World Health Organization
REGIONAL OFFICE FOR Europe

Review of public health capacities and services in the European Region





ABSTRACT

This document aims to provide an overview of the current status of public health services across the WHO European Region, in order to strengthen the development of future public health services and capacities. It aims to underpin and complement the European Action Plan for Strengthening Public Health Capacities and Services (EAP). The information is derived from assessments of public health services in 41 of the 53 countries in the WHO European Region. Across the Region, the strongest public health responses are for surveillance, monitoring, emergency planning, immunization, environmental health and health protection. Weaker areas of response include health promotion and action to address inequalities and the wider determinants of health; surveillance to address NCDs is also weak. Governance, workforce development, financing and communications are also less well developed across the Region; this pattern is found especially in the Commonwealth of Independent States (CIS) countries.

This report is part of a series of three studies being conducted by the WHO Regional Office for Europe. These are a review of policy and legislation instruments and tools for public health; a "snapshot" review of organizational models for delivering essential public health operations (EPHOs) and public health services; and a summary of country assessments of public health capacities and services. These studies support the development of the EAP, and will be presented as information documents at the Regional Committee's sixty-second session in Malta in 2012.

Keywords

FINANCING, HEALTH.
HEALTH MANAGEMENT AND PLANNING.
HEALTH SERVICES.
HEALTH SYSTEMS PLANS – ORGANIZATION AND ADMINISTRATION.
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Contents

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Abbreviations

ASPHER	Association of Schools of Public Health in the European Region
CAH	Community Action for Health
CDC	Centers for Disease Control and Prevention (United States)
CIS	Commonwealth of Independent States
DALY	Disability-adjusted life year
EAP	European Action Plan for Strengthening Public Health Capacities and Services
EPHO	Essential public health operation
EU	European Union
FCTC	Framework Convention on Tobacco Control
GP	General practitioner
HiAP	Health in All Policies
IHR	International Health Regulations
IT	Information technology
NCD	Noncommunicable disease
NGO	Nongovernmental organization
NIS	The newly independent states (of the former USSR)
OECD	Organisation for Economic Co-operation and Development
PAHO	Pan American Health Organization
Sanepid	Sanitary-epidemiological health systems (of the former USSR)
SEEHN	South-eastern Europe Health Network
STI	Sexually transmitted infection
SWOT	Strengths, weaknesses, opportunities, threats
TB	Tuberculosis
VHC	Village health committee

Executive summary

Aim

1. This document aims to provide an overview of the current status of public health services across the WHO European Region, in order to strengthen the development of future public health services and capacities. The report provides background evidence and information to support the implementation of the European Action Plan for Strengthening Public Health Capacities and Services (EAP), which forms a key pillar of the overarching regional framework, Health 2020.

Background

2. As societies and countries change, so do the public health challenges. The challenge for public health services is to ensure that they adapt and respond to these changes and reflect the main current and future public health threats and risks according to different settings. Across the WHO European Region the main challenges facing public health include inequalities, the economic crisis, globalization, migration and urbanization, environmental degradation and climate change. These factors all influence the health of the European population, resulting in changing disease patterns across the Region, which in turn lead to public health emergencies, changes in lifestyle behaviours and increasing prevalence of noncommunicable diseases (NCDs), emerging and re-emerging communicable diseases.

3. Through resolution EUR/RC61/R2 on strengthening public health capacities and services in Europe (WHO, 2011a), the WHO Regional Committee for Europe endorsed the development of an action plan, to be led by the WHO Regional Office for Europe and submitted to the Regional Committee for consideration at its sixty-second session in September 2012. This plan would be centred on actions that are strategic and reflect modern public health practice (including a focus on both structural determinants and individual actions) and would form a key pillar of the new European health policy framework, Health 2020. The purpose of the plan is to ensure that public health services are strengthened to respond to the current and emerging public health challenges facing the WHO European Region. The overall vision is to support the delivery of the Health 2020 policy framework by promoting population health and well-being in a sustainable way.

Methods

4. Information for these documents is derived from assessments of public health services in 41 of the 53 countries of the WHO European Region. This consists of self-assessment reports from 17 countries performed using the European Region self-assessment tool (WHO, 2012a). It also includes findings from a review of public health capacities in the 27 European Union (EU) countries – a study for the European Commission by Maastricht University (Maastricht University, unpublished). In addition, two countries also conducted an assessment with the European Observatory on Health Systems and Policies. Some countries have conducted more than one type of assessment. Azerbaijan, Georgia, Iceland, Norway, San Marino, Turkey, Turkmenistan and Ukraine are yet to commence any assessment. Finally, other relevant WHO work looking at existing activity related to the 10 essential public health operations (EPHOs) that form the basis of the EAP was included in the report, based on the WHO strategic objectives for 2008–2013 (WHO, 2008a).

5. The report presents a summary of the main findings by EPHO. These EPHOs were updated during the consultation process to include a new area on advocacy, communication and social mobilization (EPHO 9), which was not fully captured during the assessments.

Findings

6. The main findings are summarized under the 10 EPHO headings.

EPHO 1: Surveillance of population health and well-being

- Most countries of the WHO European Region have surveillance systems and registries in place for communicable diseases, environmental hazards and basic demographic and health status data; notable exceptions are in central Asian countries.
- Data linkage and routine surveillance of NCD risk factors and wider determinants – including protective factors and inequalities and lifestyle behaviours – is generally poorly developed across the Region.
- There has been a recent emergence of some communicable diseases – such as malaria and polio in central Asian countries – highlighting the need for good surveillance systems.

EPHO 2: Monitoring and response to health hazards and emergencies

- The existence of national crisis management plans and structures for reacting to emergency situations is reported in most self-assessments of public health capacities and services, especially in EU countries.
- These plans are better developed for expected threats (such as influenza) than unexpected emergencies (such as bioterrorism or natural disasters); recent outbreaks suggest that even some of the richer countries may struggle with public health emergencies.

EPHO 3: Health protection, including environmental, occupational, food safety and others

- Policy frameworks are in place within all WHO European Region countries for control of communicable diseases, although implementation varies; however, implementation of policy and legislation to address environmental challenges such as water and air quality is underdeveloped in many countries.
- Legislation is in place in most countries for risk assessment for occupational health, food safety and a number of environmental exposures; however, the technical capacity to conduct risk assessments is not fully developed across the Region.
- Surveillance of antimicrobial resistance is variable across the Region and in many countries national coordinated surveillance is unavailable.

EPHO 4: Health promotion, including action to address social determinants and health inequity

- The WHO European Region includes examples of some very progressive approaches to health inequality, with strategic approaches to health inequalities found in the United Kingdom and Nordic countries.
- Action to address health inequalities in health promotion strategies is not seen as routine practice, with inclusion or equity in legislation and policy-making being reported by only half of EU countries.
- Despite many individual activities, health promotion is currently underdeveloped in the Region overall, in particular with regard to NCDs and lifestyle risk factors.

- Capacity building is required with general strategy formation, implementation and monitoring, especially in central Asia and eastern Europe, in order to strengthen overall responses.

EPHO 5: Disease prevention, including early detection of illness

- Primary prevention – routine immunization programmes are established in some form in all countries, and in most cases are well developed and effective; however, arrangements for delivery of vaccine programmes are underdeveloped in some countries, especially for minority populations, and some CIS countries have witnessed an increase in vaccine-preventable disease following the breakdown of Soviet-era services.
- Secondary prevention – routine screening for many major forms of cancer now exists in many but not all countries; screening programmes are not always evidence-based and systemic health checks for NCDs are not routine in most countries.
- Tertiary prevention – lack of availability and affordability of treatment for early stage cancers is a limiting factor in some countries; staff need training in evidence-based NCD treatment and management approaches and equipment needs updating.

EPHO 6: Assuring governance for health and well-being

- In most countries there are clear accountabilities at governmental level for "traditional" public health functions such as communicable disease control and sanitation.
- Good examples of innovative intersectoral structures promoting Health in All Policies (HiAP) approaches do exist, with environmental and mental health being the most common areas for intersectoral collaboration.
- Intersectoral approaches and accountability are often poorly defined for health improvement and promotion across the Region; many programmes are still delivered in a vertical structure.

EPHO 7: Assuring a sufficient and competent public health workforce

- University-level public health education has seen a rapid expansion in capacity over recent years; examples exist, mostly in western Europe, of well-defined and regulated specialist public health training programmes, including multidisciplinary approaches to the public health workforce and systems of continued professional development and accreditation.
- The majority of self-assessments indicate workforce capacity as the major limitation on public health services, and few countries have an overall public health workforce plan.
- Only a small number of countries have a defined postgraduate specialist public health training programme, and most countries do not define core competencies for public health for the public health workforce.
- Leadership capacity in public health was widely reported as being insufficient; this was seen as an issue for political cross-sectoral leadership and for the public health workforce itself.
- Some states noted that the small size of their national population was a barrier to support effective training of a highly specialized and expensive public health staff.

EPHO 8: Assuring sustainable organizational structures and financing

- Governments today spend an average of 3% of their budgets on disease prevention. On average, EU countries spend a lower proportion of their health budgets on disease prevention (2.8%) than the newly independent states (NIS) of the former USSR (3.3%) and south-eastern European (3.8%) countries, with figures ranging from less than 1% of

total health expenditure (in Italy and Israel, for example) to over 8% (in Romania, for example).

- Duration of funding plans is an issue, with many countries having short term and even annual budgets; these are not well suited to preventive health strategies, which often take many years to plan and implement.

EPHO 9: Advocacy, communication and social mobilization for health

- This is an area that was not included in the public health self-assessments and was added as an EPHO following the wider consultation process. Consequently, little information is available, although anecdotally this is an area that countries have asked for support on.

EPHO 10: Advancing public health research to inform policy and practice

- The public health evidence base is stronger than ever before, although more research is needed on addressing the wider determinants of health, disease prevention and promotion of well-being.
- Much of the information collated cannot be directly translated into policy; links and communication between academic public health and national policy-making are generally not well established.

Summary

7. The main findings across the EPHOs are summarized below.

- Across the Region, the strongest geographical coverage and quality is for EPHOs 1–3, including surveillance, monitoring, emergency planning, immunization, environmental health and health protection.
- The less well developed EPHOs include EPHO 4 on health promotion, inequalities and the wider determinants of health; surveillance to address NCDs is also weak – this pattern is found especially in the CIS countries.
- The enabling EPHOs 6, 7, 8 and 9 are also less well developed across the Region, addressing governance, workforce development, financing and communications – these are generally weaker in the CIS countries.
- Where there are greater health inequalities there are generally less well developed public health services and capacities, illustrating the inverse care law in an approximate line from north-west to south-east across the Region, with central Asian countries experiencing greatest health inequalities and least capacity to address them.
- The main public health challenges facing the Region need core EPHOs 1–5 particularly to be strengthened; additionally, governance and communication (EPHOs 6 and 9) are considered highly relevant.
- All the EPHOs were found to be relevant to a greater or lesser extent for WHO strategic objectives and categories, contributing to overall strengthening of WHO work and illustrate the need to take an integrated, horizontal approach to delivering public health services.

Recommendations

8. All countries would benefit from addressing the following recommendations as there was considerable variation across the Region regarding the quality and coverage of public health services. However, to address inequalities in health across the Region, these recommendations especially need to be addressed in the CIS countries.

9. Delivery of the EPHOs needs to take an integrated, horizontal approach, informing and improving the delivery of public health services to achieve the overall vision of promoting health and well-being in a sustainable way.

EPHO 1: Surveillance of population health and well-being

- Strengthen surveillance systems to inform planning for addressing inequalities, the wider determinants of health and health promotion.

EPHO 2: Monitoring and response to health hazards and emergencies

- Ensure that laboratories and skills are updated to fulfil International Health Regulations (IHR); develop, evaluate and test emergency plans.

EPHO 3: Health protection, including environmental, occupational, food safety and others

- Strengthen health protection by identifying future hazards and weaknesses in current services to inform planning; ensure enforcement of legislation.

EPHO 4: Health promotion, including action to address social determinants and health inequity

- Strengthen and develop integrated cross-sector health promotion policies and services to address inequality and the wider determinants of health that are especially orientated towards reducing NCDs and promoting well-being; build capacity on strategy formation and implementation to support this process.

EPHO 5: Disease prevention, including early detection of illness

- Ensure a balance of primary prevention (vaccination and health promotion), secondary prevention (screening and early detection of disease) and tertiary prevention (integrated patient-centred disease management); primary health care is a key delivery mechanism for disease prevention.

EPHO 6: Assuring governance for health and well-being

- Strengthen governance mechanisms for public health, such as setting up cross-sector governmental committees; appointing a minister of public health; ensuring clear lines of reporting and accountability; monitoring and undertaking performance management; strengthening systems for transparency of decision-making; and ensuring information sharing, consultation and participation.

EPHO 7: Assuring a sufficient and competent public health workforce

- Develop public health workforce plans, including the number and range of public health staff needed, training, curriculum development, core competencies, accreditation, leadership skills, mentoring and continued professional development; health professionals and the wider workforce need tailored training programmes.

EPHO 8: Assuring sustainable organizational structures and financing

- Establish sustainable funding mechanisms for public health services to ensure long-term planning; design integrated public health organizations and functions to ensure that services are responsive and sustainable – with a "win win win" approach, increase cost–efficiency, maximize health gain and reduce harm to the environment.

EPHO 9: Advocacy, communication and social mobilization for health

- This was not an area covered by the assessments; however, during the consultation process for the EAP it was recognized as a key area for strengthening public health responses. Further work needs to be developed on the best approaches for training and application of skills and methods for advocacy, communication and social mobilization.

EPHO 10: Advancing public health research to inform policy and practice

- There is a strong evidence base across Europe; however, further work is needed to ensure that future research and findings are focused on upstream prevention and health promotion, and provide straightforward, integrated messages for policy-makers and practitioners.

Key message

Strengthen the delivery of public health services by developing and integrating health promotion and disease prevention with robust health protection services. To support service delivery, the enablers for public health that especially need further development include governance, workforce development, financing and communication. Focus public health services to ensure they address inequalities and the wider determinants of health to achieve the overall vision of promoting health and well-being in a sustainable way.

Introduction

Aim

10. This document aims to provide an overview of the current status of public health services across the WHO European Region, in order to strengthen the development of future public health services and capacities. This report provides background evidence and information to support the implementation of the EAP, which forms a key pillar of the overarching regional framework, Health 2020.

11. The review covers 41 of the 53 countries in the WHO European Region. It provides a summary of information from country self-assessments and information extracted from European Observatory on Health Systems and Policies reports. Its purpose is to give a clearer picture of current public health services, their strengths, weaknesses and capacity to address the public health challenges of today and the future.

12. Secondly, the review demonstrates how self-assessment of public health services can benefit individual countries, subregions and the WHO European Region as a whole by providing a broad landscape view outlining current capacities of public health services in the Region and identifying both potential gaps and examples of good practice to inform strategic investments in public health. Finally, it provides information and evidence to support the implementation of the EAP and Health 2020.

13. Presentation of information is structured around the 10 EPHOs outlined in the EAP. It should be noted that different methods of assessment were used by different countries; hence the level of detail provided varies considerably between reports. Information including generalised findings, strengths and weaknesses identified with the current situation is therefore presented in summary format at subregional levels with the aim of providing an overview of performance against EPHOs. Examples of good practice are, however, highlighted with more specific focus in an effort to aid dissemination of good practice.

Background

Public health in the European Region

14. Public health is defined as "the art and science of preventing disease, prolonging life and promoting health through the organized efforts of society" (Acheson, 1988; WHO, 2011b). The Faculty of Public Health in the United Kingdom describes three domains of public health: health improvement (including lifestyles, inequalities in health and the wider social determinants of health), health protection (including investigation and control of infectious diseases, environmental hazards and emergency preparedness) and improving services (including evidence-based screening, evidence-based patient self-management, integrated care pathways, service planning, efficiency, audit and evaluation) (Faculty of Public Health, 2010). All three areas need to be addressed to deliver effective public health across populations.

15. As societies and countries change over time, so the public health issues alter across different populations. The challenge for public health is to ensure that services adapt and respond to these changes and reflect the main current and future public health threats and risks according to different settings. Across the WHO European Region, the main challenges facing public health include the following (WHO, 2010a).

- Inequalities – disparities in both the determinants of health and health outcomes are widening across the European Region. This is illustrated below in Map 1, which shows the approximate pattern of health inequalities across the Region. The darker colours

indicate higher levels of health inequalities and the lighter colours represent lower levels. There is now a 15-year difference in life expectancy across the European Region. Intra- as well as intercountry inequalities are also widening and impacting on health.

- The economic crisis – the worsening financial situation has impacted upon health and social care budgets. Unemployment levels are associated with poorer health outcomes.
- Globalization and migration – these affect population, socioeconomic and health patterns across Europe, as well as public health workforce capacity.
- Environmental degradation and climate change – these are already challenging current public health services, especially in lower income countries across Europe. This has the potential to further widen health inequalities.

Map 1. Inequalities in life expectancy across the WHO European Region

16. These factors all influence the health of the European population, resulting in changing disease patterns across the Region leading to further issues.

- Public health emergencies – disasters and new threats continue to emerge, including major health threats such as pandemic flu, flooding, heat waves and civil unrest.
- Lifestyle behaviours and NCDs – these are a major problem. Tobacco use among women and girls in particular is increasing in the European Region, especially in the east. Alcohol consumption is also rising in the east and only declining slightly in the west. Physical activity is lower than ever before, which – combined with increasingly calorific diets – is leading to an alarmingly steep increase in the prevalence of obesity and overweight among both adults and children.
- Emerging and re-emerging communicable diseases – including HIV infection, multidrug-resistant tuberculosis (TB) and the growing threat from antimicrobial resistance – remain an area of concern in many countries of the Region. Also of note are alarming outbreaks of potentially global significance, such as pandemic H1N1 influenza in 2009 and the re-emergence of poliomyelitis in Tajikistan in 2010, which threatened the polio-free status held by the Region since 2002.

17. Of all these health outcomes NCDs currently cause the largest proportion of mortality in the European Region. Alterations in the social and environmental determinants of health, demographics and lifestyle behaviours have changed the burden of diseases: today, five major NCDs – cardiovascular diseases, cancer, chronic respiratory diseases, mental disorders and diabetes – account for 77% of the disease burden in the Region and 86% of deaths. To address the issue of NCDs a high-level meeting of the United Nations General Assembly took place in 2011 in New York, where the *Political declaration of the high-level meeting of the General Assembly on the prevention and control of non-communicable diseases* was adopted by consensus (United Nations, 2011).

18. Alongside these challenges and health outcomes a number of new innovations and opportunities are becoming available that could help to shape and inform public health services. These include information technology (IT), nanotechnology, new concepts like complexity theory and systems science, and participatory governance and collaborative leadership. In particular, the concept of well-being is being further developed, with a greater understanding of determinants for well-being, interactions with health outcomes and indicators to measure population well-being.

19. Public health needs to find a way to incorporate these changing concepts and innovative approaches. A central principle, which applies an ecological approach to promoting population well-being (Nurse et al., 2010), is that of "sustainable well-being". This can be described as "the science, art and politics of promoting human and environmental health and well-being to meet the needs of the present without compromising those of future generations" (adapted from Acheson, 1988 and Brundtland, 1987).

20. Essentially, this principle seeks economic, social (including health) and environmental solutions where all areas benefit in a triple "win win win" situation (Bone and Nurse, 2010), with the overall vision being one of promoting sustainable well-being. The approach can be based upon the following concepts:

- maximizing resource and organizational efficiency;
- creating balanced systems – applying systems theory to find upstream solutions, reduce inequalities and negative determinants of health;
- developing integrated networks and partnerships – to improve communication, reduce duplication and create multiplier effects;
- promoting diversity – to strengthen resilience and innovation.

21. This concept of sustainable well-being and systems thinking has been used to inform the thinking of this report: a number of illustrations are provided throughout.

Health 2020 and the development of the EAP

22. The recognition that health cannot be delivered through traditional health care routes alone has been officially recognized since the Alma-Ata declaration (WHO, 1978). It was reiterated in the 1980s with the publication of the Ottawa Charter (WHO, 1986), which recommended an HiAP approach: a whole-of-government approach to health, in which the health impact of policy is considered across all sectors and provides a lever for governments to address the key determinants of health through a systematic approach.

23. Health is recognized as a major economic and social factor; hence the sustainability of the health of the population plays a critical role in prosperity and quality of life. A healthy and skilled population is crucial to workforce participation, productivity and a healthy economy, as people in good health are more productive and able to participate more effectively in society. Recognizing this, improving health becomes a shared goal across all sectors.

24. International health policy over recent years has attempted to incorporate the changing landscape of public health and delivery of health services. HEALTH21 was a WHO European Region policy derived from WHO's global vision of Health for All in the 21st century (WHO, 1998), providing an emphasis on improving primary health care and including health as an objective of economic development. The 2005 update of this policy included a set of tools for evaluation of national policies and health systems (WHO, 2005). In 2008 the Tallinn Charter (WHO, 2008b) went on to provide further guidance for strengthening health systems across the European Region. Most recently, the Parma Declaration of 2010 (WHO, 2010b) was developed to address key environment and health challenges.

25. The ongoing challenge of health inequalities within and between WHO European Region countries is well recognized, and addressing these is a key principle of the new European health policy framework, Health 2020 (see Box 1). Through resolution EUR/RC61/R2 on strengthening public health capacities and services in Europe (WHO, 2011a), the WHO Regional Committee for Europe endorsed the development of a new action plan, to be led by the WHO Regional Office for Europe and submitted to the Regional Committee for consideration at its sixty-second session in September 2012. This plan would be centred on actions that are strategic and reflect modern public health practice (including a focus on both structural determinants and individual actions) and would form a key pillar of Health 2020.

26. The purpose of the plan is to ensure that public health services are strengthened to respond to the current and emerging public health challenges facing the WHO European Region. The overall vision is to support the delivery of the Health 2020 policy framework by promoting population health and well-being in a sustainable way.

Box 1. Health 2020

The vision: for a WHO European Region in which all people are enabled and supported in achieving their full health potential and well-being and in which countries, individually and jointly, work towards reducing inequities in health within the Region and beyond.

Shared goals: to significantly improve the health and well-being of populations, reduce health inequalities, strengthen public health and ensure sustainable people-centred health systems that are universal, equitable, sustainable and of high quality.

Strategic objectives: improving health for all and reducing health inequalities; improving leadership and participatory governance for health.

Priority action areas:

- investing in health through a life course approach and empowering people;
- tackling Europe's major health challenges of NCDs and communicable diseases;
- strengthening people-centred health systems, public health capacity and emergency preparedness, surveillance and response;
- creating supportive environments and resilient communities.

Source: WHO, 2012b.

27. As a consequence of historical and political organization, and affected by local demographics, differing national priorities and competing pressures on resources, the delivery of public health services varies greatly across the WHO European Region. The recent downturn in the global economy continues to impact on health budgets. However, core requirements for delivery of public health functions are the same for all countries.

28. In recognition of this and in order to support work at the national level the WHO European Region has been working with countries to develop a set of core EPHOs (see Box 2). These can be used as a benchmark for countries to assess their own performance in the delivery of public health and identify areas for improvement and act as a tool for planning and policy development to strengthen public health services and capacities.

29. The EPHOs were informed by the work done by the Pan American Health Organization (PAHO) and their development of health indicators through the Public Health in the Americas Initiative (PAHO, 2011). However, they reflect the reality of the situation in Europe, and since 2007 have been developed and piloted with the support of the European countries.

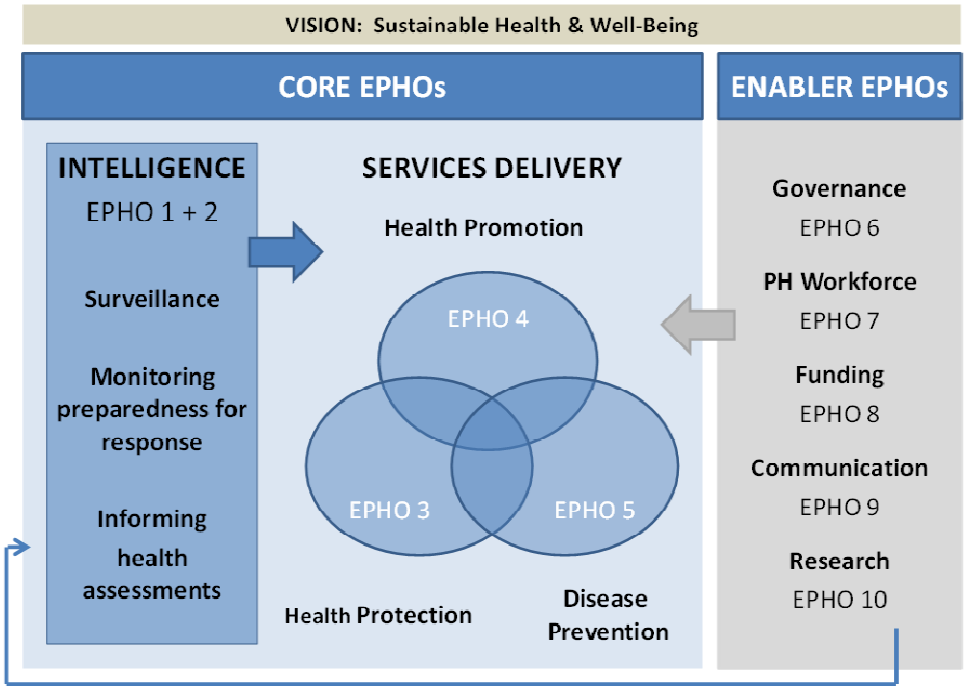
Box 2. The 10 EPHOs (2012)

1. Surveillance of population health and well-being
2. Monitoring and response to health hazards and emergencies
3. Health protection including environmental, occupational, food safety and others
4. Health promotion including action to address social determinants and health inequity
5. Disease prevention, including early detection of illness
6. Assuring governance for health and well-being
7. Assuring a sufficient and competent public health workforce
8. Assuring sustainable organizational structures and financing
9. Advocacy, communication and social mobilization for health
10. Advancing public health research to inform policy and practice

Note: following resolution EUR/RC61/R2 on strengthening public health capacities and services in Europe (WHO, 2011a), the 10 EPHOs which form the basis of the EAP were revised to the above in 2012.

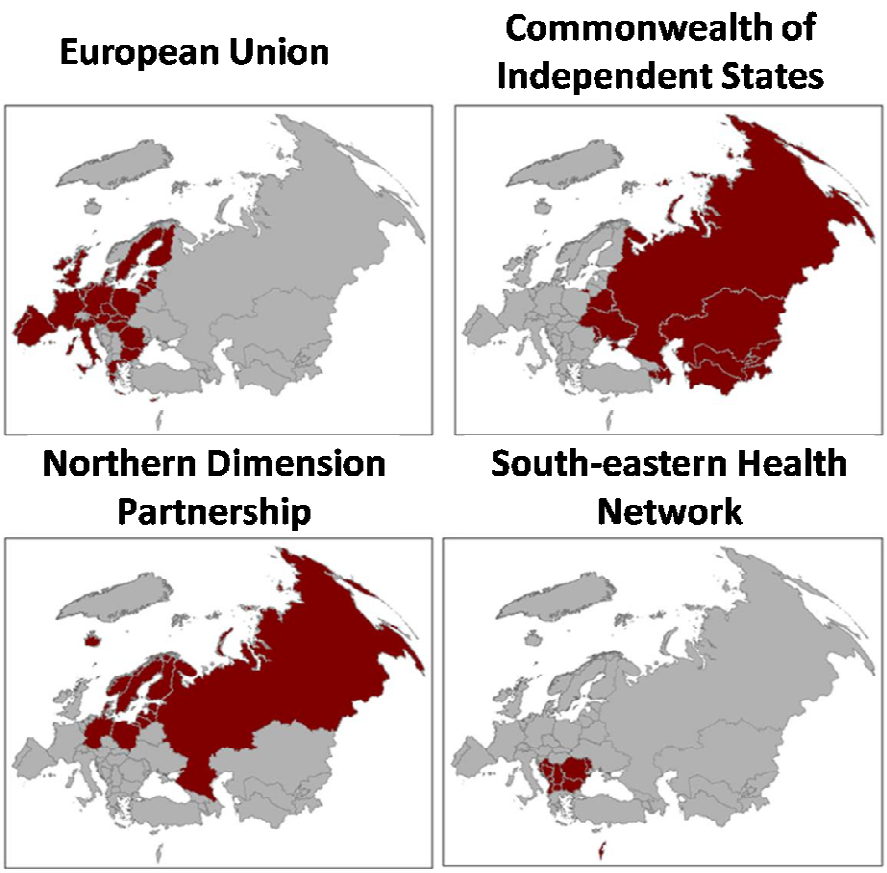
30. The operations can be conceptualised and clustered into different groupings (for example, see Fig. 1). The self-assessment tool (WHO, 2012a) is based on an early version of the EPHOs, and the process of conducting self-assessment and other consultations in the development of the EAP has helped to inform and improve this. The EPHOs used as headings in this report are the new ones reflected in the latest version of the EAP. The most notable gap between the EPHOs used in the self-assessment tool and the current list, on which this report is structured, is the addition of EPHO 9 (advocacy, communication and social mobilization for health).

Fig. 1. Clustering of EPHOs to deliver public health services



31. The European Region covers a wide and diverse range of countries. This report often groups findings according to subregions. The main subregions referred to include the EU, the Russian Federation and the Commonwealth of Independent States (CIS), the Northern Dimension Partnership, and the South-eastern Europe Health Network (SEEHN). The maps below provide an overview of the country coverage of each of these networks (see Map 2). As they show, there is significant overlap between these subregions, as well as countries which are not included in any of these networks such as Iceland, Switzerland and Turkey.

Map 2. Geographical coverage of selected European networks



Methods

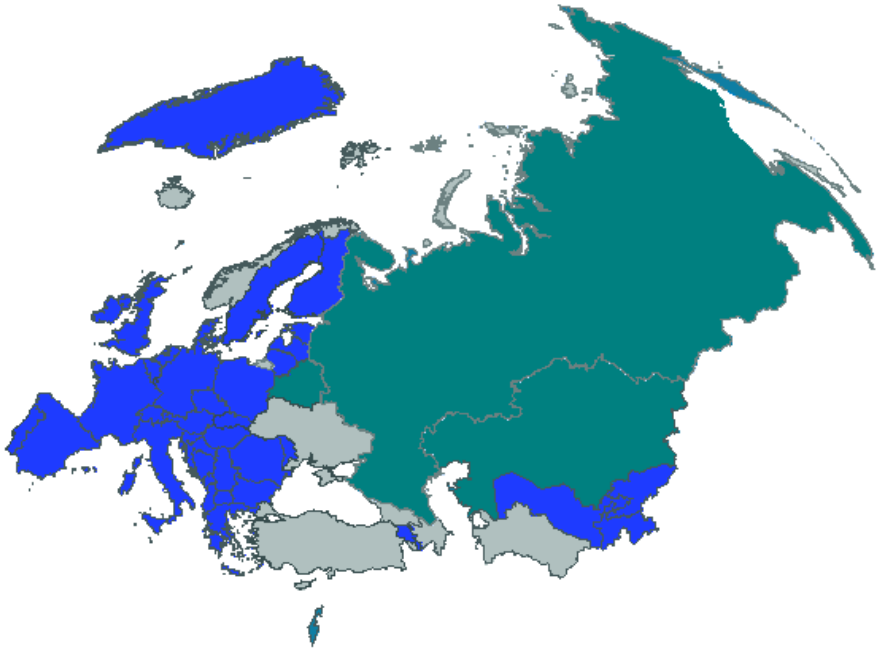
32. Information for these documents is derived from assessments of public health services in 41 of the 53 countries of the WHO European Region. This consists of self-assessment reports from 17 countries performed using the European Region self-assessment tool (WHO, 2012a). It also includes findings from a review of public health capacities in the 27 EU countries – a study for the European Commission by Maastricht University (Maastricht University, unpublished). In addition, two countries also conducted an assessment with the European Observatory on Health Systems and Policies.

33. A number of further countries have started to implement self-assessments which will be completed in the coming year: country status is summarized in Annex 1. Some countries have conducted more than one type of assessment. Finally, other relevant WHO work looking at existing activity related to the 10 EPHOs that form the basis of the EAP was included in the report, based on the WHO strategic objectives for 2008–2013 (WHO, 2008a).

34. The section below describes in detail the methods used to collect the data to inform this report from each of these three sources. A summary of the assessments carried out in each country is shown in Map 3 below: dark blue indicates a completed assessment (self-assessment, or undertaken by the Maastricht study or the European Observatory on Health Systems and Policies), including 41 countries in total; light blue indicates the four countries where self-assessments are planned or are in progress where no assessment has been conducted before (Belarus, Israel, Kazakhstan and the Russian Federation); and grey indicates that no assessment

has been carried out or is currently planned (eight countries – Azerbaijan, Georgia, Iceland, Norway, San Marino, Turkey, Turkmenistan and Ukraine – are yet to commence any assessment).

Map 3. WHO European Region country assessments



Evaluation reports of European countries performed using the European Region self-assessment tool

35. The European Region self-assessment tool (WHO, 2012a) is under continuing development: early reports have already informed changes to the system and to the EPHOs. It should be noted that the draft of the EPHOs used in the majority of self-assessments informing this report differs from the current EPHOs outlined earlier in Box 2. Of particular note – although not the only difference – is EPHO 9 (advocacy, communication and social mobilization for health), which was not included when most assessments were undertaken.

36. At the time of writing the self-assessment tool had been used by 17 countries**.** Nine of these constitute the SEEHN, with the remaining eight representing a spread across the 53 countries of the WHO European Region. Self-assessments are also in progress in Finland, Israel, Italy, Kazakhstan, Portugal, the Russian Federation, Slovakia and Spain. The intention is for all countries eventually to complete these self-assessments, providing a baseline picture that can then be used to monitor progress, as proposed by the EAP.

Review of public health capacity in the EU

37. This study from Maastricht University (unpublished) provides the second major information source for this report. The study was undertaken separately from the self-assessments, with the aim of reviewing public health capacity across the EU. In order to collect this information a public health capacity assessment tool was developed by the Department of International Health at the University of Maastricht. The tool is based around six key areas:

- leadership and governance
- organizational structures

- financial resources
- workforce
- partnerships
- knowledge development.

38. These domains were further divided into 21 subdomains. Within these subdomains, there were 128 quantitative "indicators", which were used to assess the components of public health capacity. This was achieved by rating the indicators on a scale reflecting their development, from "not developed" [1] to "fully implemented and functioning well" [6]. The indicators were also stratified by local, regional and national levels to reflect how the situation differed between areas.

39. Assessment of each country was carried out by researchers at the University of Maastricht; the findings were then sent out to individual countries for verification and additions. The six key areas outlined in the Maastricht study cover similar areas to the enabler EPHOs (see Fig. 1), with the exception of EPHO 9. The study included all 27 countries of the EU (see Map 3), including four countries (Bulgaria, Estonia, Romania and Slovenia) that had already completed self-

Other relevant WHO work

40. The two primary sources outlined above provide a valuable resource that supplies the bulk of information for this report. However, due to the natural and important evolution of the EAP and EPHOs, the assessments underlying this work included a number of gaps. These centred in particular around EPHO 9 (advocacy, communication and social mobilization for health).

41. For this reason, and in an effort to integrate all departments of the WHO Regional Office for Europe, other relevant sources of WHO work in the European Region were included where appropriate. This was also useful for building an understanding of the coverage of current WHO activities and how they relate to the EPHOs, particularly to identify future areas that especially need strengthening. The other relevant works consulted include:

- a review of the WHO Regional Office for Europe's 11 strategic objective challenges (WHO, 2012c), to cross-check relevant activities;
- a review of health systems and the financial crisis in *EuroHealth*, the quarterly publication of the European Observatory on Health Systems and Policies (2012a);
- country reports in the Health Systems in Transition series of the European Observatory on Health Systems and Policies (2012b).

Findings by EPHO

42. This section looks at the 10 EPHOs that form the basis of the EAP in turn. Each section outlines:

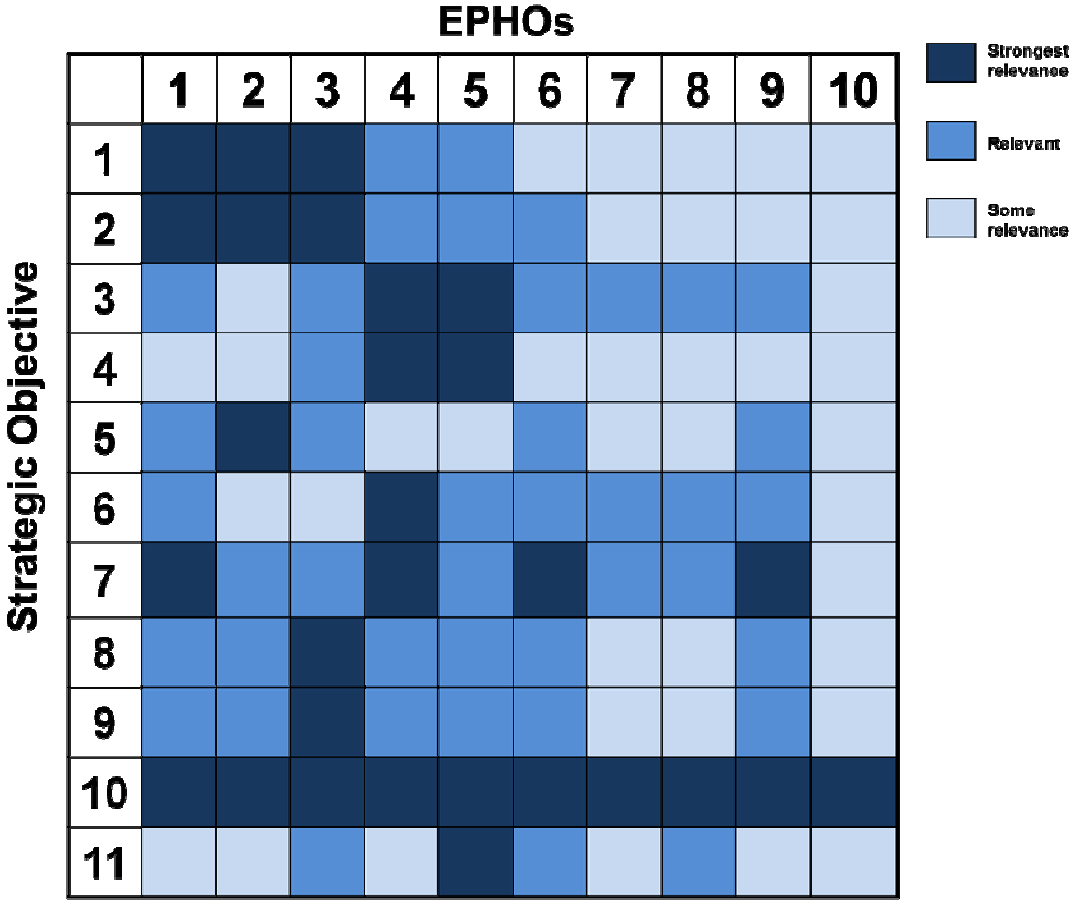
- the aim of the EPHO;
- a description as defined by the EAP (WHO 2011b);
- key findings, including current strengths and areas that need further strengthening;
- case studies of good practice;
- current WHO activities related to the EPHO.

Global WHO strategic objectives and the EPHOs

43. In May 2007 the World Health Assembly endorsed WHO's *Medium-term strategic plan for 2008–2013* and its 13 strategic objectives, of which 11 are mainly relevant in the European Region (WHO, 2008a). The EAP will be working initially within the context of these strategic objectives and thus it is important to identify where the areas of strongest relevance between each of these may lie (see Table 1).

44. Significantly, all areas have at least some relevance to the EPHOs. This is necessarily a subjective exercise and should not be seen in any way as a scientific exercise based on data: it is merely a way of mapping where the implementation of the EAP could fit into the global work of WHO.

Table 1. Relationship between the WHO strategic objectives and the EPHOs



Strategic Objectives

1: Managing the threat of communicable diseases
2: The way forward – scaling up action to prevent and control major communicable diseases
3: NCDs
4: Health at key stages of life
5: In emergency and crises health comes first
6: Good health starts with healthy behaviour
7: Promoting health and reducing health inequities by addressing the social determinants of health
8: Healthy environment
9: Safe and nutritious food is a prerequisite for health
10: Health systems and public health services
11: Medical products and technologies

EPHOs

1: Surveillance of population health and well-being
2: Monitoring and response to health hazards and emergencies
3: Health protection, including environmental, occupational, food safety and others
4: Health promotion, including action to address social determinants and health inequity
5: Disease prevention, including early detection of illness
6: Assuring governance for health and well-being
7: Assuring a sufficient and competent public health workforce
8: Assuring sustainable organizational structures and financing
9: Advocacy, communication and social mobilization for health
10: Advancing public health research to inform policy and practice

EPHO 1: Surveillance of population health and well-being

Aim

45. This operation seeks to provide information and intelligence to inform health needs assessments, health impact assessments and planning, in order to reduce health inequalities and promote health and well-being. It is essential to have a reliable and clear picture of how health is distributed in a given population and what indicators contribute to or reduce opportunities to be healthy. Well-functioning public health laboratories are critical to countries' surveillance and response activities.

Description of operation

46. Establishment and operation of surveillance systems to monitor the incidence and prevalence of diseases are required to assess current health status and health behaviour, as well as establishment and operation of health information systems to measure morbidity and population health indicators.

47. Other elements of this operation comprise community health diagnosis, data trend analysis, identification of gaps and inequalities in the health status of specific populations, identification of needs, and planning of data-oriented interventions. Where possible, data should be stratified using at least one socioeconomic stratifier (such as geographical area, income, education or ethnicity).

Key findings: current strengths

48. Most countries of the WHO European Region have surveillance systems and registries in place for communicable diseases, as well as basic demographic and health status data (see Case study 1). Notable exceptions are central Asian countries, where further development is needed in this area.

49. Systems for identification of physical and chemical hazards, food safety risk assessments and progress towards implementation of the IHR are in place in many states, although laboratory support for investigation of health threats varies.

Key findings: areas that need further strengthening

50. There is scope for improvement in many countries in terms of data integration and analysis, such as through linking data on the environmental and social determinants of health to morbidity and mortality and other indicators of health status. This would help to illustrate how inequalities impact on health and to identify populations to be prioritized.

51. Routine surveillance of NCD risk factors, wider determinants – including protective factors and inequalities – and lifestyle behaviours is generally poorly developed across the Region. Well-developed capacities for such monitoring and reporting were reported for only 13 countries, and these were mostly in the EU.

52. There has been a recent re-emergence of some communicable diseases – such as polio and malaria in central Asian countries – further strengthening the case for increased surveillance and immunization.

53. The process dealing with generation of information and intelligence and how they are used needs assessment; priority setting, policy and planning are underdeveloped. Information technologies and systems are generally currently insufficiently adopted across the Region.

Case study 1. The Czech Republic: an example of a centralized health information system

Data for health policy and research are collected by the Czech Institute of Health Information and Statistics. The main task of the Institute is to manage and refine the national health information system, including collecting and processing information concerning health status and health care, managing national health registries (15 in total, including the Cancer Registry and the Registry of Hospitalized Patients) and providing information for health research purposes, while ensuring compliance with data protection laws. All health care providers are required to send data reports to the Institute on an annual basis.

Source: Bryndová et al., 2009.

Current WHO activities related to EPHO 1

Health information

54. The WHO Regional Office for Europe's Division of Information, Evidence, Research and Innovation provides regular summaries of health statistics across Europe and supports countries in the establishment, enhancement and evaluation of integrated and effective health information systems. It works with international partners to ensure the standardization, international comparability and quality of health data (WHO, 2011c).

Laboratory services

55. The Regional Office also supports countries in the development of national policies, standards and strategies for laboratory services and in strengthening the capacities of these laboratories and creating well-structured networks (WHO, 2011d).

EPHO 2: Monitoring and response to health hazards and emergencies

Aim

56. This operation seeks to monitor infections and other health hazards, to inform priority setting and risk assessment to protect health, and to plan for emergencies to reduce the risk from health hazards.

Description of operation

57. The EPHO entails monitoring, identifying and predicting priorities in biological, chemical and physical health risks in the workplace and the environment; risk assessment procedures and tools to measure environmental health risks; release of accessible information and issuance of public warnings; and planning and activation of interventions aimed at reducing exposure to health hazards and minimizing health risks.

58. This operation includes preparedness for management of emergency events, including formulation of suitable action plans; development of systems for data collection and prevention and control of morbidity; and application of an integrative and cooperative approach with various authorities involved in management.

59. In the globalized world, diseases can spread far and wide via international travel and trade. A health crisis in one country can quickly affect livelihoods and economies in many parts of the world. The IHR were created for this purpose: they are intended to help the international community prevent and respond to acute public health risks.

Key findings: current strengths

60. The existence of national crisis management plans and structures for reacting to emergency situations is reported in most self-assessments of public health capacities and services (see Case study 2).

61. There is a high level of capacity within the EU to respond to public health emergencies: all EU countries covered reported systems to identify potential threats and national plans to deal with unexpected public health emergencies. These plans are, however, better developed for expected threats (such as influenza) than unexpected emergencies (such as bioterrorism or natural disasters) (WHO, 2011d).

62. Networks of laboratories are available within countries to support investigation of health threats; EU and south-eastern European states also have a regional network of laboratories capable of supporting investigation of public health issues.

Key findings: areas that need further strengthening

63. In many countries, although infrastructure and procedures may be in place, not enough is known about their actual performance. Some of the plans that are in place are more a reactive process than an established plan. Recent outbreaks suggest that even some of the richer countries in the Region may struggle with public health emergencies. This may not always be a matter of resources but sometimes an issue with training, collection and evaluation of data.

64. Insufficient funds were identified as a key problem by many states.

65. Issues were reported with the privatization of laboratories in south-eastern European states and concerns that this may be diluting the public health orientation of the national public health laboratory.

66. Insufficient technical expertise to manage emergency situations was identified by some countries, particularly those in transition.

Case study 2. Capacity of the health system in Kazakhstan for crisis management

Kazakhstan experiences a wide array of natural hazards – including earthquakes, flooding, mudslides and extreme temperature events (both heat-waves and cold spells) – many of which are expected to increase in frequency and in response to a changing climate. In order to respond to these threats, Kazakhstan has developed a national multisectoral institutional framework for emergency management. The interaction of governmental, central and local executive bodies and other organizations takes place within the framework of the state system. Representatives of 15 ministries, under the leadership of the Prime Minister, constitute the high-level Crisis Management Committee. Similar committees exist at the lower government levels, where they are chaired by the respective governors. The Ministry for Emergency Situations has overseen the development of a multisectoral national emergency response plan defining the roles and responsibilities of the crisis management structures and seeking to enhance Kazakhstan's capacity to respond to natural hazards.

Source: WHO, 2012d.

Current WHO activities related to EPHO 2

Public health emergencies and crises

67. The WHO Regional Office for Europe has developed a comprehensive event management system, which coordinates with the Global Outbreak Alert and Response Network (WHO, 2012e) to manage critical information about outbreaks and other public health emergencies. It also supports countries to evaluate the capacities of their health systems to manage a potential health crisis through promotion of an all-hazard approach for preparedness (WHO, 2011e).

68. The Regional Office has planned a set of activities through 2012 to enable countries to implement the recommendations of the IHR. In addition to this, a number of other areas have been identified in which action is being focused:

- assessing and strengthening the crisis preparedness of national health systems;
- supporting ministries of health in institutionalizing risk reduction and crisis preparedness;
- promoting effective national policies;
- reducing vulnerability of critical health facilities;
- collecting and sharing best practices;
- building plans to mount sustained responses to a pandemic;
- preparing for emergencies triggered by climate change;
- improving knowledge and upgrading skills.

69. As the lead agency for the global health cluster, the Regional Office is working closely with international partners to help local authorities and civil society respond to the health needs of people threatened by a health crisis. Ongoing efforts are directed to strengthening the capacities of WHO and European Region countries to respond quickly and with effective health intelligence and health coordination to any likely health emergencies.

Recovery from health crises

70. The Regional Office works to support countries in their recovery from health crises, including offering assistance to rebuild health system capacities; establish early warning systems for communicable diseases and natural disasters; and develop national health policy frameworks. It also acts as a technical focal point for public health programmes.

EPHO 3: Health protection, including environmental occupational, food safety and others.

Aim

71. This operation seeks to use intelligence from surveillance and monitoring to develop and inform service provision to protect health from communicable disease and environmental risks and hazards.

Description of operation

72. Risk assessments and actions are needed for environmental, occupational and food safety. Whenever possible, risks need to be assessed for different socioeconomic groups, in order to identify inequities in the exposure to risk. Public health authorities supervise enforcement and control of activities with health implications.

73. This operation includes the institutional capacity to develop regulatory and enforcement mechanisms to protect public health and monitor compliance with accepted norms. It looks at:

- environmental safety
- occupational safety
- food safety
- risk assessment of other hazards.

Key findings: current strengths

74. Policy frameworks are in place within all WHO European Region countries for control of communicable diseases, although implementation varies. Legislation is in place in most countries for risk assessment for occupational health, food safety and a number of environmental exposures (see Case study 3).

75. Some CIS states have developed policies and introduced legislation to address environmental challenges such as water and air quality, and common national programmes for health and environment exist in some countries.

76. In Italy, a programme to integrate veterinary services into health promotion divisions at the local level has helped to address more effectively the threat of foodborne diseases transmitted by animals.

Key findings: areas that need further strengthening

77. Implementation of policy and legislation to address environmental challenges such as water and air quality is underdeveloped in many countries.

78. Technical capacity to conduct risk assessments, including staff and equipment, is not fully developed across the Region.

79. Effective monitoring of nosocomial infections and surveillance of antimicrobial resistance is variable across the Region, and in many countries national coordinated surveillance is unavailable.

80. Health impact assessments are not yet consistently used in all European countries to evaluate the potential impact of other sectors on population health. A mapping exercise of health impact assessments in 19 European countries covering the period 1990–2005 found that some countries reported very few, while the highest number were reported in England, Finland, the Netherlands and Wales. Very few countries had used health impact assessments extensively (Wismar et al., 2007).

Case study 3. Protecting health from impacts of climate change in the former Yugoslav Republic of Macedonia

Protecting Health from Climate Change was a seven-country initiative between WHO and the German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety, with the aim of strengthening the capacity of health systems to protect health against climate change. Within the former Yugoslav Republic of Macedonia, one of the objectives was to develop and implement heat-wave action plans, which resulted in the following actions.

- The Heat-health Action Plan was adopted by the government in February 2011 and published in 2011.
- A heat-wave early warning system was developed for timely announcement of heat-waves. It is available online at http://www.toplotnibranovi.mk.
- Information leaflets for protection against heat-waves were developed and printed, aimed at the general population, managers of health and social institutions, general practitioners (GPs) and health workers.
- More than 300 health professionals, environment professionals, journalists and other professionals received training on the influence of health on climate change, with an emphasis on heat-waves.

This demonstrates significant steps towards reducing the influence of climate change, assessing its impact and developing a coherent set of recommendations, now successfully implemented.

Source: Kendrovski and Spasenovska, 2011.

Current WHO activities related to EPHO 3

Communicable disease

81. The WHO Regional Office for Europe has a number of specific programmes addressing communicable disease threats, including antimicrobial resistance, seasonal and pandemic influenza, HIV/AIDS, TB, malaria and viral hepatitis (WHO, 2011d).

Prison health

82. It also supports Members States in improving prison health by facilitating the links between prison health and public health systems (WHO, 2011f).

Climate change

83. The Regional Office's climate change, green health services and sustainable development programme helps countries understand the health effects of climate change and assists in implementing the European Regional Framework for Action endorsed at the Parma Ministerial Conference in 2010 (WHO, 2011g).

Environmental health risk assessment

84. The environmental health risk assessment and management programme develops methods and tools to assess the complex health impacts of new developments, including industrial infrastructures and new technologies (such as nanotechnology) (WHO, 2011g).

Water and sanitation

85. The water and sanitation programme works to increase access to safe water and sanitation, specifically addressing inequities in the Region. This work is framed by the Protocol on Water and Health presented to the 1992 Convention on the Protection and Use of Transboundary Watercourses and International Lakes (UNECE, 1999), as well as supporting implementation of the water and health components of the Barcelona Convention for the Protection of the Mediterranean Sea against Pollution (WHO, 2011g).

Food safety

86. The food safety programme aims to ensure that food remains safe from production to consumption by supporting countries to build capacity to manage food safety, developing mechanisms and tools for an intersectoral food safety system, monitoring contamination of chemical and microbiological hazards, and surveillance of foodborne disease. This programme is based on the Region's Action Plan for Food and Nutrition Policy 2007–2012 (WHO, 2008c) and the WHO global strategy for food safety (WHO, 2011h).

Healthy environments

87. The living and working environment programme focuses on air quality, chemical safety, environment and health information systems, housing, noise and occupational health (WHO, 2011g).

EPHO 4: Health promotion, including action to address social determinants and health inequity

Aim

88. This operation seeks to promote population health and well-being by addressing inequalities and the wider social and environmental determinants of health. This can be achieved by creating supportive environments and strengthening community assets to empower individuals and populations to have healthier lifestyles and behaviours across the life course. Additionally, multisectoral action aims to create healthy environments, to reduce inequalities and risk factors in social and environmental determinants of health, and to develop protective community assets that promote population well-being.

89. Addressing social inequalities contributes substantially to health and well-being. Reducing health gradients requires a comprehensive policy goal of equalizing health chances across socioeconomic groups, including remedying health disadvantage and narrowing health gaps. Action to reduce these inequities will touch all those affected if it is applied universally across society. Action is greatest in addressing the needs of the most deprived and vulnerable people but is not delivered exclusively to them.

Description of operation

90. Health promotion is the process of enabling people to increase control over their health and its determinants and thereby improve it. It addresses determinants of both communicable diseases and NCDs and includes the following activities:

- the promotion of changes in lifestyle, practices, and environmental and social conditions to facilitate societal development among individuals and the community that promotes public health and reduces social inequalities in health across the social gradient;
- educational and social communication activities, adapted to specific socioeconomic groups, aimed at promoting healthy lifestyles, behaviours and environments;
- reorientation of health services to develop care models that encourage health promotion and ensure equal access to health care;
- analysis to understand the root causes of health inequities, including factors such as social exclusion, low income, and poor access to health and social services;
- design of interventions to address the socioeconomic determinants of health;
- intersectoral partnerships for more effective health promotion activities;
- assessment of the impact of public policies on health;
- risk communication.

91. The means of achieving this include conducting health promotion activities aimed at the population according to a gradient approach, as well as activities aimed at subgroups at increased risk of negative health outcomes. This includes action to improve health outcomes and influence the social determinants of health in areas such as sexual health, mental health, health behaviour related to HIV, drug abuse control, tobacco control, alcohol control, physical activity, obesity prevention, nutrition, food safety, work-related health hazards, injury prevention, and occupational and environmental health.

92. Health inequities arise from the societal conditions in which people are born, grow, live, work and age; these are referred to as the social determinants of health. They include early years' experiences, education, economic status, employment and decent work, housing and environment, and effective systems of preventing and treating ill health (structural factors). Action on these determinants of health, both for vulnerable groups and the entire population, is essential to create inclusive, equitable, economically productive and healthy societies.

93. The role of health promotion includes working with other sectors and policy-makers to address the structural factors that influence health and health inequities. The focus of policies to reduce social inequities in health should therefore be on the social, cultural and economic environment, as well as on targeting individual risk factors in isolation.

94. The broader role of health promotion includes advising policy-makers on health risks, health status and health needs of populations across the social gradient, and designing strategies for different settings. It also includes acting upon the determinants of health, in particular the social or socioeconomic determinants that cause ill health (such as poverty, unemployment, lack of social support and poor living conditions). It further includes addressing existing inequalities

in health between different populations groups and promoting equity in health in all public health policies and interventions.

95. The conceptual boundaries between "health promotion" and "disease prevention" are at times ambiguous and subject to debate. In preparing this document, choices were made on a pragmatic basis, and readers may find deviations from categorizations made elsewhere.

Key findings: current strengths

Inequality and the social determinants of health

96. The WHO European Region includes examples of some very progressive approaches to health inequality (see Case study 4). A number of countries mentioned inequality, many stating concerns about rising levels in recent years. Examples were found of strategic approaches to health inequalities; the United Kingdom and Nordic countries were at the forefront of this.

Lifestyle factors

97. In south-eastern Europe, most countries have some sort of health promotion activity in the area of communicable disease.

Key findings: areas that need further strengthening

Inequality and the social determinants of health

98. Consideration of health inequalities in health promotion strategies was not seen as routine practice. For example, the requirement for some form of assessment of inclusion or equity in legislation and policy-making was reported by only half of EU countries.

Lifestyle factors

99. Availability and delivery of health promotion varies enormously across the Region. Health promotion is not well recognized or developed in some countries; notably within the SEEHN and central Asian republics.

100. Integrating topic-specific health promotion messages within other areas like alcohol, substance misuse, mental health and violence prevention helps to provide a more person-centred approach with greater overall health gains. However, many strategies need to be updated, and capacity building is required with strategy formation, implementation and monitoring, especially in central Asia and eastern Europe.

101. Health promotion activities are not sufficiently integrated with other sectors in the community.

102. Many countries focus health promotion activities through existing primary care and school nursing services without extensive involvement of other sectors and communities.

103. Assessment and formal evaluation of health promotion projects is carried out in some cases, but this is not widespread practice across the Region.

104. In south-eastern Europe, most countries have some sort of health promotion activity in the area of communicable disease. In particular, HIV/AIDS and programmes on alcohol and tobacco use are quite widespread, but health promotion on NCDs is non-existent in some countries. Despite many individual activities, health promotion is in general currently underdeveloped in the Region, in particular with regard to NCDs and lifestyle risk factors.

Case study 4. Community action for health (CAH), Kyrgyzstan

The CAH strategy is a country-wide partnership between village health committees (VHCs) and the governmental health system. Its goals are to enable rural communities to act on their own to improve health in their villages and to enable the governmental health system to work in partnership with VHCs to improve health. There are currently around 1500 VHCs covering about 80% of Kyrgyzstan's villages. CAH is part of the Kyrgyz health reform programme.

VHCs are community-based organizations. They consist of elected lay people who are ready to do something voluntarily for the improvement of health and well-being in their villages. VHC federations at the district or "rayon" level are registered as nongovernmental organizations (NGOs). A national association of VHCs coordinates collaboration with the Ministry of Health and donors. The VHCs' direct partners in the health system are primary health care providers in the villages and especially the staff of health promotion units: these are part of family medicine centres and are dedicated exclusively to health promotion. They were formed to facilitate the extension of the CAH strategy throughout the country.

The CAH process begins with villagers identifying their health priorities, followed by formation of VHCs, facilitated by primary health care and health promotion unit staff. These units' work with VHCs is two-fold. First, they provide training in organizational development to help the VHCs to become independent civil society organizations; this enables them to engage in their own initiatives, addressing social determinants of health with their own resources and in collaboration with local self-government bodies and other organizations. Second, health promotion units train VHCs to implement health actions on the diseases identified as priorities. These campaigns are developed by the Republican Centre for Health Promotion, a department of the Ministry of Health, together with international aid projects. Examples are distribution of test kits for iodised salt to retailers for use at wholesale markets; population screening for hypertension with automatic blood pressure cuffs; and promoting dental health in schools. Other campaigns cover nutrition for children, hygiene, sexual reproductive health, brucellosis and TB.

The CAH programme has been developed since its initiation in 2001 with financial support from the Swiss Agency for Development and Cooperation and technical assistance from the Swiss Red Cross. In 2005, it became part of the Kyrgyz health reform programme, which led many other donors (including the United States Agency for International Development, Swedish International Development Cooperation Agency, Liechtenstein Development Service, United Kingdom Department for International Development and World Bank) to support its extension throughout the country.

Source: Ministry of Health of the Kyrgyz Republic, 2001.

Current WHO activities related to EPHO 4

Violence and injury prevention

105. The WHO Regional Office for Europe's violence and injury prevention programme assists countries to build capacity for prevention policies, addressing this health priority through resolution EUR/RC55/R9 on the prevention of injuries and the European Council recommendation on the prevention of injury and promotion of safety (WHO, 2011f).

106. TEACH-VIP is a comprehensive injury prevention and control curriculum, developed through the efforts of WHO and a network of global injury prevention experts, which provides support for policy development and capacity building (WHO, 2012f).

Maternal and newborn health

107. The Regional Office's maternal and newborn health programme includes the Effective Perinatal Care training package and the Beyond the Numbers methodology to support countries in developing national policies and guidelines for better quality of maternal care (WHO, 2011i). This programme is most active in the countries with greatest need, particularly the Balkan and CIS countries.

Adolescent health

108. The Regional Office has developed a systemic "Five S" approach to support countries in strengthening their response to adolescent health. In addition to this, further implementation of the early childhood development programmes and cross-sector approaches (such as the Schools for Health in Europe network) seeks to improve the survival, growth and development of young children (WHO, 2011i).

Healthy ageing

109. The Regional Office has adopted the Active Ageing framework for policy-makers, which is based on a multisectoral approach to health for the elderly (WHO, 2011i).

Tobacco control

110. Supported by the WHO Framework Convention on Tobacco Control (FCTC) (WHO, 2003/2005), the Regional Office is successfully promoting the six tobacco control policy intervention areas through the MPOWER framework (WHO, 2011j).

Alcohol

111. The Regional Office works closely with the European Commission on the European Information System on Alcohol and Health. It will use the European Alcohol Action Plan to guide countries in drafting or renewing national alcohol policies to reduce the harmful use of alcohol through, for example, increasing taxation and decreasing access to alcohol products (WHO, 2011j).

Illicit drugs

112. The Regional Office's programme on illicit drugs supports countries in providing effective treatment programmes for their drug users, including technical advice on harm reduction measures and opioid substitution therapy (WHO, 2011j).

Transport and health

113. The countries of the WHO European Region have been committed to pursuing healthy and sustainable transport since 1999, when the Charter on Transport, Environment and Health was adopted at the Third Ministerial Conference on Environment and Health.

114. The transport and health programme supports countries in defining and managing healthy mobility policies, and in promoting healthy and sustainable transport through an HiAP approach. It helps countries make health and environmental considerations a more explicit criterion for decision-making on transport (WHO, 2011g).

Physical activity

115. The Regional Office works towards the creation of environments supportive of physical activity through HEPA Europe (the European network for the promotion of health-enhancing physical activity) (WHO, 2012g).

EPHO 5: Disease prevention, including early detection of illness

Aim

This operation seeks to prevent disease through three levels of prevention: primary, secondary and tertiary. These range from improving the overall health of the population (primary prevention) to improving treatment and recovery (tertiary prevention) (see Table 2).

116. Each of these levels has an important role to play; however, in general, more upstream approaches (primary prevention) tend to be cheaper, more efficient and entail lower morbidity and mortality. Health promotion (EPHO 4) is covered in the previous section and the two should be seen as inextricably intertwined.

117. It is important to note the difference between access and coverage, as these are not one and the same. Coverage describes the proportion of the population who are geographically and physically able to reach and utilize services. Access, on the other hand, identifies a patient or population's ability to utilize needed health services in terms of health service delivery system characteristics (such as availability, organization and financing of services), characteristics of the population (such as demographics, income and care-seeking behaviour) and whether or not the care sought adequately meets the individual or group's basic medical needs. Even where there is full coverage, several barriers to access might exist, deriving from issues such as cost or cultural unacceptability. These are important determinants to enhance accessibility of services to minority or excluded populations, and services might need to be tailored for these communities. As such, the key outcome for systems to strive towards should be universal access, rather than universal coverage.

Table 2. Levels of disease prevention

Prevention level	Definition	Activities
Primary prevention	Promoting well-being and stopping health problems from occurring in the first place – usually includes addressing wider determinants and upstream approaches targeting the majority of the population.	• Vaccination • Health promotion • HiAP
Secondary prevention	Identifying early and halting the progression of health problems once they are established – detecting disease early with health checks or screening and targeting high-risk groups. This is important to reduce inequalities in health.	• Screening programmes • Early detection of disease • Health checks
Tertiary prevention	Working with individuals with established health problems to promote recovery and reduce the risk of relapse using evidence-based cost-effective approaches to improve disease management.	• Patient-centred self-management • Integrated care pathways to improve disease management

Source: Donaldson and Donaldson, 2000.

Description of operation

118. Disease prevention is aimed at both communicable diseases and NCDs and has specific actions, largely delivered to the individual. The term is sometimes used to complement health promotion and health protection operations. Although there is frequent overlap between the content and strategies, disease prevention is defined separately. Disease prevention in this context is considered to be action that usually emanates from the health sector, dealing with individuals and populations identified as exhibiting identifiable risk factors, often associated with different risk behaviours.

119. Primary prevention services include vaccination of children, adults and the elderly, as well as vaccination or post-exposure prophylaxis for people exposed to a communicable disease. Primary prevention activities also include provision of information on behavioural and medical health risks, as well as consultation and measures to decrease them at the personal and community level; maintenance of systems and procedures for involving primary health care and specialized care in disease prevention programmes; production and purchasing of childhood and adult vaccines; storage of stocks of vaccines where appropriate; and production and purchasing of nutrition and food supplements.

120. Secondary prevention includes activities such as evidence-based screening programmes for early detection of diseases; maternal and child health programmes, including screening and prevention of congenital malformations; production and purchasing of medicines such as antibiotics; production and purchasing of screening tests for the early detection of diseases; and ensuring capacity to meet current or potential needs.

121. Tertiary prevention includes the rehabilitation of patients with an established disease to minimize residual disabilities and complications and to maximize potential years of enjoyable life, thereby improving the quality of life even if the disease itself cannot be cured.

122. It is possible to deliver disease prevention at all levels of health care, from primary to tertiary. However the most efficient use of resources may be best achieved through seeking the most upstream form of delivery wherever possible: primary care is a key sector of the health system for delivering disease prevention as it provides cheaper and more accessible services to identify and manage diseases earlier. Health professionals can also play a role in identifying risk factors such as lack of physical activity or poor diet, and provide advice.

Key findings: current strengths

Primary prevention

123. Routine immunization programmes are established in some form in all countries. These are in most cases well developed and effective (see Case studies 5a and 5b). Immunization coverage is generally within targets in EU countries, although vigilance is still required, as demonstrated by increases in measles cases in recent years.

Secondary prevention

124. Routine screening of neonates and for many major forms of cancer now exist in many countries, particularly those in the EU. Abdominal aortic aneurysm screening is also now being introduced in some EU countries. More than half of European countries now have strategies or policies on sexual and/or reproductive health, either as individual strategies or within mainstream health or public health policies.

Tertiary prevention

125. Many countries, especially in western Europe, have well-developed tertiary care services of a high quality, although not always available to all sections of society.

Key findings: areas that need further strengthening

Primary prevention

126. Arrangements for delivery of vaccine programmes are underdeveloped in some states, with access to vaccines and supply chain management reported as problematic in some countries. Further measures to include minority populations in routine immunization programmes are also needed across the Region.

127. Some CIS countries witnessed an increase in vaccine-preventable disease during the early 1990s, following the breakdown of Soviet-era services. Previous coverage rates have not yet been achieved in some areas.

128. There is also a need for provision of accessible, effective contraception and good counselling to prevent unintended pregnancies, as well as integration of family planning and other sexual and reproductive health services into primary health care.

129. There is a particular need to improve chlamydia control programmes among young people and to expand the network of laboratories in eastern Europe to be able to monitor antimicrobial-resistant strains of gonorrhoea.

Secondary prevention

130. Systematic health checks for NCDs are not routine in most countries. For example, ad hoc cardiovascular checks are conducted in some countries, although often with poor processes in place for follow-up or referrals.

131. Availability of cancer screening programmes varies greatly across the Region, ranging from no programmes in some south-eastern European and central Asian states to routine screening for major cancers in others. Lack of availability and affordability of treatment for early stage cancers is a limiting factor in some countries.

132. Routine newborn screening is not universal within the Region. Among those countries that do have screening programmes, the range of tests offered varies.

133. Family planning services need to be strengthened as they are essential to ensuring good reproductive and sexual health and to the prevention of negative health outcomes.

Tertiary prevention

134. In many cases disease registries, risk factor survey instruments and surveillance systems are lacking or not fit for purpose, with only limited disaggregation of data by sex, age or social strata. This presents problems for comparative analysis and benchmarking between and within countries, and means that monitoring of trends and the impacts of interventions is limited.

Case study 5a. Development of immunization programme capacity in Bosnia and Herzegovina

In October 2009, the WHO Regional Office for Europe, in collaboration with the United States Centers for Disease Control and Prevention (CDC), conducted post-introduction evaluation of Haemophilus influenzae type b (Hib) and DTPa-IPV vaccines in Bosnia and Herzegovina. Six investigation teams – composed of local specialists and Regional Office and CDC consultants – visited 24 sites, including two central public health institutes, four regional/cantonal public health institutes and eighteen health facilities. The investigators interviewed immunization programme personnel, health care professionals and mothers using standardized questionnaires, and observed immunization sessions. The team of experts summarized evaluation findings and recommendations, which were presented to the Ministry of Health and immunization programme personnel. These recommendations focused on strengthening service delivery in areas with poor access, and where less than optimal implementation by programme staff was occurring. The experts also developed a "lessons learned" tool for use by the Ministry to avoid common planning and implementation pitfalls when introducing new vaccines.

Source: WHO, 2009a.

Case study 5b. Economic development and investment choices in health care: the improvement of key health indicators in Portugal

Portugal has shown significant improvements in child health, with infant mortality falling steadily from 54 per 1000 in 1970 to 3.3 per 1000 in 2006. Other major achievements include a 96% reduction in maternal mortality, an 89% reduction in child mortality and a 96% in infant mortality. These results are the outcome of both political will, via the improvement of social and economic conditions of the population, and the creation of a national network of health centres.

The focus on development of a primary health care network explains about 40% of the important health improvements in Portugal. Multivariate analysis of the time series of the various mortality indices since 1960 shows that the decision to base Portugal's health policy on primary health care principles, with the development of a network of comprehensive primary care services, has played a major role in the reduction of maternal and child

Source: WHO, 2008d.

Current WHO activities related to EPHO 5

Immunization

135. The WHO Regional Office for Europe's Vaccine-Preventable Diseases and Immunization team provides policy and technical assistance to countries to maximize equitable access of all people to vaccines of assured quality as part of the Global Immunization Vision and Strategy (WHO, 2011d; WHO, 2011k).

Primary health care

136. The Regional Office's primary health care programme has supported ten countries in conducting studies on primary care organization and provision, and continues to support countries through, for example, generation of data to facilitate international comparisons of performance (WHO, 2011c).

Mental health and mental disorders

137. Since 2008, the Regional Office has run a partnership project with the European Commission on empowerment in mental health, aiming to empower mental health service users and their families (WHO, 2011f).

Cardiovascular diseases, cancers, chronic respiratory diseases and diabetes

138. The Regional Office seeks to support countries with surveillance of disease risk factors and work to enhance early detection of diseases. Its NCD programme is based *on The European health report 2009* (WHO, 2009b) and the report on country capacity for NCD prevention and control in the Region (Farrington and Stachenko, 2010).

HIV/AIDS

139. The Regional Office supports a health system approach in tackling the HIV epidemic, and has developed an action plan for 2012 to 2015. This is in keeping with the 2001 United Nations Declaration of Commitment on HIV/AIDS (WHO, 2011l).

Sexually transmitted infections (STIs)

140. The Regional Office has been working to combat STIs through collaboration with the International Union against Sexually Transmitted Infections and with UNICEF (WHO, 2011l).

TB

141. The Regional Office supports countries in implementation of the "Stop TB Strategy", and together with its partners is developing a consolidated action plan to prevent and combat multi/extensive drug resistant TB in Europe (WHO, 2011l).

EPHO 6: Assuring governance for health and well-being

Aim

142. This operation seeks to ensure that public health services are well governed through effective mechanisms, processes and institutions, with clear lines of accountability, quality assurance and equity.

Description of operation

143. Policy development is a process that informs decision-making on issues related to public health. It is a strategic planning process that involves all the internal and external stakeholders and defines the vision, mission, measurable health goals and public health activities at national, regional and local levels. Moreover, in the past decade it has become more important to assess the repercussions of international health developments on national health status.

144. Quality assurance deals with developing standards for ensuring the quality of personal and community disease prevention and health promotion services, and evaluation of the services based on these standards. Evaluations should identify weaknesses in governance and operation, resource provision and service delivery across the social gradient. The conclusions of evaluations should feed back into policy and management, organization, and the provision of resources to improve service delivery.

Key findings: current strengths

145. In most countries there are clear accountabilities at governmental level for "traditional" public health functions such as communicable disease control and sanitation. Environmental and – to a lesser extent – mental health sectors are the most common areas for intersectoral collaboration with the health sector.

146. Good examples of innovative intersectoral structures promoting HiAP approaches do exist (see Case studies 6a and 6b); for example, a number of countries have included sport and transport in the same governmental ministry as health. Estonia has developed intersectoral strategies for healthy lifestyles and disease outcomes, and in Italy close ties have been developed between human and veterinary medicine in an effort to aid the control of zoonotic (particularly foodborne) disease.

Key findings: areas that need further strengthening

147. Accountabilities at the governmental level are often poorly defined for health improvement and promotion. In addition, intersectoral approaches to public health at government level need to be improved across the Region.

148. TB and HIV/AIDS programmes are a particular concern, showing a lack of effective horizontal integration, which is an issue of both governance and organizational structure. This problem is seen particularly in the sanitary-epidemiological (Sanepid) health systems of the former USSR.

Case study 6a. Spain's policy on tobacco control

Spain implemented a strong smoke-free law in 2011. Previous attempts to minimize exposure through partial bans, voluntary policies or "courtesy of choice" programmes, as promoted by the tobacco industry and parts of the hospitality sector, did not protect people against second-hand smoke. Spain has now become an example of good practice for those countries aiming to go smoke-free.

Spain's example illustrates how comprehensive smoke-free policies can almost immediately reduce mortality and morbidity from exposure to second-hand tobacco smoke. Hospitalizations for myocardial infarction decreased by 30% just one month after the law was introduced. Armando Peruga, Tobacco Free Initiative Programme Manager in Spain, says: "To comply with the WHO FCTC, all enclosed public spaces must be 100% smoke free, without smoking zones or other exceptions, such as the creation of 'smoking clubs' in bars, restaurants, and other private establishments. Despite alarmist predictions about the potential impact on business, studies in countries with 100% smoke-free laws have failed to show economic losses in the hospitality or entertainment sectors".

Sources: Fernández, 2011; Global Smokefree Partnership, 2010.

Case study 6b. HiAP in the SEEHN

Today all countries face health threats associated with lifestyle and socioeconomic factors, as well as health inequities. Public health services focused on health promotion and disease prevention are an increasingly important tool in combating these health threats. The countries of south-eastern Europe and their public health services in have undergone extensive reform over the last ten years since the establishment of the SEEHN in 2001.

In 2011 a joint study was undertaken to evaluate public health services in south-eastern Europe, examining the current status of HiAP and identifying a series of bottlenecks for applying an HiAP approach at national and subnational level. The study recognized that progress on HiAP was lacking and needed to be prioritized, and noted the scarce economic and human resources available for the development of these initiatives. However, times of crisis can provide unique opportunities for coordinating and integrating related policies to improve efficiency and resources, while making changes for greater health equity.

At the Third Health Ministers' Forum in Banja Luka, Bosnia and Herzegovina in October 2011, the results of the report served as solid evidence and justification for putting the priority focus of the forum on HiAP and capacities for its application. As a consequence, ministers of health from all ten countries of south-eastern Europe and their international partners signed the Banja Luka Pledge, in which they declared a unanimous resolve to achieve equity and accountability in health by:

- committing governments to work towards the goals of HiAP within countries across the SEEHN and in the WHO European Region;
- advancing implementation of the HiAP approach, thereby ensuring that health and health equity are considered in all policy and investment decisions at local and national levels;
- strengthening the routine mechanisms that engage local communities, NGOs and other stakeholders as partners in identifying solutions for improving health and reducing health inequalities;
- strengthening capacity for and technical cooperation in implementing health and health equity in all policies;
- supporting and facilitating the development of strong high-level policy processes across the different sectors for dealing with the social determinants of health and implementing the HiAP approach in all member countries.

Sources: WHO, 2012h; CEB and WHO, 2009; WHO 2011m.

Current WHO activities related to EPHO 6

National governance programme

149. In its strategy to promote good governance in health, the Regional Office guides governments towards system-wide, evidence-based approaches, facilitating links and partnerships between stakeholders, and promoting the inclusion of HiAP approaches (WHO, 2011c).

Strengthening subnational governance

150. Various regions within Europe have joined together in the Regions for Health Network, which is currently being re-launched by the WHO Regional Office for Europe. This aims to accelerate action on social determinants of health and health inequities at regional level, including through the sharing of experiences and joint interventions (WHO, 2011n).

Strengthening local-level governance

151. The WHO Healthy Cities project seeks to put health high on the agenda of decision-makers in cities and to mobilize action for health and health equity in all local policies. The Regional Office launched the European Healthy Cities Network in 1987 as a vehicle to bring a "Health for All" strategy to the local level (WHO, 2012i). A need has been identified for development of a web-based interactive resource on urban health (WHO, 2011n).

Quality of health care

152. The Regional Office's health care quality programme supports countries in improving the quality of health care care, of which patient safety is a crucial part. Current research is planned around enhancing the role of the patient in reducing safety risks within three priority themes of blood transfusion, hospital infections and hand hygiene, and communication during patient handovers (WHO, 2011c).

Health technologies and pharmaceuticals

153. The health technologies and pharmaceuticals programme provides direct technical support to countries to strengthen regulatory systems and improve access to medicines. The programme focuses mostly on countries where public access to essential medicines and medical devices is limited (WHO, 2011o).

EPHO 7: Assuring a sufficient and competent public health workforce

Aim

154. This operation seeks to ensure that there is a relevant and competent public health workforce sufficient for the needs of the population it is designed to serve.

Description of operation

155. Investment in and development of a public health workforce is an essential prerequisite for adequate delivery and implementation of public health services and activities. Human resources constitute the most important resource in delivering public health services. This operation includes the education, training, development and evaluation of the public health workforce in order to address priority public health problems efficiently and to evaluate public health activities adequately.

156. Training does not stop at the university level. There is a need for continuous in-service training in economics, bioethics, management of human resources and leadership in order to implement and improve the quality of public health services and to address new challenges in public health.

157. The licensing procedures of public health professionals establish the requirements of the future workforce concerning relevant public health training and experience. The public health workforce includes public health practitioners, health professionals and other professionals with an impact on health.

158. The workforce is the key to delivery of any system. Effective planning, training and employment of the public health workforce need to be considered. The following considerations should be made when assessing the capacity of the workforce.

- Number: how many people are being trained and are there enough/too many for the health needs of the population and for the jobs available?
- Relevance: are people being trained for the right jobs? There are traditionally more individuals employed in jobs in communicable disease and health protection. This does not accurately reflect the current burden of disease in the Region.
- Competence: are people being trained to the correct standard? People need to be sufficiently equipped with the skills necessary for the challenges they are likely to face.

159. The public health workforce can be divided into three broad categories.

Public health specialists

- This includes traditional public health occupations such as public health doctors and nurses, environmental health officers, food safety inspectors and communicable disease control personnel. This group also includes "new" practitioners working in the broad field of protection, prevention and promotion.

Health professionals

- This includes health professionals who work in the health sector but do not have an explicit public health function, such as hospital workers in primary care settings. For health care workers, the task is to ensure they are able to provide relevant health promotion and disease prevention services in the health care setting.

Non-health sector professionals

- This includes actors from other sectors whose activities and decisions have an impact on health, whether or not they themselves realize it. Examples include professionals at various levels of government (national, regional and local) who implement policies and manage programmes in non-health sectors; technical officers such as city planners; housing, education, transport and other such officials.
- For this group, the task is to provide them with an understanding of how their activities and decisions have an impact on health, and how designing healthy policies can contribute to furthering the policy agendas in their own sectors.

160. Public health education can take many different forms. However, in order to establish a methodology to compare the provision for education in different countries, a number of broad categories can be identified (see Box 3).

Box 3. Education and training

Academic education includes:

- bachelor's degree
- master's degree (in public health, social medicine, epidemiology or equivalent subject)
- PhD in similar field.

Workforce education includes:

- specialist public health training – usually but not exclusively applied to medical graduates
- a system of core competencies for public health professionals that can be applied at all grades.

Key findings: current strengths

161. University-level public health education has seen a rapid expansion in capacity over recent years. Many countries have universities offering training in public health topics at a number of academic levels, including bachelor's, master's and doctorate. This expansion has been particularly rapid in central and eastern European and central Asia, but the picture is seen across the Region.

162. Examples of well-defined and regulated specialist public health training programmes do exist in the Region. These need to be harnessed, and a strategy to use these experiences found to assist in wider implementation.

163. There are networks between these increasing numbers of schools of public health and specialist training programmes, of which the Association of Schools of Public Health in the European Region (ASPHER) is one of the foremost (see Box 4).

Box 4. ASPHER core competences

In 2011 ASPHER developed a list of seven core competences for public health professionals:

- methods in public health;
- population health and its social and economic determinants;
- population health and its material – physical, radiological, chemical and biological – environmental determinants;
- health policy, economics, organizational theory and management;
- health promotion: health education, health protection and disease prevention;
- ethics.

Source: Birt and Foldspang, 2011.

Key findings: areas that need further strengthening

164. Few countries have an overall public health workforce plan, and in the majority of countries public health has historically not been planned according to population need. As a consequence, there is often inadequate trained workforce capacity for the main public health challenges in particular settings. Defining the "public health professional" is part of the difficulty here. Countries mostly do not define core competencies for public health for the public health workforce.

165. There is difficulty in ascertaining accurate information about total public health workforce capacity, as in many countries a clearly defined public health workforce is not established. The majority of self-assessments indicate workforce capacity as the major limitation on public health services.

166. There is too great a focus on the education of public health professionals compared with workforce capacity, often with poor alignment between supply of professionals and employment capacity. More information is required in order to implement effective strategic planning.

167. Only a small number of countries have a defined postgraduate specialist public health training programme, and this training is restricted to medically trained professionals, except in the United Kingdom (see Case study 7). States with defined programmes tend to be – but are not exclusively – in western European. However, some of the largest and most affluent European countries currently do not have any specified specialist public health training programmes; instead, they rely on academic courses and postgraduate examinations. Countries with better-developed public health systems often have a more multidisciplinary approach to their public health workforce and systems of continued professional development and accreditation.

168. Geographical distribution is an issue for public health workforces, with a tendency for urban concentrations at the expense of rural needs. This can be an issue when addressing inequalities in health.

169. Leadership capacity in public health was widely reported as being insufficient. This was seen as an issue of political leadership both from outside the public health sphere and within the public health workforce itself. Few countries have an identified individual responsible for health – such as a Chief Medical Officer – and in some but not all of the countries which do have such a position, it is politically controlled.

170. Some states noted that the small size of their national population was a barrier to support effective training of a highly specialized and expensive public health staff. Regional approaches (for example, in the Baltic and south-eastern European states) could be a solution to this.

171. The average age of the public health workforce in many countries is quite high, which presents a concern for the sustainability of the workforce in coming years.

172. The status of public health specialists is generally low in most countries. Anecdotal information indicates that low wages, organizational structures, a lack of clear career development pathways and a lack of strong leadership result in public health having a reduced status in comparison to other medical specialties and equivalent professions. However, this is not the case in all countries.

Case study 7. Public health workforce development in the United Kingdom

The United Kingdom's Faculty of Public Health has a mission to "promote, for the public benefit, the advancement of knowledge in the field of public health, and to develop public health with a view to maintaining the highest possible standards of professional competence and practice".

The Faculty oversees the quality of training and professional development of public health consultants in the United Kingdom, and maintains the professional standards in the discipline. It embraces the wider multidisciplinary public health workforce, continually expanding its membership and examinations to all those engaged in professional public health.

Higher specialist training in the United Kingdom equips trainees to work as public health consultants. Training is based upon developing skills and knowledge to:

- quantitatively and qualitatively assess the population's health and health needs;
- critically assess the evidence relating to the effectiveness of health and health care interventions;
- influence the development of policies and assess the impact of policies on health;
- lead teams and individuals, build alliances, develop capacity and capability, work in partnership with other practitioners and agencies and effectively use the media to improve health and well-being;
- promote the health of populations by influencing lifestyle and socioeconomic, physical and cultural environment;
- protect the public's health from communicable diseases and environmental hazards;
- support commissioning, clinical governance, quality improvement, patient safety, equity of service provision and prioritization of health and social care services;
- collect, generate, synthesise, appraise, analyse, interpret and communicate health intelligence;
- teach and research in public health.

Source: Faculty of Public Health, 2010.

Current WHO activities related to EPHO 7

Technical assistance, including capacity building and learning exchange

173. The WHO Regional Office for Europe works with countries to build and support a critical mass of human resources in countries and to support countries in sharing the lessons learned from specific interventions at national and subnational levels. The main focus of the Regional Office's work is currently on health professionals; further work is needed on public health professional workforce development (WHO, 2011n).

Health workforce

174. The health workforce programme seeks to assist countries to address health workforce challenges in key areas, including expanding the evidence base for decision-making on health workforce; strengthening governance capacity and health workforce planning; enhancing health workforce performance; and work on health workforce migration, retention and ethical recruitment. In 2010 the WHO Global Code of Practice on the International Recruitment of Health Personnel (WHO, 2010c) was adopted by the Sixty-third World Health Assembly. The Code is the only global framework for international cooperation on health workforce recruitment, providing key guidance to countries on internationally accepted ethical norms and principles related to health workforce migration (WHO, 2011n).

EPHO 8: Assuring sustainable organizational structures and financing

Aim

175. This operation seeks to ensure sustainable organizations and finance structures for public health services that provide efficient, effective and responsive services to maximize health gain and minimize environmental harm.

Description of operation

176. Assuring sustainable organizational structures and financing means developing services that are efficient and integrated; that have minimal environmental impact with maximal health gain; and that have sufficient funding for long-term planning, in order to ensure that health is protected and promoted today and in the future.

177. Financing is concerned with the mobilization, accumulation and allocation of resources to cover population health needs, individually and collectively. Comprehensive public financing should be the norm for proven cost-effective population-based services as well as personal services with broad effects beyond the person receiving the intervention. Health financing arrangements for public health should set the right financial incentives for providers to ensure efficient service delivery and access to these services by all individuals. At the same time, appropriate incentives for individuals should be put in place to ensure appropriate levels of utilization of public health services (see Case studies 8a and 8b).

178. Countries of the WHO European Region follow numerous approaches to organizational structures, each individually different. However, it can be useful to categorize the different types of provider to achieve a broad view of the landscape. The Organisation for Economic Co-operation and Development (OECD) recognizes three main categories, which can be a useful approach (Docteur and Oxley, 2003). All of these health sector financing approaches can be applied to financing public health services.

179. The first of these is the "public-integrated model", which combines financing of health care provision with hospital providers that are part of the government sector. Staff are generally salaried and are most often public sector employees. Achieving universal health coverage is much easier under such systems. As they are under the control of one national budget, overall costs can been contained more easily. However, they have weaker incentives to increase output, improve efficiency or maintain quality and responsiveness to patient needs.

180. The second is the "public-contract model", where public commissioners contract with private health care providers. In many public-contract systems the private hospitals and clinics are run on a non-profit basis. These systems are generally considered to be more responsive to patient needs than public-integrated arrangements, but less successful in containing health care costs, requiring additional regulation and control by the public authorities.

181. The third is the "private insurance/provider model", which combines private insurance with private providers, often for profit. Insurance can be mandatory or voluntary, in which case affordable insurance may not be available to poorer individuals. Payment methods are traditionally activity based and the systems feature a high degree of choice and responsiveness to patient needs. Cost control can, however, be weak.

182. A number of other organizations including private companies and NGOs also play important public health roles in the Region. In addition, professional associations, trade unions and patient associations play important roles in some countries, such as the physicians' associations in Germany and the Netherlands (Allin et al., 2004).

183. Prevention of disease can sometimes be dismissed as unaffordable; a luxury in times of austerity, with costs paid today and benefits not realized until sometime in the future. However, there is evidence to support the economic case for prevention in the short and long term.

184. The most cost-effective tobacco control policy is raising taxes. A price increase of 10% could result in up to 1.8 million fewer premature deaths, at a cost of between US$ 3 and US$ 78 per disability-adjusted life year (DALY) in eastern European and central Asian countries. An alcohol tax increase in England was estimated to bring benefits close to €600 million in reduced health and welfare costs, as well as reduced labour and productivity losses, at an implementation cost of less than €0.10 per capita. Savings to the health service were estimated at €65 million in the first year from reduced hospital admissions.

185. In countries such as the Russian Federation, a comprehensive prevention package to counteract obesity and cholesterol is estimated to cost no more than US$ 4 per capita per year. Actions would be aimed at improving diet and increasing physical activity, along with measures to curb tobacco and alcohol use and address high blood pressure (McDaid et al., 2012).

Key findings: current strengths

Organizational structures

186. One example of how public health organizational structures have been strengthened in the Region is the SEEHN, a forum of high-level officials from ministries of health of nine countries in south-eastern Europe. This major multicountry network was established in 2001 as a regional peace-building initiative. For the past ten years, it has been instrumental in promoting development in the subregion in the areas of mental health, communicable diseases, food safety and nutrition, blood safety, tobacco control, information systems, maternal and neonatal health, public health services and health systems (WHO, 2012h). Current reforms of financial mechanisms in SEEHN countries offer further potential for improving consistency and quality.

Financing

187. The balance of health expenditure on preventive versus curative care gives an indication of the relative priority given to public health in each state. This proportion varies widely from less than 1% of total health expenditure (in countries such as Italy and Israel) to over 8% (in Romania, for example) (OECD, 2009; Eurostat, 2009). On average, EU countries spend a lower proportion of their health budgets on prevention (2.8%) than NIS (3.3%) and south-eastern European (3.8%) countries.

Key findings: areas that need further strengthening

Organizational structures

188. There is a lack of a comprehensive, horizontal evaluation of the state of public health services in European countries, which could facilitate appropriate policy-making, resource allocation and strategies for reform, in order to improve the performance of the structures and services of public health. One of the other background information reports for the EAP reviews institutional models for delivering EPHOs in Europe, and addresses this issue in part.

Financing

189. Finance is a particular challenge in the current global climate. Health promotion initiatives are often perceived as "softer" functions that can be cut during times of financial pressure. Few countries have "ring-fenced" public health budgets.

190. In addition, assessment of budgets for public health or preventive services is often made challenging because of the difficulties in clarifying what should be included as public health activity. For example, money spent on non-public health programmes such as civil infrastructure, which would therefore not show up in public health budgets, can have a huge impact on the wider determinants of health. Such spending could provide either positive or negative health gain, depending on the projects involved.

191. Duration of funding plans is an issue, with many countries having short term or even annual budgets; these are not well suited to preventive health strategies, which often take many years to plan and implement.

192. The economic impact of NCDs may amount to many billions of euros per year. Many costs are avoidable by investing in health promotion and disease prevention, but governments today spend an average of only 3% of their budgets on prevention (McDaid et al., 2012).

Case study 8a. Sweden: a long-term commitment to public health

From an international perspective Sweden has a long tradition of pursuing what is now referred to as public health policy. The wide diversity of measures implemented over the last 250 years has had an impact on both people's health and their life expectancy, although this development cannot be ascribed to public health measures alone.

Sweden adopted a national public health policy in 2003. The policy states that public authorities should be guided by eleven objective domains of the policy, which cover the most important determinants of Swedish health. The policy was updated in 2008: the core content of the 2003 policy remains, but greater elements of individual choice and responsibility have been added in the renewed version. The updated public health policy focuses particularly on children, young people and the elderly, with a special focus on initiatives aimed at strengthening and supporting parents in their parenthood; increasing suicide prevention efforts; promoting healthy eating habits and physical activity; and reducing the harmful use of

Source: Glenngård et al., 2005.

Case study 8b. Financial incentives for GPs in Estonia

GPs in Estonia receive specific incentives to offer preventive services, including counselling patients on medical and behavioural risks. Since 2006, preventive check-ups have been linked with the GPs' bonus system, which includes criteria for coverage of certain age groups (such as people aged 40–60 years). GPs may send patients with a high risk of cardiovascular diseases to a special consultation at the county heart examination rooms. The bonus system also includes regular monitoring (medical tests) and action for patients with NCDs such as hypertension and type 2 diabetes.

Preventive services are directly financed by the Estonian Health Insurance Fund. The medical unions are responsible for devising clinical practice guidelines to improve the quality of health care, and the Estonian Health Insurance Fund supports this activity on an annual basis. Such clinical practice guidelines include aspects of disease prevention and health promotion, such as guidelines for the prevention of cardiovascular diseases and of dental diseases in children and young people; the monitoring of pregnancy; screening for breast and cervical cancer; and guidelines for school health care.

Source: Koppel et al., 2008.

Current WHO activities related to EPHO 8

Health systems financing

193. Based at the WHO Barcelona Office for Health Systems, the health systems financing programme aims to assist countries to improve the financial aspects of their health systems. This is particularly important in the wake of the financial crisis which has served to highlight the fragility of health financing arrangements in many countries (WHO, 2011c).

EPHO 9: Advocacy, communication and social mobilization for health

Aim

194. This operation seeks to use modern communication styles to support leadership and powerful advocacy for improving health, enhancing community engagement and empowerment in the process.

Description of operation

195. Communication for public health is aimed at improving the health literacy and status of individuals and populations. It is the art and technique of informing, influencing and motivating individuals, institutions from outside the health sector and public audiences about important health issues and determinants. Communication must also enhance capacities to access, understand and use information to reduce risk; prevent disease; promote health; navigate and utilize health services; advocate for health policies; and enhance the well-being, quality of life and health of individuals within the community.

196. Health communication encompasses several areas including health journalism, entertainment, education, interpersonal communication, media advocacy, organizational communication, risk and crisis communication, social communication and social marketing. It can take many forms, from mass, multimedia and interactive (including mobile and internet) communications to traditional and culture-specific communication, encompassing different channels such as interpersonal communication, mass, organizational and small-group media, radio, television, newspapers, blogs, message boards, podcasts, video-sharing, mobile phone messaging and online forums.

197. Public health communication offers the public a way to counter the active promotion of hazardous products and lifestyles (such as tobacco). It is a two-way information exchange activity which requires listening, intelligence-gathering and learning about how people perceive and frame messages on health, so that information can be transmitted in more accessible and persuasive formats. Public health communication is also about transparency, so that the public can be aware of what is being said and done in their name.

Key findings

198. This is an area that was not included in the public health self-assessments; it was added as an EPHO following the wider consultation process. Consequently, no information is available for analysis in this section. Case studies 9a and 9b below are provided to illustrate some of the work that WHO is doing to promote advocacy, communication and social mobilization. Anecdotally, this is an area that countries have requested support with.

199. This is a relatively underdeveloped field in public health services. Further work is needed to create a strategic way forward to develop this important and potentially very powerful field.

Case study 9a. Decade of Action for Road Safety

On 11 May 2011 the Decade of Action for Road Safety 2011–2020 was launched in more than 100 countries, with one goal: to prevent five million road traffic deaths globally by 2020. In the European Region there have been launches in 37 countries; in three, this involved heads of state (the United Kingdom, Slovenia and the Russian Federation). Many countries have taken measures towards improving road safety, either by developing national plans for the Decade (as in Albania and the Czech Republic); introducing new laws (as in France and Albania); or increasing enforcement of existing legislation (as in the Russian Federation), among other concrete actions.

The recent United Nations General Assembly resolution on global road safety gives further impetus to the Decade by calling on countries to implement road safety activities in each of the five pillars of the Global Plan for the Decade. Much of the action has also been at a local community level, which has involved social marketing campaigns, enhanced enforcement and community mobilization in countries such as Serbia, the Czech Republic and Italy. Global action has led to implementation both at national and community levels.

Sources: United Nations Road Safety Collaboration, 2011; WHO, 2011p; United Nations, 2012; WHO, 2012q.

Case study 9b. Triple P – Positive Parenting Program in Scotland to reduce child maltreatment and youth violence

Adverse childhood experiences and disadvantage in childhood are risk factors for multiple negative lifestyle behaviours and health outcomes in adolescence and adulthood. The Triple P – Positive Parenting Program is a multilevel parenting intervention programme used to increase the knowledge, skills and confidence of parents at the population level, and to reduce the prevalence of mental health, emotional and behavioural problems in children and adolescents. It is estimated that the cost of offering Triple P throughout a community would be recovered in a single year if it brought about a 10% reduction in cases of child abuse and neglect.

The programme consists of different levels of intervention, which range from providing parents with access to information about parenting, using media to increase community awareness of parenting resources; sessions of videotapes showing specific parenting strategies to parents of children with mild behavioural difficulties; active skills training; and treating relational conflicts and parental depression. Triple P is one of the parenting programmes proven to be effective in several countries of the world, including in Europe, where it is being used successfully in Switzerland and Germany. Another example is from Glasgow, Scotland, where it is being implemented in response to concern about high youth violence and some high-profile youth murders. Since its launch in 2010, more than 5000 parents have signed up for the scheme to improve their parenting skills; thousands more have visited the web site to find out more; and more than 500 practitioners have been trained to deliver it. Evaluation of the programme is in progress and it is hoped that it will lead to a reduction in child abuse, foster care placements and hospitalizations from child abuse injuries, as shown elsewhere, and eventually to a reduction in youth violence.

Sources: Sanders, 1999; Nowak and Heinrichs, 2008; Sanders, 2008; Foster et al., 2008; Bodenmann et al., 2008; Triple P Communications, 2012; Prinz et al., 2009.

Current WHO activities related to EPHO 9

Patient empowerment

200. The WHO Regional Office for Europe works to help countries place patients at the centre of disease management by implementing and strengthening patient empowerment in policies, strategies and programmes (WHO, 2011f). Patient empowerment and patients' rights form part of the Regional Office's Strategy for the Prevention and Control of Noncommunicable Diseases (WHO, 2006).

EPHO 10: Advancing public health research to inform policy and practice

Aim

201. This operation seeks to ensure that research findings are summarized in an accessible style for policy-makers and practitioners in order to improve evidence-based policy and practice.

Description of operation

202. Research is fundamental to informing policy development and service delivery. This operation includes:

- research to enlarge the knowledge base that supports evidence-based policy-making at all levels;
- development of new research methods, innovative technologies and solutions in public health;
- establishment of partnerships with research centres and academic institutions to conduct timely studies that support decision-making at all levels of public health.

203. Continued knowledge creation and strengthening of the evidence base is a key function of a comprehensive public health service. This evidence base has never been larger than it is today. As it continues to expand it becomes ever more important that the focus of health research reflects the burden of disease and the health and well-being issues faced by the European population.

204. As the evidence base grows the gap between what is known and what needs to be known decreases every year. Closing this gap should be encouraged, but new knowledge serves no purpose if it cannot be translated into action. This is where the key challenge and focus now lie.

205. Uptake of research results through policy-makers is based on numerous factors, including the availability, usability and reliability of health information. The process is also influenced by other factors, including opinions, national networks, political considerations and financial constraints. Addressing this is likely to involve more than just the effective distribution of resources; it will include looking at new thinking about knowledge creation and additional avenues to the current linear thinking about policy implementation of research findings.

Key findings: current strengths

206. The public health evidence base is stronger than ever before. Some areas – for example, those concerned with medical and health care related solutions – are stronger than others, such as addressing the wider determinants of health, disease prevention and promotion of well-being.

Key findings: areas that need further strengthening

207. Across the European Region health-related research is weighted more towards solving clinical rather than preventive problems. There is a workforce development aspect to this, which would need to be addressed when searching for solutions.

208. Much of the information collated cannot be directly translated into policy. For example, health data from routine statistics or epidemiological studies are not available in all countries in Europe. Where they do exist, they are often fragmented, frequently concentrate on mortality, or may be only partially available. Studies that investigate particular conditions may exaggerate claims on mortality. This is largely a reflection of co-morbidity, where several co-existing

pathologies contribute to and compete for the cause of death. All of these factors influence the quality of information available for research.

209. Links and communication between academic public health and national policy-making are generally not well established. Examples of good joint working and strategic planning do exist, however, which could provide solutions to address this challenge (see Case study 10).

Case study 10. The Cochrane Collaboration

The Cochrane Collaboration was founded in 1993 to provide a current database comprising systematic reviews of all relevant randomized controlled trials of health care. Their vision is for health care decision-making throughout the world to be informed by high-quality, timely research evidence, with the aim of playing a pivotal role in the production and dissemination of evidence across all areas of health.

Participants in the Cochrane Collaboration conduct and update systematic reviews that address the question 'What works?' for health care, providing easily accessible information for health care professionals. By summarizing the latest evidence base they are able to supply up-to-date recommendations to practitioners.

Systematic reviews that address the questions asked by health care managers, policy-makers and wider public health professionals – for example, how to adapt existing reviews to highlight decision-relevant information or to facilitate retrieval of evidence – will become increasingly important in future. As a result, resources based on evidence-based practice are becoming increasingly prevalent and their use should be encouraged at all levels.

Sources: The Cochrane Collaboration, 2012; Lavis et al., 2006.

Current WHO activities related to EPHO 10

Data and knowledge management

210. The Regional Office's Division of Information, Evidence, Research and Innovation provides tools and capacity-building initiatives for the translation of scientific evidence into policy; engages in knowledge management and dissemination; and advises on e-health and innovation. It is also developing a comprehensive health information strategy for Europe; establishing a Region-wide integrated health information system in partnership with the European Commission; conducting a full review and streamlining of all existing health databases in the Regional Office; and creating a knowledge management strategy for Europe (WHO, 2011c).

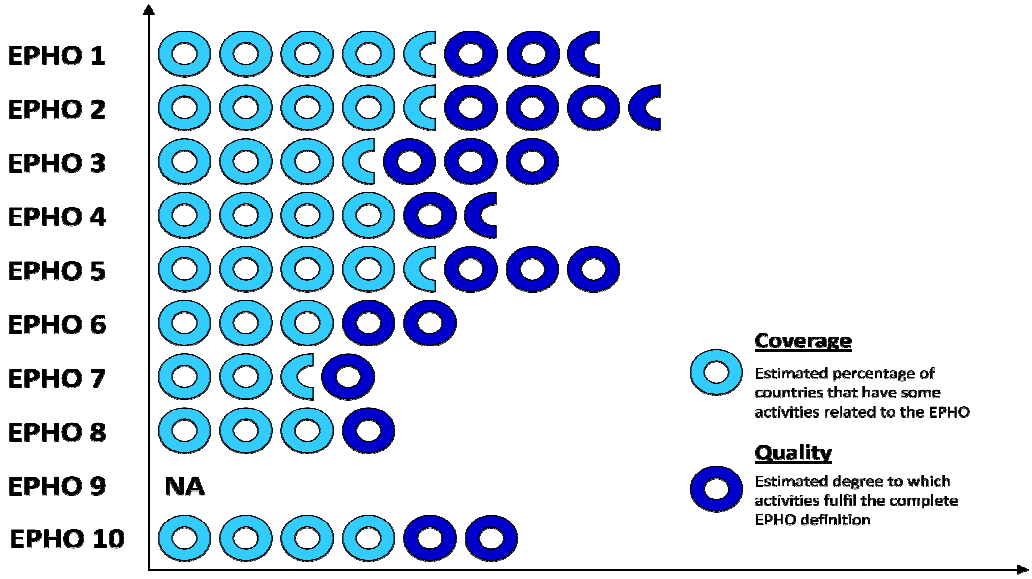
Conclusion

211. This chapter outlines the main findings from the assessment and key recommendations for further action to support implementation of the EAP.

212. In general, the core EPHOs (1–5) covering communicable diseases, emergency planning and health protection are reasonably strong throughout the Region, although surveillance for the determinants of health and NCDs is relatively weak. The assessment found that countries were less prepared to address the large epidemic of NCDs, especially the inequalities and wider determinants of health that impact upon NCDs and other health outcomes.

213. Overall estimates of the rough proportion or coverage of countries with some activities related to each EPHO and the quality of services meeting the complete EPHO description in all countries were developed, based on the findings of the review. On the whole, there was greater estimated geographical coverage than quality of services provided (see Fig. 2).

Fig. 2. Estimate of coverage and quality of EPHOs across the WHO European Region

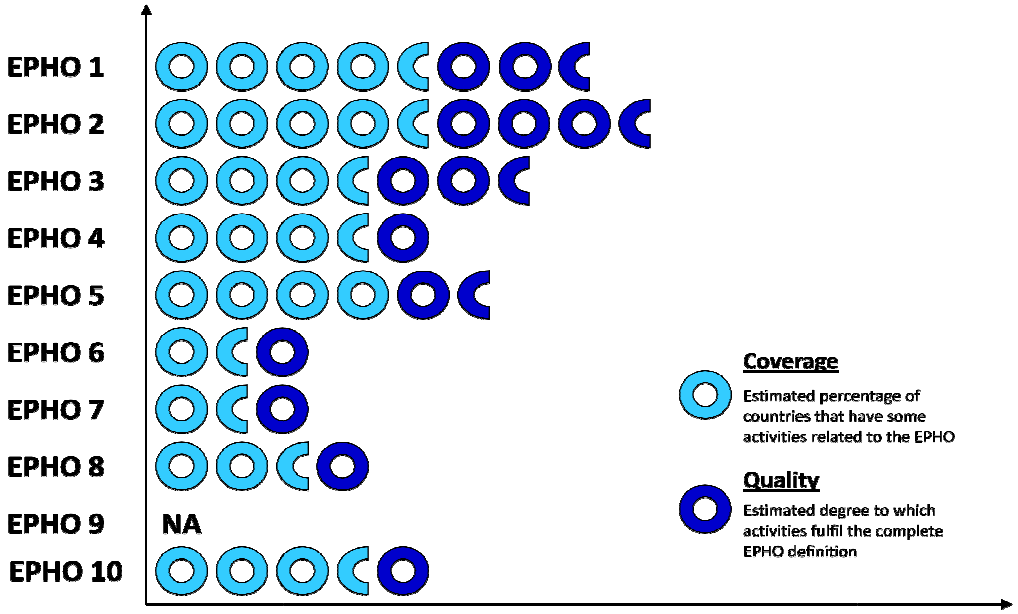


214. Of the core EPHOs, 1–3 and 5 are relatively strong throughout the Region, while EPHO 4 on health promotion and inequalities is weaker. Overall, the enabler EPHOs are less well developed across the Region, especially EPHOs 7 and 8 on workforce development and financing. Advocacy and communication (EPHO 9) were not measured in this assessment; however, anecdotally they are considered weak, and countries have requested support in these areas. Research capacity (EPHO 10) is relatively strong in the European Region, with a history of excellent university departments on public health. However, training needs to be scaled up to ensure a large enough public health workforce to meet today's needs and future challenges.

215. Countries of the CIS have strengths in historic services that mostly relate to EPHOs 1–3 regarding surveillance and monitoring of communicable diseases and environmental health threats, immunization and health protection functions. However, they also – particularly in central Asia – have less well developed core services for addressing NCDs and the wider determinants of health (EPHOs 4 and 5), and generally have less well developed enablers (EPHOs 6–10) than the EU, especially western and northern Europe (see Fig. 3).

216. For further information, the strengths, weaknesses, opportunities and threats (SWOT) of the EU, SEEHN and CIS subregions are summarized in Annex 2.

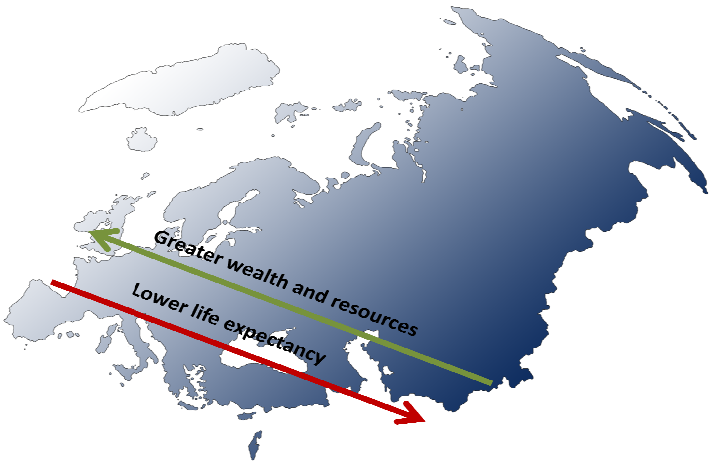
Fig. 3. Estimate of coverage and quality of EPHOs in CIS countries



217. Overall, although there is considerable variation between countries in each subregion, the general pattern is that EU countries, especially in western and northern Europe, have stronger public health services and capacities.

218. Map 4 gives a conceptual illustration of this: darker areas represent weaker and lighter areas represent stronger services and capacities. The darker graded shading in the far south-east of the Region shows that, especially in central Asia, public health services and capacities overall can be considered to be weaker here than in many other parts of Europe. When compared to Map 1 on inequalities in life expectancy, this illustrates the inverse care law, which states that where there is greater need, there are fewer services (Tudor Hart, 1971).

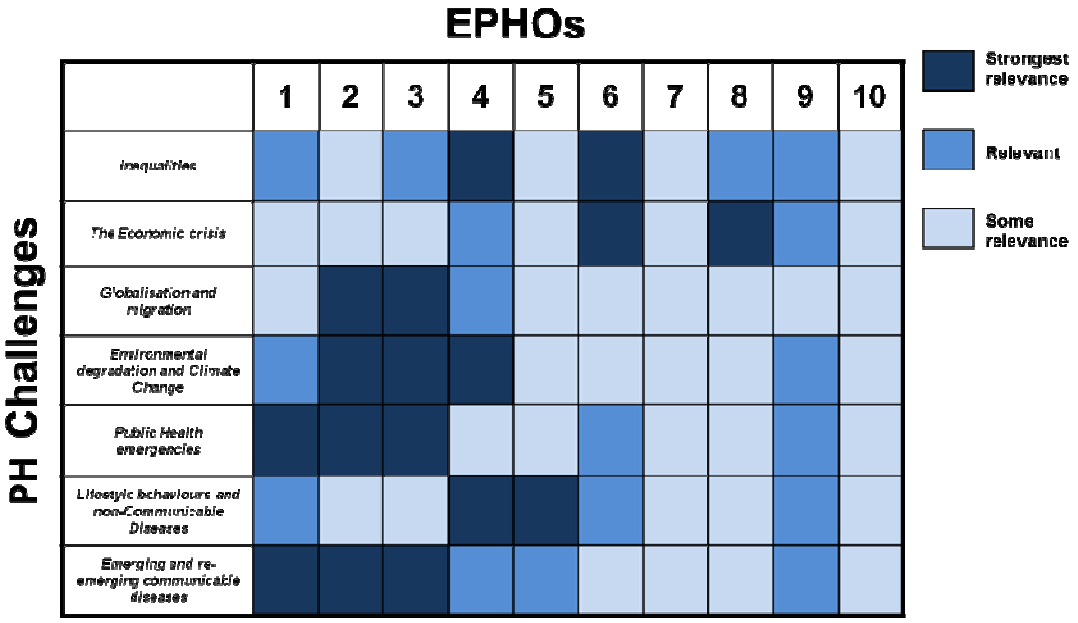
Map 4. Approximate geographical gradient across the European Region of strengths and weaknesses in public health services and capacities



219. The public health challenges facing Europe outlined in the introduction need to be considered when planning areas to strengthen across the EPHOs at both regional and country level. To assist in that process, Table 3 outlines the relative strength of estimated relevance for

each of the EPHOs. Note: this is purely a subjective exercise and is not intended to reflect the results of any systematic process; it is intended merely as a useful indication to guide the implementation of the EAP.

Table 3. Estimated relevance of EPHOs according to the main public health challenges for Europe

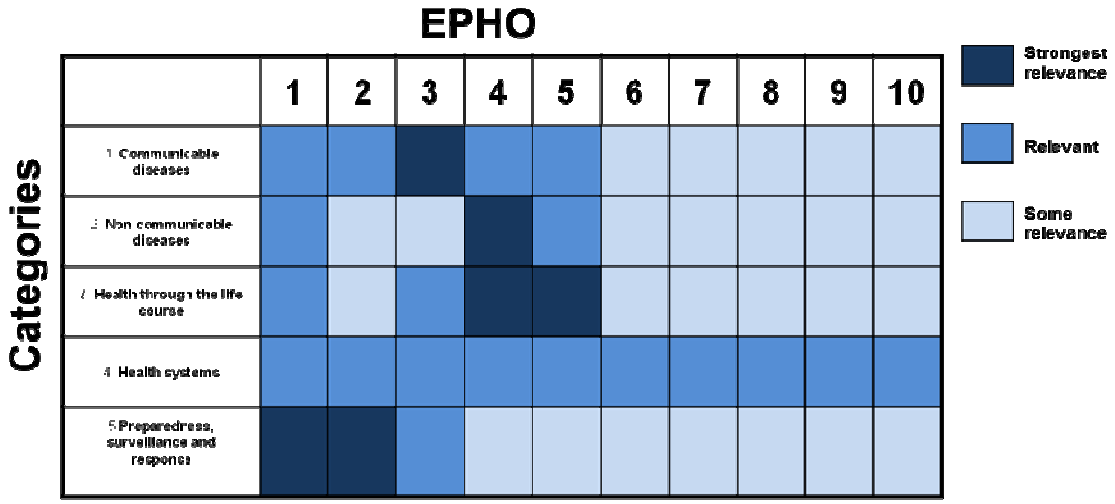


220. As can be seen, the core EPHOs (1–5) are most relevant for addressing all the identified challenges other than those posed by the economic crisis, where effective governance and a more sustainable approach to finance (EPHOs 6 and 8) will be critical. Addressing the growing health inequalities will also require effective governance mechanisms (EPHO 6). EPHOs 2 and 3 are central to the more traditional public health roles of protecting the population against emergencies and communicable disease. This can be contrasted with the rising burden of NCDs caused by changing lifestyle behaviours (as well as environmental factors), which will be better addressed through action in health promotion and disease prevention, the domain of EPHOs 4 and 5. EPHO 9 on advocacy and communication was considered to be relevant for the majority of the public health challenges, which illustrates the importance of including this as a new EPHO. Although workforce development and research (EPHOs 7 and 10) are not highlighted as strongly relevant, they are nonetheless significant in supporting and strengthening the overall delivery of public health services.

221. Approaches that will help prepare the Region for future challenges, such as climate change and decreasing resources need to be considered. Sustainable development is one such approach, which was defined by the United Nations World Commission on Environment and Development in 1987 as "development, which meets the needs of the present without compromising the ability of future generations to meet their own needs" (Brundtland, 1987). The concept can broadly be divided into three constituent and overlapping domains: environmental, societal (which includes health) and economic development. Seeking solutions that fulfil each of these three domains can be seen as a "win win win" solution, whereby interventions or organizations ensure cost–efficiency, maximal health gain and least harm to the environment. It is at the overlap of these domains that sustainable health and well-being is to be found.

222. In the future, WHO will be changing from 11 strategic objectives (outlined in Table 1) to 5 main categories, for which the degree of relevance for each of the EPHOs is also estimated and marked in Table 4. Significantly, all categories have at least some relevance to the EPHOs, with greatest relevance to the core EPHOs (1–5). However, the enabling EPHOs (6–10) are still very important in strengthening overall services. The "health systems" category includes public health services, and is therefore marked as relevant across all EPHOs.

Table 4. Relationship between the WHO categories and the EPHOs



Recommendations

223. The following section outlines the main recommendations for the EAP to take forward, based on the findings from this assessment.

224. All countries would benefit from addressing the following recommendations as there was considerable variation across the Region regarding the quality and coverage of public health services. However, to address inequalities in health across the Region, these recommendations especially need to be addressed in the CIS countries and other Member States where public health services are in the process of being adapted to the new demands and needs of the 21st century.

EPHO 1: Surveillance of population health and well-being

- Strengthen surveillance systems to inform planning for addressing inequalities, the wider determinants of health and health promotion.
- Improve and update disease registries and risk factor survey instruments to improve surveillance of lifestyle and the social and environmental determinants of disease.
- Link data on health outcomes with socioeconomic status and according to minority populations such as Roma populations. This will ensure that inequalities in health are being measured in order to improve planning responses to reduce health inequity.
- Systems for identification of health hazards and progress towards implementation of the IHR are in place in many states; however, variation in laboratory support should be improved. Strengthen surveillance systems to detect the re-emergence of neglected tropical diseases such as malaria.

- Strengthen skills for analysing surveillance data to inform the development of needs assessments and prioritization for planning.

EPHO 2: Monitoring and response to health hazards and emergencies

- Ensure that laboratories and skills are updated to fulfil the IHR; develop, evaluate and test emergency plans.
- Put robust reporting and processes in place in each country to ensure adequate outbreak control measures and responses to manage public health emergencies, in order to protect health and fulfil the IHR.
- Update public health monitoring systems and laboratories; additionally, subregional collaborations between laboratories could be extended.
- Undertaking evaluations following an outbreak or emergency is useful to improve current plans and processes; further strengthen emergency plans by undertaking tabletop and simulated exercises.

EPHO 3: Health protection, including environmental, occupational, food safety and others

- Strengthen health protection by identifying future hazards and weaknesses in current services to inform planning; ensure enforcement of legislation.
- Health protection services are generally a strength throughout the Region; however, ensure that services are updated – including IT systems – and have sufficiently trained staff, robust reporting and governance mechanisms in place.
- Use intelligence from EPHOs 1 and 2 to inform risk assessments and train more staff to undertake assessments, including health impact assessments; use research from EPHO 10 to develop evidence-based plans.
- Work to improve health outcomes by establishing systems for information sharing on how the environmental determinants of health influence EPHO 4 and take integrated action.
- Processes to strengthen policy implementation and local enforcement of legislation to address environmental challenges such as water and air quality need to be developed in some countries.
- Strengthen health protection services to address current and new public health risks and challenges such as climate change, emerging infections, antimicrobial resistance and nosocomial infections.

EPHO 4: Health promotion, including action to address social determinants and health inequity

- Strengthen and develop integrated cross-sector health promotion policies and services to address inequality and the wider determinants of health that are especially orientated towards reducing NCDs and promoting well-being; build capacity on strategy formation and implementation to support this process.
- Use intelligence from EPHOs 1–3 and 10 to inform assessments and planning processes, including identifying which populations experience greater levels of inequalities in health related to socioeconomic and environmental determinants; improve IT and staff training to strengthen evidence-based policy and planning.
- Policy and strategies need to be updated across many parts of the Region, especially in CIS countries, and reflect country priorities; identify the main social and environmental determinants of health – including inequalities, risk and protective factors – and develop cross-sectoral responses to promote health and well-being.

- Ensure health promotion services target marginalized groups especially affected by inequalities in health, such as young or older people; migrants; Roma populations; disabled people; lesbian, gay, transgender and bisexual populations; those with mental health problems; homeless people; and sex workers.
- Health promotion will be more person-centred if it is delivered in an integrated service, addressing multiple risk factors; it can be strengthened by being delivered by health professionals in primary health care, hospitals and other health care settings.
- Develop a balance of legal and policy responses for health promotion approaches, especially to address the high levels of NCDs across the European Region; for example, by ensuring implementation of all articles of the WHO FCTC, including ratification of the framework by the remaining seven countries in the Region.
- Develop networks between countries and with research and policy-makers to share innovative and good practice examples of health promotion, such as those that address multiple issues and inequalities in an integrated way, that develop community assets or that empower communities.

EPHO 5: Disease prevention, including early detection of illness

- Ensure a balance of primary prevention (vaccination and health promotion), secondary prevention (screening and early detection of disease) and tertiary prevention (integrated patient-centred disease management). Primary health care is a key setting to strengthen the delivery of primary, secondary and tertiary prevention approaches in an efficient and patient-centred manner; primary health care professionals are especially well placed to provide health promotion advice and referral to services to address wider determinants of health.
- Improve primary prevention, such as access to vaccines and supply chain management, especially in the CIS countries; targeting minority populations in routine immunization programmes will help to reduce inequalities in health.
- Strengthen secondary prevention, such as health checks and screening programmes; planning needs to incorporate the latest evidence of effectiveness, equipment needs to be updated and staff training. This is particularly needed in south-eastern European and central Asian countries.
- Strengthen tertiary prevention, such as evidence-based integrated care pathways, to address the main NCDs and patient self-management to improve clinical and health outcomes.

EPHO 6: Assuring governance for health and well-being

- Strengthen governance mechanisms for public health, such as setting up cross-sector governmental committees; appointing a minister of public health; ensuring clear lines of reporting and accountability; monitoring and undertaking performance management; strengthening systems for transparency of decision-making; and ensuring information sharing, consultation and participation.
- Strengthen governance mechanisms, including accountability in particular for health improvement and health promotion; networks provide an opportunity to share good practice across countries.
- Enhance governance approaches to improve the effectiveness of HiAP and intersectoral action; for example, by establishing cross-governmental committees, identifying targets, accountability and reporting mechanisms, and developing positive incentives.

EPHO 7: Assuring a sufficient and competent public health workforce

- Develop public health workforce plans, including the number and range of public health staff needed, training, curriculum development, core competencies, accreditation, leadership skills, mentoring and continued professional development; health professionals and the wider workforce need tailored training programmes.
- Develop national public health workforce plans, to include details on workforce numbers, skills, age and location, as well as estimates of what is needed to address current and future public health challenges.
- Develop tailored training programmes for health professionals and the wider public health workforce and incorporate into undergraduate and postgraduate training, curriculum and professional development.
- Develop training programmes for public health specialists; these should include core competencies, accreditation and continued professional development to maintain skills and address new challenges. Regional approaches to support the effective training of highly specialized and expensive public health staff could be a solution to the issue of the resource barrier for countries with relatively small populations, such as central Asian, Baltic and south-eastern European states.
- Strengthen networks between the increasing numbers of public health schools and specialist training programmes to help to raise standards and quality of training across the Region.
- Strengthen public health leadership skills with senior level training and continued professional development and mentoring programmes; encouraging countries to identify politically independent responsible officers for health (Chief Medical Officers) and appoint public health ministers to help to raise the profile and status of public health.

EPHO 8: Assuring sustainable organizational structures and financing

- Establish sustainable funding mechanisms for public health services to ensure long-term planning; design integrated public health organizations and functions to ensure that services are responsive and sustainable – with a "win win win" approach, increase cost–efficiency, maximize health gain and reduce harm to the environment.
- Establish sustainable funding mechanisms for delivering public health services to enable long-term and strategic planning to address public health challenges and organizational stability that retains and develops public health professionals.
- Direct a greater proportion of health budgets towards health promotion and disease prevention compared to curative services to help to curb rising health care costs and improve health outcomes.
- Improve integration of organizational structures across health protection, disease prevention and health promotion services – for example, by strengthening the public health role of primary health care across these three areas – to help to make services more efficient, effective and responsive.
- By applying principles of sustainability to planning of public health organizational structures, help to identify "win win win" options that are cost-efficient, maximize health gain and reduce harm to the environment.

EPHO 9: Advocacy, communication and social mobilization for health

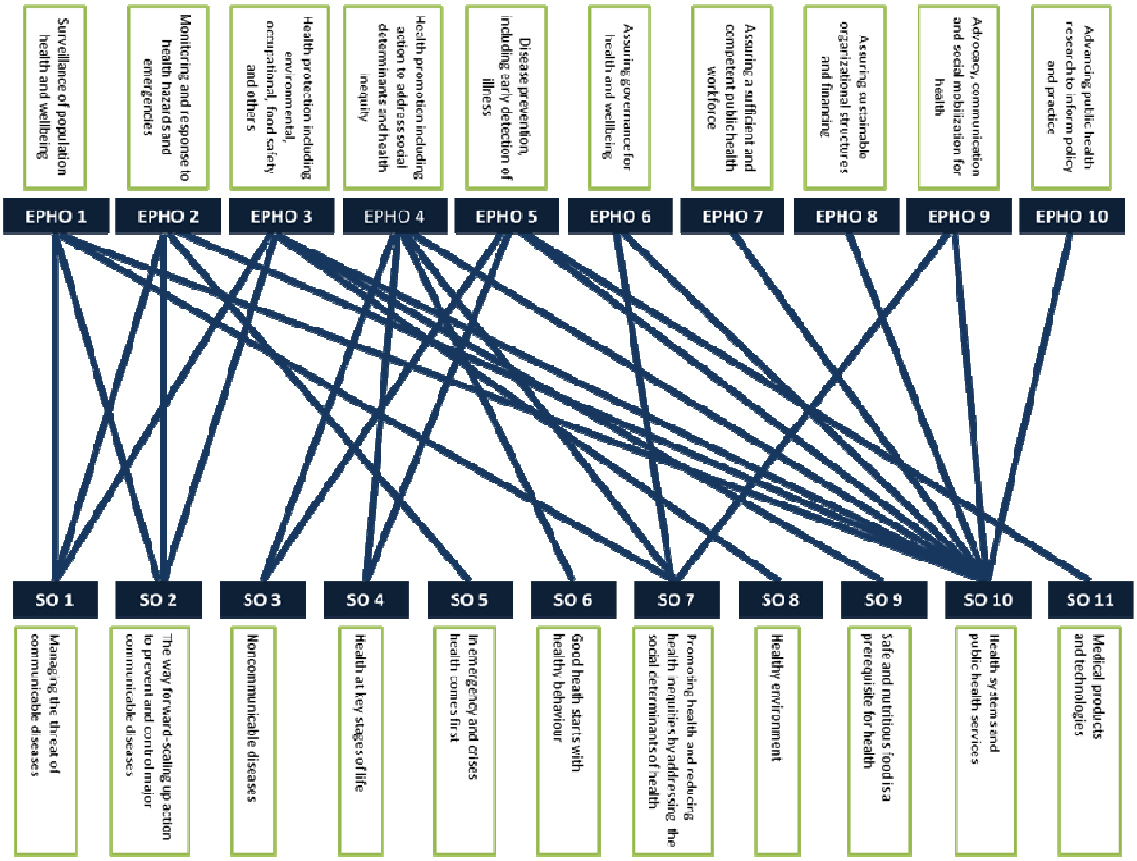
- This was not an area covered by the assessments; however, during the consultation process for the EAP it was recognized as a key area for strengthening public health responses. Further work needs to be developed on the best approaches for training and application of skills and methods for advocacy, communication and social mobilization.

EPHO 10: Advancing public health research to inform policy and practice

- There is a strong evidence base across Europe; however, further work is needed to ensure that future research and findings are focused on upstream prevention and health promotion, and provide straightforward, integrated messages for policy-makers and practitioners.
- The majority of research funding is on curative approaches to health; a greater proportion of funding needs to directed at evaluating integrated multiple interventions for health promotion and primary prevention, including how to address inequalities and the wider determinants of health.
- Identify the information and training needs of policy-makers to increase the development of evidence-based priority setting and policy-making.
- Create accessible and usable summaries of research findings for policy-makers and practitioners by applying systems science approaches to develop upstream, integrated solutions to public health challenges, and by using good communication methods to present findings.
- Establish research–policy–practitioner networks, meetings and workshops to identify the research and information requirements of both policy-makers and practitioners, and tailor future research publications accordingly.

225. Delivery of the EPHOs needs to take an integrated, horizontal approach, informing and improving the delivery of public health services to achieve the overall vision of promoting health and well-being in a sustainable way. Fig. 4 shows the strength of relevance of the work outlined in the WHO strategic objectives: this illustrates how an integrated horizontal approach needs to be taken in strengthening public health capacities and services via the EPHOs across Europe, rather than developing vertical programmes related to each EPHO. Each country will have its own historical strengths to build upon, and will form organizations and networks that maximize synergies between the relevant EPHOs to improve overall delivery of public health services.

Fig. 4. Multiple relationships between WHO strategic objectives and EPHOs



226. Implementation of the EAP will be supported by the WHO European Region in general, and by the public health services programme in particular. This programme develops tools and products to support countries in their efforts to further streamline, strengthen and upgrade their public health services through the EAP using the 10 EPHOs. WHO Regional Committee for Europe resolution EUR/RC60/R5 endorsed strengthening public health capacities and services, including prevention, and carrying out a thorough review of the effectiveness of the public health instruments currently available as main avenues for addressing key public health and health policy challenges in Europe (WHO, 2010d).

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Annex 1. Country assessment coverage

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

SE Ma OBS SE Ma OBS

Kyrgyzstan	■			Uzbekistan	■		
Latvia		■					

Key

SE: self-assessment reports

Ma: Maastricht study

OBS: European Observatory on Health Systems and Policies

Black: some form of assessment has been completed (either using the self-assessment tool, as part of the EU study or with the European Observatory): a total of 41 countries.

Grey: an assessment using the self-assessment tool is being conducted or planned. Of these, four countries have had no previous assessment: Belarus, Israel, Kazakhstan and the Russian Federation. Additional assessments using the self-assessment tool are being conducted in Finland, Portugal, Slovakia and Spain – these four countries have already completed previous assessments with the EU.

Currently no assessment has been carried out or is planned in eight countries: Azerbaijan, Georgia, Iceland, Norway, San Marino, Turkey, Turkmenistan and Ukraine.

Annex 2. SWOT assessments of subregions

SEEHN

Strengths	Weaknesses
• Established public health institutes and legal frameworks for public health • Intersectoral arrangements for public health programmes • Clear and legally defined package of public health services • Population health surveillance systems well established • Capacity for epidemiological research • Supportive international framework with many charters and agreements in the area of public health	• Lack of integration of policy across sectors, including intersectoral assessment of the results of policies, strategies and programmes • Lack of integration of social determinants of health in policies • Lack of data disaggregated by socioeconomic groups • Weak capacity for monitoring policy implementation • Lack of quality assessment for health care services, requiring development of standards • Lack of monitoring of private activity
• **Opportunities**	• **Threats**
• Opportunity for devolved decision-making, including local accountability for services • Coordination of institutions, agencies and ministries competent in public health services • Establishment of processes for evaluation and monitoring of cost–effectiveness of public health programmes and activities • Existing good practice in intersectoral cooperation can be built on and extended; multisectoral cooperation for the broader health determinants can be established • Public health agenda in EU, and harmonization of the regulatory framework; the EU is a driver of positive change and the accession process a significant opportunity • Accreditation of laboratory resources to identify and close gaps – opportunity for regional cooperation	• Over decentralization may present risks of increased differences in the health conditions and provision of services among the different parts of the country • Privatization process without a strategic approach could worsen problems in the distribution of resources • Threat to economic effectiveness of public health due to lack of intersectoral arrangements • Poverty is an underlying threat to population health and to effectiveness of health system • Any disengagement from EU accession process affecting strategy or other factors such as economic growth, and therefore funding • Insufficient mechanism for maintaining public health workforce standards • Low salaries in the public health professions might undermine recruitment and lead to potentially severe shortages of personnel in some areas

Source: CEB, WHO (2009). *Evaluation of public health services in south-eastern Europe.* Copenhagen, WHO Regional Office for Europe (http://www.euro.who.int/__data/assets/pdf_file/0016/125206/e94398.pdf, accessed 23 July 2012).

EU

Strengths	Weaknesses
• National health strategies formally exist with an intersectoral approach • Extensive network of partnerships for public health • Research capacities in the Member States considered relatively well established • Health information systems in place • Good training and education capacities on public health, with an increasing number of university graduates with public health degrees	• Lack of legal mechanisms to support partnership building efforts • Weak local public health capacities to face population needs • Weak linkages across sectors, as well as limited sensitivity for differences in population groups and minorities • Lack of capacity for identification of resources for public health due to many dispersed funds • Limited financial resources for public health due to strong imbalance in favour of curative health services • Competency framework for public health workforce and career pathways poorly developed and few plans for public health workforce development • Effective facilitation of research capacities to support policy development remains insufficient
Opportunities	**Threats**
• The European context presents significant opportunities for public health service improvements, including through raised standards • Harmonization with EU standards and coordination of public health curricula with EU norms • EU support through various channels, including implementation of monitoring systems, promotion of exchange of good practice, coordination of activities between Member States, complementation of national activities • Opportunities for wider application of IT and integration of IT systems can improve the quality of services, and operational efficiency	• Due to the financial crisis, budget cuts are being made among human resources and institutions in the public health sector • Public health organizations are struggling to maintain the status quo of functions and activities, despite these increasing shortages in human resources • The current existing national and regional infrastructures are at risk. This can lead to an important loss of trained and experienced professionals from a lack of incentives and career opportunities • The lack of public health applied research hampers the strategic and policy-making processes

Source: Maastricht University (unpublished). *Reviewing public health capacity in the EU – final report*.

CIS

Strengths	Weaknesses
• Food and water safety, hygiene-related measures and control, environmental health regulations, occupational health and the control of other health hazards are still major responsibilities of public health services • Prevention of infectious diseases, particularly through vaccination • The beginning of intersectoral cooperation, including with the Ministry of Education, the Ministry of Culture and Sports, the State Environmental Protection Agency, NGOs and the media, although the efforts in this area have remained limited.	• Health protection activities are still most commonly carried out by means of a "damage control/sanction" procedure, while a preventive approach towards health threats is often lacking • Evaluations of public health programmes are lacking • HIV/AIDS prevention institutions and projects with their own vertical structures risk being insufficiently integrated into existing health systems • Prevention of NCDs remains underdeveloped • Screening programmes for NCDs are not based on sound evidence, or lack qualified staff • Overall lack of effective collaboration with other sectors
Opportunities	**Threats**
• Opportunities for strengthening the health protection functions of Sanepid services as part of the health reforms and in line with the trend towards applying risk assessment, management and communication practices, rather than only inspection and control • Wide cooperation and collaboration aims to streamline health into other sectors and to involve citizens closely in health-related policies and decision-making • Future challenges lie in the area of health promotion and the prevention of NCDs, with important opportunities for strengthening public health and links to primary health care	• The shortage of funds, the global economic crisis and the possible reduction of international aid are potential threats to the successful implementation of reforms in public health, and particularly disease prevention and health promotion services • Political commitment is indispensable as the main driver for the extension of public health services into disease prevention and health promotion activities, and is a major threat to implementation if not ensured

Source: Maier C, Martin-Moreno JM (2011). Quo vadis SANEPID? A cross-country analysis of public health reforms in 10 post-Soviet states. *Health Policy*, 102(1):18–25.