Assessment of essential public health functions in countries of the Eastern Mediterranean Region

Assessment tool

World Health Organization
Regional Office for the Eastern Mediterranean

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Foreword

When I started my term as Regional Director in 2012, the first step was to reach consensus with Member States on the key health challenges that the countries of the Region face and to agree on strategic directions to address them. In this respect, we conducted a comprehensive situation analysis, in close coordination with Member States, focusing on the nature and epidemiological and health system characteristics of the challenges, the gaps and barriers to action, as well as interventions to address them and the opportunities that exist.

Five broad priorities were identified: health system strengthening, health security and communicable disease control, addressing the epidemic of noncommunicable diseases, maternal and child health, and emergency preparedness and control. These priorities were subsequently endorsed by Member States during the Fifty-ninth session of the WHO Regional Committee for the Eastern Mediterranean in October 2012 and were the focus of WHO's work over the five-year period 2012–2016.

It was clear from the situation analysis conducted in early 2012 and from my own assessment following my return to the Regional Office after many years in headquarters that despite important improvements made in health indicators over the past several decades, there was a major gap in public health capacity in most countries of the Region. The serious health challenges that these countries face were not matched with existing skills and experience and it was evident that progress in addressing the five key priorities would be impeded unless capacity in public health was strengthened. It was also clear that most of today's challenges can be tackled effectively only if the other sectors in government are engaged and multisectoral public health action is enhanced. These were the conclusions that prioritized action to expand capacity and skills in public health and related disciplines.

The assessment of essential public health functions is one of the key initiatives made to move this agenda forward in the Eastern Mediterranean Region. Our first step was to review existing frameworks initiated in other WHO regions. This was followed by the development of a framework and an implementation tool that is based on international experience and lessons learnt, taking into account global and regional public health priorities.

The overall aim of this initiative is to conduct an objective review of the different components of the public health system in Member States, identify strengths as well as areas for further improvement and provide evidence-informed plans and recommendations for improving public health capacity and performance.

The two pilot assessments conducted in Qatar and Morocco were very successful and provided important lessons for refining the assessment tool presented in this publication. More recently, we have also updated the part on the International Health Regulations by integrating the newly endorsed Joint External Assessment (JEE) tool which provides a more objective assessment of national core competencies.

I am very encouraged to see that many Member States have expressed interest and commitment to use the tool in assessing their public health capacity in 2017 and beyond. I hope that, as with the experience in Qatar and Morocco, the results of the assessment in each country will be followed by a national dialogue and a multisectoral action plan to reinforce national capacity for progress in the five regional priorities and in accelerating health sector reform and the achievement of universal health coverage.

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Introduction

Essential public health functions (EPHFs) have been defined as the indispensable set of actions, under the primary responsibility of the state, that are fundamental for achieving the goal of public health which is to improve, promote, protect and restore the health of the population through collective action *(1)*.

Several Member States in the Eastern Mediterranean Region are engaging in a process of health sector reform and development of national health strategies and are therefore open to an objective approach to evaluating their own health systems and the response to their key health challenges. Through assessment of the performance of EPHFs, countries led by their ministries of health are able to identify the strengths and weaknesses in the public health system and, based on the results, develop interventions designed to sustain good practices and bridge gaps.

In this respect, the WHO Regional Office for the Eastern Mediterranean launched in August 2013 an initiative to reinforce the capacities in public health in Member States by supporting them to assess essential public health functions and proposing corresponding action plans to bridge the gaps identified. The first step involved convening a steering group of international public health experts, chaired by the Regional Director and supported by a secretariat based in the Regional Office. The regional initiative is unique in that: i) it builds on existing initiatives in other regions to develop a framework that is relevant to the context of the Region and considers latest developments in global health; ii) the basis for the assessment tool is topic-specific WHO guidelines, assessment tools and policy recommendations, in order to foster a coherent, evidence-based approach to public health challenges; iii) it stems from the request of Member States and it is therefore owned by them and not intended to be an "external audit" of the health system; and iv) it combines a mixed approach of a national self-assessment followed by a joint external evaluation to validate the findings.

The overall purpose of this initiative is to provide evidence-informed recommendations for improving public health capacity and performance in Member States. This aim can be achieved through: i) providing a baseline status of national public health services and capacities, based on an objective assessment; ii) identifying areas of strength as well as areas for further development and actions needed at country level to strengthen EPHF; iii) convening a national policy dialogue that brings together different stakeholders to reach consensus on a proposed action plan and the way forward; iv) developing institutional capacity within the Region to undertake an assessment of EPHF.

The process of assessing EPHFs is not new and there are several assessment frameworks that have been developed as early as the 1990s (Annex 1), with a common aim: to identify areas of strength as well as areas that require further strengthening in national public health systems. The assessment of EPHFs in the Eastern Mediterranean Region provides a renewed opportunity to refine and update the methodology, as well as develop concrete and focused action plans.

Essential public health functions in the Eastern Mediterranean Region

The conceptual framework for essential public health functions for the Region identifies eight inter-related functions, four core and four enabling functions, which are necessary for a comprehensive public health system (Fig.1).

Core public health functions

1. Surveillance and monitoring of health determinants, risks, morbidity and mortality
2. Preparedness and public health response to disease outbreaks, natural disasters and other emergencies
3. Health protection including management of environmental, food, toxicological and occupational safety
4. Health promotion and disease prevention through population and personalized interventions, including action to address social determinants and health inequity

Fig. 1. Essential public health functions in the Eastern Mediterranean Region

Enabling public health functions

1. Effective health governance, public health legislation, financing and institutional structures (stewardship function)
2. Sufficient and competent workforce for effective public health delivery
3. Communication and social mobilization for health
4. Public health research to inform and influence policy and practice

According to the conceptual framework of essential public health functions for the Eastern Mediterranean Region, operational definitions have been developed for each term. This has further been the basis for development of comprehensive assessment tool. The eight functions are further broken down into a detailed list of sub-headings and sub-functions, which together constitute a comprehensive package of public health services that all Member States in the Region should aim to provide to their populations.

Approach and methodology

The scope of assessment of essential public health functions is country-wide and follows a multi-sectoral approach. It is done in close collaboration with the ministry of health, as its owner, but ensures the involvement of relevant stakeholders. The assessment is a collaborative effort between WHO and the Member State, with full ownership of the project by the national authorities.

The assessment tool provides a brief list of criteria for each item, which national public health officials and external experts can use to evaluate the adequacy, quality and comprehensiveness of the service. These criteria have generally been synthesized from topic-specific WHO guidelines, assessment tools and policy recommendations, in order to foster a coherent, evidence-based approach to public health.

The tool is unique in that it has been conceived to facilitate a broad, system-wide assessment of public health functions in Member States and to identify gaps and areas where improvement is needed. However, it is important to take into account the following considerations.

1. Tackling a major public health problem often requires contributions from all or most of the eight functions, including non-health sectors. For example, different aspects of communicable disease control are scattered throughout EPHF 1 (information systems, laboratories), EPHF 2 (emergency

preparedness), EPHF 3 (environmental, chemical and food safety) EPHF 4 (disease prevention, including immunization), EPHF 5 (governance and financing), EPHF 6 (human resources), EPHF 7 (risk communication) and EPHF 8 (research). This fragmentation is largely inevitable since the sub-functions interact through complex, multiple avenues that are related or articulated in a multidimensional way. Thus, it should be emphasized that after different sections of the tool are filled, the sections should be reviewed in an integrated manner to avoid vertical assessment of issues.

2. The level of details included in a system-wide assessment tool covering a broad field like public health. If the tool is too long, it will be too unwieldy to be operational. At the same time, if it is too short, important issues may be left out. The current list aims to balance comprehensiveness with utility, and to cover all essential issues concisely and systematically. Complementary tools, including more detailed assessment modules, can be used to assess areas identified as incomplete in the initial evaluation.
3. The assessment of the enabling functions, particularly governance and financing (EPHF 5) and public health workforce (EPHF 6), will provide a general picture of how well they are carried out, but it will not be specific enough to explore disparities in their execution between different units, departments and agencies that carry out the EPHFs. One possible way to address this problem would be to develop a generic package of horizontal sub-functions, based on the current list, which could be circulated to the different entities responsible for answering the questionnaire.

The assessment is overseen and facilitated by a team of experts, comprising internationally renowned public health experts and supported by the secretariat based in the WHO Regional Office for the Eastern Mediterranean. In addition to WHO, the team of experts which guide the assessment process are selected in collaboration with the Ministry of Health of the concerned country.

The assessment is undertaken in close collaboration with the national team, comprising national public health experts and partners. It is important to emphasize that the success of the initiative relies heavily on partnerships between different stakeholders. At national level, the assessment is a joint initiative of different partners, including:

- the Ministry of Health (or its equivalent), as the principal steward of the public health system in the country;
- other relevant sectors of the government, parliament and partners in the country (with responsibilities influencing the wider social determinants of health), such as environment, food and agriculture, industry, transport, etc.;
- leading academic institutions and “think tanks” in order to build capacity within the country and Region; and
- public health experts of international eminence with diverse expertise and experience in leading health systems and public health programmes in their own countries.

Assessment process

The pathways for assessment of EPHFs include three stages. Stage 1 is a desk review carried out by WHO, based on the experience accumulating as a result of the long-standing technical collaboration between WHO and the Member State. The different WHO technical staff provide their evaluation of the current status of capacity in implementing public health functions in their own areas of work.

Stage 2 is a self-assessment where the national public health authorities take responsibility for completing the WHO assessment tool, in advance of the WHO-guided assessment. The tool is provided to different departments and units responsible for the different public health functions to respond to the questions and then, through a national meeting, produce their own conclusions on their capacity and the areas requiring further development. The assessment tool is a comprehensive document that is not meant to be completed by one person or even by one unit within the Ministry of Health. Stage 2 will involve the following steps.

- Assembling a national steering group to oversee the assessment process at national level. Ideally, the group may consist of directors of different sectors/departments/units in the Ministry of Health and related entities.
- Completing each of the eight sections of the assessment tool by the department/sector/unit that corresponds to it. The process requires reviewing available documents, reports, strategies, and publications in support of the information needed while filling the assessment tool.
- Reviewing the sections corresponding to the eight EPHFs in an integrated way, by the national steering group to avoid any duplications/conflicting information.
- Sharing the completed tool and related documentation with WHO well in advance of the planned external assessment mission to the country.

Stage 3 is an "external" assessment where a WHO-led team of experts conduct a country mission, working closely with national public health officials. The team reviews the outcome of stages 1 and 2 and develops their own assessment based on interviews with health and relevant non-health stakeholders. The role of the WHO-led team during the second stage can be summarized as follows.

- Review documents shared by the country and the filled in assessment tool, prior to the country mission.
- Attend presentations prepared by the national team, summarizing the situation in the country in relation to each of the eight EPHFs.
- Conduct in-depth face-to-face interviews and meetings with relevant ministry of health staff, stakeholders and partners in the country (following the structure of the tool), to understand the interplay of contextual factors in the delivery of EPHFs.
- Draft an assessment report that includes the outcome of the assessment as well as a set of recommendations for improving public health services in the country, based on the responses to the tool, the presentations, site visits and parallel meetings.
- Share the report with the national authorities for their review and feedback.

Once the assessment is complete, a follow-up workshop is jointly organized (by WHO and the country) to discuss the findings of the assessment and develop a plan of action for strengthening the areas covered under the essential public health functions. The workshop brings together the relevant stakeholders at country level, under the leadership of the Ministry of Health to outline the steps that need to be taken to strengthen public health capacity and performance in the country.

Fig. 2 summarizes the steps recommended to conduct the three stages of the assessment of essential public health functions.

Instructions for completing the assessment tool

The assessment tool is intended to be completed by a coordinated team, not by one person. It should be distributed to all relevant units and departments within and outside of the Ministry of Health (or equivalent), and potentially to regional or local authorities as well. Once completed and reviewed by the national steering group for internal coherence, the questionnaire is sent to the WHO office leading the assessment (Regional Office or country office) ahead of the country mission.

To complete the sections in the tool:

- Where a box (☐) exists, the answer should be limited to a yes (☐) or no (☐) response.
- Otherwise, the answer should be a brief description of the item in question, with pertinent details as required. Whenever possible, quantitative data should be provided, but qualitative responses are also welcome. References should be mentioned when possible. If the item in question is "not applicable" to the national context, please use N/A.

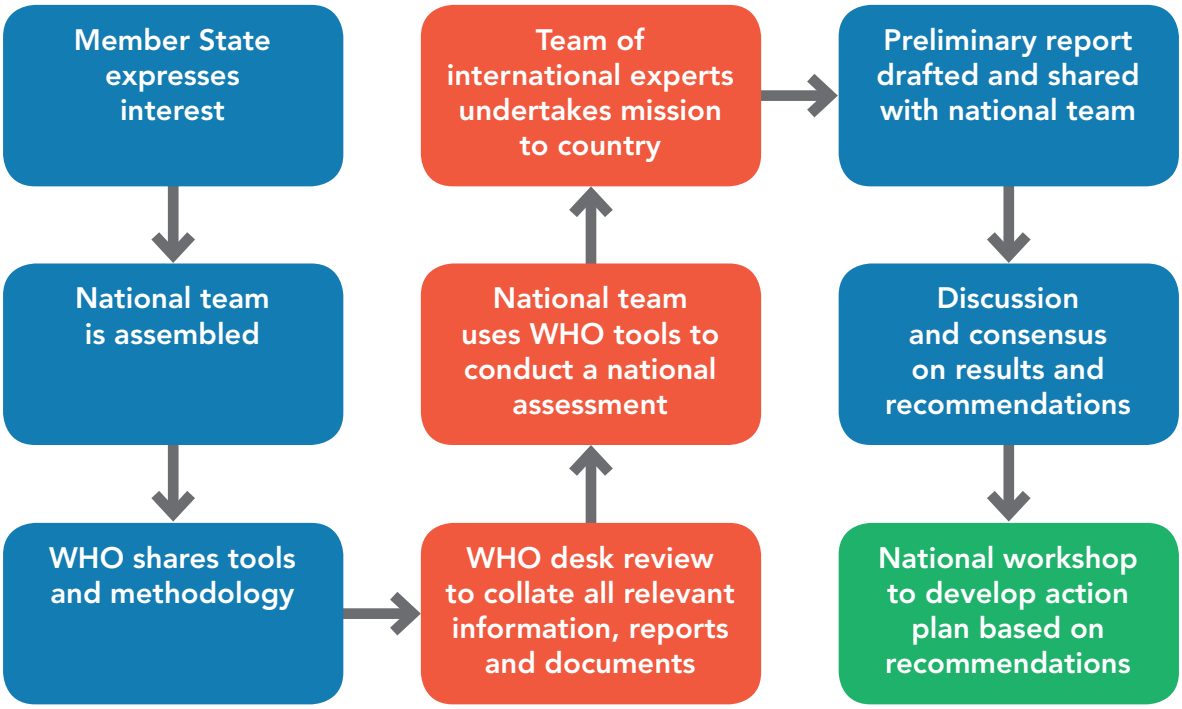

Fig. 2. Steps in the assessment of essential public health functions

In summary, several key practices differentiate the Eastern Mediterranean assessment experience from others

1. The request for assessment is made by a Member State on a voluntary basis, providing funding for the assessment to ensure ownership.
2. A "glossary of terms" is available to ensure terminology is clear and consistent.
3. Three pathways are followed for the assessment to ensure adequate sources of information, including the two-tier assessment process: self-assessment followed by a WHO-guided assessment.
4. The involvement of a national team from the early stages and throughout the process contributes to strengthening national capacity in this area and ensuring sustainability.
5. Within the WHO Regional Office, the initiative has involved all technical departments allowing an all-inclusive approach to the inter-related functions.
6. The assessment tools build on existing WHO tools and references, thereby serving as a compilation of existing WHO guidance and documents on the subject.

A glossary is included at the end of this document to ensure a common, Region-wide understanding of the concepts being evaluated. A dossier of supporting documents may also be put together to facilitate the process and support the answers made in the tool.

The EPHF assessment tool should be considered just one of several instruments used to evaluate public health services in Member States. The tool contains references to a number of other WHO guidelines, assessment tools and policy papers, which can provide a more detailed evaluation of specific areas.

References

1. Pan American Health Organization/World Health Organization (PAHO/WHO), Public Health in the Americas: Conceptual Renewal, Performance Assessment, and Bases for Action (Washington, DC: PAHO/WHO, 2002).

Assessment tool

1. Surveillance and monitoring of health-related indicators

Operational definition

This function encompasses three elements.

1. Surveillance tools and resources
2. Collection of data for subsequent action
3. Integration, analysis, reporting and use in policy development and evaluation

Scope of the function

Surveillance tools and resources

- Population surveys (MICS[1], DHS[2]), including health examination surveys
- Disease registries
- Environmental sample-taking (air, water and soil)
- Civil registration and vital statistics
- Public health laboratory system
- Health technology assessment tools
- Health expenditure surveys

Collection of data for subsequent action

- Quality and availability of data
- Health system performance
- Health management information system

Integration, analysis, reporting and use in policy development and evaluation

- Analysis of health indicators data for the purpose of health sector planning
- Compliance with International Health Regulations (2005)
- Compliance with regard to NCD monitoring reports
- Development of annual health statistical reports
- Monitoring and reporting on regional or global movements

[1] Multiple Indicator Cluster Survey
[2] Demographic and Health Survey

1.1. Surveillance tools and resources

1.1.1. Evaluate the quality of your national and international population surveys, including health examination surveys and health expenditure surveys.

Consider, providing details where appropriate:

Survey type	Population-based surveys								Facility-based surveys			
	Household-based surveys					Institution-based surveys		Community-based surveys	SARA[3] *(3)*	Exit interviews	Provider surveys	Other
	Demographic surveys (DHS, MICS and/or other), census, etc.	Health examination/interview surveys (NCDs STEPwise *(1)* or problem-specific surveys such as tuberculosis, malaria, diabetes, domestic violence surveys)	Behavioural risk surveys (GATS *(2)*)	Household expenditure surveys to estimate health expenditure	Health performance surveys (see also EPHF 1.2.4)	School tobacco survey	KAP on sexual behaviour, HIV, etc.	Bio-behavioural surveys for HIV, etc.				
Capacity to plan and conduct quality surveys												
What is the number of surveys completed in the past 5 years or longer?												
What is the interval (if 2 or more surveys were conducted)?												
What methodology is used for data quality assessment?												
Is there electronic data storage and transmission?												
Describe briefly data: • access, • dissemination, and • use (the raw data?)												

[3] Service Availability and Readiness Assessment

1.1.2. Evaluate your country's functioning disease registries.

Consider, providing details where appropriate:

Disease(s):	1. Cancer (core)	2.	3.
Which indicators are collected?			
What is the % population coverage?			
Is it ICD[4] compliant?			
Does it use the Unique Patient Identifier (UPI)?			
Is it linked with other disease registries? If yes, which ones?			
Is it linked with other population data? If yes, which ones?			
What is the methodology to assess the quality of data (or data quality assessment?)?			
Does it have electronic data storage and transmission?			
Describe briefly data: • access, • dissemination, and • use			

[4] International Classification of Diseases

1.1.3. Evaluate your country's environmental public health units (or units from other Ministries with the same functions) in charge of monitoring the quality of the environment.

(To answer in conjunction with relevant sections in **1.2.3**, dealing with quality and use of data, and in **3.1.1** and **3.2.1**, dealing with environmental protection legislation and enforcement).

Consider, providing details where appropriate:

	Air	Water	Soil
Does a dedicated unit exist with resources needed to take samples?			
What is the geographic distribution?			
Describe the methodology used?			

1.1.4. Evaluate the functioning of your country's civil registration system to record vital statistics for the population (live births, deaths, fetal deaths, marriages and divorces).

Consider, providing details where appropriate *(4)*:

Is there a legal framework for civil registration and vital statistics?	
Describe the registration infrastructure and resources	
How is the organization and functioning of the vital statistics system?	
What is the percentage of completeness of registration of births and deaths?	
Is there electronic data storage and transmission?	
Describe the ICD-compliant practices and certification within and outside hospitals	
What are the practices affecting the quality of cause-of-death data?	
Are ICD coding practices followed?	
What are the coder qualification and training, and quality of coding?	
Describe briefly data: • access • dissemination • use.	

What methodology is used to assess data quality and are plausibility checks done? • accuracy • relevance • timeliness • comparability • dissemination and use • security and privacy	

1.1.5. Evaluate your public health laboratory system (5).

Consider, providing details where appropriate:

Existence of different types and levels of public health laboratories:	General public health laboratories	Environmental public health laboratories	Other types of laboratories (hospitals, universities, private centres, etc.)
National laboratory policy (with supportive legislative framework) that defines the roles and responsibilities of laboratories at different levels			
Licensing, registration, quality management system, accreditation, and monitoring system, including data on proportion of laboratories which are participating in External Quality System (EQAS)			
Infrastructure and training for human resources. Does caseload match capacity?			
Standardized protocols, standard operating procedures for collecting, transporting, receiving, storing, labelling, testing and reporting sample data			
Reliability of domestic sample collection and transport system for collection, packaging, storage, sharing and transport of specimens			
Appropriateness of diagnostic tests and methods used at different levels of the laboratory network based on a list of priority public health risks			
Capability to conduct rapid screening and high-volume testing for routine diagnostic and surveillance needs			
Capacity to support diagnosis, confirm and report timely and reliable results in response to potential health threats, hazards, and emergencies, including detection and diagnosis of antimicrobial resistance and healthcare associated infections			
Plans to manage bio-risk, as well as procedures for ensuring biosafety and biosecurity measures in laboratory practices			

1.1.6. Evaluate health intervention and technology assessment (HITA) in your country (6).

Consider, providing details where appropriate:

Familiarity with HITA as a tool for evidence-informed decision-making on technology investments in health	
Explicit commitment from top-decision-makers on using HITA	
Presence of a well-articulated function inside the Ministry of Health or other government agency to carry out HITA *(if the answer is no, please skip the following issues in this section 1.1.6)*	
Adequacy and capacity of human resources to carry out HITA	
Adequacy of financial and physical resources	
Collaboration at national or international level	
Organizational process for HITA (transparent, participatory and accountable processes based on national guidelines)	
Dissemination and data access of HITA products	

1.1.7. Evaluate your country's epidemiological surveillance network (7,8).

Consider, providing details where appropriate:

Main characteristics:		Comments:
Existence of explicit system objectives, regarding:	☐ extent of surveillance intended ☐ relationship between collected data and subsequent decision- or policy-making	
Existence of a description of the population under surveillance, including details on the following:	☐ Topography ☐ Demography ☐ Major health problems ☐ Risk factors ☐ Mobility ☐ Healthcare provision ☐ Healthcare accessibility and coverage	
Identification of scope of surveillance system for communicable diseases and other threats, including the following:	☐ Antimicrobial resistance ☐ Health care associated infections ☐ Chemical ☐ Radionuclear ☐ Zoonotic diseases ☐ Event -based surveillance ☐ Syndrome-based surveillance ☐ Healthcare accessibility and coverage	
Existence of a list of events under surveillance, prioritized according to the following characteristics:	☐ Public health/societal importance ☐ Vulnerability ☐ Health system capacity for control ☐ International requirements	
Clear process for data transmission throughout the system, including provisions for:	☐ Detection ☐ Reporting ☐ Decision-making ☐ Communication of feedback	
Adequacy of resources:	☐ Staffing characteristics (existence of vacancies, training, workload, etc.) ☐ Equipment (availability, maintenance, and staff skills for using it) ☐ Budget (potential shortages, process for allocating additional resources)	
Overall capacity of the system:	☐ Completeness ☐ Representativeness ☐ Timeliness ☐ Simplicity ☐ Flexibility ☐ Acceptability ☐ Usefulness	

1.1.8. Evaluate your country's capacity to set up an early warning alert and response network (EWARN) to deal with challenges associated with displaced populations, whether due to unplanned emergencies (e.g. armed conflict, natural disaster) or large, planned events (e.g. sporting events, religious celebrations, etc.)(9).

Consider, providing details where appropriate:

Structure: Does a network of people and facilities to perform immediate alert functions and periodic reporting of health data exist?	
Management: Is there a designated coordinator and focal point(s) for defined geographic regions?	
Priority diseases: Is there capacity to conduct risk assessment in order to define group of priority diseases to be included in EWARN?	

Data collection, reporting, analysis and transmission: Is an electronic system in place to quickly collect and aggregate standardized data, frequently report results, analyse public health implications and clearly transmit data to relevant stakeholders?	
Outbreak preparedness: Do a multisectoral outbreak control team (OCT), outbreak response plan, standard line-list forms for data collection, and standard treatment protocols for key diseases exist?	
Alert verification and outbreak investigation: Do standard operating procedures (SOPs) in case of an alert to verify and investigate outbreak(s) exist?	
Laboratory support: Has a reference laboratory for potential performance of complex tests been identified?	
Implementation: Does an implementation team, with tools, resources and training to quickly (i.e., within three weeks) set up an EWARN exist?	
Evaluation: Is a formal evaluation of EWARN activities prepared, following acute phase of crisis?	
Exit strategy: Are protocols available to integrate EWARN activities into existing surveillance networks prior to dissolution?	

1.2. Collection of data for subsequent action

Evaluate the quality and availability of data in the following areas , providing details where appropriate:

1.2.1. Cause-specific mortality

	Compliance with ICD-10[5]/quality and comparability of data	Disaggregation of data (gender, age, migration, urban/rural, education, occupation, income, etc.)	Data storage and transmission	Data access, dissemination and use	% population coverage
Mortality between ages 30–70 due to NCD (cardiovascular disease, cancer, chronic respiratory diseases, and diabetes)					
Infectious diseases					
Maternal and child health					
Injuries and road accidents, by type and cause of lesion					

[5] International Classification of Diseases (tenth revision)

1.2.2 Selected morbidity

	Compliance with ICD-101/quality and comparability of data	Disaggregation of data (gender, age, migration, urban/rural, education, occupation, income, etc.)	Data storage and transmission	Data access, dissemination and use	% population coverage
Infectious disease surveillance, together with capacity for outbreak investigation and control					
NCD STEPwise[6] surveillance					
Mental health screening					
Maternal and child health monitoring					
Injuries and road accidents					
Hospital discharge data					

[6] WHO STEPwise approach to Surveillance of Noncommunicable Disease Risk Factors

1.2.3. Risk and determinants

	Select which indicators are monitored	Disaggregation of data (gender, age, migration, etc.)	Data storage and transmission	Data access, dissemination and use	% population coverage
Behavioural risk indicators (tobacco use, physical inactivity, unhealthy diet, alcohol use)	☐ Nutrition behaviour and risk ☐ Physical activity behaviour and risk ☐ Reproductive and sexual behaviour and risk ☐ Alcohol intake ☐ Prevalence of tobacco use ☐ Substance use and dependence behaviour and risk ☐ Other (specify)				
Biological risk factors (blood pressure, body mass index, blood glucose, blood cholesterol)	☐ Raised blood pressure (18+) ☐ Raised blood glucose (18+) ☐ Overweight ☐ Obesity				
Environmental risk indicators	☐ Access to improved drinking water ☐ Access to improved sanitation facilities				
Social determinants of health indicators	☐ Living conditions ☐ Employment conditions ☐ Social protections ☐ in place ☐ Social gradient in life expectancy ☐ Socioeconomic inequalities ☐ Political empowerment				

1.2.4 Evaluate your country's health system performance.

Consider the use of the following:

Is there a national health accounts (NHA) analysis, with data on:	☐ General government expenditure on health as % of general government expenditure ☐ Total health expenditure per capita ☐ Share of out of pocket as % of total health expenditure ☐ Population with catastrophic health expenditure ☐ Population that gets impoverished ☐ Human resources expenditure ☐ Expenditure by type and level of services and type of expenses (human resources, medicines, medical devices, capital) ☐ Expenditure by diseases
Does a health workforce observatory (or similar unit within the Ministry of Health) exist, with data on *(10)*:	☐ Density and stock of health workers (relative to population, skills mix, geographical distribution, age distribution, gender distribution ☐ Labour activity (employment rate of public health workers in their field; distribution of workers by agency, institution, and/or activity; occupational earnings) ☐ Productivity (absenteeism and provider productivity) ☐ Renewal and loss (workforce entry, national self-sufficiency, workforce loss)
Do you collect data on health care utilization, performance and user satisfaction, with data on:	☐ Service delivery: access/availability/readiness ☐ Density of health facilities (qualify this or PHC) ☐ Density of inpatient beds (hospitals) ☐ Annual number of outpatient department visits, per capita ☐ Coverage of interventions ☐ Contraceptive prevalence rate ☐ Antenatal care coverage (≥ 1 visit) ☐ Antenatal care coverage (≥ 4 visits) ☐ Skilled birth attendance ☐ DPT3-containing vaccine coverage among children under 1 year of age

	☐ Percentage of individuals who slept under an insecticide-treated net the previous night ☐ Percentage of eligible adults and children currently receiving antiretroviral therapy ☐ Treatment success rate of new bacteriologically confirmed tuberculosis cases ☐ Oral rehydration therapy (for children with diarrhea)
Is their availability of essential medicines and biomedical technologies, with data on:	☐ Average availability of 14 selected essential medicines[7] and medical products (adult scale, child scale, thermometer, stethoscope, sphygmomanometer and blood pressure cuff, and light source) in public and private health facilities ☐ National essential drug list, including data on utilization ☐ Proportion of laboratories which are participating in External Quality Assurance System (EQAS)

[7] Defined by WHO as: amitriptyline, amoxicillin, atenolol, captopril, ceftriazone, ciprofloxacin, co-trimoxazole, diazepam, diclofenac, glibenclamide, omeprazole, paracetamol, simvastatin and salbutamol

1.2.5. Provide a brief, qualitative assessment of your country's health management information system as a whole, based on the answers to questions in the previous sections.

Consider also (in addition to 1.1.1–1.2.4):

Is it only facility based?	
Does it include only the public sector, or is private included too?	
Is it a manual or an electronic system?	
Are quality checks conducted, in terms of: • regularity • completeness • accuracy of Information	
Is the health information system developed in line with health policy targets and objectives?	
Does a system exist for regular: • reporting • analysis • feedback	

1.3. Integration, analysis and reporting (also for international commitments)

1.3.1. Evaluate your country's analysis of health indicators data for the purpose of health sector planning.

Consider, providing details where appropriate:

Do you have a health system observatory?	
Do health system analysts participate during planning processes?	
Is a review of independent research or analysis on health system performance conducted?	
Are epidemiologic, socioeconomic, demographic and other data related to population health needs considered during the planning process?	
Is a comprehensive situation analysis of the health sector undertaken in preparation for health sector planning?	
Do planning processes include specific provisions for monitoring and evaluation of indicators?	

1.3.2. Consider your country's provision of updates on compliance with International Health Regulations (IHR).

Consider, providing details where appropriate:

Do you generate systematic and periodic reports on your country's implementation of IHR, according to the IHR capacities? (see 2.3)	
Are these reports used in adjusting or formulating plans for subsequent steps in the implementation process?	
Is there notification and reporting of public health events that might be of international concern to WHO? Do standard operating procedures (or a similar document) exist?	
Are there public health events that have occurred in the country and spread internationally?	
Is there collaboration with neighbouring countries to strengthen cross-border surveillance and response and with other countries to meet the IHR obligations?	

1.3.3. Evaluate your country's participation and compliance with regard to NCD monitoring reports, based on the Global NCD Action Plan (2013–2020) (11).

Consider, providing details where appropriate:

Prior to May 2014:	
Did you participate in WHO-led consultations to draft a set of action plan indicators?	
Monitoring of targets and indicators recommended by WHA (9 targets along three domains: 1) mortality and morbidity, 2) risk factors for NCDs, 3) national systems response)	
Following WHA67 in May 2014:	
Capacity to collect data on the global action plan indicators	
Capacity to generate accurate, timely reports to monitor progress on Global NCD Action Plan	

1.3.4. Evaluate your country's development of annual health statistical reports.

Consider, providing details where appropriate:

Availability of qualified human resources to carry out assessment	
Dedication of specific financial and IT resources for assessment	
Ease in accessing all sources of health indicators data and official statistics for the purpose of drafting statistical report(s)	
Production of reports targeted to different audiences (policy-makers, health system managers, researchers, the public)	

1.3.5. Evaluate your country's ability to monitor and report on regional or global movements, such as MDGs[8], Sustainable Development Goals (SDGs) and universal health coverage.

Consider, providing details where appropriate:

	MDGs	SDGs	UHC	Other regional or global health movements, if any
Clear responsibility for producing report(s)				
Availability of necessary human and financial resources				
Accuracy and quality of report(s)				
Dissemination and use of reports for policy-making, research and public accountability				

[8] Millennium Development Goals

References

1. WHO STEPS surveillance manual : the WHO STEPwise approach to chronic disease risk factor surveillance. Geneva: World Health Organization; 2005 (http://apps.who.int/iris/bitstream/10665/43376/1/9241593830_eng.pdf).
2. Global Adult Tobacco Survey Collaborative Group. Global Adult Tobacco Survey (GATS): Question by Question Specifications, Version 2.0. Atlanta, GA: Centers for Disease Control and Prevention; 2010 (http://www.who.int/tobacco/surveillance/en_tfi_gats_questionbyquestionspecifications_v2_final_24nov2010.pdf?ua=1).
3. Service Availability and Readiness Assessment (SARA): An annual monitoring system for service delivery. Geneva: World Health Organization; 2015 (WHO/HIS/HSI/2014.5 Rev.1; http://apps.who.int/iris/bitstream/10665/149025/1/WHO_HIS_HSI_2014.5_eng.pdf?ua=1).
4. Rapid assessment of national civil registration and vital statistics systems. Geneva: World Health Organization; 2010 (WHO/IER/HSI/STM/2010.1: http://apps.who.int/iris/bitstream/10665/70470/1/WHO_IER_HSI_STM_2010.1_eng.pdf).
5. Joint external evaluation tool: International Health Regulations (2005). Geneva: World Health Organization; 2016 (http://apps.who.int/iris/bitstream/10665/204368/1/9789241510172_eng.pdf).
6. Health technology assessment of medical devices. Geneva: World Health Organization; 2011 (http://apps.who.int/iris/bitstream/10665/44564/1/9789241501361_eng.pdf).
7. Protocol for the Evaluation of Epidemiological Surveillance Systems. Geneva: World Health Organization; 1997 (WHO/EMC/ DIS/97.2; http://apps.who.int/iris/bitstream/10665/63639/1/WHO_EMC_DIS_97.2.pdf).
8. Evaluating a national surveillance system. Geneva: World Health Organization; 2013 (http://apps.who.int/iris/bitstream/10665/94321/1/9789241506465_eng.pdf?ua=1).
9. Outbreak surveillance and response in humanitarian emergencies in humanitarian emergencies: WHO guidelines for EWARN implementation. Geneva: World Health Organization; 2012 (WHO/HSE/GAR/DCE/2012.1; http://apps.who.int/iris/bitstream/10665/70812/1/WHO_HSE_GAR_DCE_2012_1_eng.pdf).
10. Handbook on monitoring and evaluation of human resources for health: with special applications for low- and middle-income countries. Geneva: World Health Organization; 2009 (http://apps.who.int/iris/bitstream/10665/44097/1/9789241547703_eng.pdf).
11. Global action plan for the prevention and control of noncommunicable diseases 2013-2020. Geneva: World Health Organization; 2013 (http://apps.who.int/iris/bitstream/10665/94384/1/9789241506236_eng.pdf).

2. Preparedness and public health response to disease outbreaks, natural disasters and other emergencies

Operational definition

This function encompasses three components.

1. Planning for preparedness and response to health emergencies
2. Management of prevention and protection, mitigation, response and recovery in the event of public health emergencies and disasters that impact public health
3. International Health Regulations (2005)

This includes involvement of the entire health system and the broadest possible intersectoral and inter-institutional collaboration by developing policies and plans, and executing activities that reduce the public health impact of emergencies and disasters.

Scope of the function

Planning for prevention and preparedness

- Periodic risk and vulnerability assessments
  - > Natural hazards: meteorological (e.g. drought, heat wave, flood), geological (earthquake, landslide) and biological (pandemic/epidemic)
  - > Human-caused hazards: accidents (workplace, transportation or structural) and intentional acts (civil disturbance, strike, hostage incident, terrorism, arson, etc.)
  - > Technological hazards: utility outage, application failure, loss of connectivity, fire, explosion, hazardous material spill or release, transportation interruption
- Emergency planning
  - > Health sector/cluster operational plan for all potential emergency situations
  - > Pre-crisis mapping of "who does what where when" ("4W" matrix)
  - > Sector-specific protocols in the event of an emergency
- Coordination structure
  - > Surge mechanism
  - > Roster of available technical specialists to advise in specific situations
  - > Alert system for specific disease outbreaks and emergencies
  - > Information management (coordination between health and other civil services)

Management

- Capacity to implement early response plan and mobilize resources
- Relief operations
- Surge deployment
- Recovery and reconstruction
- Rehabilitation

International Health Regulations (2005)

- Fostering global partnerships
- Public health capacities for surveillance and response
- Public health security
- Management of specific risks
- Sustaining rights, procedures and obligations
- Performance of studies to track progress

2.1. Planning for emergency preparedness *(1)*

2.1.1. Evaluate the quality of the risk and vulnerability assessments carried out in your country, based on an all hazard/whole health approach (2).

Consider:

HAZARD IDENTIFICATION

		Are the following considerations included in health risk assessment (check where yes)?:				
	What is the periodicity of consultation? (answer "n/a" if no consultation takes place)	Generation of hazard maps at a national and regional level	Likelihood of an event	Risk to human health (immediate, aftermath and long-term)	Risk to provision of essential health services	Risk to other sectors with influence on health (environment, economy, industry, etc.)
Natural hazards						
Biological						
pandemic/epidemic		☐	☐	☐	☐	☐
food/waterborne diseases (including diarrhoeal illnesses)		☐	☐	☐	☐	☐
other (specify)		☐	☐	☐	☐	☐
Meteorological						
drought		☐	☐	☐	☐	☐
heat wave		☐	☐	☐	☐	☐
flood		☐	☐	☐	☐	☐
storm		☐	☐	☐	☐	☐
other (specify)		☐	☐	☐	☐	☐
Geological						
earthquake		☐	☐	☐	☐	☐
landslide		☐	☐	☐	☐	☐
other (specify)		☐	☐	☐	☐	☐
Human-caused hazards						
Accidents						
transportation		☐	☐	☐	☐	☐
structural		☐	☐	☐	☐	☐
private industry (mines, oil fields energy plants, etc)		☐	☐	☐	☐	☐
Intentional acts and societal hazards						
civil disturbance		☐	☐	☐	☐	☐
strike in essential services		☐	☐	☐	☐	☐
massive influx of migrants/refugees		☐	☐	☐	☐	☐
hostage incident		☐	☐	☐	☐	☐
terrorism		☐	☐	☐	☐	☐
mass gatherings or events (sporting, religious, etc.), with potential for clustering of environmental risks or syndromes		☐	☐	☐	☐	☐

HAZARD IDENTIFICATION	other (specify)		☐	☐	☐	☐	☐
	Technological hazards (with a focus on mass casualty events)						
	chemical		☐	☐	☐	☐	☐
	radio-nuclear		☐	☐	☐	☐	☐
	utility outage		☐	☐	☐	☐	☐
	fire		☐	☐	☐	☐	☐
	explosion		☐	☐	☐	☐	☐
	hazardous material spill or release		☐	☐	☐	☐	☐
	transportation interruption		☐	☐	☐	☐	☐
	other (specify)		☐	☐	☐	☐	☐

2.1.2. Evaluate institutional framework for health emergency preparedness (3).

Consider, providing details where appropriate:

Does a national policy or strategy on preparedness to emergencies, including for the health sector exist?	**(if no, proceed to section 2.2)**
Does the policy prescribe:	
a formal, multi-disciplinary emergency preparedness and response programme for the health sector at the national level?	
a formal, multi-disciplinary emergency preparedness and response programme for the health sector at the provincial level?	
the development of a national, multi-disciplinary health emergency preparedness and response plan, covering all IHR-related hazards?	
the conduct of regular simulation exercises at all relevant levels?	
Is the concept of health security explicitly reflected in relevant areas of foreign policy?	
Does a multisectoral committee on emergency preparedness and response which includes a representative from the Ministry of Health, who has clearly defined roles and responsibilities exist?	
Does a well-defined, full-time Emergency Preparedness and Response Unit within the Ministry of Health exist (see also 2.1.5)?	
Other comments or considerations	

2.1.3. Evaluate the quality and comprehensiveness of your country's health sector emergency plan.

Consider:

	Yes	**No**
Does a law, ministerial decree or explicit plan detailing the health sector response to an emergency situation exist? (if no, proceed to section 2.2)	☐	☐
Is the plan:		
developed and maintained by a specific health sector planning committee (ex. emergency preparedness team)?	☐	☐
based on results of vulnerability assessment?	☐	☐
explicitly linked to national, multisectoral plan?	☐	☐

Does the plan describe:		
standard operating procedures (SOPs) for all hazards identified in the risk and vulnerability assessment?	☐	☐
sector command and control arrangements, including a strategic health operations centre?	☐	☐
roles and responsibilities of all health sector actors (primary care, hospitals, laboratories, etc.)?	☐	☐
roles and responsibilities of all health stakeholders (including private sector, nongovernmental organizations and volunteers)?	☐	☐
logistic platforms and emergency information systems?	☐	☐
public information and alert systems?	☐	☐
measures to protect and prepare health care facilities?	☐	☐
the resources necessary to respond to each type of emergency?	☐	☐
precise need for trainings and capacity development?	☐	☐
the roles of community at different phases of emergencies?	☐	☐
Does the plan include sections on the following stages of an emergency?		
Prevention and protection	☐	☐
Mitigation	☐	☐
Response	☐	☐
Recovery	☐	☐

2.1.4. Evaluate your country's coordination structure, in the event of an emergency.

Consider, providing details where appropriate:

Does a national, regional, and/or international surge mechanism and focal point(s) to coordinate support in the case of an emergency exist?	
Do you have a roster of available technical specialists to advise in specific situations?	
Is there an alert system for specific disease outbreaks and emergencies?	
Information management (coordination between health and other civil services)	
Capacity to coordinate action through the Inter-Agency Standing Committee (IASC)	

2.1.5. Evaluate the appropriateness of other activities, projects and/or programmes carried out by the Emergency Preparedness and Response Unit or other responsible authority in the Ministry of Health in your country.

Consider, providing details where appropriate:

Are there public awareness programmes on general risks and emergencies, planned and executed in cooperation with all relevant stakeholders?	
Is there a developed risk communication plan with the involvement of all stakeholders? Does the plan include a rumor management component?	
Do you conduct simulation exercises and/or drills?	
Is there an "After action review" (following an actual public health emergency event response)?	
Other activities, programmes or projects (if not covered elsewhere in section 2.1)	

2.2. Management of prevention and protection, mitigation, early response and recovery in the event of public health emergencies and disasters that impact public health.

2.2.1. Evaluate your country's capacity to prevent potential emergencies and/or protect human health in the case of an emergency.

Consider, providing details where appropriate:

Where relevant, is there capacity to predict where and when a specific emergency may occur, through the use of intelligence (in the case of societal hazards) or forecasting systems (in the case of meteorological hazards)?	
Is there capacity to produce real-time data on public health threats (see also 1.1.8 on use of EWARN) in public information and alert system, including an electronic real-time reporting system?	
Maintenance of key systems pertaining to prevention of emergencies and the protection of health in the event of an emergency (food and water safety systems, critical infrastructures, e.g. dams, etc.)	
Is there civil surveillance (e.g. border authorities, police, weather forecasting services, etc.) for all relevant hazards and threats, as identified in risk and vulnerability assessment?	
Are there access control, screening and identity checks, in case of biological threats or to protect against human-caused hazards?	
Protection of supply chain through contingency plans or back-up systems (energy, food, water, essential medicines, etc.)	
Are you involved in international surveillance networks for the rapid sharing and receiving information on potential public heath event?	

2.2.2. Evaluate your country's capacity to mitigate the impact of emergencies with potentially harmful effects on human health.

Consider, providing details where appropriate:

Leadership of community efforts (public and non-public) to develop a set of operational actions to improve resilience	
Systems aimed at reducing long-term vulnerability to public health hazards (e.g. environmental zoning codes, building safety codes, etc.)	Based on results from risk assessment

2.2.3 Evaluate your country's capacities to respond to an emergency event after it has happened or while it is being produced.

Consider, providing details where appropriate:

Capacity to define public health risks with existing information systems	
Capabilities within the public information and alert system to quickly relay important messages to and from various sources (civil, health, governmental, nongovernmental and international actors), adapting the media channels to on-ground emergency conditions	
Capacity to maintain operational coordination (including through the IASC) under rapidly changing and unpredictable circumstances, including through the use of an emergency, operational communication system	
Existence of a National Emergency Operations Centre (EOC) covering public health related issues with a written standard operating procedures for managing any event of public health concern	
Adherence to ethical codes and norms (e.g. do no harm) during relief operations	

Capacity to implement early response plan and quickly mobilize necessary resources	
Capacity to provide critical transportation to and from emergency zone (evacuation of people and animals; delivery of response personnel and equipment)	
Availability of hazard-specific guidance and resources for responders and the affected population	
Fatality management resources, including body recovery and victim identification; temporary mortuary solutions; interaction with mass care services to reunite families and transfer remains of fatal victims; and bereavement support.	
Stabilization of critical infrastructure and management of health and safety threats	
Provision of mass care services to hydrate, feed, shelter and protect populations most affected by emergency, and to reunite families	
Search and rescue capabilities (personnel, services, animals, and assets) to save as many endangered lives as possible	
Capacity to quickly make the emergency area safe for responders and the affected population	
Provision of emergency health and medical services to affected population (including pharmaceuticals, blood, medical supplies, etc.), with the aim of avoiding additional disease and injury	
Access to regional and global diagnostic and curative health services that are not available at the national level	
Maintenance of routine essential medical services for people suffering chronic conditions (e.g. dialysis, medication, etc.)	
Capacity to assess overall situation while it is occurring (including assessment of needs/gaps), and to provide all relevant actors with operational information regarding the extent of the hazard, cascading effects, and the status of the response operation	

2.2.4. Evaluate your country's capacity to provide recovery and rehabilitation services after the acute phase of an emergency event.

Consider, providing details where appropriate:

Capacity to mobilize resources needed in recovery efforts, including specific resources to restore health services	
Capacity to clearly communicate the operational steps and timeline of recovery efforts to population	
Capacity to maintain operational coordination structure, and to maintain the engagement of all necessary actors in long-term recovery efforts	
Capacity to efficiently restore vital infrastructures which may have been destroyed during emergency event	
Capacity to restore health and social services, and to provide for lingering health and social needs (including psychological) after the emergency event	

2.3. Implementation of International Health Regulations (2005) *(4,5)*

Please note that this section may overlap with other sections in the EPHF. In this case, provide a brief, qualitative assessment summarizing your answers elsewhere, and referring to them if necessary.

Has the country conducted a Joint External Evaluation (JEE) for IHR capacity assessment?	
If yes, has a national plan of action been developed following the JEE to build and maintain the IHR capacities?	

2.3.1. Evaluate how effectively your country has been in fostering global partnership with regard to the implementation of IHR (2005).

Consider, providing details where appropriate:

Training and implementation activities	
Activeness of government's role in IHR (2005) implementation	
Engagement in resource mobilization activities at a national level	
Provision or management of international funds for the implementation of IHR (2005)	

2.3.2. Evaluate your country's strengthening of national public health capacities for surveillance and response.

Consider, providing details where appropriate:

Ability to assess alert, investigate and response capacity, perform gap analysis and develop and implement national action plans to prevent, detect, and respond to public health threats, taking into account the most likely events.	
Existing of coordination structure in the country among the different IHR stakeholders and with the national IHR focal point with an established mechanism for the sharing of information.	
Mapping of potential hazards in the country and the development of a public health preparedness and response plan based on the identified potential hazards.	(see also 2.1.1)
Past, ongoing or planned work with WHO to conduct in-country joint assessments for the development and implementation of action plans	
Performance of training activities to strengthen capacity for disease prevention, surveillance, risk assessment, control and response (such as field epidemiology training programmes)	

2.3.3. Evaluate your public health security in travel and transport.

Consider, providing details where appropriate:

Designation of points of entry (airports, seaports, ground-crossing) for the implementation of the IHR and sharing the list with WHO	
Capacity of designated points of entry to rapidly implement international public health recommendations tested through an exercise or simulation/drill	
Sanitation and hygiene at facilities used by travellers at designated points of entry, including in vectors and reservoirs	
Establishment of measures at designated points of entry in compliance with IHR (2005) for travellers, conveyances, cargo, goods and postal parcels	
Availability of operational contingency plan for public health emergencies at all designated points of entry that is integrated with the national public health plan for preparedness and response to all hazards.	
Coordination between the competent authority at the designated points of entry and the national IHR focal points	
Integration of surveillance activities at the designated points of entry with the national surveillance	
Identification of list of ports authorized to issue ship sanitation certificates and the sharing of the list with WHO with annual update on this list	
Coordination with neighbouring countries through bilateral agreement or multilateral agreements on cross-border surveillance and response activities	
Existence of coordination between WHO and other relevant UN and intergovernmental organizations, industry associations and travel-related professional associations	

2.3.4. Evaluate your country's management of specific risks.

Consider, providing details where appropriate:

Surveillance and early warning: identification and prioritization of specific risks at national and international level; appropriateness of mechanisms for surveillance and early warning implemented and maintained	
Risk reduction: opportunities for risk reduction are identified and implemented (e.g. exposure reduction, health communication, vaccination, safe clinical management) and collaborative cross cutting mechanisms for risk reduction initiatives established and maintained (e.g. zoonosis and the animal–human interface).	
Preparedness and readiness: implementation of international and national preparedness and readiness measures for response and containment of these threats (e.g. pandemic influenza, yellow fever, epidemic meningococcal disease, SARS, accidental or deliberate release). Response readiness is reinforced and improved through practice in exercises and real events.	
Stockpiling: Coordination with international mechanisms for stockpiling critical supplies (vaccines, drugs, personal protective equipment (PPE)) for priority threats	
Research: coordination of upstream and operational research to characterize and assess risk, and develop and test new interventions implemented	
Maintenance of international programmes for key threats	

2.3.5. Evaluate how comprehensively the country sustains rights, procedures and obligations.

Consider, providing details where appropriate:

Familiarity among national public health officials and other stakeholders with the legal provisions laid out in IHR (2005) and capacity to ensure their full and effective implementation	
Public health laws and legislation are reviewed, aligned, updated and enacted to meet the requirements of IHR (2005)	
The country designation of the national IHR focal point with annual confirmation of the designation to WHO	
Adaptation of national public health legislation to facilitate the implementation of IHR (2005) including the roles and functions of the national IHR focal point	
The ability of the national IHR focal point for the immediate notification of public health events of potential international concern to WHO IHR contact point and the continuous reporting of comprehensive information about these events.	
The access of the country to the Event Information Site (EIS) for the sharing of information on public health events of potential international concern.	
Existence of knowledge and understanding of the legal provisions in IHR (2005) among all relevant national staff	
Coordination with WHO through national IHR focal points and assembly of pool of experts for the rapid constitution of an IHR Emergency Committee and/or an IHR Review Committee.	

2.3.6. Evaluate your country's performance of studies to track progress in the implementation of IHR (2005).

Consider, providing details where appropriate:

Performance of regular assessments on progress made and/or difficulties encountered during IHR (2005) implementation, using the IHR monitoring framework.	
Cooperation with WHO to receive technical support and guidance on an ongoing basis according to the strengths and weaknesses identified in these assessments.	
Existence of studies or changes to improve the implementation of the Regulations.	

References

1. Toolkit for assessing health-system capacity for crisis management. Copenhagen: WHO Regional Office for Europe; 2012 (http://www.euro.who.int/__data/assets/pdf_file/0010/157888/e96188.pdf?ua=1).
2. Risk reduction and emergency preparedness: WHO six-year strategy for the health sector and community capacity development. Geneva: World Health Organization; 2007 (http://www.who.int/hac/techguidance/preparedness/emergency_preparedness_eng.pdf).
3. Global Assessment of National Health Sector Emergency Preparedness and Response. Geneva: World Health Organization; 2008 (http://www.who.int/hac/about/Global_survey_inside.pdf).
4. Joint external evaluation tool: International Health Regulations (2005). Geneva: World Health Organization; 2016 (http://apps.who.int/iris/bitstream/10665/204368/1/9789241510172_eng.pdf).
5. International Health Regulations (2005): Areas of work for implementation. Geneva: World Health Organization; 2007 (WHO/CDS/EPR/IHR/2007.1; http://www.who.int/ihr/finalversion9Nov07.pdf).

3. Health protection including management of environmental, food, toxicological and occupational safety

Operational definition

This function encompasses three components.

1. Institutional capacity to develop regulatory frameworks to protect population health
2. Evaluation and enforcement mechanisms
3. Management and mitigation of risks

Scope of the function

Legal and regulatory framework for health protection in the following areas, and in line with regional and global priorities and commitments

- Environmental standards and regulations
- Occupational health protections and guidelines for industry
- Health codes for food safety (production, transport, distribution, labelling, marketing, sale)
- Smoke-free laws in line with the Framework Convention on Tobacco Control
- Road safety framework
- Consumer product safety norms, including on import/exports
- Specific laws and regulations pertaining to patient safety
  - > Pharmaceutical safety and medical devices
  - > Human blood, organs and tissue
  - > Clinical safety norms

Supervision/monitoring and enforcement mechanisms

- Audits of water, air and soil quality
- Occupational hazards reporting system and workplace inspections
- Food chain monitoring
- Coordinated resource mobilization (including with other civil servants such as police)
- Effective penalties for infractions

Management and mitigation of risks

- Information and communication
- Existence of incentives for preventive actions
- Institutional capacity to respond to hazards
- Performance of studies to track progress

3.1. Legal and regulatory framework for health protection in the following areas, and in line with regional and global priorities and commitments

3.1.1 Evaluate the strength of your country's regulatory framework in the area of the environment.

Consider how the country regulates the levels of key contaminants in the following areas (check boxes if "yes"):

Indoor air				
Do guideline values and health based targets for key indoor contaminants *(1)* exist?				
Are product standards and building codes and ventilation guidelines, covering source control and pollutant dispersion developed?				
Outdoor air				
Do guideline values and health based targets for key outdoor contaminants *(2)* exist?				
Are there regulations or bans on the production, import, export and use of certain chemicals, in line with UN standards *(3)*?	Ratification and compliance with Montreal Protocol			☐
	Ratification and compliance with Stockholm Convention			☐
	Ratification and compliance with Rotterdam Convention			☐
	Signing of Minamata Convention			☐
Stationary sources of emissions regulations, including provisions for:	Pollution prevention and control	☐	Regulation of conventional pollutants, radiation, and radioactive substances	☐
Mobile sources/vehicle emissions	Performance standards for on-road and off-road vehicles	☐	Efficiency incentives	☐
Water				
Drinking water	Existence of guideline values and health based targets for a list chemical, biological and radiological contaminants *(4)*	☐	Existence of periodic review of contaminants by an independent (not the service provider) agency or unit dedicated to protecting human health	☐
Wastewater	Regulation and control of industrial wastewater treatment and release	☐	Regulation and control of reuse of treated wastewater in Agriculture *(5)*	☐
	Municipal wastewater treatment standards	☐	Standards and control of effluents	☐
Freshwater	Standards protecting the quality of surface water	☐	Standards protecting the quality of groundwater	☐
Coastal water (if applicable)	Standards protecting wetlands, estuaries and drainage basins	☐	Standards protecting coastal ecosystems from pollution	☐
Soil				
Guidelines	List of soil contaminants and permissible levels			☐
Contamination	Regulations covering release of industrial contaminants to terrestrial environment	☐	Regulations covering release of agricultural contaminants to terrestrial environment	☐
	Regulations covering integrated management of solid waste (municipal, hazardous, medical)	☐		☐
Development	Regulations covering remediation and development of contaminated land for human use			☐

3.1.2. Evaluate the strength of your country's occupational health and safety protections (6).

Consider, providing details where appropriate:

Existence of a national policy document on protection of workers' health, meeting the following criteria:	
Has been developed with the participation of different ministries and key stakeholders, including industry and worker representatives	
Includes mechanisms for intersectoral coordination of activities	
Includes provisions for resource mobilization and funding	
Integrates objectives and actions for workers' health into national health strategies	
Includes specific programmes or measures aimed at promoting occupational health equity, including for workers in high-risk sectors (including health care workers), and for vulnerable populations (migrants, women, the disabled, young workers and elderly workers)	
Health promotion and protection in the workplace	
Existence of general and sector specific regulations, setting minimum standards for worker health and safety	
Definition of essential interventions for prevention and control of mechanical, physical, chemical, biological, ergonomic and psychosocial risks in the working environment.	
Capacity building for primary prevention of occupational hazards	
Workplace health promotion programmes	
Performance of and access to occupational health services	
Occupational health services package integrated into national health strategy and health care delivery system	
Availability of occupational health services to all workers, including specific programmes targeting workers in the informal economy, agriculture and small enterprises	
Occupational health policies incorporated into other national policies	
Consideration of workers' health in economic development policies, poverty reduction policies, immigration policies and trade policies, through specific policies or measures mentioning worker health	
Consideration of workers' health in employment policies, including through calculations on a minimum wage, environmental protections, and others	
Consideration of workers' health in sector-specific policies	

3.1.3. Evaluate the quality of your country's food safety regulations (7).

Consider, providing details where appropriate:

Institutional framework for food protection	
Existence of a single food agency (or a network of coordinated food control agencies) with the legal mandate and authority to act at all stages of food production	
Existence of a national food safety policy, with specific objectives and measurable targets using the Hazard Analysis Critical Control Point system (HACCP) *(8)*	
Food safety regulations in line with current Codex standards in the following areas:	
Production	
Transport	
Storage	
Labelling	
Marketing	
Sale	

3.1.4. Evaluate the degree of your country's implementation of the legal/regulatory aspects of the WHO Framework Convention on Tobacco Control (9).

Consider, providing details where appropriate:

Is tobacco use banned in all public places?	
Are tobacco product contents regulated?	
Are tobacco product disclosures regulated?	
Packaging and labelling of tobacco products	
Is there a comprehensive ban on the advertising, promotion and sponsorship of tobacco products?	
Is the ban on advertising promotion and sponsorship enforced?	
Is there a ban on tobacco sales to minors?	
Is the country a party to the WHO FCTC and its protocol?	
Do you monitor the tobacco epidemic through regular surveillance system for youth and adults?	
Protection from second hand tobacco smoke	
Are tobacco use cessation services integrated into primary health care?	
Are at least 50% pictorial health warnings on all tobacco packs implemented to warn people from tobacco use?	
Are taxes on tobacco products raised? (%)	

3.1.5. Evaluate the adequacy of your country's road safety framework (10).

Consider, providing details where appropriate:

1. At the multisectoral level	
National road-safety policy	
Safety of road infrastructure (repair, signage, etc.)	
Safety of broader transport network (including availability of public transport)	
Safety of vehicle fleet relative to international crash test standards	
Licensing, permits and preventive incentives and/or sanctions (e.g. graduated license system, point system) for drivers	
Consideration of the needs of pedestrians, cyclists, and motorcyclists	
Current comprehensive[9] road safety laws to minimize key risk factors	
Speed limits	
Drinking and driving	
Motorcycle helmets	
Seatbelts	
Child restraints	
Other (specify)	
2. Within the Ministry of Health	
Injury prevention including road safety	
Existence of a programme	
Existence of a strategy/plan	
Dedicated human resources	
Specific funding	
Linkages with HIS and trauma care services	
Linkages with national multisectoral mechanism/structure	

[9] Comprehensive laws entail that urban speed limits are ≤50 km/hr while allowing local authorities to modify the national limits; mandatory seatbelt use covers all vehicle occupants; drink–driving law is based on a blood alcohol concentration limit for the general population of ≤0.05 g/d); and helmets cover all riders, all types of roads and all engines with the existence of national helmet standards.

3.1.6. Evaluate your country's safety regulations with regard to consumer products, including on imports/exports.

Consider, providing details where appropriate:

Existence of general product safety norms, applicable to all consumer products			
Existence of legislation dealing with specific product areas:	Toys	☐	Others (specify):
	Chemicals	☐	
	Cosmetics	☐	
	Machinery	☐	
System for alert, market withdrawal or recall, and sanction in case of non-compliance with product safety norms			
Operational knowledge of international safety norms for exports			
Reporting system for unsafe products, considering both imports and domestically produced goods			
Existence of a consumer protection law			

3.1.7. Evaluate your country's laws and institutional framework for protecting patient/ providers safety.

Consider, providing details where appropriate:

Existence of practice standards to guarantee patient safety in a clinical setting	
Existence of licensing, accreditation, and safety standards for health care facilities, covering hygiene, ventilation and equipment repair	
Existence of specific regulations to ensure the safe collection, transport, storage and use of blood, tissues and organs	
Established system for reporting and monitoring adverse events	
Existence of specific regulations, protocols or standards to address the safety and quality assessment of health care facilities and programmes.	
Specific control systems to ensure the safety of pharmaceutical and non-pharmaceutical medical products and medical devices	
Existence of safety standards for traditional/alternative medicine	
Existence of patient rights and responsibilities statement	
Existence of a drug information and poison centre	

3.1.8. Evaluate other laws in your country that protect human health.

Describe, providing details where appropriate:

	Legislation and/or regulations	Monitoring and Enforcement
Regulations on the marketing, labelling and sale of alcoholic beverages		
Specific protections for the disabled or other vulnerable groups (equal opportunity employment, access to public buildings, etc.)		
Legal protections to promote breastfeeding		
Housing standards		

3.2. Supervision/monitoring and enforcement mechanisms

3.2.1. Evaluate your country's supervision, monitoring, and enforcement mechanisms in the area of environmental safety.

Consider, providing details where appropriate:

The number and quality of audits carried out on air, water and soil samples, in a variety of settings (urban/rural; agricultural/ industrial; in vulnerable areas, etc.), and considering representativeness (at local, subnational and national level)	Indoor and outdoor air	
	Drinking water	
	Surface and groundwater	
	Wastewater	
	Coastal water and zone	
	Soil	
Coordination of resources and strategies with related ministries (e.g. industry, agriculture, environment) and enforcement services		

3.2.2. Evaluate your country's occupational hazards reporting system and workplace inspections.

Consider, providing details where appropriate:

Existence of a national information system on occupational hazards, with capacity to estimate burden of occupational diseases and injuries	
Existence of registries for major occupational risks, including diseases, accidents and injuries	
Existence of strategy to improve early detection and reporting	
Coordination of resources and strategies with related ministries (e.g. industry, labour), major stakeholders (unions, guilds, professional associations and societies, industry representatives) and civil enforcement/ inspection services	
Adequacy of workplace audits in terms of quantity and quality; diligent follow-up of offenders	

3.2.3. Evaluate your country's monitoring of food safety.

Consider, providing details where appropriate:

Existence of a food control agency responsible for monitoring and enforcement activities	
Monitoring of food safety is process-based and audits are conducted at every step of food production (harvest, processing, transport, storage and sale)	
Appropriateness of training and professional standards for food inspectors	
Performance of risk-based audits	

3.2.4. Evaluate your country's monitoring and enforcement of road safety.

Consider, providing details where appropriate:

Existence of a national multisectoral (integrated) information system on road safety	
Existence of system to ensure safety and operability of both new (prior to sale) and functioning (currently in use) vehicles	

Sustained or increased enforcement of traffic laws, including proper coordination with police and other enforcement services	
Mandatory insurance for all car drivers and all cars	
Existence of a unit, independent from the construction company, to monitor road infrastructure safety and develop strategies to reduce risks	

3.2.5. Evaluate your country's monitoring and enforcement of patient safety standards and regulations.

Consider, providing details where appropriate:

Existence of quality assurance units in every hospital, and units to assist other primary and specialized health care facilities	
Performance of internal quality control procedures in all health care facilities	
Performance of external quality assessment procedures in all health care facilities (ex. certification, accreditation)	
Rigour of re-accreditation procedures of health care facilities and professionals, based on performance, continuous training, and compliance with quality and safety standards	
Existence of information system to track hospital acquired infections and preventable adverse effects	
Monitoring activities to track the use of new health technology (medicines, diagnostic equipment and clinical procedures)	
Existence of activities to empower patients regarding patient safety problems	
Existence of activities directed toward promoting patient safety culture	

3.3. Management and mitigation of risks

3.3.1. Evaluate your country's capacity to inform and communicate with key stakeholders to manage and mitigate risks.

Consider, providing details where appropriate:

Area	**Fluidity of communication and collaboration between the Ministry of Health and these stakeholders**				
	Other government ministries	Laboratories and information systems	Civil services	Community stakeholders (industry, labour, agriculture)	General population
Environmental safety					
Occupational health and safety					
Food safety					
Road safety					
Consumer safety					
Patient safety	n/a				
Chemical safety					
Radio-nuclear safety					

3.3.2. Evaluate to what degree incentives/sanctions for prevention and voluntary compliance are built into health protection systems.

Consider, providing details where appropriate:

	Existence of clear guidelines, quality assurance systems, and technical assistance	Sanctions are scaled based on recurrence and severity of offenses	Knowledge on risks is promoted among stakeholders	Use of fiscal incentives or disincentives
Environmental safety				
Occupational health and safety				
Food safety				
Road safety				
Consumer safety				
Patient safety				

3.3.3. Evaluate your country's institutional capacity to respond to hazards.

Consider, providing details where appropriate:

	Existence of independent mandate and authority by lead enforcement agency to halt dangerous practices	Capacity to develop national strategies to improve indicator-based outcomes	Capacity to implement said strategies	Overall effectiveness of enforcement and sanctioning system in controlling risks to public health
Environmental safety				
Occupational health and safety				
Food safety				
Road safety				
Consumer safety				
Patient safety				
Chemical safety				
Radio-nuclear safety				

References

1. WHO guidelines for indoor air quality: selected pollutants. Copenhagen: WHO Regional Office for Europe; 2010 (http://www.euro.who.int/__data/assets/pdf_file/0009/128169/e94535.pdf?ua=1).
2. WHO Air quality guidelines for particulate matter, ozone, nitrogen dioxide and sulfur dioxide: Global update 2005. Copenhagen, WHO Regional Office for Europe; 2006 (http://www.euro.who.int/__data/assets/pdf_file/0005/78638/E90038.pdf?ua=1).
3. United Nations Environment Programme [website]. Nairobi: United Nations Environment Programme; 2016 (http://www.unep.org/).
4. Guidelines for drinking-water quality – fourth edition. Geneva: World Health Organization; 2011 (http://apps.who.int/iris/bitstream/10665/44584/1/9789241548151_eng.pdf).
5. WHO guidelines for the safe use of wastewater, excreta and greywater. Geneva: World Health Organization; 2006 (http://apps.who.int/iris/bitstream/10665/78265/1/9241546824_eng.pdf).
6. Workers' health: global plan of action. Geneva: World Health Organization; 2007 (WHA60.26; http://www.who.int/occupational_health/WHO_health_assembly_en_web.pdf?ua=1).
7. Assuring Food Safety and Quality: Guidelines for Strengthening National Food Control Systems. Rome: Food and Agriculture Organization and World Health Organization; 2003 (http://www.fao.org/docrep/006/y8705e/y8705e00.htm).

8. Hazard analysis and critical control point (HACCP) system and guidelines for its application. Annex to CAC/RCP 1-1969, Rev. 3. Codex Alimentarius; 1997.

9. WHO Framework Convention on Tobacco Control. Geneva: World Health Organization; 2003 (http://apps.who.int/iris/bitstream/10665/42811/1/9241591013.pdf?ua=1).

10. Global Plan for the Decade of Action for Road Safety 2011–2020. Geneva: World Health Organization; 2011 (http://www.who.int/roadsafety/decade_of_action/plan/global_plan_decade.pdf).

4. Health promotion and disease prevention through population-based interventions, including action to address social determinants and health inequity

Operational definition

This function includes two components.

1. Disease prevention, understood as specific interventions for primary, secondary (early detection) and tertiary (including rehabilitation) prevention, aiming to minimize the burden of diseases and associated risk factors. Primary prevention refers to actions aimed at avoiding the manifestation of a disease, while secondary prevention deals with early detection when this improves the chances for positive health outcomes.
2. Health promotion is the process of empowering people to increase control over their health and its determinants through health literacy efforts and multisectoral action to increase healthy behaviours.

Disease prevention and health promotion share many goals, and there is considerable overlap between functions. On a practical level, it may be convenient to also characterize individual-based disease prevention services as those primarily concentrated within the health care sector, and population-based disease prevention and health promotion services as those that depend on intersectoral actions and/or are concerned with the social determinants of health.

Scope of the function

Disease prevention

- Primary prevention services and activities include:
  - > Vaccination and post-exposure prophylaxis of children, adults and the elderly;
  - > Provision of information on behavioural and medical health risks, and measures to reduce risks at the individual and population levels;
  - > Inclusion of disease prevention programmes at primary and specialized health care levels, such as access to preventive services (ex. counseling); and
  - > Nutritional and food supplementation; and
  - > Dental hygiene education and oral health services.
- Secondary prevention includes activities such as:
  - > Population-based screening programmes for early detection of diseases;
  - > Provision of maternal and child health programmes, including screening and prevention of congenital malformations; and
  - > Provision of chemo-prophylactic agents to control risk factors (e.g. hypertension)

Health promotion

- Policies and interventions to address tobacco, alcohol, physical activity and diet (e.g. FCTC *(1)*, DPAS *(2)*, alcohol strategy and NCD "best-buys")
- Dietary and nutritional intervention should also appropriately tackle malnutrition, defined as a condition that arises from eating a diet in which certain nutrients are lacking, in excess (too high in intake), or in the wrong proportions

(continued)

- Intersectoral policies and health services interventions to address mental health and substance abuse
- Strategies to promote sexual and reproductive health, including through health education and increased access to sexual and reproductive health, and family planning services
- Strategies to tackle domestic violence, including public awareness campaigns; treatment and protection of victims; and linkage with law enforcement and social services

Support mechanisms for health promotion and disease prevention

- Multisectoral partnerships for health promotion and disease prevention
- Educational and social communication activities aimed at promoting healthy conditions, lifestyles, behaviour and environments (see EPHF 7)
- Reorientation of health services to develop care models that encourage disease prevention and health promotion

4.1 Primary, secondary and tertiary disease prevention

4.1.1 Evaluate the health system's vaccination programme.

Consider, providing details where appropriate:

Political commitment and legal basis	
Is there a law/decree making vaccination mandatory?	
Is there a national immunization policy?	
Is there a comprehensive multiyear plan (cMYP) and annual workplan?	
Are vaccines and vaccination provided free of charge?	
Vaccination calendar for the following groups, according to evidence-based recommendations *(3,4)*:	
Children	
Adults	
Elderly	
Persons exposed to a communicable disease	
Related information programmes (*linked to EPHF 1 and 7):	
Vaccination register and reporting system	
Links with other information systems	
Information/communication campaigns for policy-makers, parents, educators and the general population	
Appropriateness of resources	
Budget line and adequate budget according to objectives	
Adequate number and distribution of qualified professionals to implement the programme at different levels (national/provincial/district/health facility)	
Adequate supply of WHO prequalified vaccines and injection equipment	
Access	
Easy, free access to vaccinations for all target populations	
National/district level vaccination coverage of different antigens	
Concordance between administrative vaccination coverage and results of coverage surveys	
Strategies for special groups/hard to reach populations	

4.1.2. Evaluate the health system's capacity to provide information on behavioural and medical health risks, and to implement measures to reduce risks at the individual and population levels

Consider, providing details where appropriate:

Is there explicit collaboration between public health institutions and health care facilities (especially primary care), with regard to population-based information campaigns?	
Do protocols or incentives exist that support the provision of health information at the primary care and hospital level?	
Is actionable information on behavioural health risks in the general population, within the health care services sector, available?	
Health professionals' capacity and tools to provide tailored health advice to patients to inform them of medical and behavioural risks associated with their particular condition	

4.1.3. Evaluate the adequacy of disease prevention programmes at primary and specialized health care levels.

Consider, providing details where appropriate:

Are specific health counseling services at primary and specialized health care levels available, in the following areas:	
Smoking cessation	
Other addiction services	
Nutrition and diet	
Oral health	
Reproductive health	
Cardiovascular health	
Hygiene and sanitation	
Testing and other clinical preventive services:	
Performance of routine physical examinations, including blood testing, blood pressure readings, eye and hearing exams, etc., for defined populations	
Infection prevention and control	

4.1.4. Evaluate the provision of nutritional and food supplementation.

Consider, providing details where appropriate:

Describe criteria for coverage of costs (if they exist) for nutritional supplements (e.g. iron, Vitamin D) from health system	
Describe specific programmes to address maternal and early childhood nutrition, including provision of food supplementation when advised	

4.1.5. Evaluate population access to oral health services.

Consider, providing details where appropriate:

Availability of (and access to) oral health and hygiene counseling within the health system	
Access to and affordability of basic dentistry services	

4.1.6. Evaluate your country's secondary prevention (screening) programmes for the early detection of disease.

Consider, providing details where appropriate:

Quality assessment criteria	List diseases for which screening is available (add additional columns if necessary)		
	1.	2.	3.
Clarity of responsibilities for coordination and service provision			
Strength of evidence- base			
Integration into broader disease control programmes, e.g. cancer control programmes			
Population-based, not opportunistic			
Population coverage (%)			
Linked with disease registry and other information systems			
Monitoring and assessment			
Mean time between abnormal test result and medical diagnosis			

4.1.7. Evaluate your country's provision of maternal and child health programmes.

Consider, providing details where appropriate:

Are there specific information systems or registries to track indicators on maternal and/or child health?	
Is there availability and access to family planning services, for all women of reproductive age?	
Is there availability and access to prenatal and postnatal care for all pregnant women?	
Quality of childbirth facilities, services and professionals	
Is there a screening programme for congenital malformations?	
Are there specific programmes to support breastfeeding?	
Is early childhood development programmes provided, including regular check-ups, preventive services and healthy child development services?	
Are there social support systems, for example through fiscal support to families, parenting education, provision of quality child care for children under six, etc.?	
Is there strategic and operational coordination with other actors (international donors, educational system, women's health services, etc.)?	

4.1.8. Evaluate your country's provision of chemoprophylactic agents to control risk factors for disease.

Consider, providing details where appropriate:

Is there a defined list of chemoprophylactic drugs and criteria used to determine coverage by the public health care system?	
Is there appropriate detection of risk factors and follow-up among patients who may benefit from such drugs?	

4.2. Health promotion

4.2.1. Evaluate your country's cross-cutting policies and interventions to address the main behavioural risk factors for noncommunicable diseases.

Consider, providing details where appropriate:

Risk factor	Tobacco	Alcohol	Unhealthy diet and malnutrition	Physical inactivity
Is there a national, multisectoral strategy, based on international standards and guidelines?	See FCTC	See WHO global strategy *(5)*	(Joint strategies tackling unhealthy diet and physical activities are frequent, but not necessary; see the WHO global strategy on diet, physical activity and health (DPAS)	
Alternatively, is there a comprehensive plan tackling the control of NCDs *(6)*?				
Are there specific measures to tackle risk factors among vulnerable populations?			†	
Is there a comprehensive legal framework supporting reduction of risk factors?	*			
Is there operational involvement of other major sectors in implementation of interventions, including industry, urban development, agriculture, education and transport?				

*See also section 3.1.4 on the legal/regulatory aspects of the Framework Convention on Tobacco Control

† Includes interventions to address malnutrition, including food fortification and nutritional supplementation

4.2.2 Evaluate your country's implementation of "best buy" interventions to control noncommunicable diseases (7), either as part of a national strategy or independently.

Consider:

Risk factor/disease	"Best buy" interventions
Tobacco use*	☐ Tax increases ☐ Health information and warnings
Harmful alcohol use	☐ Tax increases ☐ Restricted access to retailed alcohol ☐ Bans on alcohol advertising
Unhealthy diet and physical inactivity	☐ Reduced salt intake in food ☐ Replacement of trans fat with polyunsaturated fat ☐ Public awareness through mass media on diet and physical activity
Cardiovascular disease and diabetes	☐ Counselling and multidrug therapy for people with a high risk of developing heart attacks and strokes (including those with established cardiovascular disease) ☐ Treatment of heart attacks with aspirin
Cancer	☐ Hepatitis B immunization to prevent liver cancer ☐ Screening and treatment of pre-cancerous lesions to prevent cervical cancer†

*See also section 3.1.4 on the legal/regulatory aspects of the Framework Convention on Tobacco Control

†See 4.1.6 on basic quality assessment criteria for screening programmes

4.2.3. Evaluate your country's intersectoral policies addressing mental health and substance abuse.

Consider, providing details where appropriate:

Mental health *(8)*	
Performance of needs assessment research; generation of policy reports to obtain a comprehensive picture of mental health needs in the country	
Is there a national, multisectoral strategy addressing mental health?	
Does specific legislation to protect human rights and foster the inclusion of persons with mental illness exist?	
Are social services for prevention, promotion and rehabilitation linked?	
Substance abuse	
Performance of needs assessment research; generation of policy reports to obtain a comprehensive picture of substance abuse patterns in the country	
Is there a national, multisectoral strategy addressing substance abuse?	
Are information campaigns for the prevention of substance abuse conducted?	
Is there linkage with related health programmes, e.g. mental health, HIV, alcohol?	

4.2.4. Evaluate your country's programmes and policies to promote sexual and reproductive health.

Consider, providing details where appropriate:

Availability and access to affordable, over-the-counter contraception for the entire population	
Do specific programmes addressed to sex workers and other high risk populations (e.g. adolescents, people living with HIV) exist?	

4.2.5. Evaluate your country's policies to control domestic violence and violence against women (9).

Consider, providing details where appropriate:

Existence of explicit political commitment to protecting women's human rights	
Equal legal rights with regard to owning property, access to divorce, and custody rights after separation	
Existence of a national, multisectoral plan to address violence against women	
Engagement with male political, social and religious leaders to denounce violence against women	
Information system to monitor domestic violence and violence against women	
Primary prevention interventions to address domestic and/or sexual violence	
Public awareness campaigns to undermine population acceptance	
Prioritization of the prevention of child abuse	
Integration of programmes against abuse into related programmes, e.g. HIV/AIDS, adolescent health, sexual and reproductive health, maternal and child health, etc.	

Safety of physical environments for women	
Involvement with the education sector	
Safe school environment for girls; skills-based education covering gender issues; promotion of girls' education and empowerment	
Health sector response	
Existence of specific, sensitized protocols within all areas of health services to respond to women suspected of being the victims of domestic or sexual violence	
Use of reproductive/family planning services as entry point to support for victims	
Social support for women living with violence	
Community-based strategies to identify and support victims, ensuring confidentiality and safety	
Sensitization of criminal justice system	
Comprehensive review of criminal justice system to identify areas in need of improvement; sensitization of professionals to increase understanding of crimes and their victims	
Research and collaboration	
Context-specific research on the causes of violence and effective prevention/protection strategies	
Collaboration with donors and international organizations to scale up or implement plans	

4.3. Support mechanisms for health promotion and disease prevention

4.3.1. Evaluate your country's capacity for multisectoral action with regard to health promotion and disease prevention programmes.

Consider, providing details where appropriate:

Existence of mechanisms to promote intersectoral collaboration and leadership, e.g. ministerial tables	
Mixed methods of financing disease prevention and health promotion programmes, within and outside the health sector	
Performance of health impact assessments (HIA) on full range of national policies *(10)*	

4.3.2. Evaluate the existence of education and communication programmes for disease prevention and health promotion (see also EPHF 7 to assess the quality *of such programmes).*

Consider:

Topic areas related to disease prevention and health promotion		Health education in primary and secondary school	Information campaigns based in the health care settings	Traditional mass media and social media campaigns
	Vaccination	☐	☐	☐
	Screening	☐	☐	☐
	Hygiene and sanitation	☐	☐	☐
	Tobacco	☐	☐	☐
	Nutrition	☐	☐	☐
	Physical activity	☐	☐	☐
	Alcohol	☐	☐	☐

Topic areas related to disease prevention and health promotion	Cardiovascular disease and diabetes	☐	☐	☐
	Cancer	☐	☐	☐
	Sexual and reproductive health, including prevention of sexually transmitted infections	☐	☐	☐
	Mental health	☐	☐	☐
	Domestic and sexual violence	☐	☐	☐
	Illicit substance abuse	☐	☐	☐

References

1. WHO Framework Convention on Tobacco Control. Geneva: World Health Organization; 2003 (http://apps.who.int/iris/bitstream/10665/42811/1/9241591013.pdf?ua=1).
2. Global strategy on diet, physical activity and health. Geneva: World Health Assembly; 2004 (http://www.who.int/dietphysicalactivity/strategy/eb11344/strategy_english_web.pdf).
3. WHO recommendations for routine immunization - summary tables [website]. Geneva: World Health Organization; 2016 (http://www.who.int/immunization/policy/immunization_tables/en/).
4. WHO Recommendations for Routine Immunization: A User's Guide to the Summary Tables. Geneva: World Health Organization; 2012 (http://www.who.int/immunization/policy/routine_immunization_table_guidelines_en.pdf?ua=1).
5. Global strategy to reduce the harmful use of alcohol. Geneva: World Health Organization; 2010 (http://www.who.int/substance_abuse/msbalcstragegy.pdf).
6. Global action plan for the prevention and control of noncommunicable diseases 2013-2020. Geneva: World Health Organization; 2013 (http://apps.who.int/iris/bitstream/10665/94384/1/9789241506236_eng.pdf).
7. From Burden to "Best Buys": Reducing the Economic Impact of Non-Communicable Diseases in Low- and Middle-Income Countries. Geneva: World Economic Forum and World Health Organization; 2011 (http://www.who.int/nmh/publications/best_buys_summary.pdf?ua=1).
8. The WHO mental health policy and service guidance package: Checklists and 13 user-friendly modules to support policy development and service planning [website]. Geneva: World Health Organization; 2016 (http://www.who.int/mental_health/policy/essentialpackage1/en/).
9. WHO multi-country study on women's health and domestic violence against women: summary report of initial results on prevalence, health outcomes and women's responses. Geneva: World Health Organization; 2005 (http://www.who.int/gender/violence/who_multicountry_study/summary_report/summary_report_English2.pdf).
10. Health Impact Assessment (HIA) [website]. Geneva: World Health Organization; 2016 (http://www.who.int/hia/tools/process/en/).

5. Assuring effective health governance, public health legislation, financing and institutional support

Operational definitions

1. Governance includes evidence-based policy development that informs decision-making on issues related to public health by upholding the key governance principles of fairness, accountability, transparency and participation.
2. Public health legislation includes the institutional capacity to formulate health legislation, especially public health laws and regulations that enable actions to prevent disease, and protect and promote public health by ensuring proper, consistent and timely compliance with the regulatory and enforcement frameworks.
3. Institutional support implies ensuring that effective organizational structures and mechanisms are in place to ensure effective delivery of health promotion, disease prevention and health protection interventions.
4. Financing is concerned with the collection, pooling, allocation of resources, purchasing and procurement mechanisms to cover population health needs.

Scope of the function

Governance

- National government commitment to health and health equity as an explicit priority in national policy
  - > Participatory healthy public policy based on health in all policies (HiAPs) concept
- National strategies, policies and plans for public health
  - > Cross-sectoral planning process
  - > Consideration of international health developments
  - > Definition of responsibilities for implementation
  - > Structural, process and outcome indicators linked to time-based targets
- Quality assurance schemes
- System for monitoring and periodic evaluation of effectiveness

Public health legislation

- Capacity for developing and implementing the appropriate national legislation to improve public health and promotion of healthy environments, aligned with regional and global commitments
- Effective structures, resources and processes for enforcement of public health and health-in-all-policies legislation and regulations.
- Adoption of transparent audit and accountability mechanisms across planning and implementation processes

Institutional support

- Institutional capacity and skills that enable the implementation of health-in-all-policies by adopting a multisectoral approach
- Institutional structures or platforms for the appropriate implementation of key public health functions (e.g. national public health institutes, health protection agencies, centers for diseases control and prevention or other structural mechanisms)

(continued)

Financing and resource allocation

- Existence of budget lines for both systematic and emergency public health services
- Allocation of resources based on principles of equity and cost-effectiveness
- Purchasing and procurement mechanisms linked to public health planning

5.1. Governance

5.1.1. Evaluate the strength of your national government's commitment to health and health equity as an explicit priority in national policy.

Consider, providing details where appropriate:

Existence of explicit political commitment to population health as a national priority, at a constitutional level or from the Head of State or of Government	
Detailed consideration of health on the developmental agenda	
Existence of specific national priorities related to improving the health of vulnerable populations, including women, children, ethnic minorities, migrants and the poor	
Existence of a clear national strategy to support universal access to primary care	
Leadership and support for a health in all policies (HiAP) approach, from the executive branch of government	

5.1.2. Evaluate the clarity and coherence of the organizational structure of the Ministry of Health (or equivalent) and its linkage to all the independent public agencies on health.

Consider, providing details where appropriate:

Clear organigram with lines of designated responsibilities and accountability	
If relevant, existence of structures/mechanisms to coordinate local, subnational and national levels of action	
Designated structures to manage and plan primary health care and specialized health care, with adequate coordination between them	
Explicit public health care perspective, with functions clearly integrated into health care and social systems	

5.1.3. Evaluate the planning and implementation of your national strategies, policies and plans for public health.

Consider, providing details where appropriate:

Participatory, cross-sectoral structures in designing and implementing policies, including with nongovernmental stakeholders	
Policymaking informed by evidence, through research briefs, green papers, scientific advisors, or other means	
Implementation plan incorporated into national strategies, policies and plans	
Structural, process and outcome indicators linked to specific, time-based targets	

Consideration of international health developments, through development of national strategies in line with broad global developments or objectives (SDGs, NCDs *(2)*, AMR, etc.)	
Clear lines of institutional responsibility and accountability	
Explicit mechanisms to ensure transparency and public accountability	

5.1.4. Evaluate the health system's strategic approach to quality assurance (1).

Please note that patient safety, an important dimension of quality, is also dealt with in EPHF 3.1.7 and 3.2.5.

Consider the execution of these steps within the strategy cycle, providing details where appropriate:

1. Stakeholder participation	
Existence of a clear process for involving key stakeholders	
Existence of a list of all key stakeholders	
Clear terms of reference for all involved	
2. Situational analysis	
Consideration of existing contextual factors related to quality assurance, including: Current structures and systems in the Ministry of Health National policies and national health policies National health goals and priorities Health system performance and current quality interventions	
The availability and quality of quantitative and qualitative information, and policy-makers' consideration of this evidence in policy	
3. Confirmation of health goals	
Existing consensus that quality improvement interventions are aligned with broader health goals	
4. Development of quality goals	
Existence of specific, measurable, time-bound goals related to six dimensions of quality: Effectiveness Efficiency Safety Accessibility Acceptability Equity	
5. Choice of quality improvement interventions	
Consideration of a range of interventions across six domains of governance: Leadership Information Population and patient engagement Regulation and standards Organizational capacity Care models	
Implementation plan, including definition of responsibilities, resources, timetable, operational steps, methods of communication and accountability, milestones and monitoring	
6. Implementation	
Oversight by stakeholder steering committee	
Capacity to adapt resources, timetable and interventions based on progress and emerging evidence	
Collaborative leadership approaches	
7. Monitoring progress	
Use of existing information resources	

Operability of any new information systems	
8. Overall approach to quality assurance:	
The capacity of the units responsible for quality in MoH to plan, implement, monitor and evaluate quality assurance programmes.	
Health care accreditation mechanisms and schemes for all facilities and services, both public and private	
Clinical governance	
Total quality management programmes	

5.2. Public health legislation

To analyse content of specific areas of public health legislation, see EPHF 3.1.

5.2.1. Analyse your Ministry of Health's capacity to develop, enact and implement appropriate national legislation to improve public health and promotion of healthy environments and behaviours, aligned with regional and global commitments (3).

Consider the execution of the following stages in the development of public health law:

1. Formulation of law	
Adoption and transposition of international health laws (e.g. treaties), human rights laws (e.g. the International Bill on Human Rights) and current international developments in the field of health law	
Access to a complete collection of all primary and secondary law that impacts upon health	
Articulation of how new public health law(s) will contribute to achieving broader policy goals	
Detailed knowledge, within the Ministry of Health, of the legislative process and the accepted drafting style of legislation	
Is there capacity to incorporate specific requirements for implementation and enforcement into draft legislation (e.g. reporting requirements, auditing requirements)?	
Is there capacity to work with other ministries in the formulation of cross-cutting legislation?	
2. Enactment stage	
Is there capacity to prepare explanatory notes or summaries to accompany the draft legislation, summarizing its intention, its policy context, and its basic provisions?	
Is there capacity to prepare translations (if necessary) or otherwise adapt draft to parliamentary language?	
Is there capacity to expedite the discussion, debate and ratification of laws in legislative forums?	
3. Operation/implementation	
Is there country capacity to implement legislation in a timely manner, whether this is done in stages or at once?	

5.2.2. Evaluate the structures, resources and processes for the enforcement of public health and health-in-all-policies (4,5) legislation and regulations.

See also EPHF 3.2 on the supervision/monitoring and enforcement mechanisms for public health law, and 3.3 on management and mitigation of risks.

Consider, providing details where appropriate:

Enforcement structures	
Existence of a strong mandate or authority from public health agencies or the Ministry of Health with regard to enforcement of public health legislation	

What is the quality of operational coordination with law enforcement or civil enforcement agencies?	
Do reporting systems to collect intelligence on possible infractions exist?	
Are there built-in accountability mechanisms?	
Is there linkage with relevant information systems?	
Resources	
Are there adequate and sustainable financial resources dedicated to monitoring, follow-up and potential prosecution of criminal cases?	
Are there adequate human resources, with regard to number of staff and staff training?	
Are there sufficient technical and physical resources needed for enforcement?	
Processes	
Do integration and coordination exist between enforcement agencies?	
Is there a balance between: a. rigour of enforcement; and b. administrative/financial burden on those being monitored?	
Are there incentives for voluntary compliance and/or prompt rectification upon detection of offense?	
Is there a transparency of audits, with possibility to appeal decisions?	

5.3. Institutional support

5.3.1. Evaluate your health system's approach to capacity-building with regard to skills and structures that enable the implementation of health-in-all-policies by adopting a multisectoral approach.

Consider, providing details where appropriate:

Is there linkage among information systems, within the health sector; between the health sector and other sectors; and between national and international sources?	
Is there knowledge-brokering and knowledge transfer, to facilitate evidence-based policies?	
Are there trust- and communication-building activities among different government ministries and actors, e.g. ministerial tables, etc.?	
Do you conduct training workshops on health topics for policy-makers across government?	
Do you conduct training workshops on health topics for civil servants in key positions (social workers, educators, etc.)?	
Are there specific mechanisms to improve coordination of resources and objectives?	
Does an empowered multi-sectoral task-force/committee / body exist that is responsible for dealing with health issues?	

5.3.2. Evaluate the creation or support for institutional structures and platforms necessary for the implementation of key public health functions.

Consider, providing details where appropriate:

	Are adequate resources provided to support functioning of the following:	Are strategies developed to improve performance of the following:	What is the capacity to recruit, train and retain meritorious staff for the following:
National Public Health Institutes			
Public health protection agencies			

Centre(s) for disease control and prevention			
Research institutions			
Laboratories	(see also 1.1.5)		
Units/departments of public health within Ministry of Health			

5.4. Financing and resource allocation

5.4.1. Evaluate the adequacy of the public health budget in the following areas.

Consider, providing details where appropriate:

	Does a budget line dedicated to public health exist, in these areas:	Do contingency clauses or flexible budget lines exist in case of changing circumstances:
Primary care		
Specialized/hospital care		
Health technology procurement		
Enforcement agencies		
Emergency services		
Laboratories		
Public health institutions (see 5.3.2)		
Other sectors		

5.4.2. Evaluate the appropriateness of the criteria used when making decisions on resource allocation for public health.

Consider, providing details where appropriate:

Is there alignment of resource allocation with service planning?	
Is health equity considered as a key criteria (allocation is based on estimated need, rather than current use)?	
Is the burden of disease considered as a key criteria?	
Performance of cost-effectiveness, budget impact and capacity to deliver analyses before selecting interventions	
Is allocation of resources for training and salaries in line with strategies to retain staff?	

References

1. Quality of care: a process for making strategic choices in health systems. Geneva: World Health Organization; 2006 (http://apps.who.int/iris/bitstream/10665/43470/1/9241563249_eng.pdf).
2. Framework for action to implement the United Nations Political Declaration on noncommunicable diseases, including indicators to assess country progress by 2018. Cairo: WHO Regional Office for the Eastern Mediterranean; 2015 (WHO-EM/NCD/121/E; http://applications.emro.who.int/docs/Framework_action_implement_UN_political_declaration_NCD_October_2015_EN.pdf?ua=1).
3. Enhancing health policy development: A practical guide to understanding the legislative process. Manilla: WHO Regional Office for the Western Pacific; 2004 (http://www.wpro.who.int/health_services/documents/enhancing_health_policy_dev.pdf).
4. Health in all policies: Helsinki statement. Framework for country action. Geneva: World Health Organization; 2014 (http://apps.who.int/iris/bitstream/10665/112636/1/9789241506908_eng.pdf?ua=1).
5. Health in all policies: training manual. Geneva: World Health Organization; 2015 (http://apps.who.int/iris/bitstream/10665/151788/1/9789241507981_eng.pdf?ua=1).

6. Assuring a sufficient and competent workforce for effective public health delivery

Operational definitions

This function includes two components.

1. Strategic areas for action, in the following areas: human resource management systems, leadership, partnership, finance, education and policy.
2. Human resource development cycle, including situational analysis, planning, implementation and monitoring and evaluation.

Scope of the function

Generation of human resources

- Human resource planning, including:
  - > Public health workforce profile (that includes health, environment, food, agriculture and live-stock sectors, etc.)
  - > Linkage with long-term public health strategies and plans
- Coordination of human resource planning between ministries of health and institutions of higher education
- Accredited institutional programmes of training for public health professionals
- Implementation of continuous training programmes for active public health workers, including clinical practitioners and healthcare support staff
- Certification and licensing based on established norms and standards
- Ethical recruitment standards in line with WHO Code of Practice

Distribution, retention and performance evaluation of public health workforce

- Improved conditions for health care professionals
- Increased opportunities for career advancement
- Incentives to retain physicians and nurses in countries and regions with human resource shortages
- Prioritization of management training
- Periodic re-certification procedures based on performance and up-to-date training

6.1. Strategic areas for action *(1)*

6.1.1. Evaluate your country's human resource management systems in the field of public health.

Consider, providing details where appropriate:

Do independent evaluation report(s) exist that cover the aspects described below:	
Organizational aspects of personnel systems	
Explicit ground rules regarding staffing policies, including recruitment, hiring and deployment	
Work environment and conditions	
Employee relations	
Workplace safety	
Gender equity	
Job satisfaction and career development	
Human resources information system	
Integration of data sources to ensure timely availability of accurate data required for planning, training, appraising and supporting the workforce	
Performance management	
Performance management system (giving consideration to public health roles and responsibilities)	
Performance appraisal	
Supervision	
Productivity	

6.1.2. Evaluate aspects related to the leadership and management of your human resources for public health.

Consider, providing details where appropriate:

Is there explicit, high-level support for human resource advocates?	
Is there a leadership development programme for managers at all levels?	
Clarification of public health roles and responsibilities for health care workers	
Do effective multisectoral and sector-wide collaborations exist?	
Capacity of public health institutions and professional associations to provide leadership amongst their constituencies	

6.1.3. Evaluate the existing structures and agreements for strategic partnerships in the development of human resources for public health.

Consider, providing details where appropriate:

Are there mechanisms, structures and processes for multi-stakeholder cooperation (interministerial committees, health worker advisory groups, observatories, donor coordination groups)?	
Is there explicit collaboration between academic institutions and government in the generation of human resources for public health?	

Are there public–private sector agreements to support public health programmes?	
Do specific mechanisms exist to promote community involvement in the governance and provision of public health services?	

6.1.4. Evaluate the financing of human resources for public health in your country.

Consider, providing details where appropriate:

Are salaries and allowances competitive for public health professionals in local labour market?	
Is there inclusion of respective budget lines for salaries, allowances, education, incentive packages and other compensation for public health professionals?	
Are specific processes under way to mobilize funding for public health human resources?	With: ☐ Government ☐ International organizations ☐ Donors ☐ Other

6.1.5. Evaluate the education component of the development of human resources for public health in your country.

Consider, providing details where appropriate:

General human resource issues, as they pertain to core public health professionals	
Ratio of graduates of pre-service training programmes to projected demand by type of health worker	
Attrition of students in pre-service training programmes	
Periodic updates of pre-service curricula	
In-service training coordination and evaluation mechanisms	
Student/teacher ratios by pre-service institutions and cadres	
Public health curricula	
Is there a standard curriculum covering detailed knowledge, skills and values for public health specialists, at:	☐ Undergraduate level ☐ Graduate level ☐ Post-graduate level ☐ Continuous education
Is there a core public health component covering basic public health functions within medical curricula for:	☐ Doctors ☐ Nurses ☐ Other key health care professionals
Is there a public health component, covering basic public health functions, within multidisciplinary curricula for other undergraduate or graduate studies?	Examples include: ☐ Journalism ☐ Public policy ☐ Education ☐ Environment ☐ Other

6.1.6. Evaluate the policies pertaining to human resource development in public health.

Consider, providing details where appropriate:

Do specific professional standards, licensing and accreditation systems exist?	
Do authorized scopes of practice for public health cadres exist?	
Is there a national strategy for human resources in public health; or is a public health component included in a national strategy for human resources in health?	

Adequacy of employment law and rules for civil service and other employers.	
Are there policies that encourage the involvement/ engagement/employment of non-medical individuals as public health professionals?	

6.2. Human resource development cycle *(2)*

6.2.1. Evaluate the comprehensiveness of the situational analysis phase in your human resource development strategy.

Consider the following elements of the planning process, providing details where appropriate:

Availability and quality of data related to the health workforce and the current and future demand for health services, for example in the following areas:	☐ Workforce supply ☐ Deployment ☐ Staff retention and attrition ☐ Staff productivity ☐ Service needs and outputs ☐ Private health sector data	
Are resources (human, financial and technical) available for data processing and analysis? See 6.1.4		
Are tools to project future HR needs *(3)* available and utilized?		
Are complementary studies or analyses performed on the health workforce?		

6.2.2. Evaluate the planning phase in your human resource development strategy.

Consider, providing details where appropriate:

Is there leadership from senior Ministry of Health officials?		
Is there an agreement on strategic objectives, and their alignment with broader health and development policies and plans?		
Is involvement of key stakeholders clearly defined?	Key stakeholders, in addition to the Ministry of Health: • Ministries of finance, education and labour • Professional associations • Public service commission • Academic institutions • Development partners and major nongovernmental organizations participating in health service provision (if relevant)	
Do planning and implementation structures exist, including:	• Interministerial working group • Task force or national coordinating mechanism dedicated to human resources development • Steering committee in charge of oversight	
Is there a planning timeframe?		

6.2.3. Evaluate the implementation phase in your human resource development strategy.

Consider, providing details where appropriate:

Availability and distribution of resources	
Are responsibilities clearly defined for each major actor?	
Are baseline data established, with a set of indicators to work towards?	
Are there mechanisms to adjust actions based on new evidence or changing circumstances?	

6.2.4. Evaluate the monitoring and evaluation phase in your human resource development strategy.

Consider, providing details where appropriate:

Does a routine monitoring process exist to track agreed-upon indicators in each action domain?	
Are periodic progress reports generated, for the purposes of accountability and to identify areas in need of adjustment?	

References

1. Human resources for health action framework [website]. Geneva: Global Health Workforce Alliance; 2016 (https://www.capacityproject.org/framework/).
2. Models and tools for health workforce planning and projections. Geneva: World Health Organization; 2010 (http://apps.who.int/iris/bitstream/10665/44263/1/9789241599016_eng.pdf).
3. Hall T. Human resources for health: Models for projecting workforce supply and requirements. Geneva: World Health Organization; 2001 (http://www.who.int/hrh/tools/models.pdf).

7. Communication and social mobilization for health

Operational definition

This function captures the following dimensions.

1. Strategic health communication planning
2. Multisectoral participation in the organization and implementation
3. Monitoring and evaluation

Scope of the function

- Communication strategy incorporated into priority public health programmes
  - > Vision, measurable objectives, clearance procedures, methods of evaluation
  - > Seeking community opinion
  - > Message framing based on target audiences
  - > Utilization of different media (from traditional media to mobile applications and online social media)
  - > Countering unhealthy marketing campaigns
- Organization of communication and social mobilization
  - > Responsibilities of various staff and networking
  - > Partnership with private media and marketing firms
  - > Interaction with civil society promoting public health issues
- Evaluation of the communication and social mobilization efforts/activities
- Linkage and synergy with relevant/key stakeholders

7.1. Communication strategies within public health programmes *(1)*

7.1.1 Evaluate how well a communication strategy is integrated into priority public health programme planning in your country.

Consider, providing details where appropriate:

Does the Ministry of Health explicitly consider communication as a strategic tool for public health?			
Are there specific staff within the Ministry of Health dedicated to health communication?			
	Priority public health programmes (add more columns if necessary)		
	1.	2.	3.
Is there inclusion of a communication strategy within programme planning?			
Is there a pilot phase to test communication messages, materials and concepts with different target audiences?			
Are messages, materials, concepts and media adapted based on target audiences?			
Is there consideration of multidirectional communication (to consumers; from consumers; among consumers; among health system actors, etc.)?			
Is there consideration of multidirectional risk communication to and from affected communities and civil society networks			
Do tactics exist to counter unhealthy marketing campaigns?			
Is there use and monitoring of different media (traditional, broadcast, mobile, online, social media, etc.)?			

7.1.2. Evaluate the organization and resource use of communication and social mobilization efforts in your country.

Consider, providing details where appropriate:

Organization	
Are responsibilities defined, among ministry of health staff, health system actors and external partners?	
Do public–private partnerships (PPPs) in the design and implementation of a marketing strategy exist?	
Is there involvement with community leaders and local issue-driven groups?	
Is there interaction with international organizations, for benchmarking, integration with international communication campaigns and sector wide approaches (SWAps)?	
Resource utilization and use	
Is there generation of resources and service agreements both within health system and beyond (private sector, communications industry, aid organizations, etc.)?	
Is there utilization of low-cost media (e.g. mobile technology, radio, internet) to optimize resource use?	
Are the scope and target audience of communication programmes properly adapted to resource availability?	

7.1.3. Assess your country's capacity to monitor and evaluate your public health communication campaigns.

Consider, providing details where appropriate:

Is there a clear vision, measurable objectives, clearance procedures, target audience(s) and methods of evaluation?	
Are periodic evaluations and subsequent refinement of communication strategy performed?	
Are quantitative and qualitative measurements used to assess campaign(s)?	

References

1. Making health communications programmes work – second edition. Rockville, MD: National Institutes of Health, National Cancer Institute; 2008 (https://www.cancer.gov/publications/health-communication/pink-book.pdf).

8. Advancing public health research to inform and influence policy and practice

Operational definitions

This function includes three components.

1. Development of research for public health priorities and practice
2. Strengthening institutional capacity and financing of research for public health
3. Knowledge brokering. Knowledge brokering refers to the operational linkage between research institutions and policy-makers in a way that optimizes the translation of research findings to policy.

Scope of the function

Development of public health research priorities and practice:

- Established processes to identify national public health research priorities (including health services research)
- Establishment of call for proposals for commissioned research, including independent research on the effectiveness of EPHF activities, in parallel to principal investigator (PI) initiated research (universities, etc.)
- Multidisciplinary partnerships with other health research centers and academic institutions
- Maintenance of scientific and ethical standards in research (codes of conduct)

Strengthening institutional capacity and financing of public health research:

- Inclusion of research activities in public health education and continuous training
- Maintenance and access to health indicators databases for researchers
- Development of new research methods, innovative technologies and solutions in public health with measurable impact
- Increased funding for public health institute-centred research

Knowledge brokering:

- Participation of research community in public health planning, particularly in development of indicators
- Forums or policy dialogues between research community and policy-makers, to facilitate uptake of evidence-based policy and to jointly set public health research agenda
- Interpretation of raw data gathered from population surveys, disease registries, hospital records, etc. (see tools in EPHF 1) to support public health planning
- Utilization/translation of research results in support of evidence-informed policy and planning
  - > Publications in the local language
  - > Policy briefs
  - > Policy advocacy

8.1. Development of public health research priorities and practice

8.1.1. Evaluate the processes undertaken in your country to identify national public health research priorities.

Consider, providing details where appropriate:

Does a prioritization process with regard to public health objectives, considering explicit criteria, as well as resource and capacity limitations exist?	
Is existing evidence (epidemiologic and health system data) used for decision-making regarding health system priorities?	
Are information systems considered as foundation for planning health system activities?	
Is available international evidence reviewed when identifying knowledge gaps?	
Is there an explicit health services research component as a national health research priority?	

8.1.2. Evaluate the degree of research coordination in your country.

Consider, providing details where appropriate:

Does a centralized source of data estimating/quantifying health research activity or funding from the following sources exist (check all that apply):	☐ International health/aid organizations (IARC, WHO, World Bank, etc.) ☐ Public and private universities or other national research centers ☐ Governmental ministries (health, science, research and development, industry, etc.) ☐ Scientific and professional societies (such as EORTC, ESMO, etc) ☐ Health technology industry ☐ Charities and nongovernmental organizations
Has a call for proposals for commissioned research, including independent research on the effectiveness of EPHF activities, in parallel to principal investigator (PI) initiated research (universities, etc.) been established?	
Do general, multidisciplinary partnerships with health research centers and academic institutions exist?	
Do ad hoc, collaborative research programmes in priority fields exist?	

8.1.3. Evaluate the maintenance of scientific and ethical standards in research performed in your country.

Consider, providing details where appropriate:

Does a specific code of conduct applicable to research activity, to ensure the integrity and accuracy of research exist?	
Do structures or mechanisms (e.g. institutional review boards, hospital ethics committees) dedicated to enforcing ethical standards exist?	

8.2. Strengthening institutional capacity and financing of public health research

8.2.1. Evaluate the integration of research activities in public health education and continuous training.

Consider, providing details where appropriate:

Does a written strategy(s) for developing public health research in an academic context exist?	

Is funding available for research in schools of public health?	
Is there integration of research skills and practice into public health curricula (lab work requirements, theses and dissertations, research papers, etc.)?	
Are there requirements and/or promotion of research activities for public health workforce, in the context of continuing education?	

8.2.2. Evaluate data access to health indicators for researchers.

Consider, providing details where appropriate:

How appropriate is confidentiality/data protection legislation (balancing privacy and protection of intellectual property with access to data for researchers)?	
Are there administrative requirements/fees for accessing health indicators data?	
Describe the physical ease of accessing data (online vs physical platforms)	
How comparable are health indicators data (global and disaggregated) at a subnational, national, regional and international level (see also EPHF 1)?	

8.2.3. Evaluate your country's capacity for innovation in public health (1).

Consider, providing details where appropriate:

Is there capacity-building in areas essential to the delivery of innovative health products, with:	
Investments in human resources and training in public health	
Support for research and development individuals, groups and institutions	
Strategies and investments to strengthen health information systems	
Are there supporting policies for capacity-building:	
Support for the WHO Global Code of Practice for the International Recruitment of Health Personnel *(2)* with the objective of retaining health workers	
Measures to strengthen regulatory capacity (see EPHF 3.1)	
Strengthening collaboration:	
Specific programmes to intensify North–South and South–South collaborations	
Existence of public–private partnerships for research, including clinical trials	
Innovation based on traditional medicine:	
Specific policies to support traditional medicine, including through development of standards, evidence-based research and practice	
Incentives for innovation:	
Existence of awards for innovative discoveries	
Specific recognition or opportunities for career advancement based on innovation criteria	

8.3. Knowledge brokering

8.3.1. Evaluate mechanisms that may exist in the country to translate evidence into policy and practice.

Consider, providing details where appropriate:

Do researchers participate in health policy planning, particularly in the development of indicators?	
Is there generation of written materials for policy-makers, such as policy briefs, intended to help policy-makers understand current research evidence and the range of policy options?	
Is there generation of written materials for health professionals (in continuing education or other) intended to disseminate innovative practices?	
Are meetings, policy dialogues, etc., convened with the participation of researchers and policy-makers, with the objective of shaping evidence-based policy on a given issue, and fostering relationships between research and policy-making community?	
Do concise, periodic reports evaluating the effectiveness of ongoing programmes exist?	

8.3.2. Evaluate the effectiveness of policy-makers in communicating their needs to the research community, including health technology firms.

Consider, providing details where appropriate:

Does national funding for research correspondence with national health priorities?	
Is there interaction with international organizations conducting research on policy needs?	
Do documents that set out strategic areas for health policy development exist?	
Do clear ground rules regarding health technology, including criteria for inclusion within public health system, exist?	

References

1. Global strategy and plan of action on public health, innovation and intellectual property. Geneva: World Health Organization; 2011 (http://www.who.int/phi/publications/Global_Strategy_Plan_Action.pdf).
2. WHO Global Code of Practice on the International Recruitment of Health Personnel. Geneva: World Health Organization; 2010 (WHA63.16; http://www.who.int/hrh/migration/code/code_en.pdf?ua=1).

Annex 1. Building on other frameworks – Identifying EPHFs of relevance to the Eastern Mediterranean Region

EPHFs (according to Delphi study)[1]	Region of the Americas[2]	Western Pacific Region[3]	European Region[4]	Eastern Mediterranean Region
D-EPHF 1. Immunization	EPHF 1. Monitoring, evaluation, and analysis of health status	1. Health situation monitoring and analysis	EPHO1: Surveillance of population health and wellbeing	1. Surveillance and monitoring of health determinants, risks, morbidity and mortality
D-EPHF 2. Monitoring morbidity and mortality	EPHF 2. Surveillance, research, and control of the risks and threats to public health	2. Epidemiological surveillance/disease prevention and control	EPHO2: Monitoring and response to health hazards and emergencies	2. Preparedness and public health response to disease outbreaks, natural disasters and other emergencies
D-EPHF 3. Disease outbreak control	EPHF 3. Health promotion	3. Development of policies and planning in public health	EPHO3: Health protection including environmental occupational, food safety and others	3. Health protection including management of environmental, food, toxicological and occupational safety
D-EPHF 4. Disease surveillance	EPHF 4. Social participation in health	4. Strategic management of health systems and services for population health gain	EPHO4: Health Promotion including action to address social determinants and health inequity	4. Health promotion and disease prevention through population and personalized interventions, including action to address social determinants and health inequity
D-EPHF 5. Promotion of community involvement in health	EPHF 5. Development of policies and institutional capacity for public health planning and management	5. Regulation and enforcement to protect public health	EPHO5: Disease prevention, including early detection of illness	5. Assuring effective health governance, public health legislation, financing and institutional structures (stewardship function)
D-EPHF 6. Monitoring determinants of health	EPHF 6. Strengthening of public health regulation and enforcement capacity	6. Human resources development and planning in public health	EPHO6: Assuring governance for health and wellbeing	6. Assuring a sufficient and competent workforce for effective public health delivery
D-EPHF 7. Production and protection of safe water	EPHF 7. Evaluation and promotion of equitable access to necessary health services	7. Health promotion, social participation and empowerment	EPHO7: Assuring a sufficient and competent public health workforce	7. Communication and social mobilization for health
D-EPHF 8. Control of food quality and safety	EPHF 8. Human resources development and training in public health	8. Ensuring the quality of personal and population-based health services	EPHO8: Assuring sustainable organizational structures and financing	8. Advancing public health research to inform and influence policy and practice
D-EPHF 9. Provide health information and education	EPHF 9. Quality assurance in personal and population-based health services	9. Research, development and implementation of innovative public health solutions	EPHO9: Advocacy communication and social mobilisation for health	
D-EPHF 10. Evaluate the effectiveness of health programmes and services	EPHF 10. Research in public health		EPH10: Advancing public health research to inform policy and practice	
	EPHF 11. Reduction of the impact of emergencies and disasters on health			

[1] Bettcher D, Sapirie S, Goon EHT. Essential public health functions: results of the international Delphi study. World Health Statistical Quarterly, 1998,51:44–55.

[2] Centers for Disease Control and Prevention, Centro Latino Americano de Investigaciones en Sistemas de Salud, Pan American Health Organization/World Health Organization. Public health in the Americas: national level instrument for measuring essential public health functions. Washington DC, Pan American Health Organization, 2000. Pilot test version, May 2000. (http://www1.paho.org/english/dpm/shd/hp/EPHF.htm)

[3] Regional Office for the Western Pacific 2003. World Health Organization. Essential public health functions: a three-country study in the Western Pacific Region. (http://www.wpro.who.int/publications/docs/Essential_public_health_functions.pdf)

[4] Regional Office for Europe, World Health Organization. The 10 Essential Public Health Operations. (http://www.euro.who.int/en/what-we-do/health-topics/Health-systems/public-health-services/policy/the-10-essential-public-health-operations)

Glossary of terms

Access to (health services): "the perceptions and experiences of people as to their ease in reaching health services or health facilities in terms of location, time, and ease of approach." *(1)*.

Accountability: "the result of the process which ensures that health actors take responsibility of what they are obliged to do and are made answerable for their actions." *(1)*

Antenatal care coverage: "Percentage of women who utilized antenatal care provided by skilled health personnel for reasons related to pregnancy at least once during pregnancy as a percentage of live births in a given time period." *(2)*

Assessment: "a systematic or non-systematic way of gathering relevant information, analysing and making judgment on the basis of the available information." *(3)*

Burden of disease: "a measurement of the gap between a population's current health and the optimal state where all people attain full life expectancy without suffering major ill-health." *(4)*

Civil registration and vital statistics (CRVS): A well-functioning civil registration and vital statistics (CRVS) system registers all births and deaths, issues birth and death certificates, and compiles and disseminates vital statistics, including cause of death information. It may also record marriages and divorces *(5)*.

Cluster (in the context of Humanitarian Reform): "a group of agencies, organizations and/or institutions interconnected by their respective mandates, which works together towards common objectives. The purpose of the cluster is to foster timeliness, effectiveness and predictability while improving accountability and leadership." *(3)*

Commitment: "firm promises of the government made in policy statements." *(1)*

Communicable diseases: "diseases caused by pathogenic microorganisms, such as bacteria, viruses, parasites or fungi; the diseases can spread directly or indirectly, from one person to another." *(6)*

Community health needs assessment: "The ongoing process of evaluating the health needs of a community. Usually facilitates prioritization of needs and a strategy to address them." *(7)*

Contingency planning: "the process of establishing programme objectives, approaches and procedures to respond to situations or events that are likely to occur, including identifying those events and developing likely scenarios and appropriate plans to prepare and respond to them in an effective manner." *(3)*

Continuing education: "the formal education obtained by a health professional after completing his/her degree and full-time postgraduate training." *(7)*

Contraceptive prevalence rate: "is the proportion of women of reproductive age who are using (or whose partner is using) a contraceptive method at a given point in time." *(8)*

Counseling: "an interaction offering an opportunity for a person to explore, discover and clarify ways of living with greater well-being, usually in a one-to-one discussion with a trained counselor." *(7)*

Crisis: an event or series of events representing a critical threat to the health, safety, security or wellbeing of a community, usually over a wide area. Armed conflicts, epidemics, famine, natural disasters, environmental emergencies and other major harmful events may involve or lead to a humanitarian crisis *(9)*.

Curative care: "the medical treatment and care that cures a disease or relieves pain and promotes recovery." *(7)*

Data: "refers to facts and figures as raw material, not analyzed." *(1)*

Demographic and Health Survey (DHS): These "are nationally-representative household surveys that provide data for a wide range of monitoring and impact evaluation indicators in the areas of population, health, and nutrition." *(10)* A mix of survey tools are used to conduct DHS: questionnaires, biomarkers and

geographic information. DHS is conducted by an in-country institution, typically the national statistics office. A key aim of DHS is to provide quality data for policy development and programme planning, monitoring and evaluation.

Disaster: Any occurrence that causes damage, ecological disruption, loss of human life or deterioration of health and health services on a scale sufficient to warrant an extraordinary response from outside the affected community or area *(11)*.

Disease outbreak: "the occurrence of cases of disease in excess of what would normally be expected in a defined community, geographical area or season. An outbreak may occur in a restricted geographical area or may extend over several countries. It may last for a few days or weeks, or for several years." *(12)*

Early warning alert and response system: "a communicable disease surveillance and response system designed to detect as early as possible and departure from the usual of normally-observed frequency or phenomenon." *(3)*

Effectiveness: "the extent to which a specific intervention, procedure, regimen or service, when deployed in the field in routine circumstances, does what it is intended to do for a specified population." *(1)*

Emergency: A sudden occurrence demanding immediate action that may be due to epidemics, to natural, to technological catastrophes, to strife or to other man-made causes *(13)*.

Emergency preparedness: "are the actions taken in anticipation of an emergency to facilitate rapid, effective and appropriate response to the situation." *(3)* "a programme of long-term activities whose goals are to strengthen the overall capacity and capability of a country or a community to manage efficiently all types of emergencies and bring about an orderly transition from relief through recovery, and back to sustained development. It requires that emergency plans be developed, personnel at all levels and in all sectors be trained, and communities at risk be educated, and that these measures be monitored and evaluated regularly." *(9)*

Environment: "All that which is external to the individual, including physical, biological, social, cultural and other factors." *(7)*

Environmental health: "addresses all the physical, chemical, and biological factors external to a person, and all the related factors impacting behaviours. It encompasses the assessment and control of those environmental factors that can potentially affect health. It is targeted towards preventing disease and creating health-supportive environments." *(14)*

Essential medicines: "those that satisfy the priority health care needs of the population. They are selected with due regard to public health relevance, evidence on efficacy and safety, and comparative cost-effectiveness." *(15)*

Evaluation: "the systematic and objective assessment of the relevance, adequacy, progress, efficiency, effectiveness and impact of a course of actions, in relation to objectives and taking into account the resources and facilities that have been deployed." *(1)*

Evidence: "any form of knowledge, including, but not confined to research, of sufficient quality to inform decisions." *(1)*

Evidence-informed health policy-making: "is an approach to policy decisions that aims to ensure that decision making is well-informed by the best available research evidence. It is characterized by the systematic and transparent access to, and appraisal of, evidence as an input into the policy-making process." *(16)*

Food safety: "encompasses actions aimed at ensuring that all food is as safe as possible. Food safety policies and actions need to cover the entire food chain, from production to consumption." *(17)*

Global adult tobacco survey (GATS): "is a nationally representative household survey, launched in February 2007, as a new component of the ongoing Global Tobacco Surveillance System (GTSS). The GATS enables countries to collect data on adult tobacco use and key tobacco control measures. Results from

the GATS assist countries in the formulation, tracking and implementation of effective tobacco control interventions, and countries are able to compare results of their survey with results from other countries. Topics covered in GATS include: tobacco use prevalence (smoking and smokeless tobacco products); second-hand tobacco smoke exposure and policies; cessation; knowledge, attitudes and perceptions; Exposure to media; and economics." *(18)*

Global Outbreak Alert and Response Network (GOARN): "is a technical collaboration of existing institutions and networks that pool human and technical resources for the rapid identification, confirmation and response to outbreaks of international importance. The Network provides an operational framework to link this expertise and skill to keep the international community constantly alert to the threat of outbreaks and ready to respond." *(19)* GOARN contributes towards global health security by: combating the international spread of outbreaks, ensuring that appropriate technical assistance reaches affected states rapidly, and contributing to long-term epidemic preparedness and capacity building.

Global youth tobacco survey (GYTS): "is a school-based survey designed to enhance the capacity of countries to monitor tobacco use among youth and to guide the implementation and evaluation of tobacco prevention and control programmes. It uses a standard methodology for constructing the sampling frame, selecting schools and classes, preparing questionnaires, following consistent field procedures, and using consistent data management procedures for data processing and analysis. The information generated from the GYTS can be used to stimulate the development of tobacco control programmes and can serve as a means to assess progress in meeting programme goals. In addition, GYTS data can be used to monitor seven Articles in the WHO FCTC." *(20)*

Hazard: Any phenomenon that has the potential to cause disruption or damage to people and their environment (21).

Health accounts (national): is a process through which countries monitor the flow of money in their health sector. It "delivers the means to learn retrospectively from past expenditure, improving planning and allocation of resources and increasing systems accountability. This aims to help member states protect its people from catastrophic health bills, reduce inequities in health and make definitive strides towards universal health coverage." *(22)*

Health communication: is exchange of information with the public or communities about health issues with the objective of reducing health risks and improving health status.

Health determinants: the factors that combined together affect the health of individuals and/or communities. A number of factors have considerable impact on health; for example where we live, the state of the environment, genetics, income and education level, and relationships with friends and family. Health determinants include the: (i) social and economic environment; (ii) physical environment; and (iii) person's individual characteristics and behaviours *(23)*.

Health development: is the continuous, progressive improvement of the health status of individuals and groups in a population.

Health financing: "is concerned with how financial resources are generated, allocated and used in health systems. Health financing policy focuses on how to move closer to universal coverage with issues related to: (i) how and from where to raise sufficient funds for health; (ii) how to overcome financial barriers that exclude many poor from accessing health services; or (iii) how to provide an equitable and efficient mix of health services." *(24)*

Health governance: "the wide range of steering and rule-making related functions carried out by governments/decisions makers as they seek to achieve national health policy objectives that are conducive to universal health coverage. Governance is a political process that involves balancing competing influences and demands. It includes: (i) maintaining the strategic direction of policy development and implementation; (ii) detecting and correcting undesirable trends and distortions; (iii) articulating the case for health in national development; (iv) regulating the behaviour of a wide range of actors - from health care financiers to health care providers; and (v) establishing transparent and effective accountability mechanisms." *(25)*

Health in all policies (HiAP): "an approach to public policies across sectors that systematically takes into account the health and health systems implications of decisions, seeks synergies, and avoids harmful health impacts, in order to improve population health and health equity. A HiAP approach is founded on health-related rights and obligations. It emphasizes the consequences of public policies on health determinants, and aims to improve the accountability of policy-makers for health impacts at all levels of policy-making." *(26)*

Health inequity: "the avoidable inequalities in health between groups of people within countries and between countries. These inequities arise from inequalities within and between societies. They are attributable to the external environment and conditions mainly outside the control of the individuals concerned. Social and economic conditions and their effects on people's lives determine their risk of illness and the actions taken to prevent them becoming ill or treat illness when it occurs." *(27)* "the differences in health status or in the distribution of health resources between different population groups, arising from the social conditions in which people are born, grow, live, work and age. Health inequities are unfair and could be reduced by the right mix of government policies." *(28)*

Health needs: "the objectively determined deficiencies in health that require health care, from promotion to palliation. Perceived health needs: the need for health services as experienced by the individual and which he/she is prepared to acknowledge; perceived need may or may not coincide with professionally defined or scientifically confirmed need. Professionally defined health needs: the need for health services as recognized by health professionals from the point of view of the benefit obtainable from advice, preventive measures, management or specific therapy; Professionally defined need may or may not coincide with perceived or scientifically confirmed need. Scientifically confirmed health needs: the need confirmed by objective measures of biological, anthropometric or psychological factors, expert opinion or the passage of time; it is generally considered to correspond to those conditions that can be classified in accordance with the International Classification of Diseases." *(1)*

Health promotion: "the process of enabling people to increase control over, and to improve, their health. It moves beyond a focus on individual behaviour towards a wide range of social and environmental interventions." *(29)*

Health sector plan: "is an agreed set of arrangements for responding to, and recovering from emergencies, including the description of responsibilities, management structures, and resource and information management strategies." *(30)*

Health service: "any service (i.e. not limited to medical or clinical services) aimed at contributing to improved health or to the diagnosis, treatment and rehabilitation of sick people." *(1)*

Health system performance: "the level of achievement of the health system relative to resources." *(31)* "the degree to which a health system carries out its functions – (service provision, resource generation, financing and stewardship) to achieve its goals." *(32)*

Health systems governance: is to "define, lead and implement policies in health service delivery, health financing and resource generation, while responding to health priorities and reflecting own goals and values." *(33)*

Health technology assessment (HTA): "is the systematic evaluation of properties, effects, and/or impacts of health technology. Its main purpose is to inform technology-related policy-making in health care, and thus improve the uptake of cost-effective new technologies and prevent the uptake of technologies that are of doubtful value for the health system." *(34)*

Health workers: "all people engaged in actions whose primary intent is to enhance health." *(35)*

Health workforce: "includes those that provide health services such as doctors, nurses etc. and those that support the health services such as hospital managers, ambulance drivers etc." *(36)*

Impact: "the total, direct and indirect, effects of a programme, service or institution on a health status and overall health and socio-economic development." *(1)* "the degree of achievement of an ultimate health objective." *(1)*

International Classification of Diseases (ICD): "is the standard diagnostic tool for epidemiology, health management and clinical purposes. This includes the analysis of the general health situation of population groups. It is used to monitor the incidence and prevalence of diseases and other health problems. It is used for reimbursement and resource allocation decision-making by countries." (37)

International Health Regulations (2005) (IHR 2005): "an international legal instrument that is binding on 194 countries across the globe, including all the Member States of the WHO. Their aim is to help the international community prevent and respond to acute public health risks that have the potential to cross borders and threaten people worldwide." *(38)*

Intervention: "an activity or set of activities aimed at modifying a process, course of action or sequence of events, in order to change one or several of their characteristics such as performance or expected outcome." *(1)*

Knowledge, attitudes and practices (KAP) survey: "is a representative study of a specific population to collect information on what is known, believed and done in relation to a particular topic. In most KAP surveys, data are collected orally by an interviewer using a structured, standardized questionnaire." *(39)*

Knowledge brokering: "a strategy to close the "know–do gap" and foster greater use of research findings and evidence in policy-making. It focuses on organizing the interactive process between the producers and users of knowledge so that they can co-produce feasible and research-informed policy options." *(40)*

Maternal health: "the health of women during pregnancy, childbirth and the postpartum period." *(41)*

Mental health: "a broad array of activities directly or indirectly related to the mental well-being component included in the WHO's definition of health: "A state of complete physical, mental and social well-being, and not merely the absence of disease". It is related to the promotion of well-being, the prevention of mental disorders, and the treatment and rehabilitation of people affected by mental disorders." *(42)*

Millennium Development Goals (MDGs): "are eight goals that all 191 United Nations Member States agreed to try to achieve by the year 2015. They are related to combatting poverty, hunger, disease, illiteracy, environmental degradation, and discrimination against women." *(43)*

Monitoring: "the continuous oversight of an activity to assist in its supervision and to see that it proceeds according to plan. Monitoring involves the specification of methods to measure activity, use of resources, and response to services against agreed criteria." *(1)*

Morbidity: the measure of disease incidence or prevalence in a given population.

Mortality: the measure of deaths in a given population.

Multiple indicator cluster survey (MICS): is an international household survey initiative coordinated by UNICEF to assist countries in collecting and analysing data in order to fill data gaps for monitoring the situation of children and women. The MICS has enabled many countries to produce statistically sound and internationally comparable estimates of a range of indicators in the areas of health, education, child protection and HIV/AIDS *(44)*.

National public health institutes (NPHIs): "are science-based governmental organizations that serve as a focal point for a country's public health efforts, as well as a critical component of global disease prevention and response systems." *(45)* Typical core functions of NPHIs include surveillance for diseases and injuries, as well as risk factors; epidemiologic investigations of health problems; public health research; and response to public health emergencies.

Nutrition: "the intake of food, considered in relation to the body's dietary needs." *(46)*

Objective: "a statement of a desired future state, condition, or purpose, which an institution, a project, a service or a programme seeks to achieve." *(1)*

Occupational health: "deals with all aspects of health and safety in the workplace and has a strong focus on primary prevention of hazards." *(47)*

Operational plan: "the effective management of resources with a short time framework, converting objectives into targets and activities, and arrangements for monitoring implementation and resource usage." *(1)*

Oral health: "a state of being free from chronic mouth and facial pain, oral and throat cancer, oral sores, birth defects such as cleft lip and palate, periodontal (gum) diseases, tooth decay and tooth loss, and other diseases and disorders that affect the oral cavity." *(48)*

Outcome: "those aspects of health that result from the interventions provided by the health system, the facilities and personnel that recommend them and the actions of those who are the targets of the interventions." *(1)*

Personal health services: "Health services targeted at the individual. These include, among others, health promotion, timely disease prevention, diagnosis and treatment, rehabilitation, palliative care, acute care and long-term care services." *(1)*

Physical activity: "any bodily movement produced by skeletal muscles that requires energy expenditure. Physical inactivity has been identified as the fourth leading risk factor for global mortality." *(49)*

Prevention/mitigation: "are the regulatory and physical measures to ensure that emergencies are prevented, or their effects mitigated." *(50)*

Primary care: "the part of a health services system that assures person focused care over time to a defined population, accessibility to facilitate receipt of care when it is first needed, comprehensiveness of care in the sense that only rare or unusual manifestations of ill health are referred elsewhere, and coordination of care such that all facets of care (wherever received) are integrated. Quality features of primary care include effectiveness, safety, people-centeredness, comprehensiveness, continuity and integration." *(1)*

Public health: "all organized measures (whether public or private) to prevent disease, promote health, and prolong life among the population as a whole. Its activities aim to provide conditions in which people can be healthy and focus on entire populations, not on individual patients or diseases. Thus, public health is concerned with the total system and not only the eradication of a particular disease. The three main public health functions are: (i) the assessment and monitoring of the health of communities and populations at risk to identify health problems and priorities; (ii) the formulation of public policies designed to solve identified local and national health problems and priorities; and (iii) to assure that all populations have access to appropriate and cost-effective care, including health promotion and disease prevention services." *(51)*

Public health laboratory: is a governmental reference laboratory that protects the public against diseases and other health hazards.

Public health legislation: "encompasses the laws, ordinances, directives, regulations and other similar legislative instruments that deal with all aspects of health protection and promotion, disease prevention, and delivery of health care." *(52)*

Public health services: "health services targeted at the population as a whole. These include, among others, health situation analysis, health surveillance, health promotion, prevention services, infectious disease control, environmental protection and sanitation, disaster preparedness and response, and occupational health." *(1)*

Recovery: "is the reconstruction of the physical infrastructure and restoration of emotional, social, economic and physical wellbeing." *(50)*

Regulation: "the imposition of external constraints upon the behaviour of an individual or an organization to force a change from preferred or spontaneous behaviour." *(53)*

Reproductive health: "addresses the reproductive processes, functions and system at all stages of life. It therefore implies that people are able to have a responsible, satisfying and safe sex life and that they have the capability to reproduce and the freedom to decide if, when and how often to do so." *(54)*

Research for health: "reflects the fact that improving health outcomes requires the involvement of many sectors and disciplines. As identified in the work of the Global Forum for Health Research, research of

this type seeks to perform the functions of understanding the impact on health of policies, programmes, processes, actions or events originating in any sector; of assisting in developing interventions that will help to prevent or mitigate that impact; and of contributing to the achievement of the Millennium Development Goals, health equity and better health for all." *(55)*

Resources: "the inputs required to make health systems work (human and financial resources, drugs, supplies and equipment, and infrastructure)." *(1)*

Resource planning: "the estimation of resource inputs (human resources, medical devices, medical equipment, pharmaceuticals and facilities) necessary to provide expected services." *(1)*

Response: "are the actions taken in anticipation of, during, and immediately after an emergency to ensure that its effects are minimized." *(50)*

Risk factors: "any attribute, characteristic, or exposure of an individual that increases the likelihood of developing a disease or injury." *(56)*

Risk reduction: "involves measures designed either to prevent hazards from creating risks or to lessen the distribution, intensity or severity of hazards. These measures include flood mitigation works and appropriate land-use planning. They also include vulnerability reduction measures such as awareness raising, improving community health security, and relocation or protection of vulnerable populations or structures." *(57)*

Service Availability and Readiness Assessment (SARA): "is a health facility assessment tool designed to assess and monitor the service availability and readiness of the health sector and to generate evidence to support the planning and managing of a health system. SARA is designed as a systematic survey to generate a set of tracer indicators of service availability and readiness. The survey objective is to generate reliable and regular information on service delivery (such as the availability of key human and infrastructure resources), on the availability of basic equipment, basic amenities, essential medicines, and diagnostic capacities, and on the readiness of health facilities to provide basic health-care interventions relating to family planning, child health services, basic and comprehensive emergency obstetric care, HIV, TB, malaria, and non-communicable diseases." *(58)*

Social determinants of health: the conditions and circumstances, in which people are born, grow up in, live, work and age; and the systems put in place to deal with illness. These circumstances are shaped by a wider set of forces like the distribution of money, power and resources at global, national and local levels *(59,60)*.

Stakeholder: "an individual, group or an organization that has an interest in the organization and delivery of health care." *(1)*

Standard: "an established, accepted and evidence-based technical specification or basis for comparison." *(61)*

STEPwise approach to surveillance (STEPS): "is a simple, standardized method for collecting, analysing and disseminating data in WHO member countries. By using the same standardized questions and protocols, all countries can use STEPS information not only for monitoring within-country trends, but also for making comparisons across countries. The approach encourages the collection of small amounts of useful information on a regular and continuing basis." *(62)*

Strategy: "a series of broad lines of action intended to achieve a set of goals and targets set out within a policy or programme." *(63)*

Substance abuse: "the harmful or hazardous use of psychoactive substances, including alcohol and illicit drugs." *(64)*

Surveillance: "the continuous, systematic collection, analysis and interpretation of health-related data needed for the planning, implementation, and evaluation of public health practice. Such surveillance can: (i) serve as an early warning system for impending public health emergencies; (ii) document the impact of

an intervention, or track progress towards specified goals; and (iii) monitor and clarify the epidemiology of health problems, to allow priorities to be set and to inform public health policy and strategies." *(65)*

Tobacco products: "are products made entirely or partly of leaf tobacco as raw material, which are intended to be smoked, sucked, chewed of snuffed. All contain the highly addictive psychoactive ingredient, nicotine. Tobacco use is one of the main risk factors for a number of chronic diseases, including cancer, lung diseases, and cardiovascular diseases." *(66)*

Total health expenditure: is the sum of public and private health expenditure. It covers the provision of health services (preventive and curative), family planning activities, nutrition activities, and emergency aid designated for health but does not include provision of water and sanitation.

Unique patient identifier (UPI): is a single, universal identifier for an individual's health information that ensures availability of all data associated with that particular patient.

Utilization (of health services): "experience of people as to their receipt of health care services of different types." *(1)*

Vaccine: "a biological preparation that improves immunity to a particular disease." *(67)*

Violence: "the intentional use of physical force or power, threatened or actual, against oneself, another person, or against a group or community, which either results in or has a high likelihood of resulting in injury, death, psychological harm, mal-development, or deprivation." *(68)*

Vulnerability assessment: "is a procedure for identifying hazards and determining their possible effects on a community, activity, or organization. It provides information essential for: sustainable development, emergency prevention, mitigation, preparedness, response and recovery." *(50)*

References

1. Health Systems Strengthening Glossary. Geneva: World Health Organization; 2011 (www.who.int/healthsystems/Glossary_January2011.pdf).
2. WHO Statistical Information System - Antenatal care coverage. Geneva: World Health Organization; 2016 (http://www.who.int/whosis/whostat2006AntenatalCareCoverage.pdf).
3. Humanitarian Health Action – Definitions: emergencies [website]. Geneva: World Health Organization; 2016 (http://www.who.int/hac/about/definitions/en/index.html).
4. The World Health Report 2000 - Health Systems: Improving Performance. Geneva: World Health Organization; 2000 (http://www.who.int/whr/2000/en/whr00_en.pdf?ua=1).
5. Health statistics and information systems - Civil registration and vital statistics [website]. Geneva: World Health Organization; 2016 (http://www.who.int/healthinfo/civil_registration/en/).
6. Infectious diseases [website]. Geneva: World Health Organization; 2016 (http://www.who.int/topics/infectious_diseases/en/).
7. A Glossary of Terms for Community Health Care and Services for Older Persons. Kobe: WHO Centre for Health Development; 2004.
8. WHO Statistical Information System – Contraceptive prevalence rate. Geneva: World Health Organization; 2016 (http://www.who.int/whosis/whostat2006ContraceptivePrevalenceRate.pdf).
9. Risk reduction and emergency preparedness: WHO six-year strategy for the health sector and community capacity development. Geneva: World Health Organization; 2007 (http://www.who.int/hac/techguidance/preparedness/emergency_preparedness_eng.pdf).
10. The Demographic Health Surveys (DHS) Program [website]. Rockville, MD: U.S. Agency for International Development; 2016 (http://dhsprogram.com/What-We-Do/Survey-Types/DHS.cfm).
11. Community Emergency Preparedness: A Manual for Managers and Policy-Makers. Geneva: World Health Organization; 1999 (http://apps.who.int/iris/bitstream/10665/42083/1/9241545194.pdf).
12. Disease outbreaks [website]. Geneva: World Health Organization; 2016 (http://www.who.int/topics/disease_outbreaks/en/).

13. Living With Risk: A Global Review of Disaster Reduction Initiatives, 2004 version. Geneva: United Nations Inter-Agency Secretariat of the International Strategy for Disaster Reduction; 2004 (http://www.unisdr.org/files/657_lwr1.pdf).

14. Environmental health [website]. Geneva: World Health Organization; 2016 (http://www.who.int/topics/environmental_health/en/).

15. Essential medicines [website]. Geneva: World Health Organization; 2016 (http://www.who.int/topics/essential_medicines/en/).

16. Evidence-Informed Policy Network [website]. Geneva: World Health Organization; 2016 (http://www.who.int/evidence/about/en/).

17. Food safety [website]. Geneva: World Health Organization; 2016 (http://www.who.int/topics/food_safety/en/).

18. Tobacco Free Initiative – Global Adult Tobacco Survey (GATS) [website]. Geneva: World Health Organization; 2016 (http://www.who.int/tobacco/surveillance/gats/en/).

19. Strengthening health security by implementing the International Health Regulations (2005) - Global Outbreak Alert and Response Network (GOARN) [website]. Geneva: World Health Organization; 2016 (http://www.who.int/csr/outbreaknetwork/en/).

20. Tobacco Free Initiative – Global Youth Tobacco Survey (GYTS) [website]. Geneva: World Health Organization; 2016 (http://www.who.int/tobacco/surveillance/gyts/en/).

21. Living With Risk: A Global Review of Disaster Reduction Initiatives, 2004 version. Geneva: United Nations Inter-Agency Secretariat of the International Strategy for Disaster Reduction; 2004 (http://www.unisdr.org/files/657_lwr1.pdf).

22. Health Accounts and universal health coverage [website]. Geneva: World Health Organization; 2016 (http://www.who.int/health-accounts/universal_health_coverage/en/).

23. Health Impact Assessment – the determinants of health [website]. Geneva: World Health Organization; 2016 (http://www.who.int/hia/evidence/doh/en/).

24. Health financing [website]. Geneva: World Health Organization; 2016 (http://www.who.int/topics/health_economics/en/index.html).

25. Health systems – Governance [website]. Geneva: World Health Organization; 2016 (http://www.who.int/healthsystems/topics/stewardship/en/).

26. Health in all policies [website]. Geneva: World Health Organization; 2013 (http://archive.is/20130704022147/www.healthpromotion2013.org/health-promotion/health-in-all-policies).

27. Social determinants of health – key concepts [website]. Geneva: World Health Organization; 2016 (http://www.who.int/social_determinants/thecommission/finalreport/key_concepts/en/).

28. 10 facts in health inequities and their causes [website]. Geneva: World Health Organization; 2016 (http://www.who.int/features/factfiles/health_inequities/facts/en/index.html).

29. Health promotion [website]. Geneva: World Health Organization; 2016 (http://www.who.int/topics/health_promotion/en/).

30. Global Assessment of National Health Sector Emergency Preparedness and Response. Geneva: World Health Organization; 2008.

31. The world health report 2000: health systems: improving performance. Geneva: World Health Organization; 2000 (http://www.who.int/whr/2000/en/whr00_en.pdf).

32. Murray C, Evans D, editors. Health systems performance assessment – debates, methods and empiricism. Geneva: World Health Organization; 2003 (http://whqlibdoc.who.int/publications/2003/9241562455.pdf).

33. Health systems governance [website]. Copenhagen: WHO Regional Office for Europe; 2016 (http://www.euro.who.int/en/health-topics/Health-systems/health-systems-governance/health-systems-governance).

34. Medical devices – health technology assessment [website]. Geneva: World Health Organization; 2016 (http://www.who.int/medical_devices/assessment/en/).

35. The World Health Report 2006 - Working together for health. Geneva: World Health Organization; 2006 (http://www.who.int/entity/whr/2006/whr06_en.pdf).

36. Health systems – health workforce [website]. Geneva: World Health Organization; 2016 (http://www.who.int/healthsystems/topics/workforce/en/).

37. Classifications of diseases [website]. Geneva: World Health Organization; 2016 (http://www.who.int/classifications/icd/en/).

38. International Health Regulations (IHR) [website]. Geneva: World Health Organization; 2016 (http://www.who.int/topics/international_health_regulations/en/).

39. Advocacy, communication and social mobilization for TB control: a guide to developing knowledge, attitude and practice surveys. Geneva: Wolrd Health Organization; 2008 (WHO/HTM/STB/2008.46; http://www.stoptb.org/assets/documents/resources/publications/acsm/ACSM_KAP%20GUIDE.pdf).

40. Van Kammen, et al. Using knowledge brokering to promote evidence-based policy-making: the need for support structures. Bulletin of the World Health Organization, 84:8, 608-612; 2006.

41. Maternal health [website]. Geneva: World Health organization; 2016 (http://www.who.int/topics/maternal_health/en/).

42. Mental health [website]. Geneva: World Health Organization; 2016 (http://www.who.int/topics/mental_health/en/).

43. Millennium Development Goals (MDGs) [website]. Geneva: World Health Organization; 2016 (http://www.who.int/topics/millennium_development_goals/en/).

44. Statistics and monitoring – Multiple Indicator Cluster Survey (MICS) [website]. New York: UNICEF; 2014 (http://www.unicef.org/statistics/index_24302.html).

45. Heymann, D.L. NPHIs as focal points for leadership in prevention and control of infectious diseases. Journal of Public Health Policy, 29, 374-376; 2008.

46. Nutrition [website]. Geneva: World Health Organization; 2016 (http://www.who.int/topics/nutrition/en/).

47. Occupational health [website]. Geneva: World Health Organization; 2016 (http://www.who.int/topics/occupational_health/en/).

48. Oral health [website]. Geneva: World Health Organization; 2016 (http://www.who.int/topics/oral_health/en/).

49. Physical activity [website]. Geneva: World Health Organization; 2016 (http://www.who.int/topics/physical_activity/en/).

50. Global Assessment of National Health Sector Emergency Preparedness and Response. Geneva: World Health Organization; 2008.

51. Trade, foreign policy, diplomacy and health [website]. Geneva: World Health Organization; 2016 (http://www.who.int/trade/en/).

52. Public health legislation [website]. Geneva: World Health Organization; 2016 (http://www.who.int/topics/legislation/en/).

53. Saltman RB. Regulating incentives: the past and future role of the state in health care systems. Social Science and Medicine 2002;54:1677:1684.

54. Reproductive health [website]. Geneva: World Health Organization; 2016 (http://www.who.int/topics/reproductive_health/en/).

55. The WHO strategy on research for health. Geneva: World Health Organization; 2012 (http://www.who.int/phi/WHO_Strategy_on_research_for_health.pdf).

56. Risk factors [website]. Geneva: World Health Organization; 2016 (http://www.who.int/topics/risk_factors/en/).

57. Risk reduction and emergency preparedness: WHO six-year strategy for the health sector and community capacity development. Geneva: World Health Organization; 2007 (http://www.who.int/hac/techguidance/preparedness/emergency_preparedness_eng.pdf).

58. Health statistics and information systems – Service availability and readiness assessment (SARA) [website]. Geneva: World Health Organization; 2016 (http://www.who.int/healthinfo/systems/sara_introduction/en/).

59. Social determinants of health [website]. Geneva: World Helath Organization; 2016 (http://www.who.int/social_determinants/en/).

60. Closing the gap in a generation – health equity through action on the social determinants of health. Geneva: World Health Organization; 2008 (http://whqlibdoc.who.int/hq/2008/WHO_IER_CSDH_08.1_eng.pdf)

61. Last JM. A dictionary of public health. Oxford University Press, 2007.

62. Chronic diseases and health promotion – STEPwise approach to surveillance (STEPS) [website]. Geneva: World Health Organization; 2016 (http://www.who.int/chp/steps/en/).

63. Health Impact Assessment [online glossary]. Geneva: World Health Organization; 2016 (http://www.who.int/hia/about/glos/en/index2.html).

64. Substance abuse [website]. Geneva: World Health Organization; 2016 (http://www.who.int/topics/substance_abuse/en/).

65. Public Health Surveillance [website]. Geneva: World Health Organization; 2016 (http://www.who.int/topics/public_health_surveillance/en/).

66. Tobacco [website]. Geneva: World Health Organization; 2016 (http://www.who.int/topics/tobacco/en/).

67. Vaccines [website]. Geneva: World Health Organization; 2016 (http://www.who.int/topics/vaccines/en/).

68. Violence [website]. Geneva: World Health Organization; 2016 (http://www.who.int/topics/violence/en/).

69. Global Assessment of National Health Sector Emergency Preparedness and Response. Geneva: World Health Organization; 2008 (http://www.who.int/hac/about/Global_survey_inside.pdf).