Strengthening Public Health Capacities and Services in Europe: A Framework for Action

Interim draft

This working paper is submitted to the European Health Policy Forum for High-Level Government Officials, Andorra La Vella, Andorra, 9-11 March 2011 for comments and suggestions as the interim document in the process of developing a European Framework for Action to Strengthen Public Health Capacities and Services in Europe. This paper and the comments received during the meeting of the Forum will then be submitted to the Standing Committee of the Regional Committee (SCRC), on 30-31 March 2011, in Copenhagen.

This paper will accompany the European Health Policy, Health 2020, and following guidance received from the SCRC, they will both be submitted to the sixty-first session of the Regional Committee (RC61) for discussion, and to RC 62 for approval.

It is proposed that this technical paper and annexes will be followed by a focused Action Plan to accompany Health 2020, which will be submitted to RC61 for consideration and to RC62 for final adoption. Thus it forms part of a wider process to develop a European framework for action to strengthen public health capacities and services in all Member States.

The document outlines some of the major challenges to health policies and systems in the WHO European Region, including consideration of public health services and infrastructures. In view of the differences in the way European health systems and public health services are organized, operated and governed, the paper makes a clear statement on public health and health systems, including definitions, boundaries and concepts.

The paper proposes a set of ten horizontal essential public health operations (EPHOs), and sets out the core public health services within each of them. These will become the unifying and guiding principles for any European health authorities monitoring, evaluating or setting policies, strategies and actions for reforms and improvement in public health. The paper highlights the major avenues that the WHO Regional Office for Europe intends to take in order to tackle public health and health system challenges. It concludes by proposing specific actions and measures to move towards the attainment of the objectives set.

This technical paper has been developed through a process of external and internal consultation initiated by the Regional Director. An annex contains a list of the proposed ESPOs, which were prepared in consultation with all Member States and a number of external partners, and have been piloted by 17 Member States since 2007.
## Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction: mandate</td>
<td>1</td>
</tr>
<tr>
<td>Background</td>
<td>1</td>
</tr>
<tr>
<td>Scope and purpose</td>
<td>1</td>
</tr>
<tr>
<td>Challenges</td>
<td>2</td>
</tr>
<tr>
<td>Challenges to health and equity</td>
<td>2</td>
</tr>
<tr>
<td>Challenges to societies and health systems</td>
<td>3</td>
</tr>
<tr>
<td>Challenges to public health capacities: the current situation in Europe</td>
<td>3</td>
</tr>
<tr>
<td>Potential for health gains</td>
<td>3</td>
</tr>
<tr>
<td>The determinants of health</td>
<td>3</td>
</tr>
<tr>
<td>Guiding principles: Definitions of public health, essential public health operations for Europe, and health systems</td>
<td>4</td>
</tr>
<tr>
<td>Definition of public health</td>
<td>5</td>
</tr>
<tr>
<td>Definition of health systems</td>
<td>5</td>
</tr>
<tr>
<td>Primary health care and specialized health care services: the link with public health</td>
<td>7</td>
</tr>
<tr>
<td>Public health governance</td>
<td>7</td>
</tr>
<tr>
<td>Essential public health operations (EPHOs) and policy instruments</td>
<td>8</td>
</tr>
<tr>
<td>Framework for Action</td>
<td>9</td>
</tr>
<tr>
<td>Concept</td>
<td>9</td>
</tr>
<tr>
<td>Strengthening regulatory frameworks for protecting and improving health</td>
<td>10</td>
</tr>
<tr>
<td>Improving health outcomes through health protection operations and services</td>
<td>11</td>
</tr>
<tr>
<td>Improving health outcomes through disease prevention operations and services</td>
<td>12</td>
</tr>
<tr>
<td>Improving health outcomes through health promotion operations and services</td>
<td>13</td>
</tr>
<tr>
<td>Assuring a competent public health workforce</td>
<td>15</td>
</tr>
<tr>
<td>Developing Research and Knowledge for Policy and Practice</td>
<td>16</td>
</tr>
<tr>
<td>Organizational structures for public health services</td>
<td>17</td>
</tr>
<tr>
<td>The way forward: WHO’s role and next steps</td>
<td>19</td>
</tr>
<tr>
<td>References</td>
<td>20</td>
</tr>
<tr>
<td>Annex 1: (Unedited) Definitions of Essential Public Health Operations and Services in Europe</td>
<td>20</td>
</tr>
<tr>
<td>Annex 2: “Wicked problems” and systems thinking</td>
<td>50</td>
</tr>
</tbody>
</table>
Introduction: mandate

1. Since the end of the 20th century, Europe has faced complex health challenges (1), including deteriorating health status and widening inequalities among and within countries. Public health as a discipline, and public health services, have also faced unprecedented problems and in some cases have been prevented from developing owing to a lack of political vision and commitment.

2. The resolution entitled “Addressing key public health and health policy challenges in Europe: moving forwards in the quest for better health in the WHO European Region” (EUR/RC60/R5) (2), which was adopted at the sixtieth session of the Regional Committee for Europe (RC60) in Moscow in September 2010, endorsed the Regional Director’s proposal to formulate a new European policy for health, now known as Health 2020.

3. Health 2020 will reflect a renewed commitment to public health, with a considerable emphasis on prevention, while at the same time advocating for stronger health systems and the appropriate development of national health policies and strategies.

4. The resolution sought, in particular, to strengthen public health capacity and services, including prevention, and carry out a thorough review of the effectiveness of available public health instruments, as main avenues for addressing key public health and health policy challenges in Europe. The Resolution requested that the Regional Director renew the focus on public health capacity, function and services, and make a real commitment to, and investment in, prevention and health promotion. The present report will accompany the new European policy for health, Health 2020, and will be submitted in preliminary form to RC61 in September 2011 and in a consolidated form to RC62 in September 2012. The background to this framework is described in document EUR/RC60/SCRC/18 (3).

Background

5. There is no comprehensive and common understanding of what constitutes public health and public health services. Skills and infrastructure across the European Region are patchy, and there is still a long way to go in many Member States before public health infrastructure and practice can be considered strong enough to meet contemporary challenges. The monitoring and evaluation of public health services in European countries, which can facilitate appropriate policy-making, resource allocation and strategies for reform, are lacking or insufficient.

6. The new policy framework, which will be developed in the context of Health 2020, represents a unique opportunity for Member States to review the existing capacities and services for public health as the basis for a much stronger public health function in Europe. The WHO Regional Office for Europe will encourage all Member States in the Region to make strengthening public health services a priority, and will assist them in attaining that goal.

Scope and purpose

7. The present technical document aims to put public health and public health services high on the political agenda of ministries of health, and other sectors as necessary, to promote the integration of essential public health operations into national health systems, and to foster public health leadership.
8. Public health leaders must initiate and inform the health policy debate at the political, professional and public levels, in order to advocate for policies and action to improve health. Public health services offer a mechanism for giving expression to health across the whole political and administrative policy-making spectrum. They must take a comprehensive, horizontal view of the health improvement needs of society as a whole, and they must analyse broader strategies for health, create innovative networks for action among many different actors and be catalysts for change.

9. If public health is to be at the centre of health improvement then public health operations, capacities and services must be strengthened. This requires a clear definition of the role of public health, together with its working concepts, boundaries and interrelationships. It is also important that essential public health operations (EPHOs) are defined and performance measured.

10. It is not sufficient, however, to fully integrate public health and health care structures. A good link with social services is essential, particularly to address challenges caused by the ageing and dependent population. Moreover there are many other political, economic, environmental and institutional actors whose activities influence health. A key element in bolstering public health is to integrate its principles and services more systematically into all parts of society through increased whole-of-government and intersectoral working, through a Health in All Policies approach and through participation, transparency, communication and accountability.

Challenges

Challenges to health and equity

11. The European Region faces multiple health challenges. Despite recent improvements, major health inequalities remain both within and between countries in the WHO European Region. Notably, there is a difference of 20 years for men and 12 years for women between the highest and lowest national average life expectancies in the Region (4). Health experience also varies considerably according to socioeconomic experience and advantage. Evidence shows that most of these inequalities could be avoided. Action is needed to address the significant human and economic costs associated with pronounced health inequalities (5).

12. The most significant challenge comes from an epidemiological shift: the vast majority of the disease burden across the region is now caused by chronic noncommunicable diseases, which accounted for more than 85% of the 9 million deaths in the European Region between 2003 and 2007 (6), and include cardiovascular diseases, cancers, diabetes, chronic lung diseases and mental disorders. Noncommunicable diseases constitute the greatest current health challenge in the Region, to which public health capacities and infrastructure have, thus far, responded inadequately.

13. Communicable diseases also present an increasing challenge for policy-makers and public health institutions and professionals. The need to prepare for different strains of influenza, potential new pathogens such as severe acute respiratory syndrome (SARS) and new drug-resistant strains of tuberculosis mean that communicable disease surveillance and response remain key considerations for public health services.

14. Finally, these challenges are occurring in an extremely dynamic social and political context, in which globalization, economic considerations, technological advances, persistent health inequalities and access to information play an increasingly important role.
Challenges to societies and health systems

15. Existing challenges are also being exacerbated by demographic changes (ageing population and migration). Today less than 17% of the population is aged below 15 years, while nearly 16% is aged over 65. The total dependency ratio in the WHO European Region is expected to increase from 47% in 2007 to 74% in 2050 (7). The ageing population poses a new challenge for public health, the implications of which are fundamental to the viability of Europe’s health and social welfare systems, and to the performance of the economy. Cost of illness studies, for example, have estimated that the cost of chronic diseases and their risk factors could amount to as much as 6.77% of GDP in some countries (6).

16. The main challenges continue to be balancing the allocation of resources across sectors according to national priorities, as well as reducing costs and improving health system performance to ensure that investments result in improved health, access, equity and responsiveness. Average health expenditure as a proportion of GDP in the WHO European Region rose from 7.3% in 1998 to 7.7% in 2005 (7). The public sector has shouldered the majority of that burden, and the share of total government expenditure allocated to health care has increased. These challenges are being exacerbated by the current situation of economic and financial crisis, in which the most vulnerable must be protected (8,9).

Challenges to public health capacities: the current situation in Europe

17. Although strong public health capacities have historically been vital for meeting all these challenges, investments in this field have been insufficient (10,11,12,13). Recent outbreaks of poliomyelitis and measles in the WHO European Region, owing to gaps in immunization coverage, have highlighted the need to strengthen public health capacity and services, as well as the need for financial resources to be made available to respond to future outbreaks (14).

18. Disease prevention and health promotion are particularly important elements of public health. In a number of countries of the European Region these have become institutionally and functionally lacking as a result of weaknesses inherited from the past as well as recent reforms and structural changes, such as decentralization and privatization of health care services, conducted without appropriate planning and investment in preventive services. The development of primary health care services will enable these elements to function more effectively.

19. The share of health expenditure allocated to public health programmes remains relatively small. Available data, which comes mainly from western European countries, shows that on average, 2.9% of health spending is allocated to public health (15).

Potential for health gains

Introduction

20. WHO still faces considerable challenges to meeting its objective of “the attainment by all peoples of the highest possible level of health”. Yet it is possible to be optimistic. Health has improved both globally and in the European Region in recent decades: life expectancy has increased and technological advances in modern medical science have revolutionized opportunities for the prevention and control of disease among the population as a whole, and at the individual level.

21. Despite these advances health related inequality persists between and within countries, stratifying populations according to ethnicity, gender, socioeconomic status, education, and
geographical location. The differences are not caused by health care systems and access to these systems alone, but also by the political, institutional, social, economic and environmental circumstances of peoples’ lives. This inequality affects the very core of the human right to health.

22. To build on past successes and improve population health in an equitable way, we must strengthen health systems and renew political commitment to evidence based public health services and infrastructures, which must be appropriately integrated into health care structures.

The determinants of health

23. The determinants of health are multiple and varied. Political, social and economic circumstances are extremely influential, and the report issued by the Commission on Social Determinants of Health (CSDH) (5) in 2008 demonstrated the ethical imperative of acting on inequalities in the distribution of power, influence, goods and services, as well as in living and working conditions and access to good quality services, including health care, schools and education.

24. Environmental factors also influence health. They include water and air quality, environmental pollution caused by hazardous substances and emissions, urbanization, climate change, rising temperatures and sea levels, and an increased frequency of natural disasters and extreme weather conditions.

25. Behavioural determinants such as smoking, alcohol, diet, exercise and substance abuse also have a significant impact on health, particularly in relation to the rising prevalence of noncommunicable diseases. Increased investment in the preventive portfolio within primary health care may be particularly useful to address this fact, keeping in mind that although there are countries where this is not currently the case, primary health care can and should be interpreted in a broad sense to include health promotion and disease prevention. While some efforts to tackle smoking prevalence have been successful, an effective package of health interventions that addresses all of these risks should be developed in the context of a strategy to deal with the surging burden of noncommunicable diseases.

26. Finally, the capacity and efficiency of health systems is an important health determinant. At the moment it is generally considered that socioeconomic determinants have a greater influence than health system capacity on disease incidence, although over the course of a disease trajectory, health systems play an increasingly essential role in determining health outcomes. In that sense strengthening health systems (including their advocacy role outside the health care sector) will be an important component of Health 2020.

27. The issue facing Member States in the European Region is how to improve performance and reduce costs while maintaining the European values and principles agreed in Health for All, HEALTH21, and the Tallinn Charter, namely solidarity, equity and participation (16,17,18).

28. These determinants are inevitably interrelated. Many of them are amenable to effective interventions. Increased investment in health promotion and disease prevention is essential; awareness should be raised about the economic costs and benefits of prevention. Prevention includes population based vaccination programmes, but also the early detection of disease, such as hypertension and some cancers that are amenable to early treatment. Health promotion programmes aim to improve lifestyle and behaviours through education, advocacy and support offered to the population by health services and other sectors such as education and labour. More efficient therapy and rehabilitation are also required for those affected by disease.
Guiding principles: Definitions of public health, essential public health operations for Europe, and health systems

Definition of public health

29. A core definition of public health has proven elusive (19). Definitions vary depending on whether they are framed by the public health function and activities related to a public health workforce; whether they are normative or descriptive; or whether they incorporate wider social and economic factors influencing population health and health inequalities. From a pragmatic perspective a general definition is required, which may be used as a basis for describing in more detail the core activities of the public health function, but which is also sufficiently flexible to allow for debate on broader interpretations of what is involved in improving the health of the population in a given context and at a particular time.

30. After considerable internal and external consultation. The definition of public health originally put forward by Winslow in 1920 (20), and adapted by Acheson in 1988 (21), has been widely accepted, and is proposed for adoption:

“Public health is the science and art of preventing disease, prolonging life and promoting health through the organized efforts of society”

Sir Donald Acheson 1988

31. This definition has important characteristics.

- It is intentionally generic and does not specify particular societal preoccupations for public health outcomes, which might change over time.
- It refers to public health as both a science and an art, essentially and always a combination of knowledge and action. Public health must have an evidence base, but action must be taken on the basis of current knowledge.
- The core purposes of public health are to prevent disease, prolong life and promote health.
- Public health is an organized societal function.
- Several important and implicit aspects of this definition should be highlighted and explicitly communicated when necessary, including:
  - health protection
  - outcomes such as “wellness” or quality of life
  - individual responsibility and choice
  - future orientation of public health
  - political empowerment, equity and human rights in relation to health, and
  - the importance of health systems for public health improvement, including the key public health responsibility of ministries of health, rather than their simply being managers of the health care system.

Definition of health systems

32. The following definition of a health system, presented and adopted in the Tallinn Charter in 2008 (18), is proposed to be retained.

“Within the political and institutional framework of each country, a health system is the ensemble of all public and private organizations, institutions and resources mandated to improve or restore health. Health systems encompass both personal and population services, as well as activities to
influence the policies and actions of other sectors to address the social, environmental and economic determinants of health.”

Tallinn Charter, WHO Europe, 2008

33. Acheson’s definition makes it clear that public health is a function of the whole of society, to be achieved through society’s “organized efforts”. Public health goes beyond the strict boundaries of the health sector, encompassing a wide range of stakeholders throughout society. At the same time, the health system (led by the Ministry of Health) is absolutely central to public health leadership and services. Thus, public health is also about health systems, and reciprocally, health systems can only be effective if they include a public health services component.

34. In the public mind health systems remain largely associated with health care systems which, unlike public health systems, have relatively clear organizational boundaries, are familiar, and are highly visible and valued by populations.

35. The health system can be conceptualized as a key channel for the organized efforts of society in terms of public health and health improvement (see Diagram 1 below). The Diagram shows the health system in turquoise, and includes institutions and organizations with a health mandate, the resources dedicated to health, and the services delivered to promote, protect and restore health. The governance function orchestrates and aligns the numerous efforts from the different sectors of society in order to maximize health gain. We need to keep in mind that public health services must be strengthened to improve health as a whole, since they are fundamental to the health of the whole population. An investment in public health is an investment in long term health and well-being, which is not only of value as a good in itself but also as a contributing factor to economic productivity.

Fig. 1: Conceptual framework of the boundaries of public health and the health system
36. This diagram conceptualizes public health as a broad societal function, including organizations, resources and services from the health system, but also from other sectors of society, constrained only by the boundaries of society’s “organized efforts”. There are also a myriad of other societal activities influencing health, but which cannot be said to be part the “organized efforts” of society.

Primary health care and specialized health care services: the link with public health

37. The Declaration of Alma-Ata (1978) defines primary health care as

“essential health care based on practical, scientifically sound and socially acceptable methods and technology made universally acceptable to individuals and families in the community through their full participation and at a cost that the community and country can afford to maintain at every stage of their development in the spirit of self-reliance and self-determination. It forms an integral part both of the country’s health system, of which it is the central function and main focus, and of the overall social and economic development of the community. It is the first level of contact of individuals, the family and community with the national health system bringing health care as close as possible to where people live and work, and constitutes the first element of a continuing health care process.

Primary health care addresses the main health problems in the community, providing promotive, preventive, curative and rehabilitative services accordingly.”

38. Primary health care is a fundamental part of the health care system (22), which should work hand in hand with public health services to pursue health gain. It is important to highlight the fact that the primary health care services portfolio includes disease prevention and health promotion activities. It is therefore one of the main instruments for integrating public health into the wider health care system, as a primary vehicle for prevention, and as a nexus for all branches of the health system.

39. Other specialized health care services should be properly linked to public health services. It is important to break the barriers between traditional health care services and traditional public health activities; to articulate primary and secondary prevention functions in both primary and specialized health care; and to provide bidirectional informational tools for appropriate health surveillance, using a coherent system approach.

Public health governance

40. New approaches to health governance are required to ensure a better understanding of the complex interplay between the various determinants of health, in particular the role of economic and social factors and ways in which resources and influences are distributed across society. A key premise is that multiple determinants must be addressed using cross societal and “joined up” government approaches with the involvement of multiple sectors and stakeholders. This is the basis of Health in All Policies (23).

41. As noted earlier, many of the most pressing present and future policy challenges affecting public health involve addressing complex problems, such as climate change, obesity and health inequalities. These problems, which are known as wicked problems, go beyond any one organization’s capacity to understand or address. There is often disagreement about the causes of such problems, and a lack of certainty about the best way to tackle them (24). Wicked problems are described more fully in Annex 2.
42. As part of the development of Health 2020, the WHO Regional Office for Europe has commissioned a study on governance for health in the 21st century, to contribute to Health 2020 and the strengthening of public health infrastructure, capacity and practices.

**Essential public health operations (EPHOs) and policy instruments**

43. The background to developing essential public health operations (EPHOs) has been developed across the WHO European Region. The EPHOs, of which there are 10 at present, are a work in progress and are currently being used in a self assessment programme in the European Region. The 10 EPHOs are described in detail in Annex 1, and can be summarized as follows:

- surveillance and assessment of the health and well-being of the population;
- identification of health problems and health hazards in the community;
- preparedness and planning for public health emergencies;
- health protection operations (environmental, occupational, food safety and others);
- disease prevention;
- health promotion;
- evaluation of quality and effectiveness of personal and community health services;
- assuring a competent public health and personal care workforce;
- leadership, governance and the initiation, development and planning of public health policy, and
- public health research.

44. EPHOs should be updated in light of the changing European context. They should be mapped against the WHO health system framework and the Tallin Charter, and against existing public health services. The concepts presented in the EPHOs, such as equity, transparency, accountability, governance and stewardship, should be clarified. There should be consistent use of terminology during the process of strengthening public health across the European Region and to that end the new European policy for health, Health 2020, should include a glossary of terms.

45. A web-based self-assessment tool for public health has been developed, based on the EPHOs. It has been used in countries to evaluate the current state of capacity and practice related to EPHO implementation. Following a strategic analysis, the tool highlights the strengths and weaknesses, as well as necessary and proposed actions for further development. Areas identified for improvement include: issues of governance (legislative development or governmental leadership), health financing, resource generation (human, technological or knowledge), or service delivery. This matrix approach allows the integration of vertical (services and operations) and horizontal issues. An added value of the tool is to bring different public health stakeholders together to reach consensus, as well as to promote progress by allowing continuous assessment. These systemic dimensions (which include governance, financing and resources) encompass a whole-of-government approach which is not necessarily restricted to the health sector.

46. The tool has already been tested in 17 eastern European Countries with positive feedback on its relevance for identifying strengths and weaknesses, as well as for defining strategic actions to improve EPHOs in countries. The tool must still be tested in western Europe, as well as in countries with decentralized public health structures and responsibilities, in order to get comprehensive feedback on its relevance across the European Region. Moreover, there is potential to further focus the EHPoS for better coherence, deleting redundant items and perhaps
adding relevant, new challenges, such as communication for better health. This is intended to be a two-way process of using social marketing to listen to suggestions and reactions, and then engaging in a positive and constructive exchange making optimum use of technologies and developments (including social media).

### Framework for Action

#### Concept

47. A framework for action for protecting and improving the health of populations should reflect current health challenges and emerging hazards, while at the same ensuring that core public health activities are maintained and resourced. Promoting population health, whether at national, regional or local level, requires action to understand and address the impact on health of a wide range of social and economic determinants while continuing to ensure comprehensive monitoring and enforcement systems for communicable disease control, environmental health (including food safety, water quality and sanitation), occupational health, health protection and access to effective preventive health services.

48. A framework for action should be constantly reassessed and updated, while maintaining a focus on the importance of living and working conditions, education, effective disease prevention and the needs of disadvantaged or socially excluded groups. At the same time, an action framework needs to incorporate plans for addressing future challenges to population health, including sustainability and the impact of current policies on inter-generational equity.

49. A framework for action for protecting and promoting population health inevitably reaches far beyond effective delivery of the public health function in any single state. It involves states working together to promote global public health values and address problems arising from globalization and health worker mobility, including the rapid spread of communicable disease and the impact of global finance, and the challenges associated with global communication strategies.

50. At the national level, a framework for action should be influenced by the extent to which governments endorse a governance role in relation to the health of their populations, and their degree of commitment to human rights, social equity and social justice, and implement policies for sustainability and reducing inequity. At a policy level, it involves fostering intersectoral approaches, considering the impact on health and on health inequalities of a range of policies outside the health sector (singly and in combination), recognizing the potential impact of these policies on health, as reflected in Health in All Policies (23), and ensuring effective governance arrangements and resources for core preventive activities.

51. A framework for action should focus on operational aspects of the public health function while recognizing the wider strategic context within which this occurs and which influences the extent to which implementation is effective. It draws on the 10 EPHOs (see Annex 1).

52. The 10 EPHOs provide a comprehensive checklist of essential public health activities. Priorities for action in the shorter term will vary according to country-specific health challenges and the resources available to states to discharge their public health function. While governance arrangements for the public health function differ between Member States, broad governance principles, such as accountability and transparency, remain constant.

53. A framework for action requires a number of conditions.

- The health of the population must be explicitly recognized as a key governance role of national government.
National government must support the leading role of ministers of health, working in partnership with other sectors, by securing provisions for different mechanisms in national legislation and regulations.

Health strategies and policy priorities should be revised based on an assessment of current health needs, and inequalities in health and equitable access to preventive services should be reduced using the opportunities provided by the new European policy for health, Health 2020.

Intersectoral action should be supported at the national, regional and local levels to promote concerted action on wider determinants of health. Legal provisions in that regard should be amended to ensure that national and subnational regulations are based on the current European and global experience.

Consistency in strategy and direction across different levels of organization should be secured using systems for monitoring performance and ensuring accountability.

National and subnational governments should ensure that adequate resources are targeted to delivering essential public health operations, services and activities, including identification of emerging health hazards.

Strengthening regulatory frameworks for protecting and improving health

54. Regulatory frameworks are complex and multifaceted. Where risks to the health of the population are considered to outweigh other considerations, including individual choice, legislation is the preferred policy instrument. In recent years the use of legally binding arrangements to protect population health has increased. In particular, aspects of environmental health, safety of food and drinking-water, occupational health and infectious disease control have been the subjects of public health legislation.

55. These public health interventions can be highly cost effective. They include actions to reduce alcohol consumption through taxation and advertising bans; legislation to reduce trans fats and salt content in food; tobacco control measures related to advertising, taxation and smoke free workplaces; and road safety through mandatory seat belt use, speed bumps and breath tests. While many of these actions would already be justified for other reasons, the cost effectiveness evidence is a further argument in favour of their implementation.

56. Legislation may be international, such as the Universal Declaration of Human Rights (24), the International Health Regulations (2007) (25) and the Framework Convention on Tobacco Control (2005) (26); regional, such as European Union directives and the Protocol on Water and Health to the Convention on the Protection and Use of Transboundary Watercourses and International Lakes (27); or national, such as national public health laws. A study of public policy instruments for Public Health in the European Region (28) describes a wide range of instruments available to WHO (conventions, regulations, recommendations and standards), reflects variation between countries’ deployment of specific instruments, and notes changes in national regulatory frameworks arising from a growth in pluralism and democratization.

57. Public policy instruments may also provide technical support to national governments. Compliance with international agreements should be reflected in the assessment of the relevant EPHOs, in order to identify national progress towards meeting internationally agreed standards. A mapping exercise could serve to indicate the EPHOs for which international agreements and guidance are available.

58. While legislation is enforced through legal systems, national governments try to ensure implementation of national health strategies and policies through a range of monitoring, audit and performance management arrangements often associated with meeting standards or
achieving targets. These procedures may be carried out by regulatory agencies, and associated with a range of penalties (and sometimes incentives or rewards).

59. While there is some uncertainty regarding which aspects of performance management arrangements are effective in which circumstances, there is evidence that simple process targets can lead to unintended consequences and gaming. A broader approach is needed, based on performance measurement and accountability mechanisms. A focus on improving both the process and the health outcomes allows for a dynamic local system of accountability, which brings the reactions of the person being held accountable into the frame of reference.

60. For WHO, there has been a movement away from region-wide targets towards an emphasis on countries developing their own national frameworks for performance measurement and accountability to guide subnational priorities and performance assessment frameworks (6). These national frameworks will be built in line with the vision expressed in a national health plan or strategy, or a detailed health reform programme. While the diversity of approaches and variety of contexts should be recognized and lauded as an indication of country ownership, WHO advocates for national frameworks that translate shared values of equity and solidarity and foster transparency.

61. Standards for the delivery of public health services should be made explicit and their quality ensured through regular scrutiny, inspection or assessment arrangements and accreditation.

62. EPHOs provide a detailed and practical basis for performance assessment, enabling Member States to assess infrastructure, performance and capacity related to 10 core public health activities. This will show where gaps exist between the specific public health challenges of Member States and the infrastructure and capacity required to address them.

63. A number of conditions are required to strengthen regulatory frameworks for protecting and improving health.

- An implementation plan must be in place for legally binding international treaties, conventions and regulations, as well as resolutions and standards related to protecting population health.
- National regulatory frameworks related to licensing, accreditation and quality control of public health services, including laboratory facilities, should be reviewed in the light of best practices.
- An implementation plan for national health strategies should be established, including performance assessment measures for the delivery of core public health functions, standards and targets.
- Effective systems should be in place to ensure the continuous improvement of quality of public health services, with clear lines of accountability.
- Support should be given to intersectoral and integrated approaches to complex problems.

**Improving health outcomes through health protection operations and services**

64. Assessment of the health needs of populations is the cornerstone of any public health strategy, and guides core public health activities in relation to health protection and promotion and disease prevention, as well as the development of national health strategies. Such assessments can be conducted jointly across agencies and in partnership with local communities. The can influence priorities, service interventions and targeting strategies. Health
needs assessments should be independent and may take the form of a local public health report that is available to the public. Such assessments should be conducted on a regular basis.

65. Health protection requires systems that enable rapid detection, response and communication strategies. Control of communicable diseases remains a core activity for the public health function. This requires vigilance with regard to existing diseases, rapid response to new strains, and maintenance of an infrastructure for identification, control and treatment. There should be an equivalent rapid reporting system for environmental hazards.

66. The capacity to activate emergency plans that have already been tested and mobilize emergency response teams in response to public health emergencies, whether due to natural disasters, communicable disease outbreaks, chemical hazards, radiological hazards or bio-terrorism, are fundamental to health protection. There should also be capacity for public health surveillance follow up activities in the aftermath of disasters.

67. A number of actions are required to improve health outcomes through health protection operations and services.

• Data collection, integration and analysis should be improved in order to support health needs assessments and the rapid identification of emerging risks and hazards.
• Health needs assessments should be conducted on a regular basis to identify health status and health needs of the population; inequalities in health; changing patterns of disease; and implications for service provision.
• Reporting mechanisms should be established for disease outbreaks with better coordination across public health, veterinary, occupational and food safety agencies.
• Capacity and resources to implement IHR should be regularly reviewed.
• Emergency response plans should be put in place and regularly tested.

Improving health outcomes through disease prevention operations and services

68. Primary prevention refers to activities to prevent the manifestation of a disease, while secondary prevention refers to early detection for improving the chances for positive health outcomes. Tertiary prevention aims to re-establish health once the disease appears, applying care or treatment to cure or palliate a disease or its symptoms. Finally quaternary prevention alludes to the group of health care activities carried out to lessen or avert the consequences of unnecessary or excessive health care interventions.

69. Primary disease prevention is, by definition, a broad concept, including health promotion activities that have a positive influence on health-affecting behaviour, and health protection measures that prevent disease (environmental or food safety). However, given that the above functions are explained in detail in other sections, disease prevention can be practically understood as clinical preventive services including immunization and vaccination, evidence-based screening programmes, and the range of screening and preventive measures delivered through maternal and child health services. Preventive services are largely aimed at individuals but require computerized call and recall systems for selected populations and an organized system of delivery that is accessible to those populations. Such services may also involve targeted action to reach groups who are at risk but may not be able to access preventive services. There should be no financial or other barriers to accessing preventive services.

70. Vaccination programmes are widely established with clear guidelines and processes but additional action may be required in certain situations: in the event of inadequate coverage of
the target population; to provide outreach for rural and isolated populations or those unable to access services; when selective media coverage of safety has led to a reduction in vaccine take up and population immunity; to implement catch-up programmes or new initiatives in response to outbreaks of disease; in order to achieve the required level of coverage of influenza vaccine for adults at risk and the older population; to ensure vaccination coverage for marginalized or stigmatized groups; and to encourage vaccination of persons in certain occupations such as staff providing health services.

71. There are great disparities in maternal and child health between European countries. In 2008, infant mortality was reported at less than 5 per 1000 live births in 19 European countries, but at 30 or more per 1000 in each country in central Asia (6). The accessibility of maternal and child health programmes that offer a range of routine preventive and screening services should be evaluated, and reasons for late enrolment should be identified. Targeted approaches may also be required for those who lack access to other preventive services.

72. Evidence-based screening programmes may be established to identify and treat disease in its early stages. Their applicability and operation should be assessed according to agreed criteria related to: the magnitude of the problem; the extent of disparities between populations and geographical areas; the identification of a target population; the availability of laboratory facilities; and the capacity to treat detected cases quickly. A good system of primary health care with a registered population facilitates the optimal organization and delivery of population-based screening programmes, which should be vigorously promoted in favour of opportunistic screenings without value-added evidence.

73. As well as organized screening programmes there opportunistic case findings by health professionals can occur, as well as evidence-based interventions related to the reduction of risk factors such as smoking, alcohol consumption and poor diet.

74. A number of actions are required to improve health outcomes through disease prevention operations and services.

- Adequate resources should be allocated to vaccination programmes, including the purchase and storage of vaccines and the maintenance of effective call and recall systems.
- Evidence-based screening programmes should be implemented and regularly updated in the light of best practices.
- Systems for involving primary care and specialized care in disease prevention should be evaluated.
- Targeted programmes to reach populations at risk should be developed and evaluated.
- Maternal and child health services should be accessible and reasons for low or late enrolment investigated.

**Improving health outcomes through health promotion operations and services**

75. The Ottawa Charter (29) sets out five main strategies for health promotion: building healthy public policy; creating supportive environments; strengthening community action; developing personal skills; and reorienting health services. Building on these strategies, the following points reflect key elements of effective health promotion and can be applied across a range of topic areas, such as smoking, obesity or drug abuse.

76. The first priority of public health promotion is the recognition of the influence of political, social, and cultural contexts on life chances and on behaviour at each stage of the life
course has led to an emphasis on different settings and contexts for health promotion activities and on policies for making healthy choices easier by creating health promoting environments (including the use of legislation) as well as partnerships and intersectoral collaboration to address the social and economic determinants of health. This approach is fundamental to addressing inequalities in health and is being addressed in Health 2020 by the European Social Determinants and Health Divide Review.

77. The second priority, which reflects the 1948 WHO definition of health as “a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity” (30), emphasizes the promotion of well-being, including mental health promotion, as well as disease prevention.

78. The third priority, which is also related to the above, focuses on the resilience of communities as a reflection of the quality of social networks, increased participation in decision-making and active involvement in improving the environment and developing a culture of health. An assets approach to community health and well-being involves building on the cultural and material assets to promote active communities, address inequalities in health and encourage long term change.

79. It has been argued that effective local delivery for challenging health inequalities requires local participatory decision-making (21). This builds on a long standing appreciation of relationships between community development and health promotion, as reflected in the declaration of Alma-Ata, which moved away from professionally dominated notions of primary health care towards a more participative and multisectoral approach. This also involves community participation in planning health promotion activities.

80. The fourth priority, which is related to an intersectoral approach, promotes a public health ethos in different settings and organizations both inside and outside the health care sector and, more recently, through whole area approaches to service provision. While the important role of primary care in providing health promotion and preventive services has been reiterated since Alma-Ata, family doctors often lack the time or incentives to focus on prevention. Access to preventive services in primary care is variable and may not meet the needs of vulnerable or stigmatized groups.

81. The fifth priority is the importance of not increasing health inequalities through health promotion activities that are either inappropriate, culturally insensitive or fail to reach those most in need.

82. The priorities for health promotion are informed by key public health challenges as identified through health needs assessments. EPHO 6 outlines key operations in relation to diet and nutrition, physical activity and obesity; tobacco and alcohol control, drug abuse and prevention; prevention of infectious disease, sexual health, occupational health, environmental health and mental health and dental hygiene.

83. A number of actions are required to improve health outcomes by promoting operations and services.
- Intersectoral dialogue and cooperation between partners should be promoted to develop joint approaches to factors influencing health, well-being and healthy lifestyles.
- Communities should be involved in decision-making and building on community assets.
- The appropriateness of health promotion activities for targeted groups and those with the greatest health needs should be evaluated.
The importance of prevention for a sustainable health care system and for the wider economy must be recognized: long term action is required rather than many sporadic initiatives.

Assuring a competent public health workforce

84. This subsection relates to EPHO 8 and to elements of EPHO 9. A competent public health workforce is a prerequisite for an effective public health function. A multidisciplinary public health workforce lies at the heart of a modern public health function. Given the complex challenges facing public health, both existing and anticipated, a wide range of existing and new skills and expertise is called for. Many countries have moved from having a medically dominated public health workforce to a multidisciplinary one. Others have yet to make that transition or have just embarked on the journey.

85. The public health workforce in many countries comprises three broad categories:

- public health specialists working at senior management level or with a high level of expertise;
- professionals spending a major part of their time in public health practice such as health visitors, environmental health officers and community development workers; and
- professionals who can contribute to public health but may not recognize this, such as teachers, social workers, housing officers and some health care professionals.

86. In many health systems, public health is fragmented and sections of the workforce can feel isolated. There are often continuing problems of underresourcing, skill shortages, under capacity, poor morale and low pay.

87. The issues facing the public health function in the key areas of protection, improvement and health service development demand a range of diverse skills with practitioners coming from epidemiology, intelligence expertise, information systems, health promotion, environmental health, management and leadership, and elsewhere.

88. Key areas of public health practice have been identified (see below). Most are present in EPHOs 8 and 9 but have been listed here since they constitute the principal areas requiring attention to ensure that the appropriate skills are present in order to address new challenges and requirements. These include working with communities using an asset approach to improving community health and well-being, based on a co-production model.

89. The 10 key areas of public health practice are:

- Surveillance and assessment of the population’s health and well-being
- Promoting and protecting the population’s health and well-being
- Developing quality and risk management within an evaluative culture
- Collaborative working for health
- Developing health programmes and services and reducing inequalities
- Policy and strategy development and implementation
- Working with and for communities
- Strategic leadership for health
- Research and development – knowledge to action, and
- Ethically managing human, financial and other resources.
90. To deliver on these key areas of practice, a competency framework is required, comprising core and defined competencies. Core competencies might include: surveillance and assessment, assessing the evidence, policy and strategy, leadership and collaborative working. Defined competencies might include: health protection, health improvement, public health intelligence and health quality. The purpose of such a competency framework is to ensure that adequate training is provided and to help develop the workforce in terms of career progression and staff recruitment and retention. Quality assurance and solid accreditation mechanisms should be promoted. Training and research should be made relevant to practice and community service to revitalize the key role of schools of public health in this endeavour.

91. New skills are also required. Making the business case for investment in order to improve health and tackle health inequalities is becoming a key priority for public health leaders. Moreover, the particular type of leadership required is not of a traditional command and control variety but rather akin to what has been termed “adaptive” leadership: leading in contexts where there is considerable uncertainty and ambiguity, and where there is often imperfect evidence and an absence of agreement about both the precise nature of the problem and the solutions to it.

92. These situations require a very different style of management and leadership. In the absence of these new management forms, public health is often marginalized or vulnerable to budget raids at times of financial cutbacks. In future, much of the authority of public health leaders will come not from their position in the health system but rather from their ability to win and convince others through influence rather than control.

93. As previously mentioned, public health as a profession or specialization in the health sector (fundamentally focused on leadership actions, management and health protection) is one thing; while public health practices are quite another. The latter is performed by a wide variety of professionals, (in health care or otherwise) and citizens who contribute to community health from a Health in All Policies perspective. It is vital to foster a culture of cooperation and good communication, defining functions and synergies and avoiding confrontations caused by conflicts of professional boundaries.

94. An ability to understand different contexts and cultures, to work across organizational and professional boundaries (both vertically and horizontally) (33), and to act with political astuteness are central to the success of public health. Few leadership programmes embrace such an approach, although there are examples of some that successfully drawing on the tools and techniques from systems thinking (34), complexity science and improvement science.

95. A number of actions should be taken to ensure a competent workforce.

• A multidisciplinary public health workforce should be developed.

• A public health skills audit should be conducted in order to identify gaps.

• Efforts should be made to ensure that key skills for health form the essential competency framework for the public health workforce.

• Investment should be made in innovative and creative management and leadership programmes informed by systems thinking, complexity science and transformational change principles.

Developing Research and Knowledge for Policy and Practice

96. This subsection relates to EPHO 10 on health-related research and reaffirms the importance of epidemiological research, research databases and research collaboration. Member States will have very different research priorities depending on their public health situation, and on the needs identified and the resources available to tackle them. There is, however, an
increasing need for greater understanding of how research and knowledge are produced and used (or not used) in practice.

97. Public health has often been contrasted to mainstream medicine for lacking an evidence base of equivalent status and robustness. Few public health problems lend themselves to the type of gold standard research that is usually characterized by randomized clinical trials (RCTs). In the hierarchy of evidence, methods and designs that may be more appropriate to understand and address the wicked complex problems besetting public health come low down and are often held in disdain by those of a clinical or positivist scientific persuasion.

98. Recent developments are challenging the received wisdom and hierarchy of evidence approach. Some working in the area of creating public health evidence are pioneering new approaches in an effort to strengthen the evidence base in public health and to provide practical guidance to policy-makers on which interventions might work in the long term and be most cost-effective. Recent work, done mainly in Canada, shows that to produce sound research that is likely to be implemented, the approach to conceptualising and conducting research must be radically different (35,36,37). It requires a negotiated relationship between the researcher and user of research and one that involves the co-production or co-creation of knowledge. In such circumstances, knowledge exchange occurs through building relationships and networks created in local contexts.

99. Some health systems are increasingly aware of their deficiencies in respect of the synthesis, sharing and spreading of knowledge. They have therefore sought to place greater emphasis on ensuring that knowledge is spread and acted on. Knowledge management is a recognized skill. It is not a task to be undertaken lightly, but rather one that demands careful planning, and senior level engagement and championing.

100. A number of actions must be taken in respect of developing research and knowledge for policy and practice.

• Traditional approaches to evidence-based health should be replaced by a commitment to evidence-informed practice adopting knowledge exchange and co-production approaches.
• Evidence-informed public health demands the deployment of a mix of methods and disciplines in order to comprehend complex contexts and wicked problems.
• Knowledge sharing and management skills need to be supported and put in place.
• Public health practitioners should be encouraged to join a community of practice.
• Priority areas for research should be identified in close collaboration with academics and policy-makers.

Organizational structures for public health services

101. The organization and provision of public health services occurs at three levels, national, sub-national and local, with complex horizontal and vertical links. There are also important contextual factors that determine how public health services are organized in Member States. Networks are also important so that links can be established with agencies and services that are not part of the formal public health structure. Examples might include NGOs, voluntary or tertiary sector organizations, public health associations, and policy think tanks.

102. All three levels may be present in some health systems when it comes to the organizational structures of public health services. The intermediate level between national and local is often the most complicated and subject to change. At the national level, the public health function is located within a ministry or central department (usually the ministry or department responsible for health) although many elements will be scattered across other ministries and
departments. Some functions will also be located in agencies that are independent of, or
distanced from, central government. They may have a subnational structure, too. At the local
level a variety of agencies may be involved in delivering public health, although one of them
assumes overall responsibility for delivery. This can be a health service organization or a local
authority.

103. Regardless of the precise organizational system in place at any particular time, clarity and
consistency of purpose are always required at every level. Some aspects of the public health
function may be conducted more appropriately at particular levels where economies of scale
might prevail and where scarce expertise prohibits local solutions or delivery arrangements.
Most functions will probably require a presence at all or some levels. Effective management and
communication are crucial to enable the various levels and delivery agents to work effectively
and provide coherent policies and practices.

104. There are many models for organizing the public health function at national, sub-national
and local levels and it may be an area that would benefit from an evidence base in order to
demonstrate which models or arrangements are more effective than others. Too often, health
systems embark on major organizational change that is not evidence-based and which often fails
to deliver the promised objectives and benefits. Organizations delivering public health must
become learning organizations in order to improve their performance and impact.

105. There is no right or perfect organizational structure for public health services and
governments have often experimented with different arrangements. Sometimes these are located
in the health care service and sometimes outside it in regional and/or local government. What
matters is that work is appropriately coordinated to ensure that all the necessary partners are
engaged and able to contribute their knowledge and expertise. Organizational structures must
not serve as a barrier to achieving this outcome. Such expertise will embrace the three core
health domains: health protection, disease prevention and health promotion, and will involve
different types of partnership and accountability arrangements. Some functions, including
surveillance and reporting systems, need to be coordinated nationally.

106. A number of actions are required

• Appropriate organizational structures should be put in place to discharge the various
  public health functions

• Those structures must enable the public health function, EPHOs and services to be
delivered in a cost-effective and timely manner.

• The structures should be a combination of national, regional and local arrangements
depending on the size of the health system in question, and in the nature of the health
tasks being delivered

• Measures should be taken to encourage learning from international experience in order to
  maximize the use of effective practices.
The way forward: WHO’s role and next steps

107. The WHO Regional Office for Europe aims to support Member States by:

- ensuring close consultation and collaboration with Member States and other key stakeholders, such as the European Union and professional associations to further strengthen international, bilateral and multilateral cooperation;
- further developing the document “Strengthening public health capacities and services in Europe: A framework for action” through a participatory process between Member States and other partners;
- fostering public health leadership by creating specific positions of responsibility and accountability for public health matters;
- ensuring that WHO works hand in hand with its Member States to support them in their strategic developments to improve health outcomes and strengthen public health capacity and services;
- increasing coordination between public health structures and health care (especially primary care), through multidisciplinary training, enhanced communication channels and structural links;
- strengthening public health training through research, monitoring and evaluation and the dissemination of evidence with partners including the Association of Schools of Public Health (ASPH) for continuing education and the European Public Health Association (EUPHA) for maintaining professional standards and research.
- placing a greater focus on public health in medical training curricula;
- reviewing services, functions and operations from a practical perspective to improve coherence and better adapt to new challenges, such as communication for better health, which will be essential for better understanding the needs and perceptions of citizens (through behavioural research) and engaging in a positive and constructive exchange making the best use of new technologies and developments in social media;
- reviewing public health tools and instruments for the 21st century, including reviewing and monitoring their effectiveness assessing the efficiency of the different tools currently in place and the advisability of expanding, maintaining or discontinuing them;
- developing standards and indicators for delivering and monitoring EPHOs and core public health services;
- producing a web-based toolkit of instruments for strengthening public health services;
- supporting the cooperation of international, regional, multinational, national and subnational networks for public health; and
- establishing a potential high-level forum for policy development.
References


14. Renewed commitment to elimination of measles and rubella and prevention of congenital rubella syndrome by 2015 and Sustained support for polio-free status in the WHO European Region. Copenhagen, World Health Organization 2010 (resolution


Annex 1: (Unedited) Definitions of Essential Public Health Operations and Services in Europe

**DEFINITIONS OF ESSENTIAL PUBLIC HEALTH OPERATIONS (EPHO) AND SERVICES IN EUROPE**

**EPHO 1: Surveillance and assessment of the population’s health and well being**

**Definition:** This operation includes the setup and operation of surveillance systems focused on diseases of public health importance and the ongoing collection of data to be used for assessing measures of morbidity and population health indexes. It includes Community Health Diagnosis; analysis of data to identify trends, gaps and inequalities in the health status of specific populations; identification of needs; and planning of data oriented interventions.

A. **Establishing and maintaining broad-based surveillance systems and registries of diseases and measures related to health**

1. **A.1 Evaluate the surveillance system and registries of diseases in the area of Vital Statistics (births, deaths).**
   **Points to consider in making your evaluation:**
   - Whether there is a complete vital registration system.
   - Whether mortality and morbidity data can be disaggregated by any socioeconomic markers, gender, ethnicity, levels of income and education.
   - Whether you undertake population-based health information gathering.
   - Whether you undertake activities that define essential public health problems as a result of processing the data.

2. **A.2 Evaluate the surveillance system and registries of diseases in areas of communicable diseases, non-communicable diseases (NCDs) & food-borne diseases.**
   **Points to consider in making your evaluations:**
   - Existence of a legal framework for reporting and surveillance of infectious diseases.
   - Existence of a list of notifiable diseases in the relevant area (infectious, NCD, food-borne).
   - Existence of a list of surveillance system (passive, active, comprehensive, sentinel).
   - Existence of monitoring systems for microbiological and chemical contamination in the food chain.
   - Existence of national and sub-national registries.
   - Drawing information from the data.
   - Reporting to international agencies (WHO, ECDC, EFSA etc.).
   - Whether data can be disaggregated by any socioeconomic markers, gender, ethnicity, levels of income and education.

3. **A.3 Evaluate Ongoing Surveys of Health Behaviour, including Health and Nutrition Surveys, which address issues such as obesity and dietary intake.**
   **Points to consider in making your evaluation:**
   - Existing definitions of sub-populations at risk.
   - Existing goals and definitions of population health items to study.
   - The way standard surveys are conducted.
   - Adaptations of surveys to the characteristics of the study population.
   - Forming information from the data collected.
   - Intra/Inter SSII connection.
• Whether surveys enable data to be disaggregated by any socioeconomic markers, gender, ethnicity, levels of income and education.

1. A.4 Evaluate your surveillance system and registries of diseases in the area of Maternal and Child Health indicators.

   Points to consider in making your evaluation:
   • Existence of a legal framework for data collection.
   • Existence of national data collection system with connection to other existing information systems, including socio-economic indicators.
   • Existence of information systems on provision of mother and child health services (process evaluation).
   • Availability and delivery of maternal and child health including prenatal care, place of delivery, attendance of health professionals at delivery, type of delivery.
   • Establishing information systems on outcome of mother and child health services: fertility rates, pregnancy outcome such as complications of pregnancy, miscarriage, therapeutic abortion, stillbirth, length of stay in hospital, low-birth rates, infant mortality rates and avoidable genetic disorders, data availability in death certificates.
   • Whether data can be disaggregated by any socioeconomic markers, gender, ethnicity, levels of income and education.

1. A.5 Evaluate your surveillance system and registries of diseases in the area of Environmental Health indicators.

   Points to consider in making your evaluation:
   • Existence of a legal framework and integrating legislation at a European level.
   • Surveillance of data that relates environmental factors to population health.
   • Integrating data and information from other information systems outside the health sector in accordance with the WHO definition.
   • Availability of a national unit dealing with environmental epidemiology.
   • Publishing of material concerning environment and health.
   • Whether data can be disaggregated by any socioeconomic markers, gender, ethnicity, levels of income and education.

1. A.6 Evaluate your surveillance system and registries of diseases in the area of Social and Mental Health indicators.

   Points to consider in making your evaluation:
   • Existence of registry for Mental Health that is handled in a confidential way.
   • Availability of indicators related to the existence of peer support networks or of any other type of operational social support and related activities.
   • Whether data can be disaggregated by any socioeconomic markers, gender, ethnicity, levels of income and education.

1. A.7 Evaluate your surveillance system and registries of diseases in the areas of Occupational Health and Injury Surveillance.

   Points to consider in making your evaluation:
   • Existence of a national registry for Injury Surveillance from various sources: hospital information systems, emergency departments, death certificates, accident reports.
   • Existence of a registry of compensable occupational injuries and diseases.
   • Extent of existing integration with other socio-economic information systems in different registries outside the health sector.
   • Publishing yearly information on Injuries and Health.

1. A.8 Evaluate your surveillance system and registries of diseases in the area of Socio-Economic indicators, including in Health Inequalities.

   Points to consider in making your evaluation:
   • Existence of national data collection and data analysis configurations in the central statistics office.
   • Integration of data in the central statistics office into health information systems.
• Publishing data on health and food security and inequalities in health.

B. Data integration and analysis (including community health diagnosis) in order to identify population needs and risk groups and monitor progress towards health related objectives.

1. B.1 Evaluate how well and effectively you apply computer-generated graphics to identify trends and/or compare data by relevant categories (i.e. race/ethnicity, gender, age group).

*Points to consider in making your evaluation:*
- Availability of software or ad-hoc computer programmes generating standardised graphics after having introduced the raw data.
- Existence of hardware and infrastructure to support these activities.

1. B.2 Evaluate how well and effectively you use data integration and analysis in order to monitor the health of communities, distribute up-to-date public health information, and assist in the detection of emerging public health problems and alerts.

*Points to consider in making your evaluation:*
- Availability of software or ad-hoc computer programmes generating standardized outputs after having introduced the health information and surveillance data.
- Existence of hardware and infrastructure to support these activities.
- Generation of periodical analyses and reports.

C. Publication of data in multiple formats for diverse audiences.

1. C.1 Evaluate how comprehensively and effectively you publish data in multiple for Decision Makers, Health Services Providers and Insurers, the General Public and at-risk populations.

*Points to consider in making your evaluations:*
- Whether the data is monitored in various surveillance systems integrated and published periodically through various communications vehicles: hard copies, electronic publications on websites, distributed through email, computer applications, etc.
- Use of the mainstream media – radio, TV, Newspapers.
- Whether these publications address the necessary action that should be required from the target group.
- Whether they are disseminated to relevant social services.

**EPHO 2: Identifying health problems and health hazards in the community**

**Definition of operation:**
Monitoring, identification and prediction of biological, chemical and physical health risks in the workplace and the environment; application of risk assessment tools for environmental health risks, and issuing public warnings about these risks; planning and activation of interventions aimed at minimizing environmental related health risks.

**A. Control of communicable disease**

2. A.1 Evaluate your system and procedures for the detection of outbreaks of communicable disease.

*Points to consider in making your evaluation:*
- Procedures for GPs, nurses, physicians, etc. regarding the reporting of any unusual clusters or presentations of communicable diseases.
- The adequacy in practice of the reporting level.
- Whether outbreaks are detected in early or later stages.
2. A.2 Evaluate your system and procedures for identifying populations at increased risk of communicable diseases.

*Points to consider in making your evaluation:*
- Whether there are population or communities that could be exposed to greater risk of communicable disease?
- Whether factors such as poverty, low income, education, quality of housing, access to health care are taken account of in assessing risks.

2. A.3 Evaluate your system and procedures for outbreak investigation and cause identification.

*Points to consider in making your evaluation:*
- How well the existence of an outbreak is established (refer to recent cases).
- Whether outbreak investigations are done by epidemiological teams?
- Whether case definition and case counts are applied?

2. A.4 Evaluate your system and procedures for controlling zoonotic and vector-borne diseases.

*Points to consider in making your evaluation:*
- Control systems of food production throughout the food chain (‘from farm-to-fork’).
- Laboratory network (human and veterinary) microbiological analyses.
- Ability to conduct joint epidemiological investigation with veterinary services.
- Ability to conduct joint epidemiological investigation with environmental services.
- Ability to undertake a vector control and cooperation with veterinary services.

2. A.5 Evaluate your system and procedures for the surveillance of nosocomial infections.

*Points to consider in making your evaluation:*
- Whether there are epidemiological teams in each general hospital.
- Whether there are procedures in each hospital to control and prevent nosocomial infections.
- Whether there are programmes and communication protocols implemented on hospital level.

2. A.6 Evaluate your system and procedures for the surveillance of antibiotic resistance.

*Points to consider in making your evaluation:*
- Whether there are hospital surveillance systems for antibiotic resistance and antibiotic usage.
- Whether there are community surveillance systems for antibiotic resistance and antibiotic usage.
- Whether there are surveillance systems for antibiotic resistance and antibiotic usage in food animals.
- Whether the surveillance systems collaborate with other systems: pharmacies, veterinaries, etc.
- Whether all these reports are integrated on a national level.

B. **Control of environmental health hazards**

2. B.1 Evaluate your system and procedures for assessing the health impact of environmental factors.

*Points to consider in making your evaluation:*
- Existence of environmental epidemiology unit.
- Existence of a methodology that combines environmental factors with population health regulations.
- Risk assessment procedures.

2. B.2 Evaluate your system and procedures for environmental risk assessment to identify possible hazardous exposures.

*Points to consider in making your evaluation:*
The availability of professionals trained in methodology of environmental risk assessment procedures and models.

A multidisciplinary approach that integrates different skills and fields of knowledge to identify hazardous exposures.

2. B.3 Evaluate your system and procedures for occupational health assessment and control.

Points to consider in making your evaluation:

- Whether there is an explicit law on occupational safety / prevention of occupational risks (or a Prevention of Occupational Hazards Act).
- The existence of specific regulations to encourage safe work settings, as part of the Law on the Prevention of occupational hazards.
- Cooperation between ministries involved (Ministry of Health, Ministry of Labour, others).
- Legally established occupational health records (health check-ups that are tailored to the job post).
- The performance of occupational risk assessment regarding exposures to risk factors.

2. B.4 Evaluate your system and procedures for air quality assessment and the robustness of clean air standards.

Points to consider in making your evaluation:

- Specific air quality regulations for monitoring air quality and risk assessment.
- Environmental surveillance networks and specific environmental laboratories.
- Existence of a research group for integration of network data to find cause-effect correlation to the component of air pollution.

2. B.5 Evaluate your system and procedures for water quality assessment and the robustness of clean water standards.

Points to consider in making your evaluation:

- Specific regulations on water quality in various settings (drinking water, recreation, natural water, marine water).
- Transversal mainstreaming (integration into other community planning activities: construction, water supply, water treatment, drains).
- System and network for monitoring water quality system, backed by laboratories to check the water periodically.
- Surveillance networks of water quality and integration of data and production of information.
- Establishment of cause-effect correlations with outbreaks in the community.

2. B.6 Evaluate your system and procedures for the identification of chemical and physical health hazards thorough analysis of surveillance data or epidemiological research.

Points to consider in making your evaluation:

- Surveillance networks of chemical and physical health hazards, including in the food chain.
- Infrastructure for data analysis and integration of data and production of information.
- Establishment of cause-effect correlations with outbreaks in the community.
- Encouragement of research for the development of new methodologies and oversight strategies.

2. B.7 Evaluate your system and procedures for food safety risk assessment.

Points to consider in making your evaluation:

- Specific regulations and circulars on food safety in various settings.
- Existence of mechanisms for food safety risk assessment.
- Functional separation of risk assessment and risk management.

2. B.8 Evaluate your system and procedures for risk assessment regarding consumer goods, cosmetics and toys.

Points to consider in making your evaluation:

- Specific regulations on consumer goods, cosmetics and toys.
• Existence of a mechanism for risk assessment regarding consumer goods, cosmetics and toys.

2. B.9 Evaluate to what extent you have progressed towards implementation of the International Health Regulations (IHR).

Points to consider in making your evaluation:
• Evaluation of national laws regarding IHR.
• Dissemination of knowledge to the health sector.
• Dissemination of knowledge to other ministries.
• Performing intersectoral table top exercises.
• Agreements with neighbouring countries.

C. Laboratory Support for Investigation of Health Threats

2. C.1 Evaluate to what extent you have readily accessible laboratories capable of supporting investigations of public health problems, hazards, and emergencies.

Points to consider in making your evaluation:
• Existence of a network of readily accessible laboratories that are fit for purpose.
• Collaboration with other laboratories (private, academic institutions) for both research and during crises.
• Communication between laboratories and epidemiological units.
• Integration of databases with the rest of SSII.

2. C.2 Evaluate to what extent you have ready access to laboratories capable of meeting routine diagnostic and surveillance needs.

Points to consider in making your evaluation:
• Existence of a network of readily accessible laboratories that are fit for purpose.
• Adaptation of the infrastructure to the volume of samples over time.
• Collaboration with other laboratories (private, academic institutions) for routine diagnostic and surveillance needs.
• Communication between laboratories and epidemiological units, including other sectors such as environment and veterinary fields.
• Integration of databases with the rest of SSII.

2. C.3 Evaluate to what extent you have the ability to confirm that laboratories are in compliance with regulations and standards through credentialing and licensing agencies.

Points to consider in making your evaluation:
• Existence of specific regulations on standards for laboratory quality control.
• Availability of mechanisms related to supervision/inspection of standards for laboratory quality control.

2. C.4 Evaluate to what extent you have the ability through guidelines or protocols to address the handling of laboratory samples, which describe procedures for storing, collecting, labelling, transporting, and delivering laboratory samples, and for determining the chain of custody regarding the handling of these samples.

Points to consider in making your evaluation:
• Existence of specific regulations on guidelines, protocols or standards to address the handling of laboratory samples.
• Availability of mechanisms for inspecting the fulfilment of the above guidelines or standards for handling of laboratory samples.

2. C.5 Evaluate the adequacy of your public health laboratory system and its capability to conduct rapid screening and high volume testing for routine diagnostic and surveillance needs.

Points to consider in making your evaluation:
• If no such laboratory exists, consider whether or how you aim to develop such a facility.
• Regulations concerning quality assessment of laboratories.
• Possibility of adapting to international standardisations: ISO 17000.
• Availability of PNT (standard work procedure).
• Mechanisms for certification and recertification.
• Performance of intra-laboratory and inter-laboratory reviews.

2. C.6 Evaluate your ability to produce timely and accurate laboratory results for diagnostic and investigative public health concerns.

Points to consider in making your evaluation:
• Existence of the necessary laboratory infrastructure to produce results for diagnostic and investigative public health concerns.
• Availability of mechanisms for inspecting the fulfilment of the protocols to produce results for diagnostic and investigative public health concerns.
• If you do not have such ability, consider whether or how you aim to develop and maintain a new and appropriate facility.

EPHO 3: Preparedness and planning for public health emergencies

Definition of operation:
Preparedness for management of emergency events, including construction of suitable action plans; development of systems for data collection and for control and prevention of morbidity during an unusual event; applying an integrative approach in order to cooperate effectively with various authorities involved in the management of unusual events.

A. Planning, investigating and responding to public health emergencies
3. A.1 Evaluate your ability to define and describe public health disasters and emergencies that might trigger implementation of the emergency response plan in the following areas.

Points to consider in making your evaluations:
• Existence of specific preparedness guidelines for emergency response in the relevant area (i.e. respectively Natural Disasters, Communicable Disease Outbreaks, Chemical Hazards, Radiological Hazards and Bio Terrorism).
• Capacity to foresee the different factors that might trigger this type of emergency.
• Ability to anticipate the population at risk and its requirements.
• Systematic assessment of requirements and of the available means of action.
• Effectiveness of intersectoral collaboration and cooperation.
• Identification of underlying social problems that might be exacerbated during such incidents.
• Existence of information systems including intra-national and international warning networks.

3. A.2 Evaluate the development of a Plan that defines organisational responsibilities, establishes communication and information networks, and clearly outlines alert and evacuation protocols.

Points to consider in making your evaluation:
• The integration of planning for all the above potential emergency situations (in 4A1).
• Existence of a general plan, easily available and pragmatic, that defines organisational responsibilities, communication algorithms and information networks.
• What the basis is for elaborating the plan – i.e. whether it will be the previous analysis of the possible risk factors as well as of the requirements associated with these risk factors.
• Whether requirements for implementation are also developed alongside the plan/s.
• Whether emergency plans have been developed in collaboration with all other agents involved (not only medical/public health dimension, but also social, economic, occupational, environmental, and defence dimensions).
3. A.3 Evaluate the development of a rapid response team, including testing of the Emergency plan through table-top exercises and large-scale drills.

*Points to consider in making your evaluation:*

- Systematic mechanisms for capacity response assessment.
- Table-top exercises and drills under ideal conditions to enable identification of processes or steps of the plan that need to be amended (refer to practical example).
- Periodical reports on results of the drills or practical exercises.

B. Designating an emergency response coordinator

3. B.1 Evaluate the development of your written epidemiological case investigation protocols for immediate investigation of the following events.

*Points to consider in making your evaluations:*

- Assessment of appropriateness of procedures for GPs, nurses, physicians, veterinarians etc. regarding:
  - The reporting of any unusual clusters or presentations of communicable diseases, including zoonotic communicable diseases.
  - Immediate investigation of relevant area (i.e. respectively, Environmental Health Hazards, Chemical, Radiological and Biological Agent Threats, Large-Scale Disasters).
- Assessment of the reporting level in the country.

C. Lessons learned, maintaining protocols and ensuring a roster of experts

Public health surveillance is the logical continuum of the initial epidemiologic task of emergency health assessment. After disasters, surveillance systems need to be established in sentinel sites, such as clinics, to monitor the health of the population and to gauge the effectiveness of ongoing relief programmes, particularly during the implementation of emergency programmes that are likely to continue beyond the immediate aftermath of the disaster.

3. C.1 Effectiveness of the evaluation of past incidents and identification of opportunities for improvement.

*Points to consider in making your evaluation:*

- How early/late the problems are usually detected.
- Existence of reports acknowledging aspects that should be improved in the future.

3. C.2 Evaluate your maintenance of written protocols to implement a programme of source and contact tracing for communicable diseases or toxic exposures.

*Points to consider in making your evaluation:*

- Whether there is an attempt to keep dynamic, written protocols accessible.
- Assessment of previous experiences regarding the availability and usefulness of the written reports.

3. C.3 Evaluate your maintenance of a roster of personnel with the technical expertise to respond to potential chemical, radiological or biological public health emergencies.

*Points to consider in making your evaluation:*

- Explicit assessment of organisational aspects and existence of prepared professional teams.
- Log recording existing experts and professionals for different types of public health emergencies.
- Report acknowledging further needs of experts and professionals for different types of public health emergencies.

D. Implementation of the International Health Regulations (IHR)

3. D.1 Implementation of the International Health Regulations (IHR) in the area of emergency planning.
Points to consider in making your evaluation:

- How fully the IHR are currently implemented in the area of emergency planning.
- Whether there is a plan / programme for implementation and whether it is being implemented according to schedule.
- Evaluation of national laws regarding IHR.
- Performing intersectoral table top exercises.
- Agreements with neighbouring countries.

**EPHO 4: Health protection operations (environmental, occupational, food safety and others)**

**Definition of operation:**
Technical capacity for risk assessments and actions needed for environmental, occupational and food safety. Enforcement and control activities are applied by public health authorities that supervise actions that have health implications. This operation includes the institutional capacity to develop the regulatory and enforcement frameworks that protect public health and monitor compliance within these frameworks; and the capacity to generate new laws and regulations aimed at improving public health, as well as promoting healthy environments.

**A. Technical capacity for risk assessment**

4. A.1 Evaluate your technical capacity for risk assessment in the following areas.

*Points to consider in making your evaluations:*

- Arrangements to collect samples (surveillance network).
- Laboratories equipped with the necessary technology to analyse these samples.
- Technically qualified personnel to carry out control tasks.
- Access to existing studies on the matter (scientific evidence) as part of a developing knowledge base.

4. A.2 Evaluate your technical capacity for risk assessment in the area of Health Related Behaviour.

*Points to consider in making your evaluation:*

- Existence of health surveys and protocols to carry them out.
- Existence of technical equipment to assess risk (e.g. breathalysers, air quality monitors)
- For example, assessment of active and passive smoking.

4. A.3 Evaluate your technical capacity for risk assessment in the area of Health Care Facilities and Programmes.

*Points to consider in making your evaluation:*

- The existence of specific regulations on guidelines, protocols or standards to address the safety and quality assessment of Health Care Facilities and Programmes.
- The availability of mechanisms for inspecting the fulfilment of the above protocols or standards.

**B. Enforcement of laws and regulations by public health authorities**

4. B.1 Evaluate your inspection, monitoring and enforcement of laws and regulations by public health authorities in the following areas.

*Points to consider in making your evaluations:*

- Adopting (transposing) regulations at a higher level (European level) to the legislation of your country.
- Introducing the necessary legal changes swiftly in accordance with changes occurring at a social level, as well as new requirements.

**C. Cooperation with other authorities responsible for law enforcement in issues related to public health (health protection)**
4. C.1 Evaluate the cooperation between the Ministry of Health and other ministries for law enforcement in issues related to public health.

Points to consider in making your evaluations:

- The interrelation and cooperation between the various authorities and administrations at different levels (which is essential to ensure that the existing regulations are applied, and that new regulations are created in order to face new challenges and requirements).
- The extent to which the government facilitates cooperation and communication mechanisms between administrations by establishing collaborative agreements, mixed committees, information systems of shared operations, shared legal regulations, etc.

i) Ministry of Environment
ii) Ministry of Agriculture
iii) Ministry of Fisheries
iv) Ministry of Labour
v) Ministry of Education
vi) Ministry of Science
vii) Ministry of Interior
viii) Ministry of Defence
ix) Ministry of Justice
tax) Any other relevant ministries

**EPHO 5: Disease prevention**

**Definition of operation:**
Disease prevention is aimed at both communicable and non-communicable diseases and has specific actions largely delivered to the individual. Disease prevention services should include primary prevention through vaccination of children, adults and the elderly; the application of vaccination or post-exposure prophylaxis to persons exposed to a communicable disease. In reality, this is the principal form of disease prevention in many countries, with comprehensive vaccination programmes being firmly established. Disease prevention also includes the provision of information on behavioural and medical health risks as well as consultation and measures to decrease them at the personal and community level; systems and procedures for involving primary health care and specialised care in programmes on disease prevention; the capacity for the production and purchasing of childhood and adult vaccines; reserves of vaccines where appropriate; and the production and purchasing of nutritional and food supplementation.

Prevention also includes secondary prevention, through activities such as evidence-based screening programmes for early detection of diseases; maternal and child health programmes, including screening and prevention of congenital malformations; the production and purchasing of chemo-prophylactic agents; the production and purchasing of screening tests for the early detection of diseases, and capacity in relation to actual or potential needs.

**A. Primary prevention**

5. A.1 Evaluate your vaccination programmes for the following groups

Points to consider in making your evaluations:

- Defining and providing accountable vaccination arrangements, including the necessary resources to ensure the efficiency of the programme.
- Adopting a consensus-built vaccination calendar in accordance with the international organisations’ recommendations (including the review and inclusion of new vaccinations in accordance with scientific/economic criteria).
• Vaccination register.
• Link with other SSII.
• Information programmes (including for parents and education professionals in the case of child vaccination) regarding the need to immunise the population as a main barrier against the transmission of diseases.
• Easy access to vaccination services for the vaccinations included in the vaccination calendar.
• Programmes run by professionals to inform about side effects.
• Training programmes for professionals.

i) Adults
ii) The elderly
iii) Vaccination or post-exposure prophylaxis to persons exposed to a communicable disease

5. A.2 Evaluate your provision of information on behavioural and medical health risks

Points to consider in making your evaluation:
• Availability of information regarding behavioural health risks in our population.
• Explicit assessment of comprehensiveness of this available information.
• Consultation mechanisms to evaluate how to proceed to lower the risk.
• Usefulness/effectiveness of the available mechanisms.
• Existence of operational proposals for the future.
• Effectiveness of all measures to decrease health risks.

5. A.3 Evaluate your systems and procedures for involving primary health care and specialized care in programmes on disease prevention.

Points to consider in making your evaluation:
• Availability of information regarding the role of primary health care and specialised care in programmes on disease prevention.
• Explicit assessment of level of involvement.
• Existence of operational proposals for the future.

5. A.4 Evaluate the adequacy of your capacity for the production and purchasing of the following.

Points to consider in making your evaluations:
• Availability of information regarding the capacity for the production and purchasing of products (i.e. respectively childhood & adult vaccines, and iron, vitamins and food supplements)
• Explicit assessment of further provision needs.
• Evaluation of the adequacy of reserves.
• Existence of operational proposals for the future.

i) Childhood and adult vaccines
ii) Iron, vitamins and food supplementation.

B. Secondary prevention
5. B.1 Evaluate your evidence-based screening programmes for early detection of diseases.

Points to consider in making your evaluation:
• Legal framework.
• Network: defining and providing accountable structures.
• Application of international inclusion criteria of the potential target pathologies in screening programmes (consider the magnitude of the disease, the possibility of primary prevention, the natural history of the disease, efficient treatment in the sub-clinic phase, the parameters of the test, etc.).
• Structural and budgetary feasibility – and ability to deal with the detected cases quickly and effectively.
• Defining the target populations for the programmes.
• Arrangements set up to attend and receive cases for their diagnosis and treatment.
• Assessing the programmes.
• Adapting the screening programmes to the international organisations’ recommendations.

5. B.2 Evaluate your maternal and child health programmes, including screening and prevention of congenital malformations.

*Points to consider in making your evaluation:*

• Coordinated framework.
• Network: defining and providing accountable structures.
• Applying international inclusion criteria of the potential target pathologies in screening.
• Structural and budgetary feasibility.
• Defining the target populations for the programmes.
• Arrangements set up to attend and receive cases for their diagnosis and treatment.
• Assessing the programmes.
• Adapting the screening programmes to the international organisations’ recommendations.

5. B.3 Evaluate the adequacy of your production and purchasing of screening tests for the early detection of diseases.

*Points to consider in making your evaluation:*

• Availability of information regarding the capacity for the production and purchasing of screening tests for the early detection of diseases.
• Explicit assessment of further provision needs (comparison of our capacity in relation to actual or potential needs).
• Existence of operational proposals for the future.

**EPHO 6: Health promotion**

**Definition of operation:**
Health Promotion is the process of enabling people to increase control over their health and its determinants, and thereby improve it. It is a core activity of public health and contributes to tackling communicable and non-communicable diseases and other threats to health. Health promotion includes the following activities:

• The promotion of changes in lifestyle, practices and environmental conditions to facilitate the development of a “culture of health” among individuals and the community;
• Educational and social communication activities aimed at promoting healthy conditions, lifestyles, behaviour and environments;
• Reorientiation of health services to develop models of care that encourage health promotion;
• The strengthening of intersectoral partnerships for more effective health promotion activities;
• Assessment of the impact of public policies on health.
• Risk communication.

The means of achieving this include conducting health promotion activities for the community-at-large or for populations at increased risk of negative health outcomes, in areas such as sexual health, mental health, health behaviour related to HIV, drug abuse control, tobacco control, alcohol control, physical activity, obesity prevention, healthy nutrition, food safety, work-related health hazards, injury prevention, occupational and environmental health.

The broader role of health promotion includes giving advice to policy makers on health risks, health status and health needs, as well as designing strategies for different settings, and the provision of information to the public. It also includes taking account of the determinants of health, in particular the social or socioeconomic determinants that cause ill health.
A. **Conducting health promotion activities for the community-at-large or for populations at increased risk of negative health outcomes.**

6. A.1 Evaluate activities and services directed at Healthy Diet & Nutrition, Physical Activity And Obesity Prevention and Control, in the following areas

*Points to consider:*
- For all questions consider how tailored activities are to the whole population, taking account of issues such as poverty, ethnicity, gender, other socioeconomic factors and groups at particular risk.
  1. Intersectoral approach and partnership of other ministries, NGOs, local government, and the private sector, including Ministry of Education regarding diet and physical activity in schools.
  2. Integration of dietary and physical activity advice into primary health care services.
  3. Integration of different promotion strategies around healthy nutrition and physical activity.
  4. Community participation in planning and implementation.
  5. The involvement of the food industry through agreements that favour improved diet, food labelling and supporting nutrition projects (see also 6A2iii).
  6. Developing promotional and healthy nutrition strategies for particular population groups.
  7. Elaboration of specific health education materials to different age groups and/or groups with particular ethnic or social characteristics.
  8. Continuous monitoring and evaluation of health promotion projects.

6. A.2 Evaluate intersectoral activities, including the leadership role of the Ministry of Health, in ensuring a health in all policies approach, regarding the following ministries.

*Points to consider:*
- Communication between ministries, including the existence of liaison staff or special protocols
  i) Ministry of Education regarding diet and physical activity in schools, as well as health education.
  ii) Ministries of Transport, Environment and any other relevant Ministries regarding the built environment and transport in relation to health promotion.
  iii) Ministry of industry regarding the food industry and the promotion of healthier food products.
  iv) Ministry of labour regarding health promotion in the work place.
  v) The involvement of the food industry through agreements that favour improved diet, food labelling and supporting nutrition projects.
  vi) Developing promotional and healthy nutrition strategies for particular population groups.
  vii) Elaboration of specific health education materials to different age groups and/or groups with particular ethnic or social characteristics.
  viii) Continuous monitoring and evaluation of health promotion projects.

6. A.3 Evaluate your activities and services directed at Tobacco Control.

*Points to consider in making your evaluation:*
- Existence of a legal framework (regulations against smoking in public places, availability to young people, media publicity, selling price, etc.).
- Enforcement of laws and regulations on smoking, for example in public places.
- Annual monitoring of smoking prevalence among the population.
- Comprehensive plans for dealing with the problem: economic, political, social, cultural, environmental, healthcare and ethical.
- Elaboration of specific health education materials to different age groups.
- Evaluation and assessment of the implementation of the programmes.
- Whether services address the whole population, taking account of issues such as poverty, ethnicity, gender, other socioeconomic factors and groups at particular risk.

6. A.4 Evaluate your activities and services directed at Alcohol Control.

*Points to consider in making your evaluation:*
- **For all questions consider how tailored activities are to the whole population, taking account of issues such as poverty, ethnicity, gender, other socioeconomic factors and groups at particular risk.**
  1. Intersectoral approach and partnership of other ministries, NGOs, local government, and the private sector, including Ministry of Education regarding healthy diet and physical activity in schools.
  2. Integration of dietary and physical activity advice into primary health care services.
  3. Integration of different promotion strategies around healthy nutrition and physical activity.
  4. Community participation in planning and implementation.
  5. The involvement of the food industry through agreements that favour improved diet, food labelling and supporting nutrition projects (see also 6A2iii).
  6. Developing promotional and healthy nutrition strategies for particular population groups.
  7. Elaboration of specific health education materials to different age groups and/or groups with particular ethnic or social characteristics.
  8. Continuous monitoring and evaluation of health promotion projects.
• Existence of a legal frameworks regulating alcohol purchasing or consumption.
• Enforcement of such legal frameworks.
• Evaluation of the effectiveness of such frameworks in achieving public health aims.
• Existence of a list of activities or services directed towards alcohol control.
• Whether activities are multidisciplinary and intersectoral in nature.
• Whether services and activities are planned every year according to a survey that deals with knowledge, attitudes and environment of the target populations.
• That the evaluation of activities and services is an integral part of the planning process.
• Whether feedback from the evaluation is implemented and is constructive for the following year’s planning.
• Whether services address the whole population, taking account of issues such as poverty, ethnicity, gender, other socioeconomic factors and groups at particular risk.

6. A.5. Evaluate your activities and services directed at Drug Abuse Prevention and Control.

Points to consider in making your evaluation:
• Existence of comprehensive plans for dealing with the problem: economic, political, social, educational, cultural, environmental, healthcare and ethical.
• Reinforcement of community participation, NGOs and community leaders.
• Suitable orientation of the healthcare services (which allow for the necessary support treatments and arrangements).
• Involvement of social services professionals.
• Evaluation and assessment of the implementation of programmes.
• Whether services address the whole population, taking account of issues such as poverty, ethnicity, gender, other socioeconomic factors and groups at particular risk.

6. A.6 Evaluate your activities and services directed at health behaviour related to prevention of infectious diseases (e.g., HIV, TB).

Points to consider in making your evaluation:
• Comprehensive plans for dealing with the relevant problem: economic, political, social, educational, cultural, environmental, healthcare and ethical.
• Involvement of different disciplines in an intersectoral approach.
• Elaboration of specific health education materials by considering the social characteristics of the group to which the messages are addressed.
• Upgrading community participation (development of community attitudes: family, education system).
• Emphasis on development of healthy (safe) attitudes and not only knowledge about them (development vs. knowledge).
• Building of culturally sensitive health promotion plans with emphasis on prevention.
• Evaluation and assessment of the implementation of programmes.
• Whether services address the whole population, taking account of issues such as poverty, ethnicity, gender, other socioeconomic factors and groups at particular risk.

6. A.7 Evaluate your activities and services directed at Sexual Health.

Points to consider in making your evaluation:
• Existence of a list of activities or services directed at sexual health.
• Whether activities are multidisciplinary and intersectoral in nature.
• Whether services and activities are planned every year according to a survey that deals with knowledge, attitudes and environment of the target populations.
• That the evaluation of activities and services is an integral part of the planning process.
• Whether feedback from the evaluation is implemented and is constructive for the following year’s planning.
• Whether services address the whole population, taking account of issues such as poverty, ethnicity, gender, other socioeconomic factors and groups at particular risk.

6. A.8. Evaluate your activities and services directed at the prevention and control of Occupational and Work-Related Health Hazards, including workplace health promotion.
Points to consider in making your evaluation:

- Sound legal infrastructure as a basis for prevention and control.
- Involvement of health professionals in promoting the need for healthy work settings.
- Elaboration of specific health education materials to different work environments and to specific risk groups.
- Performance of risk analysis and risk assessment in the work place.
- Continuous monitoring and evaluation of various work-related injuries.
- Existence of a list of activities or services directed at occupational health.
- Whether activities are multidisciplinary and intersectoral in nature, regardless of whether occupational health is within the authority of the Ministry of Health or not.
- Whether services and activities are planned every year according to a survey which deals with knowledge, attitudes and environment of the target populations.
- That the evaluation of activities and services is an integral part of the planning process.
- Whether feedback from the evaluation is implemented and is constructive for the following year’s planning.
- Whether services address the whole population, taking account of issues such as poverty, ethnicity, gender, other socioeconomic factors and groups at particular risk.

6. A.10 Evaluate your activities and services directed at Environmental Health.

Points to consider in making your evaluation:

- Existence of a list of activities or services directed at environmental health regardless of which authority or which ministry is the lead agency.
- Whether activities are multidisciplinary and intersectoral in nature.
- Whether services and activities are planned every year, or at least once every three years, according to a survey that deals with knowledge, attitudes and environment of the target populations.
- That the evaluation of activities and services is an integral part of the planning process.
- Whether feedback from the evaluation is implemented and is constructive for the following year’s planning.

6. A.1. Evaluate your activities and services directed at Mental Health.

Points to consider in making your evaluation:

- Existence of a list of activities or services directed at mental health.
- Whether the activities are multidisciplinary and intersectoral in nature.
- Whether the services and activities are planned every year according a survey that deals with knowledge, attitudes and environment of the target populations.
- Whether the evaluation of activities and services directed is an integral part of the planning.
- The feedback from the evaluation is implemented and is constructive feedback for the next year’s planning.
- Whether services address the whole population, taking account of issues such as poverty, ethnicity, gender, other socioeconomic factors and groups at particular risk.

6. A.12 Evaluate your activities and services directed at Dental Hygiene Education and Oral Health.

Points to consider in making your evaluation:

- Orientation of public health towards dental hygiene.
- Existence and promotion of educational programmes of dental hygiene from kindergarten and through school.
- Integration of strategies to promote dental hygiene with other related strategies, such as healthy nutrition.
- Continuous surveillance of dental health and monitoring and evaluation of various programmes related to dental hygiene education and its outcomes.
- Are services accessible and affordable by the whole population, taking account of issues such as poverty, ethnicity, gender, other socioeconomic factors and groups at particular risk?

B. Capacity of intersectoral action
6. B.1 Are policies, strategies and interventions aimed at making healthy choices easy?

Points to consider in making your evaluation:
- Refer to examples that address social determinants of such choices such as the availability, accessibility and affordability of safe, fresh food or green spaces for physical activity in urban areas.
- Assessment of the current programmes in health promotion and disease prevention are regularly performed.
- Development information tools which may transfer information on the state of health of the community, sub-national and national to needs-based health policies.
- Draft policy papers are produced to reflect and communicate information on health risk, health status, and health needs of the community sub-national and national levels.

6. B.2 Evaluate structures, mechanisms and processes that exist to enable intersectoral action and working with other sectors.

Points to consider in making your evaluation:
- The legal basis for health promotion, regulations, intersectoral committees
- Systematically implemented health impact assessment
- Attention given to broader determinants of health in other policy areas
- Civil society participation
- Ability to implement such policies – through legislation, financing, research
- Whether there is a systematic follow-up and evaluation of activities
- Administrative capacity for health promotion

**EPHO 7: Evaluation of quality and effectiveness of personal and community health services**

**Definition of operation:**
Developing the standards for ensuring the quality of personal and community health services regarding disease prevention and health promotion and evaluation of the services based on these standards. Evaluation should identify weaknesses in governance and operation, resources provision and the delivery of services to users. The findings of evaluations should feed back into policy and management, organisation, and provision of resources to improve service delivery.

**A. Defining needs**

7. A.1 Evaluate processes and mechanisms for defining needs in personal and population health services from public health perspectives.

Points to consider in making your evaluations:
- Data sources to define needs.
- Definition of the portfolio of services included in the system.
- Evidence of efficiency, effectiveness, etc., to incorporate new services
- Coordinating services in the overall process: from inclusion within the programme to cure
- Addressing services to cover the established prevention programmes
- The structures available must be capable of efficiently covering the population’s preventive needs
- Are services accessible?
- Are personal services affordable to all groups; is there a co-payment?
- What is the distribution of services (urban/rural, more/less affluent areas, regional disparities)?
- Are services used as intended and do they reach those targeted?

For preventive services in particular:
- Addressing services to cover the established prevention programmes
• The structures available must be capable of efficiently covering the population’s preventive needs
  1. Preventive services, including disease prevention and health promotion services within the health system
  2. Curative services
  3. Rehabilitative services

7. A.2 Evaluate processes and mechanisms for identifying the health service needs of populations who may encounter barriers to receiving health services.

*Points to consider in making your evaluation:*
• The adequacy of your identification of the health service needs of immigrants, ethnic groups, and disadvantaged populations.
• Specific studies on these groups adapted to their characteristics.
• Alternative strategies to offer services that favour access.
• Collaboration with other social agents: NGO’s, associations, social services, etc.

B. Assessing & evaluating services
7. B.1 Evaluate the comprehensiveness and effectiveness of procedures and practices designed to evaluate the delivery of personal and community public health services in the following areas of services.

*Points to consider in making your evaluations:*
• Assessments of coverage of accessible personal health services.
• Assessments of coverage of accessible community health services
• Existing databases, SSII.
• Studies on both the frequency of use and the use of the system.
• Health care indicators.
• Social care indicators.
• Socio-economic indicators.
  1. Preventive services, including disease prevention and health promotion services within the health system.
  2. Curative services
  3. Rehabilitative services

7. B.2 Evaluate processes and mechanisms for conducting an analysis of age-specific participation in preventive services

*Points to consider in making your evaluation:*
• Adequacy of the analysis of the participation in preventive services of children and adolescents; adults; elderly.
• Adequacy of the gender-specific assessment of participation in preventive services.
• Developed SSII that enable the gathering of data about cover, access, specific programmes in process within these groups, statistics on the frequency of use.

7. B.3 Evaluate the assessment and analysis that takes place regarding the integration of services in coherent community health services system.

*Points to consider in making your evaluation:*
• Existence of databases/records identifying duplications, fragmentations and lack of coherence when dealing with community health services.
• Availability of secondary analyses of published information on issues related to coherence and integration when dealing with community health services.
• Existence of surveys to professionals to identify their opinion on how to foster coherence and integration when dealing with community health services.

7. B.4 Evaluate the adequacy of your evaluation of the structure of human resources and the financial support of the community health services system.

*Points to consider in making your evaluation:*

• Existence of databases/records identifying specialised human resources dealing with community health services.
• Existence of accounting records and financial analyses identifying needs dealing with community health services.

C. Application of evaluation findings
7. C.1 Evaluate processes and mechanisms for, and effectiveness of, applying evaluation findings to improve services and programmes, implementing control and quality assurance actions.

a. Evaluate your application of evaluation findings to modify the strategic and operational plans of PHSS to improve services and programmes.

**Points to consider in making your evaluation:**
- All the programmes must be assessed with the aim of analysing the amendments to be introduced.
- Description of the situation at the initial phases and the definition of the present-day situation: a comparative analysis.
- Access to the databases.

b. Evaluate your implementation control and quality assurance actions on health systems that supply personal and community health services.

**Points to consider in making your evaluation:**
- Quality management of the health services offered.
- Management as far as processes, clinical guidelines, performance protocols, etc., are concerned.
- Research into services.

c. Evaluate your Health Technology Assessment centres or programmes.

**Points to consider in making your evaluation:**
- Assessment of the implemented healthcare technologies.
- Study of the successful practices in other scopes.

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**EPHO 8: Assuring a competent public health and personal health care workforce**

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

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, and to address new challenges in public health, in order to implement and improve the quality of PHS.

The licensing procedures of public health professionals establish the requirements of the future workforce concerning relevant public health training and experience.

**A. Human resources planning**
8. A.1 Evaluate your planning for public health human resources.

**Points to consider in making your evaluation:**
- Existence of national planning of public health human resources.
- Consideration of tools and methods used in such planning.
- Whether public health human resources planning has a long-term/anticipatory nature.
• Whether demographic changes are taken into account.
• Whether future health care needs have been taken into account.
• Whether effectiveness has been proven in practice during the last decade.

8. A.2 Evaluate the effectiveness of decentralization in Human Resources planning.

Points to consider in making your evaluation:
• Whether decentralisation is an integral part of Human Resources planning.
• Whether there is a division of responsibilities between national and sub-national planning (in federal or decentralised countries).
• Whether there a division of responsibilities between the centre and districts in planning in non-federal countries.
• Whether appropriateness and effectiveness were proven in practice during the last decade.
• The balance/imbalance in the distribution of human resources.
• Whether the needs of different regions are taken into account.

8. A.3 Evaluate the current provision of human resources for public health.

Points to consider in making your evaluation:
• The multi-disciplinary approach in allocation of the potential workforce.
• Allocation of the public health workforce according to shortage or surplus.
• Allocation of human resources according to population size and needs.
• Whether the distribution of human resources is evaluated at least once a year.

B. Standards

8. B.1 Evaluate your mechanisms for maintaining public health workforce standards (education, certification, and licenses).

Points to consider in making your evaluation:
• Projection of future health manpower needs in terms of quantity and quality.
• Ensuring that public health workers and managers meet an appropriate educational level.
• Whether appropriate standards have been established that permit the evaluation of quality of population-based and personal health services using data from all levels of the health system.

8. B.2 Evaluate your mechanisms for evaluating the public health workforce, including continuous quality improvement and continuing education and training programmes.

Points to consider in making your evaluation:
• Periodical assessment of teaching programmes.
• Existence of performance evaluation system or systems for continuing education courses to ensure that they contribute to developing human resources for public health.
• Existence of performance evaluation system or systems for continuous quality improvement.
• Whether results of the evaluation of continuing education and graduate training programmes are shared, and whether feedback from public health workers is obtained.
• Offering incentives and implementing plans that improve the quality of the country’s public health workforce.

8. B.3 Evaluate your systems for improving teamwork abilities and communication skills.

Points to consider in making your evaluation:
• Establishment of continuing education courses or in-service training for improving teamwork abilities and communication skills.
• Continuous evaluation of the courses, and in-service training by feedback questionnaire of the participants.
• Existence of a mechanism on a national and/or sub-national level to evaluate the continuing education courses and in-service training.

8. B.4 Evaluate any system for supporting capacity development of intersectoral teams and professionals from across policy areas.

Points to consider in making your evaluation:
• Whether the multidisciplinary character of the working environment, across different profiles, is an integral part of the culture of the public health system.
• Development of intersectoral teams and professionals in continuing educational courses or in-service training.
• Drawing lessons and evaluating the capacity of intersectoral teams after each public health event.

8. B.5 Evaluate how effectively (if at all) evidence and know-how about the broader determinants of health (SDH), and tools for acting upon evidence and trends, are incorporated into leadership training and development programmes.

Points to consider in making your evaluation:
• The approach of SDH is an integral part of the culture of the public health system (ministry of health and across other policy sectors) culture.
• That evidence-based SDH in public health thinking is considered for future public health programmes or interventions.
• Existence of relevant cross-government policy and leadership development strategies and programmes, concerning SDH.
• Evaluation of public health programmes and interventions regarding SDH among policy makers and politicians, as well as planners, and technical heads – across policy sectors, programmes and services.

C. Education and accreditation
8. C.1 Evaluate the structure of training in public health management.

Points to consider in making your evaluation:
• Availability and quality of training in non-medical specialities related to health care.
• Adequacy of the training to the Public Health Services needs.
• The exposure to the public health issues in general and on country level in particular is part of the training in public health management.

8. C.2 Evaluate undergraduate programmes in Medicine relevant to public health.

Points to consider in making your evaluation:
• Whether public Health is part of the curriculum in undergraduate programmes.
• Existence of introductory course in public health.
• Incorporation of public health issues (e.g. epidemiology and population approaches) within the curriculum of various courses.

8. C.3 Evaluate undergraduate programmes in Pharmacy relevant to public health.

Points to consider in making your evaluation:
• The availability of pharmacists among the public health workforce.
• The availability of courses or integrative courses that include public health curricula.

8. C.4 Evaluate undergraduate programmes in Veterinary Medicine relevant to public health.

Points to consider in making your evaluation:
• The availability of veterinarians among the public health workforce.
• The availability of courses or integrative courses that include public health curricula.
• Existence of experts in veterinary public health within veterinary schools.
• Cooperation or joint ventures between veterinary school/s and school/s of public health.
• Availability of post graduate courses or programmes for veterinary public health.

8. C.5 Evaluate undergraduate programmes in Nursing relevant to public health.

Points to consider in making your evaluation:
• The availability of courses or integrative courses that include public health curricula.
• Existence of experts in public health nursing, in academic or non academic schools of nursing.
• Availability of post graduate courses or programmes for public health and community nursing.

8. C.6 Evaluate undergraduate programmes in Dentistry relevant to public health.
Points to consider in making your evaluation:

- The availability of dentists among the public health workforce.
- The availability of courses or integrative courses that include public health curricula.
- Existence of experts in public health dentistry, within Dentistry schools.
- Cooperation or joint ventures between the school of dentistry and schools of public health.

8. C.7 Evaluate undergraduate programmes in Social Work relevant to public health.

Points to consider in making your evaluation:

- The availability of social workers among the public health workforce.
- The availability of courses or integrative courses that include public health curricula.

8. C.8 Evaluate the adequacy of Schools of Public Health.

Points to consider in making your evaluation:

- Availability of School/Schools of Public Health in the country.
- Availability of legal or national academic framework for evaluating the competences of such schools.
- Existence of collaborative agreements between the different academic authorities in this area, mainly universities, when such schools are non-university ones.
- Schools of Public Health fulfil the need for training the future workforce in public health.
- Mechanisms which facilitate the exchange of educational, occupational and research experiences within the same area of other European countries (grants, permits for placements, etc).

8. C.9 Evaluate Master of Public Health Programmes.

Points to consider in making your evaluation:

- Availability of a Master of Public Health programme in the country.
- The design of this programme in relation to licensing or undertaking the professional and research work within public health.
- A continuous review and enhancement process of the programmes with a view to adapting them to current and future challenges of PHS.
- Adaptation to the unification criteria of European postgraduate studies.

8. C.10 Evaluate Master of Health Services administration and/or Policy, Leadership, or Management.

Points to consider in making your evaluation:

- Availability of a Master of Public Health Public programme that provides studies in Public Health Services administration and/or Policy, Leadership, or Management.
- Adaptation of the programme to the needs of the PHS or the public health sector.
- The design of this programme in relation to undertaking professional work in public health management.
- Adaptation to the unification criteria of European postgraduate studies.

8. C.11 Evaluate other relevant academic programmes related to health protection, promotion or disease prevention (specify).

Points to consider in making your evaluation:

- Legal framework for professionals’ continuous education in health protection, promotion or disease prevention.
- Availability of programmes related to health protection, promotion or disease prevention.
- Defining and implementing continuous educational programmes for multi-disciplinary professionals working in PHS.
- The competence of these programmes to address the knowledge, skills and practices required of the professionals also in order to upgrade and to extend the various areas of action.

8. C.12 Evaluate Quality Control and Accreditation programmes at Undergraduate level.

Points to consider in making your evaluation:

- Established process of evaluation and accreditation of the undergraduate programmes.
• Evaluation of the undergraduate programmes by accreditation agencies to certify that they meet the minimum quality criteria required.
• Adaptation of the undergraduate programmes to the existing legal framework at both the national and European levels (the Bologna Process).

8. C.13 Evaluate existing Quality Control and Accreditation programmes at Postgraduate level.

Points to consider in making your evaluation:
• Legal framework of certification required in accordance with pre-established criteria.
• The coordination and collaboration of training and accreditation programmes with educational institutions in order to develop a basic public health curriculum for various levels of public health.
• Periodic assessment of teaching programmes and continuing education courses to ensure that they contribute to developing human resources for public health.

EPHO 9: Leadership, governance and the initiation, development and planning of public health policy

Definition of operation:
Policy development is a process that enables informed decisions to be made concerning issues related to the public's health. It is a strategic planning process involving all the internal and external stakeholders, defining the vision, mission, measurable health goals and public health activities for national, regional and local levels. Moreover in the last decade PHSS should also assess the implication of international health developments on national health.

A. The National level

9. A.1 Evaluate your process of strategic planning in relation to public health services.

Points to consider in making your evaluation:
• Existence of strategic planning process in relation to public health services.
• The process is performed on regular basis once a year/two years/three years.
• The process is lead by the PHS or by the ministry of Health or both.
• The process is performed and dictated by the PHS directorate.
• The process is attended by the headquarters and the districts.
• The process includes checking the vision, mission and the activities of the PHS.

9. A.2 Evaluate the appropriateness & effectiveness of your national public health policy.

Points to consider in making your evaluation:
• Existence of a publication which sets up the national public health policy.
• Whether the national public health policy includes the activities of the PHS of the Ministry of health, and various activities concerning public health.
• Whether the national public health policy has been translated into programmes and activities.
• Existence of an evaluation process of the implementation of national public health policy.
• Amending the national public health policy regarding changing situation.
• Effectiveness of intersectoral collaboration.

9. A.3 Evaluate the appropriateness and effectiveness of how the implications of International health developments for national health are taken into account in public health planning e.g. preparing for Avian and Pandemic Influenza, West Nile Fever, SARS, and so on).

Points to consider in making your evaluation:
• Availability of a national planning unit or ad-hoc committee, which evaluates or monitors the international developments and their implication on national health.
The implementation of the health implication of the abrupt events of West Nile Fever or SARS on the public health planning.

Availability of a intersectoral national public health plan to combat Avian Influenza or Pandemic influenza.

The appropriateness of a national plan of a pandemic in case of a real outbreak occurred on country or sub-country level.

9. A.4 Evaluate your information system for decision making.

Points to consider in making your evaluation:

- Availability of an online information system on surveillance of communicable and non-communicable diseases.
- The decision making is based on the information produced by the Information system.
- The ability of the information system to detect an infectious disease on a community level.

9. A.5 Evaluate the role of public health operations within the Ministry of Health.

Points to consider in making your evaluation:

- The role of public health operations within the MoH and/or other agencies to provide technical assistance for drafting proposed legislation, regulations, and ordinances.
- The public health operations within the MoH and/or other agencies undertake upon themselves the education or training of persons and entities obligated to comply with or to enforce laws and regulations designed to protect health.
- The usage of measurable health objectives and indicators used by MOH in order to evaluate services and activities in the field of public health.
- Supervising governmental and non-governmental public health entities in the community in order to ensure that essential public health services are provided.

9. A.6 Evaluate the appropriateness/effectiveness of any mechanisms or processes through which poverty, inequalities and the social determinants of health are taken into account in decision making.

Points to consider in making your evaluation:

- Existence of a national Poverty Reduction Strategy Paper (PRSP) or similar of a kind, which includes a health component.
- Representation of professional or position papers in the health policy decision making that secure that broader determinants of health are incorporated in the process.
- Existence of mechanisms to ensure that policy actions are consistent with the social conditions that contribute to health or illness across the population.

B. Public health policy planning in regional or local authorities of health

9. B.1 Evaluate the policy planning process at regional and local levels.

Points to consider in making your evaluation:

- The national policy papers are taken into account in the sub-national public health policy planning.
- The process is taking into account data or information on health status of the population on regional or local level.
- The views of stakeholders from different organisations including community leaders are taken into account in the process with or without their participation.
- Existence of evaluation mechanism that evaluates the process.

9. B.2 Evaluate the development of a sound information system for decision making at regional and local levels.

Points to consider in making your evaluation:

- Existence of information system in the regional and local level which provides sound data for decision making and the public health planning process.
- Data is collected and the information is processed while the information system is under development.
C. Intersectoral and interdisciplinary approach

9. C.1 Evaluate the comprehensiveness and effectiveness of monitoring and evaluation of public health and other health-related policy decisions, through a multidisciplinary approach.

*Points to consider in making your evaluation:*
- Whether there is multidisciplinary participation in the public health policy strategic process.
- Whether a multidisciplinary approach is taken into account in the public health policy strategic process, including at a regional and local level.
- Whether a multidisciplinary approach is felt in the final public health policy strategic document.

9. C.2 Evaluate the effectiveness of your advocacy for health-conducive policies, strategies, actions and interventions by the non-health governmental sectors through dialogue and intersectoral approaches.

*Points to consider in making your evaluation:*
- The existence of advocacy processes by a non-health governmental sectors.
- The views and the advices of the non-health governmental sectors are taken into account in the strategies, actions and intervention.
- The views and advices of the non-health governmental sectors have influenced the are final strategies, action and interventions.

9. C.3 Evaluate your application of health impact assessment to other sectoral or regional policies, and developmental plans.

*Points to consider in making your evaluation:*
- The notion and the concept of "health impact assessment" is known to the public health officials on the national and regional levels.
- Availability of professionals who can perform a health impact assessment on regional level.
- The health impact assessment is taking into account while dealing with regional policies and developmental plans.
- The health impact assessment is an integral part of the developmental plans and regional policies done by a intersectoral teams.

9. C.4 Evaluate your success or progress at interrelating information systems to ensure the most efficient use of available data.

*Points to consider in making your evaluation:*
- Availability of efficient information system based on sound data.
- The information system is undergone a continuous quality improvement.
- The information system provides each year a better use of available data.
- The availability of information system is influencing better quality of data and its most efficient use.

9. C.5 Evaluate any intersectoral strategies and approaches in the following areas of public health: occupational health (health in the work place), environmental health, sexual health, mental health and health inequalities.

*Points to consider in making your evaluation:*
- The intersectoral approach is part of the working culture on the national level.
- The strategies developed in each one of the above mentioned areas in public health are developed within an intersectoral framework.
- The implementation of national strategies is done in an intersectoral way.

9. C.6 Evaluate any intersectoral strategies that specifically target the social determinants of health, such as poverty, housing, work & unemployment, socio-economic exclusion (of groups or individuals), access to education, nutrition, drug use.

*Points to consider in making your evaluation:*
- The existence of specific targets in the national public health policy that are taking into account the social determinant of health.
• These specific targets are an outcome of intersectoral strategies.
• These intersectoral strategies are a basis for national and sub-national policies and programmes on regional and local levels.

D. Monitoring and evaluation of public health policies and programmes

9. D.1. Evaluate any system or programme you may have for monitoring the implementation of policy and programmes in public health, or in any particular areas of public health.

Points to consider in making your evaluation:
• Setting of indicators, standards and benchmarks as integral parts of public health policies and programmes.
• Mechanisms for quality review and performance assessment are part of the evaluation process.
• Monitoring and evaluation of various policies and programmes are systematically performed.
• The results of the monitoring and evaluation are part of the feedback mechanism in the current and future public health policies and programmes.

9. D.2. Evaluate your short- medium- and long-term strategies to comply with an EU community health services system.

Points to consider in making your evaluation:
• Existence of systematic files identifying EU guidelines and standards.
• Attempt to systematically identify gaps between current situation in our country and the EU guidelines and standards.
• Existence of a written strategy to fill these gaps.

E/PHO 10: Health related research

Definition of operation:
Research is fundamental to informing policy development and service delivery. This operation includes:
• Research for enlarging the knowledge base that supports evidence-based policy making at all levels;
• Development of new research methods and of innovative technologies and solutions in public health;
• Establishing partnerships with research centres and academic institutions to conduct timely studies that support decision-making at all levels of the public health.

A. Capacity to initiate or participate in timely epidemiological and public health system research

10. A.1 Evaluate your country's capacity to initiate or participate in epidemiological and public health research.

Points to consider in making your evaluation:
• The availability of research institutes, universities, school of public health that have a capacity to conduct research in public health.
• Existence of priority agenda for research in public health based on population need and key actors in public.
• Availability of a mechanism that mobilises funding sources to encourage research in public health.
• Encouragement of schools of public health and research institutes to study health problems identified on the public health research agenda.

10. A.2 Evaluate the adequacy of your country's available resources (e.g. databases, information technology) to facilitate research.
Points to consider in making your evaluation:

- Existence of database and information technology on a country and/or regional level.
- Integration of the existing SSII to create databases that are useful for epidemiological research and which concern public health systems.
- Facilitation of access to existing databases for both the professionals within the system and to researchers outside the system through collaborative agreements (e.g. with other research centres, universities).
- Availability of specific research training for professionals and thus develop the existing methodology in research.

10. A.3 Evaluate your planning for the dissemination of research findings to public health colleagues (e.g. publication in journals, websites).

Points to consider in making your evaluation:

- Setting up mechanism (organizations and structures) to diffuse research finding to decision-makers in public health.
- Promotion of exchange and transfer of results between the different research development settings (researchers working within the system, researchers working outside the system).
- Availability of a researcher networking that notify on publication published in journals and/or website.
- Setting up networks which favour the diffusion of results as well as the rapid implementation of the results obtained.

10. A.4 Evaluate your country’s evaluation of the development, implementation, and impact of public health (and PH services) research efforts.

Points to consider in making your evaluation:

- The contemplation of the PHS system and tools in the design phase of the research.
- The development of programmes for assessment of public health research.
- The implementation of PHSS research in the system or in programmes designated for target populations.
- The evaluation of impact of public health research efforts.

B. Fostering Innovation

10. B.1 Evaluate how your country enables staff to identify new solutions to health problems in the community by providing the time and resources for staff to pilot test or conduct experiments to determine the feasibility of implementing new ideas.

Points to consider in making your evaluation:

- The existence of a work culture that enables the inclusion of research tasks in the usual work.
- Whether there is a collaborative agreement between the professionals working within the PHS system and researchers in the academic institutes or research centres to conduct research.
- The performance of research as part of the work culture of PHS.

10. B.2 Evaluate the adequacy of the Ministry of Health’s proposing to research organisations public health issues for inclusion in their research agenda.

Points to consider in making your evaluation:

- The existence of a bureau of chief scientist in the MoH on national or sub-national level (in a federal state).
- Defining the priority areas of public health research within the system as a basis to orientate future studies conducted by external agents (declaration of policy or budget allocation).
- Proposing by the MOH fields of research in public health to encourage research as an integrative part of the public health services.

10. B.3 Evaluate the adequacy of the Ministry of Health’s researching and monitoring of best practice information from other agencies and organizations.

Points to consider in making your evaluation:

- Monitoring by the MoH on best practices published by other agencies and organization within the country.
• Existence of the monitoring by the MoH on best practices published by other international agencies and organizations like EU, WHO.
• Establishing collaborative relationships to transmit information about public health practices at European and international levels.
• Adopting and implementing successful initiatives in other geographical locations with MoH adaptation to the specific situation in the country.

C. Health information to support decision making

10. C.1 Evaluate the active use of research evidence used in designing and supporting policy in the field of public health.

*Points to consider in making your evaluation:*
• Availability of research evidence for use in designing public health policy and/or:
• Availability of research evidence for use in supporting public health policy.
• Good practice in use of research evidence in creating public health policy.
• Inclusion in the health policy-making process of position papers that take into account the social determinants of health.
• Those cost-benefit analyses are taken account of in health policy making.

10. C.2 Evaluate your capacity in the public sector for the collection, analysis and dissemination of health information.

*Points to consider in making your evaluation:*
• Availability of health information collected by the public sector.
• Availability of regular and yearly health information in the national bureaux of statistics.
• The quality of the information collected analysed and disseminated by the public health sector.
• The health information collected by the public sector is used by the health and public health sector.
• Decisions are based largely on information produced by the information system.
• The health information collected by the public sector is in harmonization and coordination with that collected by the health sector.

10. C.3 Evaluate your capacity to carry out robust research in the area of the social determinants of health (and their influence on health) in order to shape and target policy.

*Points to consider in making your evaluation:*
• Researching on poverty – including child poverty and poverty of the elderly.
• Researching on poverty on housing, work & unemployment, socio-economic exclusion – of groups or individuals.
• Researching on access to education, nutrition, drug use.
• Publishing and shifting resources from areas where there is good research and areas where it is lacking.

10. C.4 Evaluate your mechanisms for ensuring that policies, priorities and decision-making are consistent with evidence of effectiveness on the broader determinants of health.

*Points to consider in making your evaluation:*
• Availability of research studies as part of decision making process.
• Considering evidence-based results of research on the broader determinants of health.
• Importance of cost-benefit or cost – effectiveness research to the decision-making process in your country.
Annex 2: “Wicked problems” and systems thinking

“Wicked problems” share many characteristics (see below). It is beyond the capacity of any one organization to understand or respond to these problems. There is often disagreement about the causes of these problems, and a lack of certainty about the best way to tackle them. They are also often characterized by chronic policy failure. A good example here is the failure of successive governments in many countries to tackle health inequalities, despite numerous efforts to do so.

Wicked problems have a number of characteristics.

- They are difficult to define clearly.
- They have many interdependencies and are often multi-causal.
- Attempts to address them often have unforeseen consequences.
- They are often not stable.
- They usually have no clear solutions.
- They are socially complex.
- They hardly ever sit conveniently within the responsibility of any one organization.
- They involve changing behaviour.
- Some are characterized by chronic policy failure.

Tackling wicked problems with any prospect of success demands the adoption of “systems’ thinking”. Systems’ thinking foresees dimensions of public health action that vary according to the health issue being addressed, and the active involvement of relevant organizations and communities. The strength of public health could then be gauged by the extent to which relevant groups work effectively together on specific issues, that is, by its flexibility and relevance, rather than as a static, comprehensive or generic list of various groups and organizations with an impact on health.

Systems’ thinking involves much more than a reaction to present events and as such is in keeping with an approach to public health that focuses on future challenges, and which seeks to promote a deeper understanding of the links, relationships, interactions and behaviours among the various components of the system. Systems thinking also places high value on understanding context. Addressing wicked problems by adopting a systems approach has profound implications for the public health workforce and the skills and expertise needed for capacity-building.

Tackling wicked problems through adopting a systems approach requires knowledge exchange. This derives from the realization that merely producing evidence or knowledge in the expectation that it will be adopted and acted on is simplistic and naïve. A lesson from the evidence-based medicine movement is that the acquisition and application of knowledge are themselves complex, context-based activities. Even where evidence exists, ensuring its adoption

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into policy and practice poses significant challenges.\textsuperscript{3,4,5} Knowledge exchange works towards evidence-informed policy and policy-informed research. Getting knowledge into practice requires new ways of co-producing and co-creating knowledge with researchers and practitioners working closely together throughout the research process. Knowledge brokerage is an activity intended to result in the adoption of research findings and to spread and share learning from the application of knowledge. Knowledge exchange processes can occur at the individual and systemic or collective levels and knowledge use at these levels depends on various processes including coalition building, advocacy and persuasion.

Public health practitioners should familiarise themselves with these developments and tools.

\textsuperscript{3} Lavis JN et al. Evidence-informed health policy: Case descriptions of organisations that support the use of research evidence. Implementation Science, 2008, 3:56.
\textsuperscript{5} Lomas J. Using research to inform health care managers’ and policy makers’ questions: from summative to interpretive synthesis. Health care policy, 2005, 1(1): 55–71.