



# Strengthening food safety and nutrition policies and services in South-eastern Europe





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**Edited by: Dorit Nitzan Kaluski** 

### **ABSTRACT**

The South-east European countries have faced difficult challenges in the past decade. In 1999, the European Union initiated a Stability Pact to assist the region with sustainable development. This included a Food Safety and Nutrition Project with three components: Component One aimed to align food policy, strategy and legislation in the countries with international and European Union standards; Component Two aspires to establish harmonized and integrated models for food safety systems and a healthy food supply tailored to the countries' political, legislative, social and economic contexts; Component Three will be devoted to designing region-wide collaboration and training curricula for food safety and nutrition professionals and for consumers' organizations. This publication gives information about the countries' food and nutrition control systems, assessing their effectiveness and identifying differences and commonalities between them. Gaps are highlighted and recommendations made about the organizational changes necessary to ensure effective, science-based food safety systems and healthy diets.

### **Keywords**

NUTRITION POLICY
DIETARY SERVICES
FOOD
SAFETY MANAGEMENT
PROGRAM DEVELOPMENT
EUROPE, EASTERN
EUROPE, SOUTHERN

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### **ACKNOWLEDGEMENTS**

The following people were involved in providing data on food and nutrition strategies:

Albania Dr Marita Afezolli, and based on a consultation

visit by Dr Marc Cornelius from Belgium and Dr Dorit Nitzan Kaluski, WHO Regional Office

for Europe

Bosnia and Herzegovina Dr Aida Filipovic-Hadziomeragic,

Dr Dragana Stojisavljevic

Bulgaria Dr Svetlana Tcherkezova, Dr Stefka Petrova

Croatia Dr Krunoslav Capak, Dr Zrinka Laido

Montenegro Dr Danica Masanovic

Republic of Moldova Dr Ana Volneanski, Dr Galina Obreja

Romania Dr Daniela Nuta
Serbia Dr Aleksandra Makaj,

Dr Ljiljana Trajkovic-Pavlovic

The former Yugoslav

Republic of Macedonia Dr Vladimir Kendrovski

This book has been compiled and edited on the basis of their contributions by Dr Dorit Nitzan Kaluski (Head of Country Offices in Serbia and Montenegro, and Manager, Public Health Services, SEE Health Network/Food Safety and Nutrition) and Dr Aleksandra Makaj (Regional Project Manager, SEE Health Network/Food Safety and Nutrition). Ms Hani Avital reviewed the first drafts. Ms Ursula Truebswasser was the scientific editor.

Special thanks go to Dr Maria Haralanova, WHO European Regional Adviser for Public Health Services, for her leadership, dedication and support, and to Dr Dora Mircheva-Dimitrova, Dr Altin Malaj and Dr Mike Sedgley from Public Health Services, WHO Regional Office for Europe.

We appreciate the assistance provided by Dr Francesco Branca, WHO European Regional Adviser for Nutrition and Food Security, and Dr Hilde Kruse, WHO European Regional Adviser for Food Safety.



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### **PRFFACE**

Recent trends in global food production, processing, distribution, preparation and consumption are creating challenges for national systems to ensure food safety and adequate nutrition. Policy makers from different fields and ministries around the globe have been working together to improve food control systems in response to food safety scares that have occurred in the past two decades. "Mad cow" disease, dioxin-contaminated feed and adulterated olive oil are just a few examples. Today's consumers have improved access to information on food hazards and are making increasing demand to minimize the risks.

Food safety and healthy nutrition are both essential to the health of the people, and are, therefore, important public health areas that the health system has to deal with. Through their stewardship role, ministries of health can contribute in the fields of primary prevention of food-borne diseases, effective responses to health crises that originate from food, mitigation of the events and treatment of those affected. In all these areas, WHO Regional Office for Europe provides technical support to Member States. The South-eastern European Health Network provides a working platform for such activities.

This is the first publication of the South-eastern European Health Network on Food Safety and Nutrition. It maps out some major characteristics of the current food safety systems in the nine countries and the challenges they face. The publication provides key facts and lessons learned as a resource for health ministries in policy-making. WHO will continue to work with South-eastern European member states to better understand the complexity of food safety and adequate nutrition and explore effective ways to enhance their food and nutrition control systems. This can contribute to reducing important and advance public health in the region.

I hope that this publication will contribute to important advance in public health in the region. Special thanks are extended to the South Eastern European Health Network, to the Country Project Managers who not only provided the information, but worked intensively to develop in all countries National Food And Nutrition Action Plans, Food Safety Strategies and laws, and, finally, to our partners, the ministries of health and social protection of Belgium, Greece and Italy, who made their work possible.

Nata Menabde Deputy Regional Director WHO Regional Office for Europe







## Chapter 1. SEE Food Safety and Nutrition Project





### **Summary**

The countries of South-eastern Europe (SEE) have experienced important changes in the past decade and a half. New social, political and economic challenges have appeared with changes in systems of government and the dissolution of the former Yugoslavia. The move from centralized to market-based economies has affected health systems in their entirety, leaving populations increasingly exposed to threats to their health.

In recognition of these countries' need of support, the European Union initiated in 1999 a Stability Pact aimed at sustaining the development of a comprehensive, long-term conflict prevention and resolution strategy. Since the governments across the region expressed concern with the health status of their populations, the inclusion of health in the political commitment of the Stability Pact was embodied in a cooperative process launched at the First SEE Health Ministers Forum in 2001.

In 2001, the SEE countries established the SEE Health Network and their representatives met in Dubrovnik to sign the Dubrovnik Pledge, a cornerstone agreement for cooperation and action on health in the region. The major outcome of the Dubrovnik Pledge was the identification of seven health priorities, including food safety and nutrition. Based on these priorities, each of the participating countries (initially seven and later nine) assumed the leadership role for one of the projects. These projects have been implemented in each SEE country and have been supported at regional level by close cross-border cooperation. The leadership role over the Food Safety and Nutrition Project was originally taken by Serbia and Montenegro (as it then was) and subsequently by Serbia.

The SEE Food Safety and Nutrition Project aims (i) to strengthen the public health approach to food safety and nutrition in SEE countries and (ii) to increase the effectiveness of activities to promote health and reduce the burden of foodborne and nutrition-related diseases. Since food moves between countries and populations, the Project also aims to build the essential network to ensure safety along the food chain. The SEE Health Network provides a forum to ensure a safe, healthy, accessible and sustainable food supply, and to assess the effectiveness of governments in addressing these issues from production to consumption. The Network is further developing recommendations for change and for movement towards more effective food safety and healthy nutrition systems.

The Project comprises three components: Component One aimed to align food policy, strategy and legislation in SEE countries with international and European Union standards; Component Two aspires to establish harmonized and integrated models for food safety systems and a healthy food supply that are tailored to the countries' political, legislative, social and economic contexts; while Component Three will be devoted to designing region-wide collaboration and training curricula for food safety and nutrition professionals and for consumers' organizations.



### Introduction

The countries of South-eastern Europe (SEE) are in a process of transition. In recognition of the difficulties they are facing, the international community has come together to strengthen international political will for coordinated and preventive action in the region. A Stability Pact for SEE was adopted in 1999 and is the first serious attempt by the international community to replace the previous, reactive crisis intervention policy in south-eastern Europe with a comprehensive, long-term conflict prevention strategy. Under Working Table II of the Stability Pact, an Initiative for Social Cohesion was launched in 2000 to address social issues.

In April 2001, the SEE Health Network was established by seven SEE countries: Albania, Bosnia and Herzegovina, Bulgaria, Croatia, Romania, Serbia and Montenegro (as it then was) and the former Yugoslav Republic of Macedonia. In September 2001, the seven countries signed an political commitment, the Dubrovnik Pledge, to work together to improve health in south-east Europe. In 2002, the Republic of Moldova joined the Health Network and in 2006, following its separation from Serbia, Montenegro joined (Boxes 1 and 2 are based on Dubrovnik and Skopje Pledges in Annex 1 and 2).

### Box 1. SEE Health Network: functions

- To promote the implementation of the Dubrovnik Pledge by SEE ministers of health:"Meeting the Health Needs of Vulnerable Populations in South East Europe".
- To act as the prime mover in obtaining and sharing experience of implementation at all levels within Member States.
- To assist the Council of Europe, the WHO Regional Office for Europe and the Stability Pact Initiative for Social Cohesion in defining high-priority areas for international action.
- To stimulate and participate in international cooperation.
- To steer, monitor and evaluate the implementation of regional projects for health development in SEE.
- When requested by countries, to facilitate and support the development of health development action plans, including technical assistance in analyses of the economic, social and health implications of particular policy options, and to promote and assist in building up partnerships and mobilizing resources.
- To promote and facilitate the strengthening of intersectoral coordination at national level and the involvement of other government sectors and support for action in health.
- To cooperate with bodies and partners involved in the Stability Pact process for SEE through its Initiative for Social Cohesion, in order to promote action addressing health issues in, or their close linkage with, action programmes for social cohesion.
- To provide advice and recommendations on health issues relating to SEE to other international organizations and donors ready to support the countries in implementing reforms in different health sectors.



The SEE countries have invested significant efforts in the pursuit of wideranging reforms of their health sectors, addressing issues of financing, organization and management of health services. These reforms came in response to inadequacies in the health systems, pressures arising from political and economic transition, a collapse in funding for public health and the effects of conflicts and economic sanctions. While the countries have followed different strategies, the overall aims of their health sectors have often been very similar.

### **Box 2.** SEE Health Network. Principles of cooperation

- · Ownership by SEE countries.
- Partnership approach.
- · Equal involvement of SEE countries.
- Equal distribution of activities and resources.
- Sustainability (commitment by SEE ministries of health to project implementation at national level, capacity-building and mobilization of resources for further expansion).
- Complementary and continuity (which implies building up continuing plans, projects and investment through WHO biennial collaborative agreements).
- Up to 30% of funds allocated to management.
- · Decentralization of resources.
- · Transparency and accountability.
- · Project management by a multicountry project steering committee.
- · Regular reporting by the steering committee of each project to the Network.

Currently, nine regional projects, budgeted with over US\$ 8 million and including one project on food safety and nutrition, have been designed to implement the political commitments of the Dubrovnik Pledge. The governments of Belgium, France, Greece, Hungary, Italy, Norway, Slovenia, Sweden and Switzerland are giving technical and financial support to the projects. The Council of Europe and the WHO Regional Office for Europe are partners in supporting the coordination of the projects.

### Food safety and nutrition

Food and nutrition are major determinants of health, disease and productivity. Safe food and adequate nutrition affect the survival, well-being and functioning of individuals and societies, and should thus be prominent components of policies addressing health, education, welfare, agriculture and fisheries, trade, environment and infrastructure.

Recent trends in global production, processing, distribution and preparation of food are creating an increasing demand for food safety research in order to ensure a safer global supply of food. Foodborne diseases pose a considerable threat to human health and the economies of individuals,



families and nations. Foodborne diseases, particularly those of zoonotic origin, represent a considerable public health burden and challenge (Table 1). In some parts of South-eastern Europe, the prevalence of foodborne and waterborne diseases such as hepatitis A, salmonellosis, campylobacteriosis, trichinellosis and echinococcosis are of particular concern. Antimicrobial resistance is an increasing public health problem, which is partly related to non-human use of antimicrobial agents (1). Various chemical hazards also represent a public health risk, and food allergies are being increasingly recognized as a concern.

Changes in the world food economy are further reflected in changed dietary patterns, for example, increasing consumption of energy-dense diets high in fat, particularly saturated fat, and salt and low in unrefined carbohydrates. Because of these changes in dietary and lifestyle patterns, chronic noncommunicable diseases (including obesity, diabetes mellitus, cardiovascular disease, hypertension and stroke) and some types of cancer are becoming increasingly significant causes of disability and premature death. Over 34 million disability-adjusted life-years (DALYs) (23% of total) are lost each year to cardiovascular disease in Europe (2). In 2002, poor nutrition accounted for 4.6% of the total disease burden of the WHO European Region (measured in DALYs) (3).

Table 1. Disease burden in SEE countries, 2004 g

	Heart disease: DALYs lost per 1000	Stroke: DALYs lost per 1000	Obesity pr (Body ma ≥30kg	ss index	Foodborne diseases per 100 000°	Salmonellosis cases per 100 000°	
	populationa	populationa	Women	Men			
Albania	13	13	35.6 <sup>d</sup>	22.8 <sup>d</sup>	62.72	9.39	
Bosnia and Herzegovina	10	13	25.2	16.5	62.02	11.19	
Bulgaria	14	13	13.5	11.3		13.19	
Croatia	10	11	22.7	2.6	25.1	126.5	
Republic of Moldova	23	15			3.98	36.52	
Romania	13	13	9.5	7.7	11.22	2.98	
Serbia and Montenegroe	12	12	20.1	14.3	22.55 <sup>f</sup>	30.64 <sup>f</sup>	
The former Yugoslav Republic of Macedonia	9	13	17.6	19.6	10.47	10.42	

### Sources:

### Notes:

Reported cases



a Mackay J, Mensah G (4).

<sup>&</sup>lt;sup>b</sup> The challenge of obesity in the WHO European Region and the strategies for response (5).

<sup>&</sup>lt;sup>c</sup> European health for all database (6).

<sup>&</sup>lt;sup>d</sup> Not nationally representative.

e Serbia and Montenegro became two separate Member States of WHO in September 2006. The data in this table refer to 2004 and the first four columns relate to the then one country of Serbia and Montenegro.

f For Serbia only.

Between 30% and 80% of adults in the WHO European Region and up to one third of children are overweight (5). Acute undernutrition is still documented in areas facing food insecurity, and chronic undernutrition due to micronutrient deficiencies extensively affects vulnerable populations, especially Roma, refugees and internally displaced persons. Undernutrition in the elderly, chronically ill patients and disabled individuals is present to a variable extent throughout the European Region. Micronutrient deficiencies are also a concern in the Region and the rate of exclusive breastfeeding at six months is low everywhere (ranging from 1% to 46%), even in countries with high initiation rates (7).

### **Political response**

### **Food safety**

Notable recent food safety issues have led to increased political and government involvement in food regulation activities. The bovine spongiform encephalopathy (BSE) crisis probably resulted in more political and structural change in western Europe than any other food or agricultural issue. In the United Kingdom the crisis was seen as so severe that it provided a platform for reform of the food control system. The Food Safety Agency, which was created following the crisis, deals mainly with control, management and advice to central government, while policy and legislation issues are dealt with by the Department of Health (8). In the European Union (EU), scientific risk assessment was delegated to the European Food Safety Agency, which was established in 2000, while risk mamagement remained with the European Commission. Both agencies were created in a short time (about two years), mostly due to the wish to restore consumer confidence in the food chain through "independence, scientific excellence and transparency". These were delineated by detaching food policy from the influence of vested interests and re-establishing it within the field of public health (9).

In 2000, the Fifty-third World Health Assembly unanimously confirmed food safety as an essential public health priority and committed WHO to expanding its responsibilities in food safety. The outcome of this has been a global food safety strategy with the objective of reducing the health and social burden of foodborne disease (10). It is intended that this objective will be achieved by:



- advocating and assisting in the development of risk-based, sustainable, integrated food safety systems;
- developing science-based measures along the entire food chain that will prevent exposure to unacceptable levels of chemical and microbial hazards; and
- assessing, communicating and managing foodborne risks in cooperation with other sectors and partners.

To enable national authorities, particularly in developing countries, to improve their food safety systems and to ensure that the standards for imported foods conform to national requirements, WHO and the Food and Agriculture Organization (FAO) jointly published guidelines for strengthening national food safety systems (11).

It has been shown that crises can serve as catalysts for change due to the friction they produce as a result of public demands for the government to change its behaviour in order to prevent such crises in the future (12). However, if a crisis has a marked impact, such as in the case of BSE, institutional changes can be more advanced (13).

When taken into serious consideration, food crises such as BSE in the United Kingdom or dioxin in Belgium could serve as catalysts for changes in the food safety systems in south-eastern Europe. These countries are going through marked transitions in their infrastructures, and thus could take advantage of these experiences to make sensible steps towards the evolution, rather than rapid post-crisis revolution, of their current food safety systems.

WHO, FAO and the EU have published advice to national authorities in developing food safety strategies in order to create comprehensive food safety systems (14–16). Some of the essential roles of a government in a food safety system are:

- collection of baseline information
- scientific risk assessment: basing decisions on best available science
- an integrated food chain approach from farm to fork
- legislation and enforcement of food safety strategies
- · informing consumers and motivating industry
- developing performance indicators
- strategic planning (including official control requirements).



### **Nutrition**

Recognizing the still unresolved issue of the noncommunicable disease burden related to nutrition, the Fifty-seventh World Health Assembly in 2004 endorsed the WHO global strategy on diet, physical activity and health (17). The objective of the Strategy is to provide a basis for multisectoral action to reduce the risk factors for noncommunicable diseases and to encourage the development of national policies to improve nutrition and physical activity. In recognition of the magnitude of the challenge posed by obesity, the health ministers of Europe adopted the WHO European Charter on Counteracting Obesity in 2006, which defined guiding principles and clear action areas (18). Activities should span government sectors, be international and involve multiple stakeholders.

At EU level, the European Commission launched the EU Platform for Action on Diet, Physical Activity and Health in 2005 to tackle the problem of obesity on a multisectoral level. In 2007, the European Commission adopted a White Paper called *A strategy for Europe on nutrition, overweight and obesity related health issues*, setting out a wide range of proposals on how the EU can tackle nutrition, overweight and obesity-related health issues (19).

### Integrating food safety and nutrition

A new approach to the national food system should ensure not only safety but also nutritional adequacy as well as food security. The second WHO European Action Plan for Food and Nutrition Policy 2007–2012 addresses the main public health challenges in the area of nutrition, food safety and food security and deals with diet-related noncommunicable diseases (particularly obesity), micronutrient deficiencies and foodborne diseases (20). The integration of nutrition, food security and food safety policies and programmes allows public health outcomes to be maximized by simultaneously addressing all hazards associated with the intake of food (e.g. inadequate food intake and food- and waterborne diseases) and by weighing the risks and benefits of food consumption in existing and novel food products (e.g. nutrients and contaminants).

For these reasons, the adoption and effective enforcement of integrated national food and nutrition policies, strategic implementation plans and regulations are required in order to improve public health.



### Food safety and nutrition project in South-eastern Europe

The project entitled Strengthening Food Safety and Nutrition Services in SEE countries is a direct outcome of the Dubrovnik Pledge, when food safety and nutrition were recognized as one of the seven original priority interventions.

In 2002, two international meetings (the Pan European Conference on Food Safety and Quality, Budapest, Hungary, and the Fourth Meeting of Senior Government Officials of Countries in South-eastern Europe, Hillerød, Denmark) recognized the need to build capacity in Europe to improve safety and the nutritional quality of foods. In May 2002, the project Strengthening Food Safety and Nutrition Services in South-eastern Europe was launched. Partners and donors included the WHO Regional Office for Europe, FAO and the national governments of Greece and Italy. In November 2002 in Belgrade, Serbia and Montenegro, the first meeting of the SEE Food Safety and Nutrition Health Network launched the Food Safety and Nutrition Project with a survey of food policy and legislation in all eight countries (the Republic of Moldova had joined by then). The commencement of this latter Project was a clear statement that it was needed for the improvement of public health in South-eastern Europe.

The decision on Component One of the Project was made during the 7th SEE Health Network meeting in Tirana in November 2003 by nominated representatives of the countries in the SEE Stability Pact and representatives of the Council of Europe and the Regional Office. In 2004, the formal decision on Component One was signed by the SEE ministers of health, and the Regional Project Manager from Serbia and Montenegro and eight country project managers were selected. Since then, the Project has been supported by the governments of Belgium, Greece, Italy and Switzerland and by the Regional Office.

Component One of the Project focused on action at national level with the principal objective of bringing food policies, strategies and legislation in South-eastern Europe into line with international and EU standards. Several activities were carried out during this phase, both within countries and across SEE borders.



Since June 2007, Component Two has been implemented, with the main objective of establishing harmonized and integrated models for food safety and nutrition strategies tailored to the political, legislative, social and economic contexts of the SEE countries.

This publication gives information about the countries' food and nutrition control systems, assessing their effectiveness and identifying differences and commonalities between them. Gaps are highlighted and recommendations made about the organizational changes necessary to ensure effective, science-based food safety systems and healthy diets. Chapter 1 describes the political background with relevant EU and WHO strategies and recent developments related to the guiding principles for safe food and healthy nutrition. Chapter 2 discusses the main findings of the data collection. Chapter 3 gives the individual countries' reports about their main achievements and the challenges they face, and Chapter 4 lists the conclusions and recommendations.





### Chapter 2. Food safety policies in SEE Member States





### **Summary**

A general overview of the food safety strategies in the SEE Member States has been recognized as a precondition for further decisions in the process of reform. The identification of existing needs and gaps within the current systems will be useful in distinguishing the necessary organizational changes to ensure effective and holistic food safety systems that are science-based and risk-based, and to ensure healthy diets.

Existing national legal and regulatory frameworks in the SEE countries are aimed at harmonization with European legislation and Council of Europe and WHO recommendations concerning food safety and nutrition. These attempts are, however, at different stages of revision, planning or implementation. Many countries have functioning health systems which act to enforce food laws, regulations and standards. In some, the principles of the food safety system have recently been reformed and modernized (e.g. Bulgaria and Romania) and their capacities have been successfully developed. Most of the countries are, however, facing challenges. Effective food safety systems are often undermined and impeded by the existence of fragmented legislation, multiple jurisdictions and weak surveillance, monitoring and enforcement. In some countries the roles of government bodies, as well as the responsibilities of the food producers, are not well defined. Consumers' rights are often not considered a priority. Moreover, infrastructures are designed in a way that gaps or duplications may occur between the responsible organizations involved. The issues of safe food and adequate and healthy diets require increased attention throughout the region. Each step of the food chain needs to be assessed, since different hazards occur at different steps, with different magnitude. Preventive measures should be introduced at the most efficient stages.

### Introduction

Most SEE Member States have a long history of committed and professional food safety and nutrition systems, included, at least for some of their functions, within the health services. This provides a good opportunity to build on the existing systems, paying special care and attention to maintaining those parts that function well or can be improved. This report describes the food safety strategies currently in place in Albania, Bosnia and Herzegovina, Bulgaria, Croatia, Montenegro, Republic of Moldova, Romania, Serbia and the former Yugoslav Republic of Macedonia.



The data provided by Member States represent a solid information base to be built on in the respective countries. The report mainly addresses Components One and Two of the SEE Food Safety and Nutrition Project. It aims to assess the effectiveness of the current food safety systems in SEE Member States and to identify differences between them as well as common features with the aim of ensuring a safe, healthy, adequate and accessible food supply. This assessment is needed to identify gaps in the current systems and to formulate recommendations for necessary organizational changes to ensure effective, science-based food safety systems and healthy diets.

It is important to note that this publication puts a specific focus on food safety strategies. Food and nutrition polices in the WHO European Region have been described and analysed before (20,21). A publication addressing nutrition and food security issues particularly in south-eastern Europe will follow.

### **Methods**

The Regional Project Manager sent the country project managers a comprehensive open-ended questionnaire assessing different aspects of their national food safety system and the stakeholders involved. Their replies were reviewed and the first draft of the common publication was presented at the 18th Meeting of the SEE Health Network in Chisinau, Republic of Moldova, in May 2007. The WHO Regional Advisers for Nutrition and Food Security and Food Safety provided input during that meeting. Country project managers were asked to update and improve their reports by involving all stakeholders in their countries. They were asked to send the publication to the project management, after obtaining the approval of their ministers of health. These reports are summarized in Chapter 3. Reports from assessments carried out by the Project Regional Office in Albania, Montenegro, the Republic of Moldova and the former Yugoslav Republic of Macedonia were integrated into the final document. The quantity and quality of data vary from country to country since the information was often not available or thought to be insufficiently reliable.

Information in the country reports is presented using the key functions of the health systems approach: stewardship, resource generation, financial component and service delivery. Fig. 1 illustrates the WHO health system framework



Functions the system performs Goals/outcomes of the system Financing HEALTH (collecting, pooling and (level and equity) purchasing) Responsiveness Resource generation (to people's nonmedical (investment and training) expectations)  $\supset$ Delivering services z Financial protection and equity in the distribution (personal and population of funding based PERFORMANCE Stewardship (maximizing goals relative (oversight) to potential)

Fig. 1. The health system functional framework

Source: Adapted by P Travis from WHO 2000 (22).

### **General country parameters**

South-eastern Europe is characterized by specific geo-history and sociocultural dynamics. As a result of its geopolitical position it is a crossroads between west and east, north and south. In 1989, the change of governing system brought about a transformation from centralized to pluralist civil societies. Deep changes took place in the economy, social structure, politics and culture of the region. Most of the countries opted for a liberal-democratic model in politics and neoliberalism in their economies. Although in some sountries the development status is well below the 1989 level, the overall balance shows that these societies, through undertaking many reforms, are making crucial progress towards modernization, growth and development.

In all nine countries the executive power lies with the president/prime minister and council of ministers/government, the legislative function is assumed by parliament and the judicial function is carried out by the supreme or constitutional courts.



Table 2 gives the demographic indicators of SEE Member States.

**Table 2.** Demographic indicators of south-eastern Europe, 2003

	0:		Population	Down	l lab au	Gender	
Country	Size (km²)	Population	density (per km²)	Rural %	Urban %	Female %	Male %
Albania	28 648	3 102 764	107.92	56	44	50.15	49.85
Bosnia and Herzegovina	51 209	3 812 051	74.56	56	44	51.75	48.25
Bulgaria	111 000	7 823 557	70.48	32	68	51.38	48.62
Croatia	56 542	4 441 800	78.56	41	59	51.87	48.13
Montenegro	13 812	620 279	n.a.	n.a.	n.a.	50.71	49.29
Republic of Moldova	33 800	4 226 400	106.73	58	42	52.2	47.8
Romania	238 500	22 246 862	91.17	44	56	51.2	48.8
Serbia	77 474	7 480 591	n.a.	n.a.	n.a.	51.37	48.63
The former Yugoslav Republic of Macedonia	25 713	2 026 773	78.83	40	60	49.81	50.19
TOTAL	636 698	55 267 771	83.69	45	55		

Source: European Health for all database (6).

### **Health systems perspective**

The development and organization of food safety and nutrition strategies are strictly linked to the existing health system in every country. The process of evaluation and the emerging lines of action need to be seen within the health system framework to ensure their implementation and the viability of change. The biggest challenge in regard to risk management of food safety and nutrition system (FSNS) is to ensure holistic, risk-based and cost-efficient integration from farm-to-fork. Population health should be its main objective. A FSNS, as part of a health system, embraces the four functions of a health system shown in Fig. 1.

Stewardship consists of information regarding existing governance and leadership functions, including legal and regulatory frameworks concerning food safety and nutrition and their alignment with EU legislation and with



WHO and FAO recommendations. This function also focuses on collecting data, information and intelligence and sharing it in a transparent way with the public.

Resource generation deals with the development of resources required for the operation of the FSNS. It includes the human, material, technological and conceptual resources that are essential not only to deliver modern and tailored services but also to provide feedback to the policy-making process.

Financing briefly describes the various funding mechanisms of the FSNS.

Service delivery includes the core food control services, capacity-building for food producers and provision of inspection services and assurance systems that are interlinked with active and supportive enforcement and legal mechanisms.

In the following section, these responsibilities will be analysed by applying the functions of the health systems framework.

### **Stewardship**

The FSNS is responsible for the development of food and nutrition policies aimed at promoting and protecting population health. These include the development of legislation, core strategies and regulations, the allocation of resources and the enforcement of laws and regulations to ensure access to safe and healthy food. Such action affects the health of both individuals and populations as well as the activities of the multiple stakeholders involved in the food chain, locally and internationally. In this capacity, the FSNS stewardship activities might influence and reflect the economic and political situations in the country and beyond. Intelligence, information and research are important constituents of stewardship. Thus, it is expected that the FSNS will monitor and provide information about the population's dietary intake as well as foodborne and nutrition-related diseases. The system should further provide the required data for risk analyses, support research on food and nutrition and monitor its own performance in order to ensure accountability and transparency.

The FSNS needs to create partnerships and mobilize multisectoral activities that would result in the increasing availability and accessibility of safe and healthy foods.

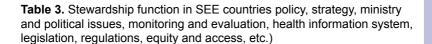


In summary, based on FAO/WHO guidelines, food legislation should include the following provisions (11):

- a high level of health protection;
- clear definitions to increase consistency and legal security;
- a basis of high-quality, transparent and independent scientific advice following the assessment, management and communication of risk;
- the use of precaution and the adoption of provisional measures where an unacceptable level of risk to health has been identified and where a full risk assessment could not be carried out;
- the right of consumers to have access to accurate and sufficient information;
- the tracing of food products and their recall in case of problems;
- primary responsibility for food safety and quality resting with producers and processors;
- the obligation to ensure that only safe and fairly presented food is offered for sale;
- recognition of the country's international obligations, particularly in relation to trade;
- transparency in the development of food law and access to information;

Table 3 lists the challenges to the stewardship function carried by the authorities in the SEE Health Network Member States.





Country	Challenges
Albania	<ul> <li>Limited coordination between relevant ministries</li> <li>Food Law not fully enacted</li> <li>Incomplete information on dietary intake and nutritional status</li> <li>FNCS being reorganized</li> </ul>
Bosnia and Herzegovina	<ul> <li>Newly established national food safety and nutrition system with food safety agency at state level not yet fully functioning and implementation of new state legislation and control under development</li> <li>Limited coordination between entity level authorities, legislation, institutions and services or among sectors</li> </ul>
Bulgaria	<ul> <li>National legislation well in line with EU legislation but implementation not yet fully effective or efficient</li> </ul>
Croatia	<ul> <li>Legislation fragmented between ministries of health and agriculture and not completely harmonized</li> <li>Limited cooperation and coordination horizontally and vertically</li> <li>Need for national guidelines, monitoring and control plans</li> </ul>
Montenegro	<ul> <li>Three ministries and one institution are responsible for the food safety and nutrition systems, with overlapping duties</li> <li>Limited coordination and communication between different national institutions, scientific institutions and nongovernmental organizations</li> </ul>
Republic of Moldova	<ul> <li>Need for strengthened institutional infrastructure to enable the system to deal with food safety issues</li> <li>Reorganization is planned</li> </ul>
Romania	<ul> <li>Strategy aimed at strengthening food safety and nutrition services currently under implementation</li> <li>Some degree of cooperation between food safety authorities</li> </ul>
Serbia	<ul> <li>Three ministries responsible for the FSNS</li> <li>Strategy and law on food safety prepared and in process of adoption</li> <li>Draft on nutrition action prepared by ministry of health</li> </ul>
The former Yugoslav Republic of Macedonia	<ul> <li>Food control seen as an administrative procedure</li> <li>Some non-food safety functions of ministry of health financed through income generation of the food control system</li> <li>Reorganization planned to ensure institutional control of food safety and improve capacity of the system to deal with food safety crises</li> </ul>



### Resource generation

The challenges within today's global food-chain necessitate, more than ever before, professional personnel and infrastructure to meet them. A modern, efficient and effective infrastructure for food control and supply is a pre-requisite for control over the food chain. Equipment for modern communications, laboratory analyses, surveillance, monitoring and inspection service performances should be accessible to the FSNS. The systems are being called upon to reformulate foods by reducing fat, salt and sugar content in order to facilitate a healthy diet and prevent obesity and other noncommunicable diseases.

A modern FSNS imposes global challenges due to trends in global food production, processing, distribution and preparation. Food and animal feed grown in one country travel around the world and thus transit borders, different policy environments and standards. The food chain of today is marked by the integration and consolidation of agricultural and food industries. Moreover, people are demanding a wider variety of foods, out of season, away from home, but still safe and healthy. There are also larger vulnerable populations (e.g. people with special dietary needs such as infants who receive infant formula instead of being breastfed, children in schools and child care facilities, elderly people in institutions, and hospitalized and immune-compromised people) that need special assurance of food safety as well as adequate nutritional content in their foods and diets. Increases in serious outbreaks and noncommunicable diseases result in a high burden on health care with economic and political consequences and might cause public anxiety and outrage.

It is important to invest in management of excellence and to increase staff motivation. Increasing the knowledge and capacities of the staff is essential, especially with regard to modern risk management tools, risk-based approaches, newly emerging diseases, and new laboratory and epidemiological methodologies and techniques. The role of an FSNS in strengthening the capacity of people responsible for food processing in the above-mentioned fields is clear, and imposes a responsibility on the system to invest in professionals who can inform and educate food handlers and consumers. Harmonization of food safety regulations is another important facet of the capacity of the health function (i.e. food control). Here, the legal and enforcement capacities of the food safety and nutrition workforce need to be upgraded.

Table 4 shows the main challenges facing each SEE Health Network country with regard to resource generation.



**Table 4.** Resource generation in SEE countries (medicines, technologies, facilities, equipment, human resources, etc.)

Country	Challenges
Albania	Further training needed for staff as well as regular information exchange between sectors involved in food and nutrition
Bosnia and Herzegovina	Need for training of staff in inspection services and upgrading laboratory equipment Hazard analysis and critical control point (HACCP) implementation currently only voluntary and for export facilities
Bulgaria	Need for action and funds allocated for further implementation and maintenance of FSNS, based on HACCP principles by the food business operators
Croatia	HACCP implementation currently only voluntary and for export facilities     Need for training of inspection services and laboratory staff
Montenegro	Need for further training in HACCP     Need for further professional training of inspectors in food safety regulations
Republic of Moldova	<ul> <li>Need to upgrade laboratories and systems</li> <li>Need for capacity-building in risk communication</li> </ul>
Romania	Need to strengthen new generation of specialists in the food safety system     Need to upgrade laboratory equipment for new contaminants (acrylamide, pathulin, dioxin)
Serbia	Need for further development and use of HACCP and other risk management tools     Need for investment in continuing education of health workers in food safety and nutrition
The former Yugoslav Republic of Macedonia	Need to strengthen capacities in risk assessment, management and communication

### **Finance**

Financing of the FSNS, like any other health programme within the health system, is directed at making funds available to fulfil its mission. In contrast to other health services, the FSNS can have the legal basis to create the funds needed for its activities (through taxes, licensing, enforcement, etc). Care must, however, be taken to avoid any conflicts of interest. In cases when this is not feasible, the government should ensure allocation of resources for the financing of the FSNS. One way to do this is by regulating the proportion of the health budget to be allocated to the FSNS and setting up a budget earmarked within the overall health budget. In many ministries



of health, the FSNS is not considered a key priority as other health and medical issues (such as clinical care and immunizations) and thus the threat of under-funding is unfortunately the reality (Table 5).

**Table 5.** Financing of the FSNS in SEE countries (collecting, pooling, purchasing, etc.)

Country	Challenges
Albania	Limited funds for the FSNS for research, laboratory reagents and consumables for diagnosis
Bosnia and Herzegovina	Limited resources and financing mechanisms for newly established national FSNS which hampers implementation of specific activities
Bulgaria	Competent authorities' activities financed by national budget and from food control service income
Croatia	<ul> <li>Limited financial resources for activities linked to food safety and nutrition, especially for upgrading laboratory networks and for financing referral functions</li> </ul>
Montenegro	<ul> <li>Limited funds specifically for research, professional training programmes and capacity-building</li> </ul>
Republic of Moldova	Impaired service delivery and implementation due to limited funds for the FSNS
Romania	Limited financial resources for nutrition activities
Serbia	<ul> <li>Food safety services financed partly by national budget using payments from food industries and partly by international programmes; rest of health care system financed through national budget, international programmes and out-of-pocket payments by patients</li> </ul>
The former Yugoslav Republic of Macedonia	Limited provision of the FSNS services due to limited funds

### Service delivery

The core functions of the contemporary FSNS should include: disease prevention through activities directed at primary and secondary prevention; health promotion and health education; evaluation of the quality and effectiveness of personal and community health services; initiation, support and carrying out of health-related research; initiation, development and planning of public health policy; preparedness and management of public health emergencies; and ensuring a competent workforce for public health and personal health care. These services can be provided to the public, the policy-makers, or both. With regard to inspection and control activities,



it is clear that the modern FSNS should avoid using inefficient standards and not build on fragmented existing control authorities. Rather, it should concentrate on processes and adequate assurance systems such as HACCP and good agricultural and manufacturing processes.

The existing FSNS in SEE countries usually focus on the inspection services. In the context of health protection this includes the enforcement of laws and regulations that protect health and ensure safety. Most of the existing systems also provide services in the context of surveillance and assessment of the population's health and well-being as well as identification, prediction, investigation and mitigation of health problems and health hazards in the community.

Challenges to service delivery in SEE countries are listed in Table 6.

**Table 6.** Service delivery in SEE countries (organization, public health services, primary health care, hospitals, referral system, etc.)

Country	Challenges
Albania	Lack of a clear chain of command and insufficient functioning of the FSNS     Need for a risk-based approach and improvement of alert systems
Bosnia and Herzegovina	<ul> <li>Multiple ministries provide food control services; need for a single unitary approach in coordination and implementation of food control and inspection</li> </ul>
Bulgaria	Need for a risk-based approach and improvement of alert systems
Croatia	Lack of information and communication with consumers  Need for a strengthened public health network regarding nutrition, food safety and environmental health services  Need for a common approach to inspection and control procedures in inspection services
Montenegro	Strong focus on food control and inspections
Republic of Moldova	Food control carried out by multiple ministries, which requires coordination     Need to strengthen health promotion and disease prevention activities
Romania	<ul> <li>Need for comprehensive information for consumers related to food safety, nutrition and public health</li> </ul>
Serbia	<ul> <li>Fragmented services and overlapping responsibilities</li> <li>Food safety control based on analyses of final products rather than on a risk-based approach</li> <li>Need for a stronger focus on prevention in the health system</li> </ul>
The former Yugoslav Republic of Macedonia	Different ministries have food safety responsibilities; need for a common approach to coordinate and manage the food safety system



### **Discussion**

The WHO strategy for food safety in Europe aims to develop and/or strengthen national food safety systems in Member States by promoting intersectoral initiatives for developing or strengthening modern food legislation, the integrated surveillance of foodborne disease and food contamination monitoring, the promotion of risk-based food control systems and effective risk communication. Joint WHO/FAO guidelines have been developed to assist national authorities develop and strengthen their national food safety programmes (11).

Food safety and nutrition was also considered a priority in the SEE Health Network, which led to the creation of the SEE Food Safety and Nutrition Project in 2002, with the aim of strengthening food safety and nutrition services in this region and facilitating their alignment with European and international standards.

In many SEE countries, FSNS are not provided by a single infrastructure and are marked by lack of a dedicated leadership and coordination and amalgamation of authority, responsibility and accountability. In some countries, the policy-makers and inspectors are regarded as responsible and accountable for ensuring safe and healthy food. This can pose a potential risk for conflict of interest: since the identification of any health hazards in the food system might result in the FSNS staff being considered responsible and accountable for anything going wrong in the food chain, they might opt not to disclose dire findings.

All SEE states have restructured and reorganized their food safety systems in recent years. Some have made large strides while others are still at early stages. As mentioned above, the approach described in the WHO Health System Framework could serve as a tool to analyse as well as to upgrade the food safety systems in south-eastern Europe (20).

Stewardship. It is clear that all SEE Member States are in the process of improving their infrastructure, approaches and methods to strengthen their food control systems. Some have been moving from mandatory compliance with so-called "Gost" standards at the top of the food chain (i.e. food products) towards risk-based control systems. Some have even gone further by adopting a risk-based policy, based on the total diet approach, and some

<sup>1</sup> GOST standards were originally developed by the former Soviet Union as part of its national standardization strategy. GOST is an acronym for gosudarstvennyy standard, meaning state standard.



have been working to improve their surveillance and monitoring. A few are harmonizing their food and nutrition legislation with EU regulations, and most are striving to follow the Codex Alimentarius. Some have a food law with targeted directives, standards and procedures.

Resource generation. Few countries in the region have been constructing a modern FSNS, with increased professional capacity and equipment of laboratories. A small number of governments have actually worked to ensure that staff working in food control have increased their efficiency and stopped using the old inspection techniques. Experience from these countries clearly shows that overlaps and duplications within and between ministries have been reduced. International cooperation has been invaluable in achieving this outcome. Most countries need, however, to develop and maintain a system for continuing education, to upgrade education in academic institutions and to include more medical and non-medical professionals in the system.

Financing. Most of the SEE Member States lack funds directed towards the FSNS. There is a need to develop or reform funding mechanisms to ensure that the systems function well.

Service delivery. A few countries are updating their food safety systems to prevent conflicts of interest. Some are starting to use a risk-based approach, to improve their alert systems, to increase communication and interaction with consumers and to invest in capacity-building and improvement of laboratories.

In most of the SEE countries, authority is divided among ministries and municipalities. The mere fact that more than one organization is involved in controlling the food chain can cause some confusion and uncertainties. Joint efforts are often hindered by lack of communication or coordination and clear division of responsibilities between ministries. It is therefore recommended that a comprehensive integrated FSNS should be set up to ensure the harmonization of the concepts, strategies and implementation procedures of each ministry, to make clear distinctions between the roles of the specific parts of the food system, and to provide seamless continuity over control of the food chain without gaps or duplications. The implementation of a well-integrated food safety system will enhance coordination among the bodies involved, resulting in a responsive and efficient organism and increasing the availability and accessibility of safe foods and healthy diets. No single preventive measure will ensure the safety of all foods. A number of practical preventive steps can, however, be taken immediately to reduce the incidence of many foodborne diseases and improve the composition



of food products. Any initiative designed to improve the safety of the food supply (such as HACCP and good manufacturing practice) should focus on the hazards and foods that present the greatest risks to public health. The plan should also emphasize the development and implementation of preventive control of those risks, and should seek opportunities for such control through a collaborative process with the responsible sectors of the food industry and all other stakeholders.

In order to avoid these possible problems in structure, process and outcome, it is suggested that control of the food chain should be transferred to a modern integrated system with efficient collaboration between ministries/agencies across the farm-to-fork continuum.

### Cornerstones of a modern food control system

The EU has laid down the cornerstones of a modern food control system as follows.

Risk assessment and risk management. EU regulations state that risk assessments shall be based on the available scientific evidence and undertaken in an independent, objective and transparent manner. These regulations also formally establish the precautionary principle as an option open to risk managers when decisions have to be made to protect population health in cases where scientific information concerning the risk is inconclusive or incomplete. Such measures are provisional and have to comply with the normal principles of non-discrimination and proportionality.

Responsibility for food safety. The primary responsibility for ensuring both food safety and compliance with food law in the EU rests with food and animal feed businesses. For example, a food and animal feed business operator is required by law to inform authorities immediately if there is reason to believe that foods placed on the market might be injurious to human health. Operators must inform authorities of action taken to prevent risks to consumers, and must not prevent or discourage any person from cooperating with the relevant authorities.



Traceability and labelling. The EU defines traceability as the ability to trace and follow food, animal feed and ingredients throughout all stages of production, processing and distribution. General provisions for traceability cover all food and animal feed and all operators of food and animal feed businesses at all stages of production, processing and distribution, although tougher standards may apply to specific sectors such as beef, fish and genetically engineered organisms.

EU legislation on labelling, presentation and advertising of foodstuffs to the final consumer is based on the principle of functional labelling and aims to ensure that the consumer gets essential information regarding the composition of the product, the manufacturer, and methods of storage and preparation. Producers and manufacturers are free to give additional information, provided that it is accurate and does not mislead the consumer.

Recall. Whenever a business operator has reason to believe that food or animal feed is not in compliance with food safety requirements, it must withdraw the product from the market and inform the relevant authorities. If the product has already reached the consumer, the operator must inform the public of the withdrawal and must recall products already supplied to consumers.

Food inspections. Food inspections extend from the farm to the market. Animal health certificates must accompany all imported live animals. Upon arrival in the EU, the animals and accompanying certificates must be verified and checked by EU official veterinarians at a designated border inspection post. Products of animal origin from a non-EU country are allowed into the EU only if they come from an establishment specifically approved to export to the EU.





## Chapter 3. Reports on food safety policies in SEE countries





## Ibania

#### **Albania**



#### **Background**

The relative burden of communicable diseases in Albania has been decreasing, while noncommunicable diseases, mainly cardiovascular diseases and cancer, have become the leading cause of death among the adult population. Some studies suggest that the incidence of diabetes in Albania is higher than in many western European countries and is likely to grow.

The diseases caused by the microbiological contamination of food remain major threats to public health. It is estimated that 10% of reported foodborne diseases, and the majority of epidemic outbreaks, is caused by *salmonella spp*. Brucellosis is also an increasing health concern. Recent outbreaks (hepatitis viral A in children in 2003 and an outbreak of *S. enteriditis* in 2007) are thought to be associated with deterioration in the quality of drinkingwater.

#### **Stewardship**

Albania is aiming to harmonize all food safety legislation and procedures with the EU and with the Codex Alimentarius. During 2008, the existing food safety system has been reformed based on the farm-to-fork approach. In the process of association with the EU, a new Law on Food was prepared based on European Regulation (EC) No.178/2002 on food law, the creation of a European Food Safety Authority and food safety (23). The new Law on Food was approved by Parliament on 28 January 2008 and was to come into force in the following months. The creation of a National Food Authority is envisaged as one of the main aims of this law.



The food safety system will consist of the following elements:

- food control management an administrative body to be set up and operate in a centralized manner to coordinate food control;
- inspection services investigation of foodborne diseases, response to consumers' requests and recommendations for the food sector;
- inspection system identification of risks to food safety and development of methods to monitor risk control and to ensure the adoption of the HACCP system by all actors in the supply chain; inspection programmes to be based on HACCP principles, including inspection activities and HACCP audits;
- *laboratories and food control monitoring* provision of analytical capacities for quality monitoring of food safety; laboratory accreditation is one of the main procedures to be implemented soon.

#### Resource generation

The food safety and nutrition workforce includes physicians, hygienists, nutritionists, epidemiologists, microbiologists, chemists and veterinarians.

Over the last ten years a number of training courses have been organized, with the support of WHO, related to HACCP and food safety or food hygiene.

#### **Financing**

Food safety activities (health certificates for foodstuffs, control of food- and waterborne diseases and analytical control in cases of intoxications) are funded by the Ministry of Finance via the Ministry of Health.

#### **Delivery of services**

The main food control structures established by current legislation are the following.

 The Food Control Inspectorate: Directorate of Food Quality and Food Safety and Inspection at the Ministry of Agriculture, Food and Consumer Protection. Its local structures are food inspectorate services in all the districts, responsible to the Directorates of Agriculture and Food.



- The State Sanitary Inspectorate is a vertical structure from the national Chief Inspector to state sanitary inspectors in every district.
- The Veterinary Inspectorate is organized according to the provisions of the Law on the Veterinary Service and Inspectorate in both state and private systems. It carries out double veterinary services, service and inspection for animal health and animal well-being, public veterinary health and control of veterinary medical products. The Veterinary Inspectorate operates under the Ministry of Agriculture, Food and Consumer Protection at central level and with veterinary sectors at regional level. The district veterinary inspectors carry out this service at district and municipality levels. Every municipality has its veterinary office.
- The Phytosanitary Inspectorate operates at the Ministry of Agriculture, Food and Consumer Protection.

The Law on Consumer Protection provides precise definitions and identifies the obligations of state control bodies to ensure food safety for the protection of consumers.

When the new Food Law enters into force, the responsibility for food safety issues will be under the National Food Authority, which is being set up under the Ministry of Food, Agriculture and Consumer Protection.

## Control of food- and waterborne infections and intoxications

There is a network for epidemiological surveillance and control of communicable diseases. Reports of communicable diseases are sent from all the districts to the Institute of Public Health at national level, according to the Law on Prevention and Combating of Communicable Diseases. Reports on communicable diseases are analysed regularly and weekly, monthly and annual reports are prepared for the Ministry of Health.

#### Challenges ahead

The following tasks remain to be done:

- · creation of a national food authority;
- harmonization of the national food legislation with EU legislation;
- introduction of a quality management system;



- introduction and implementation of an efficient and sustainable system for controlling the production and distribution of foodstuffs and products in contact with food;
- introduction and implementation of an efficient and sustainable system for monitoring programmes for contaminants and additives in food;
- introduction of an efficient and sustainable rapid alert system;
- improvement in the efficiency of the foodstuffs inspection system and introduction of a standard inspection procedure;
- implementation of the minimum requirements of good manufacturing practice and HACCP procedures in the food industry.

#### **Conclusions and recommendations**

#### **Conclusions**

On the whole, improving the food safety system requires well-coordinated and integrated action. It is therefore recommended that current structures related to food control should be reorganized and rearranged to assure public health, protect consumers' interests, provide a solid regulatory system for trade in food and add to economic development by gaining and keeping the confidence of consumers.

This can be achieved with strong leadership, organizational flexibility, personnel integration strategies and open decision-making and evaluation criteria.

The building blocks of the system are: food legislation, food control management, food inspection, laboratory services and information, education, communication and training.

#### Recommendations

The following are the main recommendations:

Reorganization of the food safety system

- 1. A risk-based integrated food safety system should be established.
- 2. A link should be created between food safety and nutrition, especially with regard to surveillance systems for food intake and health promotion activities in local settings such as schools, workplaces and health care services.



- **3.** An interministerial and interdisciplinary task force should be set up to consider how best to ensure that recommendations are in accordance with the following principal objectives of the proposed system:
  - to protect public health by reducing the risk of foodborne illnesses;
  - to protect consumers' interests by preventing or reducing the sale of mislabelled, contaminated or adulterated food;
  - to enhance economic development by obtaining and keeping consumers' confidence in the food supply;
  - to provide a solid regulatory system for the production, distribution and sale of food.
- 4. Full account should be taken of the following key elements of the food control system:
  - food legislation
  - · food control management
  - · food inspection
  - laboratory services
  - information, education, communication and training.
- The organization and structure of the ministries responsible for food control should be reconsidered and adjusted as necessary.
- 6. To achieve these changes the following prerequisites must be ensured:
  - · consensus among the main players
  - strong leadership at cabinet level
  - dedicated start-up groups
  - · organizational flexibility
  - strategies for the integration of personnel
  - open decision-making
  - · evaluation criteria.

#### Establishment of a food and nutrition commission

7. A competent food and nutrition commission should be established, possibly within the office of the Deputy Prime Minister, to plan and implement an integrated food safety system covering the entire food chain, based on interministerial cooperation between the Ministry of Health and the Ministry of Agriculture, Forestry and Water Management and with other stakeholders and with a clear definition of its advisory relationship to the relevant ministries.



- 8. The commission should have the following responsibilities:
  - to assist in drafting relevant legislation;
  - to set standards for monitoring, inspection, certification and enforcement activities for the agencies implementing and enforcing the legislation;
  - to achieve sustainable and dynamic coordination at different levels of operation and within different sectors, avoiding confusion, gaps and overlaps between jurisdictions and any lack of efficiency to make the system more cost-effective and accountable;
  - to deal with the entire food chain in an integrated manner: it should

     (i) pursue risk-based approaches and have a mandate to transfer
     resources to high-priority areas of concern, and (ii) develop food
     safety, nutrition and food sector development goals and the strategies
     to achieve them:
  - to formulate policies and strategies for the achievement of goals, and for the adoption of risk assessment, risk management, standards and regulatory updates;
  - to formulate national compliance policies and programmes;
  - to coordinate food control activities, monitoring and auditing;
  - to prepare all stakeholders in the food chain for risk communication during outbreaks and emergencies;
  - to represent the authoritative point of reference for consumers, the food industry and local, national and international authorities;
  - to monitor and audit inspection activities and thereby gather data on implementation and enforcement that will assist in deciding on the best options for a planned further complete reform of the food safety control system.
- **9.** Existing inspection bodies should continue their enforcement and inspection activities.
- 10. The commission and the existing inspection agencies should cooperate in risk communication, education and training in the public and private sectors.
- 11. The existing inspection agencies at the central or local levels should retain their responsibilities, and each should function within an overall strategic and policy framework set out by the commission.



- 12. Each of the ministries should also keep its inspection systems, activities and efficiency under review and seek to upgrade the structure and improve its functions.
- 13. The commission should be supported by a scientific advisory committee to provide high-level multidisciplinary scientific input from relevant fields into the risk assessment and decision-making processes.

The ultimate aim is to implement a well-coordinated and well-harmonized system under one body, thus ensuring transparency and accountability.





## Bosnia and Herzegovina



#### **Background**

Obesity, reported morbidity and mortality from chronic noncommunicable diseases, such as cardiovascular and malignant diseases, are still major health challenges.

The morbidity rate of infectious and parasitic diseases in 2006 was 1080.38/100 000 compared with 1613.67/100 000 in 2005.

#### Stewardship

The food safety system is being fundamentally changed in order to fulfil the obligations and requirements of accession to the EU.

A first result of the changes was the adoption of a National Food Law by the National Council of Ministers. The principal aim of the Law and of the whole food safety system is to ensure a high level of protection of human health and consumers' interests in relation to food. It establishes common principles and responsibilities, and the means to provide strong, science-based, efficient organizational arrangements and procedures that underpin decision-making in matters of improving health and the quality of food and animal feed.



#### Legislative framework

The entire legislative, regulative and methodological base was inherited from the former Yugoslavia, including those elements related to food safety and quality control. The National Food Safety Agency is responsible for revising legislation related to the safety of foodstuffs at national level. Related laws such as the Laws on the Safety of Food and Common Use Objects, on Inspections, on Health Care, and on the Protection of the Health of the Population against Infectious Diseases are implemented at entity level in the Republika Srpska and the Federation of Bosnia and Herzegovina .

The Veterinary Law covers the planning, conduct, surveillance and control of: infectious diseases in animals; veterinary prevention; animal health protection; expenditure on and costs of animal health protection; veterinary services; public authority of the veterinary chamber; education in the veterinary field; databases and information systems; the responsibilities of state, entity and district authorities; and the inspection control and rights and responsibilities of legal and physical entities in relation to this Law.

The Law on Protection of Plant Health is also relevant, in that it covers plant health care and the safety and control of foodstuffs of plant origin.

#### Food control management

As laid down in the National Food Law and according to a decision of the National Council of Ministers, the Food Safety Agency was established in 2005 with the mission to:

- provide scientific advice and technical support for legislation and policies;
- collect and analyse data for the purposes of monitoring and characterizing risk and, in collaboration with other relevant authorities, coordinate activities related to risk assessment and risk management;
- coordinate activities related to the Codex Alimentarius.

In 2007, Bosnia and Herzegovina became a member of the Codex Alimentarius Commission.

At entity level the Ministries of Health, of Agriculture, Water Supply and Forestry, of the Environment and of Trade share responsibility for the food chain, including its regulation. In carrying out their activities the ministries



collaborate closely with a number of expert institutions involved in different parts of the food safety and quality control system such as public health institutes, entity inspection services and faculties.



#### Surveillance and monitoring

Surveillance of foodborne diseases is a part of the Communicable Disease Information System operating in both entities of the country under the Epidemiological Services network. Cases of reportable infectious disease or epidemics should be registered at primary health care centres, secondary health care clinics and tertiary health care clinics and reported to the epidemiological service in charge of the area involved. The Federation of Bosnia and Herzegovina has 10 cantonal epidemiological services, which are obliged to report to the Federal Epidemiological Service in the Federal Public Health Institute. In Republika Srpska, there are regional epidemiological services that report to the Institute of Public Health of Republika Srpska.

Supervision and control of foodstuffs is implemented at entity level as well. Since 2006, both entities have the formerly separate health, sanitary, veterinary and phytosanitary inspections working under one roof in the form of the Inspection Service of Republika Srpska and Federal Administration for Inspection Affairs, with their duties and responsibilities defined by the Law on Inspections.

Laboratory control is carried out by two entity networks of laboratories that include both public health laboratories and laboratories in the veterinary sector.

With a State Food Safety Agency in place, it is planned to establish a reference laboratory service at state level. The accreditation of laboratories is a priority. The rapid alert system is coordinated by the National Food Safety Agency, and an information flow has also been developed.

#### Information and communication

Guidelines on the prevention of major noncommunicable disease risk factors have been developed and distributed among family physicians.



Food safety and nutrition subjects have been included in the pre-university education system. There is, however, a need to expand the curricula for both students and teachers as well as for professionals dealing with food and nutrition. Faculties such as biology, food technology, pharmacy, veterinary, agriculture and sanitary engineering include topics related to nutrition in undergraduate curricula, but these deal mainly with food safety issues. Even the recently developed curriculum for the specialized training of family physicians did not include any public health issues at all.

Additional training and education for health professionals and workers in the food industry and agriculture have provided both regular refreshment courses on food hygiene and safe food handling and specific courses on.

#### **Resource generation**

Through the Stability Pact Initiative and the project on strengthening food safety services, a number of food safety and nutrition professionals, as well as professionals from entity ministries of health, have participated in different types of training and workshop and exchanged their experiences related to food safety.

Many other international initiatives and projects funded by bodies such as the EU, WHO and the Swedish International Development Cooperation Agency have also provided professional training for food safety professionals ranging from sanitary veterinary inspectors to laboratory staff. Further training is, however, needed, particularly for food inspectors in the principles of the HACCP system and implementation of official food control, sampling, etc.

According to the Food Law, the HACCP concept is required in new enterprises and it is envisaged that it will be implemented step by step in other food industries in the future. Food business operators are obliged to train workers in food establishments in food safety.

#### **Financing**

The state budget provides for the regular activities and functioning of the newly formed state Food Safety Agency. Activities are planned on an annual basis and are coordinated by the State Council of Ministers. The state budget also provides for the work of state-level authorities. There are also entity budgets that support authorities' activities at entity level, as well as cantonal budgets that support such activities at cantonal level.



There is no regular budget for research activities. So far, such activities have been mainly supported by international organizations such as WHO and the United Nations Children's Fund (UNICEF) and through international projects such as the EU programme entitled Poland and Hungary: Assistance for Restructuring their Economies (PHARE).

#### **Delivery of services**

#### Official controls/inspection services

Although the Food Safety Agency has been established as the central state authority concerning food safety, the main food control structures are still organized and operate at entity level.

The Inspection Service of Republika Srpska comprises:

- the Health Sanitary Inspectorate, which implements legislation related to food safety and hygiene and health norms for objects and personnel;
- the Veterinary Inspectorate, which implements legislation related to animal health, animal well-being, public veterinary health and veterinary medications;
- the Phytosanitary Inspectorate, which implements legislation related to plant protection;
- the Trade Inspectorate, which implements legislation related to trade in foodstuffs.

Regional and municipal offices carry out the fieldwork for all of these inspectorates, with relevant inspectors responsible for verifying the implementation, supervision and monitoring of the above-mentioned legislation.

The new Law on Inspection in the Federation of Bosnia and Herzegovina envisaged the establishment of a federal administration for inspection affairs.

#### Food monitoring and epidemiological data

Laboratory services are also organized at entity level. Laboratory control is carried out by networks of laboratories in each entity that include both public health laboratories and veterinary laboratories. Veterinary institutes





are responsible for carrying out analyses of samples taken from animals, animal feed and food of animal origin.

The network of cantonal/regional public health institutes is in charge of analyses of food for human consumption, water and human transmissible diseases.

#### Recommendations

A sound and integrated food safety system is still under development and major efforts are needed to strengthen the Food Safety Agency so that it can fulfill its objectives and tasks. These efforts include:

- the provision of scientific advice and scientific and technical support for legislation and policies;
- the provision of independent information on all matters within these fields and risk communication;
- serving as a point of contact for activities within the Codex Alimentarius Commission;
- contributing to a high level of protection of human life and health, including animal health and welfare, plant health and the environment;
- the collection, comparison and analysis of data;
- the provision of information on nutritional issues within the framework of the health programme;
- cooperation with the competent bodies;
- the promotion of effective coherence between risk assessment, risk management and risk communication functions;
- the initiation, preparation and organization of the drafting of implementing measures;
- action to identify and characterize emerging risks;
- the provision of scientific and technical assistance in the crisis management procedures implemented by the competent bodies with regard to the health correctness of food and animal feed.

It is, therefore, suggested that priority activities include:

- full harmonization of food safety legislation with EU legislation;
- establishment of the roles and functions of competent authorities on food safety issues;
- improvements in the effectiveness and efficiency of official control;
- improvements in the coordination of the state Food Safety Agency's activities and competent authorities carrying out official control;



- organization of professional training for the staff of all organizations involved in the food safety system;
- establishment of a network of laboratories;
- strengthening of the surveillance system of foodborne diseases;
- intensive communication with consumers and stakeholders.









### **Bulgaria**



#### **Background**

In 2004, 22 outbreaks of foodborne diseases were registered; 259 people were sick, of whom 102 were children up to 18 years of age (39.38%); and 81 people were hospitalized (31.27%), of whom 26 were children. In the etiological structure of the foodborne diseases, outbreaks caused by *S. entiridis* are the most prevalent, followed by *Staphylococcus aureus*, conditionally pathogenic microorganisms and *Shigella Flexneri*.

#### Stewardship

Food legislation is part of the administrative law. The legislative framework on food covers laws enacted by Parliament and decrees, regulations and policies issued by the Council of Ministers or individual ministers regulating all stages of the production, processing and distribution of foods in the country.

The competent government authorities implementing the state policy on food safety are the Minister of Health and the Minister of Agriculture and Forestry.

Bulgaria has undertaken significant reforms directed towards integration into the EU.



#### Legislative framework

Food legislation falls into two major categories. The first, so-called horizontal, category covers legislation applicable to all foods and sets out requirements for labelling, presentation and advertising of foods, for materials and articles intended to come into contact with foods, for additives, flavouring substances, solvents and other supplementary substances in foods, for deep frozen foods and for food hygiene. The second, vertical, category includes regulations introducing detailed requirements for specific foods.

The existing legislation on food applies the following three principles of food safety:

- from farm-to-fork
- · responsibility of the producers and traders
- traceability of all foods and food components in the food chain.

The principal framework law is the Law on Foodstuffs that came into effect in 1999. The objective of the law is to ensure compliance with the requirements for production and trade in foodstuffs in order to protect the health and interests of consumers.

Other laws and/or regulations relevant to food are the following:

- Law on Veterinary and Medical Activities, effective since 2006, regulates public relations related to veterinary and medical activities;
- Law on Health, effective since 2005, regulates public relations with regard to human health;
- Law on Feeds from 2006 regulates the terms and conditions for production, distribution, import, export and use of products and substances intended for cattle feed:
- Law on Plant Protection regulates public relations with regard to plant protection and phytosanitary control;
- Law on Fishery and Aquacultures regulates relationships with regard to ownership, organization, management, use and preservation of fishery resources, as well as the trade in fish; the Executive Agency on Fishery and Agriculture has control authority under this Law;
- Law on the Storage of and Trade in Grain regulates the terms and procedures for storage of and trade in grains and aims to ensure the terms and conditions for stable development of grain production and processing;



 Law on Protection of Consumers, effective since 2006, regulates the protection of basic consumer rights including the right of information on commodities and services.

## Competent authorities officially carrying out food control

Pursuant to provisions of the Law on Foodstuffs, the power to exercise official control of foodstuffs is divided between the Ministry of Health for control of all foods other than foods of animal origin and the Ministry of Agriculture and Forests for control of foods of animal origin. The official control is carried out by state inspectors.

The Law on Foodstuffs specifies when fines are to be levied for administrative breaches. The identification of such breaches and levying of sanctions is carried out by the official control authorities in line with the Law on Administrative Proceedings.

### Structures and responsibilities of the competent authorities

#### Ministry of Health

The Public Health Directorate in the Ministry of Health is responsible for state health control of the production, distribution, trade, import and export of all foods (apart from foods of animal origin) and coordinates the control activities of the 28 Regional Inspectorates of Protection and Control of Public Health.

#### Ministry of Agriculture

The Food Safety and Food Control Directorate implements food safety policies in the Ministry of Agriculture, harmonizes legislation and coordinates and controls the activities of the competent authorities.

The National Veterinary Service is responsible for official control in the area of animal health, animal welfare and animal feedstuffs. It is also responsible for official control over establishments producing food of animal origin.

The National Plant Protection Service is responsible for official control in the areas of plant health and monitoring of pesticide residues in products and raw materials prior to their being placed on the market.



The National Grain and Feed Service is responsible for official control over animal feedstuffs in relation to quality issues, control over additives, trade and feeding for special purposes and the approval and registration of producers and traders.

#### National Council for Food Safety

The members of the National Council for Food Safety are the deputy ministers for health, agriculture and forests, economy and energy and one representative of the Bulgarian Association of the Food Processing and Beverage Industry and of the consumer protection associations.

#### The Council:

- · proposes changes to food legislation;
- proposes structural and administrative changes in the organization and structure of the official control activities;
- approves guidelines for implementation of good practice and of the HACCP system developed by the associations of food producers and traders in cooperation with the competent authorities; and
- implements the policy of official integrated control of food safety.

#### Council of Experts

The Council of Experts is responsible for risk assessment in the field of food safety. The members include representatives of scientific organizations related to food safety throughout the whole food chain.

#### Council for Coordination of Control Activities

To ensure efficient coordination and cooperation of the official control activities, the Council for Coordination of Control Activities has been established with the National Food Safety Council.

A national information system has operated since 1 January 2007. The system comprises central and regional structures of all the competent authorities involved in official control of food and feedstuffs.





Branch organizations of food producers and traders have, in cooperation with the competent authorities, developed guidelines for the implementation of good manufacturing practices and the HACCP system in food production and trade. The guidelines are approved by the National Council for Food Safety.

#### **National Food and Nutrition Plan**

The National Food and Nutrition Plan 2005–2010 was approved by the Council of Ministers. The objectives of the plan are improvement of the skills of administrative personnel and enhancement of the knowledge base on food safety. The achievement of those objectives will result in more efficient official control of food safety and a better decision-taking process.

#### **Resource generation**

Action has been and continues to be taken with regard to the training of employees carrying out official food control. The government authorities require sufficient human resources with appropriate skills and experience as well as laboratory equipment.

Under the Law on Foodstuffs food business operators are obliged to deliver training on food safety to the staff employed in food establishments.

#### **Delivery of services**

The National Diagnostic and Research Veterinary Institute in Sofia provides laboratory support to the National Veterinary Services and methodological guidance to laboratories involved in official control in the veterinary area.

The Central Laboratory for Veterinary Control and Ecology is the national reference laboratory with respect to control of residues and environmental pollutants. Sixteen regional laboratories carry out veterinary analysis of samples taken during official controls.

The National Centre of Public Health Protection is a research institute in the field of public health and food safety.



The Central Laboratory for Plant Quarantine is the official reference laboratory of the National Plant Protection Service.

Much attention is being paid to the quality performance of both sampling and analysing. The inspectors have been trained and will be trained and coached in good sampling methods.

*Ministry of Health.* Every year the Public Health Directorate prepares the annual monitoring plan for contaminants and pesticide residues in foods. An annual report is prepared of the results of the pesticide monitoring programme aimed at the European Commission, EU member states and all other interested parties.

Ministry of Agriculture and Forestry. The National Plant Protection Service formulates and accepts an annual workplan. Pesticide residues are monitored against the plant protection products used according to the records of the inspectors on the application of the pesticides.

The alignment of the monitoring programmes of the Ministry of Health and Ministry of Agriculture and Forestry is part of the strategy to harmonize food safety control in both ministries and the implementation of the European food law, laid down in the National Food and Nutrition Plan for 2005–2010.

#### Recommendations

Although the majority of the EU directives have been adopted in Bulgarian legislation, important EU legal measures are being adjusted or are under revision.

It is recommended that:

- a single authority should be established to carry out official food control;
- legislative and administrative measures should be taken to optimize the official control of foods;
- activities should be undertaken related to the reorganization and development of laboratory capacity, including accreditation of laboratories:
- effective market surveillance should be established;
- public administration and private operators should be prepared for the application of the EU principles of safe food production and marketing;



• the establishment of a National Food Safety Agency should be considered a successful long-term solution.

#### Specifically, the following is recommended:

- policy and institutional framework: the division of tasks and responsibilities between the different institutions and organizations needs to be defined in line with EU requirements, and the transfer of knowledge from the centre to the regions improved;
- strengthening of inspection and sampling: the instruments to enforce the law need to be made more effective;
- laboratory infrastructure and analytical methods: the current and future state of the infrastructure should be assessed, and training on sample preparation and interpretation of the data introduced;
- food business operators should have new responsibilities, to enable them to keep up with the implementation of new requirements;
- consumers should make an effort to ensure food safety, exercising their right for an informed choice of foods that comply with regulatory requirements.





## oatia

## Croatia

#### **General information**



#### **Background**

The reported number of epidemics and individual cases of foodborne infections and intoxications varies between 50 and 100 annually, while the number of registered cases ranges between 8000 and 10 500 annually. The most common causal organisms of epidemics are *Salmonellae* spp, *Staphylococcal* toxin and, among parasites, *Trichinella*. Salmonellosis account for 50% of all registered cases of foodborne diseases.

#### Stewardship

#### Food laws

The basic law on food safety is the Food Act (Official Gazette No. 46/07), which sets out a general overview and requirements on food and animal feed safety, laying down the obligations of the food business operators, the official control system, laboratory operation requirements, the obligation for food manufacturers to implement HACCP, establishment of the National Food Agency, crisis and emergency situation management, and the responsibilities of relevant authorities regarding food control. The Food Act is a comprehensive and complex law dealing with all the main items concerning food and animal feed safety and food quality. It is harmonized with EU Regulation 178/2002 (23).



#### Food control management

The Ministry of Agriculture, Fisheries and Rural Development has overall responsibility for food safety including animal health, animal welfare and plant health. This Ministry and the Ministry of Health and Social Welfare are both responsible for policy issues, adoption of regulations and inspection activities.

Under the Food Act 2007, the respective responsibilities of each Ministry are clearly defined: the Ministry of Agriculture has responsibility for food of animal origin and the Ministry of Health has responsibility for food of plant origin. The mandate of the National Food Agency relates mainly to risk assessment and risk communication.

#### Surveillance and monitoring

Surveillance of foodborne diseases is part of the Communicable Disease Information System. It is based on the Population Protection from Infectious Disease Act, under which the first contact physician is obliged to report an infectious disease or epidemic to the epidemiological service in charge. Data on the incidence of foodborne diseases and intoxications are collected by the public health sector and a bi-monthly report is published.

The Veterinary Institute is responsible for carrying out analyses of samples taken from animals, animal feed and food of animal origin.

The network of county institutes of public health is responsible for analyses of food for human consumption, water and human transmissible diseases. Furthermore, several private laboratories carry out analyses of food samples taken in the framework of HACCP plans and quality assurance samples implemented by the food industry.

Croatia has harmonized Directive 2003/99/EC of 17 November 2003 on the monitoring of zoonoses and zoonotic agents (24).

An increasingly important role for food safety systems is the delivery of information, education and advice to stakeholders across the farm-to-fork continuum. These activities include the provision of balanced factual information to consumers, of information packages and educational programmes for workers in the food industry, and of reference literature to extension workers in the agriculture and health sector. According to the 2007 Food Act, the National Food Agency should do this with a high level of transparency. For that purpose, relevant information held by the Agency needs to be available to the public as soon as possible.



# Croatia

#### **Resource generation**

The Food Act lays down that the Ministry of Agriculture and the National Food Agency are in charge of providing information to the Ministry of Health, food and animal feed business operators, consumers and other stakeholders concerning food and animal feed risks. Education and health promotion are also activities of the National Institute of Public Health. According to the Food Law, as from 2009 food business operators should implement HACCP principles in all establishments involved in the production of animal and non-animal food.

The main actors involved in the implementation of the health promotion policy are the Ministry of Health and the subordinate National Institute of Public Health, institutes of public health in each of the 21 counties and the Institutes of Occupational Health, Transfusion Medicine, Toxicology, Radiation Protection and Mental Health as well as of Health Insurance.

#### **Financing**

The public health system is financed by the State Health Insurance Institute and by the Ministry of Health at central level and through the county budgets.

Nutrition and food safety services are almost 100% financed from the market in laboratory services, part of which is also control of foodstuffs ordered by the sanitary inspection service. This control is financed from county budgets according to the Framework Plan of Food Inspection.

As regards the financing of veterinary activities linked with food safety, article 108 of the Veterinary Law (Official Gazette No. 41/07) states that the Minister prescribes fees for veterinary-sanitary checks and controls carried out by authorized veterinarians. The Law also stipulates that the inspections are carried out by state veterinary inspectors, county-city veterinary inspectors and border veterinary inspectors, who have the status of civil servants paid from the national budget.

#### **Delivery of services**

The Ministry of Agriculture is the central competent authority concerning food safety. At local level, veterinarians and sanitary inspectors carry out official controls of foodstuffs.



Three directorates in the Ministry of Agriculture are involved in food safety:

- the Veterinary Directorate is responsible for legislation, implementation and supervision in the veterinary field, including the safety and hygiene of food of animal origin;
- the Agricultural Directorate is responsible for the legislation, implementation and supervision of all activities in the field of plant health and plant protection products in agriculture and forestry;
- the Food Industry Directorate is responsible for drafting legislation on food quality, food labelling, geographical indications and designations of origin for foodstuffs.

In the Ministry of Health, only the Directorate for Sanitary Inspection is involved in food safety.

## Laboratory services: food monitoring and epidemiological data

The laboratory network is organized through the National Institute of Public Health and the Veterinary Institute dealing, respectively, with food of non-animal origin and food of animal origin. Each national centre coordinates a network of peripheral laboratories with different responsibilities.

The Veterinary Institute network is a state-governed system that operates in the fields of animal disease, veterinary public health and environment protection.

The National Institute of Public Health provides laboratory services for food safety purposes. It coordinates and supervises 21 regional institutes. The network of county institutes of public health covers the whole country.

#### **Recommendations and challenges**

The food safety system is almost completely harmonized with the EU *acquis communautaire*. Effective food control is, however, undermined by fragmented legislation, multiple jurisdictions and weaknesses in surveillance, monitoring and enforcement. Specific objectives should be:

- to complete harmonization with EU legislation;
- to establish the roles and functions of the competent authority on food safety issues, in line with EU requirements;
- to increase the effectiveness and efficiency of official control so that it is carried out uniformly and systematically at a required level;



- to improve the coordination of activities of the competent authority in carrying out official controls;
- to ensure the impartiality and effectiveness of inspection services;
- to support the development of professional training for the staff of all organizations involved in the food safety system;
- to optimize the laboratory network;
- to strengthen the system for surveillance of foodborne diseases;
- to ensure intensive communication with consumers and stakeholders in order to increase their awareness;
- to support the introduction of own-check systems based on HACCP principles and good hygienic practices.

Complete harmonization should be reached for the Food Law and for several other pieces of legislation related to food safety. Protection of health and promotion of consumer interests through safe food requires a high level of cooperation and coordination of the activities of all governmental and nongovernmental organizations involved within their specified areas of responsibility.

The competent authority should ensure that appropriate coordination procedures are in place and implemented effectively where different control units are involved in carrying out official controls and where such controls have been delegated from central to regional or local levels. Effective coordination, both vertical and horizontal, between the ministries and institutions involved in food safety control should, therefore, be assured.

Official controls of foodstuffs should be carried out according to control plans, which should be drafted on the basis of exhaustive and reliable data. A basic step in the organization of an efficient food control system is, therefore, the establishment of a data management system. An integrated data management system should be developed for record-keeping, collection, flow and analysis of data connected with official controls on foodstuffs. A coordinated national programme of food inspection should be drafted in a cooperative way. The national programme should include a coordinated monitoring plan and be carried out by inspectors from the Ministries of Agriculture and Health.

The administration and implementation of food laws require a qualified, trained, efficient and honest food inspection service. The reputation and integrity of the food control system depends, to a very large extent, on the integrity and skills of food inspectors. Inspection services should have the capacity and the power to enforce legislation and to take action in case



of irregularities. Food control agencies should prepare guidelines for carrying out food inspections and address the specific training needs of food inspectors.

An increasingly important role for food safety systems is the provision of balanced factual information to consumers as well as an educational programme for workers in the food industry and extension workers in the agriculture and health sectors. The competent authority should ensure a high level of transparency. The Food Safety Agency should develop and implement a communication strategy with all necessary elements for the proper information and education of consumers.



### **Montenegro**



#### **Background**

Circulatory and malignant diseases are the main cause of disease in Montenegro. The most frequent diseases are cerebrovascular and ischaemic heart diseases.

In 2006, 24% of reported cases of infectious disease were intestinal diseases. In the same year, a total of 2243 cases of infections were registered: 236 cases of salmonellosis, 20 cases of dysentery, 1768 cases of acute enterocolitis and 13 cases of zoonosis.

#### Legislative framework

The Ministry of Health and the Ministry of Agriculture, Forestry and Water Management have developed a strategy for food safety with the main objective of assuring the safety and quality of food and healthy nutrition through a legal framework.

To reduce the incidence of foodborne diseases the following activities are proposed:

- establishment of an integrated, holistic and sustainable food safety system and building of capacities;
- implementation of good hygiene and manufacturing practices and HACCP measures along the entire food chain;
- science-based risk assessment, management and communication;
- mutual cooperation between all involved in the food chain;
- epidemiological surveys related to foodborne diseases.



A number of food safety laws have been endorsed: the veterinary law and laws on surveillance, on the sanitary safety of foodstuffs, on sanitary inspection, on health protection, on market inspection, on quality control of agricultural products and foodstuffs in foreign trade, on standardization, on accreditation, on water, on plant protection, on measures to promote cattle-raising, on the protection of agricultural and forest plants species, on seed and reproductive material, on fishing, on olive groves, on wine and grapes and wine products, on organic agriculture, on genetically modified organisms, on protection from ionizing radiation, and on consumer protection.

The food safety law is harmonized with EU regulations but adapted to national conditions in the production of and trade in food and fodder. It follows a new approach aiming to:

- control food and fodder at all stages of production, processing, reprocessing, packing, repacking, storage and distribution following a farm-to-fork approach;
- introduce the three interlinked components of risk analysis, risk assessment and risk management as well as exchange of information on risk;
- introduce adequate internal systems for control of all practices during the production process (HACCP and good agricultural, hygiene and manufacturing practices);
- ensure training for everyone involved in handling food;
- conduct official controls (veterinary, sanitary and phytosanitary inspections) through monitoring, surveillance and sampling with previously designed workplans.

As laid down in the law, the National Council for the Assessment of Food Safety has been established for the purpose of continuous monitoring and assessment of food and animal feed safety with the aim of improving human and animal health, developing proposals for decision-making regarding professional matters, providing scientific and professional assistance in decision-making, and preparing regulations in the food and animal feed safety area.

Since 2007, the Veterinary Directorate has been applying the plan for a residue control system in animals, food of animal origin and animal feed. A regulation on residue monitoring in animals, food of animal origin and animal feed was passed in 2006. The regulation defines measures for the systematic control of pharmacologically active substances and their metabolites as well as residues of other substances in animals, food of animal origin and in animal feed.





The competent authorities in the area of food safety are the Ministry of Agriculture, Forestry and Water Management, the Ministry of Health, Labour and Social Care and the administrative bodies responsible for veterinary services and for phytosanitary services.

The Ministry of Agriculture and the Ministry of Health develop the annual control plan, the monitoring plan and the plan for managing crisis situations in the area of food safety at the primary production level. The Ministries are also responsible for the implementation of the law, for deciding upon complaints on decisions made in the first instance, and for communication with international organizations and responsible bodies in other countries.

The administrative body responsible for veterinary services provides the basis for the annual control plan, the monitoring plan and the plan for managing crisis situations related to food of animal origin and animal feed. It also issues permits to the entities dealing with food of animal origin and animal feed.

The administrative body responsible for phytosanitary services provides the basis for the annual control plan, the monitoring plan and the plan for managing crisis situations related to food of vegetable origin at the primary production level. It also issues permits for the entities dealing with foods of vegetable origin.

Food safety control is conducted through official inspections, while food monitoring is carried out by inspections, professional institutions and laboratories.

#### **Advisory bodies**

The National Commission for Food Safety was established in 2003 in the Ministry of Health. Its members are experts in the areas of health, veterinary medicine, agriculture, the economy and legislation as well as representatives of laboratories and medical scientific institutions.

The new law on food safety envisages the establishment of the National Council for the Control of Food Safety to carry out the following activities:

- analysis of conditions and achievements in the area of food safety;
- development of recommendations and professional and scientific support;



- proposal of measures to eliminate risks;
- provision of scientific input to laws and regulations;
- provision of scientific and professional input to analysis, development and implementation of measures for eliminating risks and other measures:
- establishment of cooperation with relevant public and administrative bodies and international institutions to foster the exchange of information:
- preparation of information for the public.

The Food Safety Council should further establish cooperative arrangements with ministries and the relevant public and administrative bodies.

# Supervision and monitoring of food safety

Foodborne diseases are registered as individual cases or as alimentary epidemics. Doctors are obliged to report infectious diseases. An official report of the disease is submitted by every health institution to the Disease Prevention Centre of the Public Health Institute.

Laboratory analysis of food is carried out at the order of the inspection bodies following requests from individuals or legal entities, as well as in accordance with sanitary and epidemiological indications.

The health regulation of food states that a minimum of 15 food products per 1000 citizens should be analysed annually.

#### Resources

Implementation of the laws in the area of food safety requires well-trained, qualified and professional inspection services. Previously, inspectors received basic training in the area of regulations as well as special professional training and education.

A number of seminars have been held as well as conferences on different professional areas (HACCP, good manufacturing and hygiene practices and sanitation standard operating procedures).

Food safety supervision is carried out by sanitary, veterinary and phytosanitary inspectors. Forty-two sanitary inspectors are currently



employed in the sanitary inspection services, which are also partly engaged in food safety activities. The veterinary inspection employs 20 inspectors and 14 inspectors work in phytosanitary supervision.



# **Financing**

Inspection services are financed from the budget and from payments from food businesses for laboratory and inspection services. Numerous projects for the development of official food control have been implemented with the support of the United States Agency for International Development and the European Agency for Reconstruction as well as with bilateral support (from Germany, Luxembourg and the Netherlands).

# Laboratory services

Laboratories for food and drinking water are organized within the Biotechnical Institute, the Public Health Institute, the Centre for Ecotoxicological Research and Dom Zdravija (primary health care centres) Bar. According to the rulebook on sanitary safety of drinking water, control of food safety can only be carried out by public health institutions.

In 2007, the Commission for Food Safety established expert commissions to evaluate requirements for all the existing laboratories.

A specialized veterinary laboratory was established in 2005.

Laboratories are obliged to obtain accreditation within two years. Authorized laboratories submit results to the Public Health Institute, which consolidates all data, publishes annual reports and establishes risk estimates for the health of the population.

#### Recommendations

The main objectives of the food safety system are to ensure that:

- all food produced in the country or imported complies with existing standards and recommendations:
- all food in circulation is produced according to the principles of good production and sanitary practice;
- consumers are protected from unsafe food in all cases.



One of the challenges for the food safety system is the implementation of European and international standards in national legislation. Active participation and cooperation at both regional and international level in the area of food safety is also important.

A focus needs to be placed on the education of inspectors for implementation of the envisaged procedures and of entities dealing with food.

Active participation in the Codex Alimentarius will facilitate the implementation of the standards and recommendations of the Codex in the national regulations dealing with food safety.



# Republic of Moldova



# **Background**

High rates of morbidity and mortality from noncommunicable diseases such as cardiovascular diseases, cancers and type 2 diabetes are still major challenges for the public health system.

During the period 2002–2006, the number of outbreaks of foodborne diseases registered annually ranged from 3 to 20, showing an increasing trend. The causative agent for more than 80% of the outbreaks was *Salmonella* spp, especially *S*. Enteritidis.

# **Stewardship**

The food safety system is currently being revised to comply with EU regulations on food safety.

According to the 2005 Law on Development and the Government Decision of 2006, all legislative acts and regulations, including those on food safety, must be harmonized with EU legislation.

In order to achieve these objectives a reorganization of the former food safety system is under way. This includes the harmonization, approval and implementation of legislation, implementation of official control conforming to the EU, reorganization of laboratories and harmonization of laboratory testing methods.



The food safety strategy is currently being revised and will be approved by the government.

The main objectives of the national food safety system are to:

- protect human health by reducing the risk of foodborne diseases;
- protect consumers' interests by preventing or reducing the sale of contaminated or adulterated food;
- add to economic development by gaining and keeping consumers' confidence in the food supply;
- provide a solid regulatory system for trade in food.

# Legislative framework

The Food Law was adopted in 2004 and reflects most of the provisions of Regulation (EC) No. 178/2002 (23). This law creates the legal framework for the implementation of EU legislation on foodstuffs. The scope of the food law is to protect human health and consumers' rights and facilitate trade. The law establishes general requirements for the safe production, distribution, import and export of foodstuffs, for traceability of foods, for risk assessment and for establishing a rapid alert system. It also defines the responsibilities of food business operators to produce and distribute food in good hygienic conditions, to introduce the HACCP control system, to label foodstuffs and to provide sufficient information to consumers.

Food safety is also the subject of the Law on Sanitary-Epidemiological Assurance of the Population (1993, rev. 2003), which includes mandatory hygiene training for food handlers, sanitary authorization for food establishments and sanitary certification of food.

The Law on Sanitary Veterinary Activity (2007) establishes requirements for animal health, prevention of diseases (including zoonoses), sanitary/veterinary control and inspections in the area of foodstuffs of animal origin, monitoring of veterinary residues and organization of activities in the field of veterinary medicine.

The Law on Identification and Registration of Animals (2006) is currently being implemented. The Law on Plant Protection (1999) establishes requirements for plant health and protection from diseases and pests. The Law on Protection of Consumers (2003) establishes requirements for the protection of consumers, for accurate information and for consumers' rights.





The Ministry of Health and the Ministry of Agriculture and Processed Industry are the competent authorities responsible for food safety, food quality regulations and nutrition. The State Sanitary Service under the Ministry of Health is responsible for food safety inspection and control activities for food of non-animal origin, and the State Veterinary Service under the Ministry of Agriculture likewise for food of animal origin. The Consumer Protection Department is being reorganized and will be responsible for the protection of consumers' rights. An interministerial coordination body has been approved by the government.

The national strategy to strengthen the food safety system has been revised and will be approved by the government. The aim of the strategy is to avoid fragmented legislation and vague distribution of responsibilities between ministries, food control services and food business operators, and in that way protect public health, prevent fraud and deception and facilitate trade.

The National Codex Committee was established in 2000 under the Ministry of Health with participation of experts from relevant ministries, the food industry, scientific institutions and consumers' organizations. The Committee is an advisory body to the government.

Other nominated bodies include the national Centre for Scientific and Applied Preventive Medicine, which is the contact point for the National Codex as well as the enquiry point for the World Trade Organization sanitary and phytosanitary measures.

# Surveillance and monitoring

Specialized preventive health services have been established for the 36 municipal and district Centres for Preventive Medicine at all stages of food production and distribution. The control of foodstuffs and materials in contact with them are carried out at all stages of the food chain by the State Sanitary-Epidemiological Service according to the Food Law and the Law on Sanitary-Epidemiological Assurance of the Population. The food control activities of raw materials of animal origin and of plants processing food of animal origin are conducted by the State Sanitary Veterinary Service.

The National Centre for Scientific and Applied Preventive Medicine is responsible for the collection and analysis of data on food safety and





nutritional status. A register for communicable diseases has been established and one for noncommunicable diseases is currently being established.

The National Centre for Scientific and Applied Preventive Medicine and the centres for preventive medicine are responsible for sanitary monitoring. Reports on sanitary-epidemiological activity are published annually. The monitoring programmes are financed by the government as part of the Sanitary-Epidemiological Service activity.

#### Control of foodborne diseases

There is a network for epidemiological surveillance and control of communicable diseases. Fifty-six forms of communicable disease are subject to mandatory reporting by primary and secondary health care and clinical centres to the district or municipal centre for preventive medicine within 24 hours. The centres for preventive medicine report monthly and annually to the National Centre for Scientific and Applied Preventive Medicine, which reports to the Ministry of Health.

In cases of transgression of the law, inspectors must levy punitive measures against the responsible persons. Such measures can be pecuniary or temporary closure of the establishment. Where there is damage to health, the Criminal Act will apply.

# Control of the import of foodstuffs

Control of foodstuffs of animal origin is the responsibility of the sanitary veterinary services. Veterinary inspectors are located at customs terminals and are responsible for the control of foodstuffs of animal origin. Importers of foodstuffs of animal origin are obliged to submit the customs declaration to the veterinary inspector.

There is no border control for food of non-animal origin. Although these foods can enter the country without border sanitary control, imported consignments must not be placed on the market without prior sanitary inspection, laboratory testing and issuing of sanitary certificates. These procedures are conducted by the municipal and district centre for preventive medicine and by the National Centre for Scientific and Applied Preventive Medicine.





The SEE Health Network of the Stability Pact has been providing a platform for the food safety professionals from the National Centre for Scientific and Applied Preventive Medicine to share and learn from the experience of neighbouring countries.

Both the laboratory staff and the inspectors from the State Sanitary Epidemiological Service have to be retrained in their specialties every five years. The National Centre for Scientific and Applied Preventive Medicine provides continuing training for inspectors and laboratory staff to facilitate the implementation of new legislation and new analytical methods. Most food inspectors are physicians who have specialized in food hygiene; microbiological laboratory staff are medical doctors who have specialized in microbiology and chemical laboratory staff are chemists. Veterinary inspectors are usually veterinarians.

The implementation of the new legislation requires additional training for food inspectors in food hygiene, good manufacturing and hygiene practices and HACCP procedures.

# **Delivery of services**

The Ministry of Health is responsible for drafting regulations on contaminants, pesticide residues, food additives, novel foods, foods for particular nutritional use, food supplements, water, health and nutrition claims, fortification and ionization.

Regulations on general requirements for food hygiene, official control of foodstuffs, veterinary residues and labelling are drafted by the Ministry of Health in cooperation with the Ministry of Agriculture.

#### Official control/inspection services

Organizations officially charged with control and inspection functions are:

- the State Sanitary-Epidemiological Service of the Ministry of Health, with food inspectors;
- the State Veterinary Service, with veterinary inspectors, and the Plant Protection Directorate of the Ministry of Agriculture and Processed Industry;



• the Consumer Protection Inspectorate (being reorganized to become part of the Ministry of Economy and Trade).

The Food Hygiene Division of the National Centre for Scientific and Applied Preventive Medicine is responsible for the development of food safety and nutrition legislation and its harmonization with EU and Codex Alimentarius requirements, for the training of food inspectors and for issuing reports to the Ministry of Health.

Inspection and surveillance of food safety are carried out by food inspectors from the municipal and district centres for preventive medicine. The inspection of food of animal origin is carried out by the State Veterinary Service according to the Law on Sanitary Veterinary Activity and the Food Law. The safety of foodstuffs is the responsibility of the producers.

Laboratory control is carried out by the following authorized and accredited institutions: the National Centre for Scientific and Applied Preventive Medicine, the Republican Centre for Veterinary Diagnostic, 36 centres for preventive medicine and 3 regional veterinary laboratories.

#### Promotion of food safety and nutrition

Information and education of the population about food safety and quality and healthy nutrition form part of the national education programmes. Food safety subjects have recently been included in the school curriculum as part of health education.

The Consumer Protection Inspectorate has the main responsibility for consumer education and information. The Ministries of Health and Agriculture are also responsible for education and information and communication of risks related to food safety. Consumer organizations could potentially be further involved in risk communication activities.

## Financing

The state budget provides for the regular activities and functions of the State Sanitary Epidemiological Service, State Sanitary Veterinary Service and Consumer Protection Department. These activities are planned on an annual basis and coordinated by the Ministry of Health for the State Sanitary Epidemiological Service and by the Ministry of Agriculture for the State Sanitary Veterinary Service.





According to the Law on Legislative Acts (2005) and the respective Government Decision, all legislative and normative acts must be harmonized with EU legislation.

The strategic objectives of the Ministry of Health in the area of food safety and public health protection should be met by:

- approval and implementation of the national food safety strategy, including harmonization with the EU and World Trade Organization and creation of a Food and Nutrition Council:
- implementation of the International Health Regulations (IHR) approved by the government in 2008;
- enhancement of regional and international cooperation in the area of food safety and public health;
- drafting, approval and implementation of the national strategy to combat obesity and the nutrition action plan.

To implement the food safety strategy, the State Sanitary Epidemiological Service should:

- harmonize national food legislation with EU legislation and WHO and FAO recommendations;
- implement an efficient system for monitoring programmes for contaminants, pesticide residues and food additives;
- introduce a rapid alert system;
- implement good hygiene practices and HACCP in food industry enterprises;
- improve the efficiency of the food inspection system.





# Romania



# **Background**

In 2002, the main noncommunicable diseases accounted for about 90% of deaths, external causes accounted for about 6% and communicable diseases accounted for about 1%.

A total of 1181 cases of foodborne diseases were notified in 1999 and 975 in 2000. The most frequently reported foodborne disease was staphylococcosis, with 37% of the cases notified in 1999 and 27% in 2000, followed by *E. coli* enteritis, comprising 24% of the cases notified in both years. In 1999, 95 outbreaks of foodborne infections and intoxications with 1218 cases were investigated. In 2000, 83 outbreaks involving 975 cases were examined.

# **Stewardship**

All legislation adopted is fully in accordance with EU requirements. The competent authorities for developing food legislation are the National Sanitary, Veterinary and Food Safety Authority, the Ministry of Public Health and the Ministry of Agriculture, Forestry and Rural Development. According to the schedule of the EU *acquis communautaire*, these bodies transpose Community legislation into norms harmonized with EC regulations. Once adopted, these norms are disseminated for the information of interested parties, for personnel training and for monitoring implementation.



The Ministry of Health (Ministry of Public Health until February 2009) is in charge of public health, dealing with monitoring the nutritional health status of the population and the main food safety topics. It organizes, coordinates and guides activities to assure the health of the population and works to prevent food hazards and foodborne diseases. The National Committee for Food and Nutrition has prepared a draft national action plan for food and nutrition. It is expected that some other institutions will participate in the implementation of the tasks defined within it.

The Ministry of Agriculture, Forestry and Rural Development plays a key role within the general framework of agricultural policy. Its responsibilities include the formulation of a national agricultural policy as well as planning, implementing, monitoring and evaluating agricultural development programmes in order to ensure food safety and security.

The National Sanitary, Veterinary and Food Safety Authority coordinates the development and enforcement of food safety legislation.

#### Food control

National plans for surveillance and control are developed every year which specify the activities of the General Veterinary Directorate and the Food Safety Directorate, including detailed information regarding inspections and controls to be carried out.

The Ministry of Health and its subordinate structures conduct inspections and surveillance activities based on the annual action plans of the Ministry of Health and of the Public Health and State Sanitary Inspectorate.

The frequency of inspections is defined in advance but adapted to EU requirements and potential risks. Food production establishments are controlled on a monthly basis, food in public institutions is controlled on a quarterly basis, shops are controlled biannually and markets annually.

The Ministry of Health and related authorities also carry out thematic inspections aimed at the prevention of foodborne diseases, other digestive diseases, food poisoning, etc.



# Surveillance and monitoring

The Ministry of Health coordinates the following regulations and control activities regarding products which have an impact on the health status of the population:

- development of new legislation on: additives, flavourings, food for special nutritional needs, food supplements, novel foods, irradiated food, contaminants, materials in contact with foodstuffs, official control of foodstuffs and food premises, sanitary approval/ notification/ authorization for food premises and mineral water quality;
- enforcement of laws and regulations through sanitary inspections and official control of food safety and quality, hygiene conditions of food premises and training in personal hygiene;
- surveillance of the quality of foodstuffs in relation to health status according to the ministerial order on health programmes within the national programme of public health;
- coordination of the action plan for food and nutrition;
- epidemiological surveillance and rapid reporting system for foodrelated outbreaks;
- surveillance of healthy behaviour and activities related to nutrition education and communication;
- ensuring budgetary resources for related activities.

The National Sanitary, Veterinary and Food Safety Authority regularly collects data on food control by sending official letters to the county sanitary/ veterinary and food safety authorities requesting information on certain subjects. The early warning system is used to notify epidemiological events as quickly as possible.

# Resource generation

Responsibilities related to the food chain are divided between the Ministries of Public Health and of Agriculture, Forestry and Rural Development and the National Sanitary, Veterinary and Food Safety Authority, including the training of staff.



# **Delivery of services**

The laboratories of the National Sanitary, Veterinary and Food Safety Authority are involved in the analysis of food contaminants and the control of hygienic and sanitary norms.

The 42 laboratories of the Ministry of Health, belonging to the county public health directorates, test for control of sanitary and hygienic norms. The Bucharest Public Health Directorate also has laboratories. All of them are financed through the state budget. Laboratories are adequately equipped and the accreditation process has already started.

The Ministry of Agriculture phytosanitary laboratories analyse pesticides in plants.

## Financing

The Ministries of Health and of Agriculture, Forestry and Rural Development are financed through the state budget. The National Sanitary, Veterinary and Food Safety Authority is funded through the state budget and external resources.

# Recommendations and challenges ahead

The food safety system will be adapted according to WHO policies on food safety and nutrition and will be based on the following objectives:

- the protection of public health by reducing the risk of foodborne illnesses;
- the protection of public health by reducing mislabelled, contaminated or adulterated foods;
- the development of an efficient system for trade in food.

These objectives will be integrated into a food safety system composed of food legislation, food control management, food inspection, laboratory services, risk assessment and information, education and communication.



Recommendations for strengthening the food control system are:

- to develop laboratories for efficient control of the food safety system;
- to improve collaboration and coordination between authorities involved in food safety;
- to strengthen the personnel training component;
- to train staff in new food safety standards (HACCP, traceability, etc.);
- to participate actively in national and international programmes;
- to inform and educate consumers in food and nutrition.





# Serbia



# **Background**

The highest burden of disease is attributable to noncommunicable diseases. Smoking, hypertension, physical inactivity and obesity are important risk factors, contributing to the disease burden with 5.5% of total years of life lost in males and 7% in females.

In 2006 the reported gastrointestinal diseases were due to bacterial infections (27%) including salmonellosis (9%).

# **Stewardship**

The Ministry of Health and the Ministry of Agriculture, Water Management and Forestry are both responsible for food safety. The food safety system is being reorganized to comply with EU regulations according to the acquis communautaire. In 2004, the parliament established the Government's Integration Office and adopted the Plan of Action for Approximation of Draft Laws with EU Regulations and a comprehensive plan to reform and upgrade the network of veterinary, phytosanitary and food safety laboratories.



The Ministries of Health and Agriculture have set up an interministerial task force which has developed a food safety strategy and a food law, both currently under revision. Under the 2003 Community Assistance for Reconstruction, Development and Stability in the Balkans programme, technical assistance was provided to the two ministries to strengthen the protection of food safety through advice regarding the alignment of Serbian legislation with EU laws, training for the veterinary and phytosanitary and sanitary inspectorates, and support for the preparation of procedures, manuals and guidance documents. Assistance was also provided to the Veterinary Directorate of the Ministry of Agriculture to prepare systems and procedures for the implementation of an EU-compatible bovine animal identification and registration system.

# Legislative framework

At present, food safety is regulated by the Law on Foodstuffs and Items of General Use. Laws and ordinances cover issues on the microbiological criteria for food safety, methods for microbiological food safety control, limits of pesticide residues, residues of mycotoxins, residues of veterinary drugs and other contaminant residues in food, provisions on irradiated foods, drinking-water quality, dietary products safety, consumer goods safety, including safety of materials in contact with food staff, competencies of laboratories and guidelines for food sampling.

The Law on Health Protection from Communicable Diseases includes provisions for surveillance of foodborne diseases. The Law on Medicines and Medical Devices includes provisions for pre-market approval for veterinary drugs.

The Law on Veterinary Affairs prescribes provisions on animal health protection and treatment of diseases. According to the Law on Plant Protection, a list of pesticides and fertilizers that are approved for marketing is updated annually.

The Ministry of Trade and Services is responsible for the implementation of the Law on Standardization, including two sub-laws on food labelling, several sub-laws on additives, the sub-law on mineral water quality and the sub-law on animal feed quality.

The Institute for Standardization is in charge of issuing standards. Most food quality standards are harmonized with the standards of the Codex Alimentarius Commission. The majority of the national standards of the



methods for laboratory examinations are harmonized with the International Organization for Standardization (ISO) and HACCP.

# Competent authorities performing official food control

The *Ministry of Health* is in charge of the prevention, surveillance and data collection of infectious diseases, including foodborne diseases, and sanitation in public facilities and facilities for the production and trading of food. Public health institutes are responsible for technical assistance to the Ministry of Health in the area of risk assessment.

The Ministry of Agriculture, Forestry and Water Management is responsible for animal and plant health protection and control; sanitation in facilities for animal husbandry and slaughter, production and introduction of genetically modified organisms into the environment; and official safety control of food of animal origin.

The *Ministry of Environmental Protection* is responsible for the surveillance, protection and pollution control of the environment; waste disposal; all affairs relating to standardization including international cooperation in this field; and accreditation of the laboratories for food safety control.

The *Ministry of Economic Affairs and Regional Development* is responsible for multilateral and bilateral affairs including with the World Trade Organization, the Council of Europe and EU Commission and regional cooperation.

The *Ministry of Trade and Services* is responsible for protecting the interests of consumers and checking the quality of all retail goods, including food.

The Government has established the Accreditation Body and the Institute for Standardization. The Accreditation Body is responsible for the accreditation of laboratories, including laboratories for food safety analysis, according to national standards which are fully harmonized with ISO. The Institute for Standardization is in charge of issuing standards that include food quality and methods for laboratory analysis of food safety.



#### **Data collection**

Surveillance of communicable diseases is the responsibility of the Institute of Public Health. The first physician to see a patient with an infectious disease is obliged to report this to the epidemiology service/department responsible for the area. The Institute of Public Health regularly monitors communicable diseases, including foodborne illnesses, through the network of regional public health institutes. The monitoring system is based on the WHO Surveillance Programme for Control of Foodborne Infections and Intoxications model.

Monitoring of zoonoses is also the responsibility of the Institute of Public Health.

#### Monitoring and surveillance

The Sanitary Inspection Section of the Ministry of Health, together with the Institute of Public Health as national coordinating centre, monitors food safety through the network of 23 regional institutes of public health. Public health institutes and their laboratories are in charge of collecting data related to food safety analysis. The results of safety control of specimen foods throughout production, processing, distribution and preparation are analysed annually in a report prepared by the Institute of Public Health. This report includes data on the microbiological and physico-chemical control of foodstuffs and consumer goods produced domestically as well as imported. Data on 22 foodstuffs are analysed on the basis of food category, group of pathogens or physico-chemical contaminants, domestic production or import and test results.

#### Information and communication on food safety

There are no established official task forces for communication and information exchange on a regular basis for food safety. Ad hoc working groups are established when necessary. The International Food Safety Authorities Network is an information network for the dissemination of important information about global food safety issues.

# Resource generation

The food safety control system involves various kinds of professional: medical doctors specializing in hygiene and epidemiology, veterinary doctors, agricultural, technological and environmental engineers, chemists



and pharmacists. Since 2000, sanitary inspectors for official food safety control have been trained on a regular basis. The main objectives of the educational programmes are related to procedures for official control of food safety and principles for HACCP implementation. Throughout these projects equipment for official inspection has been provided.

In 2006, the Ministry of Health issued guidelines and instructions for the official food safety inspectorate. The Community Assistance for Reconstruction, Development and Stability in the Balkans project supported many activities for the establishment of the laboratory network for official food safety control, specifically the reconstruction and adaptation of the 27 laboratories involved in the network. In recent years, several programmes on staff training for food and environment laboratory testing have been carried out by the Technical Assistance Information Exchange and the European Virtual Institute for Speciation Analysis. Relevant government departments are involved in educational programmes.

# **Financing**

The public health system is partly financed by the Institute of Health Insurance and partly by the Ministry of Health, according to the annual plans and programmes of the Institute of Public Health and the regional institutes of public health. Official control of food safety is conducted by the Sanitary, Veterinary and Phytosanitary Inspectorates. Nutrition and food safety services are almost completely financed by the market in laboratory services, of which part covers control of foodstuffs. According to the Law on Food and Consumer Goods Safety, the owners of food businesses have to cover the costs for laboratory tests that are part of official food safety control. Some laboratories receive some financial support through specific national programmes. The Ministry of Health also provides resources to the public health institutes for processing data concerned with food safety.

# **Human capacities**

Serbia has adopted the Second WHO European Action Plan for Food and Nutrition Policy. According to this, intersectoral cooperation and strengthening of capacities and networking is necessary in order to reduce the incidence of foodborne diseases. Serbia is also a member of the Central and East European Nutrition Network, which was initiated by the Food and Nutrition Programme of the United Nations University and the United Nations Standing Committee on Nutrition. One of the aims of the network is to organize activities to develop capacity.



# **Delivery of services**

#### Official control/inspection services

Foodstuffs are under sanitary supervision as well as veterinary, phytosanitary and quality control and, when imported, customs control. The Sanitary Inspection Section of the Ministry of Health carries out inspections related to food safety and security: sanitary and health inspection in the field of population protection from communicable and noncommunicable diseases; control of food safety; control of hygienically approved drinkingwater; sanitary inspection of workers that are subject to such supervision; inspection of plant, devices and equipment used for carrying out activities that require sanitary supervision; and sanitary inspection at the frontiers, to mention a few. The Section is also responsible for compiling the draft law and other regulations within its scope. It encompasses more specialized units, such as the Department for Monitoring the Situation in the Field of Sanitary Inspection, 18 departments for sanitary inspection in the regions and 5 departments for sanitary inspection at the frontiers.

#### **Laboratory services**

Food safety control is carried out in accredited laboratories and in laboratories approved for food safety control. The Institute of Public Health provides laboratory services for food safety purposes. Within the Institute's Centre for Hygiene and Environment, several laboratories carry out laboratory testing of food safety, including microbiological and chemical essay testing. The Institute coordinates and supervises 23 regional institutes of public health.

#### Recommendations

The strategic activities of the government are defined in line with the Multi-Annual Indicative Planning Document for the Republic of Serbia in 2007–2009, which aims to support it in fulfilling the political requirements of the stabilization and association process.

Inter- and intrasectoral communication and cooperation should be strengthened with respect to sustained and coherent development and ensuring that public health concerns are taken into account.



The food safety system needs to meet the following objectives:

- to complete harmonization with EU legislation, with special attention to fragmented legislation and overlapping responsibilities in the field of food safety;
- to increase the effectiveness and efficiency of official food safety control and inspection services;
- to improve the coordination of activities of authorities controlling food safety;
- to strengthen the surveillance system for foodborne diseases;
- to improve communication between authorities, consumers and stakeholders and thus to increase stakeholders' awareness;
- to ensure effective coordination, both vertically and horizontally, between the responsible ministries and institutions involved in food safety control;
- to establish an integrated data management system for record-keeping, collection and analysis of foodstuffs;
- to continue the accreditation process of national reference laboratories for food safety control and to improve the laboratory network;
- to support the development of professional training for the staff of all organizations involved in the food safety system;
- to provide adequate laboratory equipment in compliance with HACCP and ISO standards:
- to promote and ensure the implementation of HACCP standards in food production;
- to ensure a high level of transparency in making information available to the public







# The former Yugoslav Republic of Macedonia

# **Background**

Noncommunicable diseases cause the biggest burden of public health diseases expressed as disability-adjusted life-years (DALYs). In 2003, the total burden of diseases from circulatory and malignant diseases as well as diabetes was estimated as 65.7% DALYs from all causes (Table 1). Since 2000, the rates of communicable diseases have been decreasing overall, although the incidence of enterocolitis is increasing (Table 2).

**Table 1.** Burden of diseases, the former Yugoslav Republic of Macedonia. 2003

	Males		Females		Total	
Cause of death	Total DALYs	DALYs per 1000	Total DALYs	DALYs per 1000	Total DALYs	DALYs per 1000
Circulatory diseases (total)	43 461	42.9	40 827	40.3	84 288	41.6
Malignant diseases (total)	17 489	17.2	22 121	21.8	39 610	19.5
Diabetes mellitus (total)	3 950	3.9	5 875	5.8	9 824	4.8
All causes	123 461	121.4	102 923	101.2	226 384	111.3

Source: Kendrovski V, Gjorgjev D. Burden of diseases in the Republic of Macedonia, 2005 (unpublished document).



**Table 2.** No. of registered patients by communicable diseases, the former Yugoslav Republic of Macedonia, 2000–2007

Disease	2000	2001	2002	2003	2004	2005	2006	2007
Salmonellosis	374	574	304	412	413	212	201	282
Brucellosis	422	414	405	378	297	323	309	380
Acute toxic infection	1 787	1 574	1 623	1 472	1 407	1 115	1 350	1 251
Hepatitis A	1 170	408	567	383	220	706	526	254
Enterocolitis	9 484	8 072	8 308	7 673	7 842	6 851	9 073	10 809
Echinococcosis	23	12	6	12	12	17	19	19
Trichinellosis	0	1	0	0	0	0	0	0

Source: Republic Institute for Health Protection, 2008 (unpublished document).

# Stewardship

The food safety system has been reorganized to meet the obligations of EU and WTO membership. Planned revisions include the preparation of new legislation, implementation of the EU approach to official control and redefinition of the role of laboratories. Institutional responsibilities also need to be defined, to allow better coordination from farm to fork and to ensure efficiency, budgetary control and transparency so as to respond effectively and quickly to emerging food safety needs in the future.

The national food safety strategy was endorsed by the government in 2007. The principal objectives of the national food control system are:

- to protect public health by reducing the risk of foodborne illness;
- to protect consumers from unsafe, unwholesome, mislabelled or adulterated food; and
- to contribute to economic development by maintaining consumers' confidence in the food system and providing a sound regulatory foundation for domestic and international trade in food.

# Legislative framework

The adoption of regulations arising from the Law on the Safety of Foodstuffs and Products and Materials in Contact with Foodstuffs² and its amendments³ has created the conditions for the establishment of an integrated food control system in accordance with international standards and EU legislation in this field.

<sup>3</sup> Official Gazette of the Republic of Macedonia, 84/07.



<sup>2</sup> Official Gazette of the Republic of Macedonia, 54/02.

Food safety also relies on elements of veterinary and phytosanitary laws for effective coverage of all relevant issues that have an impact on human health through the food chain. New framework laws in both the veterinary and phytosanitary areas are currently being implemented.

The Law on Veterinary Public Health<sup>4</sup> defines the competences of the veterinary service as a whole, as well as the rights, duties and responsibilities of each of the service's structural segments.

The Plant Protection Directorate is an administrative authority included in the safety of foodstuffs of plant origin, pursuant to the Law on Plant Protection.<sup>5</sup>

The new Law for Agriculture and Rural Development<sup>6</sup> regulates planning and activities in agricultural policy and policy for rural development.

#### **Management of food control**

With regard to food control, the competent authorities are the Ministry of Health and the Ministry of Agriculture, Forestry and Water Economy. Within these ministries, the following bodies supervise the implementation of national regulations:

- the Macedonian Commission for Codex Alimentarius is responsible for reviewing the methods of food analysis and issues governed by the Macedonian Codex:
- the National Committee for Food and Nutrition has been established to ensure coordination for implementation of the Action Plan for Food and Nutrition:
- the Multisectoral National Committee for the Codex Alimentarius was established in 2001 with experts from relevant ministries, the food industry, trade sector, scientific institutions and consumer organizations.

The Republic Institute for Health Protection is the national Codex Alimentarius contact point and World Trade Organization sanitary and phytosanitary measures enquiry point. Since June 2007, the Institute has also served as the national contact point for International Health Regulations (IHR).



<sup>4</sup> Official Gazette of the Republic of Macedonia, 114/07.

<sup>5</sup> Official Gazette of the Republic of Macedonia, 25/98 and 06/00.

<sup>6</sup> Official Gazette of the Republic of Macedonia, 134/07.

#### Surveillance and monitoring

The control of foodstuffs and products and materials in contact with food is carried out at all stages of production and circulation by the Food Directorate and its food inspectors in accordance with the Law on the Safety of Foodstuffs and Products and Materials in Contact with Foodstuffs.

Public health monitoring has been established as a programme for preventive health protection, which is published in the *Official Gazette*. In accordance with the programme for preventive health care in 2008,<sup>8</sup> a total diet study of the country is being prepared.

#### Control of foodborne diseases and intoxications

There is a network for epidemiological surveillance and control over communicable diseases. Reports of incidents are sent from the local level to the Republic Institute for Health Care. These reports are digitally processed, analysed, prepared and submitted to the Ministry of Health.

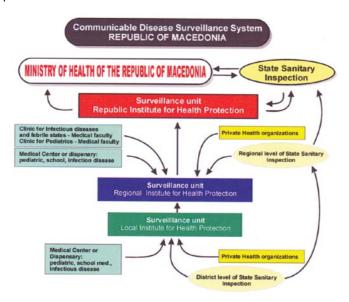
With the support of WHO, an early warning and response system was set up in 2003 and the ALERT project (the project for notifying disease outbreaks in the former Yugoslav Republic of Macedonia) is being implemented throughout the country.

<sup>8</sup> Official Gazette of the Republic of Macedonia, 146/07.



<sup>7</sup> Official Gazette of the Republic of Macedonia, 54/02 and 84/07.

Fig. 1. Foodborne disease surveillance system in the former Yugoslav Republic of Macedonia



#### **Control of imported foodstuffs**

In carrying out official food controls, inspectors for food imports are expected to prohibit the import or to order the harmless destruction of unwholesome or unsafe foodstuffs or articles and materials intended to come into contact with foodstuffs. The Food Directorate envisages that the work of the border regional unit will be reorganized in accordance with the establishment of inspection control on the future external borders of the EU.

# **Resource generation**

The director of the Food Directorate and the Head of the Department for Administration and Human Resources are responsible for the preparation and implementation of the professional training programme for food inspectors. Training in risk assessment, standard inspection procedure, effective food control and sampling have been organized by different projects and organizations, such as WHO and the United States Agency for





International Development. Food inspectors responsible for official control of foodstuffs have received basic education in HACCP. Three guidelines on HACCP and good hygiene practice were published in 2006 and distributed to the authorities and workers in that sector.

# **Delivery of services**

The Food Directorate and Veterinary Directorate signed a memorandum for collaboration in 2005. The competent institution for foodstuff safety and quality is the Food Directorate, which is responsible for general requirements for the safety of foodstuffs and special requirements for separate types of foodstuff. Inspection and supervision are carried out through regional departments of the Directorate. Inspection of foodstuffs of animal origin is carried out by the Veterinary Directorate.

Laboratory control is carried out in the Republic Institute for Health Protection, the Faculty of Veterinary Medicine and the 10 regional institutes for health protection.

# **Financing**

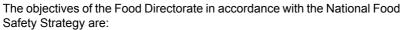
The Food Directorate is financed from the state budget, based on an annual plan provided by the Minister of Health. In accordance with the Law, one part of the budget is provided from clients' payments for services.

# Recommendations and challenges

The following activities are recommended to achieve the objectives of the Ministry of Health:

- preparation of the Second Action Plan for Food and Nutrition in 2008;
- implementation of the strategy to introduce EU legislation into national legislation;
- implementation of WTO food legislation;
- implementation of International Health Regulations (IHR);
- enhancement of regional and international cooperation;
- implementation of a human rights-based approach to food safety.





- harmonization of national food legislation with EU legislation;
- introduction of a quality management system;
- implementation of an efficient and sustainable system for controlling the production and distribution of foodstuffs and products in contact with food;
- implementation of an efficient and sustainable system to monitor programmes for food contaminants;
- implementation of an efficient and sustainable system for monitoring programmes for food additives;
- introduction of an efficient and sustainable rapid alert system;
- improvement of the efficiency of the foodstuffs inspection system and introduction of a standard inspection procedure;
- implementation of the minimum requirements of good manufacturing practice and of HACCP procedures in food production.







# Chapter 4. Conclusions and recommendations



During the implementation phases of Components One and Two of the project, the SEE Member States have been working on restructuring and reorganizing their FSNS according to the building blocks of a national food safety system and beyond (11).

### Food law and regulations

Food laws have traditionally been fragmented and focused on defining unsafe food items and punishing those responsible for transgressions. They have reflected a reactive and enforcement-oriented approach, whereas the most recent legislation, which aims to reduce the risk of foodborne illnesses, is preventive and holistic.

The most visible outcome of the first two components of the Project is that most SEE countries are developing, upgrading or reforming their food laws and regulations. Some countries have developed comprehensive food laws harmonized with EU regulation No. 852/2004 on the hygiene of foodstuffs (25). Most countries are currently working on integrating a preemptive approach into their legal system, rather than keeping the former post-factum, reactive and enforcement-oriented approach. All the countries have been updating their food standards and gradually replacing highly detailed standards with horizontal ones centred more on food safety than on definitions of and prescriptions for the end products. More countries are using risk-prevention approaches such as good agricultural, hygiene and manufacturing practices and HACCP. Other standards are being replaced by food labelling laws. In this process, WHO and FAO recommendations, CODEX and EU legislation have been used as guidelines. All these approaches need to be increasingly emphasized, incorporated into the legal framework and monitored by the food and nutrition inspectorates. In some, it could be laid down that whenever a business operator believes that food or animal feed does not comply with food safety requirements (which could be wider than those laid down in the law), it is his/her responsibility to withdraw it from the market and inform the authorities.

#### It is recommended that:

- risk assessment, risk management and risk communication should be further developed and used as a basis for legislation;
- consumers' organizations and voices should be organized, heard and become more influential; for this to happen, the FSNS should include provisions for consumers' rights and make all information accessible to them and to the media;
- legislation should address the traceability of food items and recall procedures;



- legislation should include clear provisions indicating that the primary responsibility for food safety and quality rests with producers and processors, and emphasizing that the responsible food handlers are accountable for placing only safe and truthfully presented food on the market:
- international obligations should be included in legislation, principally those dealing with trade as well as issues such as International Health Regulations (IHR).

The process of developing the legislation and regulations governing food should be transparent and ensure access to information.

# Food safety management

Effective food safety systems are based on policy and operational coordination at national level. For this, a leadership function and administrative structures with clearly defined accountability are needed.

Most SEE Member States have multiple agencies. The fragmented food chain and the interweaving of policy-making with inspection and enforcement could result in increased bureaucracy and a lack of coordination between different ministries, institutes of public health and local authorities, and create friction between the public and private sectors with a risk of conflicts of interests. Moreover, the multiple agency characteristics of the food control system result in overlapping, duplications, contradictions and lacunae.

Component 2 of the project promotes countries' engagement and provides support for separating the leadership role from the inspectorate and reorganizing both in line with a national integrated approach.

The core responsibilities of food safety management include (11):

- establishing regulatory measures
- monitoring the performance of the system
- facilitating continuous improvement
- providing overall policy guidance.

Management should assure risk management during outbreaks and emergencies and should work with risk communication specialists. Transparency and professionalism would build trust between the public and the risk managers.



# **Inspection services**

Food inspection should be carried out at critical points along the food-chain farm-to-fork. A skilled and integrated inspectorate that prioritizes its functions according to a risk-based approach is more effective and efficient.

In most SEE countries the food inspectorates are still divided among different ministries and different institutions, each following its own directives and orientations (the vertical approach) and with little coordination between them. In a few, food inspection is only one of the issues that they are expected to address. Thus a lack of efficiency, confusing messages and bureaucratic hurdles without a clear positive impact on public health are just a few of the problems.

Modern inspectorates should have the following responsibilities (11):

- evaluation and implementation of HACCP plans;
- inspection of premises for compliance with hygiene and other requirements of standards and regulations, and sampling of food along the food chain to establish compliance, to contribute data for risk assessment and to identify offenders;
- identification of food which is unfit for human consumption or deceptively marketed, and taking of the necessary remedial action;
- recognition, collection and transmission of evidence when the law is breached, and appearing in court to assist prosecution;
- encouragement of voluntary compliance, in particular by means of quality assurance procedures (e.g. good manufacturing practice);
- carrying out of inspection, sampling and certification of food for import/ export inspection purposes when so required;
- the conduct of risk-based audits in establishments working under safety assurance programmes such as HACCP.

An effective institutional framework with an appropriate legal base should be created and technical and financial resources allocated. The training of staff in food science and technology, and sufficient information about the hazards and risks involved, should be emphasized. A risk-based plan for inspection would make this even more efficient. With time, it might be possible to include nutritional issues requiring inspection in the workplan of the inspectorates (such as healthy school feeding programmes).



# Laboratory services: food monitoring and epidemiological data

Laboratories are an essential component of the FSNS. The food control management should establish norms for the laboratories and monitor their performance.

The food laboratories in many SEE countries are not monitored by the food control management. In most of the countries they are under different ministries or organizations and provide a mix of services to public health institutes, the inspectorate and private companies. For most, this is a source of income consequent upon a lack of funding from the state. Some countries have, however, reformed their laboratory services to ensure that they perform more efficiently and effectively.

In most of the countries, effective links have been established between food control agencies and the public health system, mainly through the institutes of public health, although this is only true for the part of the food chain under the jurisdiction of the ministries of health. In general, epidemiologists and public health staff are not integrated or connected to veterinary services and the laboratories of these two vertical systems are not integrated or linked. Hence, it is advisable that:

- a cadre of scientists should be assigned to advise on the collection, collation and evaluation of data from national and international sources:
- laboratories and staff who are involved in surveillance of foodborne diseases should collaborate and communicate with those involved in monitoring of food contamination (chemical and microbiological):
- laboratories should be adequately equipped to carry out necessary analytical techniques using the most up-to-date procedures and conforming to the highest international standards;
- laboratories should be redistributed, based on geographical distance, needs assessment, efficacy and efficiency; if more than one laboratory is needed, consideration should be given to apportioning the analytical work to achieve the most effective coverage of the food analyses to be performed;
- a central laboratory should be assigned that would be equipped for sophisticated and reference analyses;
- analytical quality assurance programmes should be introduced as well as the accreditation of the laboratories by an appropriate accreditation agency;



 participation in WHO and FAO projects, programmes and initiatives should be strengthened (e.g. Codex Alimentarius, the Joint FAO/WHO Expert Committee on Food Additives, International Health Regulations (IHR), total diet studies, WHO Global Salmonella Surrveillance programme and biomonitoring of human milk).

In one of the future components, the SEE Health Network, Food Safety and Nutrition Project, might opt to focus on this area and to consider sharing laboratory capacity on a regional rather than a national basis.

# Information, education, communication and training

An important role for the FSNS is the delivery of information, education and advice to stakeholders across the farm-to-table continuum. Rapid alert systems that connect public health, food/water and environment sectors are essentials to ensure efficient detection, investigaton and control of foodborne diseases, food emergencies, and proper tracing and recall of implicated foods. The important role of delivering information on food and nutrition issues to the public and to health workers is not always in the hands of the FSNS. However, more time, energy and skills should be devoted to this area. If the FSNS are to be involved, they will need to be able to deal with the provision of balanced and factual information to consumers and of information packages and educational programmes to key officials and food handlers.

The FSNS in SEE should continue to develop specific training needs for the food inspectors and laboratory analysts, investing in:

- training needs assessment and prioritization
- development of train-the-trainer programmes
- provision of reference literature to agricultural and health workers.

# Food safety and healthy diet

The Second WHO European Action Plan for Food and Nutrition 2007–2012 (20) recommends addressing the main public health challenges through action in six areas of nutrition, food safety and food security:

- 1. supporting a healthy start
- 2. ensuring a safe, healthy and sustainable food supply



- providing comprehensive information and education to consumers
- 4. promoting integrated action to address related determinants
- 5. strengthening nutrition and food safety in the health sector
- 6. monitoring and evaluation.

Most SEE countries have no integrated approach to food safety and nutrition. Activities in many countries are centred on food safety and nutrition information and are vertically implemented. Clearly, this type of activity is not able to target either the determinants and constraints that are part of the food supply system as well as socioeconomic status, cultural preferences and the effect of global and governmental policies. For this to happen, a broader policy for food and nutrition is needed, encompassing all the stakeholders (consumers, media, finance, economy, trade, food industry, agriculture, the social, medical, education and science sectors and so on). To promote food safety and nutrition, food and animal feed and their ingredients must be traceable throughout all stages of production, processing and distribution. EU legislation on labelling and work with European networks to improve dietary intake are important tools and fora that can be used. Intensive programmes for the promotion of health and nutrition through access to healthy foods in schools, hospitals and workplaces should be undertaken so as to promote healthy life styles and behaviour. Food should be tailored to promote health: the fat, salt and sugar content, for example, should be reduced. In order to create an increasing demand for food safety and healthy nutrition in the community, consumers' organizations should become more visible and strengthen their efforts in the area of consumer awareness in an objective and scientific manner. This should, in turn, enable governments to give the subject a higher priority and to allocate greater resources for improved protection measures.

# Funding national food and nutrition control systems

It is essential that governments are fully committed to the establishment of appropriate structures and development of policies which will deliver the optimum level of consumer protection. The funds and resources required for reorganizing and strengthening FSNS would normally be made available from the national government.



Not all SEE countries secure sufficient resources for FSNS. Cost recovery is practised in most of them. When this cannot be avoided, it is important to:

- manage this carefully as any costs passed directly onto the food handlers will be passed on to consumers as an indirect tax on food;
- manage it ethically without any conflict of interests.

# **Summary**

This publication highlights the achievements that the countries in the SEE health network have made, and the challenges they face, in the field of food safety and nutrition. As shown, Component One of the Project focused on action at national level, with the development of draft food safety strategies and food laws, revision of existing food laws, and the thinking through of concepts for the institutional frameworks for modern food safety control services. During Component Two, the country project managers have been working on establishing harmonized and integrated food safety and nutrition systems. Food national action plans have been adapted to national needs, and tailored models for harmonized and integrated food safety and nutrition have been developed. Also, during this phase, professionals have been trained to work using the HACCP tools and to deliver their knowledge to peers in their countries. International partnerships are currently being formed by joining WHO networks in the field of food safety and nutrition. In Component Three, work will be devoted to strengthening the issues and the countries that are still lagging behind, while moving forward to designing region-wide collaboration and training curricula for food safety and nutrition professionals and for consumers' organizations.

It is anticipated that the network will have a visible impact in moving towards more effective food safety services and healthy nutrition in this part of Europe, while providing a common framework for constructive and lasting regional cooperation.



#### References

- 1. Joint FAO/OIE/WHO Expert Workshop on Non-Human Antimicrobial Usage and Antimicrobial Resistance: First Workshop on Scientific Assessment, 1–5 December 2003, Geneva, World Health Organization, 2003.
- 2. The world health report 2004. Geneva, World Health Organization, 2004.
- 3. The world health report 2002. Geneva, World Health Organization, 2002.
- 4. Mackay J, Mensah G. Atlas of heart disease and stroke. Geneva, World Health Organization, 2004
- Branca F, Nikogosian H, Lobstein T, eds. The challenge of obesity in the WHO European Region and the strategies for response. Summary. Copenhagen, WHO Regional Office for Europe, 2007 (http://www.euro.who.int/document/e89858.pdf, accessed 8 August 2008).
- 6. European health for all database [online database]. Copenhagen, WHO Regional Office for Europe, 2004 (http://data.euro.who.int/hfadb, accessed 8 August 2008).
- Cattaneo A et al. Protection, promotion and support of breast-feeding in Europe: current situation. Public Health Nutrition. 2005. 8:39

  46.
- 8. Vos E. EU Food safety regulation in the aftermath of the BSE Crisis. *Journal of Consumer Policy*, 2000, 23(3):227–255.
- 9. Vincent K. 'Mad cows and Eurocrats' Community responses to the BSE crisis. *European Law Journal*, 2004, 10(5):499–517 (http://ssrn.com/abstract=591445, accessed 8 August 2008).
- 10. Global strategy for food safety. Geneva, World Health Organization, 2002 (http://whqlibdoc.who.int/publications/9241545747.pdf, accessed 8 August 2008).
- 11. Strengthening national food control systmes: a quick guide to assess capcity building needs. WHO/FAO Joint publication, 2007 (ftp://ftp.fao.org/docrep/fao/009/a0601e/a0601e00.pdf, accessed 8 August 2008).
- 12. Collins LK, Hill FM. Leveraging organizational transformation through incremental and radical approaches to change: three case studies. *Total Quality Management & Business Excellence*, 1998, 9(4):30–34.
- 13. Fligstein N, Mara-Drita I. How to make a market: reflections on the attempt to create a single market in the European Union. *American Journal of Sociology*, 1996, 102:1–33.
- 14. Assuring food safety and quality: guidelines for strengthening national food control systems. Food and Agriculture Organization of the United Nations and World Health Organization (http://www. who.int/foodsafety/publications/capacity/en/Englsih\_Guidelines\_Food\_control.pdf, accessed 24 October 2008).
- 15. The Second FAO/WHO Global Forum of Food Safety Regulators Building effective food safety systems. The Joint Secretariat of the FAO/WHO Global Food of Food Safety Regulators, FAO, Rome 2004.
- 16. White paper on food safety. Brussels, Commission of the European Communities, 12 January 2000 (COM (1999) 719 final) (http://ec.europa.eu/dgs/health\_consumer/library/pub/pub06\_en.pdf, accessed 8 August 2008).



- 17. Global strategy on diet, physical activity and health. Geneva, World Health Organization, 2004 (http://whqlibdoc.who.int/publications/2004/9241592222\_eng.pdf, accessed 8 August 2008).
- 18. European Charter on Counteracting Obesity. Copenhagen, WHO Regional Office for Europe, 2006 (document EUR/06/5062700/8) (http://www.euro.who.int/Document/E89567.pdf, accessed 8 August 2008).
- 19. White paper on a strategy for Europe on nutrition, overweight and obesity related health issues. Brussels, Commission of the European Communities, 2007 (COM(2007) 279 final) (http://ec.europa.eu/health/ph\_determinants/life\_style/nutrition/documents/nutrition\_wp\_en.pdf, accessed 8 August 2008).
- 20. Second WHO European Action Plan for Food and Nutrition Policy 2007–2012. Copenhagen, WHO Regional Office for Europe, 2007 (http://www.euro.who.int/document/nut/action\_plan\_leaflet\_final\_eng.pdf, accessed 8 August 2008).
- 21. Comparative analysis of food and nutrition policies in the WHO European Region.

  Copenhagen, WHO Regional Office for Europe, 2006 (http://www.euro.who.int/Document/NUT/Instanbul conf %20ebd02.pdf, accessed 8 August 2008).
- 22. The world health report 2000. Geneva, World Health Organization, 2000.
- 23. Regulation (EC) No. 178/2002 of the European Parliament and of the Council of 28 January 2002 laying down the general principles and requirements of food law, establishing the European Food Safety Authority and laying down procedures in matters of food safety. Official Journal of the European Communities, 1 January 2002, L 31/1 (http://eur-lex.europa.eu/pri/en/oj/dat/2002/I 031/1 03120020201en00010024.pdf, accessed 9 August 2008).
- 24. Directive 2003/99/EC of 17 November 2003 on the monitoring of zoonoses and zoonotic agents, amending Council Decision 90/424/EEC and repealing Council Directive 92/117/EEC. Official Journal of the European Communities, 12 December 2003, L 325:31 (http://www.wetgiw.gov.pl/ old/inspekcja\_weterynaryjna/zwalczanie\_chor/Aktyprawne/03\_99\_dyr/en.pdf, accessed 11 August 2008).
- 25. Regulation (EC) No. 852/2004 of the European Parliament and of the Council of 29 April 2004 on the hygiene of foodstuffs. *Official Journal of the European Union*, 30 April 2004, L 139/1 (http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2004:139:0001:0054:EN:PDF, accessed 3 November 2008).



# Annex 1. The Dubrovnik Pledge



# The Dubrovnik Pledge

### Meeting the Health Needs of Vulnerable Populations in South East Europe

We the Ministers of Health of South East Europe (SEE), gathered here today at the Health Ministers' Forum for Regional Health Development Action in South East Europe recognize the damaging effects on health of recent wars, continuing unrest and conflict, as well as the economic hardships faced by the populations of SEE during their countries' transition to market economies. We accept the challenge to play a key role in strengthening the fundamental human rights of our societies and of vulnerable populations and individuals within them to effective health care, social wellbeing and human development, in line with the principles of the World Health Organization and the Council of Europe.

#### Focus on specific strategies

We, the Ministers of Health of: Albania; Bosnia and Herzegovina; Bulgaria; Croatia; Romania and the former Yugoslav Republic of Macedonia; and the Federal Secretary for Labour, Health and Social Welfare of Yugoslavia commit ourselves through government action to the following goals.

WE WILL WORK IN PARTNERSHIP with relevant national and international bodies and organizations: to ensure equity, health gain and a better quality of life and health care (including reduced inequalities in its infrastructure and balanced primary and secondary services and public health interventions for the populations of SEE); and to collaborate on issues of common concern, including the harmonization of policies, legislation and information systems, institutional capacity building and networking to build an infrastructure to pursue regional goals and future European integration.

# WE WILL MEET THE HEALTH NEEDS OF VULNERABLE POPULATIONS IN SEE, mobilizing human and financial resources to the extent possible 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; and
- establish regional networks and systems for the collection and exchange of social and health information.

#### Plea to international stakeholders

The Health Ministers' Forum for Regional Health Development Action in South East Europe recognizes the need for assistance from international stakeholders to achieve the goals of this Pledge.

WE LOOK TO the Council of Europe and the World Health Organization for strategic guidance in developing mechanisms to coordinate partnership with national and international agencies in the fulfilment of this Pledge and request their support in organizing a first meeting to monitor and evaluate the progress achieved by such partnership.



WE ASK THAT the international community assist, within the framework of the Stability Pact for South East Europe, by providing resources to support the implementation of the above-mentioned urgent action areas for health reconstruction and development. In so doing, we commit ourselves to transparency and dedication in the implementation and reporting of all project activities and their results.

WE REQUEST that the World Health Organization Regional Office for Europe and the Council of Europe report to their governing bodies about this Pledge and the progress achieved towards its goals.

#### **SIGNATORIES**

Albania	Romania
Ms Ruki Kondaj  Secretary General of the Ministry of Health for The Minister of Health of Albania	Dr Daniela Bartos Minister of Health of Romania
Bosnia and Herzegovina	The former Yugoslav Republic of Macedonia
Dr Zelko Misanovic Minister of Health of the Federation of Bosnia and Herzegovina  Dr Milorad Balaban Minister of Health of the Republika Srpska  Bulgaria  Dr Bojidar Finkov Minister of Health of Bulgaria	Professor Petar Milosevski Minister of Health of the former Yugoslav Republic of Macedonia  Yugoslavia  Dr Miodrag Kovac Federal Secretary for Labour, Health and Social Welfare of Yugoslavia
Croatia	For the Secretariat of the Meeting
Dr Ana Stavljenic Rukavina Minister of Health of Croatia	Mrs Gabriella Battaini-Dragoni Director General for Social Cohesion Council of Europe  Dr Marc Danzon Regional Director for Europe World Health Organization

Dubrovnik, 2 September 2001



РЕПУБЛИКА МАКЕДОНИЈА МИНИСТЕРСТВО ЗА ЗДРАВСТВО "50 Дивизија" б.б., 1 000 СКОПЈЕ телефон: + 389 2 113 429 телефакс: + 389 2 113 014



REPUBLIC OF MACEDONIA MINISTRY OF HEALTH "50 Divizija" b.b., 1 000 SKOPJE

phone: + 389 2 113 429 fax: + 389 2 113 014

Ref. No 09-8858//

Date: 18.10.2001

TO: Dr. Marc Danzon Regional Director World Health Organization Copenhagen, Denmark

Subject: Notification for the Dubrovnik Pledge

Dear Sir.

Ministry of Health of the Republic of Macedonia within the framework of the Stability Pact for South East Europe, supports the implementation of the Dubrovnik Pledge containing urgent action areas for health reconstruction and development. We commit ourselves to transparency and dedication in the implementation and reporting of all project activities and their results.

Yours truly,



Copy to:

Cabinet of Minister, Ministry of Foreign Affairs, Skopje, Republic of Macedonia
Dr. Marija Kisman, WHO Liaison Officer, WHO Liaison Office Skopje, R. Macedonia
Ms. Raquel Ragragio, UNDP Representaive, UNDP Office, 3 Dimitric Cupovski, 1000 Skopje, R. Macedonia



# Annex 2. The Skopje Pledge









# Second Health Ministers' Forum

With the special participation of ministers of finance

## Health and Economic Development in South-eastern Europe in the 21st Century Skopje, The former Yugoslav Republic of Macedonia, 25–26 November 2005



# The Skopje Pledge

We, the Ministers of Health of Albania, Bosnia and Herzegovina, Bulgaria, Croatia, the Republic of Moldova, Romania, Serbia and Montenegro, and The former Yugoslav Republic of Macedonia, have gathered for the Second Health Ministers' Forum for Health and Economic Development in Southeastern Europe in Skopje. The former Yugoslav Republic of Macedonia on 25 and 26 November 2005 with the purpose of discussing progress achieved towards the goals of the Dubrovnik Pledge.

#### Current situation

We acknowledge the importance of the role of the South-eastern Europe (SEE) Health Network – in partnership with the World Health Organization (WHO) Regional Office for Europe and the Council of Europe, supported by the Council of Europe Development Bank and in the framework of the Initiative for Social Cohesion of the Stability Pact for South Eastern Europe – in meeting the challenges related to the health needs of vulnerable populations in the SEE region.

#### We:

- recognize that health, as an integral determinant of social cohesion, and an investment and a major factor in development, is essential to lasting peace, stability and economic progress;
- recognize that regional cooperation in the field of health is a vital part of the European Union (EU) integration process;
- recognize that health and the health systems in the SEE region are facing important challenges;
- recognize that there is a need to continue to develop, strengthen and support work being carried out in this area in general and, in particular, to improve the access of vulnerable populations in society to the health services of the region;
- recognize that there is a need to promote the exchange of experiences within the area of health systems and health system reform, at international, regional and national levels;
- express our gratitude for the support received from international and bilateral institutions and governments, and particularly the important analytical and policy development work of the Council of Europe, the Council of Europe Development Bank and the WHO Regional Office for Europe.



# Looking forward

Having reviewed the concerted action taken over the last five years in health development as a bridge to reconciliation, peace and development, we accept the challenge of reforming the health systems in the region and thus contributing to its economic development in the twenty-first century.

#### WE UNANIMOUSLY AGREE:

- to continue to cooperate beyond 2005 on the initiative: "Health development action for south-eastern Europe: the South-Eastern Europe Health Network" (hereinafter referred to as the SEE Health Network);
- to further consolidate the SEE Health Network alliance at regional level, according to its agreed Statutes, which form an integral part of this Pledge (Annex);
- to assume full responsibility for regional cooperation on health and health-related projects;
- to continue regional cooperation and concerted efforts to improve the health systems of the countries in the SEE region in order to secure universal access to high-quality public health services for the populations of the region, based on sustainable financing;
- to confirm our commitment to implement action in the thematic areas identified in the Dubrovnik Pledge and, in doing so, to develop and apply the common criteria and procedures outlined in the Statutes;
- to demonstrate the economic potential of health as a means to increase productivity and decrease public expenditure on illness: a healthy population works better and produces more;
- to strengthen regional collaboration and coordination on preparedness planning for emerging priorities and to put this forward as a priority for action within the SEE Health Network;
- to advocate that national governments could put health higher on the political agenda and ensure that health is reflected in the policies and strategies of other sectors;
- to empower health professionals to ensure a sustainable long-term improvement in public health.

**WE COMMIT OURSELVES** to transparency and dedication in the mplementation and reporting of all project activities and their results.



## Plea to international stakeholders

The Second Health Ministers' Forum on Health and Economic Development in South-eastern Europe recognizes the need for ssistance from international stakeholders to achieve the goals of this Pledge.

**WE LOOK TO** the Council of Europe and the WHO Regional Office for Europe for strategic guidance in further consolidating regional cooperation through concerted action to improve the health systems in the region and provide its populations with universal access to high quality health services. We also request their support in the further implementation of action related to the thematic areas outlined in the Dubrovnik Pledge and in fulfilling the commitments of this Pledge.

WE ASK THAT the international community assist by providing resources to support the implementation of urgent action for health and economic development in the above-mentioned areas. In doing so, we commit ourselves to transparency and dedication in the implementation and reporting of all project activities and their results, in accordance with the Statutes of the SEE Health Network

**WE REQUEST THAT** the WHO Regional Office for Europe and the Council of Europe report to their governing bodies on this Pledge and the progress achieved towards its goals.



The Skopje Pledge Page 5

#### **SIGNATORIES**

#### Ministers of Health of the SEE Member States

**ALBANIA** 

Dr Maksim Cikuli Minister of Health

BULGARIA Professor Radoslav Gaydarski Minister of Health

REPUBLIC OF MOLDOVA

Professor Ion/Ababii Minister of Health and/Social Protection

SERBIA and MONTENEGRO Professor Miodrag Pavlicic
Minister of Health of the Republic of Montenegro Mulle

**BOSNIA AND HERZEGOVINA** 

Mr Zlatko Horvat Secretary Ministry of Civil Affairs

CROATIA

Professor Neven Ljubicic Minister of Health and Social Welfare

ROMANIA

Mr Vasile Leca, Charge d'Affaires a.i., Embassy of Romania to The former Yugoslav Republic of Macedonia

V. La

THE FORMER YUGOSLAV REPUBLIC OF **MACEDONIA** 

Professor Vladimir Dimov Minister of Health

#### Witnessed in the presence of: **Partner States**

BELGIUM

Ms Leen Meulenbergs Advisor, Ministry of Health

NORWAY

Mr Wegard Harsvik Ministry of Health and Care Services State Secretary

GREECE

Dr Pavlos Theodorakis, SEE National Health Coordinator, Ministry of Health and Social Solidarity H has

SLOVENIA

H.E. Mr Marjan Siftar, Ambassador of Slovenia to The former Yugoslav Republic of Macedonia

**SWITZERLAND** Mr Romain Darbellay, Deputy Chief of Mission, Embassy of Switzerland to The former Yugoslay Republic of Macedonia

**Partner Organizations** 

Council of Europe

Mr Alexander Vladychenko

Director General, Directorate General III-Social Cohesion

Social Cohesion Initiative of the Stability Pact for South Eastern Europe

Mr Laurent Guye, Director of Working Table II-Economy

Council of Europe Development Bank

Mr Krzysztof, Ners Vice-Gove

WHO Regional Office for Europe Dr Marc Danzon

Regional Director for Europe

Skopje, The former Yugoslav Republic of Macedonia, 26 November 2005





#### REPUBLIC OF MACEDONIA MINISTRY OF HEALTH

No.07-12460 25.11.2005 Skopje

Skopje, 25 November 2005

Der Mr. Danzon,

I hereby acknowledge receipt of your letter from November, 2005 referring to the Skopje Pledge.

I have the honour to confirm that the above-mentioned Skopje Pledge is acceptable. Therefore, please consider this letter as equivalent to signature of the Skopje Pledge on the part of the Republic of Macedonia.

With regard to the provisional reference to my country as used in the Skopje Pledge I hereby reiterate that its constitutional name is the Republic of Macedonia.

Accept, Sir, the assurances of my highest consideration.

MINISTER OF HEALTH Prof. Vladimir DIMOV, MD, PhD

TO:Mr. Marc Danzon, M.D. Regional Director Regional Office for Europe Of the World Health Organisation

COPENHAGEN





# Annex 3.

Regional Project Manager and country project managers



# **Regional Project Manager**

SERBIA Dr. Aleksandra Makaj

# **Country project managers**

#### **ALBANIA**

Dr. Marita Afezolli (Selfo) Ministry of Health

#### **BOSNIA AND HERZEGOVINA**

**Dr. Aida Filipovic-Hadziomeragic** *Institute of Public Health Federation of Bosnia and Herzegovina* 

**Dr. Dragana Stojisavljevic**Public Health Institute
Republica Srpska

#### **BULGARIA**

**Dr. Svetlana Tcherkezova** *Ministry of Health* 

#### **CROATIA**

**Dr. Krunoslav Capak**Croatian Institute of Public Health



#### **MOLDOVA**

#### Dr.Ana Volneanschi

National Scientific Centre of Preventive Medicine

#### **MONTENEGRO**

## Dr. Danica Masanovic

Ministry of Health

#### **ROMANIA**

#### Dr. Daniela Nuta

Institute of Public Health

#### **SERBIA**

## Dr. Jelena Gudelj Rakic

Institute of Public Health of Serbia "Dr Milan Jovanovic Batut"

#### THE FORMER YUGOSLAV REPUBLIC OF MACEDONIA

#### Dr. Vladimir Kendrovski

Republic Institute for Health Protection







#### **SEE Health Network Secretariat:**

Dr Piotr Mierzewski

Council of Europe
Head, Health Division;
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#### SOUTH EASTERN EUROPE HEALTH NETWORK

"Health Development Action for South eastern Europe"

#### Members:

Albania Bosnia and Herzegovina Bulgaria Croatia The Republic of Moldova Montenegro Romania Serbia The Former Yugoslav Republic of Macedonia

#### Donors and Neighbours:

Belgium France Greece Hungary Italy Norway Slovenia Sweden Switzerland

#### **Organizations:**

Council of Europe Council of Europe Development Bank WHO Regional Office for Europe