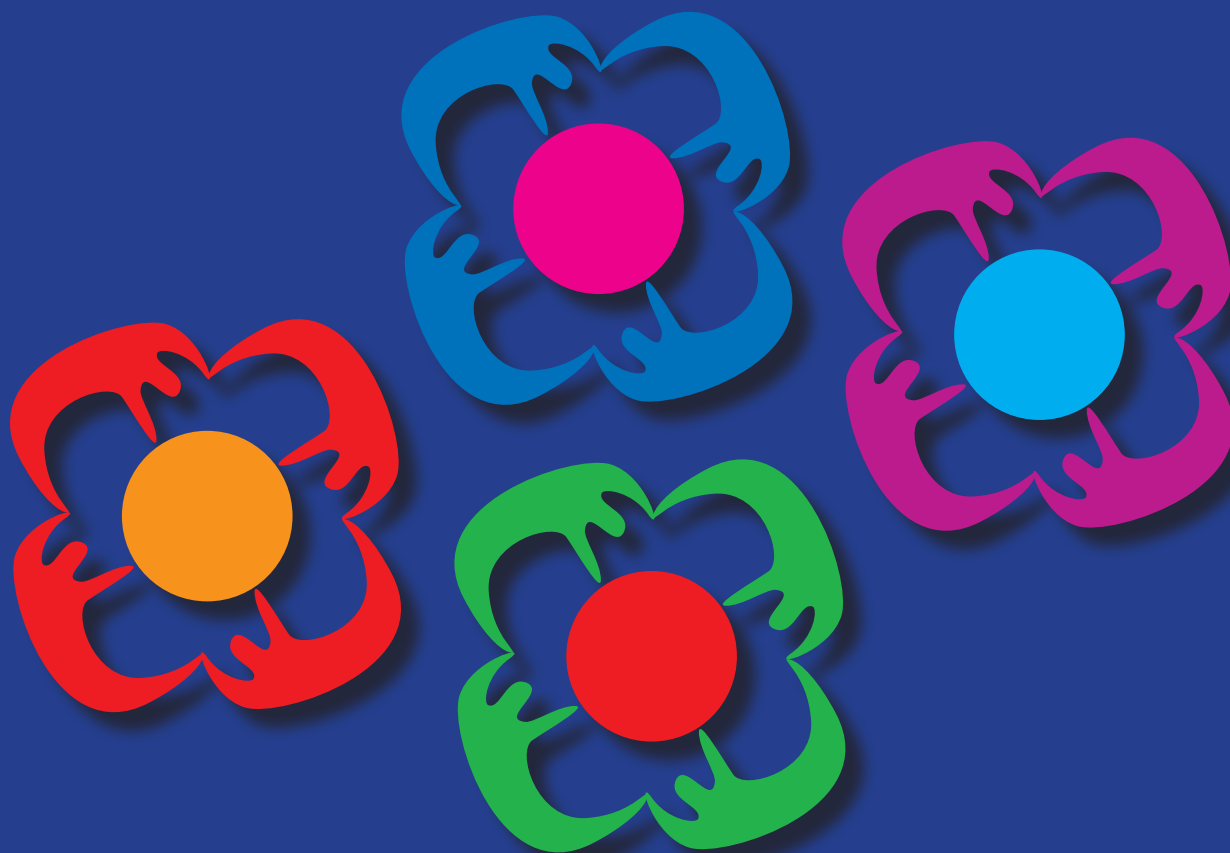


# Country capacity for noncommunicable disease prevention and control in the WHO European Region

Preliminary report



Prepared by Jill L. Farrington  
and Sylvie Stachenko



World Health  
Organization

REGIONAL OFFICE FOR Europe



**World Health  
Organization**

REGIONAL OFFICE FOR **Europe**

# Country capacity for noncommunicable disease prevention and control in the WHO European Region

*Preliminary report*

**By: Jill L. Farrington and Sylvie Stachenko**

## ABSTRACT

The lifestyles epidemic is the epidemic of the 21st century. Within the WHO European Region, the impact of the major noncommunicable diseases (NCDs) is alarming. As part of the implementation of the Action Plan of WHO's Global Strategy for the Prevention and Control of Noncommunicable Diseases, WHO conducted a global survey of country capacity for the prevention and control of NCDs during 2009–2010. The survey was designed to measure the capacity of individual countries to respond to the prevention and control of NCDs. Specific areas of assessment include: public health infrastructure for NCDs; the status of policies, strategies and action plans relevant to NCDs; health information systems, surveillance and surveys; the capacity of health care systems for early detection, treatment and care of NCDs; and health promotion, partnerships and collaboration. This publication reports on selected survey results for the countries in the WHO European Region to inform the sixtieth session of the WHO Regional Committee for Europe.

### Keywords

CHRONIC DISEASE – prevention and control  
NATIONAL HEALTH PROGRAMS  
PREVENTIVE HEALTH SERVICES – organization and administration  
DATA COLLECTION  
EUROPE

Text editing: David Breuer

Address requests about publications of the WHO Regional Office for Europe to:

Publications  
WHO Regional Office for Europe  
Scherfigsvej 8  
DK-2100 Copenhagen Ø, Denmark

Alternatively, complete an online request form for documentation, health information, or for permission to quote or translate, on the Regional Office web site (<http://www.euro.who.int/pubrequest>).

© World Health Organization 2010

All rights reserved. The Regional Office for Europe of the World Health Organization welcomes requests for permission to reproduce or translate its publications, in part or in full.

The designations employed and the presentation of the material in this publication do not imply the expression of any opinion whatsoever on the part of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted lines on maps represent approximate border lines for which there may not yet be full agreement.

The mention of specific companies or of certain manufacturers' products does not imply that they are endorsed or recommended by the World Health Organization in preference to others of a similar nature that are not mentioned. Errors and omissions excepted, the names of proprietary products are distinguished by initial capital letters.

All reasonable precautions have been taken by the World Health Organization to verify the information contained in this publication. However, the published material is being distributed without warranty of any kind, either express or implied. The responsibility for the interpretation and use of the material lies with the reader. In no event shall the World Health Organization be liable for damages arising from its use. The views expressed by authors, editors, or expert groups do not necessarily represent the decisions or the stated policy of the World Health Organization.

## CONTENTS

	<i>Page</i>
Abbreviations.....	iv
Foreword.....	iv
Acknowledgements.....	vi
Executive summary .....	vii
1. Introduction.....	1
2. Methods .....	2
2.1. Instrument design .....	2
2.2. Data collection .....	2
2.3. Data input, cleaning and analysis.....	3
3. Results .....	4
3.1. Response rate.....	4
3.2. Public health infrastructure.....	5
3.3. Policies, strategies and action plans .....	8
3.4. Health information systems .....	12
3.5. Capacity of health care systems.....	13
3.6. Partnerships and health promotion .....	16
4. Discussion.....	19
4.1. Limitations.....	19
4.2. Discussion of findings .....	20
5. Conclusions.....	23
6. References.....	24
Annex 1. Countries responding to the survey by country group .....	27
Annex 2. Response to the global surveys in 2000–2001 and 2009–2010 among WHO European Member States .....	29

## Abbreviations

CARK	central Asian republics and Kazakhstan (five countries): Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan
CIS	Commonwealth of Independent States <sup>1</sup> (11 countries): Armenia, Azerbaijan, Belarus, Kazakhstan, Kyrgyzstan, Republic of Moldova, Russian Federation, Tajikistan, Turkmenistan, Ukraine and Uzbekistan
CSEC	central and south-eastern European countries: Albania, Bosnia and Herzegovina, Bulgaria, Croatia, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Montenegro, Poland, Romania, Serbia, Slovakia, Slovenia and the former Yugoslav Republic of Macedonia
EU	European Union
NCD	noncommunicable disease
WHO	World Health Organization

---

<sup>1</sup> When the data were collected, the CIS consisted of (12 countries): Armenia, Azerbaijan, Belarus, Georgia, Kazakhstan, Kyrgyzstan, the Republic of Moldova, the Russian Federation, Tajikistan, Turkmenistan, Ukraine and Uzbekistan.

## Foreword

The “lifestyles epidemic” is the epidemic of the 21st century. Noncommunicable diseases (NCDs) claim more than 35 million lives each year globally. Within the WHO European Region, the major NCDs – cardiovascular diseases, cancer, chronic obstructive pulmonary disease and diabetes – have alarming effects. NCDs account for nearly 86% of deaths and 77% of the disease burden and impose a great burden on socioeconomic development. NCDs, especially cardiovascular diseases and injuries, underlie the widening health gaps between and within countries. People with low income are disproportionately affected. Further, the uptake of harmful behaviour differs between the sexes, threatening progress made in gender equality. Tobacco use among men and boys is steadily declining while sharply increasing among women and girls. Added to this are the growing problems of obesity and harmful use of alcohol: more than one third of disease burden among young men is attributable to alcohol. In response to the growing burden of NCDs, WHO developed the Global Strategy for the Prevention and Control of Noncommunicable Diseases in 2000. In 2006, WHO launched the European Strategy for the Prevention and Control of Noncommunicable Diseases. The World Health Assembly endorsed a six-year Action Plan for the Global Strategy in 2008. As part of implementing this Action Plan, WHO conducted this third global survey of country capacity for the prevention and control of NCDs, which was completed very successfully in the European Region.

The results of this survey show that countries demonstrate a steady and increasing commitment to addressing NCDs, with an increase in dedicated units within health ministries and collaborative mechanisms in place in most countries. Policies on NCDs have been enhanced during the past decade, and countries have strongly focused on tobacco control supported by surveillance systems. However, the battle against the NCD epidemic is far from over. The challenge of translating policies into effective action requires adequate capacity for implementation and strong political will. Only half the policies were operational, and even fewer had dedicated budgets. This complex field of action requires the involvement of many sectors and all levels of government. The WHO Regional Office for Europe will soon embark on developing an action plan on NCDs for the European Region to accelerate action, promote partnerships and address the special needs of Member States across the Region. I am convinced that the results and conclusions of this survey will provide valuable information and insight in our efforts to tackle NCDs.

Zsuzsanna Jakab  
WHO Regional Director for Europe

## Acknowledgements

Key people in Member States and colleagues at WHO country offices, regional offices and headquarters as well as WHO collaborating centres strongly supported this survey of country capacity.

Ala Alwan, Assistant Director-General, Noncommunicable Diseases and Mental Health, WHO led the work on the survey globally. His role included: high-level advocacy for the project on a survey of country capacity in noncommunicable diseases; communicating with regional directors regarding implementation of the project in the WHO regions; and monitoring collaboration between relevant departments in the Noncommunicable Diseases and Mental Health Cluster and ensuring technical contributions. Under his guidance, Leanne Riley, Team Leader, Surveillance, Department of Chronic Diseases and Health Promotion, WHO headquarters coordinated the implementation of the survey and validation of results and contributed to sections of the report for the European Region. Melanie Cowan collated the global data and prepared statistical tables for further analysis by the Region.

Within the WHO Regional Office for Europe, Agis D. Tsouros, Unit Head, Noncommunicable Diseases and Environment, coordinated the work. Rula Nabil Khoury, Regional Surveillance Officer and Eleni Antoniadou, Technical Focal Point and coordinator of the regional capacity survey liaised with noncommunicable disease counterparts and WHO country offices to support the completion of the questionnaire and to validate data received against other sources.

Noncommunicable disease counterparts designated by health ministries were responsible for completing questionnaires. WHO country offices assisted greatly in acquiring the data in a timely manner. For each respondent country, a person with authority on behalf of the health ministry was identified to check and formally clear the questionnaire.

Sylvie Stachenko, Dean, School of Public Health, University of Alberta and Director, WHO Collaborating Centre on Noncommunicable Disease Policy contributed to the main report and carried out the comparative analysis of country groups and trend analysis, assisted by Katerina Maximova, Assistant Professor, School of Public Health, University of Alberta. Jill L. Farrington, Honorary Senior Lecturer, Nuffield Centre for International Health and Development, Leeds (WHO Collaborating Centre for Research and Development in Health Systems Strengthening) coordinated and wrote the report.

## Executive summary

This publication reports on the results of the global survey of country capacity for the prevention and control of noncommunicable diseases (NCDs) within the countries in the WHO European Region. This is a preliminary report using data available by 31 July 2010. Further validation may update findings for the global report of the survey to be published in early 2011. The WHO European Region had a 94% response rate (50 of 53 countries). This was the third survey of its kind since 2000–2001, which allowed trend analysis for selected questions for a subset of 40 countries that had responded to the first and third surveys. This report focuses on selected survey questions.

The percentage of countries having a unit, branch or department within health ministries responsible for NCDs increased during the past decade. In 2010, four fifths of countries overall have such a unit, branch or department. This most frequently covers primary prevention, health promotion and surveillance. CARICOM countries were least likely to have such a unit, branch or department. Where this existed in CIS countries, it was more likely to cover health care and treatment.

National institutes supported NCD work in various ways, most frequently in information management and least likely for treatment guidelines and policy research.

Slightly more than two thirds of countries had a policy or strategy on NCDs, although it was operational in only half of countries and had a dedicated budget for implementation in only one third. Nordic and EU countries were most likely to have a policy or strategy on NCDs, but this did not guarantee it being operational or having a dedicated budget.

Policies, strategies or action plans on NCDs were slightly more likely to address risk factors than diseases. Of the risk factors, poor nutrition and diet were most frequently addressed and physical inactivity least frequently; of the diseases, cardiovascular diseases and cancer were most frequent and chronic respiratory disease least frequent. Poor diet and physical inactivity were equally well covered by EU countries, whereas other country groups generally covered physical inactivity less well.

About one third of countries targeted a specific population group within their policy or strategy, with pregnant women least well covered. The most popular setting for implementing NCD policy interventions was health care facilities.

Policies on cardiovascular diseases, cancer, diabetes and tobacco control increased from 2000–2001 to 2009–2010: cancer was the most popular disease category, and the presence of tobacco control plans doubled during the decade.

Almost all countries included mortality and morbidity from NCDs in the national reporting system, but only about two thirds of countries included risk factors. The most common disease registry is a cancer registry, present in more than nine tenths of countries; cancer is also the disease most frequently covered in the NCD surveillance system.

Risk factors are well represented in national and provincial surveys, tobacco use most often. Six risk factors were present in surveys, and all had increased during the decade, with tobacco use most frequently included and inclusion of unhealthy diet showing the greatest increase over time. Cancer and diabetes were equally well covered in the NCD surveillance systems of all Nordic countries, whereas other country groups usually covered diabetes less well.



Overall, NCDs were well integrated into the health care system, with countries most frequently reporting primary prevention and health promotion, risk factor detection and disease management. Self-care and surveillance were least frequently reported.

The most common guidelines, protocols or standards reported were for diabetes and hypertension, with lifestyle risk factors less common, especially alcohol control and physical inactivity. In general, these were poorly implemented, however, with at best less than one third of countries fully implementing guidelines on diabetes. All the Nordic countries had alcohol control guidelines, whereas these were one of the least common topics for other country groups. CARK and CIS countries fully implemented virtually no guidelines.

Overall, about nine tenths of countries reported the availability of funding for NCD activities, and central government revenue is the main source of funding for just over half the countries. Health insurance (either social insurance or private health insurance) covers services and treatment for NCDs in four fifths of the countries, and the percentage of the population covered is high in the countries with such coverage. Nevertheless, country groups differ greatly, with health insurance covering virtually no services and treatment for NCDs in CIS and CARK countries. Countries have mixed sources of funding for lifestyle support services. Comparative analysis revealed striking differences between groups regarding funding for NCDs and health promotion. International donors are often the main source of funding for NCD activities in CIS and CARK countries. Health insurance covered NCDs all the Nordic, EU and CSEC countries versus no CARK countries and only one fifth of CIS countries. For lifestyle support services, CARK countries mainly relied on charitable organizations; for CIS and CARK countries, state insurance and health insurance were virtually absent.

Almost all countries reported established partnerships and collaborations, with cross-departmental or ministerial committees the most frequently reported mechanism. Other government ministries, academe and nongovernmental organizations were the most commonly reported key stakeholders. The private sector featured as a key stakeholder in partnerships for the Nordic and EU countries.

About half the countries had continual and ongoing collaboration between the health promotion, public health and health care sectors. A range of health promotion initiatives had been implemented; among projects with focusing on NCDs, the most frequent were health-promoting schools and least frequent workplace wellness. In summary, despite some progress across the Region, there is huge scope for strengthening work on preventing and controlling NCDs in the European Region.

## 1. Introduction

As part of the implementation of the 2008–2013 Action Plan for the Global Strategy for the Prevention and Control of Noncommunicable Diseases (WHO, 2008), WHO conducted a global survey of country capacity for the prevention and control of noncommunicable diseases (NCD) during 2009–2010. The survey was designed to measure the capacity of individual countries to respond to NCDs. Specific areas of assessment include: public health infrastructure for NCDs; the status of policies, strategies, and action plans relevant to NCDs; health information systems, surveillance and surveys; the capacity of health care systems for early detection, treatment and care of NCDs; and health promotion, partnerships and collaboration.

This publication reports on selected survey results for the countries in the WHO European Region to inform the sixtieth session of the WHO Regional Committee for Europe. As such, it draws on the data available by 31 July 2010 to highlight areas of specific interest to the Region. A global report on the main survey, to be published in early 2011, may update findings as further data validation occurs. As this is the third such survey since 2000, some limited trend analysis and comparative analysis of country groups has been possible in addition to descriptive analysis of results.

After the methods are described, the results are presented in turn for each area of assessment. Then these are discussed in detail and in context of relevant policy initiatives within the Region and in the light of findings from elsewhere. The concluding section draws out the main themes of note for the Region as it seeks to measure progress since endorsing the European Strategy for the Prevention and Control of Noncommunicable Diseases in 2006 (WHO Regional Office for Europe, 2006a) and the focus on tackling tobacco use, harmful use of alcohol, unhealthy diet, physical inactivity and obesity within the Region (WHO Regional Office for Europe, 2002, 2006b, 2006c, 2007a, 2007b). It will also contribute to measuring the mid-term progress of the Action Plan of WHO's Global Strategy for the Prevention and Control of Noncommunicable Diseases.

## **2. Methods**

### **2.1. Instrument design**

The survey aimed to measure the capacity of individual countries to respond to NCDs in five areas: public health infrastructure for NCDs; the status of policies, strategies, action plans and programmes relevant to NCDs; health information systems, surveillance and surveys; the capacity of health care systems for early detection, treatment and care of NCDs; and health promotion, partnerships and collaboration.

A global set of questions reflecting these five areas of assessment was developed from February to November 2009) through a series of technical meetings and consultations at all levels of WHO. A survey methodologist was commissioned to review the questions and to provide technical guidance on methodological issues. Three of the six WHO regional offices held consultation meetings with their NCD focal points to discuss the development of the tool and the process for implementation and to review the draft questions.

The instrument also included a set of detailed instructions to complete the survey tool, and a glossary helped to define the terms used in the survey instrument for consistency and cross-country comparison. The instrument was translated into French, Russian and Spanish to facilitate completion by the countries. The final questions and instructions were administered through the use of an electronic Excel questionnaire tool (Microsoft Corporation), which was completed by a team of professionals at the country level to ensure that a comprehensive response was compiled. Within the WHO European Region, some questions of particular interest to the Region were added to the questionnaire.

### **2.2. Data collection**

The field work was carried out from November 2009 until May 2010 in collaboration with WHO regional and country offices. Within the WHO European Region, only WHO Member States were included.

Within the WHO European Region, WHO national counterparts for NCDs assigned by health ministries have existed since 2005. The WHO Regional Office for Europe contacted these focal points with an introductory e-mail about the questionnaire, its importance and purpose and a brief outline of the timeline and expectations. They were asked to confirm whether they would be able to assist in collecting the information for their country and, if not, to refer the WHO team to the appropriate person.

WHO attempted to streamline the data collection as much as possible with other parallel data collection. The Regional Office team informed the NCD focal point if the country had contributed to other relevant WHO surveys focused on individual NCD risk factors including poor nutrition, obesity, alcohol, physical inactivity or tobacco – and provided the contact details of relevant focal points to facilitate consistency and coordination. The WHO country offices worked with the Regional Office team in following up on nonrespondents. The NCD focal points were requested to provide a copy of their national action plan or strategy if they indicated in their completed questionnaires that these existed. For validating country data, NCD focal points were also asked to identify a person with authority on behalf of the health ministry to clear the responses to the questionnaire, and a WHO sign-off form was sent to each country for the purpose of formally clearing the questionnaire.

Once completed questionnaires were received, the WHO teams at headquarters and in the Regional Office compared information received with that already held to triangulate material. When discrepancies were found, NCD focal points were contacted with proposed alternatives. If confirmation of acceptance of the proposal was received, then the response within the completed questionnaire was updated; if no confirmation was received, data remained as entered by the NCD focal point. This process is still ongoing.

### **2.3. Data input, cleaning and analysis**

Data were extracted from the country questionnaires and compiled into regional and global databases. WHO headquarters cleaned the data. Stata 10 software was used for writing the statistical programs for the global analysis (Stata Corporation, 2007).

For the European Region, where applicable, analyses were carried out for the CARK, CSEC, EU, CIS and Nordic country groups. These groups were selected according to those used in the European Health for All database and *The European health report* (WHO Regional Office for Europe, 2009, 2010a) and according to considerations of homogeneity, geographical and cultural proximity and maximizing the number of countries included in comparative analysis. Nevertheless, some groups overlap in membership (most notably EU and CSEC), groups differ in size and six countries, Andorra, Israel, Monaco, San Marino, Switzerland and Turkey, are not included in any subregional analysis. EU membership reflects current status. Annex 1 lists the countries included in the various country groups. Stata 11 software was used for writing all the statistical programs for this analysis (Stata Corporation, 2009).

The substantial changes in the questionnaires within the three surveys carried out by WHO in collaboration with WHO regional and country offices in 2000–2001 (Alwan et al., 2001), 2005–2006 (WHO, 2007) and 2009–2010 means that few questions can be tracked consistently between surveys. The first and third questionnaires are probably most similar. Trends in national capacity for NCD monitoring and surveillance were therefore derived by comparing the results from the 2009–2010 survey with the 2000–2001 survey (Alwan et al., 2001). To track progress, the analysis is based on 40 countries participating in the two surveys.

### 3. Results

#### 3.1. Response rate

Tables 1 and 2 present the response rate to the survey globally in 2009–2010 and within the WHO European Region.

In total, 196 countries completed the questionnaire: 184 of these are WHO Member States. The overall response rate for WHO Member States was 95% (184 respondents of 193 Member States). The regional response rates varied from 83% to 100%. Table 1 shows the numbers of Member States responding in the WHO regions.

Table 1. Response rates of Member States to the global survey by WHO region

WHO region	Number of WHO Member States	Returned	
		<i>n</i>	%
African Region	46	46	100
Region of the Americas	35	29	83
Eastern Mediterranean Region	21	21	100
European Region	53	50	94
South-East Asia Region	11	11	100
Western Pacific Region	27	27	100
<b>Total</b>	<b>193</b>	<b>184</b>	<b>95</b>

By 31 July 2010, the response rate for the European Region was 94%. A high proportion of returned questionnaires (43 of 50) were complete. Both the response rate and completion rate may improve during subsequent months.

Table 2 indicates the response rate by the country groups studied in the comparative analysis. Annex 1 lists the specific countries responding for each country group.

Table 2. Response rates to the global survey among WHO European Member States by country group

Country group	Number of WHO Member States	Returned	
		<i>n</i>	%
CARK	5	3	60%
CSEC	16	16	100%
EU	27	26	96%
CIS	12	10	83%
Nordic	5	5	100%
<b>European Region</b>	<b>53</b>	<b>50</b>	<b>94%</b>

The response rate for the 2000–2001 survey was 80% in the European Region, and the 94% response rate for the 2009–2010 survey was a considerable improvement. Forty countries responded to both the 2000–2001 and the 2009–2010 surveys (Annex 2).

## 3.2. Public health infrastructure

### 3.2.1. A unit responsible for NCDs

Table 3 reports on the availability of a national unit (or branch or department) responsible for NCDs in the health ministry; this refers to an administrative agency for disease prevention and control or for preventing and controlling NCDs within the health ministry.

Eighty per cent of countries have a unit, branch or department within the health ministry that is responsible for NCDs. There has been some improvement in the past decade, from 60% in 2000–2001 to 75% in 2009–2010 among the countries responding to both surveys.

Among country groups, a lower proportion of CARK countries have a department responsible for NCDs.

Table 3. Percentage of countries having a unit, branch or department for preventing and controlling NCDs within the health ministry by country group, 2009–2010

Country group	%
European Region	80
CARK	67
CSEC	81
EU	85
CIS	80
Nordic	80

About three quarters of countries responding have an NCD unit, branch or department within the health ministry with responsibility for planning, coordinating implementation, monitoring and evaluation (Table 4). Among country groups, this is less frequent for the CARK countries, and the CIS countries are least likely to have such a unit carrying out monitoring and evaluation. In general, the Nordic countries are most likely to have such a unit with all three functions.

The area most frequently covered by such an NCD unit is primary prevention and health promotion, closely followed by surveillance; health care and treatment are the areas least frequently covered. This is also the case for the EU countries, Nordic countries and CSEC countries. In contrast, the NCD unit in the CIS countries more frequently covers health care and treatment. Whether early detection and screening is part of the NCD unit varied between country groups, and there is no clear pattern.

Table 4. Percentage of countries with a health ministry unit, branch or department that covers the following responsibilities and areas, 2009–2010

	European Region	CARK	CSEC	EU	CIS	Nordic
<i>Responsibility</i>						
Planning	74	67	81	77	70	80
Coordinating implementation	74	67	75	81	70	80
Monitoring and evaluation	72	67	81	77	60	80
<i>Area</i>						
Primary prevention and health promotion	72	67	81	77	60	80
Early detection and screening	68	67	75	77	60	60
Health care and treatment	58	67	56	69	70	60
Surveillance	70	67	75	77	60	80

### 3.2.2. Funding

Tables 5 and 6 report on the availability and sources of funding for NCD activities and functions in countries.

Of the countries responding, 92% (46 of 50) stated that funding is available to support treatment and control of NCDs and surveillance, monitoring and evaluation of NCDs. There is no pattern in terms of country groups for the absence of such funding. All CARK and CSEC countries reported having such funding available, whereas a lower proportion of Nordic countries did so. CIS countries are most likely to have funding for treatment and control, which might fit with this being the most frequently reported area of responsibility for the NCD unit.

Table 5. Percentage of countries having a specific budget for the implementation of NCD activities and functions, 2009–2010

Activities and functions	European Region	CARK	CSEC	EU	CIS	Nordic
Treatment and control	92	100	100	92	90	80
Disease prevention and health promotion	88	100	100	92	70	80
Surveillance, monitoring and evaluation	92	100	100	96	80	80

For the vast majority of countries responding (90%), central government revenue is the main source of funding for NCD activities.

Overall, 44% of respondents (20 countries) reported that international donors are a major funding source for NCD work. For the CIS and CARK countries, international donors are as important a funding source as central government revenue; international donors are least important in the EU and Nordic countries.

Table 6. Percentage of countries reporting the following major sources of funding for NCD activities and functions, 2009–2010

Source of funding	European Region	CARK	CSEC	EU	CIS	Nordic
Central government revenue	90	100	100	92	90	80
Health insurance	60	33	94	65	40	40
International donors	44	100	63	31	90	0
Earmarked taxes on alcohol, tobacco, etc.	32	67	38	38	30	40

### 3.2.3. Supporting institutes involved with NCDs

Table 7 presents the support health ministries receive from national bodies, institutes or reference centres for preventing and controlling NCDs. A national institute refers to a national public health institute or a specialized institute for preventing and controlling NCDs.

These bodies are supportive in various ways, most frequently in relation to information management, with 94% of the respondents overall and all the country groups reporting this most frequently. Policy research and treatment or treatment guidelines are the least frequent areas of support overall (84% respondents for each). The frequency is similarly low for the EU and CSEC countries. For the CIS countries, scientific research and surveillance are the areas least reported as receiving support from these national bodies.

Table 7. Percentage of countries reporting the following functions of national bodies, institutes or reference centers that support the health ministry in preventing and controlling NCDs, 2009–2010

Function	European Region	CARK	CSEC	EU	CIS	Nordic
Scientific research	86	100	94	96	80	80
Policy research	84	100	87	85	90	80
Facilitate or coordinate development of policy	90	100	100	96	90	80
Surveillance of NCDs or risk factors	92	100	100	96	80	100
Information management	94	100	100	96	100	100
Treatment or treatment guidelines	84	100	94	85	90	100
Training relevant to preventing and controlling NCDs	90	100	100	92	90	80
Health promotion and disease prevention services	86	100	100	92	80	60



### 3.3. Policies, strategies and action plans

#### 3.3.1. Presence of policies, strategies and action plans

Tables 8–13 and Fig. 1 focus on the presence and nature of integrated policies, strategies and action plans for NCDs. A policy is defined as a specific official decision or set of decisions designed to carry out a course of action endorsed by a political body, including a set of goals, priorities and main directions for attaining these goals. The policy document may include a strategy to give effect to the policy. A strategy is defined as a long-term plan designed to achieve a specific goal. An action plan is defined as a scheme of a course of action to accomplish an objective, which may correspond to a policy or strategy, with defined activities indicating who does what (type of activities and people responsible for implementation), when (time frame), how and with what resources.

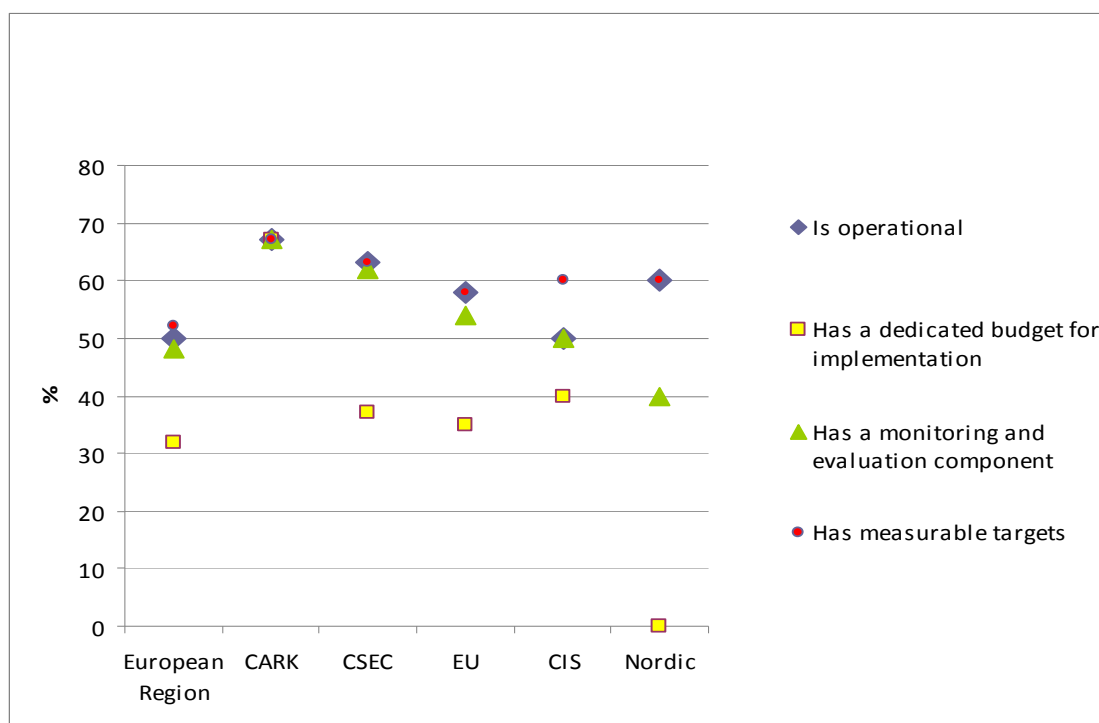
Of the 50 countries responding, 68% reported having a policy or strategy on NCDs (Table 8). About half reported the policy, strategy or action plan to be operational (50%), to have a monitoring and evaluation component (50%) and to have measurable targets (52%). Nevertheless, only 34% reported that the policy, strategy or action plan had a dedicated budget for implementation (Fig. 1).

The Nordic and EU countries more commonly have a policy, strategy or action plan (Table 8), although even for these groups of countries the policy or strategy less often is operational or has a budget for implementation. Operational policy, strategy or action plans are least common in the CIS countries.

Table 8. Percentage of countries having a national integrated policy, strategy or action plan on NCDs, 2009–2010

	European Region	CARK	CSEC	EU	CIS	Nordic
Policy, strategy or action plan exists	68	67	75	81	60	80
The policy, strategy or action plan:						
Is operational	50	67	63	58	50	60
Has a dedicated budget for implementation	34	67	44	35	40	0
Has a monitoring and evaluation component	50	67	69	54	50	40
Has measurable targets	52	67	63	58	60	60

Fig. 1. Percentage of countries having a national integrated policy, strategy or action plan on NCDs of a specific nature, 2009–2010

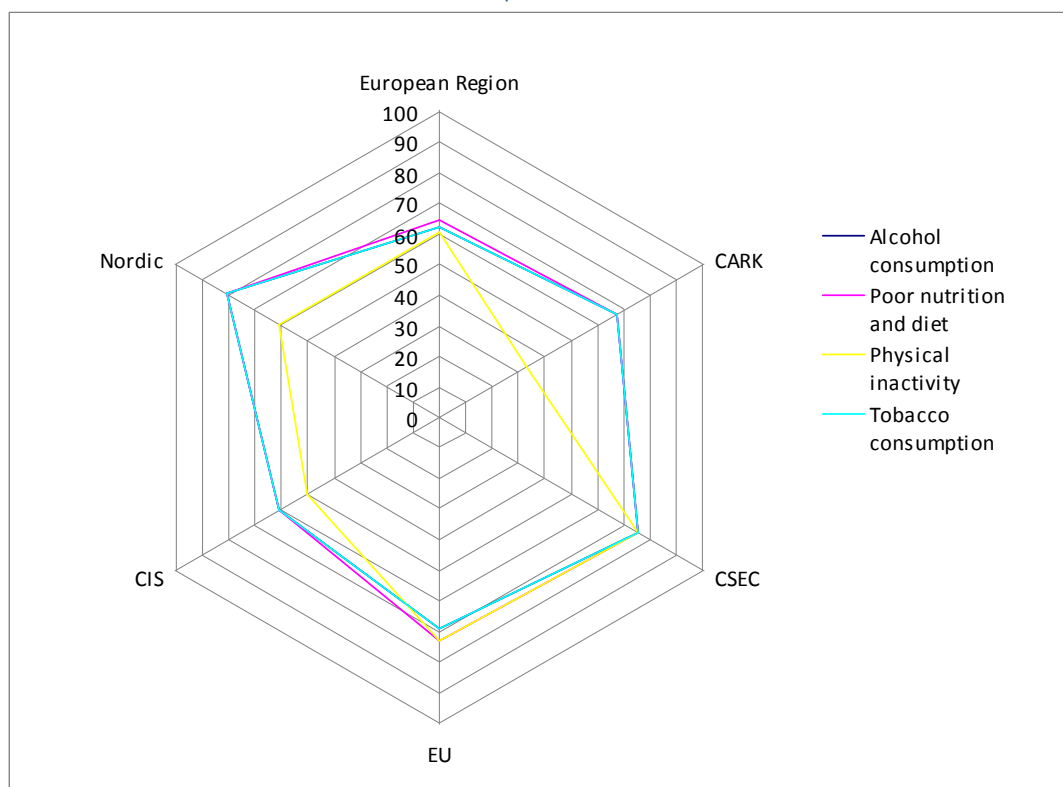


Poor nutrition and diet is the most common risk factor to be addressed by a policy, strategy or action plan overall (Table 9 and Fig. 2) and physical inactivity the least common. Diet and physical inactivity are most frequent in the EU countries; the other country groups address physical inactivity less frequently.

Table 9. Percentage of countries having an integrated policy, strategy or action plan on NCDs that addresses specific risk factors, 2009–2010

Risk factor	European Region	CARK	CSEC	EU	CIS	Nordic
Alcohol consumption	62	67	75	69	60	80
Poor nutrition and diet	64	67	75	73	60	80
Physical inactivity	60	33	75	73	50	60
Tobacco consumption	62	67	75	69	60	80

Fig. 2. Percentage of countries having an integrated policy, strategy or action plan on NCDs that addresses specific risk factors, 2009–2010



Regarding early detection, treatment and care of conditions (Table 12), policies, strategies and action plans for cardiovascular disease and cancer are most frequently reported overall and in all country groups and are present in 56% of respondent countries. The EU, Nordic and CSEC countries have the highest percentages of country groups of having a policy, strategy or action plan for cardiovascular disease and cancer, whereas having a policy, strategy or action plan for chronic respiratory disease is least common in all country groups.

Table 10. Percentage of countries having an integrated policy, strategy or action plan on NCDs that combines early detection, treatment and care for the following conditions, 2009–2010

Condition	European Region	CARK	CSEC	EU	CIS	Nordic
Cardiovascular diseases	56	67	69	58	60	60
Cancer	56	67	69	58	60	60
Diabetes	50	67	63	50	60	20
Chronic respiratory disease	42	67	44	35	60	20
Hypertension	52	67	63	50	60	40
Overweight and obesity	52	67	69	58	50	20
Abnormal blood lipids	48	67	69	50	40	40

### 3.3.2. Targeting of policies, strategies and action plans

There is no real pattern in targeting specific population groups under the national policy, strategy or action plan on NCDs (Table 11). In general, about one third (median 32%) of countries target a population specific group, with pregnant women least common (26%) and children and adolescents most common (36%). On the whole, pregnant women are least frequently targeted across several country groups (CSEC, EU and Nordic).

Table 11. Percentage of countries targeting specific population groups under the national integrated policy, strategy or action plan on NCDs, 2009–2010

Population group	European Region	CARK	CSEC	EU	CIS	Nordic
General population (no specific target)	32	33	38	46	20	0
0–9 years	36	33	44	35	40	80
10–19 years	36	33	44	35	40	80
15–24 years	32	0	38	31	30	80
Adults	34	33	44	31	40	60
≥65 years	32	0	38	27	30	60
Pregnant women	26	33	25	19	40	40
Marginalized and vulnerable groups	32	33	38	31	40	80

### 3.3.3. Implementation of policies, strategies and action plans

The most popular settings for implementing interventions under the policy, strategy or action plan on NCDs are health care facilities, community and school overall and in the EU, CSEC and Nordic country groups (Table 12). Households are relatively popular settings for implementation in the CARK and CIS countries but least popular with the EU, CSEC and Nordic groups.

Table 12. Percentage of countries implementing interventions under a policy, strategy, or action plan on NCDs in the following settings, 2009–2010

Setting	European Region	CARK	CSEC	EU	CIS	Nordic
Health care facility	68	67	75	81	60	80
Community	62	67	75	73	60	60
School	62	33	75	73	50	80
Workplace	52	33	69	65	30	40
Household	44	67	44	42	50	20

Trends on NCD issue-specific policies, strategies and action plans across the 10 years only exist for four issues (cardiovascular diseases, cancer, diabetes and tobacco control) that have been periodically reported on by the 40 countries participating in the 2000–2001 and 2009–2010 surveys (Table 13). In general, policies for each of these issues increased during the 10 years. Cancer has its own policy, strategy or action plan more frequently than cardiovascular diseases or diabetes and increased the most over the decade so that, by 2009–2010, 85% of countries reported having a national policy, strategy or action plan on controlling cancer. The number of tobacco control plans nearly doubled during the decade so that, by 2009–2010, 77% of countries reported having one. Policies for all four issues were slightly more frequent in 2009–2010 than in 2000–2001.

Table 13. Percentage of countries having a specific national policy, strategy or action plan for preventing and controlling NCDs, 2000–2001 and 2009–2010

Specific policy, strategy or action plan	2000–2001	2009–2010
Cardiovascular diseases	50	62
Cancer	60	85
Diabetes	52	67
Tobacco control	42	77

### 3.4. Health information systems

#### 3.4.1. Health reporting systems

Of the countries responding, 100% include mortality and 96% morbidity related to NCDs in the national health reporting system (Table 14). For mortality, this is population-based in 84% of countries and results in an official report in 92% of countries; for morbidity, it is only population-based in 34% of countries and results in an official report in 78% of countries.

Risk factors related to NCDs are less often included in the national health reporting system: 68% of the countries. This is population-based in 54% of countries and results in an official report in 52% of countries.

Table 14. Percentage of countries including NCDs in the national health reporting system, 2009–2010

Aspect of NCDs	European Region	CARK	CSEC	EU	CIS	Nordic
NCD-related mortality included	100	100	100	100	100	100
NCD-related morbidity included	96	100	100	96	100	80
NCD risk factors included	68	67	87	73	50	40

The most common NCD disease registry is a cancer registry: 92% of countries have a cancer registry, whereas only 58% of countries have a diabetes registry. The cancer registry is national in scope in 82% of countries but in 48% of countries for diabetes.

#### 3.4.2. Surveys

Trends in NCDs and their risk factors were reviewed for the 40 countries participating in the 2000–2001 and 2009–2010 surveys (Table 15). The presence of the six risk factors included in both surveys increased during the decade. Tobacco use remains the risk factor most frequently included in surveys (90% and 95%), with unhealthy diet and overweight and obesity both increasing from 65% to 87% over the period to become the next most commonly included risk factors, besides alcohol consumption, in national or provincial surveys.

Table 15. Percentage of countries having national or provincial studies or surveys on specific risk factors for NCDs, 2000–2001 and 2009–2010

<b>Risk factor</b>	<b>2000–2001</b>	<b>2009–2010</b>
Tobacco use	90	95
Unhealthy diet	65	87
Physical inactivity	70	80
Alcohol consumption	NA	87
Hypertension or elevated blood pressure	67	82
Diabetes or elevated blood glucose	70	77
Overweight and obesity	65	87
Dyslipidaemia	NA	65

NA: not available.

### **3.4.3. Surveillance**

Coverage of the surveillance system for NCDs is greatest for cancer, reported by 92% of countries responding (Table 16). Slightly more than half the countries cover diabetes (58%) and coronary events (52%), with 38% of countries covering stroke and other NCDs. This would be in accordance with findings for disease registries (see section 3.4.1). Cancer is most commonly covered in all country groups except CARK. All the Nordic countries reported cancer and diabetes to be equally well covered.

Table 16. Percentage of coverage of the surveillance system for NCDs, 2009–2010

<b>Disease</b>	<b>European Region</b>	<b>CARK</b>	<b>CSEC</b>	<b>EU</b>	<b>CIS</b>	<b>Nordic</b>
Cancer	92	67	94	96	90	100
Diabetes	58	67	69	54	70	100
Myocardial infarction or coronary events	52	67	56	58	40	60
Stroke	38	33	31	46	30	60
Other NCDs	38	100	44	39	50	40

## **3.5. Capacity of health care systems**

### **3.5.1. Health care systems**

Overall, NCDs are well integrated into health care systems (Table 17), with primary prevention and health promotion, risk factor detection and risk factor and disease management the three areas most frequently reported and for most country groups. Home-based care is equally high for CARK and Nordic countries. In general, support for self-help and self-care and surveillance and reporting are least frequently reported across countries overall and country groups.

Table 17. Percentage of countries integrating NCDs into the health care system, 2009–2010

Aspect integrated	European Region	CARK	CSEC	EU	CIS	Nordic
Primary prevention and health promotion	96	100	100	100	80	100
Risk factor detection	94	100	100	100	80	100
Risk factor and disease management	90	100	94	92	80	100
Support for self-help and self-care	70	67	69	81	50	80
Home-based care	80	100	75	73	90	100
Surveillance and reporting	68	67	88	62	70	40

### 3.5.2. Guidelines, protocols and standards

Tables 18 and 19 report on guidelines, protocols or standards for managing NCDs and their risk factors and the extent to which these are implemented.

The most common guidelines, protocols or standards for managing NCDs and their risk factors are diabetes and hypertension; this applies across almost all country groups, although for the Nordic countries, alcohol consumption is equally common (Table 18). In all but the Nordic countries, physical inactivity and alcohol consumption are the least common topics for guidelines, protocols or standards.

Table 18. Percentage of countries having available national guidelines, protocols and standards for managing NCDs and their risk factors, 2009–2010

Diseases and risk factors	European Region	CARK	CSEC	EU	CIS	Nordic
Diabetes	88	67	94	92	90	100
Hypertension	82	33	94	85	80	100
Overweight and obesity	68	67	81	73	50	60
Blood lipids	66	67	81	77	40	80
Alcohol consumption	56	33	63	65	40	100
Tobacco consumption	58	33	63	69	50	60
Poor nutrition and diet	68	67	81	73	40	80
Physical inactivity	56	67	63	69	30	60

In general, national guidelines, protocols or standards for NCDs and their risk factors are poorly implemented (Table 19) with, at best, diabetes being fully implemented in 30% of respondent countries and hypertension in 24%. For the country groups, the Nordic countries report most progress (60%) for diabetes and hypertension. For seven of the eight conditions, no CIS country reports full implementation.

Table 19. Percentage of countries having fully implemented national guidelines, protocols, standards for managing NCDs and their risk factors, 2009–2010

Diseases and risk factors	European Region	CARK	CSEC	EU	CIS	Nordic
Diabetes	30	0	50	46	0	60
Hypertension	24	0	50	31	0	60
Overweight and obesity	14	0	25	19	0	20
Blood lipids	14	0	31	23	0	20
Alcohol consumption	12	0	19	19	0	20
Tobacco consumption	12	0	19	23	0	0
Poor nutrition and diet	14	0	13	23	10	0
Physical inactivity	6	0	6	12	0	0

### 3.5.3. Health care funding

Tables 20 and 21 report on funding for NCDs and lifestyle-supported services.

Health insurance (either social insurance or private health insurance) covers NCD-related services and treatment in 84% of the countries, with 94% of the population covered (Table 20). This average figure masks extremes. Health insurance covers NCD services and treatment in all the Nordic, EU and CSEC countries versus no CARK countries and only 20% of CIS countries.

Table 20. Percentage of countries in which health insurance covers NCD services and treatment and proportion of the population covered by health insurance for these, 2009–2010

	European Region	CARK	CSEC	EU	CIS	Nordic
Health insurance covers NCDs	84	0	100	100	20	100
Average proportion of the population covered	94	0	90	95	92	96

Mixed sources of funding are available for lifestyle support services (Table 21). Again, country groups differed markedly. The CARK countries wholly rely on charitable organizations or user charges, and these are the two most common sources for CIS countries. For the CSEC, EU and Nordic countries, health insurance or state insurance are the main sources of funding, although user charges also feature prominently for the Nordic countries.

Table 21. Percentage of countries funding lifestyle support services by various means, 2009–2010

Means of funding	European Region	CARK	CSEC	EU	CIS	Nordic
State insurance	50	0	50	69	10	80
Health insurance	56	0	75	77	10	40
User charges	62	33	63	65	60	80
Free at the point of use from charitable organization	42	100	31	35	70	40



### 3.6. Partnerships and health promotion

Table 22 presents the existence of partnerships and collaborations for implementing key activities related to NCDs.

Almost all countries (92%) reported established partnerships and collaborations for implementing NCD-related activities, and this is fairly consistent across country groups, ranging from 90% among CIS countries to 100% among CARK and Nordic countries.

The most common mechanisms in operation for partnerships and collaborations are cross-departmental or ministerial committees, and this also applies to the EU and Nordic countries. For the CIS and CARK countries, joint task forces are equally popular (Table 22).

Table 22. Percentage of countries having various mechanisms in partnerships and collaborations for implementing NCD-related activities, 2009–2010

Mechanism	European Region	CARK	CSEC	EU	CIS	Nordic
Cross-departmental or ministerial committee	80	67	75	88	60	100
Interdisciplinary committee	76	33	81	81	50	80
Joint task force	66	67	62	69	60	60
Other	26	33	25	27	40	20

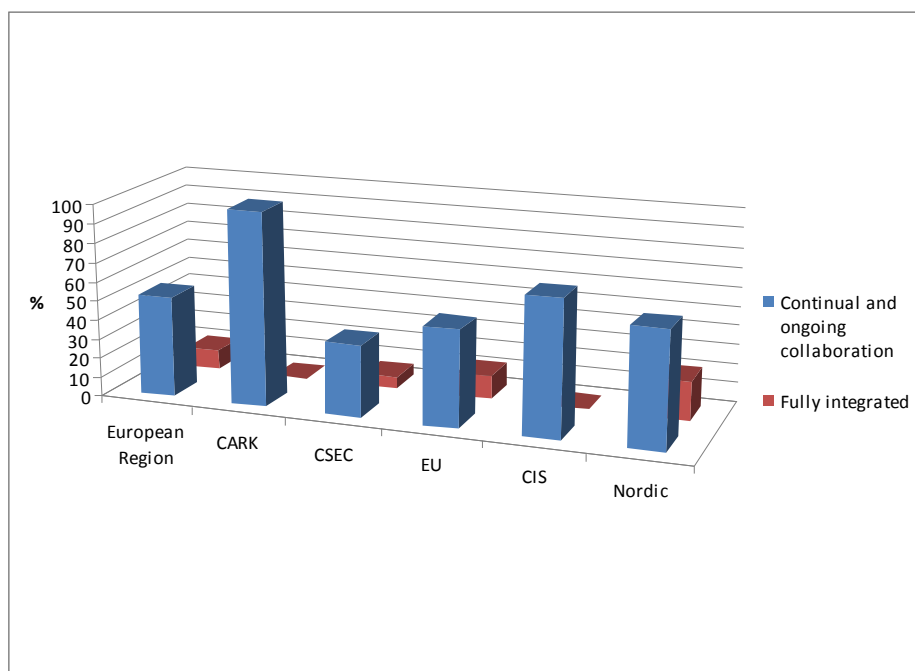
Other government ministries (other than health), academe and nongovernmental and civil society organizations are most frequently reported as key stakeholders (Table 23), also across the country groups. The private sector is a key stakeholder for the Nordic (100%) and EU (73%) countries.

Table 23. Percentage of countries having the following key stakeholders in partnerships and collaborations, 2009–2010

Stakeholder	European Region	CARK	CSEC	EU	CIS	Nordic
Other government ministries (non-health)	88	67	87	96	80	100
United Nations agencies	54	33	75	46	70	40
Other international institutions	58	33	69	61	70	40
Academe (including research centres)	86	67	87	96	70	100
Nongovernmental organizations, community-based organizations and civil society	90	67	94	96	80	100
Private sector	58	33	37	73	50	100
Other	20	0	25	35	0	40

About half (52%) the respondent countries have continual and ongoing collaboration between health promotion, public health and health care sectors; no countries reported this as being nonexistent (Fig. 3). The picture is similar across country groups.

Fig. 3. Percentage of countries having the following extent of collaboration between the health promotion, public health section and the medical and health care sectors, 2009–2010

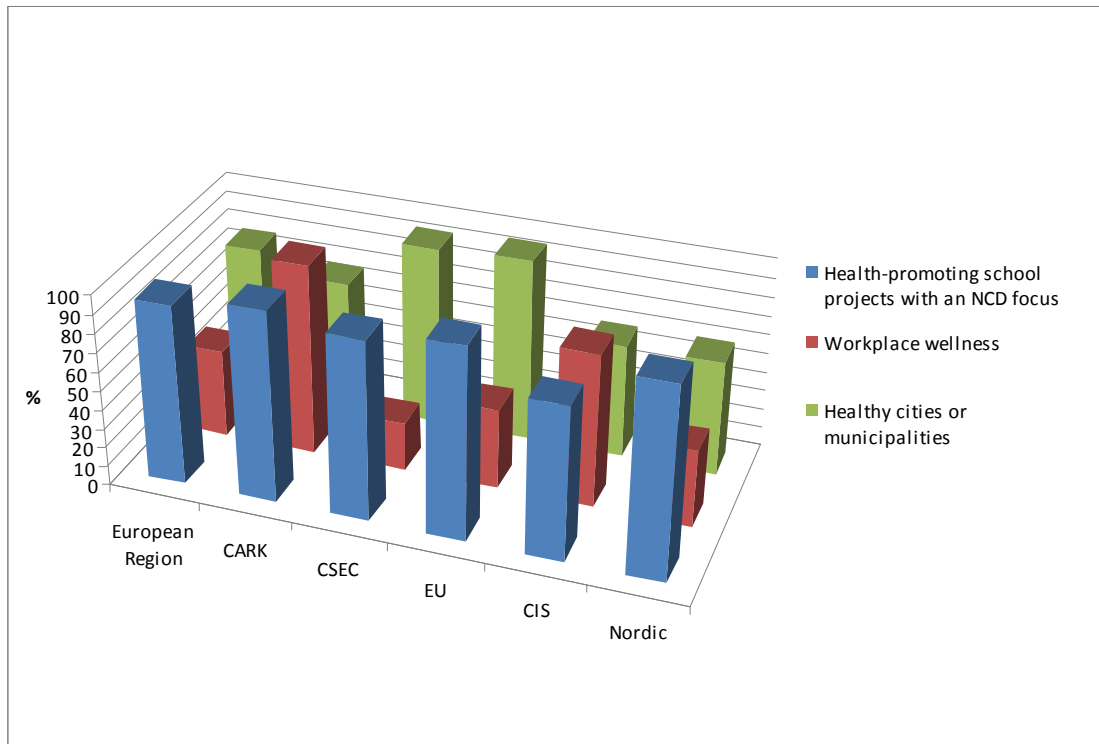


A range of health promotion initiatives have been implemented, with health-promoting schools projects with an NCD focus most frequent (94%) and workplace wellness least frequent (46%) (Table 24 and Fig. 4). Although health-promoting schools projects are popular across all country groups, all Nordic and virtually all EU countries have fiscal interventions to influence behaviour change.

Table 24. Percentage of countries that have implemented specific health promotion activities or initiatives, 2009–2010

Activity or initiative	European Region	CARK	CSEC	EU	CIS	Nordic
Fiscal interventions to influence behaviour change	80	67	81	96	60	100
Initiatives to regulate food marketing to children	70	67	69	69	80	100
Community or empowerment approach						
Health-promoting schools projects with an NCD focus	94	100	94	100	80	100
Workplace wellness	46	100	25	42	80	40
Healthy cities or municipalities	78	67	94	96	60	60

Fig. 4. Percentage of countries that have implemented community or empowerment approaches, 2009–2010



## 4. Discussion

### 4.1. Limitations

This is the third survey carried out by WHO to assess country capacity for preventing and controlling NCDs (Alwan et al., 2001, WHO, 2007). This is the first time that the questionnaires have been designed to be completed electronically in Excel format, and this may have contributed positively to the high response rate and ease of analysis.

The findings of the survey need to be interpreted in light of several limitations. The NCD focal points in the country provided the information, which reflects their understanding of the current status of survey items at the time the survey instrument was completed. Only about half the NCD focal points were the same as those in place during 2005–2006 when the second survey was carried out, so there may have been a lack of familiarity with the process or purpose. The NCD focal points came from a variety of bodies (departments within health ministries; institutes of public health; universities; and clinical fields), and this may have influenced their breadth of knowledge of the situation within their country.

Although efforts have been made to validate the responses, and supporting documentation was requested, many survey items cannot be independently validated. The timing of this report, while some data are still being validated, means that results may be subject to change in the coming months.

Although the survey questionnaire was subject to a lengthy development process, global questions cannot accommodate the specific situation in every country. The question and response structure might therefore not have allowed countries to give the most complete picture of their individual situation. Further, language problems may not have been completely solved by translation, particularly in relation to using certain technical terms that are not universally similar in their interpretation. Terms may also have been understood differently, and the individual elements of some questions specific to diseases or risk factors may have been confusing for some countries that take a more integrated approach.

Much of the analysis is descriptive. Efforts have been made to analyse trends and carry out some comparative analysis between country groups. Both are limited in approach.

The substantial changes in the questionnaires within the three surveys means that few questions can be consistently tracked between surveys. The first and third questionnaires are probably most similar. Further, only a subset of countries responded to each survey. For these reasons, the trend analysis focuses on the trends between the 2000–2001 and 2009–2010 surveys.

There is no perfect way of grouping countries for such a comparison. The present choice follows groups previously used by WHO, which takes a geopolitical approach to some extent. The groups were chosen to ensure that most countries were included; nevertheless, some groups overlap in membership (most notably the EU and CSEC), groups differ in size and six countries, Andorra, Israel, Monaco, San Marino, Switzerland and Turkey, are not included in any subregional analysis.

This report attempts to focus on areas likely to be of particular interest to the audience; the forthcoming global report will take a more comprehensive approach.

## 4.2. Discussion of findings

### 4.2.1. Infrastructure

The existence of NCD units, branches or departments within health ministries has increased during the past decade. In 2010, four fifths of countries have a unit, branch or department responsible for NCDs within the health ministry. This is largely responsible for planning, coordinating implementation, monitoring and evaluation and most frequently covers the areas of primary prevention, health promotion and surveillance. CARICOM countries were least likely to have an NCD unit, branch or department within the health ministry. In CIS countries, these were more likely to cover health care and treatment.

National institutes support NCD work in various ways, most frequently in information management and least likely for treatment guidelines and policy research. In identifying key success factors for developing policy on NCDs, an analysis of policy on NCDs in countries in the European Region (Ritsatakis & Makara, 2009) underlined the importance of a strong resource base (information and expertise) on which policy could draw, strong political commitment and a tradition for negotiating long-term policy.

### 4.2.2. Policy

Slightly more than two thirds of countries have a policy or strategy on NCDs, although it is operational in only half of countries and has a dedicated budget for implementation in only one third. Nordic and EU countries are most likely to have a policy or strategy on NCDs, but this does not guarantee it being operational or having a dedicated budget. Ritsatakis & Makara (2009) found numerous examples in which clearly designated funds, or the lack of such funds, determine the feasibility or otherwise of implementing policy.

Policies, strategies or action plans on NCDs are slightly more likely to address risk factors than diseases. Of the risk factors, poor nutrition and diet are most frequently addressed and physical inactivity least; of the diseases, cardiovascular diseases and cancer are most frequently addressed and chronic respiratory disease least. EU countries cover poor diet and physical inactivity equally well, but other country groups cover them generally less well.

About one third of the countries target a specific population group within their policy or strategy, with pregnant women least well covered. The most popular setting for implementing policy interventions for NCDs is health care facilities.

Policies on cardiovascular diseases, cancer, diabetes and tobacco control increased from 2000–2001 to 2009–2010. Cancer is the most popular disease category, and the presence of tobacco control plans increased the most during the decade. Several EU presidencies have focused on specific diseases from the overall group of NCDs in recent years. Nongovernmental organizations and professional associations have strongly promoted these focused efforts:

- cardiovascular diseases or heart health during the Irish EU Presidency in 2004 (Shelley, 2004; Council of the European Union, 2004), culminating in a European Heart Health Charter in 2007 (Ryden et al., 2007);
- diabetes during the Austrian EU Presidency in 2006, actively supported by nongovernmental organizations towards the passing of a United Nations General Assembly Resolution on diabetes in December 2006 (Hall & Felton, 2006; United Nations, 2006); and

- cancer during the Slovenian EU Presidency in 2008 (Council of the European Union, 2008).

### **4.2.3. Health information**

Almost all countries include mortality and morbidity from NCDs in the national reporting system, but only about two thirds of countries include risk factors. The most common disease registry is a cancer registry, which is present in more than nine tenths of countries; cancer is also the disease most frequently covered in the surveillance system for NCDs. Information on cancer is much more widely available than for other diseases, reflecting the long tradition of population-based cancer registries in most European countries as well as support through the European Network of Cancer Registries and the International Agency for Research on Cancer (Micheli & Baili, 2008).

Risk factors are well represented in national and provincial surveys, tobacco use most frequently. Of six risk factors in surveys, all increased during the decade, with tobacco use most frequently included and the inclusion of unhealthy diet showing the greatest increase over time. Several agencies have encouraged and supported the importance of risk factor surveillance in preventing and controlling NCDs, emphasizing its value for monitoring change over time, for evaluating the effects of interventions and for predicting the future burden of disease (Campostrini et al., 2009; WHO, 2005, 2009a). WHO has especially focused on surveillance of tobacco use in recent years: for example, developing a rigorous system to monitor the status of global tobacco use is a specific component of the Bloomberg Initiative to reduce tobacco use (WHO, 2009b), and progress in countries has been closely monitored (WHO, 2009c; WHO Regional Office for Europe, 2007c).

All Nordic countries cover cancer and diabetes equally well in their NCD surveillance systems, whereas other country groups usually cover diabetes less well.

### **4.2.4. Health care**

Overall, NCDs are well integrated into the health care system, with countries reporting primary prevention and health promotion, risk factor detection and disease management most frequently. Self-care and surveillance are least frequent.

The most common guidelines, protocols or standards are for diabetes and hypertension, with lifestyle risk factors less common, especially alcohol consumption and physical inactivity. In general, these are poorly implemented, however, with at best just below one third of countries fully implementing guidelines for diabetes. All the Nordic countries have alcohol control guidelines, whereas these are among the least common topics for other country groups. CIS countries fully implement virtually no guidelines.

Protocols and guidelines are increasingly being developed in the European Region (Ritsatakis & Makara, 2009), and the survey in 2000–2001 (Alwan et al., 2001; WHO, 2007) noted the predominance of disease-specific protocols, standards and guidelines over those for risk factors. Guidelines, protocols and standards form just one part of the wide range of decision support tools and systems available to improve the quality and safety of the care of people with chronic conditions. These often focus on particular conditions in one specific health service setting: the challenges of reorganizing health systems so that decision supports are available and operational throughout the health system are very great (Glasgow et al., 2008).

#### **4.2.5. Health care funding**

The Tallinn Charter: Health Systems for Health and Wealth recognized that there is no single best approach to health care funding, but the overall allocation of resources needs to strike an appropriate balance between health care, disease prevention and health promotion (WHO Regional Office for Europe, 2008). Funding is available for NCD activities in about nine tenths of countries, and central government revenue is the main source of funding for just over half the countries. Four fifths of the countries cover NCD services and treatment by health insurance, and the percentage of the population covered in countries with coverage is high. Nevertheless, country groups differ greatly, with health insurance covering virtually no services and treatment for NCDs in CIS and CARK countries. Mixed sources of funding exist for lifestyle support services. Country groups differ vastly in funding for NCDs and health promotion. International donors are more likely to be the main source of funding for NCD activities in CIS and CARK countries. All the Nordic, EU and CSEC countries cover NCDs by health insurance versus no CARK countries and only 20% of CIS countries. For lifestyle support services, CARK countries mainly rely on charitable organizations; for CIS and CARK countries, state insurance and health insurance are virtually absent.

#### **4.2.6. Partnerships**

Almost all countries have established partnerships and collaborations, with cross-departmental or ministerial committees the most frequently reported mechanism. The most common key stakeholders are other government ministries, academe and nongovernmental organizations.

The private sector is a key stakeholder in partnerships for the Nordic and EU countries. This may reflect the efforts at the EU level to enhance dialogue for action between the for-profit and not-for-profit sectors through mechanisms such as the European Platform for Action on Diet, Physical Activity and Health. Evaluation of the Platform after five years of operation found that it has inspired the development of national platforms in several EU countries and led to better understanding between sectors, although an element of confrontation and lack of trust remains (The Evaluation Partnership, 2010).

About half the countries have continual and ongoing collaboration between the health promotion, public health and health care sectors. Numerous health promotion initiatives have been implemented, with projects focusing on NCDs most frequent in health-promoting schools and least frequent in workplace wellness. Health promotion in schools can improve children's health and well-being, with programmes promoting healthy eating and physical activity being among the most effective (Stewart-Brown, 2006). In addition to the long-standing holistic approach of health-promoting schools in the WHO European Region, focus on the contribution of school-based projects to counteracting obesity has been increasing (Mathieson & Koller, 2006; WHO Regional Office for Europe, 2010b).

## 5. Conclusions

This publication reports on the results of the 2009–2010 global survey of the capacity of countries for preventing and controlling NCDs for the countries in the WHO European Region. Country capacity has been assessed in five main areas: public health infrastructure for NCDs; the status of policies, strategies and action plans relevant to NCDs; health information systems, surveillance and surveys; capacity of health care systems; and health promotion, partnerships and collaboration. This is the third such survey since 2000, and this preliminary report draws on the data available by 31 July 2010 to highlight areas of specific interest to the Region. Some limited trend analysis and comparative analysis of country groups has been carried out in addition to descriptive analysis of results. A global report of the main survey, to be published in early 2011, may update findings as data are validated further and will more comprehensively analyse the situation in the Region.

Evidence indicates some progress during the past decade, as more countries now have facilitating structures, resources and supportive mechanisms in place. Several of these reflect particular areas of focus at the international level through WHO, the EU, nongovernmental organizations and other efforts. The nature of the survey instrument, with its focus on disease-specific or issue-specific elements, has made assessing the extent of an integrated approach more difficult.

Some findings reinforce those from elsewhere. The presence of cancer within health information systems, especially disease registries, is particularly well resourced. Implementing disease support mechanisms is challenging.

Some findings are encouraging, such as growth in the number of health ministries having NCD units, the breadth of partnerships and established collaboration mechanisms for tackling NCDs and the resources available within countries from such sources as national institutes. Policies on NCDs have increased during the past decade, and these are slightly more likely to address risk factors than diseases. There seems to be a strong focus on tobacco control, supported by policy and surveillance systems.

Yet other findings point to areas of potential concern. Although more than two thirds of countries have a policy or strategy on NCDs, it is operational in only half the countries, and only one third of the countries have a dedicated budget for implementation. Further, nine tenths of countries have funding available for NCD activities, but central government revenue is the main source in just over half of countries, and reliance on charitable organizations or user charges for health promotion activity may be excessive. Progress across the European Region appears uneven, and some parts of Europe may still focus more on health care and treatment rather than primary prevention in tackling NCDs. Thus, despite some progress, there is great scope for efforts to prevent and control NCDs in Europe.



## 6. References

- Alwan AD, Maclean D, Mandil A (2001). *Assessment of national capacity for noncommunicable disease prevention and control: the report of a global survey*, Geneva, World Health Organization ([http://www.who.int/chp/about/integrated\\_cd/en/index1.html](http://www.who.int/chp/about/integrated_cd/en/index1.html), accessed 27 August 2010).
- Campostrini S, McQueen DV, Evans L (2009). Health promotion and surveillance: the establishment of an IUHPE global working group. *Global Health Promotion*, 16:58–60.
- Council of the European Union (2004). Heart health – Council conclusions. In: *Press release: 2586th Council Meeting: Employment, Social Policy, Health and Consumer Affairs, Luxembourg, 1–2 June 2004*. Luxembourg, Council of the European Union.
- Council of the European Union (2008). Reducing the burden of cancer – Council conclusions. In: *2876th Council Meeting: Employment, Social Policy, Health and Consumer Affairs, Luxembourg, 9–10 June 2008*. Luxembourg, Council of the European Union.
- Glasgow N et al. (2008). Decision support. In: Nolte E, McKee M, eds. *Caring for people with chronic conditions. A health system perspective*. Berkshire, Open University Press, McGraw-Hill Education.
- Hall M, Felton A-M (2006). An EU Declaration on diabetes: hopes and expectations. *Diabetes Voice*, 51.
- Mathieson A, Koller T, eds. (2006). *Addressing the socioeconomic determinants of healthy eating habits and physical activity levels among adolescents*. Copenhagen, WHO Regional Office for Europe ([http://www.euro.who.int/\\_\\_data/assets/pdf\\_file/0005/98231/E89375.pdf](http://www.euro.who.int/__data/assets/pdf_file/0005/98231/E89375.pdf), accessed 27 August 2010).
- Micheli A, Baili P (2008). Information on cancer. In: Coleman MP et al., eds. *Responding to the challenge of cancer in Europe*. Ljubljana, Institute of Public Health of the Republic of Slovenia ([http://www.euro.who.int/\\_\\_data/assets/pdf\\_file/0011/97823/E91137.pdf](http://www.euro.who.int/__data/assets/pdf_file/0011/97823/E91137.pdf), accessed 27 August 2010).
- Ritsatakis A, Makara P (2009). *Gaining health: analysis of policy development in European countries for tackling noncommunicable diseases*. Copenhagen, WHO Regional Office for Europe ([http://www.euro.who.int/\\_\\_data/assets/pdf\\_file/0018/105318/e92828.pdf](http://www.euro.who.int/__data/assets/pdf_file/0018/105318/e92828.pdf), accessed 27 August 2010).
- Ryden L, Martin L, Volqvartz S (2007). The European Heart Health Charter: towards a healthier Europe. *European Journal of Cardiovascular Prevention and Rehabilitation*, 14:355–356.
- Shelley E (2004). Promoting heart health – a European consensus. Background paper prepared by the Irish Presidency for a meeting in Cork, Ireland, February 2004. *European Journal of Cardiovascular Prevention & Rehabilitation*, 11:87–100.
- Stata Corporation (2007). *Stata statistical software: release 10*. College Station, TX, Stata Corporation.
- Stata Corporation (2009). *Stata statistical software: release 11*. College Station, TX, Stata Corporation.
- Stewart-Brown S (2006). *What is the evidence on school health promotion in improving health or preventing disease and, specifically, what is the effectiveness of the health promoting schools approach?* Copenhagen, WHO Regional Office for Europe ([http://www.euro.who.int/\\_\\_data/assets/pdf\\_file/0007/74653/E88185.pdf](http://www.euro.who.int/__data/assets/pdf_file/0007/74653/E88185.pdf), accessed 27 August 2010).

- The Evaluation Partnership (2010). *Evaluation of the European Platform for Action on Diet, Physical Activity and Health*. Brussels, European Commission.
- United Nations (2006). *Resolution adopted by the General Assembly: World Diabetes Day*. New York, United Nations.
- WHO (2005). *Preventing chronic diseases: a vital investment*. Geneva, World Health Organization ([http://www.who.int/chp/chronic\\_disease\\_report/en](http://www.who.int/chp/chronic_disease_report/en), accessed 27 August 2010).
- WHO (2007). *Report of the global survey on the progress in national chronic diseases prevention and control*. Geneva, World Health Organization ([http://www.who.int/chp/about/integrated\\_cd/en/index6.html](http://www.who.int/chp/about/integrated_cd/en/index6.html), accessed 27 August 2010).
- WHO (2008). *2008–2013 Action Plan for the Global Strategy for the Prevention and Control of Noncommunicable Diseases*. Geneva, World Health Organization (<http://www.who.int/nmh/publications/9789241597418/en/index.html>, accessed 27 August 2010).
- WHO (2009a). *WHO STEPS Instrument (Core and Expanded). The WHO STEPwise approach to chronic disease risk factor surveillance (STEPS). Instrument v2.1*. Geneva, World Health Organization ([http://www.who.int/chp/steps/STEPS\\_Instrument\\_v2.1.pdf](http://www.who.int/chp/steps/STEPS_Instrument_v2.1.pdf), accessed 27 August 2010).
- WHO (2009b). Bloomberg Initiative to reduce tobacco use [web site]. Geneva, World Health Organization (<http://www.who.int/tobacco/communications/highlights/bloomberg/en/index.html>, accessed 27 August 2010).
- WHO (2009c). *WHO report on the global tobacco epidemic*. Geneva, World Health Organization (<http://www.who.int/tobacco/mpower/2009/en/index.html>, accessed 27 August 2010).
- WHO Regional Office for Europe (2002). *European Strategy for Tobacco Control*. Copenhagen, WHO Regional Office for Europe ([http://www.euro.who.int/\\_\\_data/assets/pdf\\_file/0009/82386/E93103.pdf](http://www.euro.who.int/__data/assets/pdf_file/0009/82386/E93103.pdf), accessed 27 August 2010).
- WHO Regional Office for Europe (2006a). *Gaining health. The European Strategy for the Prevention and Control of Noncommunicable Diseases*. Copenhagen, WHO Regional Office for Europe ([http://www.euro.who.int/\\_\\_data/assets/pdf\\_file/0009/82386/E93103.pdf](http://www.euro.who.int/__data/assets/pdf_file/0009/82386/E93103.pdf), accessed 27 August 2010).
- WHO Regional Office for Europe (2006b). *European Charter on counteracting obesity. WHO European Ministerial Conference on Counteracting Obesity*. Copenhagen, WHO Regional Office for Europe ([http://www.euro.who.int/\\_\\_data/assets/pdf\\_file/0009/82386/E93103.pdf](http://www.euro.who.int/__data/assets/pdf_file/0009/82386/E93103.pdf), accessed 27 August 2010).
- WHO Regional Office for Europe (2006c). *Framework for alcohol policy in the WHO European Region*. Copenhagen, WHO Regional Office for Europe ([http://www.euro.who.int/\\_\\_data/assets/pdf\\_file/0009/82386/E93103.pdf](http://www.euro.who.int/__data/assets/pdf_file/0009/82386/E93103.pdf), accessed 27 August 2010).
- WHO Regional Office for Europe (2007a). *Steps to health. A European framework to promote physical activity for health*. Copenhagen, WHO Regional Office for Europe ([http://www.euro.who.int/\\_\\_data/assets/pdf\\_file/0009/82386/E93103.pdf](http://www.euro.who.int/__data/assets/pdf_file/0009/82386/E93103.pdf), accessed 27 August 2010).

WHO Regional Office for Europe (2007b). *WHO European Action Plan for Food and Nutrition Policy 2007–2012*. Copenhagen, WHO Regional Office for Europe ([http://www.euro.who.int/\\_\\_data/assets/pdf\\_file/0009/82386/E93103.pdf](http://www.euro.who.int/__data/assets/pdf_file/0009/82386/E93103.pdf), accessed 27 August 2010).

WHO Regional Office for Europe (2007c). *The European tobacco control report*. Copenhagen, WHO Regional Office for Europe ([http://www.euro.who.int/\\_\\_data/assets/pdf\\_file/0009/82386/E93103.pdf](http://www.euro.who.int/__data/assets/pdf_file/0009/82386/E93103.pdf), accessed 27 August 2010).

WHO Regional Office for Europe (2008). The Tallinn Charter: Health Systems for Health and Wealth. *WHO European Ministerial Conference on Health Systems: “Health systems, health and wealth”*. Copenhagen, WHO Regional Office for Europe ([http://www.euro.who.int/\\_\\_data/assets/pdf\\_file/0009/82386/E93103.pdf](http://www.euro.who.int/__data/assets/pdf_file/0009/82386/E93103.pdf), accessed 27 August 2010).

WHO Regional Office for Europe (2009). *The European health report 2009. Health and health systems*. Copenhagen, WHO Regional Office for Europe ([http://www.euro.who.int/\\_\\_data/assets/pdf\\_file/0009/82386/E93103.pdf](http://www.euro.who.int/__data/assets/pdf_file/0009/82386/E93103.pdf), accessed 27 August 2010).

WHO Regional Office for Europe (2010a). European Health for All database [online database]. Copenhagen, WHO Regional Office for Europe (<http://www.euro.who.int/hfad>, accessed 27 August 2010).

WHO Regional Office for Europe (2010b). *Nutrition Friendly Schools Initiative capacity-building workshop*. Copenhagen, WHO Regional Office for Europe (<http://www.euro.who.int/en/what-we-do/health-topics/disease-prevention/nutrition/activities/capacity-building-workshops/nutrition-friendly-schools-initiative>, accessed 27 August 2010).

## Annex 1. Countries responding to the survey by country group

European Region	CARK	CIS <sup>2</sup>	CSEC	EU	Nordic
Albania			Albania		
Andorra					
Armenia		Armenia			
Azerbaijan		Azerbaijan			
Belarus		Belarus			
Belgium				Belgium	
Bosnia and Herzegovina			Bosnia and Herzegovina		
Bulgaria			Bulgaria	Bulgaria	
Croatia			Croatia		
Cyprus				Cyprus	
Czech Republic			Czech Republic	Czech Republic	
Denmark				Denmark	Denmark
Estonia			Estonia	Estonia	
Finland				Finland	Finland
France				France	
Georgia		Georgia			
Germany				Germany	
Greece				Greece	
Hungary			Hungary	Hungary	
Iceland					Iceland
Ireland				Ireland	
Israel					
Italy				Italy	
Kazakhstan	Kazakhstan	Kazakhstan			
Latvia			Latvia	Latvia	
Lithuania			Lithuania	Lithuania	
Luxembourg				Luxembourg	
Malta				Malta	
Monaco					
Montenegro			Montenegro		
Netherlands				Netherlands	
Norway					Norway
Poland			Poland	Poland	
Portugal				Portugal	
Republic of Moldova		Republic of Moldova			

<sup>2</sup> When the data were collected, the CIS consisted of (12 countries): Armenia, Azerbaijan, Belarus, Georgia, Kazakhstan, Kyrgyzstan, the Republic of Moldova, the Russian Federation, Tajikistan, Turkmenistan, Ukraine and Uzbekistan.

<b>European Region</b>	<b>CARK</b>	<b>CIS<sup>2</sup></b>	<b>CSEC</b>	<b>EU</b>	<b>Nordic</b>
Romania			Romania	Romania	
Russian Federation		Russian Federation			
San Marino					
Serbia			Serbia		
Slovakia			Slovakia	Slovakia	
Slovenia			Slovenia	Slovenia	
Spain				Spain	
Sweden				Sweden	Sweden
Switzerland					
Tajikistan	Tajikistan	Tajikistan			
The former Yugoslav Republic of Macedonia			The former Yugoslav Republic of Macedonia		
Turkey					
Ukraine		Ukraine			
United Kingdom				United Kingdom	
Uzbekistan	Uzbekistan	Uzbekistan			

## Annex 2. Response to the global surveys in 2000–2001 and 2009–2010 among WHO European Member States

The countries responding to both surveys, and used in trend analysis, are indicated in bold.

<i>Countries responding in 2000–2001</i>	<i>Countries responding in 2009–2010</i>
<b>Albania</b>	<b>Albania</b>
	Andorra
	Armenia
Austria	
<b>Azerbaijan</b>	<b>Azerbaijan</b>
<b>Belarus</b>	<b>Belarus</b>
<b>Belgium</b>	<b>Belgium</b>
<b>Bosnia and Herzegovina</b>	<b>Bosnia and Herzegovina</b>
<b>Bulgaria</b>	<b>Bulgaria</b>
<b>Croatia</b>	<b>Croatia</b>
<b>Cyprus</b>	<b>Cyprus</b>
	Czech Republic
<b>Denmark</b>	<b>Denmark</b>
<b>Estonia</b>	<b>Estonia</b>
<b>Finland</b>	<b>Finland</b>
<b>France</b>	<b>France</b>
<b>Georgia</b>	<b>Georgia</b>
<b>Germany</b>	<b>Germany</b>
	Greece
<b>Hungary</b>	<b>Hungary</b>
<b>Iceland</b>	<b>Iceland</b>
<b>Ireland</b>	<b>Ireland</b>
<b>Israel</b>	<b>Israel</b>
	Italy
<b>Kazakhstan</b>	<b>Kazakhstan</b>
<b>Latvia</b>	<b>Latvia</b>
<b>Lithuania</b>	<b>Lithuania</b>
<b>Luxembourg</b>	<b>Luxembourg</b>
<b>Malta</b>	<b>Malta</b>
<b>Monaco</b>	<b>Monaco</b>
	Montenegro
	Netherlands

<i>Countries responding in 2000–2001</i>	<i>Countries responding in 2009–2010</i>
<b>Norway</b>	<b>Norway</b>
<b>Poland</b>	<b>Poland</b>
<b>Portugal</b>	<b>Portugal</b>
<b>Republic of Moldova</b>	<b>Republic of Moldova</b>
<b>Romania</b>	<b>Romania</b>
<b>Russian Federation</b>	<b>Russian Federation</b>
<b>San Marino</b>	<b>San Marino</b>
	Serbia
<b>Slovakia</b>	<b>Slovakia</b>
<b>Slovenia</b>	<b>Slovenia</b>
<b>Spain</b>	<b>Spain</b>
<b>Sweden</b>	<b>Sweden</b>
<b>Switzerland</b>	<b>Switzerland</b>
<b>Tajikistan</b>	<b>Tajikistan</b>
<b>The former Yugoslav Republic of Macedonia</b>	<b>The former Yugoslav Republic of Macedonia</b>
<b>Turkey</b>	<b>Turkey</b>
	Ukraine
<b>United Kingdom</b>	<b>United Kingdom</b>
	Uzbekistan

The WHO  
Regional Office for Europe

The World Health Organization (WHO) is a specialized agency of the United Nations created in 1948 with the primary responsibility for international health matters and public health. The WHO Regional Office for Europe is one of six regional offices throughout the world, each with its own programme geared to the particular health conditions of the countries it serves.

#### Member States

Albania  
Andorra  
Armenia  
Austria  
Azerbaijan  
Belarus  
Belgium  
Bosnia and Herzegovina  
Bulgaria  
Croatia  
Cyprus  
Czech Republic  
Denmark  
Estonia  
Finland  
France  
Georgia  
Germany  
Greece  
Hungary  
Iceland  
Ireland  
Israel  
Italy  
Kazakhstan  
Kyrgyzstan  
Latvia  
Lithuania  
Luxembourg  
Malta  
Monaco  
Montenegro  
Netherlands  
Norway  
Poland  
Portugal  
Republic of Moldova  
Romania  
Russian Federation  
San Marino  
Serbia  
Slovakia  
Slovenia  
Spain  
Sweden  
Switzerland  
Tajikistan  
The former Yugoslav  
  Republic of Macedonia  
Turkey  
Turkmenistan  
Ukraine  
United Kingdom  
Uzbekistan

World Health Organization  
Regional Office for Europe  
Scherfigsvej 8, DK-2100 Copenhagen Ø, Denmark  
Tel.: +45 39 17 17 17. Fax: +45 39 17 18 18.  
E-mail: [postmaster@euro.who.int](mailto:postmaster@euro.who.int)  
Web site: [www.euro.who.int](http://www.euro.who.int)