World Health Organization
REGIONAL OFFICE FOR Europe

Regional Committee for Europe
Sixty-first session

EUR/RC61/Inf.Doc./1

Baku, Azerbaijan, 12–15 September 2011

09 August 2011

Provisional agenda item 6(b)

ORIGINAL: ENGLISH

Developing a framework for action for strengthening public health capacities and services in Europe

Interim draft

This draft information document outlines major challenges facing health policies and systems in the WHO European Region and considers public health services and infrastructures, including public health aspects of health care services. In view of the differences in the way European health systems and public health services are organized, operated and governed, the paper proposes a clear statement on public health and health systems, including definitions, boundaries and concepts.

It informs the interim technical document ''Strengthening Public Health Capacities and Services in Europe: a Framework for Action'', approved by SCRC on 14–15 May 2011. Both papers are intended to accompany the European Health Policy, Health 2020, and will be submitted to the sixty-first session of the Regional Committee (RC61) in September 2011 for discussion and to RC62 for approval. Comments on interim versions of the information paper were received from the European Health Policy Forum for High-Level Government Officials, Andorra La Vella, Andorra, 9–11 March 2011, and the Standing Committee of the Regional Committee (SCRC), on 30–31 March 2011, in Copenhagen. The paper forms part of a wider process to develop a European framework for action to strengthen public health capacities and services in all Member States.

A set of ten horizontal essential public health operations (EPHOs) is proposed and core public health services within each EPHO are specified. Taken as a whole, they provide a unifying and guiding basis for any of the European health authorities to monitor, evaluate and set up policies, strategies and actions for reforms and improvement in public health. The information paper highlights eight major avenues for strengthening public health capacities and services and securing the delivery of the ten EPHOs in an equitable way across the whole region. It concludes by proposing specific actions and measures to move towards the attainment of the objectives set.

This paper has been developed through a process of external and internal consultation initiated by the Regional Director. Annex 1 provides a list of the proposed EPHOs, drawn up by WHO Europe's Public Health Services Expert Group, piloted by 17 Member States since 2007 and consulted on with all Member States and a number of external partners.

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Contents

Introduction

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 in the absence of political vision and commitment. While monitoring and evaluation of public health services in European countries can facilitate appropriate policy-making, resource allocation and strategies for reform, a common understanding of what constitutes public health and public health services is lacking or insufficient. 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 sufficiently robust to meet contemporary challenges.

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 60th 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 whole-of-government approach to health, stronger health systems and governance for health and the appropriate development of national health policies and strategies.

4. The resolution sought to strengthen public health capacity and services and carry out a thorough review of the effectiveness of available public health instruments as constituting the main avenues for addressing key public health and health policy challenges in Europe. It also 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 information document, and the WHO RC61 technical document "Strengthening Public Health Capacities and Services in Europe: a Framework for Action" which it informs, 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 these documents is described in document EUR/RC60/SCRC/18 *(3)*.

5. The framework represents a unique opportunity for Member States to review their existing public health capacities and services and to define country-specific policies to strengthen them: this process will form the basis for developing 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

6. This information document forms part of a process which aims to put public health and public health services high on the political agenda of governments, 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. Investing in public health services is an investment in the long-term health and well-being of the population as a whole,

which is both of intrinsic value and a contributing factor to economic production and wealth creation.

7. Public health leaders *(4)* must initiate and inform the health policy debate at all levels – political, professional and public - in order to advocate for policies and action to improve health. They will draw on a comprehensive assessment of health needs and capacity for health gain across society, taking a comprehensive, horizontal view of the health improvement needs of society as a whole, analysing broader strategies for health, creating innovative networks for action among many different actors, and acting as catalysts for change.

8. If public health is to be at the centre of health improvement then its operations, capacities and services must be strengthened. This requires a clear definition of public health and of its roles, boundaries and interrelationships. It is also important that essential public health operations (EPHOs) (Annex 1) are agreed and used as a basis for measuring performance and for influencing the spectrum of policy-making.

9. It is not sufficient to limit effort and activity to the integration of public health and health care structures. Links with social services are also essential for addressing challenges arising from an 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 approaches, notably Health in All Policies, *(5)* and through principles of participation, transparency, communication and accountability.

Challenges

10. The European Region faces multiple and complex health challenges arising from persistent health inequalities related to the social determinants of health, demographic changes, the impact of globalization and climate change, and the growth of noncommunicable diseases. These changes are occurring in an extremely dynamic and fast-moving social and political context and are exacerbated by the current economic crisis in which the most vulnerable must be protected *(6,7)*.

Challenges to health and equity

11. 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 *(8)*. Health experience also varies considerably according to socioeconomic conditions and status. 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 *(9)*.

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 *(10)*, 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. 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, bearing 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.

14. 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.

15. Communicable diseases present an increasing challenge for policy-makers and public health institutions and professionals. Gaps in immunization coverage have led to recent outbreaks of poliomyelitis and measles in the WHO European Region. This highlights the urgency of strengthening core public health capacity and services and of ensuring the availability of financial resources to respond to future outbreaks *(11)*. 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.

Challenges to societies and health systems

16. Existing challenges are also being exacerbated by demographic changes including an 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 *(12)*. 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 *(10).*

17. 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 *(12)*. 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 economic crisis which is placing unprecedented pressure on public finances.

18. The determinants of health are multiple and interrelated, spanning political, social and economic circumstances, environmental factors, behavioural determinants and the capacity and efficiency of health systems. The report from the Commission on Social Determinants of Health (CSDH) *(9)* 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. The Commission saw the issue principally as one of social justice.

19. Many of the determinants of health 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.

20. 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.

Challenges to public health capacities: the current situation in Europe

21. Although strong public health capacities have historically been vital for meeting all these challenges, investments in this field have been insufficient *(13–16)*. 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. Developing primary care provides a key route for the effective delivery of preventive services.

22. The share of health expenditure allocated to public health programmes remains relatively small. Available data, which come mainly from western European countries, shows that on average, 2.9% of health spending is allocated to public health *(17)*. However, many of the determinants of health are amenable to cost-effective interventions across health and other sectors.

23. 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 address problems arising from globalization, the impact of global finance, and the challenges associated with global communication strategies. Public health goes well beyond the boundaries of the health sector, encompassing a wide range of stakeholders throughout society.

Potential for health gains

24. WHO still faces considerable challenges in meeting its objective of “the attainment by all peoples of the highest possible level of health”. Yet there are grounds for optimism. 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.

25. Despite these advances, health-related inequality persists both 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 people's lives. This inequality affects the very core of the human right to health.

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

27. The central challenge facing Member States in the European Region is how to improve performance and reduce costs while at the same time upholding the European values and principles agreed in Health for All, HEALTH21, and the Tallinn Charter, namely solidarity, equity and participation *(18–20)*.

Guiding principles: Definitions of public health and health systems

28. Guiding principles are shaped by concepts of public health; the interrelationships between public health and health systems; and approaches to public health governance. There should be clarity and consistency across the European Region in relation to key concepts such as human rights, equity, transparency, accountability, governance and stewardship.

Definition of public health

29. A core definition of public health has proven elusive *(21)*. 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 *(22)*, and adapted by Acheson in 1988 *(23)*, has been 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.

32. 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
- 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

33. The following definition of a health system, presented and adopted in the Tallinn Charter in 2008 *(20)*, 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

34. 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.

35. 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.

36. 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 Fig. 1, below). Fig. 1 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. Public health is part of the health system but also includes the aspects shown in green, including society and the overall environment.

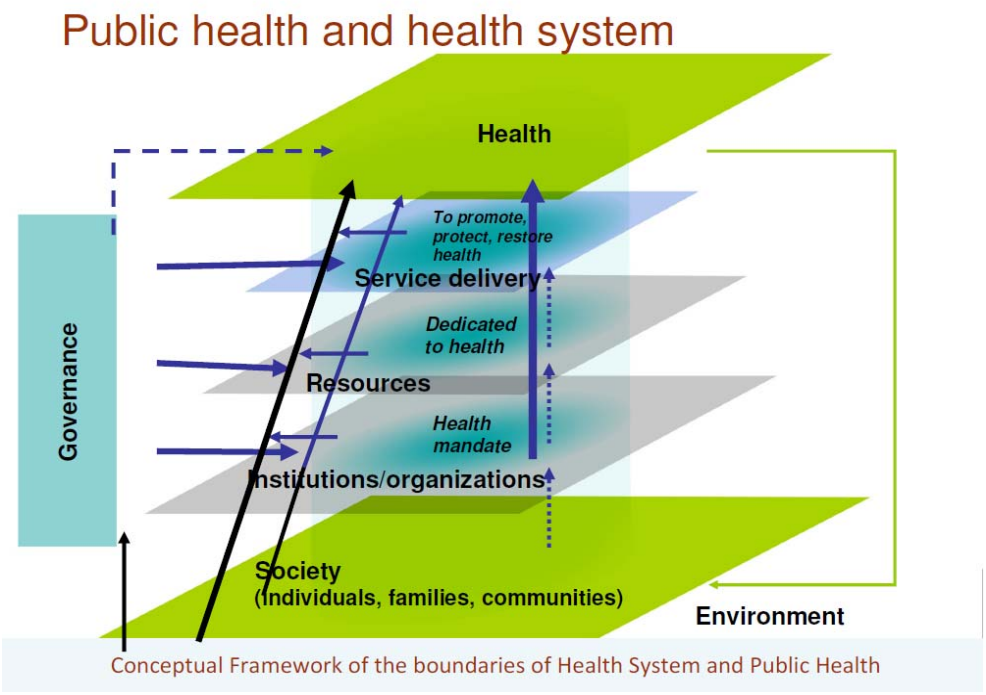
37. The solid and vertical arrows represent the organized efforts of society. Some of those efforts are channelled through the health system, while others are channelled through institutions, resources and services of other sectors of society. The vertical dashed arrows represent isolated and individual efforts.

38. The governance function orchestrates and aligns numerous efforts from the different sectors of society in order to maximize health gain.

39. 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.

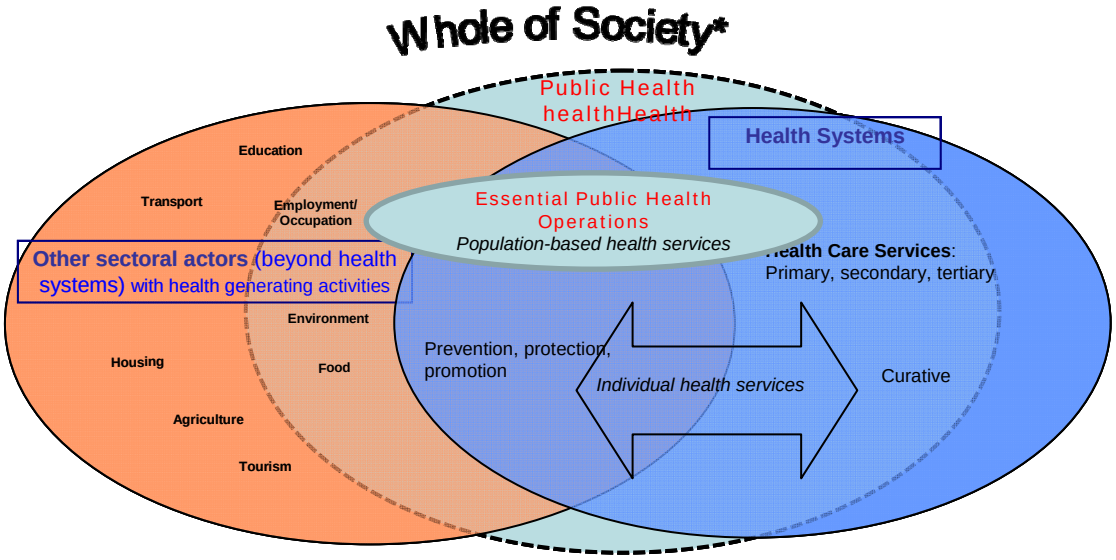
Fig. 1: Boundaries of the health system



40. 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 of the "organized efforts" of society.

41. The health of populations is generated by society as a whole and influenced by a broad range of policy areas as well as by the activities of the health system. Fig. 2, below, illustrates how public health services span the health-generating activities of both the "non health" system and of the health system, playing an important role in each.

Fig. 2: Boundaries of public health competencies and responsibilities



* Link to H2020, its governance, the whole of government and the whole of society approach

42. The wide range of policies which influence health underlines the importance of committed intersectoral action as part of the stewardship role.

Primary health care and health systems

43. Primary health care is a fundamental part of the health system *(24)*, which should work hand in hand with public health services to pursue health gain.

44. 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.

45. 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.

46. 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.

“Wicked problems” and systems thinking

47. Many of the most pressing policy challenges affecting public health involve addressing complex problems, such as climate change, obesity and health inequalities. These problems, 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 *(25)*. They are also often characterized by chronic policy failure. A good example is the failure of successive governments in many countries to reduce health inequalities, despite political commitment and numerous efforts to do so *(26,27)*.

48. “Wicked problems” share many characteristics.

- They are difficult to define clearly.
- They have many interdependencies and are often multicausal.
- Attempts to address them often have unforeseen or unintended consequences.
- They are often not stable.
- They usually have no clear solutions so are not merely complicated but complex.
- 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.

49. Tackling wicked problems with any prospect of success demands the adoption of “systems thinking” *(28)*. 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.

50. 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.

51. 51. 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 in policy and practice poses significant challenges *(29–31)*. 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, systemic or collective levels and knowledge use at each of these levels depends on various processes including coalition building, advocacy and persuasion.

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

Box 1: "Wicked Problems": The Example of Obesity

The causes of obesity are extremely complex encompassing biology and behaviour but located within a cultural, environmental and social framework. Although personal responsibility plays a crucial part in obesity, human biology is being overwhelmed by the impact of the "obesogenic environment" in which we live. Key features of this environment are: energy dense, and for the most part, relatively cheap food, motorised transport, and sedentary lifestyles.

Successfully tackling obesity is a long-term, large scale commitment involving multiple interventions at all levels of society – personal, family, and community, national. There is no single or "quick fix" solution to the obesity challenge – hence its definition as a "wicked problem". Simply increasing the number of small scale interventions will not be sufficient to tackle the problem. Effective action on a large enough scale requires action at a population level. Interventions are likely to include surgery in extreme cases but for the most part will involve a range of other measures including: spatial planning measures to create urban environments which encourage exercise and healthier lifestyles, regulation of the sugar and fat content in food, controlling the advertising of "junk" food to children, providing more time in the school curriculum for physical exercise.

Among the principles for tackling obesity are these:

- A system-wide approach, redefining a country's health as a societal and economic issue
- Attaching a higher priority for the prevention of health problems
- Engaging stakeholders inside and outside government
- Ensuring that long-term and sustained interventions are in place
- Investing in ongoing evaluation and a focus on continuous improvement.

As the United Kingdom Foresight report concluded, *(32)* the obesity epidemic affecting countries demands a societal approach similar to climate change. It requires partnership between government, science, business and civil society. There is a need for long-term, sustained interventions coupled with ongoing evaluation and a focus on continuous improvement.

Public health governance

53. Commitment to human rights, social equity and social justice are key principles of governance and of public health governance. 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 influence are distributed across society.

54. A key role is fostering intersectoral and "joined-up" approaches, assessing the impact on health and on health inequalities of a range of policies outside the health sector, as reflected in Health in All Policies, and ensuring effective governance arrangements and resources for core preventive activities.

55. 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.

Developing a Framework for Action

Concept

56. Promoting population health, whether at national, regional or local levels, 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.

57. Assessment of the health needs of populations is the cornerstone of any public health strategy. It 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. This 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.

58. A framework for action for protecting and improving the health of populations should be "fit for purpose" for current health challenges, reflect the determinants of health and encourage capacity and flexibility to respond to emerging hazards while at the same ensuring that core public health activities are maintained and resourced.

59. It needs to incorporate plans for addressing future challenges to population health, including sustainability and the impact of current policies on inter-generational equity.

60. 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 *(5)*, and ensuring effective governance arrangements and resources for core preventive activities.

61. It should incorporate and build on the ten EPHOs while recognizing the wider strategic context which influences priorities and implementation strategies.

Actions

- National governments must embrace their key governance role in relation to the health of the population.
- National governments must support the leading role of Ministers of Health, working in partnership with other sectors, through legislation and regulation.
- Intersectoral action should be supported at the national, regional and local levels to promote concerted action on wider determinants of health and complex problems. Legal provisions in this regard should be adapted to ensure that national and subnational regulations are based on current European principles and global experience.
- Ministers of Health should constantly reassess and update a framework for action, 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.
- Ministries of Health should ensure that health strategies and policy priorities are based on an assessment of current health needs, inequalities in health and equitable access to preventive services, using the opportunities provided by Health 2020.

Implementing essential public health operations (EPHOs)

62. Ten EPHOs have been developed across the WHO European Region, providing a detailed checklist of essential public health activities and a resource for evaluating public health services and capacity, encompassing a whole-of-government approach. EPHOs are constantly evolving and need to be regularly updated to reflect ongoing evaluation, new challenges and communication technologies, including social media. They should be mapped against the WHO health system framework and the Tallinn Charter, and against existing public health services.

63. 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.

64. EPHOs are described in detail in Annex 1, and can be summarized as follows:

- surveillance of diseases and assessment of the population's health;
- identification of priority 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;
- assuring a competent public health and personal health care workforce;
- core governance, financing and quality assurance for public health;
- core communication for public health;
- health-related research.

65. A web-based self-assessment tool has been developed for gauging capacity and practice in relation to implementing EPHOs. To date, it has 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 for improvement. Areas identified for improvement include: issues of governance (legislative development or governmental leadership); health financing; resource generation (human, technological or knowledge); and service delivery.

66. The tool is to 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 refine the EPHOs to reflect new challenges, such as communication for better health. This is intended to be a two-way process of using social marketing to gauge suggestions and reactions, and then engaging in a positive and constructive exchange, making optimum use of technologies and developments (including social media).

67. 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.

Actions

- Member States should use EPHOs as a resource for assessing infrastructure, performance and capacity related to core public health activities. This will demonstrate where gaps exist between the specific public health challenges of Member States and the infrastructure and capacity required to address them.

- Based on EPHO assessment, Member States should develop and implement strategies, action plans and appropriate programmes to further improve the quality and delivery of EPHOs and services at all levels.
- National and subnational governments should ensure that adequate resources are targeted to delivering EPHOs, including identification of emerging health hazards.

Strengthening regulatory frameworks for protecting and improving health

68. Regulatory frameworks to protect public health include legislation (international, regional and national); other policy instruments, including international agreements and standards; and arrangements for monitoring, audit and performance management. 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.

69. 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 measures including mandatory seat belt use, speed restrictions and traffic calming, and breath tests. While many of these actions would already be justified for other reasons, evidence of cost–effectiveness is a further argument in favour of their implementation.

70. Legislation and treaties may be international in scope, such as the Universal Declaration of Human Rights *(33)*, the International Health Regulations (2007) *(34)* and the Framework Convention on Tobacco Control (2003) *(56)*; regional, such as European Union directives and the Protocol on Water and Health to the 1992 Convention on the Protection and Use of Transboundary Watercourses and International Lakes *(36)*; or national, such as national public health laws. A study of public policy instruments for Public Health in the European Region *(37)* describes a wide range of available instruments (conventions, regulations, recommendations and standards), reflects variation among countries' deployment of specific instruments, and notes changes in national regulatory frameworks arising from a growth in pluralism and democratization.

71. 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.

72. 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).

73. 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 against both process and health outcomes, tied to a dynamic system of local accountability.

74. 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 *(37)*. These national frameworks will reflect 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.

75. 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.

76. 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.

Actions

- National government must have in place an implementation plan for legally binding international treaties, conventions and regulations, as well as resolutions and standards related to protecting population health. National progress and compliance with international agreements and standards should be reflected in self-assessment of the relevant EPHOs, which should make explicit relevant regulations and standards.
- Ministries of Health should review, in the light of best practice, their national regulatory frameworks related to licensing, accreditation and quality control of public health services, including laboratory facilities.
- 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.
- Ministries of Health should secure consistency in strategy and direction across different levels of organization using systems for monitoring performance and ensuring accountability.
- Standards for the delivery of public health services should be made explicit and their quality ensured and continuously improved through regular scrutiny, inspection or assessment arrangements and accreditation.

Improving health outcomes through health protection

77. 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.

78. Capacity needs to be in place to activate tried and tested emergency plans 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. There should also be capacity for public health surveillance follow up activities in the aftermath of disasters.

Actions

- National governments should improve public health-related data collection, integration, analysis and interpretation across sectors 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.
- Ministries of Health should establish appropriate reporting mechanisms for disease outbreaks with better coordination across public health, veterinary, occupational and food safety agencies.
- Health information systems reporting on vital statistics and routine information need to be established or strengthened.
- National governments should regularly review capacity and resources to implement International Health Regulations.
- National governments should put in place and regularly test Emergency response plans.

Improving health outcomes through disease prevention

79. Primary prevention refers to activities to prevent illness, 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.

80. Primary prevention is a broad concept, including health promotion and protection activities such as fostering healthy lifestyles, protecting the environment, guaranteeing occupational health and food safety. However, this concept can be practically understood as including clinical preventive services such as immunization and vaccination; 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; the maintenance of systems and procedures for involving primary health care and specialized care in programmes on disease prevention; the production and purchasing of childhood and adult vaccines; the conservation of reserves of vaccines where appropriate; and the production and purchasing of nutritional and food supplementation.

81. 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, including 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. These actions may also include broader participation from other ministries, such as the Ministry of Education in order to foster greater health literacy and enhance the effectiveness of public health communication.

82. There are great disparities in maternal and child health among 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 *(10)*. 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.

83. Secondary prevention comprises 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.

84. 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 among 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 and should be vigorously promoted.

85. As well as organized screening programmes, opportunistic case-finding can be carried out by health professionals drawing on a range of evidence-based interventions related to reducing risk factors such as smoking, alcohol consumption and poor diet.

86. 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.

Actions

- Ministries of Finance and Health should allocate adequate resources to vaccination programmes, including the purchase and storage of vaccines and the maintenance of effective call and recall systems.
- Ministries of Health should implement and regularly update evidence-based screening programmes in the light of best practice.
- Ministries of Health should assess existing systems for involving primary care and specialized care in disease prevention and should identify appropriate measures for scaling up preventive health care services, taking into account the needs of vulnerable population groups.
- 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

87. Health promotion builds on broad definitions of health and well-being. The Ottawa Charter *(38)* 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.

88. 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; policies for making healthy choices easier by creating health promoting environments (including the use of legislation); and 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.

89. Health promotion 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" *(39)*, emphasizing the promotion of well-being, including mental health promotion, as well as disease prevention.

90. The resilience of communities, the quality of social networks, and increased participation in decision-making for health and well-being is increasingly recognized. It has been argued that effective local delivery for challenging health inequalities requires local participatory decision-making *(40)*. 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.

91. An assets approach to community health and well-being involves building on cultural and material assets to promote active communities, address inequalities in health and encourage long-term change.

92. A public health ethos needs to be promoted in different settings and organizations both within and beyond the health system. While the important role of primary care in providing health promotion and preventive services has been reiterated since Alma-Ata, primary care practitioners may lack 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.

93. Health promotion should not increase health inequalities through interventions that are inappropriate, culturally insensitive or fail to reach those most in need.

94. 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 diseases, sexual health, occupational health, environmental health and mental health and dental hygiene.

Actions

- National governments should promote and create conditions for intersectoral dialogue and cooperation between partners to develop joint approaches to factors influencing health, well-being and healthy lifestyles.
- Formal and informal governance mechanisms should be established to support Ministries of Health in leading intersectoral policy responses to health challenges.
- National governments should secure involvement of communities in decision-making so that the potential of community assets is realized.
- The appropriateness of health promotion activities for targeted groups and those with the greatest health needs should be critically assessed.

- The importance of prevention for a sustainable health care system and for the wider economy must be recognized across the political spectrum: long-term sustained action is required rather than many sporadic initiatives.

Assuring a competent public health workforce

95. A competent and multidisciplinary public health workforce is a prerequisite for a modern effective 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 *(41)*. 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.

96. 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.

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

98. 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.

99. Key areas of public health practice, including strategic leadership and collaborative working, have been identified (see below). Most are present in EPHOs 7 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.

100. 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
- Ethically managing human, financial and other resources.

101. 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 the quality of health services. 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.

102. New skills are also required. Making the business case for investment and being able to prioritize interventions in order to improve health and tackle health inequalities are becoming key priorities for public health leaders requiring particular skills and expertise. Moreover, the 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.

103. These situations require a very different style of management and leadership than has existed for the most part hitherto. 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 and political astuteness rather than control.

104. 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 are 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.

105. An ability to understand different contexts and cultures, to work across organizational and professional boundaries (both vertically and horizontally) *(27)*, 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 draw on the tools and techniques from systems thinking *(28)*, complexity science and improvement science.

Actions

- National governments should secure development of a multidisciplinary public health workforce.
- Ministries of health should conduct a public health skills audit 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.
- Ministers of health, in collaboration with ministers of finance (as appropriate), should develop financial mechanisms to scale up prevention and to encourage health practitioners, particularly at the primary health care level, to deliver health services to prevent disease and promote health.
- Public health training should be strengthened through research, monitoring and evaluation and the dissemination of evidence, with partners, including the Association of Schools of Public Health in the European Region (ASPHER) for continuing education and the

European Public Health Association (EUPHA), for maintaining professional standards and research.

- Ministries of Health should advocate for, and cooperate with, ministries of education and medical universities to place a greater focus on challenges to population health and the relevant public health competencies to be included in medical training curricula.
- Investment should be made in innovative and creative leadership programmes informed by systems thinking, complexity science and transformational change principles.

Developing research and knowledge for policy and practice

106. 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 the public health challenges being faced, 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.

107. 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 or dismissed by those of a positivist scientific persuasion.

108. 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 *(29–31)*. 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 to address specific problems.

109. Some are increasingly aware of the deficiencies of health systems 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.

Actions

- National governments should create conditions for traditional approaches to evidence-based public health interventions to be supplemented, where appropriate, by a commitment to evidence-informed practice adopting innovative knowledge exchange and co-production approaches.
- Evidence-informed action to improve population health demands the deployment of a mix of methods and disciplines in order to comprehend complex contexts and "wicked" problems.
- The key assumptions and uncertainties in scientific assessments need to be made explicit and openly deliberated with key stakeholders.

- Ministries of health should support and put in place knowledge sharing and management skills and processes.
- Public health practitioners should be encouraged to join a community of practice.
- Ministries of Health should identify priority areas for research through close collaboration across practitioners, academics and policy-makers.

Organizational structures for public health services

110. The organization and provision of public health services occurs at three levels, national, subnational 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.

111. 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 and which may also have a subnational structure. 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.

112. 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 to achieve economies of scale, for example, or 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.

113. There are many models for organizing the public health function at national, subnational and local levels and this 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 while incurring significant costs both financial and human. Organizations delivering public health must become learning organizations in order to improve their performance and impact.

114. 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.

Actions

- Ministries of Health should put in place appropriate organizational structures 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 the nature of the health tasks being delivered.
- Ministries of Health should take measures to encourage learning from international experience in order to maximize the use of effective practices.

The way forward: WHO's role and next steps

115. The WHO Regional Office for Europe aims to support Member States in their strategies to strengthen public health capacity and services.

116. This will be achieved through the development of a European Action Plan for Strengthening Public Health Capacities and Services in Europe, to be presented during the 62nd Regional Committee. The articulation of this initiative will be achieved through a participatory process involving Member States, the European Union and other partners and will be supported by the Organization's Global Policy Group to ensure that WHO works hand in hand with its Member States to support them in their strategic developments to improve health outcomes and strengthen their public health services.

117. The European Action Plan will include several key elements. First, public health services will be strengthened through reviewing the effectiveness of existing tools in order to ensure coherence and relevance to new challenges. Standards and indicators for delivering and monitoring core public health services will be developed, and web-based assessment procedures will be implemented. WHO Regional Office for Europe will use the internet tool to assess PH capacities in Member States, reporting back to them with conclusions and recommendations. In addition, Member States will also have the opportunity to use the tool to carry out a self-assessment.

118. Public health training will also be strengthened through collaboration with the Association of Schools of Public Health in the European Region (ASPHER) for continuing education and the European Public Health Association (EUPHA) for maintaining professional standards and research. The potential for developing a European School of Public Health will be explored.

119. Supporting the development of international, regional, multinational, national and subnational networks across public health leaders is a further key area for action and could include establishing a high-level forum for policy development. This would form part of an ongoing dialogue to ensure public health services continue to address the key challenges to the health of the population.

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Annex 1. Definitions[1] of Essential Public Health Operations (EPHO) and Services in Europe

EPHO 1: Surveillance of diseases and assessment of the population's health

Definition: This operation includes the establishment and operation of surveillance systems to monitor incidence and prevalence of diseases and health information systems to measure morbidity and population health indexes. Other elements of this operation comprise Community Health Diagnosis; data trend analysis, identification of gaps and inequalities in the health status of specific populations; identification of needs; and planning of data oriented interventions.

1.1 Surveillance in the area of civil registration[2] (births, deaths)

Surveillance in the area of civil registration should cover the following:

- existence of a complete vital registration system;
- existence of data on cause of death and adjustment for mortality and morbidity data; and
- evaluation and assessment of the quality and population coverage of collected data.

1.2 Surveillance system and registries of diseases in areas of communicable diseases, noncommunicable diseases (NCDs) & foodborne diseases

Surveillance systems and disease registries should cover the following:

- existence of a legal framework for the reporting and surveillance of infectious diseases;
- existence of a list of notifiable diseases by relevant area (infectious, NCD, foodborne);
- existence of monitoring systems for microbiological and chemical contamination in the food chain; and
- capacity to provide relevant data to international agencies (WHO, ECDC, EFSA, Eurostat etc.).

1.3 Ongoing Surveys of Health Status and Health Behaviour, including Health and Nutrition Surveys to address issues such as obesity and dietary intake

Surveys of Health Status and Health Behaviour should cover the following:

- existing goals and definitions of population health items to study;
- existing definitions of subpopulations at risk, for example, people living in poverty, children, pregnant and lactating women and Roma;
- standard methodology for survey execution, including appropriate adaptations for study population; and

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[1] The short version of these definitions, including detailed specifications, is contained in Annex 2 to document EUR/RC61/10. The information and technical documents propose a definition of Public Health as well as of the ten Essential Public Health Operations. The term "operations" was chosen to overcome certain confusion that had been voiced due to the repetition of the word "function" for both the previously iterated EPHF and the four health systems framework functions (i.e. governance, resource generation, financing and service delivery). The underlying aim was to facilitate understanding among policy-makers of the difference between the descriptive framework functions and the prescriptive EPHO. The word "operation" also underlines the action-oriented nature of these core services. This development process and the proposed definitions of Public Health and of the ten EPHO has been informed by and has taken into account the concepts, experience and publications of high level PH institutions, agencies and the other WHO regions.

[2] The civil registration system refers to governmental machinery set up in the country, state, province or any other territorial subdivision of the country for the purpose of recording of vital events related to the civil status of the population on a continuous basis, as provided by the laws and regulations of the country, state, province, etc. (Source Publication: Handbook of Vital Statistics Systems and Methods, Volume 1: Legal, Organisational and Technical Aspects, United Nations Studies in Methods, Glossary, Series F, No. 35, United Nations, New York 1991).

- intra/inter SSII connection.

1.4 Surveillance system and disease registries in the area of Maternal and Child Health

Surveillance systems and disease registries should cover the following:

- existence of a legal framework for data collection; and
- existence of information systems on provision of mother and child health services (process, outputs and outcomes evaluation).

1.5 Surveillance system and registries of diseases in the area of Environmental Health

Surveillance systems and disease registries should cover the following:

- surveillance of data with integration of environmental factors with population health;
- existence of specific guidelines for the establishment of appropriate surveillance mechanisms for human and environmental hazards and diseases introduced into local communities;
- existence of a legal framework and legislation integrated at a European level; and
- availability of a national unit dealing with environmental epidemiology.

1.6 Surveillance system and disease registries in the area of Social and Mental Health

Surveillance systems and disease registries should cover the following:

- existence of Mental Health registry with sufficient confidentiality safeguards; and
- availability of indicators related to peer support networks or of any other type of operational social support and related activities.

1.7 Surveillance system and registries of diseases in the areas of Occupational Health and Injury Surveillance

Surveillance systems and disease registries should cover the following:

- existence of a national registry for Injury Surveillance (including domestic violence) from various sources: hospital information systems, emergency departments, death certificates, and accident reports;
- existence of definitions on compensable occupational injuries and diseases;
- existence of surveillance systems to monitor workers' health with the objective of accurately identifying and controlling occupational hazards. This includes:
  - registry of exposure to major risks, occupational injuries and diseases; and
  - capability of early detection and prompt reporting; and
- existence of special surveillance on asbestos-related diseases, silicosis, and other high priority occupational diseases following WHO recommendations and ILO conventions.

1.8 Data integration and analysis (including community health diagnosis) in order to identify population needs and risk groups and monitor progress towards health related objectives (in areas 1.1–1.7)

Data integration and analysis should cover the following:

- identification and establishment of agencies for evaluation and assessment of the quality of collected data;
- existence of protocols and standards for production, analysis and interpretation of data for comparison at national and international level;
- exchange of data within health registries and information sources among all national offices (including those outside the health sector), with sufficient safeguards for privacy and confidentiality;
- availability of software or ad-hoc computer programmes generating standardized analyses, tables and graphics;
- existence of hardware and infrastructure to support these activities;
- possibility of cross-sectional and trend analysis of data; and
- possibility of data disaggregation by socioeconomic markers, sex, ethnicity, levels of income, education and other relevant areas (e.g., in Occupational Health, disaggregation by industrial sector).

1.10 Publication of data in multiple formats for diverse audiences (in areas 1.1–1.7)

Publication of data should cover the following:

- elaboration of periodic analyses and reports;
- data monitoring in various surveillance systems integrated and published periodically through various communications media; and
- appropriate use of the mainstream media (radio, TV, newspapers) and social media (Facebook, Twitter, etc.).

EPHO 2: Identification of priority health problems and health hazards in the community

Definition of operation:
Monitoring, identifying and predicting priorities in biological, chemical and physical health risks in the workplace and the environment; risk assessment procedures and tools to measure environmental health risks; release of accessible information and issuance of public warnings; planning and activation of interventions aimed at minimizing health risks.

A. Control of communicable disease

2.A.1 System and procedures for the detection and control of communicable disease outbreaks

System and procedures of control should include the following:

- existence of protocols for GPs, nurses, physicians, etc. regarding the reporting of any unusual clusters or presentations of communicable diseases;
- adequacy of reporting level, including stage of outbreak at detection;
- risk assessment to identify vulnerable populations, considering factors such as poverty, low income, education, quality of housing, access to health care, etc.; and
- existence of appropriate risk communication mechanisms, adapted to diverse audiences.

2.A.2 System and procedures for outbreak investigation and cause identification

System and procedures of control should include the following:

- outbreak investigation carried out by epidemiologic teams; and
- case definition and case counts are applied.

2.A.3 System and procedures for controlling zoonotic and vector-borne diseases

System and procedures of control should include the following:

- control of food production systems “from farm-to-fork”;
- capacity to conduct joint epidemiologic investigation with veterinary services;
- capacity to conduct joint epidemiologic research with environmental services; and
- capacity to undertake a vector control and cooperation with veterinary services.

2.A.4 Evaluate your system and procedures for the surveillance of nosocomial infections

System and procedures of control should include the following:

- existence of epidemiologic teams in each general hospital;
- existence of protocols in each hospital to control and prevent nosocomial infections;
- existence of programmes and communication protocols implemented at hospital level;
- proper integration of communication protocols and programmes in the surveillance system of communicable diseases; and
- availability of information from the data collected including possibility of cross-sectional and time-trend analyses.

2.A.5 System and procedures for the surveillance of antibiotic resistance

System and procedures of control should include the following:

- existence of hospital surveillance systems for antibiotic resistance and antibiotic usage;

- existence of community surveillance systems for antibiotic resistance and antibiotic usage;
- existence of surveillance systems for antibiotic resistance and antibiotic usage in food animals;
- existence of collaboration mechanisms between surveillance systems and other entities: pharmacies, veterinaries, etc.;
- integration of the different reports at a national level; and
- possibility of cross-sectional and time-trend analyses.

B. Control of environmental health hazards

2.B.1 System with capacities, facilities and procedures for assessing actual or expected health impact due to environmental factors

System and procedures of control should include the following:

- existence of environmental epidemiology unit, or clear assignment of such tasks to dedicated PH staff;
  - availability of professionals trained in methodology of environmental risk assessment procedures and models;
- effective collaboration with environmental agencies and other relevant parties, including exchange of environmental data;
- access to and use of modern methodology for dealing with environmental health determinants; and
- capacity to undertake rigorous risk assessment procedures.

2.B.2 Arrangements and procedures for identifying possible hazardous exposures

System and procedures of control should include the following:

- capacity to critically assess potential impacts of uncertain environmental determinants; and
- use of a multidisciplinary approach that integrates different skills and fields of knowledge to identify hazardous exposures.

2.B.3 System and procedures for occupational health assessment and control

System and procedures of control should include the following:

- existence of an explicit law on occupational safety/prevention of occupational risks (or a Prevention of Occupational Hazards Act) to encourage safe workplaces;
- legally established occupational health records (health check-ups tailored to job post);
- existence of national strategy to prevent occupational diseases and injuries, developed according to national priorities;
- existence of regulations and basic occupational health standards, along with appropriate workplace health inspection, enforcement, and collaboration between the competent regulatory agencies according to specific national circumstances; and
- targeting of high-risk economic sectors and of vulnerable working populations, such as younger and older workers, persons with disabilities and migrant workers, taking account of gender issues.

2.B.4 System and procedures for air quality assessment and robustness of clean air standards

System and procedures of control should include the following:

- specific air quality regulations for monitoring air quality and risk assessment;
- environmental surveillance networks and specific environmental laboratories;
- capacity for integration of different surveillance networks to identify cause-effect correlation to the components of air pollution;
- possibility of cross-sectional and time-trend analyses; and
- cooperation/ interaction between Public Health and Environmental Agencies.

2.B.5 System and procedures for water quality assessment and robustness of clean water standards

System and procedures of control should include the following:

- promotion and implementation of holistic water safety plan, with special attention to the specific needs for support and guidance to small-scale water supply systems;

- sufficient preparation of water supply systems for extreme weather events, particularly droughts and floods, using appropriate guidance materials;
- social programmes to ensure access to the minimum amount of water needed to meet basic hygiene and health requirements for disadvantaged populations and for those with special needs.
- universal access to sanitation to protect human health and to preserve quality of the recipient environment;
- appropriate surveillance of endemic water-related diseases and technical capacity to detect outbreaks, develop and implement management plans;
- oversight of management practices for recreational water and the natural environment (including the marine environment); and
- possibility of cross-sectional and time-trend analyses.

2.B.6 System and procedures for the identification of chemical and physical health hazards through analysis of surveillance data or epidemiologic research

System and procedures of control should include the following:

- coordination of surveillance networks of chemical and physical health hazards; and
- capacity to establish cause-effect correlations with outbreaks in the community.

2.B.7 System and procedures for food safety risk assessment

System and procedures of control should include the following:

- existence of specific regulations and circulars on food safety in various settings;
- existence of mechanisms for food safety risk assessment; and
- functional separation of risk assessment and risk management.

2.B.8 System and procedures for risk assessment regarding consumer goods, cosmetics and toys

System and procedures of control should include the following:

- existence of specific regulations/standards on consumer goods, cosmetics and toys; and
- existence of a mechanism for risk assessment regarding consumer goods, cosmetics and toys.

2.B.9 Progress towards implementation of the International Health Regulations (IHR)

System and procedures of control should include the following:

- evaluation of national laws regarding IHR;
- dissemination of knowledge to the health sector and other sectors;
- dissemination of knowledge to other ministries;
- performance of intersectoral tabletop exercises;
- interaction with different stakeholders (existing agreements, other mechanisms for interaction within integrated national system to implement IHR); and
- definition of collaboration agreements with neighbouring countries.

C. Laboratory Support for Investigation of Health Threats

2.C.1 Readily accessible laboratories capable of supporting research of public health problems, hazards, and emergencies

Laboratory Support should include the following:

- existence of a network of readily accessible laboratories that are in line with national and international Standards;
- collaboration with other laboratories (private, academic institutions) for both research and during crises;
- appropriate communication between laboratories and epidemiologic units;
- integration of databases with the rest of SSII; and
- existence of standards for lab control.

2.C.2 Readily accessible laboratories capable of meeting routine diagnostic and surveillance needs

Laboratory Support should include the following:

- existence of a network of readily accessible laboratories in line with national and international standards;
- adaptation of the infrastructure to the volume of samples over time;
- capacity to control and validate results at national level;
- collaboration with other laboratories (private, academic institutions) for routine diagnostic and surveillance needs;
- appropriate communication between laboratories and epidemiologic units, including other sectors such as environment and veterinary fields; and
- integration of databases with the rest of SSII.

2.C.3 Ability to confirm that laboratories comply with regulations and standards through credentialing and licensing agencies

Laboratory Support should include the following:

- existence of specific regulations on standards for laboratory quality control;
- availability of mechanisms related to supervision/inspection of standards for laboratory quality control;
- mechanisms for certification and recertification; and
- effective coordination of the national reference laboratory with international reference laboratories.

2.C.4 Ability to address the handling of laboratory samples through guidelines or protocols

Laboratory Support should include the following:

- existence of specific regulations on guidelines, protocols or standards to address the handling of laboratory samples, including procedures for storing, collecting, labelling, transporting, and delivering laboratory samples, and for determining the chain of custody regarding the handling of these samples; and
- availability of mechanisms to ensure the fulfilment of the above guidelines or standards for handling of laboratory samples.

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

Laboratory Support should include the following:

- possibility of adapting to international standardizations: ISO 17000.
- availability of PNT (standard work procedure); and
- performance of intra- and inter-laboratory reviews.

2.C.6 Capacity to produce timely and accurate laboratory results for diagnosis and research of public health threats.

Laboratory Support should include the following:

- existence of the necessary laboratory infrastructure to produce results for diagnostic and investigative public health concerns; and
- availability of mechanisms for inspecting the fulfilment of the protocols to produce results for diagnostic and investigative public health concerns.

EPHO 3: Preparedness and planning for public health emergencies

Definition of operation:

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

3.1 Ability to define and describe public health disasters and emergencies that might trigger implementation of the emergency response plan in the following areas

Preparedness for management of emergency events should include the following:

- existence of specific preparedness guidelines for emergency response in the relevant area (i.e. 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 the available means of action;
- effectiveness of intersectoral collaboration and cooperation/interaction; and
- existence of information systems including intra-national and international warning networks.

3.2 Development of a Plan that defines organizational responsibilities, establishes communication and information networks, and clearly outlines alert and evacuation protocols

Preparedness for management of emergency events should include the following:

- integration of planning for all the above potential emergency situations (in 3A1);
- existence of a general and well-founded plan, easily available and pragmatic, that defines organizational responsibilities, communication algorithms and information networks;
- definition of emergency plans based on previous analysis of possible risk factors as well as requirements associated with these risk factors;
- consideration of requirements for plan implementation; and
- development of emergency plan in collaboration with all other agents involved (not only medical/public health dimension, but also social, economic, occupational, environmental, and defence dimensions).

3.3 Periodic Assessment of the capacity for rapid response, including testing of the emergency plan through tabletop exercises and large-scale drills

Preparedness for management of emergency events should include the following:

- systematic mechanisms for capacity response assessment;
- tabletop exercises and drills under ideal conditions; and
- periodic reports on results of the drills or practical exercises to identify processes or steps of the plan that need to be amended.

3.4 Development of written epidemiologic case investigation protocols for immediate investigation

Preparedness and planning for public health should include the following:

- assessment of appropriateness of procedures for GPs, nurses, physicians, veterinarians etc. regarding:
  - the reporting of any unusual event of Communicable Diseases, including zoonotic; and
  - immediate investigation of relevant area (i.e. environmental health hazards, chemical, radiological and biological agent threats, large-scale disasters); and
- assessment of the reporting level in the country.

3.5 Effectiveness of the evaluation of past incidents and identification of opportunities for improvement

Points to be considered:

- stage of problem at time of detection; and
- existence of reports detailing aspects that should be improved in the future.

3.6 Maintenance of written protocols to implement a programme of source and contact tracing for communicable diseases or toxic exposures

Points to be considered:

- capacity to keep written protocols accessible and dynamic; and
- assessment of previous experiences regarding the availability and usefulness of the written reports.

3.7 Maintenance of a roster of personnel with the technical expertise to respond to all natural and man-made emergencies

Points to be considered:

- explicit assessment of the current level of preparation from professional teams and organizational response, identifying gaps and further needs; and
- coordination of a network of experts and professionals in different types of public health emergencies.

3.8 Implementation of the International Health Regulations (IHR) in the area of emergency planning

Preparedness for management of emergency events should include the following:

- level of implementation of IHR in the area of emergency planning;
- existence of plan/programme and its implementation according to schedule;
- evaluation of national laws regarding IHR;
- performance of intersectoral tabletop exercises; and
- definition of agreements with neighbouring countries for implementation of IHR.

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

Definition of operation:
Risk assessments and actions needed for environmental, occupational and food safety. Public health authorities supervise enforcement and control of activities with health implications.

This operation includes the institutional capacity to develop regulatory and enforcement mechanisms to protect public health and monitor compliance with accepted norms as well as the capacity to generate new laws and regulations aimed at improving public health and promoting healthy environments.

4.1 Technical capacity for risk assessment in the area of Occupational Health

Points to be considered:

- assessment and management of health risks at the workplace performed based on clear definition of essential interventions for prevention and control of mechanical, physical, chemical, biological and psychosocial risks in the working environment;
- existence of institutional capacities built for primary prevention of occupational hazards, diseases and injuries;
- technically qualified personnel to carry out control tasks;
- accessible data on risk factors from existing reliable data flows;
- access to relevant scientific research as part of a developing knowledge base; and
- risk assessment exercises to formulate consistent policy recommendations.

4.2 Technical capacity for risk assessment in the area of Health Related Behaviour

Technical capacity for risk assessments should include the following:

- existence of health surveys and protocols to carry out risk assessments;
- existence of technical equipment to assess risk (e.g. breathalysers);
- technically qualified personnel to carry out control tasks;
- accessible data on risk factors from existing reliable data flows;
- access to relevant scientific research as part of a developing knowledge base; and
- risk assessment exercises to formulate consistent policy recommendations.

4.3 Technical capacity for risk assessment in the area of Health Care Facilities and Programmes

Technical capacity for risk assessments should include the following:

- existence of specific regulations on guidelines, protocols or standards to assess safety and quality of Health Care Facilities and Programmes;

- availability of mechanisms and capacities for inspecting the fulfilment of the above protocols or standards;
- technically qualified personnel to carry out control tasks;
- accessible data on risk factors from existing reliable data flows;
- access to relevant scientific research as part of a developing knowledge base; and
- risk assessment exercises to formulate consistent policy recommendations.

4.4 Inspection, monitoring and enforcement of laws and regulations by public health authorities

Enforcement of laws and regulations by public health authorities should include the following:

- transposition of international regulations to national legislation;
- rapid introduction of necessary legal changes and new requirements in accordance with changes occurring at a social level;
- existence of standards and protocols for inspection; and
- availability of resources for enforcement of laws and regulations.

4.5 Cooperation between the Ministry of Health and other ministries for law enforcement in issues related to public health

Cooperation for law enforcement should include the following:

- interaction between the various authorities and administrations at different levels; and
- existence of government mechanisms to facilitate cooperation and communication/interaction between administrations, for example, through collaborative agreements, mixed committees, information systems of shared operations, shared legal regulations, joint protocols, 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
  - x) Ministry of Transport
  - xi) any other relevant ministries

EPHO 5: Disease prevention

Definition of operation:
Disease prevention is aimed at both communicable and noncommunicable diseases and has specific actions largely delivered to the individual. The term is sometimes used to complement health promotion and health protection operations. Although there is a frequent overlap between the content and strategies, disease prevention is defined separately.

Primary prevention services include vaccination of children, adults and the elderly as well as vaccination or post-exposure prophylaxis for persons exposed to a communicable disease. Primary prevention activities also include 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; the maintenance of systems and procedures for involving primary health care and specialized care in programmes on disease prevention; the production and purchasing of childhood and adult vaccines; the conservation of reserves of vaccines where appropriate; and the production and purchasing of nutritional and food supplementation.

Secondary prevention includes activities such as evidence-based screening programmes for early detection of diseases; maternal and child health programmes, including screening and prevention of congenital malformations; 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.

Disease prevention in this context is considered to be action which usually emanates from the health sector, dealing with individuals and populations identified as exhibiting identifiable risk factors, often associated with different risk behaviours.

A. Primary prevention

5.A.1 Vaccination programmes for the following groups:

i) children
ii) adults
iii) the elderly
iv) vaccination or post-exposure prophylaxis to persons exposed to a communicable disease

Points to be considered:

- provision of clearly defined vaccination arrangements, including the necessary resources to ensure programme efficiency;
- existence of a vaccination calendar in accordance with the international organizations' recommendations (including the review and inclusion of new vaccinations in accordance with scientific/economic criteria);
- existence of a vaccination registry;
- appropriate links with other SSII;
- performance of information campaigns (including for parents and education professionals in the case of child vaccination) on the need to immunise the population as a main barrier against the transmission of diseases;
- accessibility of vaccination services in the vaccination calendar; and
- programmes run by professionals to inform about side effects.

5.A.2 Provision of information on behavioural and medical health risks

Primary Prevention should include the following:

- 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 future measures; and
- capacity of Public Health services and personnel to communicate.

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

Primary Prevention should include the following:

- availability of information regarding the role of primary health care and specialized care in programmes on disease prevention;
- explicit assessment of level of involvement;
- existence of operational proposals for the future; and
- financial or other incentives for the primary health care personnel to deliver individual preventive services.

5.A.4 Adequacy of production and purchasing capacity for childhood and adult vaccines as well as iron, vitamins and food supplementation

Primary Prevention should include the following:

- availability of information regarding the capacity for the production and purchasing of products;
- explicit assessment of further provision needs;
- evaluation of the adequacy of current stock; and
- existence of operational proposals for the future.

5.A.4 Adequacy of production and purchasing capacity for iron, vitamins and food supplementation

- availability of information regarding the capacity for the production and purchasing of products;
- explicit assessment of further provision needs;
- evaluation of the adequacy of current stock; and

- existence of operational proposals for the future.

B. Secondary prevention

5.B.1 Evidence-based screening programmes for early detection of diseases, including screening and prevention of congenital malformations

Secondary Prevention should include the following:

- legal framework;
- network: defining and providing accountability structures;
- application of international inclusion criteria of the potential target pathologies in screening programmes;
- structural and budgetary feasibility and ability to deal quickly and effectively with the detected cases;
- definition of target populations for the programmes in line with the international inclusion criteria for screening;
- adaptation of screening programmes to international recommendations; and
- continuous assessment and evaluation of current programmes.

5.B.2 Adequacy of production and purchasing capacity for screening tests

Secondary Prevention should include the following:

- 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 current capacity in relation to actual or potential needs); and
- existence of operational proposals for future needs.

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 addresses determinants for both communicable and noncommunicable diseases and 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;
- reorientation of health services to develop care models that encourage health promotion;
- intersectoral partnerships for more effective health promotion activities;
- assessment of the impact of public policies on health; and
- 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, nutrition, food safety, work-related health hazards, injury prevention, occupational and environmental health.

The broader role of health promotion includes advising policy-makers on health risks, health status and health needs as well as designing strategies for different settings. It also includes taking account of the determinants of health, in particular the social or socioeconomic determinants that cause ill health.

A. Health promotion activities for the community-at-large or for populations at increased risk of negative health outcomes.

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

Health Promotion should include the following:

- integration of dietary and physical activity advice into primary health care services;
- integration of different promotion strategies around healthy nutrition and physical activity;
- community participation in planning and implementation;
- the involvement of the food industry through agreements promoting improved diet, food labelling and supporting nutrition projects;
- continuous monitoring and evaluation of health promotion projects;
- government support to networks of NGO for health promotion as an outreach activity; and
- capacity of services to address the whole population, taking account of issues such as poverty, ethnicity, sex, other socioeconomic factors and groups at particular risk.

6.A.2 Activities and services directed at Tobacco Control

Health Promotion should include the following:

- 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;
- comprehensiveness of plans for dealing with the problem (economic, political, social, cultural, environmental, health care and ethical) in line with FCTC implementation;
- elaboration of specific health education materials to different groups;
- evaluation and assessment of the implementation of the programmes; and
- comprehensiveness of approach, taking account of issues such as poverty, ethnicity, sex, other socioeconomic factors and groups at particular risk.

6.A.3 Activities and services directed at Alcohol Control

Points to be considered:

- existence of a legal frameworks regulating alcohol purchase 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;
- multidisciplinary and intersectoral/interactive nature of activities;
- annual planning of programmes based on a periodic survey that deals with knowledge, attitudes and environment of the target populations;
- continuous evaluation of activities and services; and
- comprehensiveness of approach, taking account of issues such as poverty, ethnicity, sex, other socioeconomic factors and groups at particular risk.

6.A.4 Activities and services directed at Drug Abuse Prevention and Control

Health Promotion should include the following:

- existence of comprehensive plans for dealing with the problem: economic, political, social, educational, cultural, environmental, health care and ethical;
- community participation, NGOs and community leaders;
- suitable orientation of the health care services (which allow for the necessary support treatments and arrangements/deinstitutionalization/decentralization);
- involvement of social services;
- evaluation and assessment of programme implementation; and
- comprehensiveness of approach, taking account of issues such as poverty, ethnicity, sex, other socioeconomic factors and groups at particular risk.

6.A.5 Prevention of infectious diseases (e.g., HIV, TB) related to health behaviours

Health Promotion should include the following:

- comprehensive plans for dealing with the relevant problem: economic, political, social, educational, cultural, environmental, health care and ethical;
- involvement of different disciplines in an intersectoral /interactive approach;
- upgrading community participation (development of community attitudes: family, education system);
- emphasis on development of healthy (safe) attitudes and not only knowledge about them;
- continuous evaluation of the programme implementation (including in planning processes); and
- capacity of services to address the whole population, taking account of issues such as poverty, ethnicity, sex, other socioeconomic factors and groups at particular risk.

6.A.6 Activities and services directed at Sexual/Reproductive Health

Health Promotion should include the following:

- existence of a list of activities or services directed at sexual health;
- multidisciplinary and intersectoral/interactive nature of activities;
- annual planning of programmes based on a periodic survey that deals with knowledge, attitudes and environment of the target populations;
- continuous evaluation of the programme implementation (including in planning processes);
- capacity of services to address the whole population, taking account of issues such as poverty, ethnicity, sex, other socioeconomic factors and groups at particular risk; and
- capacity of Public Health and Primary Health Services to deal with family violence.

6.A.7 Prevention and control of Occupational and Work-Related Health Hazards, including workplace health promotion

Health Promotion should include the following:

- existence of a list of activities or services directed at occupational health;
- sound legal infrastructure as a basis for prevention and control;
- annual planning of services and activities according to surveys that deals with knowledge, attitudes and environment of the target populations; and
- existence of a national action plan on workers' health in collaboration in line with the Promotional Framework for Occupational Safety and Health Convention, 2006.

6.A.8 Activities and services directed at Environmental Health

Health Promotion should include the following:

- existence of a comprehensive list of activities or services directed at environmental health regardless of which authority oversees activities;
- multidisciplinary and intersectoral/interactive nature of activities;
- planning of programmes (at least every three years) based on a periodic survey that deals with knowledge, attitudes and environment of the target populations; and
- continuous evaluation of the programme implementation (including in planning processes).

6.A.9 Mental Health activities and services

Health Promotion should include the following:

- existence of a comprehensive list of activities or services directed at mental health;
- multidisciplinary and intersectoral/interactive nature of activities;
- annual planning of programmes based on a periodic survey that deals with knowledge, attitudes and environment of the target populations;
- continuous evaluation of the programme implementation (including in planning processes);
- capacity of services to address the whole population, taking account of issues such as poverty, ethnicity, sex, other socioeconomic factors and groups at particular risk; and
- community oriented services/decentralization, deinstitutionalization of arrangements.

6.A.10 Dental Hygiene Education and Oral Health activities and services

Health Promotion should include the following:

- continuous surveillance of oral health;
- existence and promotion of educational programmes on dental hygiene in schools;
- integration of strategies to promote dental hygiene and other related strategies, such as healthy nutrition;

- monitoring and evaluation of oral health programme, including outcomes; and
- accessibility and affordability of services, taking into account issues such as poverty, ethnicity, sex, other socioeconomic factors and groups at particular risk

B. Capacity of intersectoral action

6.B.1 Policies, strategies and interventions aimed at making healthy choices easy

Health Promotion should include the following:

- ability to address social determinants of healthy choices, as for example, the availability, accessibility and affordability of safe and fresh food or green spaces for physical activity in urban areas;
- periodic assessment of programmes in health promotion and disease prevention;
- application of information on the state of health of the community, subnational and national to needs-based health policies; and
- ability of policy papers to communicate information on health risks, population health status, and health at subnational and national levels.

6.B.2 Structures, mechanisms and processes to enable intersectoral action

Health Promotion should include the following:

- existence of a legal basis for health promotion such as regulations or intersectoral committees;
- systematic implementation of health impact assessment;
- focus on broader determinants of health in other policy areas;
- civil society participation;
- ability to implement policies – through legislation, financing, research;
- existence of systematic follow-up and evaluation of activities; and
- administrative capacity for health promotion.

6.B.3 Intersectoral activities, including the leadership role of the Ministry of Health, in ensuring a health in all policies approach, regarding the following ministries:

i) Ministry of Education
ii) Ministries of Transport, Environment
iii) Ministry of Industry
iv) Ministry of Labour
v) other relevant ministries

Health Promotion should include the following:

- communication between ministries, including the existence of liaison staff or special protocols;
- existence of a strategy led by the Ministry of Health to engage other sectors;
- elaboration of specific health education materials to different age groups and/or groups with particular ethnic or social characteristics; and
- continuous monitoring and evaluation of health promotion projects.

EPHO 7: 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 adequate 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 efficiently address priority public health problems and to adequately evaluate 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 in order to implement and improve the quality of PHS and address new challenges in public health.

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

7.A.1 Planning for public health human resources

Human Resources planning should include the following:

- existence of national planning of public health human resources;
- consideration of tools and methods used in such planning; and
- definition of Human Resources Plan with a long-term/anticipatory nature, taking into account demographic projections, regional considerations and future health care needs.

7.A.2 Effectiveness of Human Resources planning

Points to be considered:

- decentralization in Human Resources planning;
- division of responsibilities between national and subnational planning (in federal or decentralized countries);
- division of responsibilities between the centre and districts in planning in non-federal countries; and
- capacity to evaluate appropriateness and effectiveness of human resources planning in the last decade, taking into account the needs of the different regions and the imbalance in distribution of human resources.

7.A.3 Current provision of human resources for public health

Points to be considered:

- availability of public health workforce;
- distribution of human resources according to population health needs;
- allocation of the potential workforce through a multidisciplinary approach; and
- annual evaluation of Health Workforce distribution.

B. Public Health Workforce Standards

7.B.1 Mechanisms for maintaining public health workforce standards (education, certification, licenses)

Points to consider:

- projection of future health workforce needs in terms of quantity and quality;
- appropriate Education level of public health workers and managers; and
- definition of appropriate standards for evaluation of quality of population-based and personal health services using data from all levels of the health system.

7.B.2 Mechanisms for evaluating the public health workforce, including continuous quality improvement, continuing education and training programmes

Standards should include the following:

- periodic assessment of teaching programmes;
- existence of performance evaluation system or systems for continuing education courses to ensure appropriate development of human resources for public health;
- existence of performance evaluation system or systems for continuous quality improvement;
- dissemination of results from the evaluation of continuing education and graduate training programmes; and
- definition of incentives to improve the quality of the public health workforce.

7.B.3 Systems for improving teamwork abilities and communication skills

Standards should include the following:

- establishment of continuing education courses or in-service training for improving teamwork abilities and communication skills; and
- continuous evaluation of the courses, and in-service training by feedback questionnaire of the participants.

7.B.4 System for supporting capacity development of intersectoral teams and professionals from across policy areas

Standards should include the following:

- integration of a multidisciplinary approach in the public health system, across different profiles;
- inclusion of intersectoral teams and professionals in continuing educational courses or in-service training; and
- existence of mechanisms for the evaluation of the capacity of intersectoral teams after each public health event.

C. Education and accreditation

7.C.1 Structure of training in public health management

Education and accreditation should include the following:

- availability and quality of training in non-medical specialities related to health care;
- adequacy of training to the Public Health Services needs;
- exposure to public health issues in general and on country level in particular as part of the training in public health management; and
- inclusion of evidence-based SDH in future public health education programmes and interventions.

7.C.2 Undergraduate programmes in Health Professions (medicine, veterinary medicine, nursing, pharmacy, dentistry) relevant to public health

Education and accreditation should include the following:

- availability of the different health disciplines (medicine, veterinary medicine, nursing, pharmacy, dentistry) within the public health education programme;
- incorporation of public health issues (e.g. epidemiology and population approaches) within the medical curriculum;
- existence of Public Health Experts in the undergraduate programmes;
- cooperation or joint ventures between the different schools of health professionals and school/s of public health; and
- availability of post-graduate courses or programmes for veterinary pubic health.

7.C.3 Adequacy of Schools of Public Health

Education and accreditation should include the following:

- availability of School/Schools of Public Health in the country;
- existence of collaborative agreements between the different academic authorities in Public Health;
- capacity of Schools of Public Health to fulfil the need for training the future public health workforce;
- existence of mechanisms which facilitate the exchange of educational, occupational and research experiences within the same area of other European countries (grants, permits for placements, etc); and
- existence of disciplines of environmental health and occupational health in line with the relevant international standards of accreditation.

7.C.4 Master of Public Health Programmes

Education and accreditation should include the following:

- availability of Master of Public Health programmes in the national university system;
- design of the programme in order to adequately prepare for professional and research work within public health;
- continuous review and enhancement process of the programmes in order to adapt to current and future challenges of PHS; and
- capacity to adapt to the unified criteria of European postgraduate studies.

7.C.5 Master of Health Services administration and/or Policy, Leadership, or Management

Education and accreditation should include the following:

- 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; and
- adaptation to the unification criteria of European postgraduate studies.

7.C.6 Other relevant academic programmes related to health protection, promotion or disease prevention (specify)

Education and accreditation should include the following:

- legal framework for professionals' continuous education in health protection, promotion or disease prevention;
- availability of programmes related to health protection, promotion or disease prevention;
- definition and implementation of continuous educational programmes for multidisciplinary professionals working in PHS; and
- the adequacy of these programmes to address the knowledge, skills and practices required of professionals in order to upgrade and to extend the various areas of action.

7.C.7 Quality Control and Accreditation programmes

Education and accreditation should include the following:

- establishment of evaluation and accreditation processes for undergraduate and postgraduate programmes;
- the coordination and collaboration of training and accreditation programmes with educational institutions in order to develop basic public health curricula for different levels of public health;
- adaptation of the educational programmes to the existing legal framework at both the national and European levels (the Bologna Process); and
- periodic assessment of teaching programmes and continuing education courses to ensure that they contribute to developing human resources for public health.

EPHO 8: Core governance, financing and quality assurance for Public Health

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

Financing is concerned with the mobilization, accumulation and allocation of money to cover population health needs, individually and collectively. The purpose of health financing is to make funding available, as well as to set the right financial incentives to providers, to ensure that all individuals have access to effective public health and personal health care.

Quality assurance deals with developing 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. Evaluations should identify weaknesses in governance and operation, resource provision and the service delivery. The conclusions of the evaluations should feed back into policy and management, organization, and provision of resources to improve service delivery.

A. Health Policy Planning and Implementation

8.A.1 Process of strategic planning in relation to public health services

National Health Policy should include the following:

- existence of strategic planning process in relation of public health services;
- periodic nature of planning (once a year/two years/ three years);
- leadership by the PHS, the ministry of Health, or both;
- democratic participation among headquarters and the districts; and

- revision of mission and activities of the PHS.

8.A.2 Policy planning process at regional and local levels

Regional Public Health Policy should include the following:

- consideration of national policy papers in public health planning;
- consideration of data or information on population health status at the regional and local level;
- consideration of the views of the different stakeholders, including community leaders, in the planning process; and
- existence of evaluation mechanisms of the planning process.

8.A.3 Appropriateness & effectiveness of public health policy (health impact assessment)

National and Regional Health Policy should include the following:

- existence of a publication that establishes the national public health policy;
- the national public health policy includes the activities of the PHS of the Ministry of health, and various activities concerning public health;
- translation of national public health policy into programmes and activities;
- existence of an evaluation process of the implementation of national public health policy;
- capacity to adapt the national public health policy to changing situations;
- technical capability of professionals to perform health impact assessment at regional level; and
- integration of the health impact assessment in developmental plans and regional policies by intersectoral teams.

8.A.4 System or programme for monitoring implementation of policy and programmes in public health or related areas

Monitoring and evaluation of public health policies and programmes should include the following:

- inclusion of indicators, standards and benchmarks in public health policies and programmes;
- existence of mechanisms for quality review and performance assessment as part of the evaluation process;
- systematic monitoring and evaluation of various policies and programmes; and
- integration of the monitoring and evaluation results in the feedback mechanisms for current and future public health policies and programmes.

8.A.5 Short-, medium- and long-term strategies to comply with an EU community health services system

Monitoring and evaluation of public health policies and programmes should include the following:

- existence of systematic files identifying EU guidelines and standards;
- attempt to systematically identify gaps between current national situation and the EU guidelines and standards; and
- existence of a written strategy to fill these gaps.

8.A.6 Appropriateness and effectiveness of how the implications of international health developments are taken into account in public health planning (e.g. preparing for Avian and Pandemic Influenza, West Nile Fever and SARS)

National Health Policy should include the following:

- availability of a national planning unit or ad-hoc committee, which evaluates and monitors the international developments and their health implications at national level;
- the consideration of health implications emerging from abrupt events on public health planning;
- existence of an intersectoral national public health plan to control Avian Influenza or Pandemic influenza;
- appropriateness of a national plan for a pandemic event in the case of a real outbreak; and
- compatibility of Public Health Plans with the international health developments.

8.A.7 Role of public health operations within the Ministry of Health

National Health Policy should include the following:

- role of public health operations within the Ministry of Health and/or other agencies to provide technical assistance for drafting legislation, regulations, and ordinances;

- execution of public health operations which the Ministry of Health and/or other agencies assume directly;
- education or training of persons and entities obligated to comply with or to enforce laws and regulations designed to protect health;
- the appropriate use of measurable health objectives and indicators by the Ministry of Health to evaluate services and activities in public health; and
- supervision of governmental and nongovernmental public health entities in order to ensure that essential public health services are provided.

8.A.8 Appropriateness/effectiveness of any mechanisms or processes through which poverty, inequalities and the social determinants of health are taken into account in decision-making

National Health Policy should include the following:

- integration of SDH approach in the culture of the public health system (ministry of health and across other policy sectors);
- existence of a national Poverty Reduction Strategy Paper (PRSP) or similar, which includes a health component;
- representation of professional or position papers or other mechanisms in health policy decision-making that ensure that broader determinants of health are incorporated in the process;
- existence of specific targets and indicators in the national public health policy that take into account the social determinant of health;
- identification of specific targets based on intersectoral strategies; and
- use of intersectoral strategies as a basis for national and subnational policies and programmes at regional and local levels.

8.A.9 Comprehensiveness and effectiveness of public health and other health-related policy decisions, through a multidisciplinary and multisectoral approach

Intersectoral and interdisciplinary approach should include the following:

- definition of public health strategies with the relevant stakeholders of the health sector and other sectors of the society;
- implementation of public health strategies with the participation of the health sector and other sectors of the society, at all levels;
- evaluation of the intersectoral links necessary to respond at all levels;
- systematic evaluation of organized action, indicating deficiencies for subsequent correction; and
- consideration of diverse viewpoints in the strategies and interventions.

B. Evaluation of quality and effectiveness of personal and community health services

8.B.1 Processes and mechanisms to define needs in personal and population health services from public health perspectives

Definition of needs should include the following:

- existence of data sources for the definition of needs;
- definition of the portfolio of services included in the system;
- evidence of efficiency and effectiveness to incorporate new services;
- coordination of services throughout the care pathway;
- capacity of the available structure to cover the population’s preventive needs in an efficient manner;
- accessibility and distribution of services (urban/rural, more/less affluent areas, regional disparities); and
- affordability of personal services to all groups.

8.B.2 Processes and mechanisms to identify health service needs of populations that may encounter barriers to receiving health services

Definition of needs should include the following:

- adequacy of health service needs identification for immigrants, ethnic minorities, and disadvantaged populations;

- existence of specific studies on these groups adapted to their characteristics;
- existence of alternative strategies to offer services that favour access; and
- collaboration with several stakeholders, including NGOs, associations and social services.

8.B.3 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

Assessment and Evaluation of Services should include the following:

- assessments of coverage of accessible community health services;
- existence of databases, SSII;
- existence of studies on both the frequency and appropriateness of the Health System;
- existence of health care indicators;
- existence of Social care indicators; and
- existence of Socioeconomic indicators.

8.B.3 Processes and mechanisms for conducting an analysis of participation in preventive services

Assessment and Evaluation of Services should include the following:

- adequacy of the analysis on the participation in preventive services for children, adolescents, adults and the elderly;
- adequacy of the gender-specific assessment of participation in the preventive services; and
- capacity of the SSII to gather data on coverage, access to health services and programmes.

8.B.4 Assessment and analysis regarding the integration of services in coherent community health services system

Assessment and Evaluation of Services should include the following:

- existence of databases/records identifying duplications, fragmentation 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; and
- existence of surveys to identify professionals' opinion in order to foster coherence and integration of community health services.

8.B.5 Adequacy of evaluation of the human resources' structure and financial support to community health services

Assessment and Evaluation of Services should include the following:

- existence of legal framework to support community health services;
- existence of databases/records to identify specialized human resources in the community health services; and
- existence of accounting records and financial analyses to identify the needs in the community health services.

8.B.6 Implementation, control and quality assurance actions on health systems that supply personal and community health services

Application of evaluation findings should include the following:

- quality management of the health services offered;
- management as far as processes, clinical guidelines, performance protocols, etc., are concerned; and
- existence of research into services.

8.B.7 Health Technology Assessment centres or programmes

Application of evaluation findings should include the following:

- assessment of the implemented health care technologies; and
- existence of studies on successful practices in other scopes.

C. Financing of Public Health Services

8.C.1 Ensure that financing mechanisms for public health services, including personal services with broad effects beyond the person receiving the intervention, are aligned with desired service delivery strategies

Financing for public health services should include the following:

- identification of specific interventions associated with each population-based or personal service;
- efficient organization of services and financing;
- definition of incentives for providers to encourage appropriate service delivery;
- definition of incentives facing service users to encourage appropriate service use; and
- ongoing monitoring and analyses to adjust financing arrangements as needed over time.

8.C.2 Decisions on public financing for services, taking into consideration the extent to which its benefits are distributed in the population

Financing for public health services should include the following:

- for cost-effective population-based services (e.g. some food safety interventions) and personal services with benefits that extend far beyond the potential patient (e.g. TB control, HIV prevention interventions), comprehensive financing should be the goal.

EPHO 9: Core communication for Public Health

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

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

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

9.1 Strategic and systematic nature of public health communication, developed with an understanding of the perceptions and needs of different audiences

Communication development should include the following:

- existence of a detailed communication (and media) strategy that includes vision, aims, measurable objectives, responsibilities of various staff, clearance procedures and methods of evaluation;
- integration of strategy into overall organizational development plans;
- identification of designated communication staff (or department) with specialized training and skills to coordinate communication activities and work with media;
- existence of formative research procedures to gather intelligence on target audience perceptions and media reporting patterns; and
- specific risk and crisis communication strategies.

9.2 Dissemination to different audiences in formats and through channels which are accessible, understandable and usable

Communication dissemination should include the following:

- identification of target audiences and consideration of their health literacy capacity and behavioural patterns;
- existence of issue-related media dissemination plans;
- development of target-specific messages and use of target- specific communication channel(s);
- creation and maintenance of communication platforms (e.g. web pages, press briefings, etc) that allow for the reliable and timely delivery of communications directly to audiences or indirectly through intermediaries;
- definition of communication agreements and links with other relevant agencies (at international, regional, or national levels) and activities (e.g. health promotion, social marketing, WHO health communication network);
- capacity to adapt relevant communications from other agencies (e.g. WHO Regional Office for Europe) to national and local contexts;
- designation of appropriately trained staff to coordinate all the above; and
- existence of a communication focal point with whom WHO/Europe can liaise to ensure coherence and dissemination of information, in both directions.

9.3 Advocacy for the development and implementation of healthy policies and environments across all government sectors (health in all policies)

- Communication and advocacy as a whole of government approach should include the following:
- inclusion of health communication in the work programmes, priorities and agendas of all major government initiatives and budgets, as well as those of the health sector itself;
- analysis of relevant policy development processes in different sectors and agencies;
- consideration of the ways in which different policy-makers and stakeholders in different agencies and sectors perceive health issues;
- consideration of how, where, and who makes health policy (primary advocacy targets) and what group(s) may influence decision-making processes (secondary advocacy targets) media work;
- identification of messages that will make primary and secondary groups act;
- selection of appropriate advocacy platforms, channels and approaches; e.g. campaigns, lobbying, media advocacy, internet, etc.;
- existence of fora across different sectors of government (national and local), where health communication initiatives can be explored, monitored and implemented; and
- support for press and media personnel across government to pool experience and good practice in health advocacy and communication, with the public as the beneficiary.

9.4 Public health communication training and capacity development

Training and capacity development strategies should include:

- existence of training in effective written and oral skills for communicating with different audiences on professional public health activities;
- existence of training for new social media and traditional media;
- existence of training for journalists and other communicators on public health issues, values and approaches;
- existence of specific training on risk and crisis communications; including:
  - dealing with uncertainty
  - developing and maintaining trust
- availability of communication expertise to support departments and other stakeholders to design, plan, implement and evaluate public health communications and marketing programmes;
- existence of communication staff trained in planning, implementing and evaluating market research for public health initiatives;
- existences of information technology to access, evaluate, and interpret public health data for communication and transparency purposes; and
- existence of communication specialists whose main focus is public health communication, rather than media coverage for the ministry.

9.5 Public health communication evaluation

Evaluation of communication initiatives in terms of process and health outcomes should include the following:

- awareness raising (pre-and post surveys);
- media impact;
- policy development and implementation;
- behavioural changes; and
- health impacts.

EPHO 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, innovative technologies and solutions in public health; and
- Establishment of partnerships with research centres and academic institutions to conduct timely studies that support decision-making at all levels of public health.

10.1 Country's capacity to initiate or participate in epidemiologic and public health research

Capacity for epidemiologic and public health system research should include the following:

- availability of research institutes, universities and school of public health with capacity to conduct research in public health;
- availability of a mechanism that mobilises funding sources to encourage research in public health;
- updated assessment of burden of disease and its risk factors in the country for prioritization of public health research;
- the existence of a bureau of chief scientist in the MoH at national or subnational level;
- definition of research fields in public health; and
- definition of priority areas of public health research (declaration of policy or budget allocation).

10.2 Adequacy of available resources (e.g. databases, information technology, human resources) to promote research

Capacity for epidemiologic and public health system research should include the following:

- existence of databases and information technology on a country and/or regional level;
- integration of SSII to create useful databases for epidemiologic research and public health systems;
- facilitation of access to current databases for both professionals within the system and for researchers outside the system through collaborative agreements (e.g. with other research centres, universities); and
- availability of specific research training for professionals to develop the existing methodology in research.

10.3 Planning for the dissemination of research findings to public health colleagues (e.g. publication in journals, web sites)

Capacity for epidemiologic and public health system research should include the following:

- existence of knowledge-brokering mechanisms (organizations and structures) to disseminate 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); and
- existence of networks that favour the dissemination of results as well as the rapid uptake of new knowledge.

10.4 Country's evaluation of the development, implementation, and impact of public health (and PH services) research efforts

Capacity for epidemiologic and public health system research should include the following:

- 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; and
- the evaluation of impact of public health research efforts.

10.5 Fostering innovation among staff

Fostering innovation should include the following:

- availability of time and resources for staff to pilot test or conduct experiments to determine the feasibility of implementing new ideas;
- existence of a collaborative agreement between the professionals working within the PHS system and researchers in the academic institutes or research centres to conduct research;
- integration of research performance in the culture of PHS;

10.6 Ministry of Health's research and monitoring of best practices

Points to be considered:

- identification and dissemination of best practices at a national (MoH and other national agencies) and international (e.g. EU and WHO) level; and
- Ministry of Health adoption and implementation of successful initiatives in other geographical locations, adapted as needed to the national context.

10.7 Active use of research evidence used in designing and supporting policy in the field of public health

Fostering innovation should include the following:

- availability of research evidence for use in designing and/or 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;
- development of cost–benefit analyses as part of health policy-making.

10.8 Capacity for the collection, analysis and dissemination of health information

Fostering innovation should include the following:

- availability of health information collected by the public sector;
- availability of regular and yearly health information in the national bureau of statistics;
- quality level of the information collected, analysed, and disseminated by the public health sector;
- the use of health information collected by the public sector by the health and public health sector;
- decision-making that takes into account information produced by the information system; and
- harmonization and coordination of the health information collected by different agencies and sectors.

10.9 Capacity to carry out research on the social determinants of health (and their influence on health) in order to shape and target policy

Fostering innovation should include the following:

- research on poverty levels among specific populations – including child poverty and poverty among the elderly;
- research on poverty determinants and effects in different spheres, including housing, work & unemployment, education, nutrition, drug use and other causes of socioeconomic exclusion; and
- balance in allocation of resources among research fields, as these relate to socioeconomic determinants.

10.10 Mechanisms for ensuring that policies, priorities and decision-making are consistent with evidence of effectiveness on the broader determinants of health

Fostering innovation should include the following:

- availability of research studies on the social determinants as part of decision-making process;
- use of evidence- based results of research on broader determinants of health; and
- relevance of cost-benefit or cost-effectiveness research to the decision- making process.

Annex 2: Roadmap Public Health Action Framework