



**University of
Zurich**^{UZH}

**Zurich Open Repository and
Archive**

University of Zurich
Main Library
Strickhofstrasse 39
CH-8057 Zurich
www.zora.uzh.ch

Year: 2009

Promotion of physical activity in the European region: content analysis of 27 national policy documents

Daugbjerg, S B; Kahlmeier, Sonja; Racioppi, F; Martin-Diener, E; Martin, B; Oja, P; Bull, F

Abstract: **BACKGROUND:** Over the past years there has been increasing interest in physical activity promotion and the development of appropriate policy. So far, there has been no comprehensive overview of the activities taking place in Europe in this area of public health policy. **METHODS:** Using different search methods, 49 national policy documents on physical activity promotion were identified. An analysis grid covering key features was developed for the analysis of the 27 documents published in English. **RESULTS:** Analysis showed that many general recommendations for policy developments are being followed, for example: general goals were formulated, an implementation plan was included, a timeframe and a responsible body for the implementation was often specified. However, limited evidence for intersectoral collaboration was found. Quantified goals for physical activity were the exception. Population groups most in need such as people with low levels of physical activity were rarely specifically targeted. Most policies emphasized the importance of an evaluation. However, only about half of them indicated a related intention or requirement. **CONCLUSION:** In recent years there has been a noticeable development of national policy documents on physical activity promotion. Following principles for policy development more closely could increase the effectiveness of their preparation and implementation further.

DOI: <https://doi.org/10.1123/jpah.6.6.805>

Posted at the Zurich Open Repository and Archive, University of Zurich

ZORA URL: <https://doi.org/10.5167/uzh-29234>

Journal Article

Originally published at:

Daugbjerg, S B; Kahlmeier, Sonja; Racioppi, F; Martin-Diener, E; Martin, B; Oja, P; Bull, F (2009). Promotion of physical activity in the European region: content analysis of 27 national policy documents. *Journal of Physical Activity and Health*, 6(6):805-817.

DOI: <https://doi.org/10.1123/jpah.6.6.805>

Promotion of Physical Activity in the European Region: Content Analysis of 27 National Policy Documents

Signe B. Daugbjerg, Sonja Kahlmeier, Francesca Racioppi, Eva Martin-Diener,
Brian Martin, Pekka Oja, and Fiona Bull

Background: Over the past years there has been increasing interest in physical activity promotion and the development of appropriate policy. So far, there has been no comprehensive overview of the activities taking place in Europe in this area of public health policy. **Methods:** Using different search methods, 49 national policy documents on physical activity promotion were identified. An analysis grid covering key features was developed for the analysis of the 27 documents published in English. **Results:** Analysis showed that many general recommendations for policy developments are being followed, for example: general goals were formulated, an implementation plan was included, a timeframe and a responsible body for the implementation was often specified. However, limited evidence for intersectoral collaboration was found. Quantified goals for physical activity were the exception. Population groups most in need such as people with low levels of physical activity were rarely specifically targeted. Most policies emphasized the importance of an evaluation. However, only about half of them indicated a related intention or requirement. **Conclusion:** In recent years there has been a noticeable development of national policy documents on physical activity promotion. Following principles for policy development more closely could increase the effectiveness of their preparation and implementation further.

Keywords: health promotion, exercise, physical fitness, national health programs, Europe

The importance of physical activity for health has been well documented. Evidence shows that physical activity has major beneficial effects on most chronic diseases including the reduction of risk of cardiovascular disease, diabetes type 2, cancer, overweight and obesity, improvements in musculoskeletal health and psychological well-being.¹⁻⁴ Cost analyses have shown physical inactivity has a considerable economic impact.^{5,6} In England for example, the annual cost—including those to the health system, days of absence from work and loss of income due to premature death—have been estimated to be €3 to 12 billion. This excludes the contribution of physical inactivity to overweight and obesity, whose overall cost might run to additional €9.6 to 10.8 billion per year.⁷ Physical activity does not only have beneficial effects on mortality, morbidity and quality of life but can also confer a broad range of economic and social benefits on individuals, communities and countries as a whole.

Sports promotion has had a longer history in many countries, yet examples of comprehensive national strategies for the promotion of health-enhancing physical activity are still rare. Such strategies do exist in other fields of traditional health promotion within the health care sector (eg, tobacco cessation). It is only over the past few years that there has been an increasing interest toward promoting physical activity at a national level and more specifically as part of strategies to reduce risks for noncommunicable diseases, including overweight and obesity. This growing interest is in part related to the processes involved in the preparation of the World Health Organization's (WHO) Global Strategy on Diet, Physical Activity and Health⁸ as well as the WHO European Ministerial Conference on Counteracting Obesity.⁹ A wide agenda around the promotion of physical activity has developed following the understanding that physical activity should be promoted as part of daily life and across all settings where daily life takes place (at home, workplaces, schools, for transport purposes etc.).^{7,8}

Daugbjerg, Kahlmeier, and Racioppi are with WHO Regional Office for Europe, European Centre for Environment and Health, Italy. Daugbjerg is also with the Research Centre for Prevention and Health, Glostrup, Capital Region of Denmark. Martin-Diener and Martin are with the Swiss Federal Office of Sports, Magglingen, Switzerland. Oja is with the UKK Institute for Health Promotion Research, Tampere, Finland, and the Karolinska Institute, Stockholm, Sweden. Bull is with the British Heart Foundation's National Centre for Physical Activity and Health (BHFNC), Loughborough University, Loughborough, United Kingdom.

Why Is It Important to Develop Policies on Physical Activity?

In the history of public health successes, policy interventions have often played a major role. Their potential to affect large numbers of people underscores the need for increased emphasis on policy development also in the promotion of health-enhancing physical activity.¹⁰

Formulating a national policy on health-enhancing physical activity will give support, coherence and visibility at the political level, and at the same time make it possible for the institutions involved, such as national government sectors, regions or local authorities, stakeholders and the private sector, to be coherent and consistent by following common objectives and common strategies as well as to negotiate and to assign roles and responsibilities.¹¹

Furthermore, development of a policy should allow greater allocation of resources and greater accountability and if legally binding, would help prevent the failures often associated with 'voluntary' national recommendations or suggestions.¹¹

Aim of This Paper

An earlier analysis¹² of national policy documents on physical activity promotion has shown that often an intersectoral approach in formulation of the policies had been taken, with consultation and partnership between sectors occurring at a high level of government. However, this analysis had a different geographic scope including countries such as Australia, Canada, New Zealand and Brazil and was therefore not necessarily directly comparable to the European Region. Until recently there has been no comprehensive overview of the work taking place in Europe in the area of physical activity and public health policy. To help fill this gap, an inventory of policy documents, specified approaches and target populations related to physical activity promotion in different countries of the WHO European Region was compiled¹³ within the framework of HEPA Europe, the European network for the promotion of physical activity,¹⁴ in close collaboration with the WHO Regional Office for Europe. The first version of the inventory was launched in late 2006 on the occasion of the WHO European Ministerial Conference on Counteracting Obesity.⁹ The paper reports on the establishment of the inventory, as well as some results from its first year in operation. This paper particularly presents the results of a content analysis of national policy documents, which were collected as part of the development of the inventory, including multisectoral and multidisciplinary involvement in preparation and implementation of the policies. The paper aims to provide WHO Member States with information about existing policies, strategies and approaches from different European countries with regard to physical activity promotion. By making existing experiences more easily available and critically discussing the approaches taken, highlighting strengths as well as possible areas for improvement, it is hoped that the paper will inform more effective future policy development.

Methods

Definition of "Policy Document"

Policies have been defined in different ways by different authors. For example, Schmid et al defined policies as "legislative or regulatory action taken by federal, state, city, or local governments, government agencies, or non-governmental organizations (NGOs) such as schools or corporations. Policy includes formal and informal rules and design standards that may be explicit or implicit."¹⁵ Bull et al defined policies as "a guide to action to achieve intended goals, initiated by government, non-government or private sector organizations, and can occur on a written (eg, within legislation, policy documents) or on an unwritten basis (eg, within usual practice)."¹²

In this article, policy documents are defined as written documents that contain strategies and priorities, define goals and objectives, and are issued by a part of the public administration. In view of the particular importance of national policy documents for the Ministerial conference on Counteracting Obesity, the primary analysis focused on documents issued by a national body.

Collection of the Documents

The promotion of physical activity goes beyond the health sector alone.⁷ Therefore, any relevant national policy documents addressing physical activity were sought from the areas of public health/health promotion, transport, sports as well as the environment. A combination of methods was employed including an Internet-based search of documents on the web sites of: national ministries of health, transport, environment, education, culture, youth and sports; health promotion agencies such as national and international agencies; local and subnational initiatives (as available); and other relevant physical activity promoting projects and activities (such as BYPAD and Walk 21 congresses); Furthermore, a search was conducted through the "Google" search engine using the following key words: physical activity, HEPA, health enhancing physical activity, physical activity promotion, policy, guideline(s), strategy, programs, action plan and national program. In addition, material available at the WHO European Centre for Environment and Health (WHO Regional Office for Europe, Rome office), findings from the WHO Member States National Chronic Disease Prevention and Control Questionnaire (2005) and documents prepared for the WHO European Ministerial Conference on Counteracting Obesity in Istanbul, Turkey 2006, were reviewed.¹⁶

In June 2006, an overview of the results of the search findings up to this date was distributed together with a call for further contributions¹⁷ to around 100 counterparts of HEPA Europe as well as the Transport, Health and Environment Pan-European Program (THE PEP). Additional documents received in response were included until April 2007.

All available language versions of documents were collected. However, only policy documents available in English were included in the analysis. If more than 1 version existed only the most recent one was included in the inventory and content analysis.

Content Analysis of the Policy Documents

The content analysis of the documents consisted of a number of steps. Firstly, a screening of the collected documents was conducted to exclude documents that were not developed or issued by a part of the administration or did not contain specific information and goals on physical activity. Secondly, an analysis grid covering the key features of interest was developed. Based on the grid, the analysis of the content of the national policy documents was carried out.

Development of a Grid for the Content Analysis

The analysis grid was developed to allow standardized analysis and comparisons between documents along an a-priori defined set of indicators of good practice for policy development. The identified indicators forming the analysis grid were based on frameworks and analysis grids used in relevant policy analysis reports¹⁸⁻²¹ and journal articles,^{12,15,22,23} aiming at highlighting strengths and possible areas for improvement.

The following 8 aspects were identified as being relevant for effective physical activity policies:

- **Sectors and institutions involved:** involvement of different sectors in the preparation and implementation of the policy. Important partners include various sectors of the national government, subnational

authorities, municipalities, nongovernmental organizations, the private sector, the media, associations, educational institutions, employers, etc.

- **Implementation:** implementation plan for the policy and a clear definition of the body or bodies responsible for the implementation
- **Legal status:** legally binding or nonbinding; formally adopted by government or not
- **Target groups:** clearly identified population groups targeted by the policy
- **Goals and targets:** physical activity goals or targets were specified for certain population groups and time periods
- **Timeframe:** clear timeframe specified for the implementation of the policy
- **Budget:** specified budget allocated to the implementation of the policy
- **Evaluation and surveillance:** development or continuation of an evaluation on the implementation and results of the policy; surveillance or monitoring system to measure physical activity.

Results

Overview of Collected Policy Documents

A summary of all national documents collected until April 2007 for the inventory is presented in Figure 1. In total, 213 national documents were identified. Among these, 49 were national policy documents on physical activity promotion from 24 European countries (including 5 documents concerning England, see Table 2). Table

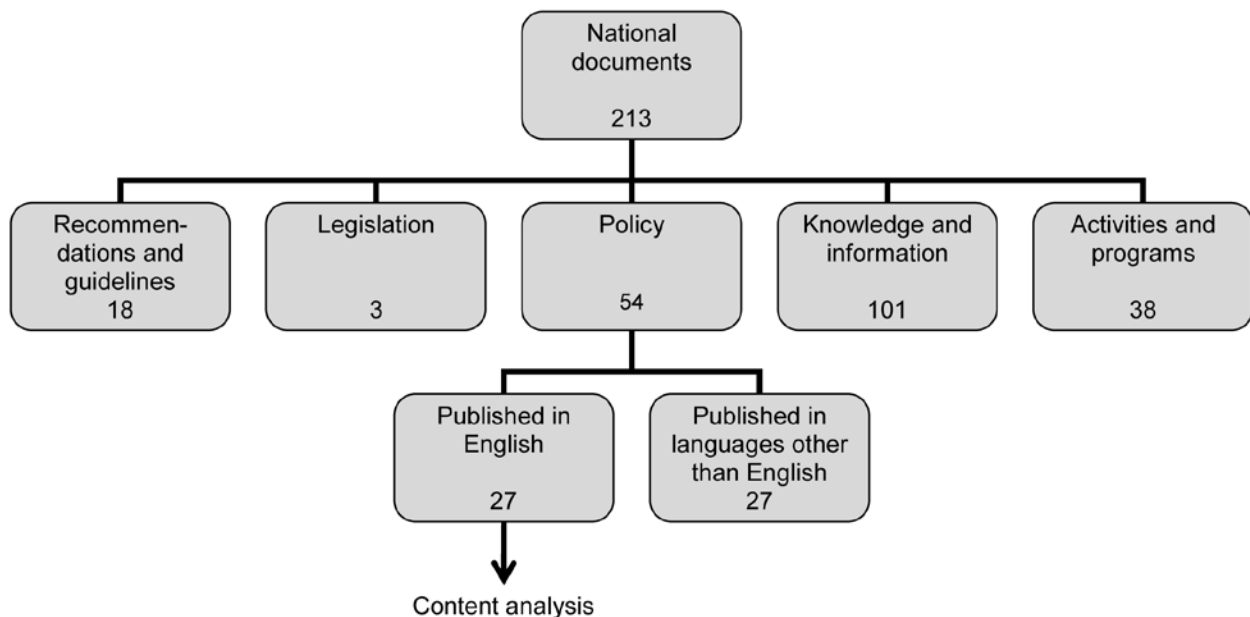


Figure 1 — Overview of collected national documents from the WHO European Region (as of April 2007).

1 provides an overview of these policy documents by country divided into 4 categories, differentiating between policy documents focusing on physical activity and public health/health promotion, on physical activity and sport, on physical activity and transport or on physical activity and environment. Nineteen countries of the 24 had at least 1 policy document focusing on public health/health promotion and physical activity. Seven countries had a policy document addressing physical activity and

transport, 5 countries had a policy document focusing on physical activity and sport. In one country a national document focused on physical activity and environment was identified. Only 3 countries (Germany, Switzerland and France) had developed legally binding documents on physical activity. This overview also shows that countries from the central and eastern part of the Region in particular are not yet well represented with national policy documents addressing physical activity.

Table 1 Overview of the 49 Identified Documents on Physical Activity Promotion From 24 Countries^a (as of April 2007)

Country	National and subnational policy documents on physical activity and—			
	health promotion	sport	transport	environment
Albania				
Andorra				
Armenia				
Austria			1	
Azerbaijan				
Belarus				
Belgium	1			
Bosnia & Herzegovina				
Bulgaria				
Croatia				
Cyprus				
Czech Republic			3	
Denmark	1			
Estonia	1	1		
Finland	1			
France	2		1	
Georgia	1			
Germany	1		1	
Greece				
Hungary	3			
Iceland	1			
Ireland	1			
Israel				
Italy	2			
Kazakhstan				
Kyrgyzstan				
Latvia				
Lithuania				
Luxembourg	1			
Malta				
Monaco				
Montenegro				

continued

Table 1 *continued*

Country	National and subnational policy documents on physical activity and—			
	health promotion	sport	transport	environment
Norway	3		1	1
Poland	1			
Portugal	2			
Republic of Moldova				
Romania				
Russian Federation				
San Marino				
Serbia				
Slovakia		1		
Slovenia	1			
Spain	1			
Sweden	2			
Switzerland		1	2	
Tajikistan				
The former Yugoslav Republic of Macedonia				
Turkey				
Turkmenistan				
Ukraine				
United Kingdom	1	1	3	
Uzbekistan				
Total for Member States in the WHO European Region	29	7	12	1

^a Includes policy documents, recommendations, and guidelines.

Table 2 Overview of the 27 National Policies Included in the Content Analysis^a

Country	Title	Published	Goals and targets	Time frame	Budget	Evaluation
Czech Republic	National Cycling Development Strategy of the Czech Republic	2005		Only for sub goals not for whole document		
Denmark	Healthy throughout Life 2002-2010	2003		2002-2010		X
Finland	Government Resolution on policies to develop health-enhancing physical activity	2002		2003-		
Germany	National Cycling Plan 2002-2012 “Ride your bike!” (Nationaler Radverkehrsplan 2002–2012 “FahrRad!”)	2002		2002-2012		X
Hungary	Johan Bela’—National Program for the Decade of Health	2003	X			
Hungary	National Public Health Program—Action Plan	2004		2004		

continued

Table 2 *continued*

Country	Title	Published	Goals and targets	Time frame	Budget	Evaluation
Iceland	The Icelandic National Health Plan to the year 2010—abridged version	2001		2010		X
Ireland	The National Health Promotion Strategy 2000-2005			2000-2005		X
Netherlands	Time For Sport—Exercise, Participate, Perform.	2005	X	2010	X	
Netherlands	National Plan of Action for Children 2004	2004				X
Netherlands	Living longer in good health—also a question of a healthy lifestyle	2004		2004-2007	X	X
Netherlands	Toward an ‘active’ policy	2003				
Norway	National Report on Youth Policy in Norway	2004				
Norway	The Government’s Environmental Policy and the State of the Environment in Norway—summary in English	2005		2007		
Norway	Working together for physical activity. The Action Plan on Physical Activity 2005-2009	2005		2005-2009		X
Norway	Prescriptions for a Healthier Norway. A broad policy for public health—short version	2003		10 years		
Portugal	National Health Plan 2004-2010 Volume I—Priorities	2004	X	2004-2010		X
Spain	Spanish strategy for Nutrition, Physical Activity and Prevention of Obesity (Estrategia para la Nutrición, Actividad Física y prevención de la Obesidad)	2005				X
Sweden	Sweden’s new public health policy—National public health objectives for Sweden	2003				
Sweden	Healthy dietary habits and increased physical activity—the basis for an action plan	2005				X
Switzerland	Mission statement on human powered mobility—English summary	2002	X	2004	X	X
Switzerland	Concept of the Federal Council for a sports policy in Switzerland	2000				X
United Kingdom—England	The Future of Transport—a network for 2030—White Paper	2004		2030	X	
United Kingdom—England	Game Plan, Strategy for delivering the Government’s sport and physical activity objectives	2002	X	2020	X	X
United Kingdom—England	Choosing Activity—a Physical Activity Action Plan—Working in partnership with people, their communities, local government, voluntary agencies and business	2005	X	Only for sub goals not for whole document	X	X

continued

Table 2 continued

Country	Title	Published	Goals and targets	Time frame	Budget	Evaluation
United Kingdom—England	Walking and Cycling—an action plan	2004			X	X
United Kingdom—England	Tomorrow's roads: safer for everyone—the Government's road safety strategy and casualty reduction targets for 2010	2000		2010		

^a All documents analyzed were legally nonbinding documents. The documents are available in the WHO report: International inventory of documents on physical activity promotion. (<http://data.euro.who.int/PhysicalActivity/>)

The documents were published in the working languages of the WHO Regional Office for Europe (English, French, German, and to a lesser extent Russian) as well as Dutch, Czech, Portuguese, and Hungarian. A number of documents were available in more than 1 of these languages. Twenty-two national and 5 subnational documents from 14 countries were published in English and were included in the content analysis. They are listed in Table 2.

Results of the Content Analysis

Sectors and Institutions Involved in the Preparation of the Policy Documents. All of the analyzed policies had some involvement by 1 or more ministries. A ministry of health was involved in almost half of the policies, which makes health the most frequently involved ministry in the policy preparation phase. There was however limited evidence for intersectoral collaboration in the preparation of the policies between ministries as in most cases the documents had been prepared by a single ministry alone. In some cases, other authorities or bodies had been involved but one third of the documents had been developed without any form of collaboration. Local- or subnational authorities were rarely involved in the preparation phase of national documents but they were more frequently involved in the implementation phase (see Table 3).

Implementation

Implementation Plan. In all analyzed policy documents, the importance of an implementation plan was emphasized. Most policies have also developed plans for implementation ($n = 26, 96\%$). However, there was wide variation in how detailed the implementation plans were described. For example, few policies listed quantifiable measures to achieve the stated goals ($n = 6, 22\%$). Some policies stated that an additional program for the implementation of the goals would be published later.

Others mentioned a general plan for the implementation of the whole policy but did not specify details on the implementation of the physical activity part ($n = 10, 37\%$).

Implementation Process. Policy documents were reviewed to assess the intended implementation process as described. No verification of the actual implementation process was undertaken. This analysis showed that in approximately half of the policy documents a government ministry would be involved in the implementation process ($n = 16, 59\%$) (see Table 4). Leadership and responsibility for implementation was most often placed within a ministry ($n = 23, 85\%$) with only 3 policies indicating implementation under the leadership of specifically appointed committees (or task forces) or institutes of public health. The ministry of health was the most frequently named ministry in the implementation phase and was most often assigned with leadership of the implementation ($n = 11, 41\%$). Ministries of transport were only involved in policies on physical activity and transport and were most often the responsible body for the implementation for these policies. Other ministries (such as ministries of environment or education) were often listed as partners in implementation process.

Joint implementation with local- and subnational authorities was indicated in about one fourth of cases ($n = 7, 26\%$). Thus, it appears that ministries are mostly involved in the preparation (as shown in Table 3), and local- and subnational authorities seem to be more frequently involved in the implementation of policies (see Table 4). Although leadership most often lay at the national level, about one third of the analyzed policies were also being implemented on the local or subnational level in addition to the national level ($n = 8, 30\%$). In half of the analyzed policies ($n = 13, 50\%$), the involvement of other institutions (eg, NGOs or the media) was foreseen in the implementation process. However, only few documents describe this involvement in detail ($n = 4, 15\%$). Only 1 policy did not specify the responsible body for the implementation.

Table 3 Overview of Sectors and Institutions Involved in the Preparation of Analyzed National Policies on Physical Activity Promotion (Total N = 27, Multiple Categories May Apply)

	No.	%
<i>Ministries involved</i>	27	100
<i>Number of documents with 1 or more ministries involved, namely:</i>		
Ministry of health/sport*	15	56
Ministry of transport	7	26
Ministry of environment	4	15
Ministry of education	3	11
Other ministry (e.g. finance) or parliament	12	44
<i>Collaboration between different sectors and institutions:</i>	10	30
1) No collaboration (only 1 ministry and no other authority or body)		
2) Any collaboration	17	63
a) Between ministries, namely:		
Ministry of health/sport* and ministry of transport	2	7
Ministry of health/sport* and ministry of environment	2	7
Ministry of health/sport* and ministry of education	3	11
Ministry of health/sport* and other ministry	5	19
b) Any ministries and subnational or local authorities		
	3	11
c) Any ministries and other body (NGO, project group, committee, private sector, experts etc.)		
	8	30

*The ministry of health and the ministry of sport could not be separated in many cases since the 2 ministries are combined in 1 ministry in a number of countries.

Table 4 Overview of Sector and Institutional Involvement in the Implementation of National Policies on Physical Activity Promotion (Total N = 27, Multiple Categories May Apply)

	No.	%
<i>Ministries involved</i>	16	59
<i>No ministries involved</i>	3	11
<i>Not specified</i>	8	30
<i>Number of documents with 1 or more ministries involved, namely:</i>		
Ministry of health/sport*	10	37
Ministry of environment	8	30
Ministry of education	8	30
Ministry of transport	6	22
<i>Collaboration between different sectors and institutions</i>	2	7
1) No collaboration (only 1 ministry and no other authority or body)	8	30
2) Not specified		
3) Any collaboration	17	63
a) Between ministries, namely:		
Ministry of health/sport* and ministry of transport	4	14
Ministry of health/sport* and ministry of environment	5	19
Ministry of health/sport* and ministry of education	7	26
Ministry of health/sport* and other ministry	6	22
b) Any ministries and subnational or local authorities		
	8	30
c) Any ministries and other body (NGO, project group, committee, private sector, experts etc.)		
	11	41

*The ministry of health and the ministry of sport could not be separated in many cases since they are combined into 1 ministry in a number of countries.

Publication Date. The earliest policy document included dated from the year 2000. The number of documents increased over the subsequent years: 3 documents were published in 2000, 5 documents were published in 2002, 5 in 2003, 7 in 2004 and 7 documents were from 2005.

However, for the purpose of this analysis, if more than 1 version existed, only the most recent one was included in the inventory and content analysis. With the notable exception of Finland,²⁴ an earlier document, however, only rarely existed and where so, it was usually concerned with more general public health programs where physical activity was included among other topics.

Legal Status. Three of the identified 49 policy documents were legally binding.^{25–27} Since none of these documents was published in English they were not included in the content analysis.

Target Groups. Table 5 shows that most policies targeted the whole population ($n = 21$, 78%). In addition, the majority targeted 1 or more subgroups of the population (eg, children, adolescents and young people, elderly, people with low level of physical activity etc.). Children were the most frequently targeted subgroup in the policies ($n = 21$, 78%).

Only a few of the analyzed policies targeted people with low levels of physical activity ($n = 2$, 7%) or disabled people ($n = 3$, 11%). One fourth of policies specifically targeted adults with low education or income ($n = 4$, 15%). One example is the Swedish policy that stated the following: “There are considerable social differences both when it comes to people’s opportunity to do physical activity and them actually doing it. Less well educated people, for example, take less exercise than those who are better educated.”²⁸

Table 5 Summary of Target Groups in National Policies on Physical Activity Promotion (N = 27, Multiple Categories May Apply)

Target groups	No.	%
Whole population	21	78
Children	21	78
Adolescents and young people	11	41
Adults	4	15
Adults with low education/income	4	15
Elderly / people over 65 years	5	19
Active road users	5	19
Disabled people	3	11
Persons with low level of physical activity	2	7
Other groups	3	11
No specified target group	2	7

Goals and Targets. All policies contained an overall goal to improve the health status of the whole population or a specific subgroup such as “increase life expectancy free of disability or illness for everyone at all ages.” In most cases only general goals on physical activity were stated such as: “to stimulate the practice of regular physical activity in the population” or “increase the level of physical activity.” Only 6 policies contained quantified physical activity goal specifying the intended level of physical activity to be achieved over a specific time period, for example “By 2010, at least 65% (60% in 2004) of the adult population in the Netherlands will meet the exercise standard.”²⁹

Some of the policies stated their goals using international recommendations such as “at least 30 minutes of regular, moderate-intensity physical activity on most days.”⁵ Only 5 policies stated both a quantified goal(s) for the level of participation in physical activity and described the intended behavior, for example: “Our target is for 70% (currently ~30%) of the population to be reasonably active (for example 30 minutes of moderate exercise 5 times a week) by 2020.”⁵ There was only 1 example of a goal for transport-related physical activity: “to increase the share of human powered mobility (HPM, including all forms of non-motorized mobility) by 15% in 10 years.”³⁰

Although some policies referred to the WHO Global Strategy on Diet, Physical activity and Health such as a Norwegian policy document,³¹ only 2 policies combined physical activity and nutrition for obesity prevention.^{32,33} In addition, 11 documents were general public health policies that included physical activity and nutrition along with other determinants of public health (41%).

Time Frame. In the majority of the analyzed policy documents, time frames for the implementation or the achievement of the goals were specified ($n = 18$, 67%). The time frames mentioned usually ranged from 3 to 10 years; a number of policies state longer or shorter time frames for the implementation of subgoals. For example, 1 policy document from the United Kingdom,⁵ stated a long-term vision for sport and physical activity for 2020 as well as recommendations that need to be acted upon in the short term (within 1 year). Few documents included time frames of less than 2 years for overall goals.

Budget. Less than half of the policies indicated a specific budget for the achievement of goals and only 2 policies contained an annual budget for implementation. In 1 example, the Dutch policy *Time For Sport—Exercise, Participate, Perform*,²⁹ it is stated that nearly € 100 million annually will be allocated for the policy from 2006 and onwards, but this order of budget is more the exception than the rule.

Where budgets were mentioned, in most cases the funding was assigned to, or came from the budget of the ministry of health. In some policies, funds were allocated by subtargets (such as for parking facilities for bicycles, building and maintaining bicycle paths, orbicycle traveling projects).

Evaluation and Surveillance. Most of the policies emphasized the importance of an evaluation plan and of a surveillance system to monitor the implementation of the policy and achievement of goals. However, only about half of the policies indicated an intention or requirement for evaluation ($n = 15$, 56%). The development or continuation of a surveillance system to measure physical activity were mentioned in less than half of the policies ($n = 10$, 37%). In addition, only few policy documents contained information on which measurements would be used for physical activity. One policy³⁴ mentioned monitoring of the level of physical activity during leisure time and at work among children, adolescents and adults. Other policies mentioned setting up a surveillance system for the whole policy in general, without specifying how physical activity will be measured. The need for standardized, simple and reliable measures for monitoring of physical activity has been raised as an issue in a number of the policy documents.

According to the information provided in the policy documents, outcomes were more often to be evaluated than the implementation process. There was a wide variation in how detailed the plans for evaluation and surveillance were described. In some policies external committees were assigned to write periodic status reports on the development of the policy or even included evaluation questions that are to be answered. Other policies included evaluation as a part of a goal to be implemented, without further specification of the process.

Discussion

Systematic collections and content analyses of policy documents related to physical activity are important for providing WHO Member States with information about existing policies, strategies and approaches from different European countries with regard to physical activity and to help develop future policies.

To our knowledge, this study represents the first attempt to undertake a systematic collection of national policy documents on physical activity promotion in the European Region. This analysis of 27 documents published in English, covering 15 countries, revealed some interesting similarities and some notable differences across Member States.

All 27 policy documents included in this analysis were published after 2000, and more than half of them in 2004 or 2005, suggesting that the development of national policy documents on physical activity has only

started in recent years in the WHO European Region. There are a few notable exceptions such as Finland, the Netherlands and the United Kingdom.¹⁴ The development of the WHO Global Strategy for Diet, Physical Activity and Health, which commenced in 2002 and was launched in 2004, as well as the preparations of the Ministerial Conference on Counteracting Obesity,^{8,9,16} may have acted as a catalyst for the development of national policies and it is to be hoped that this development continues also in the future to further strengthen the promotion of health-enhancing physical activity in the European Region.

One of the criteria recommended for successful policy development is the involvement of the different relevant ministries and government levels, as well as of the private sector, NGOs and other stakeholders.^{11,12} Our analyses suggest that not all policies have followed this recommendation in the preparation and implementation or that the documents themselves fail to adequately describe this process. For example, there was only limited evidence on intersectoral collaboration in the preparation of the policy documents and in most cases it seems that local- or subnational authorities have not been included. While collaboration across government levels was more frequently foreseen during the implementation phase, the involvement of other stakeholders such as NGOs or the private sector seems to be rare but again it should be kept in mind that the description of the foreseen implementation was not always exhaustive.

The results underline that some of the recently emerging knowledge has only partly found its way into the policy-making process on physical activity. Specifically, it has been demonstrated that the largest health benefits are to be expected when the most sedentary part of the population becomes more physically active.³⁵ However, only very few of the analyzed examples specifically target this group. Another important subgroup requiring specific consideration is the economically disadvantaged population. They usually do not have equal access to and opportunities for physical activity³⁶ and are therefore among other reasons found to have lower levels of physically activity, particularly during leisure time. However, very few of the analyzed policies included specific measures to increase participation of economically disadvantaged population groups.

Some policies have adopted international recommendations such as “at least 30 minutes of regular, moderate-intensity physical activity on most days”³⁸ but the analysis showed that only few policies set quantified goals or targets on the level of participation in physical activity or for the intended behavioral change. This lack of a clear benchmark impedes evaluation of the policies which in fact was only included in about half of the policies and in varying levels of detail. So it seems that the call for more and better evaluation of health promotion programs also extends to the field of physical activity promotion.³⁷

Overall, the results of this analysis confirm the results of an earlier analysis of national policy document on physical activity promotion which, however, had a different geographic scope, limiting the possibilities of direct comparisons between the 2 studies.¹² The analysis presented in this report found the following differences: a) in this analysis about two thirds of the policies have made clear statements of the timeframe for the proposed actions while the earlier report observed a failure to specify the completion timelines for proposed actions; b) this analysis found that most often the policies fail to specify the involvement of other institutions while the earlier report had found a high occurrence of commitments and partnerships within and between government, NGOs and the private sector; c) only 2 of 27 policy documents included in the current analysis combine physical activity and nutrition while the earlier report had found evidence of efforts to link physical activity to policies related to healthy nutrition associated to obesity prevention. The first 2 differences are difficult to explain but could at least partly be due to the different countries (and related cultures with regard to policy development) covered in the 2 analysis. The third point could also reflect that physical activity is increasingly considered on its own right and not only as part of obesity prevention.

This content analysis is based on policy documents from 14 countries with stronger representation from the northern and southern part of the Region and some examples from central Europe, while especially the eastern part of the Region was not well represented (for an overview of identified documents by country see Table 1). This limitation relates in part to the limited number of languages covered by the project team, which led to the decision to only include documents in English in the analysis. The policy documents were identified through a combination of different methods, including a key-word internet search as well as a targeted search of relevant ministries' web sites, and an invitation to a few hundred counterparts in 2 large pan-European networks to report missing documents. It is nevertheless possible that despite these multiple search methods, some policy documents were not identified. Moreover, not all countries in the WHO European Region have developed policy documents on physical activity so far. These limitations will be addressed in subsequent phases of the inventory project and should be kept in mind regarding the generalization of these findings. In addition, it should also be noted that the results are based on the information as provided in the analyzed documents.

Conclusions

This review of 27 national policy documents published in English across 14 European countries shows that in recent years there has been a noticeable advance in the development of national policy documents supporting the promotion of physical activity. This is a most encouraging development, which in the next few years

might align policy developments in physical activity promotion to those that have already been successfully undertaken in other key public health areas, such as in the field of tobacco control.³⁸

Many of the general principles and recommendations for public health policy are being followed: for example, often a responsible body for the implementation is identified, overall general goals are stated, an implementation plan is mentioned, and a time frame for the implementation is specified. However, there is a clear need for more specific and measurable targets; policies that include actions specifically targeted at those subgroups of the population most in need of more physical activity, and identification of adequate financial resources for the implementation since budgets for implementation were included in less than half of the policies. Furthermore, policies need to include a clear and specific intent toward evaluation of the policy development and implementation process as well as for the achievement of set goals over time. Monitoring and surveillance need to be integrated and supported.

Availability of translations of at least a summary of key policy documents into official WHO European languages would facilitate sharing of experiences and would make information more readily accessible for such international analysis and comparison. A more detailed description of how the policies were developed and how they are foreseen to be implemented and evaluated would also support external analysis. This would also allow to compare the success of different policies and to verify the importance of the principles mentioned above.

It is hoped that by making existing experiences more easily available this study could act as an additional stimulus for Member States to undertake policy developments in physical activity promotion, and/or to revise existing policies to further enhance their effectiveness by following the discussed principles for policy development more closely.

Acknowledgment

We would like to thank Cyrus Rostami for contributing to setting up the inventory and for collecting documents used for this paper. The main author carried out the work during an internship with the WHO Regional Office for Europe which was supported by the University of Copenhagen, Denmark. The views expressed in this paper are the authors' and do not necessarily reflect those of the World Health Organization.

References

1. Bauman AE. Updating the evidence that physical activity is good for health: an epidemiological review 2000-2003. *J Sci Med Sport*. 2004;7(S1):6-19.
2. Haskell WL, et al. Physical activity and public health: updated recommendation for adults from the American College of Sports Medicine and the American Heart Association. *American College of Sports Medicine and the American Heart Association*. 2007;116(S9):1081-1093.

3. Oja P, Borms J, eds. *Health enhancing physical activity*. Oxford, Meyer & Meyer Sport, 2004 (Perspectives—The Multidisciplinary Series of Physical Education and Sport Sciences, Vol. 6).
4. Bull FC, et al. *Physical inactivity*. In: Global and Regional Burden of Diseases Attributable to Selected Major Risk Factors, Volume 1, Ezzati, M., Lopez, AD, Rodgers, A., Murray, CJL. Geneva, 2004, World Health Organization.
5. Department for Culture, Media and Sport, *Game Plan, Strategy for delivering the Government's sport and physical activity objectives – strategy unit report – Part 1-3*, London, 2002 (http://www.isrm.co.uk/reference/documents/gameplanpart1_000.pdf, accessed 19 May 2008).
6. Swiss Federal Office of Sports et al. Economic benefits of the health-enhancing effects of physical activity: first estimates for Switzerland. *Schweiz Z Sportmed Sporttraumatol*. 2001;49(3):131–133.
7. *Physical activity and health in Europe – Evidence for action*. WHO Regional Office for Europe, Denmark, 2006.
8. *Global strategy on diet, physical activity and health. Report by the Secretariat*. Geneva, World Health Organization, 2004 (http://www.who.int/gb/ebwha/pdf_files/WHA57/A57_9-en.pdf, accessed 19 May 2008).
9. The WHO European Ministerial Conference on Counteracting Obesity [web site]. Copenhagen, WHO Regional Office for Europe, 2006 (<http://www.euro.who.int/obesity/conference2006>, 19 May 2008).
10. Sallis JF, et al. Environmental and Policy Interventions to promote Physical Activity. *Am J Prev Med*. 1998;15(4).
11. Schopper D, Lormand JD, Waxweiler R, eds. *Developing policies to prevent injuries and violence: guidelines for policy-makers and planners*. Geneva: World Health Organization; 2006.
12. Bull FC, et al. Developments in National Physical Activity Policy: an international review and recommendations towards better practice. *J Sci Med Sport*. 2004;1(7):93–104.
13. International inventory of documents on physical activity promotion (<http://data.euro.who.int/PhysicalActivity>, accessed 19 May 2008), WHO Regional Office for Europe, Copenhagen, 2006.
14. Martin BW, et al. Evidence-based physical activity promotion – HEPA Europe, the European Network for the Promotion of Health-Enhancing Physical Activity. *Journal of Public Health*. 2006;14:53–57.
15. Schmid TL, Pratt M, Witmer L. A framework for physical activity policy research. *J Phys Act Health*. 2006;1:S20–S29.
16. *Nutrition, physical activity and prevention of obesity: recent policy developments in the WHO European Region*. Report in progress – version August 2006. WHO Regional Office for Europe, 2006.
17. *Inventory of documents on physical activity promotion in the European Region: Call for contributions*. WHO Regional Office for Europe, European Centre for Environment and Health, Rome office, 2006.
18. *Initial Results for the Global Survey on Assessing the Progress of National Chronic Diseases Prevention and Control: EURO Analysis*. WHO Survey Team, December 2005.
19. Spady DW et al. *Governance Instruments and Child Health: Informing Canadian Policy*. Health Canada's Health Policy Research Program (HPRP). Final report, April 2006.
20. *Review of implementation and effectiveness of existing policy instruments on transport, environment and health, and of their potential for health gain*. WHO Regional Office for Europe, European Centre for Environment and Health, Rome office, 2001.
21. *A guide for population-based approaches to increasing levels of physical activity: implementation of WHO Global Strategy on Diet, Physical Activity and Health*. World Health Organization. 2007. (<http://www.who.int/dietphysicalactivity/PA-promotionguide-2007.pdf>, accessed 19 May 2008)
22. Signal L. The politics of health promotion: insight from political theory. *Health Promot Int*. 1998;13(3):257–263.
23. Armstrong A. Multi-sectoral health promotion and public health: the role of evidence. *Journal of Public Health*. 2006;28(2):168–172.
24. Vuori I, Lankenau B, Pratt M. Physical Activity Policy and Program Development: The Experience in Finland. *Public Health Rep*. 2004;119:331–345.
25. La République Française LOIS. *LOI no 2004-806 du 9 août 2004 relative à la politique de santé publique*, France, 2004: (http://www.cnrd.fr/IMG/pdf/joe_20040811_0185_0004-4.pdf, accessed 19 May 2008).
26. Bundesministerium für Gesundheit und Soziale Sicherung. *Einfach gesünder, das Präventionsgesetz*, Germany, 2005: (http://www.bmg.bund.de/cln_041/nn_603390/SharedDocs/Publikationen/Praevention/a-422-10244.templateId=raw.property=publicationFile.pdf/a-422-10244.pdf, accessed 19 May 2008).
27. Swiss Federal Council. *Bundesgesetz über Fuss- und Wanderwege FWG*, Switzerland, 1996: (<http://www.admin.ch/ch/d/sr/7/704.de.pdf>, accessed 19 May 2008).
28. National Institute of Public Health. *Sweden's new public health policy, National public health objectives for Sweden*, 2003: <http://www.fhi.se/upload/PDF/2004/Englisch/newpublic0401.pdf>, accessed 19 May 2008).
29. Ministry of Health, Welfare and Sport, *Time for sport – exercise, participate, perform*, The Hague, 2005, (http://www.minvws.nl/images/time-for-sport—exercise-participate-perform3_tcm20-108198.pdf, accessed 19 May 2008).
30. *Mission statement on human powered mobility (English summary)*, Federal Department of the Environment, Transport, Energy and Communications (DETEC), 2002: (http://www.echosvelo.net/article.php3?id_article=546, accessed 15 July 2007).
31. Ministry of Health et al. *Working together for physical activity. The Action Plan on Physical Activity 2005-2009*, 2005, (http://www.shdir.no/vp/multimedia/archive/00004/IS-0162_E_Kort_4546a.pdf, accessed 19 May 2008).

32. Ministry of Health and Consumer Affairs. *Spanish strategy for nutrition, physical activity and prevention of obesity*, Spain, 2005, (no direct link; download under, <http://www.aesa.msc.es>, accessed 19 May 2008).
33. National Institute of Public Health. *Health dietary habits and increased physical activity – the basis for an action plan*, Sweden, 2005, (<http://www.fhi.se/upload/ar2005/rapporter/healthydietaryhabitsphysicalactivitysummary0502.pdf>, accessed 19 May 2008).
34. Ministry of Health. *Healthy throughout life - Targets & Strategies for Public Health Policy of the Government of Denmark 2002-2010*, 2003, (<http://www.folkesundhed.dk/media/healthythroughoutlife.pdf>, 19 May 2008).
35. Martin BW, et al. *Transport Related Health Effects in Particular on Children. Towards an Integrated Assessment of Their Cost and Benefits. State of the Art Knowledge, Methodological Aspects and Policy Recommendations. Topic Report on Physical Activity*. Magglingen: Federal Office of Sports. Bern: Federal Office of Public Health; 2004.
36. Ellaway A, Macintyre S, Bonnefoy X. Graffiti, greenery, and obesity in adults: secondary analysis of European cross sectional survey. *BMJ*. 2005;331(7517):611–612.
37. Koelen MA, Vaandrager L, Colomé C. Health promotion research: dilemmas and challenges. *J Epidemiol Community Health*. 2001;55:257–262.
38. Green LW, et al. Inferring strategies for disseminating physical activity policies, programs, and practices from the successes of tobacco control. *Am J Prev Med*. 2006;31(S4):66–81.