expectancy in these countries. In all countries of the region, age-standardised death rates for cardiovascular diseases for the age group 0-64 years are higher than the EU average. The difference is smallest for Albania, which has been following the downward trend seen in the EU, although it then stagnated in the second half of the 1990s. The pattern in Croatia also followed that in the EU as a whole, although at a significantly higher level. In Macedonia and FR Yugoslavia, death rates for cardiovascular diseases stagnated in the 1990s for ages 0-64. However, registered morbidity from cardiovascular illnesses in Macedonia rose massively from 69 to 129.6 per 1,000 people in the period from 1993 to 1999, probably due to deteriorating socio-economic conditions [47]. In Bulgaria, Moldova, and Romania, premature mortality due to cardiovascular diseases in 1999 was 3.5 to 4 times higher than the EU average.

The trends are clearly disturbing. In Bulgaria, standardised death rates (SDR) for males aged 0-64 due to cardiovascular diseases have almost doubled since 1970. For the age group 35 to 64, male mortality due to cardiovascular disease in 1998 exceeded EU average mortality for all causes in 1997 [48]. In Romania, the SDR for cardiovascular diseases among men aged 0-64 years was the second lowest in the 10 central and eastern European countries that were to become candidates for EU accession in the 1990s but increased to the second highest in 1997. The SDR for ischaemic heart disease has increased dramatically by 47 percent between 1989 and

1997, 53 percent for men and 36 percent for women [37]. In Albania, Croatia, Macedonia, and FR Yugoslavia, rising numbers of deaths from cardiovascular diseases have been registered but problems with population data make reported rates problematic, [15; 49]. In Croatia, the SDR for ischaemic heart disease increased between 1985 and 1997 from 40 to 43 per 100,000 aged 0-64, with a similar increase for men and women [24].

Cardiovascular disease is associated with a complex and inter-related mix of factors. In countries where it has been most intensively studied, cardiovascular disease has been shown to be higher among the poor and in those whose control over their life is constrained, typically by their social position. It is also higher in smokers, those who are overweight, those consuming diets high in fat and low in fruit and vegetables, and those with inadequately controlled hypertension. It can also be associated with heavy alcohol consumption. All of these factors come together in many of the populations of this region, leading to the high observed levels of cardiovascular diseases. In contrast, the still comparatively low rates of cardiovascular diseases in Albania have been attributed to the prevailing Mediterranean diet [20].

Some commentators have also suggested that environmental pollution may play a role, noting, for example, that the incidence of cardiovascular morbidity in areas of Bulgaria with high levels of pollution is significantly increased [50]. However this can be explained by the clustering of multiple adverse factors in such areas, leading to the erroneous attribution of some diseases to pollution rather than to poverty.

### Hypertension

As noted above, hypertension increases the risk of cardiovascular diseases and in particular stroke. It is associated with obesity, excessive salt consumption, and regular alcohol consumption [46]. Although hypertension is an important avoidable risk factor, there are few data available on its prevalence in this region (Table 4).

**Table 4 Prevalence of Hypertension in South Eastern Europe**

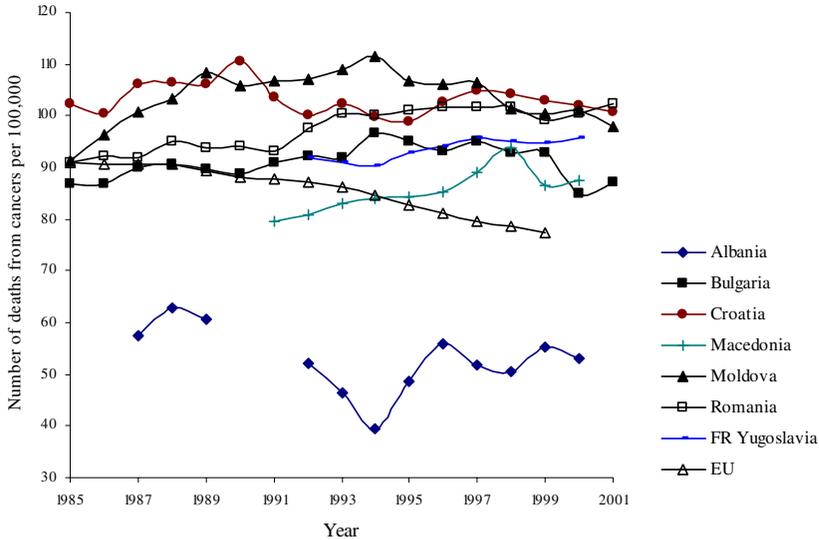
	Population group	Prevalence	Year	Source
Bulgaria	whole population	12-16%	“in recent years”	[46]
Croatia	men	20.7%	1999	[24]
	women	16.3%	1999	[24]
Macedonia	adult population	10%	1999	[51]
Serbia	refugees and IDPs	24.7%	2000	[52]
	resident population	27.9%	2000	[52]
Serbia and Montenegro	whole population	32%	not specified	[15]

Existing evidence suggests that many of those who have been diagnosed with high blood pressure do not receive any treatment or only inadequate medication [46; 52]. These findings suggest a need for programmes to enhance the detection and control of high blood pressure within primary care [53; 54].

## Cancers

Malignant diseases (cancers) are the second most frequent cause of death in the countries of South Eastern Europe. With the exception of Albania, standardised death rates for ages 0-64 are significantly higher than the EU average (Figure 4).

**Figure 4** Age Standardised Death Rate from Cancers, per 100,000 population, age 0-64



Source: WHO HFA database, January 2003.

In Macedonia, the reported death rate from cancers has almost doubled in the last 20 years, although as already noted, care must be taken when interpreting these figures because of problems with population denominators. It increased from 87.2 per 100,000 in 1983 to 147.5 per 100,000 in 1998 for all age groups [49; 55]. Increases have been particularly notable in cancers of the lung and prostate among men and breast and cervix among women [55; 56]. Mortality from cancers that are related to tobacco and alcohol use has increased rapidly in recent decades in Central and Eastern Europe, reflecting changes in consumption [57; 58]. Given the long lag phase in the natural history of many cancers, it can be expected that rates will continue to rise for some years in the future (*Box 1*).

In Bulgaria, the most common sites of cancer are breast, cervix, and corpus uteri in females and lung, prostate, and stomach in males. The incidence rates for all sites except stomach cancer are predicted to rise in the next 15 years. Compared to the period 1988-1992, rates in 2013-2017 per 100,000 females are predicted to rise for breast cancer from 38.8 to 64.6, for cervical cancer from 12.8 to 19.3, for corpus uteri from 12.4 to 26.5. In males, rates are expected to rise for lung cancer from 41.0 to 73.8, and for prostate cancer from 10.1 to 15 [59].

Cervical cancer is especially common in South Eastern Europe, with rates in 1999 six times higher than the EU average in Romania, and about three times higher in Bulgaria, Moldova, and the FR Yugoslavia. Cervical cancer rates are still increasing in most countries of the region [34]. Death from cervical cancer is largely preventable through cervical screening but there are few organised screening programmes in existence in the region and what screening activity takes place is often on an opportunistic basis, by individual physicians, and is often of low quality. Mortality rates due to breast cancer are still lower than in the European Union, but incidence rates are rising steeply [34].

In Croatia, an epidemiological study of the incidence of colorectal cancer in Split-Dalmatia County has shown a dramatic increase in cancer incidence during the last 20 years, with the national incidence rate increasing from 32.4/100,000 in 1985 to 37.8 in 1995. In Split-Dalmatia County, the rise was even more pronounced; from 16.2 in 1985 to 46.4 in 1995. This has been attributed to a change in diet and reduced physical activity, and hence greater levels of obesity [60].

Box 1

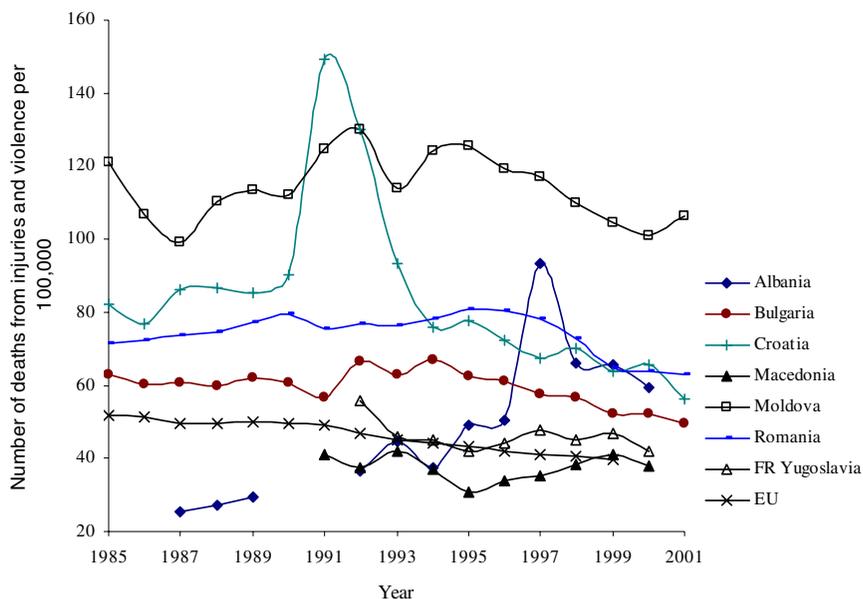
### **The Worst is Yet to Come**

Deaths from cancers attributable to tobacco and alcohol use have increased rapidly in recent decades in Central and Eastern Europe. The health effects of increased smoking will only become apparent in future years. Rates of smoking among men peaked only recently and are still rising among women so that millions of people alive now will die from the effects of current and past levels of smoking [61]. Projections of mortality over the next decade predict a rise in cancers at many sites in most countries [57].

### **Death from Injuries and Violence**

The term “external causes of death” is used to denote all deaths caused by injuries, poisoning, and events such as homicide and suicide. Increases in external causes of death have made a major contribution to changing life expectancies in Eastern Europe in the 1990s, accounting for a fifth of the six year gap in life expectancy between the EU countries and Eastern Europe in the mid 1990s [28]. This has affected primarily the countries that once comprised the Soviet Union. However, as illustrated in Figure 5, death rates from external causes in South Eastern Europe are noticeably higher than in the European Union. There is a substantial gender gap, with men more likely to die from external causes than women. The mortality gap with the EU countries attributable to injuries and violence is especially large among children, as described below.

**Figure 5** Age Standardised Death Rate from Injuries and Violence, per 100,000, all ages



Source: WHO HFA database, January 2003.

### Childhood injuries

Childhood injuries comprise an important component of the overall burden of external causes of death among children. As in EU countries, childhood injury is the most common cause of death among children in South Eastern Europe. In the whole of Central and Eastern Europe, the rate is 2.5 times higher than in the European Union and injuries account for a large part of the entire East-West gap in overall child mortality. Children from less well-off families are most at risk [62; 63].

The two most common causes of death from injury among children in Eastern Europe are traffic injuries and drowning [63]. Moldova has the highest rate in the region of under-five mortality rate due to poisoning or violence [13].

There is much room for improvement in the prevention of traffic injuries among children. Studies in Bosnia and Herzegovina and Macedonia have shown that school children's knowledge about traffic rules and the dangers of traffic was poor, indicating a need for enhanced education measures [64; 65]. Major improvements will also require better separation of children from fast-moving traffic.

Uncleared mines and the availability of firearms pose additional risks for the health of children. A study of more than 5,000 parents in Croatia in 1994-95 found that between 1/3 and 1/5 of the children of these adults could obtain access to small arms

or explosive devices at home, a situation that had been tackled in some countries through community-based interventions [66].

### **Homicide**

Obviously deaths from homicide have played a major part in the overall total of deaths from external causes in those countries suffering from wars and civil conflicts, such as Albania, Moldova, and the countries of the former Yugoslavia. An estimated 250,000 people were killed in the war in Bosnia and Herzegovina [3; 67], although the disruption caused by war means that these deaths are not included in mortality statistics. Where data are available, however, as in Croatia, where the war started in 1991, their contribution is striking. In Albania, more than 2,000 civilians were killed in civil unrest in 1997, equivalent to a death rate from homicide of 48.3 per 100,000, which was 50 times the EU average of the time. Two hundred and forty eight children were killed during the Croatian war [68] and 16,000 are estimated to have been killed in Bosnia and Herzegovina [69].

However, homicide rates in the region have long been high even in the absence of war.. This has been accentuated in recent years by the much greater availability of firearms [70]. As a consequence, even in countries not affected by civil conflict, homicide rates are at least 2.7 times higher than in the European Union [34; 37]. In Macedonia, for example, the prevalence of violent deaths has almost doubled between 1983 and 2000, with an increase from 1.6 per 100,000 to 3 per 100,000 [38].

### **Suicide**

Suicide rates in South Eastern Europe have remained largely unchanged during the last decade, except in the FR Yugoslavia, where they have increased among young people [70]. An exception is Albania, where the number of deaths due to suicide and self-inflicted injury more than doubled in the years 1997-1999. It seems most likely that this was linked to the chaos that followed the collapse of pyramid saving schemes, coupled with the greater availability of firearms. In all countries except Albania and Macedonia, suicide rates in 1999 were higher than in the European Union. The number of suicides in all ages in Bulgaria now exceeds the number of people who die in traffic accidents (17 and 15.2 per 100,000 respectively in 2000) [71]. This compares to a suicide rate of 10.3 per 100,000 in the European Union [34].

### **Road traffic injuries**

Death rates from road traffic injuries have increased significantly in all South Eastern European countries since the beginning of the 1990s, after borders opened and the number of vehicles increased. Even in Albania, the country with the lowest traffic density in the region, death rates exceeded the EU average in 1992. Although death rates due to motor vehicle accidents have declined, they remain above EU levels in Croatia, Moldova, and Romania [34]. This is particularly disturbing in view of the much lower traffic density in these countries.

### **Underlying factors**

The risk of accidental death is highest in countries that once comprised the Soviet Union, such as Moldova [69]. One important factor is the high level of alcohol consumption which plays a major role in rates of all forms of violence and injuries

[63]. In Croatia, the proportion of road traffic accidents involving alcohol in 1997 was 43 percent, which was more than twice as high as the EU average [24].

The legacy of war also contributes to the burden of external causes of death in South Eastern Europe. Firearms are widely available. In Bosnia, Croatia, and Kosovo, many landmines and unexploded bombs have yet to be cleared. In Bosnia and Herzegovina it is estimated that 4,064 people have fallen victim to landmines since 1991, 549 of them children. The annual number of landmine victims decreased since 1995, but the proportion of children has increased [72].

### **3.3 Infants and Children**

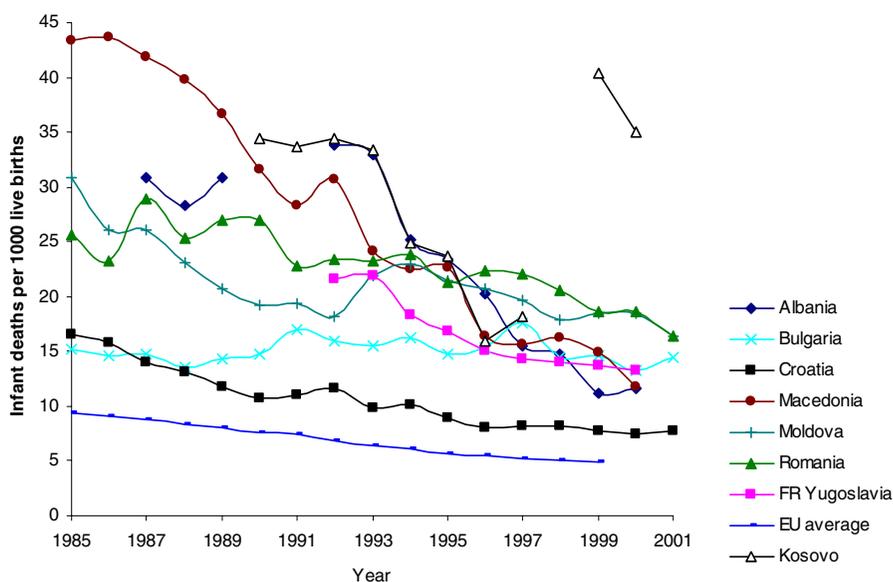
#### **Infant mortality**

One of the few positive developments in the last decade was that infant mortality continued to fall in almost all countries and territories of the region, although official numbers may be underestimates. The exceptions were Bulgaria, where infant mortality was slightly higher in 2001 than in 1989, and Kosovo, where infant mortality rates increased at the time of the war in 1999. Despite these positive trends, infant mortality in most countries is still many times higher than in EU countries. The regional average was 14.18 deaths per 1,000 live births in 1999, almost 3 times higher than the EU rate of 4.89 [34].

Once again there are major problems with the quality of data. The high reported infant mortality rates in Kosovo do not seem to be reflected in the WHO data for the whole of the FR Yugoslavia that show a continuous downward trend. There are little valid data on infant mortality in Bosnia and Herzegovina, due to unsatisfactory registration and unreliable recording [18].

The decline may in part be explained by the fact that in all countries of the region, birth rates have fallen over recent decades. The lower number of births may have improved access to intensive care facilities [73].

**Figure 6 Infant Mortality per 1,000 Live Births**



*Note:* Data are incomplete for Albania and the FR Yugoslavia.

*Sources:* WHO HFA database, January 2003; UNDP 2002: HDR Kosovo.

Bulgaria stands out as an exception to the general decline in infant mortality, even though it experienced a declining birth rate and continued to use a restricted definition of live births in which an infant weighing less than 1,000g must survive a week to be counted [74]. Indeed, between 1989 and 1998, neonatal mortality increased from 7.3 per 100,000 to 8.3 per 100,000. This has been attributed to the adverse social and economic situation in Bulgaria [75], although a disproportionately high teenage pregnancy rate and an increase in the proportion of births to mothers with poor education has also been identified [33]. Some commentators have linked persisting high infant mortality in Bulgaria to environmental pollution, citing evidence that areas polluted by chemical industries and metal works have the highest rates of foetal death, congenital malformations and premature birth, and impaired neonatal health [50]. However, such areas are also characterised by high levels of deprivation that could act independently to cause these findings.

A study on perinatal mortality in Bosnia and Herzegovina in 1999 identified prematurity as a major factor in 78.5 percent of early neonatal deaths [76], and evidence from elsewhere shows that prematurity is associated with poor socio-economic status of the mother. Similar findings have been reported from other countries in the region.

There are also considerable differences in infant mortality within countries. In general, it tends to be higher in rural areas, reflecting poorer living conditions, lower levels of education, and poorer access to health services. In Moldova, rural areas have infant mortality rates 10-15 percent higher than urban areas [13]. In Bulgaria, infant

mortality in rural areas in 2001 was 18.2 per 100,000, compared to 12.9 in urban areas, or 41 percent higher [36].

### Malnutrition among children

Infant mortality is a simple, but blunt measure of child health and there is a danger that relative optimism resulting from the fall in infant mortality observed in most countries of the region might conceal a more subtle deterioration in child health. This is confirmed by alarming data on childhood malnutrition.

**Table 5 Malnutrition among Children Under 5 Years Old**

	Low height for age (stunting)	Low weight for height (wasting)	Overweight	Obese	Year	Source
Albania	31.7%	11.1%			2000	WHO, [73]
	17%	4%	11%		2000	MICS, [4]
Bosnia and Herzegovina	10%	6%	13%	5%	2000	MICS [77]
Republika Srpska	11%	8%	21%	5%	2000	MICS, [78]
Macedonia	7%	3.5%			1999	MICS, [79]
FR Yugoslavia (data do not include Kosovo)	9%	2%			1996	[80]
	5%	4%	14.3%		2000	MICS, [81]

Data, primarily from UNICEF's Multiple Indicator Cluster Surveys (MICS), reveal a substantial proportion of children who are undernourished. Low height-for-age ("stunting") measures chronic under-nutrition, which exerts its effects over time. Low weight-for-height ("wasting") reflects a current nutritional crisis. Stunting and wasting are both associated with an increased risk of ill health and premature death in childhood and adulthood. The highest rates of stunting and wasting were found in Albania and evidence of malnutrition was, in general, more common in rural areas [79].

Paradoxically, the number of children who are overweight is increasing. The share of overweight and obese children was higher than that of undernourished children in Bosnia and Herzegovina and the FR Yugoslavia [21; 15]. Obese and overweight children, as well as children who suffered stunting or wasting, are at an increased risk of obesity in adulthood, with far-reaching implications for their chances to live a healthy life.

The nutritional status of children is linked to the economic and social status of their parents, and the situation reported in the MICS is likely to reflect growing social

inequalities. Children of poorer families or those living in institutions are more likely to show signs of under-nutrition [13].

### **Breastfeeding**

One of the factors that contributes to the poor nutritional status of children in South Eastern Europe is the low level and short duration of breastfeeding [83]. The optimal way to feed an infant is breastmilk. Human milk provides the normal balance of nutrients for a growing infant, as well as much-needed antibodies that support the immune system of the child. Several studies in the region show that the period of exclusive breastfeeding is much shorter than the six months recommended by the WHO. The 2000 Multiple Indicator Cluster Survey in the FR Yugoslavia (excluding Kosovo) showed that only 11 percent of children under 4 months of age were exclusively breastfed. However, this rate has already increased threefold since 1996 [81]. In Albania, a household survey in 2000 showed that only 9 percent of children under 4 months old were exclusively breastfed [4].

### **Immunisation**

Prior to transition, the countries of Eastern Europe had established an effective system to control many common communicable diseases and achieved high levels of childhood immunisations. The political turmoil and economic difficulties after 1989 disrupted immunisation programmes in most countries.

Croatia seems to be the only country of the region that has been able to maintain high immunisation rates throughout the 1990s [24]. In Bosnia and Herzegovina, vaccination coverage fell at least 50 percent during the war [8]. In spite of an expanded programme of immunisation, the percentage of fully vaccinated children was only 57 percent in 1995 in the accessible areas of the country [84]. A UNICEF-supported accelerated immunisation programme from 1997 seems to have achieved satisfactory levels of coverage since then [18]. However, despite the fall in coverage, outbreaks of major vaccine preventable diseases were avoided in Bosnia and Herzegovina, in part reflecting high vaccination rates prior to 1991 [85]. Immunisation rates in Macedonia declined in 1992 due to transportation blockades that resulted in a lack of vaccines, but were later restored to levels of 95-98 percent [47; 43; 86].

In Moldova, immunisation rates declined in the early 1990s. Outbreaks of diphtheria, measles, and cholera occurred between 1994 and 1996 [13; 87]. However, with international assistance, high vaccination levels were restored in the second half of the 1990s, as confirmed by the Multiple Indicator Cluster Survey in 2000 [88]. Between 1997 and 2000, infant mortality due to infectious diseases has halved [13].

In Albania, immunisation coverage was disrupted by internal conflicts, and a number of vaccine-preventable diseases were still common in the 1990s. In 1994 there was a severe cholera epidemic [39] and in 1996 an outbreak of polio. The polio outbreak however was contained, and in 2002 the entire WHO European Region was declared polio free. In 2000, Albania implemented a “catch-up” measles-rubella campaign for children aged 1 to 14, achieving a high national coverage [89].

Romania reported a major measles epidemic between December 1996 and September 1997, when a total of 20,000 cases were reported [90]. In Bulgaria, immunisation rates fell by 3-6 percent during the second half of the 1990s [33]. The coverage of

children with all three doses of diphtheria, polio, and tetanus immunisation (DTP3) declined from 99 percent in 1990 to 93.3 percent in 2000 [91].

In the FR Yugoslavia, a decline in immunisation levels was reported at the beginning of the 1990s. Between 1989 and 1994 coverage with DTP3 fell from 89.2 to 85 percent, with measles from 96.9 to 80.8 percent, and with polio from 88.8 to 84.4 percent. Coverage with the BCG vaccine (against tuberculosis) fell from 86.7 percent in 1989 to 68.3 percent in 1998. [80]. Cases of neonatal tetanus have been reported over the last few years, in particular in Kosovo, where there have also been several outbreaks of measles [21]. Other sources, however, indicate that vaccination rates in the FR Yugoslavia in the 1990s have either been maintained or improved, with the exception of measles [21]. The Kosovo Multiple Indicator Cluster Survey in 2000 found high levels of immunisation, with the exception of measles [81].

Data quality in the region is once again a problem and, in some cases, official coverage rates have been shown to be unreliable [39]. Household surveys organised by UNICEF in 2000 indicated that rates of immunisation might be much lower than the official data imply. In Moldova, 9 percent of children aged 12-23 months were not immunised against diphtheria, pertussis, and tetanus, as compared to the official figure of 1 percent [73].

### **Other threats to child health**

The health threats examined in this report are selective and children's health is endangered by many others. Yet one important factor is the high risk of dying from injuries and violence, which was highlighted earlier. Other issues may seem less serious but can still lead to suffering, such as with dental caries, which has been found to be high among children in Macedonia [92], although it remains unclear how this compares to other countries of the region.

## **3.4 Adolescents**

Adolescent health has received almost no attention in South Eastern Europe, yet adolescents in the region are being exposed to increasing, but still poorly understood threats to health. Many potentially harmful lifestyles, such as smoking, hazardous drinking, and poor diet are established during the passage from childhood to adulthood. Adolescents in South Eastern Europe are at particular risk from injuries, substance abuse, and the consequences of unsafe sexual behaviour.

The wars in Albania, Moldova and the former Yugoslavia, have claimed many young lives. Often, young people were the first casualties of war. In Bosnia and Herzegovina and Croatia, male mortality in 1991 was highest among 15-19 year-olds in Bosnia and Herzegovina and 20-24 year-olds in Croatia. Girls were often subject to sexual exploitation and rape [69].

### **Substance abuse**

Adolescents are at particular risk from substance abuse. One of the consequences of transition is an increased willingness among young people to experiment with legal and illegal drugs. Rates of smoking, hazardous drinking, and use of illicit drugs among young people are rising in all countries for which data are available.

## Smoking

During the 1990s, the proportion of young people smoking increased throughout Europe. The increase was the most rapid among girls in Eastern Europe [69]. Several surveys in South Eastern Europe have found high smoking rates among children 15 years old and younger. In Croatia, the European School Survey Project on Alcohol and other Drugs (ESPAD) in 1999 found that 70 percent of children aged 15 years have tried smoking, and 32 percent were daily smokers [24]. Another survey in Croatia confirmed very high rates of teenage smoking. In a survey among 160,000 pupils in 1999, more than 50 percent of pupils aged 15-19, and 15 percent of those aged 13-15, smoked tobacco on a regular basis. One factor may be that only 25 percent of pupils lived in families in which both parents do not smoke [94]. Smoking rates were similar in the FR Yugoslavia. A 1999 survey of children aged 11-15 in Belgrade and its suburbs found that 22.3 percent smoked regularly, increasing with age and being more common among girls [21]. In a survey among school children in Serbia in 1999, 27 percent of 15-year old respondents said they smoked every day, which is twice as many as in Canada and France, countries with what are regarded as very high rates of young smokers [95]. Among young people aged 15-24 in the FR Yugoslavia, 57 percent of young women and 64 percent of young men smoke daily, and more than 80 percent have smoked regularly at some point in their lives [70]. In Bulgaria, 41.3 percent of young people aged 15-24 were estimated to be smokers in 2001 [96]. The ESPAD survey in 1999 found that the proportion of 10<sup>th</sup> grade students in Bulgaria who smoked in the past 30 days was 50 percent, a figure higher than in all other 30 participating European countries, with the exception of Greenland. In Macedonia, 39 percent of 10<sup>th</sup> grade students participating in the 1999 ESPAD survey reported to have smoked in the past 30 days [97].

## Alcohol

Adolescent alcohol consumption has increased in the last decade in most European countries, but the increase was steeper in the transition countries of Eastern Europe [69]. Various sources suggest high levels of drinking among youth in South Eastern Europe, starting from a very young age. In a survey among school children in Serbia, 6 percent of 15 year-olds were drunk more than ten times [95]. Among Belgrade children, half of all boys aged 11-15 had tried alcohol, as had half of the girls aged 15. About 20 percent of children had been drunk at least once [21]. A survey in Romania found that one-third of 11 year-old boys had consumed alcohol and most males were occasional or regular drinkers by age 16 [69]. In a survey among 2,800 pupils in Croatia in 1998, around 63 percent of pupils said they consumed alcohol in the month before the survey was conducted [94].

## Drug use

Illicit drugs, in particular those taken intravenously, were largely unknown before transition. Since 1989, the production, trafficking, and use of illegal drugs have become widespread. A growing number of adolescents are willing to try illicit drugs. Although little information is available on the scale of the problem, it is clear that young people are the most vulnerable age group. In Albania, the number of users of illicit drugs is estimated to have doubled every two years during the 1990s. School based surveys in 1997-1998 showed that 10-12 percent of primary school children aged 13-14 have tried illicit drugs [98]. In Bulgaria, nearly 30 percent of high school students in cities between the ages of 14 and 18 are reported to have had experience with illicit drugs [46]. In a survey among 160,000 pupils aged 15-19 in Croatia in

1999, 18 percent of respondents had used illicit drugs at least once in their lives [94]. Cannabis is the most commonly used illicit drug, but opiates are also becoming more common. In Bulgaria, the number of heroin users is estimated to have increased from 1,500 in the beginning of the 1990s to 25,000-30,000 by the end of the 1990s, the majority of them being young people. The average age of people seeking treatment for heroin addiction has decreased from 24.7 in 1995 to 21.5 in 1999 [99].

### **Reproductive and sexual health**

Becoming sexually active is an important part of adolescence and young adulthood. The two most acute health problems associated with the reproductive and sexual health of young people in South Eastern Europe are sexually transmitted infections including HIV/AIDS, and unwanted pregnancies.

As is discussed in more detail in later sections, rates of sexually transmitted infections and HIV/AIDS have risen rapidly in the last years in South Eastern Europe and young people are among those most at risk. Young people are also over-represented among groups at highest risk of HIV infection, such as injecting drug users and sex workers. In Bulgaria, the age group most at risk from syphilis is between 20 and 24 years, constituting 24 percent of cases in 1998 [100]. Knowledge among young people of STIs and HIV/AIDS is lacking and access to contraceptives limited [70]. Only 12.8 percent of all adolescents in Moldova reported using a condom during their first sexual encounter [13]. In Romania, a survey in 1996 found that only 15 percent of unmarried women aged 15-24 used contraceptives at first intercourse [69]. Surveys among adolescents in Bulgaria show a significant increase in unsafe sexual behaviour. Sexual activity tends to start earlier, with a higher rate of sexual contacts, and a low proportion of condom use [46]. This not only increases the risk of transmission of STIs and HIV, but also contributes to high adolescent pregnancy rates. Birth and abortion rates among adolescent girls have fallen in most transition countries, but remain at higher levels than in most EU countries. In South Eastern Europe, adolescent pregnancies are particularly high in Bulgaria and Romania. In Bulgaria, the birth rate per 1,000 women aged 15-19 years declined from 75 in 1989 to 48 in 1999 but this was still six times higher than the EU average and has to be seen in the context of an overall decline in birth rates in Bulgaria [48; 33].

High levels of sexually transmitted diseases and pregnancies among teenagers illustrate the need for information and promotion campaigns. Sex education is not provided in many schools in the region. Where it is provided, it often fails to cover issues such as HIV, STDs, contraception, and birth control [101].

### **3.5 Women**

The former system brought about significant improvements in the health of women, accompanied by enhanced education and greater opportunities for employment, but some of these improvements were undermined in the 1990s. Women were among the first to lose their jobs, and are more often affected by poverty. Women tend to live longer than men, but they have higher rates of ill health and greater utilisation of health services. Reproductive health has been a neglected area in all countries of the region. There is a widespread lack of knowledge about reproductive health and family planning, and limited access to services and contraception.

The current situation has a particular impact on pregnant women. Antenatal care is, in theory, widely available but there is inadequate access for some groups. Care itself is

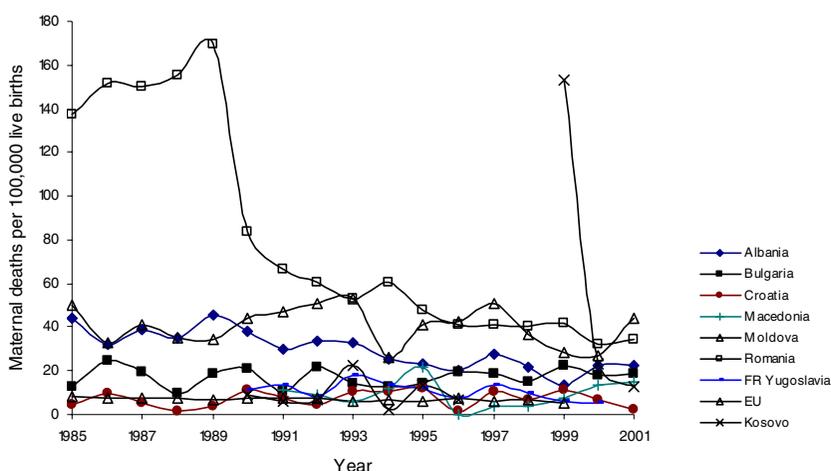
often medicalised and not women friendly. In Bulgaria, the percentage of women receiving no antenatal care was 22 percent in 1996, although it fell to 17 percent in 1997. In Romania, access to antenatal care was better, but varied considerably according to age, education, and economic status of the mother. There is also evidence of serious deficiencies in the quality of information and counselling provided during pregnancy. In Moldova, approximately one third of women felt they were not given sufficient advice about breastfeeding, labour, nutrition, the effects of alcohol and smoking, family planning, postnatal care, and possible pregnancy complications [13]. In Albania, less than half of all women surveyed in 2000 ever had a gynaecological examination [4]. In many countries, high rates of anaemia were found among pregnant women.

### Maternal mortality

During the 1990s, maternal mortality declined in some South Eastern European countries, while rising in others. It is on average 3-4 times higher than in the European Union. The most striking development was the dramatic decline in maternal mortality from very high levels in Romania after 1989. Until 1989, Romania had pursued a rigid pronatalist policy for over 23 years. The importation of contraceptives was banned, most abortions strictly prohibited, and a tax imposed on childless couples. With contraceptives lacking, many women resorted to clandestine abortions, resulting in a high number of maternal deaths [102; 103]. A new abortion law was legalised one day after the fall of the regime in 1989 [101], resulting in a drastic reduction in the number of maternal deaths.

In Kosovo, very high rates of maternal mortality were reported during the crisis in 1999. According to the UNDP Human Development Report in 2002, the rate was at least 153 per 100,000 live births [5]. A survey conducted by UNFPA and IOM indicated a much higher rate of 509 per 100,000 live births [5].

**Figure 7 Maternal Mortality per 100,000 Live Births**



Sources: WHO HFA database, January 2003; UNDP 2002: HDR Kosovo.

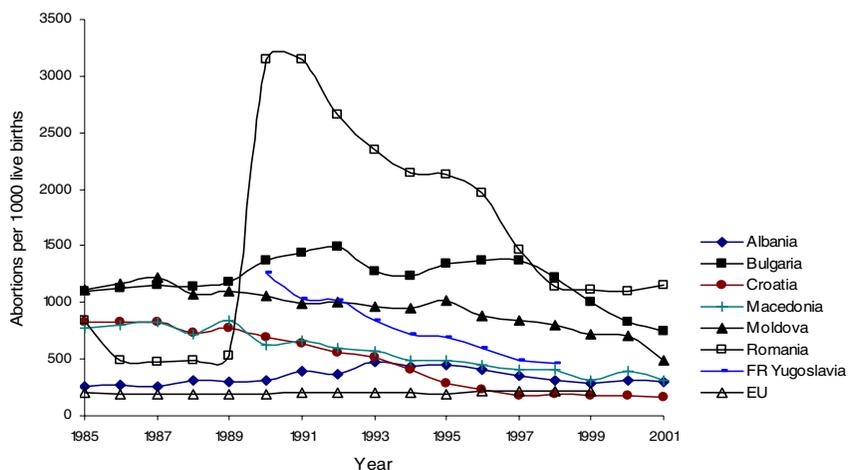
High rates of maternal mortality in Albania have been associated with poverty, poor antenatal and perinatal care, and difficulties in gaining access to care in rural and mountainous areas [4]. In Moldova, maternal mortality declined between 1995 and 1999, a fall attributed to a National Perinatal Care and Family Planning Programme [13]. However by 2001 rates exceeded the 1989 level. The high maternal mortality was attributed to poor availability of equipment and drugs, abortion complications, and increasing financial constraints facing families [87]. In Kosovo, poor nutrition, limited use of health services, low levels of education, and inadequate antenatal care were identified as important causative factors for maternal mortality [5].

### High rates of pregnancy terminations

Between a quarter and a third of maternal deaths in Eastern Europe are due to complications associated with unsafe abortion [73]. It was the most common form of fertility regulation pre-transition [103] with the exception of Albania (until 1991) and Romania (until 1989) where abortion was illegal [104]. In these countries, many unsafe abortions were performed, with a high risk of maternal death. In Romania, over half the maternal deaths follow abortions [101]. Although abortion levels have fallen during the last decade, they still remain high in many South Eastern European countries.

In Macedonia, the rate of abortions per 1,000 live births decreased from 618.46 in 1990 to 315.55 in 2001 [34]. In Moldova, a significant decline has been achieved since 1995, attributed to the National Family Planning Programme, which was backed by NGOs and international donors [13]. In Romania, abortion rates have fallen dramatically, but still exceed the number of live births. However, abortion continues to be a common form of family planning in many countries of the region [73].

**Figure 8 Abortions per 1,000 Live Births**



Source: WHO HFA database, January 2003.

The jump in the rate in Romania can be explained by the fact that abortion became legal in 1989 and more abortions were registered. As mentioned earlier, the result

was an equally dramatic drop in maternal mortality which resulted from unsafe abortion.

It is important to note that the actual number of abortions in the region can only be estimated due, in part, to a shift to private-sector services (where reporting is inconsistent) and, in part, to the use of clandestine services. Despite the legality of abortion, an anti-choice movement has succeeded in some countries in stigmatising the procedure sufficiently to push women to use clandestine services in an attempt to protect their anonymity. In Moldova, illegal abortions remain a leading cause of maternal mortality, accounting for 27 percent of all maternal deaths in 1998 [22]. Estimates for Romania indicate a declining trend in illegal abortions, with a reduction of 45 percent between 1990 and 1997 [105].

### **Lack of access to safe forms of contraception**

One of the main reasons for the high abortion rates is that access to safe forms of contraception is lacking. The use of modern forms of contraception is low in all countries for which data are available (Table 6). In Albania, less than 25 percent of the population is estimated to use modern forms of contraception. More than half of married or in union women in Bosnia and Herzegovina do not use any form of contraception.

**Table 6 Prevalence of Contraception in South Eastern Europe**

	Population group	Form of contraception	Prevalence	Source
Albania	Whole population	Modern contraceptive methods	<25%	[106]
	Women	Any method of contraception	<10%	[107]
	Girls between 15 and 19 years	Any method of contraception	38%	[4]
Bosnia and Herzegovina	Married or in union women aged 15-49	Any method of contraception	48%	MICS 2000 [77]
Republika Srpska	Married women	Any method of contraception	35%	MICS 2000 [78]
Bulgaria	Women in union aged 15-49	Any method of contraception	85.9	1995 [82]
Macedonia	Women of reproductive age	Condoms	41.9%	2002 [108]
Moldova	Women of reproductive age	Condoms	<10%	[13]
	Women	Adequate contraception	<50%	[13]
	Married or in union women	Any method of contraception	62%	MICS 2000 [109]
Serbia	Refugees and Internally Displaced People	Any method of contraception	33%	[52]
	1,500 households	condom use	22.4%	2000 [110]
Romania	Women in union aged 15-49	Any method of contraception	63.8%	1999 [82]

The low prevalence of modern forms of contraception inevitably results in a high number of unwanted pregnancies. According to the Reproductive Health Survey in Moldova in 1997, 85 percent of registered pregnancies were reported to be unintended, mistimed or unwanted [13]. The low use of condoms increases the risk of STIs and HIV. The high rates of unsafe abortion, STIs, and resulting complications meant that half of all women of reproductive age in Moldova were believed to suffer from reduced fertility [13].

The cost of modern forms of contraception is a major obstacle to improved reproductive health. Local supply is often insufficient and imported contraceptives are expensive. In Macedonia, oral contraception cost U.S.\$4 per month in 2001 — too expensive for many, when the average salary is U.S.\$120 [111]. A KAPB survey in 2002 confirmed that only 11.5 percent of respondents in Macedonia used oral

contraception [108]. An increase in the number of people living below the poverty line has resulted in an increase of unwanted pregnancies.

A general lack of knowledge about modern contraceptive methods is an additional problem, in particular among vulnerable groups [112]. In the KAPB survey in Macedonia in 2002, the share of women who said they had open conversations with their children about sexuality and contraception was particularly low for the Albanian and Romani minorities [108]. In the context of a strong gender inequality throughout the region, partner preferences contribute to the low use of condoms. It is particularly worrying that even health professionals are not sufficiently trained in reproductive health care [113]. A study among general practitioners in Bulgaria in 2001 showed that many did not yet accept that providing information about family planning to their clients was their job [114].

Pronatalist policies are a major threat to good reproductive health and a violation of reproductive rights. Triggered by declining birth rates and fears about “national survival,” several countries in the region have encouraged increased fertility. As noted earlier, abortion in Romania and Albania was prohibited until 1989 and 1991 respectively. In Croatia and the Republic of Serbia, abortion has been made less easily available in recent years [115].

### **High rates of cervical cancer**

Women in South Eastern Europe are especially affected by the rise in sexually transmitted diseases, which are harder to diagnose in women than in men. One of the most visible signs from this is cervical cancer, which results from human papilloma virus (HPV), a sexually transmitted infection. Mortality rates due to cervical cancer have increased in most countries in the region in recent decades and are now markedly higher than in Western Europe. Levels of premature mortality due to cervical cancer in 2001 were highest in Romania (11.94/100,000) and Moldova (8.98/100,000). These were 6.3 and 4.7 times the EU average in 1999 [34]. In Bulgaria, rates of cervical cancer have increased steadily since the 1970s and are now three times the EU average [48].

The high rates of incidence and mortality of cervical cancer are mostly due to the absence or inefficiency of screening services and prevention programmes although some of the increase in registered cancer rates can also be attributed to improved detection [101].

In a survey in Bulgaria in 2002, only 14.3 percent of women had undergone preventive gynaecological examinations [116]. Individual risk factors include early sexual activity without condoms, multiple partners, and cigarette smoking [24].

### **3.6 Lack of micronutrients**

Micronutrients such as minerals and vitamins play a crucial role in maintaining health. They are of particular importance for maternal and child nutrition. Small deficiencies can have a significant impact. Three nutrients of particular importance are iodine, iron, and vitamin A [21].

## Iodine deficiency

Because there is insufficient iodine in food and water in many parts of the world, adding iodine to salt is an important public health measure. In South Eastern Europe, iodine deficiency has been, and continues to be, a significant health problem. Iodine deficiency can result in goitre, and mental and physical retardation. (Table 7).

**Table 7** Prevalence of Iodine Deficiency Disorders in South Eastern Europe

	Population group	Prevalence	Year	Source
Albania	newborn children in a North-eastern area	nearly 33%	2000	[4]
Republika Srpska	school children	23.47%	1999	[117]
Macedonia	children aged 7-15	18.7%	1995-96	[49]
	children aged 7-15	3.8%	2000	[49]
Moldova	school children	22%		[109]
Serbia	school children	none	1999	[21]

The high rate of iodine deficiency disorders among children in South Eastern Europe requires urgent public health measures. Household surveys in Albania, Moldova, and the FR Yugoslavia showed many households did not have access to adequately iodised salt. In 2000, the proportion of salt that was adequately iodised was 73 percent in the FR Yugoslavia, 44 percent in Albania, 35 percent in Moldova, and only 13 percent in the semi-autonomous Transdnier region of Moldova [13; 81; 4]. Macedonia can serve as an example of how improvements can be achieved quickly when effective action is taken. After a national study in 1995-96 detected goitre among 18.7 percent of children aged 7-15, concerted action to improve consumption of iodised salt reduced the prevalence of iodine deficiency to 3.8 percent in 2000 [49].

## Iron deficiency

Iron deficiency is the most common cause of anaemia, characterised by a lack of haemoglobin in red blood cells. Anaemia can lead to lowered resistance against infection and is associated with mental and physical retardation in young children [21]. Maternal anaemia can result in pregnancy and birth complications. In Moldova, the percentage of live births complicated by anaemia has increased from 6 percent in 1989 to 27 percent in 1997 [101]. In Macedonia in 2001, 4.1 percent of hospitalised pregnant women had anaemia [118].

**Table 8 Prevalence of Anaemia in South Eastern Europe**

	<b>Population group</b>	<b>Prevalence</b>	<b>Year</b>	<b>Source</b>
Albania	pregnant women	23%	2001	[4]
Croatia	school children	7-16%		[24]
Macedonia	children	26%	1999	[49]
Moldova	children under the age of 5	28%	1997	[119]
	children between 6 and 12 months	47%	1997	[119]
	women in reproductive age	20%	1997	[109]
Romania	children under 5 years	49%	mid-1990s	[37]
FR Yugoslavia	pregnant women	9.45%		[80]
	women of child-bearing age	27%	2000	[81]
	children aged 6-59 months	30%	2000	[81] [21]
Republic of Serbia (data do not include Kosovo)	refugees and IDPs	>25%	2000	[52]

High and increasing rates of iron deficiency among children and women have been found in all countries in which studies were undertaken. Low levels of iron and other essential micronutrients such as vitamins can be attributed to poor nutrition, lacking in fresh fruits and vegetables [13]. In many Western countries, this issue has been tackled by fortification of common foodstuffs, such as flour with iron or folic acid [73].

### **3.7 Specific Diseases**

#### **Diseases of the digestive system**

Of the broad categories of disease used in international comparisons, diseases of the digestive system exhibit a particularly large gradient between South Eastern and Western Europe. There is a band of countries, stretching from Slovenia through Hungary and Romania to Moldova that have especially high death rates from liver cirrhosis [22; 119]. The reasons are not fully understood but may relate to patterns and types of alcohol consumption, possibly interacting with environmental or nutritional factors [31].

## **Diabetes**

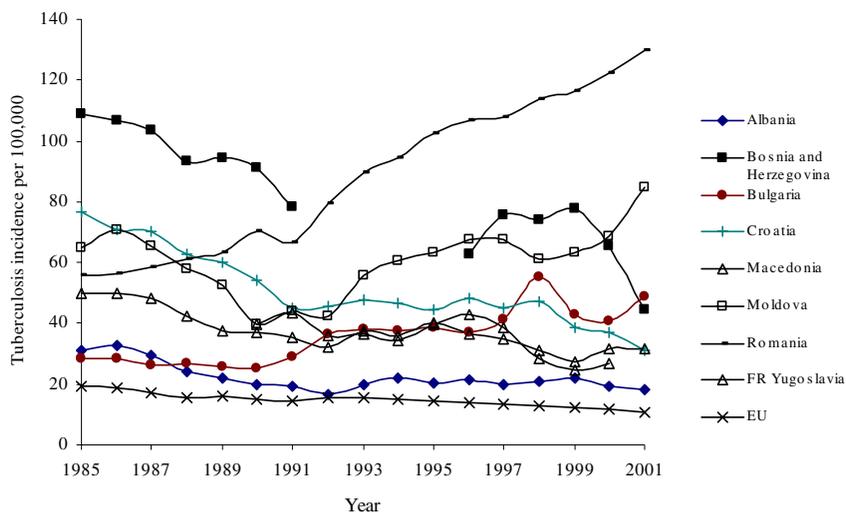
The prevalence of diabetes is growing rapidly in the countries of Eastern Europe. This can be attributed to an imbalance between energy intake (diet) and expenditure (exercise), manifest as increasing obesity. Because of its chronic nature, severe complications, and the need for effective control, diabetes is a major economic burden on individuals and health care systems [120; 121]. People with diabetes are 3-5 times more likely to get cardiovascular diseases and their life expectancy can be reduced by up to 30-40 percent [92].

Little is known about the prevalence of the disease in South Eastern Europe, but available data indicate rapidly rising rates. In Bulgaria, the prevalence of diabetes has increased 10 times in the last two decades compared to the period 1946-1980. It is now estimated at 1.74 percent of men and 2.08 percent of women suffer from diabetes [46]. In Macedonia, it is estimated that 3.5-4 percent of the population (70-80,000 people) is suffering from diabetes. Of this number, 1,200 have been diagnosed with diabetes type I, while the rest have diabetes type II [122]. In Albania, a study found an overall prevalence of type II diabetes of 6.3 percent, exceeding the rates in England [4].

## **Tuberculosis**

Tuberculosis (TB) is among the leading causes of death from infectious disease among adults worldwide. It re-emerged in Eastern Europe during the 1990s after 40 years of steady decline. War, civil unrest, economic and social crisis, and the collapse of health care systems have led to the spread of this disease. Appropriate drugs and standardised treatment regimes have been lacking and the proportion of cases that are resistant to multiple drugs (multi-drug resistant tuberculosis) has increased. TB disproportionately affects the poorest and most marginalised population groups, who also are the most likely to experience difficulties in accessing health services. Official data are thought to underestimate the actual number of cases, because the costs and social stigma attached to the disease deter many from seeking treatment.

**Figure 9 Tuberculosis Incidence per 100,000 Population**



Source: WHO HFA database, January 2003.

In South Eastern Europe, Moldova, and Romania were the countries with the highest officially reported incidence rates in 2001. Romania has experienced a steady increase in TB since 1985 and, according to data submitted to the WHO, the incidence was 130.07 per 100,000 in 2001. This was 12 times the EU average of 10.62 per 100,000 [34]. In Moldova, the incidence of TB has been increasing since 1992. This has been attributed to inadequate identification and treatment of TB patients and a shortage of TB drugs [123; 119]. The real number may be twice as high, since many patients cannot afford medical care [123]. Prisons are focal points for the disease. In Moldova, the incidence of TB in penitentiary institutions in 1999 was 6,000 per 100,000. This was over 40 times higher than the national average of 61.8 per 100,000 [119]. In Bulgaria, an alarming increase in the number of TB cases has been registered during the 1990s. Multi-drug-resistant TB was first detected in 1993 and has now increased to 8.6 percent of new cases [124]. In Bosnia and Herzegovina, high rates seem to be declining since 1999. Although this is not reflected in the data reported to WHO, anecdotal evidence indicates that Kosovo and the Republic of Serbia also experience very high rates of TB.

## HIV/AIDS

If no decisive action is taken, a major HIV epidemic in South Eastern Europe appears to be inevitable. Prevalence rates in the region are still thought to be relatively low, but there are a number of factors in place that could fuel an epidemic. Underdeveloped surveillance systems, under-diagnosis and under-reporting, and the long incubation period between infection and the onset of AIDS symptoms mean that official rates of HIV/AIDS are generally considered to be underestimates. Especially little is known about the most vulnerable groups.

The highest HIV prevalence rate was recorded in Romania, with a cumulative total of 12,559 cases of HIV/AIDS in 1985-2001 [125]. The majority were children, who contracted the disease as a result of unsafe medical practices in foster homes at the end of the 1980s. Romania was the single country in Eastern Europe that experienced increasing childhood mortality in the 1990s [31] and has the largest number of paediatric HIV/AIDS cases in Europe [126].

In most countries it is believed that heterosexual transmission is the main mode of infection. The exceptions are Moldova and Serbia and Montenegro, where transmission is primarily through injecting drug use [125]. However the disease is expected to spread increasingly from injecting drug users to the wider population [123]. The number of injecting drug users in Moldova is rising rapidly, mirrored by a rapid increase in HIV/AIDS cases. Between 1997-2000, 18 times as many cases of IDUs were registered as in 1978-1996 [127].

In Bulgaria, a total of 359 cases of HIV/AIDS have been reported in the period from 1986 to 2000. Nevertheless, Bulgaria is ranked seventh of the 10 countries identified by WHO as most at risk of a rapid HIV/AIDS epidemic over the next 10 years [128]. Low official prevalence rates can disguise an epidemic in vulnerable groups about which very little is known. The countries of the region share many characteristics with countries in the former Soviet Union that have experienced a sharp increase of HIV infections in recent years. Social and political crises, rising levels of poverty and unemployment, and large-scale population movements are all factors associated with greater risk of transmission. The breakdown of border controls has facilitated an increase in trafficking of both drugs and humans. Of particular concern is the rapid increase in commercial sex work due to a number of factors, including economic crisis, organised crime, and increased demand, partly as a result of the large international presence in Kosovo and Bosnia and Herzegovina. High rates of unprotected sex and STIs further increase the risk. In addition, there is a lack of access to prevention services, STI testing and treatment, and HIV counselling and testing [129; 4; 125].

There is evidence of low public awareness about HIV and AIDS, with little coverage in schools or by public education campaigns. There are few NGOs working in this area. UNICEF Multiple Indicator Cluster Surveys revealed that many women have a low level of knowledge of ways to reduce the risk of sexual transmission of HIV.

A survey among 1,200 women in Skopje in Macedonia in 2001 confirmed the existence of a large number of misconceptions about HIV/AIDS and its methods of transmission. Thirty seven percent of respondents had not changed their behaviour in order to minimise the risk of transmission [108].

The high levels of stigma attached to the most vulnerable groups in all countries of the region make the fight against the spread of the disease more difficult. There is also strong prejudice against people living with HIV/AIDS. In the Multiple Indicator Cluster Surveys in Bosnia and Herzegovina and FR Yugoslavia (excluding Kosovo) in 2000, 24 percent of women in Bosnia and Herzegovina and 29 percent in the FR Yugoslavia agreed with at least one of two discriminatory statements about people living with HIV/AIDS [78; 77; 81].

As noted earlier, commercial sex work has increased rapidly in the last decade, but is still deemed illegal in all countries except Bulgaria. Sex workers frequently have very limited access to health and social services, in part because of the degree to which they are controlled by those involved in organised crime and, in particular, human

trafficking. There is also a very hostile climate towards men who have sex with men. Other groups facing high levels of prejudice and stigma, such as intravenous drug users and Roma, also have an increased risk of HIV infection [125; 130; 131].

### **Sexually transmitted diseases**

The spread of STDs such as syphilis and gonorrhoea has raised serious concern in most countries of the region, partly because it increases the risks of HIV infection. In principle, all countries have mandatory reporting requirements, but in practice official statistics are considered to be unreliable, in particular because of the growth of private, and typically non-reporting, physicians. As a result, official figures about the prevalence of sexually transmitted diseases have to be treated with caution. In Macedonia, rates of STDs are considered to be underreported by a factor of 3-4 [130]. In Montenegro, the reporting of STIs by physicians is believed to be poor, even in cases that are confirmed by health laboratories [132]. No surveillance studies of incidence or prevalence of STIs have so far been done in the UN administered province of Kosovo [5]. Even less region-wide information is available about behaviours that place people at risk.

Moldova and Romania have the highest registered rates of syphilis and gonorrhoea in the region. In Moldova, the number of cases of syphilis increased from 7.1 to 200.1 per 100,000 between 1989 and 1999. Reported cases of syphilis declined after 1999, but this has been explained by reduced levels of testing [123]. In Albania, the number of reported syphilis infections increased tenfold since 1997, from negligible levels prior to 1995 [4]. The number of cases of syphilis reported from Bulgaria has risen from 4.5 per 100,000 in 1990 to 30 per 100,000 in 1999 [124]. Serbia has experienced a rapid increase of syphilis since 2000 [125].

### **Other infectious diseases**

A number of other infectious diseases have caused concern in the region. As noted earlier, some vaccine preventable diseases, such as polio, measles, rubella, and tetanus, have increased as a result of declining vaccination coverage in the beginning of the 1990s. Other infectious diseases that have become common again in the 1990s include enterocolitis, hepatitis, scabies, and chicken pox. There have been reports of increases in the incidence of infections acquired from animals in Bulgaria [48]. In Macedonia, high rates of hepatitis A, at around 100 per 100,000, were registered in the period 1990-2000 [49]. According to the WHO database, however, the incidence of hepatitis A declined to 20 per 100,000 in 2001 [34]. As always, many infectious diseases take advantage of poor living conditions, poverty, and social disruption caused by war and civil unrest [133; 18].

### **Mental health and disabilities**

The stress of transition and its enormous social costs, coupled with lack of economic and political stability and weakened family and social networks have had severe consequences for mental health in the region. In particular the wars and conflicts in former Yugoslavia, Albania, and Moldova had traumatic effects on the population. The most vulnerable groups included refugees and internally displaced persons, orphans, children, the elderly, and soldiers. Women were especially vulnerable as victims of rape and domestic violence. Reported rates of psychiatric symptoms have

increased and suicide rates have been growing, especially among young people. There have also been reports of high levels of post-traumatic stress disorder (PTSD). Yet relatively little systematic information is available about the mental health status of people in South Eastern Europe [4; 134] and real rates of mental illness are assumed to be much higher than registered cases, due to the high level of stigma attached to the mentally ill.

In Bosnia and Herzegovina, 15 percent of the population are estimated to have suffered psychological trauma, in particular post-traumatic stress disorder [18]. Over 90 percent of children who have lived in high-risk zones, such as Sarajevo or Vukovar, have been exposed to severe traumatic life events and many have been identified as in need of professional help. Most affected were refugee children [135]. A study of children aged 9-14 and their mothers in Bosnia and Herzegovina confirmed high levels of post-traumatic stress symptoms, although surprisingly, levels of depression and anxiety were not reaching expected levels [136].

In Bulgaria, the number of patients with recorded psychiatric disorders increased between 1986 and 1998, in particular those with alcohol and drug psychosis, alcohol dependence syndrome, schizophrenia, manic depression, acute stress reactions, and psychosomatic disorders. Existence of mental trauma has been identified in one out of every 13 men and one out of every 10 women, but little is known about the causes [46].

Throughout the region, mental health services are under-developed. Service provision is largely institutional, with few community-based support services. A positive exception is Bosnia and Herzegovina, where reconstruction after the war was based on the principle of community care. A network of community mental health centres has started to operate, and training of staff has been conducted [137]. In Croatia, psychiatric help to persons traumatised during and after the war also employed a community based approach [138].

In psychiatric hospitals throughout the region conditions are generally very poor, with a poorly developed culture of respect for patients' rights. Living conditions are often inhumane. Many staff have low levels of training and mental health has historically been a low priority in the medical curriculum [139-141]. WHO has described the mental health care situation in Albania as "almost [an] emergency situation" [4].

In South Eastern Europe, official policies often relegate people with mental disabilities to long-term psychiatric facilities, social care homes, orphanages, or institutions for people with developmental disabilities, where conditions frequently violate basic human rights, as has been documented by Amnesty International and other human rights organisations [142]. Those not living in institutions are often isolated at home due to the lack of a network of community-based services, societal prejudice, and the shame of relatives. This exile to long-term institutions or to family homes results in their "invisibility" in society and fosters prejudice in the general population, reinforcing prevalent exclusionary public policies.

## **4 Promoting Healthy Societies**

### **4.1 The risk factors**

There are no established national surveillance systems tracking risk factors for chronic disease, but from what is known, levels of many traditional risk factors are very high in South Eastern Europe. Furthermore, the impact of these risk factors is exacerbated as access to preventive health services is limited. Individual lifestyles are strongly influenced by socio-economic, cultural, and religious factors. On the basis of experience in EU countries, higher socio-economic status can be expected to be associated with less hazardous lifestyles. Better educated people tend to have easier access to health related information, better living conditions, and can afford healthy food and leisure time exercise.

Women tend to adopt healthier life styles than men, and differences in traditional risk factors are a major explanation of the difference between male and female life expectancy [27; 143]. A comparative study of health behaviours in Varna, Bulgaria, and Glasgow and Edinburgh, Scotland, showed much higher levels of exposure to risk factors in Bulgaria. Respondents in Varna smoked more, ate fewer fruits and vegetables, and took less exercise. However, in all three cities, respondents who were female, employed, and well educated had healthier life styles than their male counterparts [143].

#### **Tobacco**

Tobacco smoking is one of the biggest threats to health in South Eastern Europe. It affects not just those actively smoking but also those exposed to their smoke. It increases the risks for many cancers and cardiovascular and respiratory diseases. Smoking mothers are more likely to have low birth weight babies or have children that die from sudden infant death syndrome. In Albania, smoking has been blamed for the deaths of one in five males under 70 years [4]. In Bulgaria, it is estimated that smoking is responsible, directly or indirectly, for 21.6 percent of mortality [96]. In the FR Yugoslavia, 20 percent of hospitalised patients and 35 percent of deaths have been identified as smoking-related [15].

The largest single component of the total burden of tobacco-related deaths is cardiovascular disease. However, when tracking trends in smoking related disease, lung cancer rates are widely used because of the specific nature of the relationship; about 90 percent of cases of lung cancer in men in developed countries are caused by smoking. As noted previously, it is important to note that lung cancer rates are a measure of the historical burden of exposure to tobacco and so lag several decades behind changes in smoking rates. Data supplied to the WHO indicate that lung cancer mortality rates in South Eastern Europe between 1999 and 2001 were below the average in Western Europe in all countries for which data were available except Croatia and the FR Yugoslavia, with the unweighted average for the South Eastern European countries of 34.97 deaths per 100,000 population, compared to an EU average of 37.76 in 1999.

Data from the International Agency for Research on Cancer for 2000 paint a similar picture. In Albania, Bosnia and Herzegovina, and Croatia standardised death rates for lung cancer among men are thought to be higher than in the EU. Among females,

Croatia was the only country in 2000, where lung cancer mortality rates in 2000 were higher than the EU average [144].

However, given the long lag periods between taking up smoking and dying from lung cancer, this should not lead to any complacency. It can be predicted with confidence that lung cancer rates in this region will be much higher in the future, especially among women.

As a consequence of declining rates of smoking in North America and the EU, the transnational tobacco industry is actively seeking new markets in countries such as those in South Eastern Europe, employing massive marketing campaigns that heavily target women in particular, among whom smoking rates have traditionally been low. There are two main ways of estimating the prevalence of tobacco smoking: the use of statistics on the number of cigarettes sold, and, preferably, surveys among the population. Official sales statistics in this region are especially problematic as they do not take into account smuggling of cigarettes, which is widespread throughout the region, often with the complicity, or even the active involvement of the international tobacco companies.

While recognising the limitations of sales data, they do give some indication of the scale of the tobacco problem in South Eastern Europe (Table 10).

**Table 9**      **Reported Number of Cigarettes Consumed per person/year**

	<b>1999</b>
Albania	963.41
Bosnia and Herzegovina	2562.52
Bulgaria	2314.08
Croatia	2086.4
Macedonia	2658.22
Moldova	1096.85
Romania	1781.1
FR Yugoslavia	2097.96
EU average	1652.94

*Source:* WHO HFA database, January 2003.

Surveys on smoking prevalence confirm very high smoking rates in most countries of the region. Table 11 summarises the available data.

**Table 10 Prevalence of Tobacco Use in South Eastern Europe**

	<b>Population group</b>	<b>Males</b>	<b>Females</b>	<b>All</b>	<b>Year</b>	<b>Source</b>
Albania	20-44 years old	44.4%	6.3%		1995-1996	[145]
	medical students in the 5th year of studies	55%	34%		2002	[146]
	over 15 years	60% (in 2000)		39%	2001	[4]
	25 years and over in Tirana	37.6 %	19.3%	28%	2001	[147]
Bosnia and Herzegovina	all over 15 years			48%	1995	[145]
				60%	2000	[148]
Bulgaria	over 15 years	49.2%	23.8%		1996	[145]
	over 18 years	38.4 %	16.7%		1997	[149]
	11-17 years	23.5%	31.4%		1998	[145]
Croatia	18-64 years old	34.1	26.6	31%	1995	[145; 150]
	adults			33%	1999	[24]
Moldova	above 15 years	43%	3 %		1998	[145]
	adults	50%	15%			[22]
	adults	46%	18%			[87]
Romania	doctors	61%	51%			[27]
	15 years and older	42.7%	15.2%		1994	[145]
	adults	32%	10%		2000	[148]
Republic of Serbia (data do not include Kosovo)	refugees and IDPs aged 20 years and over			61.2%	2000	[52]
	domicile population aged 20 years and over			60.4%	2000	[52]
FR Yugoslavia	adults			57%	1999	[145]
	above age 18			69%	2000	[15]
EU average	above age 15			29.29%	2000	[34]

The data available on the prevalence of tobacco smoking have to be treated with caution. None of the countries of the region has an established system of monitoring smoking prevalence rates in the population. The data given in Table 11 come from surveys with widely varying sample sizes, population groups, and research methods, so that, as with sales figures, comparability is limited.

However, available data clearly show disturbing trends. An alarming 69 percent of the population aged over 18 years was estimated to smoke in the FR Yugoslavia in 2000. As these figures show, smoking rates are somewhat higher than in the EU. Smoking rates are rising rapidly among adolescents, in particular among girls. In a survey among 160,000 pupils in Croatia in 1999, more than 50 percent of pupils aged 15-19, and 15 percent of those aged 13-15 smoked tobacco on a regular basis. [94]. Among young people aged 15-24 in the FR Yugoslavia, 57 percent of young women and 64 percent of young men smoke daily, and more than 80 percent have smoked regularly at some point in their lives [70]. In Bulgaria, 41.3 percent of young people aged 15-24 were estimated to be smokers in 2001 [96].

It is likely that tobacco consumption in South Eastern Europe will increase further. In Bulgaria and Romania, an increase by 10-30 percent is expected by 2008 [148], with inevitable consequences for future rates of lung cancer and other smoking-related diseases [24]. The WHO estimated that 20 percent of all smokers aged 35 in Central and Eastern Europe will die from tobacco-related illness by the age of 69 [151].

All of the countries in South Eastern Europe are themselves producers of tobacco. The largest producers are Bulgaria and Macedonia. In 1997, they were among the top 30 tobacco producers in the world. Bulgaria produces about 0.5-0.7 percent of world tobacco and is the biggest producer and exporter of cigarettes in the region [145; 148; 96].

Workers in the tobacco industry are also extremely vulnerable. In Moldova, 70 percent of people working in tobacco processing already report significant health problems [119].

## **Alcohol**

Alcohol is another major avoidable risk factor for disease and premature death in the region. It contributes to deaths from cardiovascular disease and cancer, and is a leading cause of intentional and unintentional injuries. Men are more likely to consume hazardous amounts of alcohol than are women.

As in other former Soviet countries, the role of alcohol consumption on cardiovascular disease has been most apparent in Moldova, thought to be due to the custom of drinking spirits and in binges [152].

Although the acute effects of alcohol consumption are less apparent in South Eastern Europe than in the former Soviet Union, deaths from liver cirrhosis are extremely frequent. As noted previously, the reasons are still somewhat speculative although possible explanations include the pattern of drinking or interactions with other genetic or dietary factors [29].

Although cirrhosis also has other causes, such as hepatitis infection, the 60 percent increase in male death rates in Romania from chronic liver disease and cirrhosis between 1990 and 1996 is almost certainly due to increased alcohol consumption [31].

Accurate information on the actual consumption of alcohol is difficult to obtain, because of high levels of unrecorded production and consumption. Official data on alcohol consumption in Bulgaria, for example, register a decline since the beginning of the 1990s to lower levels than the EU average, contrasting with other evidence of increasing consumption [48].

What studies exist indicate increasing levels of alcohol consumption, for example in Bosnia and Herzegovina where there is widespread and increasing consumption of alcohol by males [18]. Alcohol consumption in Bulgaria increased substantially in the last 15-20 years. Between 1986 and 1996, the proportion of the population over 15 years of age who are regular drinkers has increased from 76.4 percent to 81.5 percent for men and from 33.6 percent to 49.9 percent for women. The number of alcohol “abusers” is estimated at 280,000-300,000 people, or 17 percent of the adult population [46]. In Moldova, per capita alcohol consumption is estimated to be around 10 litres of pure alcohol equivalent, with an additional unrecorded alcohol consumption of around 7 litres per person per year [22]. This is almost twice the EU average of 9.3 litres per capita in 2000 [34].

As noted in the section on adolescent health, a particular worrying trend is the increase of adolescent alcohol consumption [69]. Various sources suggest high levels of drinking among youth in South Eastern Europe, starting from a very young age. A recent survey in Romania found that one-third of 11 year-old boys had consumed alcohol and most males were occasional or regular drinkers by age 16 [69].

## **Drug use**

Illicit drugs expose their users to many risks to health, as well as wider social problems, including impoverishment, crime, and commercial sex work. For example, the price of illicit drugs in Croatia is similar to that in EU countries even though wages are much lower, leading to much worse social and economic consequences for users [94]. In the 1990s, the production and trafficking of illicit drugs has spread rapidly in South Eastern Europe, reflecting various factors, including civil conflict, break down of weakened and often corrupt law enforcement and border control systems, increased population mobility, and the marginalisation of substantial elements of the population.

Albania, Bosnia and Herzegovina, Kosovo, and Moldova, all of which are plagued by high levels of organised crime, have become centres of production, trafficking, and consumption of drugs in South Eastern Europe. In Bosnia and Herzegovina, members of former paramilitary groups with close links to political elites are suspected of controlling the drug trade [18]. In Moldova, the annual turnover of drug operations is estimated to be worth more than the annual amount of foreign direct investments to the country [13].

An increase in the use of illicit drugs, including heroin, has been reported in all countries of the region since the beginning of transition. In Romania, there are indications of increased injecting drug use and increased trafficking of heroin, but little has been documented [153]. In Bulgaria, the number of heroin users is estimated to have increased from 1,500 in the beginning of the 1990s to 25,000-30,000 by the end of the 1990s. A particular worrying trend is an increase of 70 percent in hepatitis C infection among intravenous heroin users in 1999, suggesting a high risk of a future HIV epidemic [99; 124].

In Macedonia, there were 5-6000 registered heroin addicts in 2001, but the real number is likely to be three times higher [92]. In Croatia, the total number of heroin addicts in 2000 has been estimated at 1,500 [94]. In Albania, the total number of drug users has been estimated to be between 10,000 and 30,000. A rapid assessment among especially vulnerable people in Albania found that knowledge by drug users of issues related to HIV/AIDS and other STIs was limited and levels of risky behaviour, such as needle sharing or unsafe sex, high [98; 4]. As in other countries of the region, demand for treatment of heroin addiction is increasing, but remains insufficiently met by medical services [154].

### **Unsafe sexual behaviour**

Rates of sexually transmitted infections, and HIV/AIDS in particular, have risen rapidly in recent years throughout South Eastern Europe, particularly among young people. This is not surprising in societies where sexual activity appears to be starting earlier, yet knowledge of the risk factors for STIs and HIV/AIDS is lacking and access to condoms is limited. Only 12.8 percent of all adolescents in Moldova reported using a condom during their first sexual encounter [13]. In Romania, a survey in 1996 found that only 15 percent of unmarried women aged 15-24 used any form of contraceptive at first intercourse [69].

A rapid assessment focusing on HIV/AIDS among especially vulnerable young people in South Eastern Europe confirmed the existence of high levels of risky behaviour among those interviewed. Ninety percent of injecting drug users had sex while under the influence of drugs, but only 14 percent used condoms regularly. Ninety three percent of sex workers had sex while under the influence of drugs, but only 47 percent used condoms regularly. Over 60 percent of injecting drug users shared needles and syringes [129].

### **Nutrition**

The region faces three types of nutritional problems: undernutrition, specific micronutrient deficiencies, and obesity. As has been noted in earlier chapters, there are alarmingly increasing levels of malnutrition, including an increase of iron and iodine deficiency disorders, and of obesity and diabetes. Poor nutrition and obesity are linked to a number of health problems, including circulatory and heart diseases, cancer, hypertension, diabetes, and an increased risk of infectious diseases, including HIV/AIDS and TB. In a World Bank study on poverty in Albania in 2002, 33.5 percent of households that reported declining health attributed this to insufficient and/or poor quality of food [155]. The role of maternal malnutrition in adverse outcomes of pregnancy complications is also increasingly recognised [101].

The deterioration of nutrition in South Eastern Europe after 1989 is the result of the combination of several factors. Traditionally poor nutrition levels, in particular a lack of access to fresh fruits and vegetables in winter and high animal fat consumption have been exacerbated by some of the worst aspects of Western diets. Nutrition patterns have also been affected by growing poverty and social inequality.

As has been observed in Bulgaria, traditional methods of preservation involve high levels of salt, increasing the risk of high blood pressure and stroke [53].

The typical diet is characterised by high calorie intake in the form of bread and animal fat, and low consumption of vegetables and fruits, in particular in winter and spring.

Salt consumption is high, a factor thought to contribute to the high death rate from cerebrovascular diseases [46]. Data from Macedonia for the period 1972-1999 indicate that the intake of fruits and vegetables increased, but did not reach the recommended daily level, while the intake of fat was higher than recommended [49]. Albania is, however, an exception to the general pattern in this region as it is characterised by consumption of a Mediterranean diet but even there the traditional diet is increasingly replaced by processed Western food high in salt and saturated fats [4]. There are signs of some improvement, and declines in deaths from cardiovascular disease after 1996 in Romania have been attributed to the transformation of the retail food sector, making fruits and vegetables more available throughout the year [31].

The large-scale impoverishment of the population in this region has been a major factor in the deteriorating diets among some groups in society. The fall in real incomes has meant that a growing proportion of expenditure is being spent on food. Average calorie consumption declined and the quality of nutrition deteriorated. Those most affected by the decline in expenditure on food are families with children [33]. Average calorie consumption in Moldova fell sharply in the first half of the 1990s. Data from a household budget survey showed that 10 percent of the population consume less than 1500 kcal per person per day, classified by the FAO as severe dietary insufficiency [22]. At the end of 1997, almost 25 percent of the population was estimated to be below the food poverty line [13]. Consumption of the food items needed most — fruits and vegetables — declined most. In Bulgaria, the monthly consumption of fresh fruits in the 1990s decreased by half. The consumption of meat and milk was also significantly reduced [46]. A similar decrease was observed in the FR Yugoslavia [15] and Moldova [13]. A large-scale representative survey in the Republic of Serbia (data not including Kosovo) in 2000 showed that 30.8 percent of refugees and IDPs eat fresh vegetables less than once a week and 19.6 percent eat fruit less than once a week, the situation being worst in collective centres. Among refugees, 15.4 percent never drank milk [52].

High rates of undernourishment among children were found in all countries of the region where surveys were conducted, with the highest rates in Albania. At the same time, the number of children and adults who are overweight is increasing. This partly reflects growing social inequalities. In the FR Yugoslavia, a tendency to compensate for monotonous diets with increased consumption of calories has been observed [15].

In Bulgaria, the share of moderately overweight people is estimated at 57.5 percent of men and 54 percent of women. The number of obese is estimated to be 10.9 percent of men and 16.2 percent of women. Most affected is the urban population, in particular office employees, and people between 45 and 60 years [46]. In Serbia and Montenegro, the rate of overweight people among adults is estimated to be 58 percent. Among students entering Belgrade University, the proportion of underweight and of overweight students has increased in recent years [15]. In Croatia, 56 percent of the population over 18 is estimated to be overweight [24]. In Macedonia, a survey of adults showed 48 percent of females overweight, and 19 percent of women and 15 percent of men obese [49].

### **Insufficient physical activity**

Low levels of physical activity increase the risk of cardiovascular diseases, diabetes, and cancer. There is very little known on the extent of physical activity of people in South Eastern Europe. What has been documented indicates low levels of leisure

time exercise. Inadequate physical activity is thought to be characteristic of all age groups. Bulgaria is one of the few countries for which data are available. Surveys indicate that about two thirds of the population in Bulgaria engage in insufficient physical activity [46]. Data from 1996/1997 suggest that only 8-15 percent of respondents undertook exercise outside work to maintain their fitness, and 4-8 percent undertook sport [48].

## **4.2 Underlying Factors**

### **Wars and political conflict**

The wars in former Yugoslavia were the most devastating in Europe since the Second World War. They had disastrous long and short term consequences for public health. Bosnia and Herzegovina paid the highest human toll of the Yugoslav wars. Of a pre-war population of 4.4 million, an estimated 250,000 people were killed, 240,000 wounded and 25,000 permanently disabled [3; 67]. Between 20,000 and 50,000 women were raped. More than half of the population became internally displaced or refugees [3]. In Croatia, up to 20,000 persons have been reported killed or missing, and more than 30,000 persons have been disabled [138]. More than 385,000 were displaced or became refugees [24]. The conflicts in Albania, Kosovo, and Moldova, too, resulted in a high number of casualties. In Albania, more than 2,000 civilians were killed in the disturbances in 1997 [4]. In the Kosovo crisis in 1999, an estimated 10,000 people were killed and 800,000 displaced [5].

Other direct health effects of the wars were increases in mental health problems and infectious diseases. Social cohesion, especially between different ethnic groups, was substantially damaged and polarisation along ethnic lines took place in all countries of the former Yugoslavia. Minority returnees continue to face considerable difficulties in attempting to return safely to their original homes. The wars fostered a culture of violence and disrespect for human rights, with particularly negative consequences for minorities, women, and children. Many households were left without breadwinners or with disabled family members. Wars and political conflict also resulted in an increase in risky lifestyles, such as alcohol and tobacco consumption. The health of large numbers of refugees and internally displaced people was at particular risk [156; 157].

The long term social and economic consequences of the wars will take many years to overcome. In the countries directly affected by the wars, a considerable part of the infrastructure was destroyed and the economy devastated. Total war damage in Bosnia and Herzegovina is estimated at around U.S.\$100 billion. Industrial production dropped to 10 percent of its pre-war level. The estimated GDP per capita in 2001 was at only 35 percent of its level in 1990 and it is estimated that it will take at least seven more years before it returns to its pre-war level [3]. In Croatia, the war is estimated to have caused between U.S.\$27-37.4 billion in damage [24; 138]. Around 200,000 mainly residential buildings were razed or damaged in the war, constituting nearly 10 percent of the housing stock [24]. The consequences are still felt today. A study in six Croatian counties in 1997-1999 showed that quality of life was noticeably impaired in the three war affected counties [138].

All countries in the region suffered economic consequences from the break-up of former Yugoslavia and the resulting wars. Markets and trading routes were lost and tourist revenues declined. The international sanctions against the FR Yugoslavia further contributed to the economic decline of the whole region. In the FR

Yugoslavia they seem to have played an important, but secondary role in the decline of the economy [15]. Albania, Bulgaria, Macedonia, and Romania also suffered from sanctions because they were dependent on the Republic of Serbia as a commercial partner and on trade routes through it. The situation in Macedonia was exacerbated by a Greek blockade [158].

The NATO bombing of the FR Yugoslavia in 1999 is estimated to have caused U.S.\$4.1 billion in damage to infrastructure and to have accounted for a decline of 2-6 percent of GDP. It is also thought to have accounted for drops in GDP in neighbouring countries, ranging from 5 percent in Macedonia and Bosnia and Herzegovina, to 0.5 percent in Romania [158].

### **Collapsing health care systems**

The collapse of health care systems in South Eastern Europe as a result of wars and conflicts, the financial effects of transition, and the inefficient use of resources has contributed to the poor health status of the population. Health facilities and essential drugs became increasingly inaccessible at a time when demand was increasing. In Bosnia and Herzegovina and Kosovo, public health services suffered an almost complete breakdown [5], with many avoidable diseases and deaths. Those with chronic diseases, requiring regular supplies of medication, were especially vulnerable [159].

#### ***War damage***

In Albania, Bosnia and Herzegovina, Croatia, and the FR Yugoslavia, considerable amounts of health infrastructure and equipment were destroyed and health personnel were either killed or left the country. In Bosnia and Herzegovina, at least 30 percent of health care facilities were destroyed, 60 percent were damaged, and 30-50 percent of health workers migrated or were killed [18; 8; 160]. In Albania, a quarter of city health centres and two thirds of health posts in small villages were destroyed in the 1991 and 1992 disturbances. In the 1997 crisis, health centres and hospitals were looted of drugs and equipment and one third of medical staff abandoned their posts [39]. In the FR Yugoslavia, the NATO bombings damaged clinical and hospital centres [161]. Access to specialist care declined as a result of international sanctions, with implications for people with, for example, cancer or in need of dialysis or organ transplants. Lack of fuel degraded emergency medical services, reduced heating in hospitals, and impaired transport to hospitals [15]. In the Macedonian conflict in 2001, 29 health facilities were seriously damaged or totally destroyed [162].

#### ***Lack of resources***

With the decline in GDP in the 1990s, a shrinking pool of funds had to cover the extensive inheritance of health facilities. In 1999, Moldova's real GDP was at 31.2 percent of its 1989 level, while the FR Yugoslavia was at 41.6 percent. With decreasing national incomes, overall state expenditure declined, and in most countries, a smaller share was spent on health. Real expenditures on health declined dramatically, while costs of drugs escalated.

**Table 11 Total Health Expenditure in PPP\$ per capita in Selected South Eastern European Countries**

	<b>1998</b>	<b>1999</b>	<b>2000</b>
Albania	52.72	73.67	66.96
Macedonia		260.46	228.87
Moldova	83.72	59.07	63.27
Romania	231.57	271.85	
EU average	1908.32	2013.8	2123.8

*Source:* WHO/Europe, HFA Database, January 2003.

In the Republic of Serbia, public spending on health fell from U.S.\$200 per capita in 1990 to U.S.\$60 per capita in 2000 [30]. Falling government expenditure on health care has led to a sharp decrease in real salaries of medical personnel, a decline in investment in infrastructure and equipment, and the underfunding of recurrent costs. Salaries for medical personnel continue to be lower than in other sectors. Perhaps the most extreme case is Moldova, where the salary for a hospital doctor was about US\$10 per month in July 2001, covering only 14.5 percent of the minimum consumption basket [123]. Until 1999, when the health care system was drastically reformed, every doctor in Bulgaria received a state salary of around 100 per month, with a small additional amount for experience and speciality [93]. The low salaries reduce motivation and increase requests for informal payments. Many professionals have decided to leave medicine or to emigrate, and it is difficult to recruit new specialists.

Lack of funding has led to widespread deterioration of health infrastructure and equipment. Medicines, consumables and equipment are lacking, treatment regimes are often obsolete, and it is very difficult to provide high quality care. In Bulgaria, it is estimated that about 75 percent of medical equipment is more than 20 years old. In a number of hospitals, patients have to bring bed linens and pay for drugs and consumables [46]. In the Republic of Serbia, 21.5 percent of equipment is more than 25 years old, and only 23 percent is less than 10 years old [30].

In Albania, UNICEF reported that more than 40 percent of health facilities in five districts visited in 1999 had no running water. They also reported in 2000 that the low availability of such basics as gloves and antibiotics could be linked to high infant mortality [4]. In Moldova, the majority of health facilities are in a very poor state of repair; some are without heating, ventilation or lighting [163]. Other reports tell of a lack of warm water, heating, changes of bed linen, or adequate nutrition [123]. Basic drugs are often lacking [87].

Services that existed previously have often deteriorated. In the FR Yugoslavia, home visits declined by about 50 percent in cities and up to 90 percent in rural areas [15]. In parts of Croatia and the FR Yugoslavia, health facilities faced increasing burdens from an influx of refugees and internally displaced persons. In Tirana, the influx of migrants from rural areas has put considerable strain on infrastructure and health services [4]. Looking ahead, ageing populations in all countries of the region except Albania will further increase strains on health and social protection systems.

### ***Inefficient use of resources***

Not only is health funding in the region very low when compared to the European Union, but what is available is often spent inefficiently and the impact of the economic crisis has been exacerbated by corruption and mismanagement [164].

The inherited infrastructure is often inappropriate to current needs and reflects outmoded forms of clinical management. In Moldova, for example, around 80 percent of official funding for health is spent on hospitals, with only 20 percent for primary health care, which serves 80 percent of patients [13]. While per capita expenditure on health is among the lowest in Europe, it has the most extensive network of health facilities and health staff. Compared with the United Kingdom, for example, Moldova in 2000 had only 0.5 percent of available resources, but attempted to maintain three times as many hospitals and hospital beds [165]. This has threatened the provision of the most basic health services, such as immunisation, which almost stopped completely between 1990 and 1993 [87].

### **Environment**

The WHO has estimated that environmental factors contribute 25-33 percent of disease and premature death world wide [166]. Policies of industrialisation by previous regimes in South Eastern Europe placed little priority on the effects of development on health and the environment. At the beginning of the transition, falls in industrial output led to reductions in emissions of some pollutants, but as economic recovery occurs it will be essential to strengthen systems of environmental protection. Currently, there is weak regulation, poor enforcement, and generally low public awareness of environmental threats. Environmental monitoring and information systems are missing or under-developed.

### **Radioactivity**

The Chernobyl disaster in 1986 is the most obvious example of an environmental threat to health in the former communist bloc, exposing populations beyond the borders of the USSR to radioactive contamination. Around 3,500 Moldovan workers helped to build the concrete casing that entombed the reactor after the accident, of which 80 have died and 700 have been incapacitated [87]. Of all the atomic power plants in operation in South Eastern Europe, the one at Kozlodoy in Bulgaria is regarded as the most dangerous. The European Union insisted on closure of units 1-4 as a condition of EU membership. Units 1 and 2 were closed in the end of 2002, but closure dates for units 3 and 4 remain contentious [167]. Even if there are no acute problems, the storage of radioactive waste will continue to be a problem for many generations to come. Approximately 135,000 Bulgarians live in areas contaminated by the uranium industry that operated until 1992 [50].

### **Air quality**

The decline in industrial production immediately following transition brought an improvement in air quality. However, the anticipated economic recovery and a growing intensity of vehicular traffic could jeopardise these improvements. Many experts consider respiratory damage as the region's most serious environmental health problem [151]. A large percentage of the population lives in areas designated as "hot spots", with high levels of industrial and domestic air pollution [58].

The problems posed by increasing numbers of motor vehicles are exacerbated by widespread and persistent use of leaded petrol and a lack of catalytic converters [24]. Although still at a low level, the number of cars in Albania increased from 68,000 to 150,000 between 1994 and 2000 [4].

The use of low-quality fuels in households and power plants also contributes to local pollution. Air pollution in industrial areas and large cities in Bulgaria is equivalent to that of Western European countries in the 1950s and 1960s [46]. In most settlements, the annual average concentration of dust exceeds permitted levels [50]. Industrial air pollution is an especially great problem where heavy industries without appropriate emission controls are concentrated [58].

In 1995, Bulgaria had the highest sulphur dioxide emissions in the world, while in Romania levels were only slightly lower [151]. In Moldova, emissions of sulphur dioxide and nitrogen oxides in 2001 were respectively two and four times higher than the OECD average [22]. In the Romanian industrial town of Zlatna, emissions from the local refinery and smelter — the town's primary employer — have resulted in cases of lead poisoning and high levels of respiratory diseases among both workers and other members of the local population [151]. In Veles, Macedonia, the lead smelting plant is a major threat to public health and is reported to be associated with high levels of respiratory diseases [47].

### **Water contamination**

The recent environmental catastrophe in Romania, where the rupture of the dam at Aurul Baia Mare in January 2000 released around 100,000 cubic meters of tailing pulp, heavily contaminated with cyanide, into the Tisza River, dramatically illustrated the need for stronger safeguards on water quality [168]. However, while this incident was an extreme example, water pollution is widespread in the region, due to both industrial outflows and untreated household waste.

However some improvement in water quality has been registered in Bulgaria since 1989, due to the closure of industrial sites. Nitrate contamination of ground water in intensively farmed areas, however, remains a major public health problem [50]. In a World Bank survey in Albania, 18 percent of those whose health has worsened since 1990 blamed inadequate water and sewerage services [155].

The most significant water-related diseases in South Eastern Europe are caused by ingestion of infected water supplies [169]. One reason is the inadequacy of waste water treatment plants. In Bosnia and Herzegovina, there was only one operating municipal waste water treatment plant in 1999 [151]. In Albania, there are no waste water treatment plants and no systematic monitoring of water quality [4]. In Bulgaria, 40 percent of industrial and domestic wastewater is discharged untreated [50]. In rural areas, many households are not connected to supplies of drinking water or to a sewage system. The household wells, which are common sources of drinking water, are at particular risk of pollution.

In Moldova, 49 percent of water samples from subterranean sources and 83 percent of water samples from wells did not comply with sanitary and chemical standards [119]. In Bulgaria, microbiologically substandard water samples exceed the limit of 5 percent recommended by WHO and the European Union, and have been attributed to inadequate purification [50]. In the FR Yugoslavia, 51 percent of water samples did not meet microbiological standards and 44 percent did not meet chemical standards in

1998 [80]. A study in 1995 in Kosovo, where wells are more commonly used than elsewhere in the FR Yugoslavia, found that 95 percent of wells had microbiologically unsafe water [21]. In Croatia, monitoring of drinking water between 1992 and 2000 found that 10 percent of samples from public water supply systems and 30 percent from local community and private water sources were contaminated chemically or microbiologically [169].

### **Waste disposal**

Waste in South Eastern Europe is generally dumped untreated into landfills. In Albania and Moldova, toxic materials and sanitary waste are deposited together with municipal waste [4; 22]. Effective systems of environmental protection are largely absent. This makes every waste disposal facility a potentially serious threat to the health of the population living nearby [47; 18]. The problems of indigenous waste are being exacerbated by the export of waste from EU countries.

### **Food standards**

Pesticides were widely before transition and their use remains largely unregulated [22]. A large-scale analysis of food products in Macedonia has shown extensive pesticides contamination, with high concentrations of heavy metals, and higher than allowed concentrations of mycotoxins [47]. This was not confirmed by the national food safety programme, although a microbiological contamination in 4-10 percent of food products tested was detected [49]. Microbiological contamination of food products is a problem in all countries of the region. In Moldova, the proportion of food samples tested that did not meet hygiene standards ranged from 6.1 percent to 21.9 percent in 1999 [119]. Market inspections found that 70-80 percent of food products did not meet health and hygiene standards in terms of microbiological contamination [22].

Contamination by heavy metals has been detected in areas close to metallurgic and industrial plants.

Microbial food-borne diseases remain a significant health problem. They are under-recorded and underdiagnosed. In Bulgaria, the incidence of microbial food-borne diseases such as salmonellosis, staphylococcal enterotoxigenesis, botulism, and trichinellosis have increased in recent years [50].

### **Soil quality**

Little is known about the contamination of soil in the region. In Bulgaria, the intensive and uncontrolled use of fertilisers in the past has resulted in the acidification of large areas of arable land, increased levels of nitrates in water sources, and the eutrophication of rivers and Black Sea coastal waters. A total of 44,900 hectares of land are registered as contaminated with heavy metals and metalloids, of which 8,160 hectares exceed the permissible limits five-fold [50]. In Moldova, only 37.3 percent of units dealing with storage and usage of pesticides were operating with official authorisation in 1999 [119].

### **The legacies of war**

The wars in former Yugoslavia have added to the environmental problems of the region. Health risks stem from unexploded bombs and land mines, exposure to

chemicals released at bombed industrial sites, depleted uranium shells, and damage to water and sanitation structures [151]. In Bosnia and Croatia, a large number of land mines and unexploded bombs have yet to be cleared. In Bosnia and Herzegovina, 30,000 minefields remain to be cleared [162]. Between 1 [162] and 2 [68] million mines have yet to be found in Croatia. Around 500 sq km of the country (0.9 percent of its land area) contains minefields, and a further 4,000 sq km is believed to be partly sown with mines [170]. During the bombing campaign in Kosovo in 1999, NATO forces used 31,000 missiles containing 9.3 tons of depleted uranium, which is likely to become a public health risk in the future [171; 5]. The NATO bombing of industrial plants in Novi Sad, Pancevo, and other cities in the FR Yugoslavia led to contamination from uncontrolled release of noxious chemicals, with contamination of municipal water supplies. The bombing also destroyed the two plants producing chlorine so that, in 1999, 69 percent of water samples had inadequate levels of chlorine [15].

### **Occupational health**

Information about occupational health in South Eastern Europe is insufficient. In the former Yugoslavia, occupational health services had been well organised and in accordance with WHO and ILO recommendations [172]. Deaths from work-related accidents have decreased in all transition countries that are candidates for EU membership between 1985 and 1999, an indication that occupational safety might have improved [37]. However, the quality of the working environment is regarded as substandard in 58 percent of manufacturing entities in Bulgaria. The registered incidence of occupational diseases has shown a steady increase and most occupational health problems are not recorded [50].

### **Worsening education**

The quality and coverage of educational services deteriorated markedly during the 1990s in all countries of the region. Because of the difficult economic situation, general indicators of education, such as literacy and school attendance rates, have been falling. There was little money left for food or the maintenance of school buildings. Especially affected were poor, rural, disabled, and Romani children [13]. In Serbia and Montenegro, an estimated 5-10 percent of primary school children are not enrolled in school [15]. In the last decade, investment in primary education has decreased by 40 percent and expenditure per student has been reduced by 30 percent. In Kosovo, less than 56 percent of Kosovo Albanian girls and less than 40 percent of girls from Romani, Turkish, and Muslim Slav communities are enrolled in secondary school [162]. In Albania, education levels have fallen and illiteracy has increased during the 1990s. There was also a decline in university enrolment. Increased crime rates are reported to have led families to keep daughters at home [155]. In Bulgaria, enrolment in pre-primary schools and in compulsory basic education has declined. The proportion of children not attending school is larger among minorities, in particular the Romani population [33].

In recent years, school enrolment rates have increased again, but have still not reached pre-transition levels [41]. In all countries it is reported that the value placed on education has decreased, due to the difficult economic situation and high youth unemployment.

The worsening education situation has far-reaching consequences for the health status of the population, some of which will become apparent only after many years. People with lower levels of education are more at risk from later ill health. Their reduced ability to make healthy choices means that they have greater exposure to many risk factors such as smoking and hazardous drinking, they often live in worse physical conditions and eat diets that are less healthy. Lower levels of education also impede economic and social development.

### **Psychosocial stress**

There is growing evidence from research in many countries that psychosocial stress can play a role in ill health. Deteriorating conditions in many countries have contributed to increased levels of stress. In particular, unemployment, social and economic exclusion, and increased insecurity arising from ethnic and political conflict and a breakdown in the rule of law have played a part [47]. Many people have experienced a sense of personal powerlessness, injustice, and social exclusion. Downward social mobility, lack of control over one's life, and low levels of social support are key causes of psychosocial stress and thus poor health [28]. In a qualitative assessment of poverty in Albania, 17 percent of respondents attributed their worsening health to stress caused by poverty, fear of crime, and hopelessness [155]. Men with lower levels of education are especially vulnerable [29]. Psychosocial stress often results in an increased use of alcohol, tobacco, and drugs as stress-coping mechanisms.

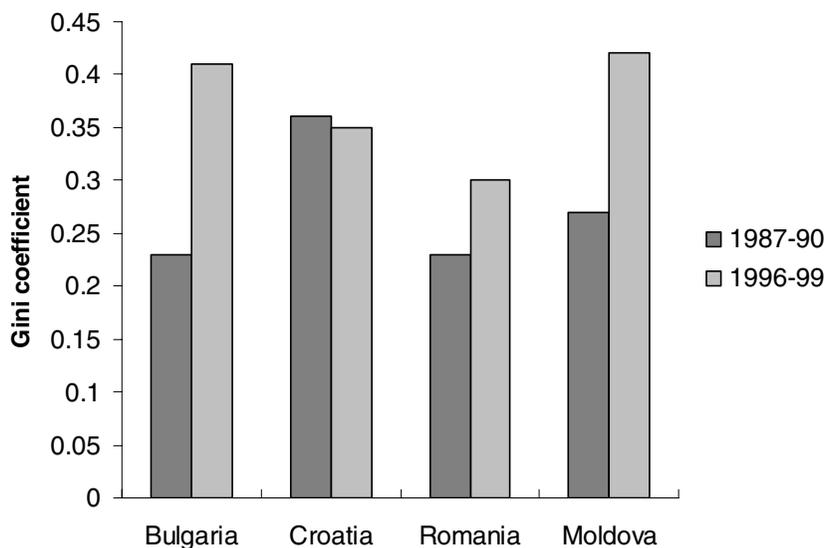
### **Growing poverty and social exclusion**

The transition countries of Eastern Europe have seen a dramatic increase in poverty during the last decade [173]. The transition brought a sudden rise in unemployment, high inflation, and a disruption of social security systems when they were most needed. Wars and conflicts accelerated the economic decline and dislocated hundreds of thousands of people. The needs of many people for social protection increased just as the systems that had provided it were disappearing [18].

### **Increasing inequalities**

Economic decline in South Eastern European countries after 1989 was associated with increasing social inequalities (Figure 10).

**Figure 10 Changes in Income Inequality in Selected South Eastern European Countries**



*Source:* World Bank 2000: Making Transition Work for Everyone.

In Romania, income inequality, measured in terms of the Gini coefficient, rose by approximately 50 percent above its 1989 level in the first years of transition [174]. In the FR Yugoslavia too, income inequalities are reported to have increased during the 1990s [15; 14]. In Moldova — the country with the lowest per capita GDP — income inequality is now the highest in the region. A World Bank study has shown that inequality has increased most in transition countries where vested interests have captured the state and transition has been marked by delays in economic and political reform and high levels of corruption [175], all features seen in some countries in this region.

### **Poverty and ill health**

Poverty and social exclusion are the single largest underlying determinants of ill health, acting through factors such as low income, lack of education, inadequate housing, unemployment, and exposure to environmental degradation. Many of these factors in turn increase the risk of exposure to hazardous behaviours and give rise to major threats to health [176].

Even before 1989, systematic differences in levels of health existed in the communist countries, driven largely by differences in education [73]. This pattern of social differentiation of health seems to have remained in place to a certain degree throughout the 1990s. A survey in Albania supported the common finding elsewhere that people with higher education generally report better personal health, better health knowledge, and a higher percentage of healthier behaviours [4]. As in other post-communist countries, income has become an important explanation of inequalities in

health in the 1990s, as seen in a representative survey in Bulgaria in 1997 which found higher rates of illness among the poor [177].

Ill health is a predisposing factor for poverty and failure of economic development. Reduction in industrial output coupled with the direct costs of health care and the social costs of disability and premature mortality act as a barrier to economic recovery and a high level of health is a significant predictor of future economic growth [73].

### ***The extent of poverty***

Various methods have been used to calculate the extent of poverty in the countries of South Eastern Europe. Several countries, including Albania, Macedonia, Moldova, and Romania have defined national poverty lines<sup>3</sup>. No official poverty line exists in Bulgaria [93]. World Bank and UNICEF have used relative poverty lines for the purpose of international comparisons. Because of the very low income levels in many transition countries, the use of absolute poverty lines may, however, be more appropriate [93]. Unfortunately many sources do not specify to which poverty line they refer.

---

<sup>3</sup> Poverty, as defined by the UN Committee on Economic, Social and Cultural Rights, includes: sustained or chronic deprivation of the resources, capabilities, choices, security, and power necessary for the enjoyment of an adequate standard of living and other fundamental civil, cultural, economic, political and social rights. For the purposes of this review, however, poverty levels have been proxied through income poverty.

**Table 12**      **Extent of Poverty in Selected South Eastern European Countries**

	<b>Poverty line</b>	<b>Prevalence</b>	<b>Year</b>	<b>Source</b>
Albania	National poverty line	29.6%	1998	[178]
	National poverty line (< 49 per month per household)	20%	2001	[179]
Bosnia and Herzegovina	Households below subsistence minimum	64%	1996	[33]
	World Bank poverty line	36%	1999	[93]
	World Bank poverty line	64%	2001	[93]
	National poverty line (1,843 Convertible DM annually per person)	19.1%	2001	[3]
Bulgaria	Less than U.S.\$2 per day	21.9%	1997	[180]
Croatia	Less than U.S.\$2 per day	<2%	1998	[180]
Macedonia	National poverty line	20%	1996	[9]
	National poverty line (defined as 60% of medium household income)	20%	2000	[181]
Moldova	Less than U.S.\$2 per day	38.4%	1997	[182]
	National poverty line	58 - 66%	1999	[13]
	Relative poverty line (<50% of average consumption)	22.8%	2000	[183]
Romania	Less than U.S.\$4 per day	44%	1998	[184]
	Less than U.S.\$2 per day	7%	1998	[184]
	National poverty line (defined as 60% of average adult equivalent consumption)	increase from 20% to 41%	Second half of the 1990s	[185]
FR Yugoslavia	Less than U.S.\$2 per day	33%	1999	[186]
Republic of Serbia	National poverty line (<U.S.\$30 per month)	33%	2000	[187]
	Absolute poverty (<U.S.\$20 per month)	18%	2000	[187]
Montenegro	National poverty line (< 50 per month)	27%	2000	[187]

Albania, Moldova, and Romania all have very high levels of officially recognised poverty, reaching up to 66 percent in Moldova. Groups most at risk of impoverishment are those in rural areas, households with single parents or many children, the unemployed and recipients of social welfare, people with lower education, the elderly, displaced and returnees, and minorities, in particular the Roma [46; 181; 178; 3; 13].

### ***Unemployment***

Unemployment is a major cause of poverty everywhere in the world. In South Eastern Europe, unemployment rose rapidly after 1989. Access to unemployment benefits, however, has been restricted and benefits are at a very low level. Women,

young people and ethnic minorities, in particular Roma, are at increased risk of unemployment.

Loss of work is a stressful event in itself, and health risks are further increased by resulting economic difficulties and the reduction in social contacts. Unemployment is associated with increased mortality, in particular due to cardiovascular diseases, injuries and suicides [47].

**Table 13 Unemployment Rates in South Eastern Europe, in %, end of period (a)**

	2000	2001	2002 (forecast)	2003 (forecast)
Albania	16.8	14.6	14	14
Bosnia and Herzegovina	38.7	39.5	40	40
Bulgaria	16.9	19.7	18.1	18
Croatia	16.1	15.9	15.2	15
Macedonia	32.2	30.5	30	30
Moldova (b)	2.1	2		
Romania	7.1	6.6	9	9
Serbia and Montenegro (data do not include Kosovo)	12.6	12.9	13	15
EU average (b)	9.03	8.39		

*Source:* (a) WIIW Balkan Observatory 2003: Macroeconomic developments in the South Eastern European countries; (b) WHO/Europe, HFA Database, January 2003

*Note:* (a) based on Labour Force Surveys with the exception of Bosnia and Herzegovina, where official rate was used; no data available for Kosovo

Unemployment rates as shown by Labour Force Surveys are highest in Bosnia and Herzegovina and Macedonia, reaching levels of 30-40 percent. The very low official figures in Moldova do not reflect the true employment situation. Approximately 140,000 employees are forced to go on involuntary, unpaid “vacation.” Most of the unemployed do not register, as the costs for obtaining unemployment status exceed potential benefits. Estimates of the real unemployment rate in Moldova varied between 11.5 percent and 28 percent in 1999 [13]. In the FR Yugoslavia, 10 percent of the labour force were “on leave” in 2000 [15]. The high levels of unemployment are mirrored in an increasing share of long-term unemployed. In Bulgaria, the share of long-term unemployed increased from 28.6 percent in 1995 to 49.8 percent in 2001 [93].

Employment figures are also distorted by employment in the informal economy, being self-employed, non-payment of welfare or insurance contributions, and the existence of unsustainable jobs. The Living Standards and Measurement Survey for Bosnia and Herzegovina showed a third more people generating some kind of income than the official figures [18]. In Moldova, 60 percent of economic activity is estimated to occur in the informal economy. In the Republic of Serbia, over 2.3 million people work full- or part-time in the informal economy [14]. A large shadow economy, of course, reduces levels of tax collection and may be associated with organised crime [87].

Employment does not necessarily offer protection against poverty. In all countries of the region, real wages declined considerably after 1989 and have still not reached the pretransition level again (Table 16). In 2000, the average real wage in the Republic of Serbia, for example, was about U.S.\$50, and pensions were even lower [14].

**Table 14 Real Wages for Selected South Eastern European Countries (index, base year = 100)**

	1989	1999
Bulgaria (a) (b)	100	52.2
Macedonia	100	53
Moldova (a)	100	35.1
Romania (c)	100	62.3

*Source:* UNICEF 2001: A Decade of Transition.

*Note:* (a) based on gross wages; (b) public sector only; (c) based on net wages.

### ***Rural poverty***

A considerable part of the population in South Eastern Europe lives in rural areas. In Albania, for example, about 80 percent of the population resided in rural areas in 1998 [178]. In general, rural populations have lower incomes and more limited access to basic infrastructure. Many villages have suffered from decay and depopulation. Rural underdevelopment is associated with restricted access to health care, drinking water and sanitary facilities, and education. In Romania there is a difference of four years in life expectancy between different parts of the country. Between 1990-1992 life expectancy in Bucharest was 1.5 years above the national average, while in Tulcea it was 2.5 years below average [188]. A 2000 survey in Albania showed that only 45 percent of rural respondents were registered at a health centre and only half had a family doctor.

### **Restricted access to health care**

As has been discussed earlier, the poor are at greater risk from ill health. They have restricted access to good quality housing and sanitation and to a balanced diet. The health status of poor people is further threatened where access to health care is not free. One of the fundamental purposes of publicly funded health care systems is to ensure equity in access to health services. This principle of equal access to health care has been effectively abandoned in many parts of the region during the last decade. In response to financial crises, an increasing share of health care expenditure has been shifted to households. This has happened through introduction of co-payments for health services and drugs, and informally, by a growth in informal payments.

### ***Formal co-payments***

In all countries of the region, formal co-payments for medical services were introduced during the last 10 years. In Bulgaria, patients have to pay a figure equivalent to 1 percent of the minimum salary for each primary visit to a physician and dentist and 2 percent for each day in hospital [46]. In Moldova, the share of private payments for treatments in state medical institutions has continuously increased since 1994. It reached 38.9 percent of the total health budget in 2001 [189]. In most countries, mechanisms were introduced to protect vulnerable groups and maintain equitable access to health services. In Moldova, a corresponding law was adopted in 1999, but its scope has since been restricted and it is not yet fully implemented [123]. The contribution by households to the cost of essential drugs has also been shifted to households in recent years. Subsidies have been curbed throughout the region, while the prices of pharmaceuticals have increased dramatically.

### ***Informal payments***

Informal payments for health care are widespread in all countries of the region. These under-the-counter payments now account for a substantial share of health expenditure. In Moldova, a recent study reported that 70 percent of respondents have made informal payments. In Albania and Bulgaria this figure was 22 percent and 23 percent respectively [73]. In a 1999 survey, physicians in Moldova confirmed that up to 70 percent had been paid informally by their patients, while 91.5 percent of patients claimed that they had made informal payments [165]. A representative survey in 1997 revealed that 80 percent of women giving birth in Moldova had to pay for the care provided [101]. A survey in Bulgaria in 1997 showed that informal cash payments were universal for operations and child birth, life-saving procedures, in hospitals or elite urban facilities [190]. A 1998 study in Bulgaria revealed that 51 percent of respondents paid for the services of a physician or dentist [46]. In a survey in the FR Yugoslavia, 80 percent of the population admitted having made informal payments for treatment [4]. By the end of the 1990s, around 50 percent of medicines and medical procedures in the FR Yugoslavia were purchased privately [15]. A study in Bulgaria, the Czech Republic Ukraine, and Slovakia, concluded that hospital doctors were only rivalled by traffic police and customs officials for taking money or gifts from clients [191].

Box 2

#### **Informal payments in Albania**

A manager in one hospital said that medical staff are forbidden to ask for payment for services and that those doctors who are discovered requesting fees are fired. But, he adds, "Anybody may give the doctor L200, and I am categorically against barriers for patients." This manager's careful choice of words illustrates the current dilemma – medical staff are not paid enough to live adequately, and many patients cannot afford to pay for healthcare [155].

### ***Implications for equity***

Formal or informal out-of-pocket payments are the most inequitable form of health financing, having the greatest negative impact on lower income groups [192]. A 1994 survey in Croatia showed that the share of income paid by low income groups for out-of-pocket medical payments is six times greater than the share of income paid by high income groups [192]. A large number of people have to forego medical treatment due to financial constraints or seek medical treatment when it is too late. In Moldova, total private payments for health expenditure, including formal costs and informal payments, are estimated to contribute 50 percent of per capita health expenditure. 15 percent of households have been estimated to forego treatment regularly, while another 40 percent of households are estimated to have foregone necessary treatment at least once [13; 165; 193]. In the World Bank Living Standards Measurement Survey in Kosovo in 2000, 26.4 percent of respondents said that the reason for not seeking treatment was that it was too expensive [194]. In Albania, a third of respondents in World Bank study reported the inability to obtain healthcare for household members to be a major problem in their lives [155].

### **Vulnerable groups**

Large parts of the population in South Eastern Europe have experienced deteriorating social and economic conditions since 1989. Yet very little is known about the health

status of some of the most vulnerable groups. Street children, children in orphanages, women who are victims of abuse, trafficking or prostitution, drug users, elderly people living alone, and the Romani population have received relatively little attention and limited social support [4].

### ***Children***

Children are particularly affected by poverty, which can permanently damage their development. Poverty also disproportionately affects families with children. Child benefits have declined in real terms during the last decade. In the Republic of Serbia, child benefits which amounted to less than U.S.\$10 per month had not been paid for almost two years between 1998 and 2000 [14]. Children are especially affected by restricted or absent access to health care. They are also exposed to domestic violence, which is believed to have increased with the social and economic crisis. As has been observed in Moldova, child abuse tends not to be recognised, documented or sanctioned. Legal provisions on child mistreatment and social services for abused children are lacking [13].

Many children have been killed or wounded in the wars in former Yugoslavia and many of those who survived have been exposed to traumatic events [16]. Children who are refugees or IDPs have been particularly vulnerable. Children belonging to minorities do not always enjoy the same access to health and education. Mother-tongue education is often absent and school drop-out rates high. Romani children face particularly grave problems.

A growing number of street children have been reported in several countries of the region. Numbers were estimated to be 2,000-5,000 in Romania in 1997 [37], 2,800 in Albania in 2000 [4], and 400 in Chisinau, Moldova, in 1999 [13].

Large numbers of children in the region are in public institutions. There are three main categories of institutionalised children: those in conflict with the law, those without parental care, and those who are disabled. The number of children in institutions is especially high in Bulgaria and Romania compared with other countries in Central and Eastern Europe. In Romania, there were almost 100,000 children and adolescents living in institutions in 1997, constituting 1.7 percent of the corresponding age group [37]. A large proportion of these children were born to young or single mothers and/or belong to ethnic minorities [33]. Children with intellectual disabilities are at particular risk of being institutionalised. In Bulgaria, nearly half of the 2,500 children with intellectual disability live in institutions [93]. Parents are often advised by doctors to send their children to institutions where, despite strenuous efforts by national and international agencies, living conditions are still often inhumane. Some institutions do not have enough beds, have no indoor toilets, no working showers, and insufficient food [195]. Other countries in the region also rely on institutionalisation as the main response to abandoned or disabled children [80]. In Moldova, more than 15 percent of disabled children are sent to boarding schools where the most basic needs for food, clothing, and shelter, are often not met [13].

### ***Women***

During transition, women have been more adversely affected by unemployment and poverty. They face discrimination in finding employment, receive lower wages for the same work, and have fewer opportunities for promotion. In the FR Yugoslavia,

for example, women constituted 30 percent of the workforce in 1998, yet comprised 56 percent of the unemployed. [15]. Childcare facilities have become virtually non-existent in many places. Political participation by women is often weak [101].

Gender inequality in South Eastern Europe increases the vulnerability of women to HIV infection and other sexually transmitted diseases. Violence against women is widespread, and has increased as a consequence of war and poverty. During the war in Bosnia, between 20,000 and 50,000 women were raped, representing 1-2 percent of the total pre-war female population [101; 196]. Few data are available on the scale of domestic violence. The problem is often covered by a “blanket of silence” [101], and is rarely seen as a public health matter. Laws are virtually non-existent; marital rape is not recognised in any of the countries of the region, and there are few shelters for women and children. In Romania, a charge of rape can be erased if the perpetrator marries the woman. Legal action in cases of domestic violence must be private prosecutions and have to be paid for by the victim. Only Albania has explicit legal provisions against sexual harassment [101; 106; 18]. In a UNICEF survey in 2001, 59 percent of Albanian youth reported to have seen violence at home, and 11 percent reported having been victims of violence [4]. A survey undertaken in Moldova showed that 22 percent of women consider themselves to be victims of various forms of abuse by their current or former partners. Between 3 percent and 9 percent of women suffered from severe violence [13]. In Bucharest (Romania), 23 percent of divorces were filed on the grounds of violence in 1997 [101].

### ***Victims of trafficking and prostitution***

South Eastern Europe has developed an unenviable reputation as a setting for trafficking of women and girls for the purpose of sexual exploitation. The trafficking system is well organised, and relies on the help of corrupt local authorities and the lack of legal provisions against trafficking. The main countries of origin are Moldova, other former Soviet Republics, and Romania. The main areas of destination are Bosnia and Herzegovina, Kosovo, Macedonia, and Western Europe. Croatia does not seem to be a major country of origin or destination. The international market for sex services, as well as local demand, has expanded, particularly in countries where there is a large international presence. The number of sex workers has dramatically increased since 1989.

Victims of trafficking are often treated as illegal migrants. There are large gaps in service provision for victims of trafficking in both countries of destination and origin. Some protection measures are provided by NGOs with foreign funding. It is estimated that over the past ten years, 30,000 Albanian women and girls have been working as sex workers in EU countries. Children from minority groups are especially at risk [98; 4].

The number of women from Bulgaria engaged in forced prostitution abroad is estimated at 10,000 [93]. Another 10,000 are estimated to work as sex workers in Bulgaria [124], although there are no reliable data on the number of trafficked persons in the region [197]. Governmental action against trafficking has remained limited, but a Trafficking Task Force has now been established under the Stability Pact and draft National Plans of Action have been developed [197; 18; 13].

### *Refugees, internally displaced people, and migrants*

The wars in former Yugoslavia and the conflicts in other countries of the region have caused large-scale population movements that were to a large part involuntary. People who left their places of residence were at particular risk of poverty and reduced mental or physical health. Many had experienced traumatic events and were viewed with suspicion in their new places of residence.

Bosnia and Herzegovina experienced the largest involuntary population movements. An estimated 1.2 million refugees have fled the country, of which only 372,200 had returned by the beginning of 2001. The returnees were predominantly elderly or poorly educated, while the young and educated often remained abroad. About 329,000 are estimated to have been absorbed into their new host countries, but there are still approximately 284,800 refugees who have yet to be settled, most of whom are in Croatia, and Serbia and Montenegro. Bosnia and Herzegovina is also home to 555,700 displaced people [18]. Returnees from minority groups are among the most vulnerable. They have difficulties in re-establishing possession of property, finding employment, or gaining access to social security. Now that the political situation is improving, the international community is withdrawing funds for return and reconstruction [18; 3].

Croatia was a particularly important destination for those fleeing war in Bosnia and Herzegovina. The war in Croatia also created a significant number of internally displaced people. During these conflicts the number of refugees and displaced persons in Croatia was estimated to be between 430,000 and 700,000 [138]. Other estimates assume that there were 600,000 internally displaced people and about the same number of refugees [68]. Refugees from Bosnia living in Croatia had access to basic health services, but only limited access to specialist care. Surveys identified high rates of cardiovascular diseases and of Post Traumatic Stress Disorder, especially among women and children [68]. Psychiatric disorder and disability remained high among former Bosnian refugees up to three years after the war had finished [198]. The main areas of return in Croatia remain economically depressed, with unemployment three times the national average [162].

The Kosovo crisis in 1999 again led to large numbers of people being expelled from their homes. About 840,000 Albanians left Kosovo during the crisis, and 540,000 were internally displaced [16]. Most fled to Albania and Macedonia. This time the rapid reaction by the international community and host governments meant that a humanitarian catastrophe was avoided. However, once again, psychosocial trauma was a particular problem among refugees. Within four weeks of the end of the conflict, 95 percent of Kosovo refugees had returned home [199]. At the same time, around 230,000 ethnic Serbs and other minorities fled to Serbia and Montenegro. Few of them returned to Kosovo [162].

In Serbia and Montenegro, there were 646,000 registered refugees in 1996, including about 161,000 children. In 2000, around 220,000 IDPs were registered, including 82,000 children. Together, refugees and IDPs constituted about 10 percent of the population of the FR Yugoslavia (excluding Kosovo) [21]. A large-scale representative survey in the Republic of Serbia (data do not include Kosovo) in 2000 showed that 94.8 percent of IDPs and 83.5 percent of refugee households could not cover costs of basic health care services, compared to 61.8 percent of established households. The unemployment rate among refugees was 39.2 percent, which was six times higher than among the established population. Refugees and IDPs were unable

to afford adequate nutrition, had restricted access to drugs and had high levels of exposure to threats to health. Many had diseases that had been inadequately treated [52].

Bulgaria, Macedonia, and Moldova have also experienced large scale involuntary population movements. In Bulgaria, around 330,000 Turks were forcibly expelled in 1989. In Moldova, the conflict in the region of Transdnister resulted in about 100,000 to 130,000 internally displaced people [87]. In Macedonia, an estimated 137,000 persons became internally displaced or fled the country at the height of the crisis in 2001 [162].

At the same time, internal migration from rural areas into towns has continued in all countries of the region. This process was most dramatic in Albania, where internal migration was prohibited under the communist regime. The population of the capital Tirana, increased from 374,000 in 1990 to 618,000 in 1999. Uncontrolled urbanisation resulted in a shortage of capacity in schools and health facilities and placed pressure on already weak infrastructure. Tensions between established city dwellers and newcomers have grown [6]. Following the 1999 conflict in Kosovo, many people, including health care staff, moved from rural to urban areas, both increasing strain on health care institutions in urban areas and reducing access to health care in rural areas [5].

### *The homeless*

A growing number of people are affected by homelessness in all countries of the region, but reliable data on their numbers or their health status do not exist. In Albania, homelessness became a serious problem following the 1997 crisis, because many people sold their houses to invest in the pyramid schemes. However, exact data are not available [4].

### *Roma*

Roma in South Eastern Europe face an extraordinary range of problems. They constitute the largest and most marginalised minority of the region. Widespread discrimination is a defining feature of their life in all countries of the region. Roma live on the margins of society, often face social exclusion, discrimination, and racial violence. Often, Roma live in segregated neighbourhoods at the outskirts of towns or villages that lack access to public services such as running water, electricity, sewage systems, paved roads, public lighting and telephones. Roma neighbourhoods in urban areas are often characterised by slum-like conditions. Roma were the first to lose their jobs in the early 1990s and Roma children in South Eastern Europe are often excluded from mainstream education. In Bosnia and Herzegovina, Roma were displaced from almost all areas and face discrimination as returnees in both entities [3]. A UNDP survey in Macedonia in 2000 found that 82.5 percent of Roma respondents could not afford to buy sufficient food. Roma are also especially affected by unclear citizenship status. According to the latest census in Macedonia, 23 percent of people with unresolved citizenship status are Roma [47].

Roma access to health care is often reduced by both direct and indirect discrimination. In Romania and Bulgaria, formal social support is a precondition for eligibility for non-contributory health insurance, but a number of administrative practices exclude Roma from access to that social support [200]. Many Roma lack the new identity cards that are necessary for inclusion in the health insurance system. In Bulgaria only

54 percent and in Romania only 63 percent of Roma reported to be covered by health insurance [201]. Health care facilities are often located far from Roma neighbourhoods and are difficult to reach. Many Roma neighbourhoods have inadequate access to telephones but even when emergency services are contacted they often refuse to send ambulances, especially at night [200]. The burden of health-related problems is borne disproportionately by Roma women, both as mothers and as the primary health-care providers within the family [202].

The limited data that exist on the health of Roma populations indicate a multitude of concerns, fuelled by poverty, poor housing, sanitation and nutrition, and lack of access to health care. Life expectancy is estimated to be many years shorter, while infant and maternal mortality rates and levels of malnutrition and disease are higher than average [200; 203]. A survey among 335 Roma women in Macedonia found an infant mortality rate of 23.5 per 1,000 live births in 2000, twice the national average [204]. Data from Romania suggest that infant mortality rates among Roma children in 1999 were three to four times higher than for the majority population [126]. Substantial numbers of Roma children suffer from undernourishment [201].

### ***Other minorities***

Other minorities in South Eastern Europe also tend to be more vulnerable to poverty and ill health than the majority populations, but in most cases little is known about their health status. The Turkish minority in Bulgaria, for example, lives predominantly in areas with the lowest levels of economic development, with unequal access to employment opportunities and health care facilities [41]. The 1999 World Bank Poverty Assessment showed a poverty rate of 40 percent among the Turkish minority, compared to a rate of 31.7 percent among ethnic Bulgarians [93].

### ***Middle-aged men***

Declines in life expectancy in South Eastern Europe in the 1990s were mainly due to a fall in life expectancy for men. In Moldova, the decline in life expectancy observed after 1989 was much greater for males. In Romania, Bulgaria, and Croatia, life expectancies for men have significantly fallen after 1989, while stagnating or slightly increasing for women. In Bulgaria, Romania, and Moldova, this fall can be attributed to a high toll of premature mortality from cardiovascular diseases [28; 29]. A similar trend is reported for Serbia, where life expectancy at birth during the last decade decreased in particular for men between 45 and 64 years, while the mortality rate for over 65s has declined [30].

### ***The elderly***

A declining birth rate and emigration of young people is causing a substantial increase in the share of the population over 65 throughout the region. Most at risk of ill health are those living alone and in rural areas. Data on the health of elderly people are scant. Low levels of pensions and high levels of chronic disease and disability mean that most people struggle to survive in old age [4]. Many pretransition savings were wiped out by bank failures and inflation. There are few residential homes for older people and most are cared for by relatives. In Albania, for example, there are only five homes for elderly people with a total of 230 residents [4]. Pilot projects providing community based care for elderly people have now been started in Romania. Financial access to health services is limited. In the Republic of Serbia, utilisation of

hospital services in Serbia by people over 65 years has fallen by 30 percent since 1990 [30]. In Albania, suicide rates among the elderly climbed from 1 per 100,000 in 1992 to 14 in 1998 [4]. Elderly people are also at risk from abuse in institutions or at home.

Elderly people are especially vulnerable when they become refugees or IDPs [206], yet they are one of the most under-studied groups in the wars in former Yugoslavia [68]. During the Kosovo war, men 50 years and older were at increased risk of death from war-related trauma [207]. Among those aged 65 or older, an increased risk for psychiatric morbidity was found [208].

### ***The disabled***

The disabled are particularly vulnerable to poverty and ill health, yet again, few data are available on the prevalence of long-term illness and disability. However, an increase in the level of disabilities has been reported in several countries of the region. In Croatia, the number of new cases of disability increased three-fold from 1990 to 1997, reaching 526 cases per 100,000 in 1997 [24]. In Moldova, the level of disability is increasing both among adults and children [209]. In Bulgaria, the number of people with registered disabilities increased from 3.4 per 1,000 in 1990 to 9.4 in 2001, not including those who had lost less than 50 percent of capacity in 2001 [36], although the number of new pensions for the disabled decreased from 7 to 5.7 per 1,000 between 1992 and 1999 [48]. The most common causes of permanent disability in Bulgaria were diseases of the circulatory system, cancer, diseases of the nervous system, mental disorders, and injuries and poisonings [46].

Disabled children are especially vulnerable. In Serbia and Montenegro, there are an estimated 143,000 children with disabilities, but less than 10 percent of them are supported by social services [162]. The mortality rate among disabled children in Moldova is 10 times higher than the overall child mortality rate [13].

### ***Patients with Life-Limiting Illnesses***

The availability of humane, compassionate palliative care, including pain management, symptom control, and psychological and social support for patients with life-limiting illnesses such as cancer and AIDS is seriously underdeveloped in South Eastern Europe. The aging population, a growing prevalence of cancer, and an emerging HIV/AIDS epidemic require immediate attention to palliative care development. Volunteer hospice and palliative care programmes are struggling throughout the region, with the positive exception of Romania. Palliative care is not integrated into national health care policies, legislation, cancer control programs or AIDS strategies and no system for reimbursement within national or private health insurance has been developed. There is no continuity of care from inpatient hospitals to inpatient hospice units, or community based home care programs. Physicians and nurses lack the knowledge and skills necessary to assess and manage pain and other symptoms from cancer, AIDS, and other chronic illnesses. The development and integration of palliative care into medical and nursing school curricula is non-existent. Opioids for pain relief at the end of life are not easily available due to overly burdensome restrictions and regulations. Medications for symptom control and opportunistic infections are also difficult to obtain.



## 5 Country Responses

### 5.1 Health care reforms

In the 1990s, all countries in South Eastern Europe embarked on substantial health care reforms, which have been remarkably similar, despite the differences among countries. The exception is the Transdnister region in Moldova which has preserved the Soviet model of health care [88]. All Eastern European countries, with the exception of Yugoslavia, followed the Soviet “Semashko” model. Albania became isolated from the Soviet Union in the 1960s, but retained many of the features of the Soviet health care model [39]. Health policy was centrally planned and administered. There were many doctors and hospital beds and all health personnel were state employees. The allocation of public expenditure was driven by norms, derived from historical levels of infrastructure and staffing levels. In Yugoslavia, health care followed a model based on local self management. The health system was less centralised and funded through a national insurance system.

In the 1990s, health care funding collapsed in all countries of the region. Access to services and essential drugs was reduced at a time when demand increased. In places like Bosnia and Herzegovina or Kosovo, public health services suffered an almost complete breakdown [5]. Already low salaries of health care staff dropped further and buildings and equipment could not be maintained.

Health sector reform has often been approached less eagerly than economic reform [73]. Bulgaria has embraced radical reform since 1997 [46]. In the FR Yugoslavia, the health care system still followed the Yugoslav model during the 1990s, but reforms have now been initiated [5]. Moldova attempted to maintain an excessive health infrastructure during the 1990s, and structural reforms are just beginning [165].

The principal formal aims of health care reforms in the region are to secure the financing of health services and to strengthen primary health care and health promotion. Payroll-based health insurance systems have been introduced in all countries where they did not exist prior to 1989 with the exception of Moldova. In Moldova, a Law on Mandatory Medical Insurance was passed in 1998 but it has not yet been implemented [123].

Reforms that seek to strengthen primary health care and the role of the family doctor are – to varying degrees - underway in all countries of the region. The increased role of family doctors in primary care is considered key to enhancing efficiency and improving access to care for families, including children [73]. General practice has been established as a speciality and training schemes have been introduced for primary care doctors. In most countries, however, there is still a long way to go before a comprehensive primary health care system is established [159; 211; 46; 212; 24].

Other reform initiatives include the development of national drug policies with the aim of ensuring the availability of drugs to all at low cost.

Payment of health care staff is an area that remains problematic. Many are still poorly paid and have not received adequate training to allow them to keep up to date with current developments. There continues to be a serious lack of managerial capacity.

## **5.2 Public Health Interventions**

### **Health promotion and disease prevention**

In the previous systems, public health programmes were mostly geared toward the control of communicable diseases, with an emphasis on widespread immunisation. Little attention was paid to the prevention of diseases and injuries through intersectoral public health policies. This is still an area in urgent need of expansion.

Governments in the region have now placed an emphasis, at least in their policy documents, on health promotion and disease prevention [19; 213]. However, the development of modern public health services is generally not seen as a priority in the current situation of scarce resources. Political support is often lacking and public health capacities remain limited. Bulgaria currently devotes only 1 percent of its national health expenditure on health promotion and disease prevention [213]. In primary health care, little attention is given to the prevention of diseases [46; 189; 86]. Even in the former Yugoslavia, where the prevention of diseases was once considered the flagship of the national health system, it remains far behind curative services in terms of resource allocation [213].

### **Public health services**

Although the need is great, public health services remain weak. Skill levels are often low, and poor salaries do not attract highly qualified staff. A 2002 assessment of needs in public health laboratories in Albania concluded that the equipment used was outdated and often unreliable and staff faced unreliable power supplies and receive little training and support. There was a lack of standardisation of procedures across the country. The authors of the report identified the need for investment in infrastructure linked with enhanced training measures [118]. An assessment of the Public Health Network in the Republic of Serbia in 2002 found that an integrated public health policy was absent, the Institute of Public Health Network was out-dated, a multi-disciplinary approach was lacking, and mechanisms for financing public health were unclear [213].

The narrow medical view of public health as a hygiene and epidemiological service still prevails in public health services in many parts of the region. This has begun to change in some countries and modern policies have been developed with the support of WHO and other donors [213], increasingly recognising the public health deficit. In Bulgaria, the 2001 National Health Strategy recognises as a priority a need to increase public health capacity [46]. The Ministry of Health in the Republic of Serbia has recognised the need for capacity building and has established a task force for public health. A strategic document on public health is being prepared and a series of conferences on public health have been held [214]. New post-graduate training programs in public health are being established in Albania, Macedonia and Moldova, and there are initiatives to strengthen existing post-graduate public health teaching programs in Croatia, Bulgaria, Romania, and Serbia [214; 25]. The need for public health training has also been recognised in Bosnia and Herzegovina [3; 215]. The international community has supported public health developments in the region, for example through the Open Society Institute (OSI)/ Association of Schools of Public Health in the European Region (ASPHER) programme. A Public Health in South Eastern Europe (PH-SEE) Network has been created as part of the Stability Pact with

the aim of strengthening collaboration among training and research institutions in the region [25].

### **Immunisation**

Immunisation is a cheap and effective public health intervention but war and rapid economic transition have degraded established programmes and have had a particularly negative impact on children in poor families. Donor programmes have sought to respond to falling immunisation rates in the mid 1990s. In Moldova, current immunisation programmes are almost entirely reliant on international donors [13]. Sustained efforts are needed to maintain high immunisation rates, although the countries of the region have now been certified as polio free.

### **Injuries and accidents**

As already noted, injuries and accidents have received little attention from policymakers in Central and Eastern Europe [63; 29]. Preventive programmes are either absent or poorly developed [62] even though interventions to improve road safety or to teach children to swim safely could reduce child mortality considerably [63]. Enhancing road safety involves enforcement of speed limits and use of seatbelts, safer road engineering, including clearly marked pedestrian crossings, safety education, and firm action to reduce driving while under the influence of alcohol [65; 70]. A specific need in some areas is further action to reduce the threat from landmines [72].

One positive example of a policy intervention in this area is the “Be Aware of Our Signs” campaign by the Croatian Ministry of the Interior between 1995-1999, which aimed to increase the safety of school children. A new campaign entitled “Kids – Friends in Traffic” started in 2001 [63]. In Bulgaria, the 2001 National Health Strategy seeks a 25 percent reduction in mortality caused by injuries to those under 60 by 2010 [46].

### **Screening**

Carefully designed screening programmes, where there is clear evidence of effectiveness, can save lives. Conversely, many screening programmes are ineffective and can prove an inefficient use of resources. Albania and Macedonia are almost alone in Europe in having not yet introduced screening of newborn babies for under-active thyroids, a preventable cause of mental handicap [216].

The Republic of Serbia still has extensive school health screening services, with school entrants expected to undergo extensive testing prior to entry. The system has not been reviewed for overall efficacy and it also may act as a barrier to poor or minority children who do not pass the hurdles for entrance.

As discussed earlier, one area where benefits could be expected is the introduction of well-organised screening programmes for cervical cancer. Pilot projects for cervical and breast cancer screening have been established in Romania with support from the Open Society Institute and USAID, but they cover only a small part of the population. Bulgaria adopted a National Programme for Prophylactic Oncological Screening in 2001.

## HIV/AIDS

The initial responses by most governments of the region to the HIV/AIDS epidemic were largely confined to actions by the Ministries of Health, and were set back by conflict and/or political transition. A key challenge now is to increase political awareness of the potential impact of HIV/AIDS in the face of complacency due to still low levels of HIV infection [131]. Since the late 1990s, however, there has been growing political commitment to view HIV/AIDS as a national priority. With the support of UNAIDS, UNDP, and other UN and bilateral agencies, Bulgaria, Croatia, Moldova, Romania, and Kosovo have established national AIDS committees. Bulgaria, Croatia, Macedonia, Moldova, and Romania are implementing national strategic plans, while Albania, Serbia and Montenegro, and Kosovo have embarked on a strategic planning exercise. At the Regional Conference on HIV/AIDS in June 2002, the countries of South Eastern Europe recommitted themselves to scale-up existing action. In the South Eastern Europe Declaration on HIV/AIDS Prevention and Care they called for urgent action to prevent the growth of the epidemic and urged international organisations and agencies to support their activities.

The conference identified a number of actions that should be taken immediately, including:

- Establishment of national AIDS committees and national strategic plans where these were still missing;
- Establishment of second generation sentinel surveillance as a basis for the development and evaluation of national plans;
- A focus on prevention, especially among young people and vulnerable groups;
- Investment of human and financial resources in interventions that target high risk groups, especially injecting drug users;
- Establishment of education and public awareness campaigns that address the stigma attached to vulnerable groups [125].

Problems in scaling-up existing HIV prevention, treatment and care efforts include inadequate financing and weak institutional capacities. In Macedonia, the budget allocated to HIV/AIDS is only symbolic [130]. Low levels of resources in the Republic of Serbia mean that only 10 percent of AIDS patients obtain up-to-date treatment [17]. In Moldova in 2000, the National Programme to Prevent Sexually Transmitted Infections and HIV/AIDS covered only blood safety. The programme's components in relation to training of medical personnel, provision of testing equipment and public education were not implemented due to insufficient funding [13]. All countries in the region have insufficient provisions for voluntary counselling and testing [106; 217; 132].

Harm reduction programmes directed at injecting drug users, such as those established by the Open Society Institute, exist on a very small scale and cannot compensate for the lack of effective national responses. Comprehensive harm reduction programmes should include needle exchange and methadone maintenance programmes. There is also a need for campaigns to reduce stigma, linked to existing health promotion services [131]. Supplies of condoms are inadequate, and condoms are often expensive and of poor quality. Decriminalisation of commercial sex work and recognising the health and social care needs of sex workers would improve access to social and health services and decrease the risk of HIV transmission [129].

## **Tuberculosis**

Critical shortages of drugs, weak laboratory infrastructure, outdated treatment regimes, and financial barriers to access to health services have contributed to the increase in cases of tuberculosis in several countries of the region, in particular in Romania and Moldova, but also in Bulgaria. The emergence and spread of multi-drug resistant TB is a serious threat to these and neighbouring countries. TB has been recognised as a national priority in all countries of the region and national TB programmes, based on the DOTS approach, are being introduced with international assistance.

## **Other communicable diseases**

The spread of sexually transmitted diseases is a major concern in South Eastern Europe. So far, prevention has been weak and existing surveillance systems are under-developed. In Albania, an Infectious Disease Surveillance programme was established in 1999, with WHO support and EU funding. In some districts, however, power cuts and the absence of telephones and computers limit surveillance capacities [218]. So far, national surveillance systems are not harmonised [133]. Within the framework of the Social Cohesion Initiative of the Stability Pact, an ongoing regional project on communicable diseases aims to strengthen surveillance and response, and to integrate national surveillance systems.

## **Reproductive health**

Levels of awareness of rights to individual choice in family planning are often low, but reproductive health is increasingly recognised as a public health priority [219]. States without national reproductive health programmes must develop them. These programmes should provide integrated services which, at a minimum, include family planning, safe abortion, cervical and breast cancer screening and referral, and STI diagnosis and treatment. This will require financing mechanisms which make access to services possible; provide advanced training of health professionals; and improve the availability of contraceptives and public education and outreach.

## **Tobacco**

Tobacco is still inadequately recognised as one of the most important long-term public health problems in the region. All countries have inter-sectoral coordinating committees, but only Bulgaria has so far developed a national action plan on tobacco. Legislation in some countries is well developed, but poorly implemented [148]. Restrictions on smoking in public or on tobacco advertising are either lacking or not implemented. Romania is so far the only country in the region that earmarks tobacco taxes for health purposes [148]. In Bulgaria, the price of rough tobacco is subsidised by a targeted extra-budgetary fund that supports tobacco producers [93]. In Albania, 5 percent of tobacco tax revenue is earmarked to provide tobacco seeds to farmers. In all countries, the share of taxes on tobacco products is much lower than in the EU. The introduction and implementation of tobacco control programmes is an urgent necessity. To be effective, health promotion programmes should be accompanied by increased taxes, and banning of advertisements and smoking in public places. Finally, much stronger action is needed against smuggling, an activity in which the international tobacco companies are complicit, and which is closely linked with other forms of organised crime, in particular drug and people trafficking.

## **Alcohol**

Alcohol consumption is also a key contributor to premature mortality in the region but effective action is largely lacking [46].

## **Drug use**

In most countries drug use is still seen solely as an issue of law enforcement, with little attention to its public health implications, although a few have established inter-ministerial bodies for planning and coordinating drug control. There have been calls for development of national strategies in Macedonia and Bosnia and Herzegovina [18; 206].

Drug demand reduction is still a low priority in most countries, although again there are some exceptions. In Croatia, a National Strategy for Suppression of Drug Abuse was agreed to in 1995 [94]. Albania established a National Drug Demand Reduction Strategy in 2001 combining measures in the areas of prevention, treatment, rehabilitation, harm reduction, and HIV/AIDS and STI prevention [154]. In Bulgaria, a National Programme for Prevention, Treatment and Rehabilitation was introduced in 2001 aiming to coordinate prevention measures and improve rehabilitation programmes [99] but the programme was not allocated funds [220]. In April 2002, it was documented that individuals on the waiting list for the annual 50 places in the methadone therapy programme had been there since 1998 [220].

The main challenges for the future are to develop national programmes where they are still missing, increase budgetary allocations, and strengthen political support. Treatment capacity must be enhanced, and rehabilitation, social reintegration, and outreach work strengthened. Of particular importance is the development of expanded government funding for the small number of NGOs delivering harm reduction services like overdose prevention, needle exchange, and methadone maintenance.

## **Mental health**

Governments in the region have recognised the need for wide-ranging reform of mental health care. A shift from institutional to community-based services has now started, but is still in its infancy in most countries. Reforms are being undertaken in Albania, Bosnia and Herzegovina, Bulgaria, Croatia, Macedonia, Moldova, and Romania – the country with the highest number of institutionalised children and adolescents – has not yet developed an official mental health policy [174]. Due to the general lack of funds, low official priority, and limited foreign assistance, improvement of mental health care has been slow, with care still based on huge psychiatric institutions and limited involvement by primary health care. An exception is Bosnia and Herzegovina, where many psychiatric institutions were destroyed in the war. Reconstruction afterwards was based on the principle of community care. A network of community mental health centres has started to operate and training of staff has been conducted [137]. In Croatia, psychiatric help to persons traumatised during and after the war employed a community based approach [138]. Within the ongoing Stability Pact project on mental health, regional standards for community mental health services have now been approved. The project also supports the development of national mental health legislation and the production of mental health plan for each country of the region.

Throughout the region, there continue to be significant legal and policy related barriers to the full integration of people with mental disabilities into society and there has been little effort to identify and address these barriers. Even though it is clear that general human rights standards apply to people with disabilities, there is widespread evidence that they face major obstacles to realise these rights. Stigma, prejudice and discrimination in relation to mental disability is deeply rooted and widespread across the region, standing in the way of positive change.

Willingness to challenge widespread prejudice about mental health has been limited. So far, only Bosnia and Herzegovina and Croatia have passed a law for the protection of persons with mental disorders. Few, if any, campaigns to raise the low awareness of this issue among the general public have been undertaken. The nongovernmental mental health sector has expanded considerably since 1989 and has tried to fill the gaps left by governments [140; 141; 221; 222; 195; 223].

### **Vulnerable groups**

All countries of the region officially seek to provide equal access to health care for all groups of the population. Yet the current financial situation makes achieving this aim a major challenge. Strategic policy documents recognise the need for special measures of protection for the most vulnerable groups [212; 46; 24]. In the 2001 Dubrovnik Pledge, Ministers of Health from South Eastern European committed themselves to improve the health of vulnerable groups. Support to refugees and vulnerable groups are key concerns of the Croatian Healthy Cities network [224]. In some countries, such as Bosnia and Herzegovina, a basic package of health entitlements has been defined to ensure equal access of all citizens to health care [225]. In Romania, the following categories of people have free access to health services: children and youth up to 26 years old if not employed, family members of an insured person, disabled persons without income, politically persecuted people, and war veterans [184]. However there are often administrative hurdles to gaining access to services that should be free. The widespread existence of informal payments for health care in all countries of the region, as well as the costs of drugs, continue to be major barriers. Direct and indirect discrimination against Roma, ethnic and religious minorities, minority returnees, drug users, and victims of trafficking and prostitution limit access to health care to those groups most at high risk. Much also needs to be done to improve health services for rural communities.

### **Food and nutrition**

Food and nutrition policy are central to the prevention of many non-communicable diseases. Knowledge about healthy nutrition, control of body weight, and the importance of breastfeeding is insufficient in all countries of the region, both among the population at large and often among health professionals. Accessibility to a balanced range of fresh foods, especially by vulnerable groups, is a major problem. The establishment of national monitoring systems to track the nutritional status of the population would contribute to more evidence-based policies. Partly due to the need to align to EU rules and regulations, the countries of the region are increasingly recognising the need for a comprehensive food and nutrition policy. Within the Health Network of the Stability Pact, a regional project to strengthen food safety and nutrition services has now started. The project aims to establish national food safety and nutrition strategies.

### **Iodine deficiency prevention**

Iodination of salt is one of the cheapest and most effective public health interventions. Iodination programmes exist in all countries of the region, but they are insufficiently monitored and financed, and some countries such as Moldova lack a legal framework [13]. Public knowledge of the issue is limited. Macedonia has established a monitoring system for salt and new national regulations for iodized salt, after a national study in 1995-96 detected goitre among 18.7 percent of children aged 7-15. The incidence of iodine deficiencies could be reduced drastically as a result [49; 4].

### **Environmental protection**

Environmental policy has not been a political priority for the last decade, and little progress has been made so far. Some countries of the region, including Bulgaria and Macedonia, have adopted National Environment and Health Action Plans (NEHAP), as initiated by WHO Europe in 1994 [46]. In Albania, a NEHAP is in preparation, while a Ministry of Environment is being established with help from OSCE [4]. Little progress has been made in Romania [174].

As well as a lack of national policies and programmes, there are often insufficient funds for control of environmental risk factors. In particular there is a need for effective information systems and new systems of environmental monitoring, including surveillance of health effects. In Bulgaria, a National Environmental Health Information System is in the process of being built [50]. Other areas that need to be expanded are professional training and public information. In many countries legislation still needs to be aligned with EU or WHO standards.

### **Occupational health**

The economic transition, with its major changes in patterns of employment, has disrupted previous systems of occupational health and safety, which in any case had often failed to keep up with recent developments. In Bulgaria, a Health and Safety at Work Act, establishing a system of Occupational Health Services, was introduced in 1997, in compliance with EU legislation, but the problem is one of implementation. In 1997, 65 percent of inspected production sites did not comply with environmental requirements [46]. The situation in the other countries of the region is likely to be similar.

## 6 The Scale and Nature of International Assistance

There has been substantial financial and technical assistance to South Eastern Europe from the international community, in particular after the wars in former Yugoslavia and the Kosovo crisis. With the wars in Afghanistan and Iraq, however, the region is threatening to disappear from the radar screen of international attention and donors are moving on. Yet the problems remain great. As this review has shown, there is still much to be done to address the health threats to the people of this region, which are often complicated by the continuing need for state building, political instability, corruption and organised crime, a lack of respect for the rule and law, and limited absorption capacity. This section focuses on assistance from the World Bank, the European Union, and EU member states. Other donors have also supported the health sector in the region, although their activities may not be detailed here.

**Table 15 International Financial Assistance to Albania, Bosnia and Herzegovina, Macedonia, Serbia and Montenegro, and Kosovo, 2001-2002**

million	2001	2002 (estimate)
European Union	1,331	1,280
European Commission	784	783
EU member states	547	497
Other bilateral donors	574	532
International financing institutions, including European Investment Bank	1,395	1,665
Total	3,300	3,477

*Source:* European Commission 2003: The Western Balkans in Transition.

Table 17 shows the total international assistance to the South Eastern European countries and territories that are grouped by the European Commission as the “Western Balkans”. Total donor support increased slightly between 2001 and 2002. The share of support by international financing institutions, mainly the World Bank and the European Investment Bank, increased, the bulk of which is in form of loans [226].

Donor assistance in the health sector, however, shows a different trend. It was to a large part confined to substantial emergency based humanitarian assistance in areas such as Bosnia and Herzegovina and Kosovo. Post-emergency development aid largely neglected the health sector.

Although external financial contributions to the health sector typically constitute only a small fraction of total public and private health financing, they can play a vital role in building capacity and encouraging reforms that put a greater emphasis on public health. There are a number of urgent public health problems, structural reforms have not been completed and there are on-going problems with financing and delivery of health care and, in particular, ensuring equal access for all.

The health sector is increasingly recognised as a key part of any agenda for poverty reduction and social inclusion. However, the linkage between health and poverty has so far received insufficient attention by some international donors.

The two main donors in the region are the World Bank and the European Union. They have been tasked with coordinating all bilateral and multilateral aid to the region. To implement this mandate, a joint European Commission-World Bank Office in

Brussels was opened and a joint EC-World Bank website launched. Since the end of the Kosovo conflict, the World Bank and European Commission have organized six donor conferences or consultative group meetings for countries of the region, where donors pledged or reported funds worth around U.S.\$7.5 billion [227]. Little from these funds, however, was earmarked for health related initiatives.

## **6.1 World Bank**

The World Bank has emerged as a leading donor in the health sector in all countries of the region, and has developed a considerable number of projects in support of health care reform and rehabilitation. Most of the completed World Bank projects included components to strengthen prevention and health promotion activities. However, so far there has been a strong focus on capital investments, even when the World Bank linked its lending to capacity building and policy reforms. Borrowers have been reluctant to use loan financing to support technical assistance and training, and often seek World Bank assistance for infrastructure and equipment projects. The World Bank contribution to the health sector should give greater emphasis on health promotion activities, reducing under-the-table payments, and improving equity [228].

Following its central mandate of poverty reduction, the World Bank is increasingly addressing issues of poverty and equity, with important implications for its support to the health sector. Lending and debt relief under the Heavily Indebted Poor Countries Initiative has been made dependent on the production of Poverty Reduction Strategy Papers (PRSP). So far, Albania is the only country of the region that has developed a full PRSP. Bosnia and Herzegovina, Macedonia, Moldova, and Serbia and Montenegro have developed interim PRSPs. All PRSPs contain a section on health, but the content and the relevance of these sections vary widely. Some health sections consist of little more than a reference to ongoing health care reforms, while others, such as the ones for Bosnia and Herzegovina and Albania, identify medium term health development goals or priorities. Even in those PRSPs that specify goals, however, it remains unclear how these will be achieved through the poverty reduction strategy. While the restricted access of poor people to quality health services is identified as a principal poverty-related health concern, good health is not recognised as a resource for economic development in any of the PRSPs. There is also the danger that the commitment to poverty alleviation in the health sector does not translate into concrete action. None of the completed World Bank health projects has so far successfully monitored outcomes for the poor [228].

## **6.2 European Union**

For all sectors combined, the European Union is the single largest donor to the countries of South Eastern Europe. In the health sector, it has provided substantial support to Bosnia and Herzegovina and Albania immediately after conflict, but support to the health sector has now largely ceased in most of the Stabilisation and Association Process (SAP) countries.

In both candidate countries and those with association agreements with the EU, the main focus of EU assistance is on meeting EU integration requirements. A key factor is the adoption of the *acquis communautaire*, the body of EU legislation. However, health care delivery does not form part of the 31 chapters of the *acquis*. Chapters in which health related questions and health protection are addressed, include chapters 1 (Free Movement of Goods), 7 (Agriculture), 13 (Social Policy and Employment), and

23 (Consumer Protection). In general, there has been little emphasis on health, which has had a low priority in the accession and association process, even though Article 152 of the 1997 Amsterdam Treaty obliges the EU to direct its action towards improving public health, and to ensure a high level of health protection in the definition and implementation of all Community policies and activities [229].

### **Stabilisation and Association Process**

The European Union distinguishes between the countries of the “Western Balkans” (Albania, Bosnia and Herzegovina, Croatia, Serbia and Montenegro, and Macedonia), the candidate countries to the east (Bulgaria and Romania), and Moldova. For the countries of the “Western Balkans,” the European Union launched the Stabilisation and Association Process (SAP) in 1997. The SAP is designed to encourage and support the domestic reform processes these countries have embarked upon, and to prepare them for gradual integration into EU structures. The Stabilisation and Association Process comprises the instruments of an assistance programme, Community Assistance for Reconstruction, Democratisation and Stabilisation, or CARDS, consisting of technical advice, trade preferences, and cooperation in fields such as justice and home affairs. Countries that have made sufficient progress in terms of political and economic reform and administrative capacity can enter a Stabilisation and Association Agreement (SAA). The SAA is a formal contractual relationship with the EU. The SAAs focus on respect for democratic principles and strengthening links with the single European market, and foresee the eventual establishment of a free trade area with the EU. So far, Croatia and Macedonia have signed Stabilisation and Association Agreements. Others will follow, once they have achieved the necessary progress on reform [230].

In the long term, the Stabilisation and Association Process offers the countries of the “Western Balkans” the prospect of full integration into EU structures. The Feira European Council in 2000 stated that all the countries covered by the SAP are potential candidates for EU membership, a statement which was put to the test by Croatia’s application for membership in February 2003.

The CARDS programme is the main channel for the European Union's financial and technical cooperation with the SAP countries of the “Western Balkans”. In 2001 it replaced the previous assistance programmes PHARE (Poland and Hungary Action for the Restructuring of the Economy) and OBNOVA. The European Agency for Reconstruction (EAR), established in February 2000, is now responsible for the management of the main EU assistance programmes to all SAP countries except Croatia and Albania. Since 1991, the EU has provided more than 6 billion to the region through its various aid programmes. By 2006, that figure will have risen to some 10 billion [230].

Very little EU assistance to the SAP countries, however, is currently allocated to the health sector. The current round of CARDS Country Programmes, valid for the period 2002-2006, stress the importance of concentrating funds on a limited number of key sectors in order to ensure maximum impact with the resources available. Health is not considered as one of these key sectors requiring external support.

### **Bulgaria and Romania**

Bulgaria and Romania were in the first generation of countries in Eastern Europe to have association agreements (Europe Agreements) with the European Union and now

have the status of candidate countries. They were not included in the 2004 enlargement wave, but are expected to join the European Union in 2007. There are three financial instruments to assist the applicant countries of Central and Eastern Europe with their pre-accession preparations: the PHARE programme; SAPARD, which provides aid for agricultural and rural development; and ISPA, which finances infrastructure projects in the fields of environment and transport. Annual pre-accession aid for Bulgaria and Romania totals approximately 900 million per year [230]. The health sector is being covered by the PHARE programme, and candidate countries can also participate in health related programmes of the European Commission. The support provided by these pre-accession programmes, however, is focused on meeting the criteria for EU membership, with less attention to the goal of health improvement. This is particularly worrying with regard to Bulgaria and Romania, because these two countries have the worst health indicators of all Eastern European EU candidates.

### **Moldova**

Moldova occupies a hybrid position between the South Eastern European countries in the accession and association process and the former Soviet republics. It is not included in the SAP or accession process, but has become a member of the Stability Pact for South Eastern Europe. EU external aid, however, is still provided under the TACIS programme, aimed at the countries of Eastern Europe and Central Asia.

### **6.3 Other donors**

Apart from the European Union and the World Bank, there are a number of other donors supporting the health sector in the countries of South Eastern Europe. They include the European Bank for Reconstruction and Development; UN agencies such as WHO, UNICEF, ILO, IOM, UNAIDS; bilateral donors, such as Denmark, France, Finland, Germany, Greece, Italy, Norway, Slovenia, Sweden, Switzerland, the United Kingdom, the United States, Canada, and private foundations, such as the Open Society Institute. Bulgaria, Moldova, Romania, and Serbia have already successfully applied to the Global Fund for AIDS, Tuberculosis and Malaria [131]. UNAIDS, IOM, UNICEF, and the European Commission are the principal supporters of the regional HIV/AIDS activities, and national UN Theme Groups on HIV/AIDS have been established. WHO has provided global and regional visions for health policy.

### **6.4 Stability Pact for South Eastern Europe**

The Stability Pact bridges the "Western Balkans," the South Eastern European EU candidate countries to the east, and Moldova. It was launched on the initiative of the European Union in June 1999 in the aftermath of the Kosovo crisis. The Pact represents a political commitment to a comprehensive coordinated and strategic approach to the region, with the aim of contributing to the stability and development of the region. It involves the EU, the G8, the OSCE, the Council of Europe, the UN, NATO, the OECD and international financing institutions. The European Commission and the World Bank coordinate the assistance measures for the region. Increasingly, the focus of the Stability Pact is on supporting greater regional co-operation, which is also a key objective of the SAP [230]. A South Eastern Europe Regional Table has been set up as an umbrella body of the Pact. It is organized through three working tables: democratization and human rights (Working Table I); economic reconstruction, development and cooperation (Working Table II); and

security issues (Working Table III). Health issues are addressed through Working Table II as part of the Initiative for Social Cohesion.

The Stability Pact, jointly with the Council of Europe and the WHO, supports many public health projects and is an important opportunity to boost the development of public health in the region. A South East Europe Health Network was established in Sofia, Bulgaria, in April 2001 by the countries of the region, which was joined by Moldova when it became a member of the Stability Pact. The network aims to develop regional cooperation for health development, promote access to health, and reduce vulnerability. At the Health Ministers' Forum for South Eastern Europe in 2001, the Dubrovnik Pledge was adopted. This political agreement was the first document making commitments on regional health development. The document is a commitment to meeting the health needs of vulnerable populations in South Eastern Europe by mobilizing human and financial resources to

- Increase citizens' access to appropriate, affordable and high-quality health care services
- Intensify social cohesion by strengthening community mental health services
- Increase the quality of and regional self-sufficiency in the provision of safe blood and blood products
- Develop integrated emergency health care services that are offered free of charge to the user
- Strengthen the surveillance and control of communicable diseases
- Strengthen institutional capacity and intersectoral collaboration for access to affordable and safe food products
- Establish regional networks and systems for the collection and exchange of social and health information.

To implement these goals, seven regional projects were designed, four of which (mental health, food safety and nutrition, surveillance of communicable diseases, and reconstruction of the A. Stampar School of Public Health in Croatia) are currently being implemented. The governments of Greece, France, Italy, Slovenia, and Switzerland, and WHO and the Council of Europe support the projects both technically and financially.

The Stability Pact has also initiated a programme for the development and reconstruction of training and research in public health (PH-SEE). A task force of the PH-SEE network has developed a Minimum Health Indicator Set for South Eastern Europe, selecting 32 indicators from the WHO Health for All 21 indicators [232].

## **6.5 Examples**

This section gives information on multilateral and bilateral assistance by country or territory, with an emphasis on the health and related sectors. The focus is on the two main donors to the region — the World Bank and the European Union, although more donors have supported the health sector, and not all of them may have been listed below.

## **Albania**

Until 1999, Albania has received a total of approximately U.S.\$2.7 billion in foreign aid, most of it after the 1997 crisis. However, disbursement rates of funds are low and Albania has had a problem absorbing external assistance [6]. In the health sector, foreign aid has accounted for a large part of total health expenditure, at more than 50 percent of total health financing since 1997. The main contributors were the World Bank, the EU ECHO programme (which is now being phased out), bilateral donors, and UN agencies [233]. Major UN agencies working in Albania include UNICEF, WHO, IOM, UNFPA, and UNHCR. Bilateral donors in the health sector include France, Germany, Greece, Italy, Slovenia, Sweden, Switzerland, the United Kingdom, and the United States.

Albania is the only country of the region that has developed a full Poverty Reduction Strategy Paper with the World Bank. The paper identifies health as a priority area. The health sector objectives of the Albanian Growth and Poverty Reduction Strategy are to increase effectiveness and efficiency, provide access to health services, and to improve health indicators through specific interventions [178]. It remains to be seen, how these health objectives will now be implemented. The World Bank has supported health care infrastructure through the Health Services Rehabilitation Project (1994-2001), with a loan of U.S.\$12.4 million. The ongoing Health System Recovery and Development Project (1998-2004), co-financed by a loan of U.S.\$17 million, aims to strengthen human resources and essential health services [234]. So far, World Bank commitments to the Albanian health sector comprised less than 5 percent (4.47 percent) of the U.S.\$657 million total country assistance [234].

The European Union has provided substantial assistance to the health sector of Albania in the form of humanitarian aid immediately after the 1997 crisis and during the Kosovo crisis in 1999, but this support has now ceased. All ECHO activities are being phased out from the country [235]. After the 1997 crisis, EU development assistance concentrated on fewer priorities, focusing on the rule of law and basic infrastructure and neglecting the health sector. PHARE support to the health sector ended in 1994. The 2001 CARDS programme for 2002-2006 does not include health among the priorities for cooperation deserving EU support [179].

## **Bosnia and Herzegovina**

Bosnia and Herzegovina received substantial humanitarian aid in the post-war period. After the war ended in 1995, the World Bank, European Union, and other donors developed a Priority Reconstruction and Recovery Programme, for which the international community committed around U.S.\$5.1 billion. Eighty percent of this aid has been or is being disbursed [3]. During and immediately after the war, about U.S.\$500 million in external aid was allocated to the rehabilitation of war victims, health care facilities, reorganisation of health services, health insurance, and education [18]. Donor involvement has now shifted to development programmes and loan-based assistance. This requires technical capacity, planning and development skills that are in short supply. While the need for assistance remains high, donor interest and assistance is declining rapidly. As a result, the process of physical reconstruction has stalled [162].

WHO has coordinated international health activities, and provided assistance in the development of health policies for the Republika Srpska and the Federation of Bosnia and Herzegovina. UNFPA supports the development of a minimum package of

reproductive health services. UNICEF and UNHCR have provided humanitarian assistance after the war and remain a strong presence. Bilateral donors in the health sector include Canada, France, Greece, Italy, Japan, Slovenia, Sweden, Switzerland, Turkey, the United States, and the United Kingdom.

The World Bank funded a number of emergency projects in the immediate post-war period, including the health sector, and also provided general budgetary support. The 1998 Country Assistance Strategy called for a sustainable provision of health care, not addressed within the immediate post-war reconstruction operations. The World Bank is currently providing a loan of U.S.\$10m for the Basic Health Project, which aims to establish a basic system for primary health care, public health, and disease control [236]. The government of Bosnia and Herzegovina has developed an Interim Poverty Reduction Strategy Paper in 2002. In the annex devoted to health, medium-term health development prospects for the health care system are identified and an Action Plan for health sector priorities is drawn up. Poverty is recognised as the most significant determinant of ill health in Bosnia and Herzegovina [3].

The European Union has provided considerable resources to the health sector in the form of humanitarian aid immediately after the war. Long-term development aid has paid less attention to health. Between 1995 and 2000, the EU's humanitarian arm, ECHO, conducted the largest humanitarian operation ever mounted in Europe in Bosnia and Herzegovina. During this time, it concentrated on food aid, health, and the return process. This humanitarian assistance ended in 2000 [237]. Current CARDS support to the health sector includes the rebuilding of health centres and schools as part of the housing reconstruction programme, technical assistance for health care reform, including health financing, and assistance to the pharmaceutical sector. The Public and Environmental Health Programme seeks to develop an integrated public health plan [238]. There is no mention of health as a sector deserving EU assistance in the current CARDS Country Strategy Paper (2002-2006), [237].

## **Bulgaria**

Overall World Bank lending to Bulgaria to date comprises 28 projects for a total loan of U.S.\$1,550 million in loans. [239] The EU PHARE programme allocated commitments of 1 billion to Bulgaria during the 1992-1999 period, 146 million in 2000, and 110.8 million in 2001 [240], a part of which was allocated to the health sector.

In the health sector, Bulgaria received international assistance primarily for its health reform efforts. The health care reform programme received total international support of over U.S. \$120 million in the period between 1997 and 2001 [93]. The World Bank has committed a loan of U.S.\$63.3 million, supporting the introduction of health insurance [239]. Bilateral donors include the United States, the United Kingdom, and many others. The health sector restructuring project from 1996 to 2001 received funding from the World Bank, the Council of Europe Development Bank, and the PHARE programme [116]. The project had the following components: policy analysis and management, primary health care, emergency medical services, and blood transfusion [116].

The Global Fund to Fight AIDS, Tuberculosis and Malaria awarded Bulgaria the amount of U.S.\$15.7 million over the next 5 years for the prevention of HIV/AIDS and TB among the groups most at risk [241].

## **Croatia**

Bilateral assistance to Croatia's health sector has so far been provided by, among others, Canada, France, Greece, Italy, Slovenia, Switzerland, the United States, and the United Kingdom. Croatia will receive the amount of U.S.\$ 4.95 million for the scaling up of its HIV/AIDS response over the next 5 years [241].

Croatia received a total of 367 million in EU assistance between 1991 and 2000, most of which was provided as humanitarian assistance up to 1995. Funding in 1996-1999 was focused on reconstruction and refugee return. Humanitarian assistance by ECHO for food and medical supplies was phased out in March 2000. Current EU support to the health sector is confined to reconstruction associated with refugee return [242]. The EUPOP programme (EU programme for Reconstruction and Return) is the international community's largest financial assistance instrument in Croatia. However, EU assistance focuses on European integration, with little emphasis on health. The current Country Strategy Paper for 2002-2006 acknowledges that the Croatian health system is "at a critical and unstable point" [243], but does not include health among the priorities for cooperation, excluding it from crucial EU assistance.

The World Bank's activities also initially concentrated on emergency reconstruction and then expanded to the health sector. As of September 2001, the World Bank had committed U.S.\$930 million to Croatia, 7 percent of which was allocated to the health sector [243]. The World Bank has also supported Croatian health care reform with a loan of U.S.\$29 million [244]. Activities in the health sector focused on improving health care services, reducing costs, rehabilitation of hospitals, reducing over-consumption of drugs, and making emergency health care more accessible and prompt. They also included procurement of equipment, health promotion campaigns, and practical training of health professionals [245].

## **Macedonia**

In the health sector, Macedonia received far less international assistance than was originally promised [246]. By December 2000, total funding from external donors to the Macedonian health sector was only 2.65 percent of total external assistance, with most of it coming from the World Bank [247].

The World Bank supported the Macedonian health sector reform process with a loan of U.S.\$16.9 million in the framework of the Health Sector Transition Project. The project had three main components: health finance and management, basic health services, and supply and distribution of pharmaceuticals [248]. The Interim Poverty Reduction Strategy Paper of 2000 contains a section on the health care system. This section pays attention to the health problems linked to the high levels of poverty in the country and the restricted access to health services of the poor. These health care reforms are expected to improve equitable access to health care. A specific health policy for the poor, however, does not exist, and health is not seen as a determinant of economic development and poverty alleviation.

The European Union provided emergency humanitarian assistance and budgetary support between 1992 and 1995 and during the Kosovo refugee crisis [249; 250]. Long term EU development aid for the health sector, however, is missing. The CARDS Assistance Programme for 2002-2006 has not identified health as an area requiring support from the EU [247]. The 2002 budget of the European Agency for Reconstruction apparently did not allocate resources to the health sector [251]. The

only CARDS support to the health sector at present seems to be a project for the strengthening of health inspectorates at the Greek border.

UNICEF is actively working together with the Ministry of Health and health-care providers to develop and secure appropriate child care facilities. It is also supporting immunisation and vaccination support programs. WHO is supporting the development of health policy and health programmes.

Japan is the most important bilateral donor to Macedonia's health sector. It has financed medical equipment for clinical centres and hospitals in the capital Skopje and for primary health care centres around the country, and has supported the education of health professionals. Other bilateral donors in the health sector include France, Greece, the United Kingdom, Italy, Sweden, Slovenia, Switzerland, and Denmark.

## **Moldova**

The major donors providing assistance to the health sector in Moldova (excluding the semi-autonomous Transdniester region) include the World Bank, the European Union, UN agencies, and bilateral donors. The WHO provides technical assistance in the areas of health-policy development, health-sector financing, maternal and children's health, expansion of the DOTS TB programme, and surveillance of communicable diseases. UNICEF is working in three main health-related areas: improvement of health services to mothers and children in primary health care, immunization and control of infectious diseases, and child nutrition. Bilateral donors include the Netherlands, Sweden, the United Kingdom, and the United States. The Global Fund to Fight AIDS, Tuberculosis and Malaria accepted Moldova's application for a total amount of U.S. \$11.7 million for five years starting in 2003 [241].

Moldova and the EU signed the Partnership and Cooperation Agreement (PCA) in November 1994. It entered into force on 1 July 1998 and forms the basis of EU-Moldova relations. Moldova has also become a member of the Stability Pact for South Eastern Europe. EU assistance to the health sector of Moldova was first provided by its humanitarian arm, ECHO. Activities in 1999 concentrated on the supply of vaccines and medicines and food to children and the elderly, but EU humanitarian aid is now being phased out [12]. The current TACIS health project (July 2001-September 2003) supports the restructuring of hospital-care services, and the strengthening of national drug policies. Implementation of another project for health promotion and disease prevention started in March 2003.

With the World Bank, Moldova developed an Interim Poverty Reduction Strategy Paper in 2000 and updated it in 2002. The government's poverty reduction strategy aims to increase access to health services and the resources allocated to the health sector [183]. However, only 4.35 percent (U.S.\$22 million) of total World Bank commitments since 1993 were in the area of health and social services [252]. U.S.\$20 million of these commitments were provided for support to the health reform process, which constituted the largest external assistance to the Moldovan health sector. Other donors supporting the health sector reform strategy include UNICEF, EU, WHO, the Netherlands, Sweden, and the United States [165; 13].

## Romania

Bilateral donors working in the health sector in Romania include the United States, which has supported reproductive health projects and the restructuring of the hospital sector. Other donors include France, Greece, Italy, Slovenia, Switzerland, the United Kingdom, UNICEF, UNDP, UNFPA, and WHO. The Global Fund to Fight AIDS, Tuberculosis and Malaria has awarded Romania grants of U.S.\$48 million for HIV/AIDS and TB prevention over 5 years [241].

Romania has received pre-accession assistance from the European Union of around 630 million per year since 2000. This equates to about 6 percent of the annual consolidated Romanian national budget revenues, and up to 25 percent of investment expenditure in the national budget [253]. However, little has been allocated for health. The European Union has provided support to the Romanian health sector in the areas of health care reform, reform of health sector financing, health care services provision and decentralisation, drug policy, and health insurance. Current pre-accession aid, however, is mainly focused on meeting the criteria for EU membership and adopting the *acquis*, with little emphasis on health.

World Bank support to the Romania health sector started with a U.S.\$150 million loan to the Health Sector Rehabilitation Project (1991-1999). This project sought to rehabilitate and upgrade primary health care and to support the restructuring of health sector financing and management. The project also included a component to strengthen public health and health promotion, which helped to establish a National Center for Health Promotion and Education. Due to weak government support and the lack of a clear framework for health promotion, however, substantial resources for public health went unused and were reallocated to other activities. The originally envisaged establishment of a health promotion fund was cancelled. Overall, only about 1 percent of total project costs were allocated to public health and health promotion activities. An additional component for strengthening the health information system failed to bring about any improvements, although it consumed nearly U.S.\$20 million. The whole project was evaluated only as “moderately satisfactory” [228].

A Second Health Sector Rehabilitation Project (2000-2003) was given a loan of U.S. \$40 million. The ongoing Health Sector Reform Project is supported by a loan of U.S.\$60 million. It has a strong focus on infrastructure, supporting investments for district hospitals and emergency medical services. Its public health and disease control component also focuses on equipment and infrastructure [254; 228].

## Serbia and Montenegro

Serbia and Montenegro has received substantial financial and humanitarian assistance, particularly after October 2000. Humanitarian assistance to the FR Yugoslavia in the 1990s totalled between U.S. \$5 and 10 billion, a per capita level perhaps unmatched in any other recent crisis [15]. The World Bank and the European Commission organised a first donor coordination meeting in December 2000, where donors identified some U.S.\$500 million to support urgent energy, food aid, and social protection needs for the 2000-2001 winter. Following the development of an Economic Recovery and Transition Program, a second donor conference was held in June 2001, which raised 1.56 billion in pledges [227; 255]. The conference identified a funding requirement of U.S.\$205.6 million for the reform of the health

sector for 2001-2004, but funds pledged so far are insufficient for wide-ranging reform [30].

Bilateral donors to the health sector include France, Greece, Italy, Slovenia, Switzerland, the United Kingdom and Canada. The Global Fund to Fight AIDS, Tuberculosis and Malaria will support Serbia's HIV/AIDS prevention efforts with an amount of U.S.\$3.58 million for 5 years [241].

Commitments of the World Bank since 2001 totalled U.S.\$172 million in June 2002 but, of this sum, only 4.06 percent (U.S.\$7 million) were devoted to health and social services [256]. The World Bank has identified the following areas of need during a four-year assistance program, which is currently being finalised: health information systems, public health, reform of health care delivery, and reform of health financing. In 2002, the FR Yugoslavia developed an Interim Poverty Reduction Strategy Paper for each of its two constituent republics. The development of health services is recognised as a key element of poverty reduction in both Montenegro and Serbia, with an emphasis on increasing access to high quality care and reforms to health financing.

Total EU assistance to Serbia and Montenegro, combining CARDS (previously OBNOVA), macro-financial and humanitarian assistance, has amounted to more than 2.9 billion since 1991, of which more than 2 billion were allocated since the fall of the Milosevic regime in October 2000. The focus of EU assistance has moved from emergency humanitarian assistance and rehabilitation work to post-conflict reconstruction. EU assistance now targets support for reforms in line with the European Union's economic and legal structures [255]. Little emphasis is given to health. Only 2.9 percent of the European Agency for Reconstruction's 2002 budget for Serbia was allocated to the health sector [251]. The 2003 EAR programme for Serbia has identified two key areas for activity in the health sector: capacity building in the Ministry of Health and in public health, and enhancing drug management. In the 2002 EAR budget for Montenegro, however, health was altogether missing [251]. The CARDS 2002-2006 Country Strategy Paper for the FR Yugoslavia (including Kosovo) acknowledges that the health care sector is in crisis, but does not include health in its priorities for cooperation.

## **UN administered province of Kosovo**

The World Bank and European Commission have organized four donors meetings for Kosovo, most recently in Brussels in November 2002, receiving a total of \$2.1 billion in pledges from the international community between 1999 and 2001 to support Kosovo's reconstruction and economic recovery (excluding humanitarian assistance) [227]. Fifty percent of Kosovo's 2000 overall budget was financed by external aid. This share has since decreased and the 2002 budget was 93 percent self-financed [5].

Donors working in the health sector in Kosovo include UN agencies, such as WHO and UNICEF, and bilateral donors, such as Canada, Sweden, the United Kingdom, and the United States. WHO played a leading role in organising activities in the health sector after the conflict. Among other things, it supported a national baseline health survey, the development of a public health surveillance system, rehabilitation of laboratories, and local capacity building for public health services and epidemic prevention [257].

The World Bank is supporting the Health Care Financing Development Project (2000 – 2003), with the principal objective of supporting the newly established Ministry of

Health to identify and implement a sustainable and affordable financing model for the health care system [227].

EU support to the health sector was first provided in the framework of humanitarian assistance. This included the provision of medical supplies and emergency health care. ECHO supported the emergency rehabilitation of the hospital in Mitrovica in 1999. In 2000, 10 million of funding helped to modernise the blood transfusion service, to strengthen the pharmaceutical sector, and to provide financial and technical assistance for the support of health care reform in Kosovo [255]. In 2001, ECHO reduced its programmes in Kosovo substantially, leaving the EAR to organise EU assistance. A CARDS funded health sector reform programme is currently under way [258]. However, only 3.72 percent of the EAR budget for 2002 was allocated to the health sector [251].

## **7 Best Practices from the Region\***

As was noted in chapter one, there is a danger that this review will convey an inappropriately pessimistic view. The many problems catalogued in the reports that have been analysed when assembling the evidence clearly paint a picture of a region where much has gone wrong and where there is still much to do. Yet it is important to recognise that the situation is not hopeless. There are many successes and in some countries levels of life expectancy that had long stagnated or even declined have begun to recover. Modern systems of disease surveillance and control are being put in place, public health capacity is being built up, and health care and health policy are increasingly based on evidence. In this chapter, we review a number of reports that identify these successes, although there is still far too little documentation and discussion of these successes and the factors that allowed them to overcome obstacles and succeed. Much better documentation of these activities is essential if those working in the region are to learn from each other.

Overall, the key lesson to emerge from these examples is that significant progress can be made within a short period of time as long as national and international resources are pooled and local ownership is ensured.

### **7.1 Fostering a multisectoral approach**

A key part of developing a multisectoral approach to health is to involve a variety of stakeholders in policy development and planning. This includes ministries of health, education, transport, environment, agriculture, and social welfare, as well as other relevant stakeholders in the private sector and among nongovernmental organisations.

#### **Local Health Plans**

The Andrija Stampar School of Public Health in Croatia, in collaboration with local governments, the Ministry of Health, and the Centers for Disease Control and Prevention, Atlanta, has implemented a program to create county-level public health plans. These plans, presented for funding to the central government, are developed by multidisciplinary teams that include civil society organizations. An adaptation of the program involving current partners and the Faculty of Medicine of St. Cyril and Methodius University, Skopje, is currently underway in Macedonia.

### **7.2 Reorienting training**

One of the main challenges to the public health system in the last decade has been moving from a medical-or-disease oriented model to a preventive approach toward public health. This has meant retraining the workforce to better understand population-oriented approaches and the role of socio-economic determinants of health.

#### **Postgraduate Training Programs in Public Health**

In Romania, with support of the World Bank and Open Society Institute, and in collaboration with the Association of Schools of Public Health in the European Region (ASPHER), the National Institute for Research and Development in Health

---

\* These examples were contributed by the country offices of the Open Society Institute/Soros Foundation Network and the regional offices of UNICEF. They are merely a sample of current activities in the region and do not represent a complete picture of best practices.

has successfully established itself, gaining joint recognition by the Ministry of Health and Family and the Ministry of Education to train a future generation of public health professionals. Similar efforts are underway in Albania, Bulgaria, Croatia, Macedonia, and Moldova.

### **7.3 Investing in people**

At a time of rapid growth in medical knowledge, continuing training and access to information is crucial. Efforts aimed to ensure that South Eastern European health professionals and policymakers have access to information are vital to the quality of care in the region.

#### **Continuous Medical Education (CME)**

In Romania, CME became compulsory in 1999 as a requirement for physicians to renew their right to practice. With support of the World Bank, Macedonia has also developed a CME program, aimed at providing life-long learning in primary care. Initially begun as a pilot project, the program was adopted by the government and fully integrated in the system of medical education.

### **7.4 Implementing reliable surveillance/health information systems**

There are still many gaps in knowledge of the health status of the people living in South Eastern Europe. The establishment of national and regional health information systems with age- and sex-disaggregated data helps determine where policy responses are most needed. These systems are also key for monitoring and evaluating the overall health of the populations and any interventions designed to improve it.

#### **Developing Health Information Systems in Moldova**

In 2000 and 2001, as part of the National Health Reform Strategy, two districts adopted pilot projects on health information systems in the fields of primary care and hospital management, with support from the Soros Foundation Moldova. The resulting ability to develop district health profiles in 2001 allowed for the integration of information about emergency, primary, and secondary care, aiding key local stakeholders in their decision-making. In the same year, a corresponding insurance information system was created in conjunction with the formation of the National Insurance Company. The success of these pilot projects led the Ministry of Health to adopt a national Integrated Health Information System.

### **7.5 Targeting health promotion efforts**

Empowering the public to participate in setting the agenda and making decisions on matters related to health is a key component of health promotion efforts. There is an urgent need for programs that will give people the necessary information to make healthy choices.

#### **Prevention of Smoking in Croatia**

In March 2003, the first national no-smoking day in Croatia was launched on the first day of Lent. The initiative in this predominantly Catholic country was supported by

the Croatian archbishop, who instructed priests to introduce the topic in their Sunday sermons, as well as by leaders of the other religious denominations [259; 260].

## **7.6 Improving health care delivery systems**

Sustained improvement in the health sector requires investment in many areas. A key component is the expansion of primary health care to ensure that the entire population has access to basic health services

### **Reducing Perinatal Mortality in Macedonia**

The perinatal project in Macedonia, financed by the World Bank, introduced innovations in medical training, trained trainers, provided equipment, and developed a national database for perinatal and neonatal data. Fifty percent of the doctors and 25 percent of the nurses who care for neonates successfully completed this training. This program can take much of the credit for a 21 percent reduction in perinatal mortality and for a reduction of early neonatal deaths by 36 percent. Increased investment would allow for further reductions in perinatal mortality [261; 262].

### **Baby Friendly Hospitals**

All the countries and territories of the region have created WHO/UNICEF Baby Friendly Hospitals. This follows 10 basic steps to promotion of breastfeeding by removing harmful practices and ensuring mother and child are not separated. The many health professionals now trained and supported by ministries of health ensure that it is sustainable and continues to develop, with countries supporting each other. The program is a good example of bilateral and regional collaboration. Building on the work done to date, the countries and territories of the region will now strive to make maternity services more family and woman friendly.

### **Primary Health Care in Bulgaria**

The primary health care component of Bulgaria's health sector restructuring project, which was supported by the World Bank, rehabilitated facilities and provided equipment for 1,784 general practices, with a focus on remote and rural areas of the country. The programme also provided training for over 1,000 general practitioners.

## **7.7 Investing in services for the most vulnerable**

Old ways of doing business must give way to new, evidence-based methods of protecting and promoting health. People with mental disabilities should no longer be institutionalized. Successful and feasible community-based alternatives exist. Drug users must have access to HIV prevention services. A number of innovative pilot programs for these and other vulnerable populations have led to national policy changes.

### **Mental Disabilities**

The Child Development Centre in Albania, established by the Open Society Foundation, was the first development centre to use a multidisciplinary approach to mental disabilities. The Centre is now fully funded by the Ministry of Health. The Open Society Foundation in Albania also established a daily care centre for disabled youngsters in Tirana, the first institution to introduce community-based services in Albania. Pilot projects are also under-way in Bulgaria, Bosnia and Herzegovina,

Croatia, Moldova, and Macedonia with the hope that these will lead to nationwide reform.

### **HIV Prevention for Drug Users**

In Bulgaria, the Initiative for Health Foundation is a small NGO that provides harm reduction services to commercial sex workers and approximately 35 percent of injection drug users in Sofia. The NGO has been supported by UNDP, UNAIDS, and the Open Society Institute. Between 1998 and 2001, its four teams contacted more than 1,800 injection drug users. On average, the NGO distributes 10–12,000 needles and syringes per month [220]. Similar projects are underway in Croatia, Moldova, Romania, and the Republic of Serbia. In Albania, a pilot harm reduction project in Tirana prompted the government to adopt and implement a national strategy on harm reduction.

### **Palliative Care in Romania**

Romania serves as an excellent model for palliative care development. It has a resource training centre in Brasov and a recognised postgraduate certificate program in palliative care. Romania also has a network of home-based care programmes and a number of inpatient hospice units and is also the only country in the region to have partial funding from national insurance for palliative care services. As with other countries in the region, however, access to opioid medications for pain management is still limited.

### **Visiting Nurses in Serbia**

The Institute of Public Health in the Republic of Serbia, with support from the European Union, the Canadian Government and UNICEF, instituted a continuing education program for visiting nurses, and supplied them with nursing kits. The project demonstrated that visiting nurses play a key role in community-based health services as well as with assisting families to deal with violence, unemployment, poor housing, and other health determinants that usually lie outside of the traditional health delivery system.

## **7.8 Regional cooperation**

Greater movement of people means greater need for collaboration across borders. This is especially important in the area of infectious disease control, not only to monitor emerging trends in disease but also as a means of fostering regional collaboration and good will.

### **Joint TB Control Program in Albania, Kosovo, and Macedonia**

Over the past few years a number of countries and territories have been working together in the area of TB control to make sure that patients can receive directly observed treatment (DOTS) even as they cross borders between countries and territories. Cross-border collaboration began with the development of the “Balkan Initiative,” a yearly meeting of national tuberculosis managers from the region that provides an open platform for discussion and collaboration. In addition to organizing reciprocal cross-country site visits to National Tuberculosis Programs (NTP) in Macedonia, Kosovo, and Albania, each team travelled to Romania to learn from its national TB program. As a result of this increased communication, the Macedonian

National Reference Laboratory helped to develop the Albanian National Laboratory Network, and the NTP manager from Albania took part as a lecturer in the DOTS training program in Kosovo. Similarly, a team from Belgrade will train Serbian doctors from Kosovo in DOTS. During the conflict in Macedonia's Tetovo region, Albanian TB patients were treated in neighbouring Kosovo, with both Macedonian and Kosovar TB dispensaries in close contact.

### **South Eastern European Public Health Network**

Under the auspices of the Stability Pact for South Eastern Europe, a network of public health faculties has been established and a common postgraduate curriculum in public health has been developed. The project is led by the Andrija Stampar School of Public Health and the Faculty of Health Sciences of the University of Bielefeld, and includes Albania, Bosnia and Herzegovina, Bulgaria, Croatia, Macedonia, Moldova, Romania, Serbia and Montenegro, and Slovenia.

### **Rapid Assessment and Response**

Little data in South Eastern Europe exist on HIV and AIDS, especially on risk behaviour and practices. For this reason, several countries implemented "rapid assessment and response"—a methodology designed to quickly assess a current vulnerable situation and use the information to make informal decisions about the development of interventions. This work has been facilitated by UNICEF and the Canadian Public Health Association.

Rapid assessment and response methodology has allowed for the development of cross-border collaboration in designing programmes to reach the most vulnerable populations (intravenous drug users, commercial sex workers, men who have sex with men). One finding consistent across the region was that if HIV testing was made anonymous, free, and accessible, many more people would choose to be tested.

### **Tobacco Control Among Youth**

Early in 2003, the Global Youth Tobacco Survey, a joint initiative of WHO and the U.S. Centers for Disease Control and Prevention, was carried out in Bosnia and Herzegovina, Croatia, Macedonia, and Serbia and Montenegro, and it will also be conducted in Albania, Kosovo, Moldova, and Romania by the end of the year. The survey, carried out in over 100 countries around the world, gathers information on smoking prevalence among teens, their knowledge and attitudes toward smoking, and how smoking is addressed in the media and school curricula. This information will strengthen the capacity of governments to develop youth-specific tobacco control strategies and programs to monitor the impact of health promotion campaigns on smoking behaviour.

### **Stability Pact Projects**

Under the auspices of the Stability Pact initiative, four health projects are currently being implemented with support of the Council of Europe and WHO, and bilateral donors, such as France, Greece, Italy, Slovenia, and Switzerland. These projects bring together professionals from the region to develop common frameworks for different issues, ranging from food safety, to mental health legislation, to improving epidemiological surveillance for communicable diseases as a tool for better decision-making. There is also a project establishing a South Eastern European public health network (described above).

## **7.9 Encouraging Increased Commitment and Coordination by Donors and International Finance Institutions**

Much of the external assistance in the region in recent years has been delivered as humanitarian aid in times of crisis, when there was often little thought given to longer term issues or to national ownership and participation in the design of programs. After the crisis ended, with the exception of the World Bank, donor funding for health-related issues in the region decreased significantly. Donor commitment to support national efforts and strengthen the rebuilding process has never been so critical. Many of the examples given above evidence a commitment by donors to support nationally led strategies. But much more remains to be done, including improved harmonisation of donor support.

### **Poverty Reduction Strategy Papers**

In addition to investing in basic health services and disease prevention efforts, governments have either developed or are developing overall Poverty Reduction Strategies Papers (PRSP) in Albania, Bosnia and Herzegovina, Moldova, Romania, and Serbia and Montenegro. Spearheaded by the World Bank, the PRSP process attempts to bring together all stakeholders, including government officials and civil society representatives from a variety of fields in an effort to design a unified plan of action. This process provides a key opportunity to address the root causes of health inequity as well as offering a formal mechanism for representatives from different sectors to analyse causes and propose solutions for poverty.

## 8 The Need for Sustained Public Health Action

For more than a decade, people in South Eastern Europe have been confronted by political turmoil, civil conflict, and wide ranging social and economic transition. There has been large scale displacement of populations, destruction of infrastructure, and degradation of previously existing systems of education, social support, and health care. Now that peace has returned to the region, it is at last possible to engage in a programme of sustained reconstruction. But at a time when sustained international financial support could really make a difference by building on the region's increasing stability and new willingness to pursue development, there is a danger that the international community's attention will shift to other parts of the world needing post-conflict assistance. There is the possibility that much unfinished business in South Eastern Europe will be forgotten.

It is true that South Eastern Europe has received considerable international financial assistance, and as chapter seven shows, in many cases this has led to important improvements. As we note, those living and working in the region are aware of many other successes, albeit less well documented. However, much more still needs to be done if these countries are to be integrated in a modern Europe.

A healthy, well-educated population is a prerequisite for economic growth, both in terms of their ability to contribute as a productive work force and by reducing the drain on resources incurred by paying for health care for those suffering from avoidable illnesses. The latter point is too often overlooked; it is the people of a country who pay the price of ill health — whether they do it collectively, through health insurance or taxation, or as individual families. Good health also contributes to political stability, as it plays an important role in building social capital. A commitment to solidarity and health is an indicator of a country's social cohesion.

Sustained improvement in population health requires investment in a large number of areas, and strategies that remain confined to the health sector will not succeed. Each of the countries included in this review is a signatory to the main UN conventions assigning states the responsibilities to protect and empower people to realise their rights. Poverty and social exclusion are major underlying determinants of ill health, which in turn impedes economic development. Public health interventions need to be multi-sectoral and require effective action in the areas of education, transportation, environment, employment, and agriculture. They need to involve local and national actors, the public, and the international community. Improved public health is also dependent on improved rule of law, accountability of government institutions, and policies that give people hope in the future. It is critical for policies to create an environment in which people are encouraged to take measures that will allow them to preserve their health and lead productive lives.

In the health sector, several key areas require investment.

The first is building capacity to identify and response to the threats to population health at the national, district, and local levels, including the development of effective surveillance, information, and training systems to enable appropriate analysis of problems. This includes investment in people. Salaries of health professionals continue to be low, resulting in poor motivation and requests for informal payments. Many professionals have decided to leave the health care field or to emigrate, and it is difficult to recruit replacements. At a time when the growth of medical knowledge is

rapid, a lack of continuing training and access to information makes it difficult to keep up to date. A much stronger focus on the long-term development of human capacity in public health is needed. This is a major factor that will affect the quality of work in public health delivery in the region.

A barrier to effective action is the fact that, although the overall picture is very apparent, the details are often missing. Compared to other parts of Europe, far too little is known about the health of the people in this region. There is an urgent need for better and more reliable information about population health trends. Health information systems are underdeveloped, and need to be re-established and strengthened in the areas of communicable and non-communicable diseases.

A second key area of public health action is to establish appropriate health care financing and delivery systems that ensure quality and access, especially for vulnerable populations. Unequal access to health and social services continues to be a major challenge in all countries of the region. The question of informal payments, which can most adversely impact the poor, requires much more decisive action. Successful models of pilot projects, such as community based mental health services and harm reduction services for drug users, need to be expanded at an accelerated pace.

Another key area should be halting the spread of sexually transmitted diseases, reverse increasing trends of TB incidence, and prevent a sudden HIV/AIDS epidemic. Effective policies must also address the high levels of injuries and violence, the many environmental health threats, and the growing prevalence of non-communicable diseases. The tobacco epidemic threatens to jeopardise the health of millions of people in the region. Greater emphasis must be given to health promotion activities in their widest sense, in order to reduce the consumption of tobacco and other drugs. This requires efforts to influence individual behaviour, but also changes in policies, taxes, laws, and law enforcement. Alarming trends of malnutrition among children and pregnant women also call for immediate action.

Finally, it is crucial to develop mechanisms for practical cooperation and sharing of best practices within the region. This includes better documentation of activities and improved cooperation between government and civil society.

Successfully meeting these challenges will depend on political and financial commitment at the international and national level and increased and better harmonised donor support. International agencies need to support the development and implementation of nationally owned plans and policies for improving public health across the region. With sustained support and attention of both national and international actors, substantial improvements are possible.

## Bibliography

1. Todorova, Maria. 1997. *Imagining the Balkans*.
2. Hall, Derek, and Darrick Danta. 1996. *The Balkans: perspectives and realities*. In *Reconstructing the Balkans: A Geography of the New Southeast Europe*, edited by D. Hall and D. Danta. New York: John Wiley & Sons Ltd.
3. World Bank. 2002. *Interim Poverty Reduction Strategy Paper, Bosnia and Herzegovina*: World Bank.
4. Albania Health Reform Project. 2001. *Towards a healthy country with healthy people*. Draft public health and health promotion strategy.
5. UNDP. 2002. *Kosovo Human Development Report*: UNDP.
6. UNDP. 2000. *Albania Human Development Report*. Tirana: UNDP.
7. Vulic, Spaso, and Judith Healy. 1999. *Health Care Systems in Transition: Croatia*. Copenhagen: European Observatory on Health Care Systems.
8. Horton, Richard. 1999. *Croatia and Bosnia: the imprints of war - II. Restoration*. *The Lancet* 353 (June 26):2223-8.
9. World Bank. 1999. *Former Yugoslav Republic of Macedonia - Focusing On the Poor*; Report No 19411-MK.
10. Donev, D, S Onceva, and I Gligorov. 2002. *Refugee crisis in Macedonia during the Kosovo conflict in 1999*. *Croatian Medical Journal* 43 (2):184-9.
11. State Statistical Office, Macedonia. 2002. *Labour Force Survey 2001*.
12. European Commission. 2002. *The EU's relations with Moldova, Latest update: March 2002*.
13. UNICEF. 2000. *The Situation of Children and Women in the Republic of Moldova 2000. Assessment and analysis.*: UNICEF.
14. UNDP. 2000. *Vulnerability Trends and Perception, Suspended Transition (1990-2000), Report No 0 (Serbia) of the Early Warning System for FRY, August 2000*: UNDP.
15. UNICEF. 2001. *Economic Sanctions, Health and Welfare in the Federal Republic of Yugoslavia, 1999-2000*.
16. Barath, Arpad. 2002. *Psychological Status of Sarajevo Children after War; 1999-2000 Survey*. *Croatian Medical Journal* 43 (2):213-220.
17. DFID Health Systems Resource Centre. 2001. *Serbia, Country Health Briefing Paper*.
18. UNDP. 2001. *Human Development Report Bosnia and Herzegovina 2002*. Sarajevo: UNDP.
19. Health Development Agency. 2002. *Public Health and Health Promotion Strategy, Reference document (Draft)*.
20. Gjonca, Arjan, Chris Wilson, and Jane Falkingham. 1999. *Can Diet and Life Style Explain Regional Differences in Adult Mortality in the Balkans?* Rostock: Max-Planck-Institute for Demographic Research.
21. UNICEF. 2001. *Ten Years of Child Rights in Yugoslavia, 1990-2000. A Review*. Belgrade: UNICEF.
22. WHO. 2001. *Highlights on Health in the Republic of Moldova*. Copenhagen: WHO.
23. Bozicevic, Ivana, S Oreskovic, Ranko Stevanovic, Urelija Rodin, Ellen Nolte, and Martin McKee. 2001. *What is happening to the health of the Croatian population?* *Croatian Medical Journal* 42 (6):601-5.

24. WHO. 2000. Highlights on Health in Croatia. Copenhagen: WHO.
25. Levett, J. 2002. Contributing to Balkan public health: a school for Skopje. *Croatian Medical Journal* 43 (2):117-25.
26. McKee, Martin. 2002. Substance use and social and economic transition the: need for evidence. *International Journal of Drug Policy* 13 (6):453-459.
27. Reamy, Jack, and S Oreskovic. 1999. Life Expectancy in Central and Eastern European Countries and newly Independent States of the former Soviet Union: Changes by Gender. *Croatian Medical Journal* 40 (2):237-243.
28. Marmot, Michael, and Martin Bobak. 2000. International comparators and poverty and health in Europe. *British Medical Journal* 321:1124-8.
29. McKee, Martin, and Vladimir Shkolnikov. 2001. Understanding the toll of premature death among men in eastern Europe. *British Medical Journal* 323:1051-5.
30. Development and Aid Coordination Unit (DACU). 2001. Working Paper, Health Sector in Serbia: DACU.
31. Dolea, C, Ellen Nolte, and Martin McKee. 2002. Changing life expectancy in Romania after the transition. *Journal of Epidemiology and Community Health* 56:444-449.
32. Hertzman, C, and A Siddiqi. 2000. Health and rapid economic change in the late twentieth century. *Social Science & Medicine* 51 (6):109-19.
33. UNICEF, and World Bank. 2001. Children in Bulgaria: growing impoverishment and unequal opportunities. Working paper No 84. Florence: UNICEF Innocenti Research Centre.
34. WHO/Europe. 2003. HFA Database, January 2003.
35. Republic of Bulgaria Ministry of Health. 2001. National Health Strategy. Better Health for a better future of Bulgaria. Sofia: Republic of Bulgaria Ministry of Health.
36. National Center of Health Informatics. 2001. Public Health Statistics Annual. Bulgaria, 2000. Sofia, Bulgaria: Ministry of Health.
37. WHO, and European Commission. 1999. Highlights on Health in Romania: WHO, European Commission.
38. State Statistical Office Macedonia. 2002. *Statistical Yearbook of the Republic of Macedonia*. CD Rom: State Statistical Office Macedonia.
39. Nuri, Besim, and Judith Healy. 1999. *Health Care Systems in Transition: Albania*. Copenhagen: European Observatory on Health Care Systems.
40. Gjonca, Arjan, and Martin Bobak. 1997. Albanian paradox, another example of protective effect of Mediterranean lifestyle? *The Lancet* 350 (December 20/27):1815-17.
41. UNDP. 2002. Bulgaria Human Development Index: Municipalities in the Context of Districts. Sofia: UNDP.
42. Mutafova, M, H P van de Water, R J Perenboom, H C Boshuizen, and C Maleshkov. 1997. Health expectancy calculations: a novel approach to studying population health in Bulgaria. *Bulletin of the World Health Organization* 75 (2):147-53.
43. Ivanovska, L, and I Ljuma. 1999. Health sector reform in the Republic of Macedonia. *Croatian Medical Journal* 40 (2):181-9.
44. Republic Institute for Health Protection. 2002. Report for the health status and health care of the population in republic of Macedonia: Republic Institute for health protection - Skopje (Annually). Skopje: Social Medicine Department.

45. The Republika Srpska Institute of Statistics. 2002. Demographic Statistics published yearly. Banja Luka: The Republika Srpska Institute of Statistics.
46. Ministry of Health. 2001. National Health Strategy, Bulgaria. Sofia, Bulgaria: Ministry of Health.
47. UNDP. 2001. National Human Development Report Social Exclusion and Human insecurity in FYR Macedonia: UNDP.
48. WHO, and European Commission. 2001. Highlights on Health in Bulgaria: WHO, European Commission.
49. WHO, Ministry of Health, and Republic Institute for Health Protection. 2002. Action plan for food and nutrition in the Republic of Macedonia: WHO, Ministry of Health, Republic Institute for Health Protection,.
50. Republic of Bulgaria Council of Ministers. 2002. National Environmental Health Action Plan. Sofia: Republic of Bulgaria Council of Ministers,.
51. Republic Institute for Health Protection. 2002. Ambulatory and Dispensary Morbidity; Republic Institute for health protection-Skopje (Annually). Skopje: Social Medicine Department.
52. Institute of Public Health of Serbia. 2000. Health status, health needs and utilisation of health services - in 2000. Report on the analysis for adult population in Serbia: Differences between domicile population, refugees and internally displaced persons: WHO.
53. Georgieva, L, J Powles, G Genchev, P Salchev, and G Poptodorov. 2002. Bulgarian population in transitional period. *Croatian Medical Journal* 43 (2):240-4.
54. WHO, and Republic of Macedonia. 2002. National Program for prevention and control of chronic diseases in Republic of Macedonia: Draft Plan of actions (2002-2007): WHO, Republic of Macedonia.
55. Republic Institute for Health Protection. 1998. Cancer register; Republic Institute for health protection - Skopje, 1998-2000 (Annually). Skopje: Social Medicine Department.
56. Tozija, F., D. Gjorgjev, Lj. Paneva, and D. Ckaleska. 1998. Breast cancer and lung cancer - most frequent malignant neoplasms in Macedonia. *Balkan Medical Union - XXVth Balkan Medical Week. Ioannina, 1-4 July, 1998: Archives of Hellenic Medicine: A291 - P88.*
57. Bray, I, P Brennan, and P Boffetta. 2000. Projections of alcohol and tobacco related cancer mortality in Central Europe. *International journal of cancer* 87 (1):122-8.
58. Jedrychowski, W, U Maugeri, and I Bianchi. 1997. Environmental pollution in central and Eastern European countries; a basis for cancer epidemiology. *Reviews on environmental health* 12 (1):1-23.
59. Hristova, L, and Ilitcheva Dimova, M. 1997. Projected cancer incidence rates in Bulgaria, 1968-2017. *International journal of epidemiology* 26 (3):469-75.
60. Situm, Marijan, Zoran Dogas, Zoran Vujnovic, Erceg Marijan, Janos Terzic, Jelena Marusic, and Dinko Miric. 2001. Increased Incidence of Colorectal Cancer in the Spit-Dalmatia County: Epidemiological Study. *Croatian Medical Journal* 42 (2):181-87.
61. Jamrozik, Konrad. 1995. Eastern Europe in transition: the dilemmas of health. *The Medical Journal of Australia* 163:643-5.
62. ECOHOST. 1998. Childhood Injuries. Final Report: UNICEF, WHO, London School of Hygiene and Tropical Medicine.

63. McKee, Martin, and S Oreskovic. 2002. Childhood injury: call for action. *Croatian Medical Journal* 43 (4):375-8.
64. Niksic, D, I Masic, and A Mehmedbegovic-Zivanovic. 1999. Health education as a factor in decreasing traffic accidents (article in Serbo-Croatian (Roman)). *Medicinski arhiv* 53 (2):109-12.
65. Tozija, F. 2002. Social-medical aspects of traffic accident traumatism in children and youth in the republic of Macedonia (Macedonian language), Department of Social medicine, University Ss Cyril and Methodius, Skopje.
66. Mujkic, A, G Vuletic, and D Kozaric-Kovacic. 2002. Evaluation of community based intervention for the protection of children from small arms and explosive devices during the war: observational study. *Croatian Medical Journal* 43 (4):390-5.
67. DFID Resource Centre. 1999. Bosnia Health Briefing Paper: DFID.
68. Horton, Richard. 1999. Croatia and Bosnia: the imprints of war -1. Consequences. *The Lancet* 353 (June 19):2139-44.
69. UNICEF. 2000. Young people in changing societies. The MONEE Project CEE/CIS/Baltics. Regional Monitoring Report No 7. Florence: UNICEF Innocenti Research Centre.
70. UNICEF. 2002. A Brave New Generation, Youth in Federal Republic of Yugoslavia, Findings and Recommendations. Belgrade: UNICEF.
71. Government of Bulgaria. 2000. National Programme on Suicide Prevention.
72. Kinra, S, and M E Black. 2003. Landmine related injuries in children of Bosnia-Herzegovina 1991-2000: comparisons with adults. *Journal of Epidemiology and Community Health* 57:0-1.
73. UNICEF. 2001. A Decade of Transition, Regional Monitoring Report No 8. Florence: UNICEF Innocenti Research Centre.
74. Carlson, E, and S Tsverstarsky. 1996. Rising Bulgarian infant mortality: fact or artifact. In *Santé et mortalité des enfants en Europe: inégalités sociales d'hier et d'aujourd'hui*, edited by G. Masuy-Stroobant, C. Gourbin and P. Buekens. Louvain-la-Neuve: Academia-Bruylant.
75. Zhekova, N, and D Kalaikov. 2000. The dynamics and structure of neonatal mortality in Bulgaria in the period of 1989-1998. *Akusherstvo i Ginekologija* 39 (3):12-5.
76. Fatusic, Z. 2001. Perinatal mortality in the Federation of Bosnia and Herzegovina. *Journal of perinatal medicine* 29 (3):247-9.
77. UNICEF. 2002. Household Survey of Women and Children Bosnia and Herzegovina 2000. Multiple Indicator Cluster Survey. Draft final report: UNICEF.
78. UNICEF. 2000. Republika Srpska Multiple Indicator Cluster Survey 2000 (RS MICS 2000). Banja Luka: UNICEF.
79. UNICEF, and Ministry of Health Macedonia. 1999. Multiple Indicator cluster survey in FYR Macedonia with micronutrient component: National Institute of Nutrition.
80. UNICEF. 2001. Poverty and Welfare Trends over the 1990s in FR Yugoslavia, Background paper prepared for the Regional Monitoring Report No 8: A Decade of Transition: UNICEF Innocenti Research Centre.
81. UNICEF. 2000. Multiple Indicator Cluster Survey II, The Report for the Federal Republic of Yugoslavia. Belgrade: UNICEF.
82. UNICEF. *UNICEF online statistical databases* 2003. Available from <http://childinfo.org/index2.htm>.

83. UNICEF. 2000. Baby Friendly Hospital Initiative Evaluation, Filomena Peitrantonio.
84. Puvavic, Slatko, Boris Hrabac, Nedim Jaganjac, Antonio Gabrielli, Nelson Chavez, and Sandra Puvacic. 1997. Vaccination coverage in Bosnia and Herzegovina during the 1992-1995 War. *Croatian Medical Journal* 38 (2).
85. Pyle, Gerald F, Carolyn R Thompson, S Oreskovic, and Ivan Bagaric. 1998. Rebuilding the Healthcare System in Mostar: Challenge and Opportunity. *Croatian Medical Journal* 39 (3).
86. Hajioff, Steve, Gordana Pecelj, and Fimka Tozija. 2000. *Health Care Systems in Transition: The former Yugoslav Republic of Macedonia*. Copenhagen: European Observatory on Health Care Systems.
87. Maclehose, Laura. 2002. *Health Care Systems in Transition: Moldova (Draft)*. Copenhagen: European Observatory on Health Care Systems.
88. Republic of Moldova Ministry of Health. 2001. Multi-year strategic plan for immunization 2002 - 2006 (Draft).
89. Bino, Silvia, Eduard Kakarriqi, Miriam Xhibanaku, Nicolae Ion-Nedelcu, Mariana Bukli, Nedret Emiroglu, and Amra Uzicanin. 2002. Measles-Rubella Mass Immunization Campaign in Albania, November 2000.
90. Ministry of Health Romania. 1997. Measles outbreak - Romania 1997. *MMWR. Morbidity and mortality weekly report* 46 (49):1159-63.
91. PHNIP. 2002. Country Health Statistical Report Bulgaria. Washington DC: PHNIP.
92. Ministry of Health. 2001. *Strategy for improvement of Health Protection of the Population in the Republic of Macedonia*. Skopje: Macedonian Academy of Sciences and Arts, Ministry of Health.
93. GVG, and European Commission. 2002. Study on the Social Protection Systems in the 13 Applicant Countries. Bulgaria Country Report (Draft): GVG, European Commission.
94. Sakoman, Slavko. 2000. Substance Abuse in the Republic of Croatia and National Program for Drug Control. *Croatian Medical Journal* 41 (3):270-86.
95. Cucic, V, V Bjegovic, and D Vukovic. 2000. Health Behaviour of School children. Executive Summary of the Research Project, FR Yugoslavia. Belgrade: UNICEF.
96. Delcheva, E. 2002. Implementing EU tobacco legislation in Bulgaria. Challenges and opportunities. *Eurohealth* 8 (Special issue):34-5.
97. Swedish Council for Information on Alcohol and Other Drugs. 1999. 1999 European School Survey Project on Alcohol and Other Drugs (ESPAD).
98. Harxhi, Arjan, Lajla Pernaska, Fatbardha Kaduku, Krenar Malaj, Berti Skenderasi, Manuela Murthi, and Silvia Bino. 2002. Rapid Assessment and Response on HIV/AIDS among especially vulnerable young people in Albania.
99. Ministry of Health. 2001. National Programme for Prevention, Treatment and Rehabilitation of Drug Abuse in the Republic of Bulgaria 2001- 2005. Bulgaria: National Centre for Drug Abuse.
100. Dencheva, R, G Spirov, K Gilina, D Niagolova, G Pehlivanov, N Tsankov, and M A Waugh. 2000. Epidemiology of syphilis in Bulgaria, 1990-1998. *International journal of STD & AIDS* 11 (12):819-22.
101. UNICEF. 1999. Women in Transition. Regional monitorin report No 6: UNICEF.
102. David, Henry P, and Adriana Baban. 1996. Women's health and reproductive rights: Romanian experience. *Patient Education and Counselling* 28:235-245.

103. Johnson, Brooke R, Mihai Horga, and Laurentia Andronache. 1996. Women's perspectives on Abortion in Romania. *Social Science & Medicine* 42 (4):521-30.
104. Keil, T J, and V Andreescu. 1999. Fertility policy in Ceausescu's Romania. *Journal of family history* 24 (4):478-92.
105. Constantin, A, C Neagu, A Bucur, and B Marinescu. 1999. Eight years of experience in the first Romanian center of family planning and contraception. *The European journal of contraception & reproductive health care* 4 (2):57-60.
106. Ministry of Health, USAID, and Albanian Parliament. 2001. Report on the Conference: Reproductive Health at the beginning of the new Millennium (MoH, USAID, Albanian Parliament), March 12-13. Tirana: JSI-TASC, USAID.
107. JSI/TASC. 2002. Albania, Contraceptive Security report (Working group),.
108. Macedonian Interethnic Association (MIA). 2002. KAPB Survey among women of reproductive age in R. Macedonia: Macedonian Interethnic Association (MIA),.
109. UNICEF. 2000. Multiple Indicator Cluster Survey. Republic of Moldova - 2000.: UNICEF.
110. Cucic, V, V Bjegovic, and D Vukovic. 2000. AIDS Preventive Indicator Monitoring. First Evaluation. Belgrade: UNICEF, Institute of Social Medicine, Statistics and Health Research, School of Medicine, Belgrade University,.
111. BIS Healthcare Group. 2001. Development of Neonatal Intensive Care Services - Scoping Study: Republic of Macedonia Ministry of Health,.
112. Gjorgov, Arne N, and Vladimir Lazarevik. 2001. A Knowledge, attitude and practice (KAP) study of Roma Women, in reproductive and sexual health, family planning and cancer screening, in Shuto Orizari, Skopje, Macedonia.
113. Kovacs, L. 1997. Abortion and contraceptive practices in Eastern Europe. *International Journal of Gynaecology and Obstetrics* 58:69-75.
114. Marinova, J, K Peeva, V Popzarchieva, Sv Dimitrova, G Veleva, D Michaelilova, and M Todorova. 2001. Family planning and health insurance system. *Social Medicine Journal* 4:24-26.
115. Shiffman, Jeremy, Marina Skrabalo, and Jelena Subotic. 2002. Reproductive rights and the state in Serbia and Croatia. *Social Science & Medicine* 54 (4):625-42.
116. World Bank. 2002. Implementation Completion Report on a loan in the amount of US\$26.0 Million to the Republic of Bulgaria for a Health Sector restructuring Project. The World Bank Document, Report No 24282. Human Development Sector Unit Europe and Central Asia Region: World Bank.
117. UNICEF. 1999. Iodine Deficiency, Republika Srpska. Banja Luca: UNICEF.
118. Clinical Center - Skopje, Department of Obstetrics and Gynecology, and Human Reproduction Center. 2002. Perinatalogical Data in the Republic of Macedonia 2001. Skopje: Clinical Center - Skopje, Department of Obstetrics and Gynecology, Human Reproduction Center.
119. Ministry of Health. 2000. Public Health in Moldova 1999. Chisinau: Scientific and Practical Center of Health and Health Management, UNICEF.
120. Shapo, L, R Coker, and Martin McKee. 2002. Tracking diabetes in Albania: a natural experiment on the impact of modernization on health. *Diabetic Medicine* 19:87-88.

121. Republic of Macedonia. 2002. National Programme for Prevention of Diabetes Mellitus. Forms for specialists - Improvement of Diabetes care and chronic complications with strict glycaemic control according to the national programme for prevention of diabetes mellitus: National programme for prevention of diabetes mellitus.
122. Republic of Macedonia. 2002. National Programme for prevention of Diabetes Mellitus. Forms for General Practitioners - Improvement of Diabetes care and chronic complications with strict glycaemic control according to the national programme for prevention of diabetes mellitus.
123. Project Coordinator Unit, World Bank, and Health Investment Fund. 2001. Executive Summary. Institutional Assessment, TB and HIV/AIDS: Project Coordinator Unit, World Bank, Health Investment Fund.
124. National Committee to fight AIDS and tuberculosis. 2002. Application form for proposal to the global fund. Proposed title "Prevention and Control of HIV/AIDS/TB among the Groups most at risk in Bulgaria 2003-2007. Bulgaria.
125. UNAIDS, Ministry of Health and Family Romanian Government, United States Agency for International Development, and DFID. 2002. Southeastern Europe Conference on HIV/AIDS, Implementing the Global Declaration of commitment on HIV/AIDS, at Bucharest, Romania.
126. UNDP. 2003. HIV/AIDS and the Roma in Central East Europe (Draft): UNDP.
127. Ministry of Health. 2000. Health Status in Moldova 2000. Chisinau: Scientific and Practical Center for Public Health and Management.
128. UNDP. 2000. National Strategy on HIV/AIDS and Sexually Transmitted Infections Bulgaria 2001-2007. UNDP Project BUL/98: UNDP.
129. Wong, Elsie. 2002. Rapid Assessment and Response on HIV/AIDS among Especially Vulnerable Young People in South Eastern Europe: UNICEF.
130. Velik-Stefanovska, Vesna. 2000. Former Yugoslav Republic of Macedonia An Overview of the HIV/AIDS Situation: UNICEF.
131. Novotny, T. 2002. World Bank Southeastern Europe HIV/AIDS Assessment.: World Bank.
132. Health Canada. 2002. Rapid Assessment of Montenegro HIV/AIDS/STI Surveillance System. Field Investigation Report. September 28 - October 2, 2002: Health Canada.
133. Christos, H, Popa MI, O Asfar, D Vasieleios, and M Pirounaki. 2000. Surveillance of communicable diseases in the Balkans. Committee of the Balkan Network for Surveillance of Communicable Diseases. *Lancet* 355 (9213):1465.
134. Porter, M, and N Haslam. 2001. Forced displacement in Yugoslavia: a meta-analysis of psychological consequences and their moderators. *Journal of traumatic stress* 14 (4):817-34.
135. Barath, A. 2002. Children's well-being after the war in Kosovo: survey in 2000. *Croatian Medical Journal* 43 (2):199-208.
136. Smith, PPerrin, S, W Yule, and S Rabe-Hesketh. 2001. War exposure and maternal reactions in the psychological adjustment of children from Bosnia-Herzegovina. *Journal of child psychology and psychiatry, and allied disciplines* 42 (3):395-404.
137. Ceric, I, S Loga, O Sinanovic, L Oruc, and G Cerkez. 1999. Reconstruction of mental health services in the Federation of Bosnia-Herzegovina Article in Serbo-Croatian (Roman). *Medicinski arhiv* 53 (3):127-30.

138. Babic-Banaszak, A, Luka Kovacevic, Lana Kovacevic, G Vuletic, A Mujkic, and Z Ebling. 2002. Impact of War on Health Related Quality of Life in Croatia: Population Study. *Croatian Medical Journal* 43 (4):396-402.
139. Harris, M. 1997. One hell of a trip. *Mental health care* 1 (2):48-50.
140. WHO. 2001. Mental Health in Europe. Country report from the WHO European Network on Mental Health: who.
141. Inclusion Europe, and Republic Centre for Helping Persons with Mental Handicap. 2002. Human Rights of Persons with Intellectual Disability. Country Report Republic of Macedonia. Brussels: Inclusion Europe, Republic Centre for Helping Persons with Mental Handicap.
142. Amnesty International. *Bulgaria. Far from the eyes of society. Systematic discrimination against people with mental disabilities* 2002. Available from <http://web2.amnesty.org/library/Index/engEUR150052002?OpenDocument&of=COUNTRIES%5CBULGARIA?OpenDocument&of=COUNTRIES%5CBULGARIA>.
143. Uitenbroek, D G, Albena Kerekovska, and Nevijana Festchieva. 1996. Health lifestyle behaviour and socio-demographic characteristics. A study of Varna, Glasgow and Edinburgh. *Social science & medicine* 43 (3):367-77.
144. International Agency for Research on Cancer. *Globocan 2000: Cancer incidence, Mortality and Prevalence Worldwide, Version 1.0*. IARC Press 2001. Available from <http://www-dep.iarc.fr/globocan/globocan.html>.
145. Corrao, Marlo Ann, Emmanuel G Guindon, Namita Sharma, and Dorna Fakhrabadi Shokoohi. 2000. The 11th world Conference on Tobacco OR Health. Paper read at Tobacco Control country Profiles, at Atlanta, Georgia.
146. Vakefliu, Ylli, Dhimitraq DArgjiri, Ilir Peposhi, Sejdini Agron, and A S Melani. 2002. Tobacco smoking habits, beliefs, and attitudes among medical students in Tirana, Albania. *Preventive Medicine* 34:370-373.
147. Shapo, Laidon, Anna BC Gilmore, Richard Coker, Martin McKee, and Entela Shapo. 2003. Prevalence and determinants of smoking in Tirana City, Albania: a population-based survey (accepted for publication). *Public Health*.
148. Bozicevic, Ivana. 2003. Consequences of and policy responses to tobacco epidemic in South East Europe (Draft).
149. Balabanova, D., M. Bobak, and M. McKee. 1998. Patterns of smoking in Bulgaria. *Tobacco Control* 7:383-385.
150. Turek, S, I Rudan, N Smolej-Narancic, L Szirovicza, M Cubrilo-Turek, V Zerjavic-Hrabak, A Rak-Kaic, D Vrhovski-Hebrang, Z Prebeg, M Ljubcic, B Janicijevic, and P Rudan. 2001. A large cross-sectional study of health attitudes, knowledge, behaviour and risks in the post-war Croatian population (the First Croatian Health Project). *Collegium antropologicum* 25 (1):77-96.
151. Brown, V J. 1999. The worst of both worlds: poverty and politics in the Balkans. *Environmental Health Perspectives* 107 (12):A606-13.
152. Chenet, L., M. McKee, D. Leon, V. Shkolnikov, and S. Vassin. 1998. Alcohol and cardiovascular mortality in Moscow; new evidence of a causal association. *Epidemiology and community health* 52 (12):772-4.
153. Paleru, G. 2000. Injecting drug use in Romania: a field-report based on an initial assessment. Bucharest: Institute of Health Services Management.
154. Ministry of Health. 2001. The Albanian National Drug Demand Reduction Strategy for the Period 2001 - 2004. Tirana: Ministry of Health.
155. World Bank. 2002. Poverty in Albania. A Qualitative Assessment. Technical paper No 520. Washington DC: World Bank.

156. Levy-Bruhl, Daniel. 2002. Health and peace. *Croatian Medical Journal* 43 (2):114-6.
157. Ashford, M W, and U Gottstein. 2000. The impact on civilians of the bombing of Kosovo and Serbia. *Medicine, conflict, and survival* 16 (3):267-80.
158. Glenny, Misha. 1999. *The Balkans 1804-1999: Nationalism, War and the Great Powers*: Granta Books.
159. World Bank, and Government of Moldova. 1999. Moldova Health Sector Reform Project. Restructuring Health Services in Central Judets: World Bank, Government of Moldova.
160. Republic of Srpska Ministry of Health and Social Welfare, and Public Health Institute. 1999. Cindi Programme. National Protocol. Banja Luka: Republic of Srpska Ministry of Health and Social Welfare, Public Health Institute.
161. Podmore, W. 1999. Effects of NATO's bombing in the Balkans. *The Lancet* 353 (9171):2249.
162. UNICEF. 2002. Consolidated Donor report for South Eastern Europe: UNICEF.
163. WHO. 1999. Hospital Restructuring in Moldova. Mission Report. Copenhagen: WHO.
164. Agovino, T. 2001. Democracy and health care in Serbia. *The Lancet* 357 (9262):1121-2.
165. World Bank. 2000. Moldova Health Investment Fund. Project Appraisal Document,: World Bank.
166. WHO. *Environmental health policy*.  
<http://www.euro.who.int/eprise/main/WHO/pROGS/HEP/Home> 2003.
167. Ety, Tom, and Bernd Rechel. 2002. Social Policy Issues in Bulgaria Against the Background of Accession: The Partial Closure of the Kozloduy Nuclear Power Plant and the Minority (Roma) Issue: European Economic and Social Committee, Seventh meeting of the EU-Bulgaria Joint Consultative Committee.
168. Michnea, A, and I Gherhes. 2001. Impact of metals on the environment due to technical accident at Aurul Baia Mare, Romania. *International journal of occupational and environmental health* 14 (3):255-9.
169. Vitale, Ksenija, Rajcic Marijanovic, and Ankica Senta. 2002. Waters in Croatia between Practice and Needs: Public Health Challenge. *Croatian Medical Journal* 43 (4):485-92.
170. The Economist Intelligence Unit. 2002. Country Profile Croatia 2002.
171. Abu-Qare, A W, and M B Abou-Donia. 2002. Depleted uranium - the growing concern. *Journal of applied toxicology* 22 (3):149-52.
172. Krstev, S, B Perunicic, and A Vidakovic. 2002. Occupational health in Yugoslavia. *International journal of occupational and environmental health* 8 (2):137-43.
173. World Bank. 2000. Making Transition work for everyone: poverty and inequality in Europe and Central Asia: World Bank.
174. UNDP. 2002. A decade later: Understanding the Transition Process in Romania. National Human Development Report Romania 2001-2002: UNDP.
175. World Bank. 2002. Transition. The first Ten years. Analysis and lessons for Eastern Europe and the Former Soviet Union. Washington DC: World Bank.
176. Heath, Iona, Andy Haines, Zoran Malencia, Judith A Oulton, Zorayda Leopando, Dan Kaseje, W Whitney, Whitney W Addington, Olivier Giscard D'Estaing, James K Tumwine, Meri Moivusalo, Gillian Biscoe, Nickson Pat,

- Matko Marusiae, and Stanimir Vuk Pavloviae. 2000. Joining together to Combat Poverty. *Croatian Medical Journal* 41 (1):28-31.
177. Balabanova, D, and Martin McKee. 2002. Access to health care in a system transition: the case of Bulgaria. *The International journal of health planning and management* 17 (4):377-95.
178. Albanian Government. 2001. National Strategy for socio-economic development. Tirana: Albanian Government.
179. European Commission. 2001. Albania, Country Strategy Paper, 2002-2006: European Commission.
180. World Bank. 2002. World Development Indicators.
181. Government of the Republic of Macedonia. 2000. Poverty reduction strategy paper (interim version). Skopje: Government of the Republic of Macedonia.
182. World Bank. 2002. Moldova Social Indicators World Development Indicators CD-ROM: World Bank.
183. Republic of Moldova. 2002. Interim Poverty Reduction Strategy Paper.
184. GVG, and European Commission. 2002. Study on the Social Protection Systems in the 13 Applicant Countries. Romania Country Report (Draft): GVG, European Commission.
185. World Bank. 2001. Romania Country Assistance Strategy.
186. Garfield, Richard. 2000. Economic sanctions, health and welfare in the Federal Republic of Yugoslavia 1990-2000: UNICEF, OCHA.
187. Federal Republic of Yugoslavia. 2002. Interim Poverty Reduction Strategy Paper.
188. Vladescu, Cristian, Silviu Radulescu, and Victor Olsavsky. 2000. *Health Care Systems in Transition: Romania*. Copenhagen: European Observatory on Health Care Systems.
189. Cerbu, Alexandru. 2002. Public Health of the Nation as a Sum of Individual Healths. Study carried out in the frame of the project "UNDP NHDR: Moldova 2002".  
[http://www.ipp.md/publications/3.4.%20Sanatatea%20publica\(engl\)1\\_Banaru.pdf](http://www.ipp.md/publications/3.4.%20Sanatatea%20publica(engl)1_Banaru.pdf): Scientific Practical Center for Public Health.
190. Balabanova, D, and Martin McKee. 2002. Understanding informal payments for health care: the example of Bulgaria. *Health Policy* 62 (3):243-73.
191. Miller, W L, A B Grodeland, and T Y Koshechkina. 2000. If you pay, we'll operate immediately. *Journal of medical ethics* 26 (5):305-11.
192. Mastilica, M. 1999. Out of pocket payments for health care in Croatia: implications for equity. *Croatian Medical Journal* 40 (2):152-9.
193. Berdaga, Viorica, Svetlana Stefanet, and Octavian Bivol. 2001. Access of the Population of the Republic of Moldova to Health Services. Chisinau.
194. World Bank. 2000. Kosovo. Living Standards Measurement Study Survey: Poverty and Human Resources, Development Research Group, World Bank.
195. BAPID, and Inclusion Europe. 2001. Human Rights for Persons with intellectual Disability. Country Report. Bulgaria. Brussels: BAPID, Inclusion Europe.
196. UNICEF. 1999. After the Fall - The Human Impact of ten years of transition. Florence: International Child development Centre.
197. UNICEF, UNOHCHT, and OSCE-ODIHR. 2002. Trafficking in human beings in Southeastern Europe. Current situation and responses to trafficking in human beings in Albania, Bosnia and Herzegovina, Bulgaria, Croatia, The

- Federal Republic of Yugoslavia, The Former Yugoslav Republic of Macedonia, Moldova, Romania: UNICEF, UNOHCHT, OSCE-ODIHR.
198. Mollica, R F, N Sarajlic, M Chernoff, J Lavelle, I S Vukovic, and M P Massagli. 2001. Longitudinal study of psychiatric symptoms, disability, mortality, and emigration among Bosnian refugees. *JAMA : the journal of the American Medical Association* 286 (5):584-8.
  199. Szilard, Istban, Arpad Cserti, Ruhija Hoxha, Olga Gorbacheva, and Thomas O'Rourke. 2002. International Organization for Migration: Experience on the Need for Medical Evacuation of Refugees during the Kosovo Crisis in 1999. *Croatian Medical Journal* 43 (2):195-8.
  200. Zoon, Ina. 2001. *On the margins. Roma and Public Services in Romania, Bulgaria, and Macedonia. With a Supplement on Housing in the Czech Republic*. New York: Open Society Institute.
  201. UNDP. 2003. Avoiding the Dependency Trap: UNDP.
  202. Van der Stoel, Max. 2000. *Report on the situation of Roma and Sinti in the OSCE Area*. The Hague: Organisation for Security and Co-operation in Europe, High Commissioner on National Minorities.
  203. Turnev, I. 2001. Common Health Problems among Roma - nature, consequences and possible solutions. Sofia, Bulgaria: Open Society Foundation.
  204. Gjorgov, Arne N, and Vladimir Lazarevik. 2002. Reproductive profiles of resident and refugee Roma women in Macedonia. Skopje: National Health Insurance Fund, Ministry of Health.
  205. Salama, P, P B Spiegel, M Van Dyke, L Phelps, and C Wilkinson. 2000. Mental health and nutritional status among the adult Serbian minority in Kosovo. *JAMA : the journal of the American Medical Association* 284 (5):615-6.
  206. WHO. 1999. Final Technical report to the Government of Italy - Multi-sectoral emergency assistance to the victims of conflict in the Balkan region: WHO.
  207. Spiegel, P B, and P Salama. 2000. War and mortality in Kosovo, 1998-99: an epidemiological testimony. *The Lancet* 355 (9222):2204-9.
  208. Lopes Cardozo, B, A Vergara, Agani F, and Gotway C A. 2000. Mental health, social functioning, and attitudes of Kosovar Albanians following the war in Kosovo. *JAMA* 284 (5):569-77.
  209. UNDP. 2000. National Human Development Report, Republic of Moldova: UNDP.
  210. Turek, S. 1999. Reform of health insurance in Croatia. *Croatian Medical Journal* 40 (2):143-51.
  211. Maclehose, Laura. 2002. Health Care Reform in the Republic of Moldova. *Euro Observer* 4 (4):a5-6.
  212. Government of the Republic of Serbia. 2002. Health Policy, as adopted in February 2002.
  213. Aarva, P, V Bjegovic, S Grujic, and S Matovic. 2002. Assessment of the Institute of Public Health Network in Serbia, Belgrade.
  214. No authors listed. 2003. Current Public Health Initiatives in Serbia.
  215. Roshi, E, and G Burazeri. 2002. Public health training in Albania; long way toward a school of public health. *Croatian Medical Journal* 43 (4):503-7.
  216. Kocova, Mirjana. 2002. Introduction of thyroid screening program in the Republic of Macedonia. Skopje: Pediatric Clinic.

217. Health Canada. 2002. Rapid Assessment of Serbia HIV/AIDS/STI Surveillance System. Field Investigatio Report: Health Canada.
218. ECHO, WHO, and MoH. 2001. Communicable disease surveillance System - Albania: ECHO, WHO, MOH.
219. Dizdarevic, Z. 1999. Reproductive health care situation in Bosnia-Herzegovina. *Medicine and law* 18 (2-3):213-5.
220. Kojuharova, I. 2002. Harm Reduction development program. Program Evaluation. Sofia, Bulgaria: Creda Consulting Ltd, Open Society Foundation.
221. Ceric, I, S Loga, O Sinanovic, Z Cardaklija, G Cerkez, L Jacobson, s Jensen, M Reali, L Toresini, L Oruc, V Danes, M Mikovic, N Mehic-Basara, M Haanbegovic, B Lagerquist, V Flaker, R F Mollica, I Pavkovic, H Skobic, J Lavelle, D Horvat, B Nakas, A Kapetanovic, L Bradvica, S Weine, I Masic, V Puratic, and M Dancevic. 2001. Reconstruction of mental health services in Bosnia and Herzegovina. *Medicinski arhiv* 55 (1 Suppl 1):5-23.
222. De Clercq, L, B Lagerkvist, T Kapelanovic, and V Puratic. 2001. Assessment of community mental health care in the Federation of Bosnia-Herzegovina (FBH) after the 1992-95 war. *Medicinski arhiv* 55 (2):105-12.
223. Ministry of Health. 2001. National Programme for the Mental Health of the citizens of Republic of Republic Bulgaria, 2001-2005. Bulgaria: Ministry of Health.
224. WHO. *Croatian Healthy Cities Network*. [http://www.euro.who.int/healthy-cities/CitiesAndNetworks/20011002\\_4](http://www.euro.who.int/healthy-cities/CitiesAndNetworks/20011002_4) 2003.
225. Hrabac, Boris, Bozo Ljubic, and Ivan Bagaric. 2000. Basic package of health entitlements and solidarity in the Federation of Bosnia and Herzegovina. *Croatian Medical Journal* 41 (3):287-93.
226. European Commission. 2003. The Western Balkans in transition: Directorate General for Economic and Financial Affairs.
227. World Bank. 2001. World Bank Activities in South East Europe.
228. Johnston, Timothy. 2002. Supporting A Healthy Transition. Lessons from Early World Bank Experience in Eastern Europe: World Bank.
229. European Union. 1997. Treaty of Amsterdam, amending the Treaty on European Union, the Treaties establishing the European Communities and related Acts.
230. European Commission. 2003. European Union relations with Southeast Europe.
231. de Ville de Goyet, C, and Egbert Sondorp. 2001. Internal Evaluation of WHO Response in Kosovo (June to December 1999): WHO.
232. Bardehle, D. 2002. Minimum health indicator set for South Eastern Europe. *Croatian Medical Journal* 43 (2):170-3.
233. Council of Europe. 2001. South East Europe Strategic Review on Social Cohesion. Health Network, Country Report - Albania. Tirana: Council of Europe.
234. World Bank. *Albania country office* 2003. Available from <http://www.worldbank.org/al/>.
235. European Commission. *Albania - the European contribution* 2001. Available from [http://europa.eu.int/comm/external\\_relations/see/albania/index.htm](http://europa.eu.int/comm/external_relations/see/albania/index.htm).
236. World Bank. *Bosnia and Herzegovina, Country Office* 2003. Available from <http://www.worldbank.org.ba>.
237. European Commission. 2001. Bosnia and Herzegovina, Country Strategy Paper, 2002-2006: European Commission.

238. European Commission. *The EU's relations with Bosnia & Herzegovina, Latest update: March 2002* 2002. Available from [http://europa.eu.int/comm/external\\_relations/see/bosnie\\_herze/index.htm](http://europa.eu.int/comm/external_relations/see/bosnie_herze/index.htm).
239. World Bank. 2003. World Bank Investment Program in Bulgaria - Overview.
240. European Commission. 2002. 2002 Regular Report on Bulgaria's Progress towards Accession.
241. The Global Fund to Fight AIDS, Tuberculosis & Malaria (GFATM). *GFATM Website* 2003. Available from <http://www.globalfundatm.org/>.
242. European Commission. *Croatia - the European contribution, Latest update: March 2002* 2002. Available from [http://europa.eu.int/comm/external\\_relations/see/croatia/index.htm](http://europa.eu.int/comm/external_relations/see/croatia/index.htm).
243. European Commission. 2001. Croatia, Country Strategy Paper, 2002-2006.
244. Ministry of Health. 2001. Croatian Health Reform: Ministry of Health Croatia.
245. World Bank. *Croatia country office* 2003. Available from <http://www.worldbank.hr/>.
246. WHO, and Ministry of Health. 2001. Report on the national workshop on NEHAP and NEHAP implementation strategy in Republic of Macedonia. Skopje: WHO, Ministry of Health.
247. European Commission. 2001. CARDS Assistance Programme. Former Yugoslav Republic of Macedonia 2002-2006: European Commission.
248. World Bank. 2002. Macedonia Health Sector Transition project, draft implementation completion report: World Bank.
249. European Commission. *The EU's relations with the former Yugoslav Republic of Macedonia, June 2001* 2001. Available from [http://europa.eu.int/comm/external\\_relations/see/fyrom/index.htm](http://europa.eu.int/comm/external_relations/see/fyrom/index.htm).
250. ECHO. 2001. Vulnerable groups, annual report: ECHO.
251. European Agency for Reconstruction. 2003. Website.
252. World Bank. 2002. Moldova Country Brief.
253. European Commission. *The EU's relations with Romania, Latest update: October 2002* 2002. Available from <http://europa.eu.int/comm/enlargement/romania/>.
254. World Bank. *Romania country office* 2003. Available from <http://www.worldbank.org.ro/eca/romania.nsf>.
255. European Commission. *The EU's relations with the state of Serbia & Montenegro, Latest update: January 2003* 2003. Available from [http://europa.eu.int/comm/external\\_relations/see/fry/index.htm](http://europa.eu.int/comm/external_relations/see/fry/index.htm).
256. World Bank. 2002. Federal Republic of Yugoslavia Country Brief.
257. Brennan, R J, C Vaderrama, W R MacKenzie, K Raj, and R Nandy. 2001. Rehabilitating public health infrastructure in the post-conflict settling: epidemic prevention and preparedness in Kosovo. *Prehospital and disaster medicine* 16 (4):244-51.
258. European Commission. 2001. Federal Republic of Yugoslavia, Country Strategy Paper, 2002-2006: European Commission.
259. Marusic, Ana. 2003. Religious leaders and celebrities back Croatia's first national no-smoking day. *The Lancet* 361:842.
260. Marusic, Ana. 2002. Croatia opens a national centre for the prevention of smoking. *The Lancet* 359 (9310):954.
261. World Bank. 2002. Health Sector Transition Project - IDA Credit # 2889 - MK.

262. Jeffery, Heather, and Jan Polverino. 2002. Evaluation of the National Perinatal Program in Macedonia. Health Sector Transition Project: Ministry of Health in Macedonia, World Bank.