PREPAREDNESS INDEX FOR HEALTH EMERGENCIES AND DISASTERS

Pan American Health Organization

World Health Organization
REGIONAL OFFICE FOR THE Americas

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Contents

Acknowledgements ix

Chapter 1 | General 1

1.1 Introduction 1

1.2 Objective 2

1.3 Scope 2

1.4 Target audience 2

Chapter 2 | Preparedness Index. 3

2.1 Organization. 3

2.2 Methodology 5

Chapter 3 | Results and interpretation 13

References 15

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Chapter 1 | General

1.1. Introduction

The **Preparedness Index for Health Emergencies and Disasters** is a voluntary tool to be used by health sector authorities to measure progress in emergency and disaster preparedness with a multi-hazard approach and in line with the World Health Organization's (WHO) Strategic Framework for Emergency Preparedness.

The Preparedness Index incorporates the following cross-cutting approaches: people-centered actions; gender, equity, ethnicity, human rights and disability; and shared responsibility between national and sub-national institutions and authorities, and the public and private sectors.

Emphasis is placed on planning for the strengthening of national and subnational disaster capacities through the development of standards, plans, procedures and protocols and their regular testing, as well as the training of the workforce involved in emergency and disaster risk management including emergency management.

It also highlights the importance of identifying and allocating human, material and financial resources for the implementation and development of preparedness for response and early recovery.

1.2 Objective

The objective of the Preparedness Index for Health Emergencies and Disasters is to estimate the national or sub-national health preparedness capacity to deal with natural, anthropic and health events (epidemics) that generate emergencies and disasters, as well as the capacity of the health sector to recover early from the effects of these events.

1.3 Scope

The organization that, according to the country's regulations, fulfills the role of national health authority, as well as the decentralized institutions (department, region or corresponding denomination) that perform this role at the subnational level.

1.4 Target audience

Officials and workers of emergency units, health services, epidemiology, environmental health, pre-hospital, and others that are part of the institutions that perform the role of national and sub-national health authority, as well as other public and private institutions of the health sector, civil protection system and other sectors related to the health emergency and disaster risk management.

PREPAREDNESS INDEX FOR HEALTH EMERGENCIES AND DISASTERS

Chapter 2 | Preparedness Index

2.1 Organization

The Preparedness Index for Health Disasters and Emergencies is organized into three components, governance, capacities and resources, which in turn include their respective sub-components (Table 1):

Table 1. Components and Sub-components of the Preparedness Index for Health Emergencies and Disasters

Component / Sub-component
1. GOVERNANCE
1.1 Policies and Legislation *1.2 Planning* *1.3 Coordination mechanisms*
2. CAPACITIES
2.1 Risk assessment *2.2 Surveillance, Information and Alert* *2.3 Emergency and Business Continuity Services* *2.4 Risk communication* *2.5 Research and Evaluation* *2.6 Coordination and control of activities*
3. RESOURCES
3.1 Financial *3.2 Human* *3.3 Logistics*

Each of the sub-components has several compliance requirements as shown in Table 2.

Nº	COMPONENT – SUBCOMPONENT	COMPLIANCE REQUIREMENTS	VALUATION
1. Governance		National or subnational policies and legislation that integrate health emergenc coordination mechanisms (adapted from WHO)	
1.1. Policies and Legislation			
1	Regulatory framework approved for the development of health emergency and disaster preparedness.	(1) Has an multi-hazard approach, including capacities to comply with the International Health Regulations	Yes
		(2) Has a gender perspective	Yes
		(3) Has an ethnicity perspective	Yes
		(4) Has a disability perspective	Yes
		(5) Is integrated into health and civil protection plans.	Yes
2	Regulatory framework for the implementation, monitoring and evaluation of health emergency and disaster preparedness.	(1) The governing health authority is responsible for monitoring and evaluating the health sector preparedness.	Yes
		(2) There is an area responsible for preparedness actions, which is part of the organizational chart of the governing health authority	No
		(3) Permanent human resources are allocated to health sector	

Governance

The governance component refers to national or subnational policies and legislation that integrate emergency and disaster preparedness; plans for emergency preparedness, response and recovery; and coordination mechanisms. It includes three subcomponents: policies and legislation, planning, and coordination mechanisms.

Capacities

The capacities component includes assessments of risks and capacities to determine priorities for emergency preparedness; surveillance; early warning system, laboratory, information management, casualty support services, continuity of basic services; risk communication; research; and evaluations to inform and accelerate emergency preparedness. It includes six subcomponents: risk assessment; surveillance, information and alert; continuity of basic and emergency services; risk communication; research and evaluation; and coordination and control of activities.

Resources

The resource component includes financial resources for emergency preparedness and contingency funding; dedicated, trained and equipped human resources for emergencies; emergency operations center; and logistics mechanisms for essential medical supplies. Three subcomponents have been included: financial, human and logistics.

2.2 Valuation methodology

The application of the Preparedness Index will be carried out by work teams designated by the national or sub-national health authorities of the country.

Based on the review of the compliance requirements, each sub-component will be valued, in Yes or No, based on the verification sources determined.

Verification techniques to be used may include documentary review, interviews, and inspections.

The corresponding valuation forms are presented below.

PREPAREDNESS INDEX FOR HEALTH EMERGENCIES AND DISASTERS

GOVERNANCE

Nº	COMPONENT – SUBCOMPONENT	COMPLIANCE REQUIREMENTS	VALUATION	VERIFICATION SOURCE	VERIFICATION TECHNIQUE	LEVEL OF COMPLIANCE	OBSERVATIONS
1. Governance		National or subnational policies and legislation that integrate health emergency and disaster preparedness, plans for emergency preparedness, response and recovery; and coordination mechanisms (adapted from WHO)					
1.1. Policies and Legislation							
1	Regulatory framework approved for the development of health emergency and disaster preparedness.	(1) Has an multi-hazard approach, including capacities to comply with the International Health Regulations	Yes	1. Regulatory document approved 2. Health plans 3. Civil protection plans".	Documentary review	HIGH	
		(2) Has a gender perspective	Yes				
		(3) Has an ethnicity perspective	Yes				
		(4) Has a disability perspective	Yes				
		(5) Is integrated into health and civil protection plans.	Yes				
2	Regulatory framework for the implementation, monitoring and evaluation of health emergency and disaster preparedness.	(1) The governing health authority is responsible for monitoring and evaluating the health sector preparedness.	Yes	1. Regulatory document approved 2. Organizational chart of the governing health authority 3. Staffing plan	Documentary review	MEDIUM	
		(2) There is an area responsible for preparedness actions, which is part of the organizational chart of the governing health authority	No				
		(3) Permanent human resources are allocated to health sector preparedness.	Yes				
1.2. Planning							
3	Health Sector Preparedness Plan for Health Emergencies and Disasters, updated and approved.	(1) Has a multi-hazard approach including capacities to comply with the International Health Regulations.	Yes	1. Preparedness plan approved by the governing health authority.	Documentary review	MEDIUM	
		(2) Is based on an updated assessment of risks and capacities (carried out in the last two years).	Yes				
		(3) Extends to all public and private institutions in the health sector.	Yes				
		(4) Includes measurable outcomes and goals.	No				
		(5) Has been prepared with a timeframe of at least three years.	Yes				
		(6) Includes funding or human resources for its implementation.	No				

PREPAREDNESS INDEX FOR HEALTH EMERGENCIES AND DISASTERS

CAPACITIES

Nº	COMPONENT – SUBCOMPONENT	COMPLIANCE REQUIREMENTS	VALUATION	VERIFICATION SOURCE	VERIFICATION TECHNIQUE	LEVEL OF COMPLIANCE	OBSERVATIONS
2. Capacities		Assessments of risks and capacities to determine priorities for emergency preparedness, surveillance and early warning system, laboratory, information management, casualty support services, continuity of basic services, risk communication; plus research and evaluations to inform and accelerate emergency preparedness (Adapted from WHO).					
2.1. Risk assessment							
13	A regular risk assessment that serves as a basis for the preparation and formulation of response, contingency and continuity plans.	(1) A methodology for health risk assessment has been established and is being implemented.	Yes	1. Methodology used. 2. Risk assessment reports.	Documentary review	MEDIUM	
		(2) Hazards are identified and characterized, as well as the health consequences generated by these hazards.	No				
		(3) Health sector vulnerabilities are identified and analyzed.	Yes				
		(4) Health sector capabilities are identified and analyzed.	No				
		(5) The level of risk is determined and health emergency scenarios are built.	No				
		(6) The risk assessment is updated every two years.	Yes				
2.2. Surveillance, Information and Alert							
14		(1) Regulatory documents are available on the surveillance system for biological, chemical and radiological agents of public health importance.	Yes	1. Regulatory document approved by the governing health authority. 2. Protocols and procedures approved. 2. Plan to expand response capacity	Documentary review	MEDIUM	
		(2) Permanent capacity is available for the surveillance and linkage of epidemiological, environmental, clinical and animal health information.	No				
		(3) A plan and resources are in place to expand response capacity to epidemics and pandemics.	Yes				
		(4) Capacity is in place for reporting and notification under the					

PREPAREDNESS INDEX FOR HEALTH EMERGENCIES AND DISASTERS

RESOURCES

Nº	COMPONENT – SUBCOMPONENT	COMPLIANCE REQUIREMENTS	VALUATION	VERIFICATION SOURCE	VERIFICATION TECHNIQUE	LEVEL OF COMPLIANCE	OBSERVATIONS
3. Resources		Financial resources for emergency preparedness, contingency funding, dedicated, trained and equipped human resources for emergencies, emergency operations center; as well as logistis mechanisms for essential medical supplies. (Adapted from WHO).					
3.1. Financial resources							
24	Financial resources allocated for the implementation and development of health and disaster emergency preparedness.	(1) Budget is allocated for the implementation and development of preparedness activities, based on the approved plan.	Yes	1. Budget approved by the health agency. 2. Budget execution report.	Documentary review	HIGH	
		(2) Budget is allocated for the operation of the health and disaster emergency preparedness area.	No				
		(3) Budget allocated is executed in accordance with approved plans, including an accountability mechanism.	Yes				
25	Financial mechanism to deal with health emergencies and disasters.	(1) A contingency fund or financial mechanism is in place (in the event of a risk or occurrence) that covers all hazards (natural or anthropogenic origin, epidemics).	No	1. Funding approval document or financial mechanism specific to health.	Documentary review	LOW	
		(2) A fund or financial mechanism for response and early recovery is in place that covers all hazards (natural or anthropogenic origin, epidemics).	No				
3.2. Dedicated, trained and equipped human resources							
26	Multidisciplinary teams for rapid response to health emergencies and disasters.	1. Rapid response teams are organized, trained and equipped and have a multi-hazard approach (epidemiology, immunizations, logistics, EMT and others).	Yes	1. Procedures approved 2. List of response team workforce 3. Roster of experts	Documentary review. Interviews	HIGH	
		2. Approved procedures are in place for the mobilization and action of rapid response teams.	Yes				
		3. A roster of experts is available for health emergency and disaster response with a multi-hazard approach, including workers of health organizations.	Yes				
		(1) A training program for health emergency and disaster					

Table 3. Components, sub-components of the Preparedness Index, with their corresponding percentages of participation in the result of the valuation

Component / Subcomponent	Score	%
1. GOVERNANCE	**12**	**41,4**
1.1 Policies and legislation	*2*	*6,9*
1.2 Planning	*6*	*20,7*
1.3 Coordination mechanisms	*4*	*13,8*
2. CAPACITIES	**11**	**37,9**
2.1 Risk assessment	*1*	*3,4*
2.2 Surveillance, information and alert	*3*	*10,3*
2.3 Emergency services and continuity	*3*	*10,3*
2.4 Risk communication	*2*	*6,9*
2.5 Research and evaluation	*1*	*3,4*
2.6 Coordination and control of activities	*1*	*3,4*
3. RESOURCES	**6**	**20,7**
3.1 Financial	*2*	*6,9*
3.2 Human	*2*	*6,9*
3.3 Logistics	*2*	*6,9*
RESULT	**29**	100
	(max score = 29)	

PREPAREDNESS INDEX FOR HEALTH EMERGENCIES AND DISASTERS

Chapter 3 | Results and interpretation

The application of the index categorizes the preparedness of the national or sub-national health authority into four levels: very well prepared, well prepared, prepared with limitations, and unprepared, according to the valuation ranges:

Table 4. Results according to the valuation from the application of the Preparedness Index

Index results	Valuation
VERY WELL PREPARED	Including 0,81 a 1
WELL PREPARED	Including 0,5 a 0,8
PREPARED WITH LIMITATIONS	Including 0,3 a 0,5
UNPREPARED	Less than 0,3

Figure 1. Components of the Preparedness Index, with their corresponding percentages of participation in the result of the valuation

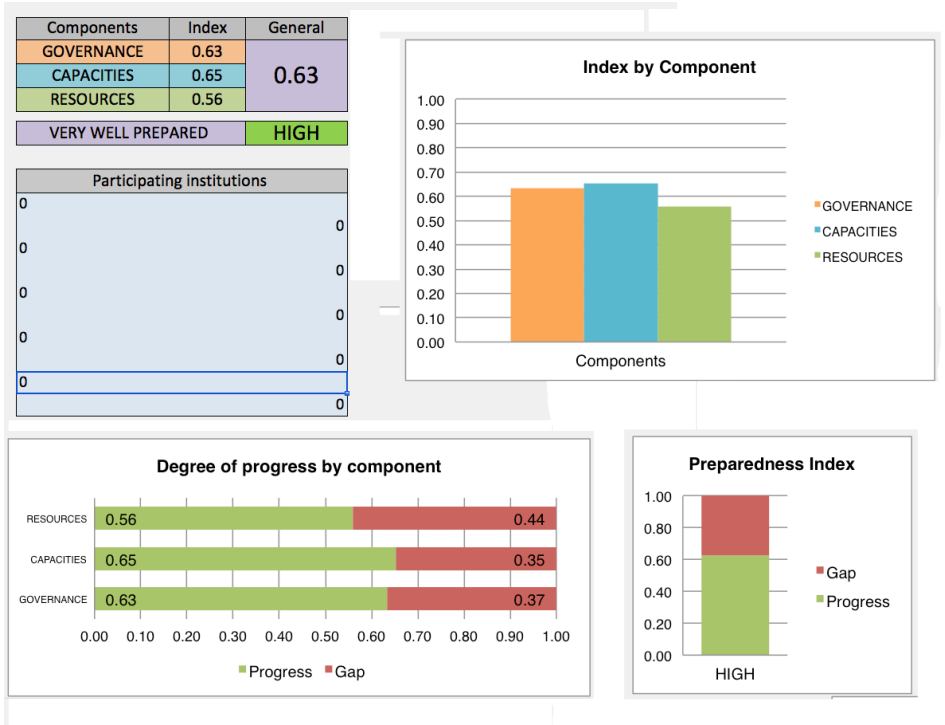
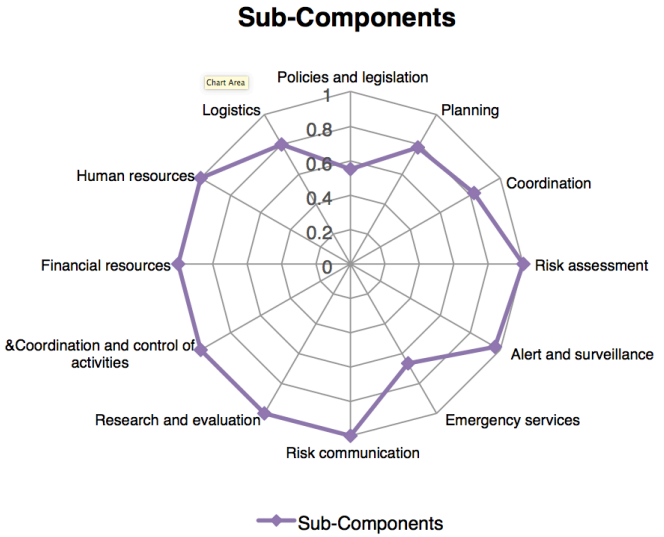


Figure 2. Sub-components of the Preparedness Index, with their corresponding percentages of participation in the result of the valuation



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