

ERF EMERGENCY RESPONSE FRAMEWORK Second edition





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ABBREVIATIONS

CFE	Contingency Fund for Emergencies
DVA	Detection, Verification and Risk Assessment
EIS	Event Information Site
EMO	Emergency Operations Department
EMS	WHO Event Management System
EMT	Emergency Medical Team
EOC	Emergency Operations Centre
ERC	Emergency Relief Coordinator
ERF	Emergency Response Framework
EWARS	Early Warning & Response System
WHE EXD	WHO Health Emergencies Programme Executive Director
FAO	Food and Agriculture Organization
GLEWS	Global Early Warning System
GOARN	Global Outbreak Alert and Response Network
HeRAMS	Health Resources Availability Mapping System
HIM	Health Emergency Information and Risk Assessment
HQ	WHO headquarters
HRP	Humanitarian Response Plan
HWO/WR	Head of WHO Offices in countries, territories and areas/ WHO Representative
IASC	Inter-Agency Standing Committee
IHR	International Health Regulations (2005)
IMT	Incident Management Team
IMS	Incident Management System
IMST	Incident Manager Support Team
	0 11
INFOSAN	International Food Safety Authorities Network
INFOSAN KPI	
	International Food Safety Authorities Network
KPI	International Food Safety Authorities Network Key performance indicator

OCHA	Office for the Coordination of Humanitarian Affairs
OIE	World Organisation for Animal Health
OSL	Operations Support and Logistics
PAM	(Regional Office) Programme Area Manager
PHEIC	Public Health Emergency of International Concern
RED	Regional Emergency Director
RO	WHO Regional Office
SitRep	Situation Report
SOPs	Standard Operating Procedures
UN	United Nations
UNCT	United Nations Country Team
UNDSS	United Nations Department of Safety and Security
UNHCT	United Nations Humanitarian Country Team
UNHRD	United Nations Humanitarian Response Depot
WAHIS	World Animal Health Information System
WCO	WHO Offices in countries, territories and areas
WHE	WHO/HQ Health Emergencies Programme
WHO	World Health Organization

GLOSSARY

Emergency A situation impacting the lives and well-being of a large number of people or a significant percentage of a population and requiring substantial multi-sectoral assistance. For a WHO response, there must be clear public health consequences.

Graded emergency An acute public health event or emergency that requires an operational response by WHO. There are three WHO grades for emergencies, signifying the level of operational response by the Organization: Grade 1 (limited response), Grade 2 (moderate response), Grade 3 (major/maximal response). If a graded emergency persists for more than six months it may transition to a protracted emergency.

Incident Management System The standardized structure and approach that WHO has adopted to manage its response to public health events and emergencies, and to ensure that the Organization follows best practice in emergency management. WHO has adapted the Incident Management System to consist of six critical functions: Leadership, Partner Coordination, Information and Planning, Health Operations and Technical Expertise, Operations Support and Logistics, and Finance and Administration.

Incident Management Team The in-country team responsible for managing and implementing the WHO response to the emergency. It is structured around the six critical Incident Management System functions and their associated sub-functions. The size and composition of the team is flexible and can vary according to context.

Incident Manager The lead of the Incident Management Team, who is responsible for strategic leadership and day-to-day management and oversight of WHO's response to the emergency. The Incident Manager serves as the overall lead of the Incident Management Team and has delegated authority to manage the emergency response, including assigning responsibilities to other critical functions as they are established. S/he works with the health authorities and partners to agree on strategic priorities and objectives for the health response, fully consistent with humanitarian principles. Incident Management Support Team The team providing day-to-day technical and operational support to the in-country Incident Management Team across all of the critical functions. It is comprised of focal points – either fully dedicated or part-time – for each of the critical functions. An Incident Management Support Team is established at both Regional and Headquarters Offices for graded emergencies, to ensure that resources from across the Organization can be accessed.

Operational oversight The responsibility for direct supervision of the Head of the WHO Office in countries, territories and areas for emergency operations. This responsibility includes day-to-day monitoring of the effectiveness of the organizational response to the emergency and delegated authority to make technical, operational and management decisions regarding the response. Operational oversight is usually the responsibility of the Regional Emergency Director. Depending on the context, the Executive Director and the Regional Director may assign this responsibility to the Director of Emergency Operations at headquarters.

Operational response The emergency actions that exceed the usual country-level cooperation that the WHO Office in countries, territories and areas has with the Member State.

Protracted emergency An environment in which a significant proportion of the population is acutely vulnerable to death, disease and disruption of livelihoods over a prolonged period of time. Governance in these settings is often weak, with limited state capacity to respond to, and mitigate, the threats to the population, or provide adequate levels of protection.

Public health event Any event that may have negative consequences for human health. The term includes events that have not yet lead to disease in humans but have the potential to cause human disease through exposure to infected or contaminated food, water, animals, manufactured products or environments.

EXECUTIVE SUMMARY

WHO Member States face increasing numbers of emergencies with health consequences from all hazards, including infectious disease outbreaks, conflicts, natural disasters, chemical or radio-nuclear spills and food contamination. Many emergencies can be complex, with more than one cause, and can have significant public health, social, economic and political impacts.

WHO has specific responsibilities and accountabilities for emergency operations under the International Health Regulations (IHR) (2005) and within the global humanitarian system as the Interagency Standing Committee (IASC) Global Health Cluster Lead Agency.

These responsibilities begin with early detection and risk assessment or situation analysis of a public health event or emergency, described in **chapter 1**. Events or emergencies requiring an operational response by WHO are referred for grading, described in **chapter 2**. This chapter describes the grading process, definitions of various grades, criteria for grading, and steps to remove a grade. WHO uses three levels of emergency grades; emergencies that continue for more than six months may be defined as protracted crises, which also have three grades.

WHO's operational response to emergencies is managed through application of the Incident Management System (IMS), described in **chapter 3**. The IMS is based on recognized best practices of emergency management and is increasingly used by emergency management systems globally, including within the health sector.

WHO's critical functions for emergency response under the IMS are: Leadership; Partner coordination; Information and planning; Health operations and technical expertise; Operations support and logistics; and Finance and administration.

Chapter 4 describes WHO's Performance Standards for emergency response, and the key performance indicators used to measure performance. The Organization's emergency response procedures are laid out in tables in **chapter 5**.

The Annexes describe the classification of hazards (**Annex 1**), and the emergency grading template (**Annex 2**).

INTRODUCTION

The world today is impacted by emergencies on an unprecedented scale. The health, economic, political and societal consequences of emergencies can be devastating, both in the acute and long term. They have major impacts on the health and well-being of communities, resilience of health systems, stability of national economies, and progress towards the Sustainable Development Goals. This revised version of the Emergency Response Framework (ERF) has been developed at a time when the need for WHO and its partners to respond more predictably and effectively has never been greater.

The evolving risks and needs due to public health events and emergencies are well documented. Between 2011 and 2016, WHO reported over 1,000 epidemics across 168 countries. Public health crises such as Severe Acute Respiratory Syndrome (SARS) (2003), pandemic H1N1 (2009), Middle East respiratory syndrome coronavirus (MERS-CoV) (2012–2015) and Ebola (2014) have highlighted the global risks of infectious disease outbreaks, while demonstrating the need for more effective international collaboration on health security and pandemic preparedness.

At the same time, the scale and complexity of humanitarian emergencies continue to expand. By the end of 2016, 128.6 million people globally required aid, of whom 65.3 million had been forcibly displaced from their homes. Both figures are the largest on record. Eighty percent of this need is due to violent conflict, often in the context of chronic underdevelopment and state fragility. Moreover, in excess of 200 million people annually are impacted by natural and technological disasters, requiring rapid and targeted response.

The convergence between disease risk and humanitarian need is also becoming increasingly evident. Outbreaks can become humanitarian emergencies (e.g. Ebola outbreak in West Africa) and humanitarian emergencies are often complicated by outbreaks (e.g. polio re-emergence in Syria and Nigeria; cholera outbreaks in Somalia and South Sudan). The establishment of the WHO Health Emergencies Programme has promoted an important alignment of the Organization's work on health security and humanitarian action.

Underlying these trends are related risk factors that are also on the rise, including climate change, environmental degradation, urbanization,

migration and international travel, state fragility, and terrorism. The number of emergencies with health consequences is therefore likely to continue to expand for the foreseeable future. WHO and its partners must be ready and have the capacity to respond.

This new version of the ERF is an important contribution towards improving the predictability, timeliness and effectiveness of WHO's response to emergencies. It has been developed following extensive consultation across the three levels of the Organization and initial experiences with many of the processes and systems presented in the document.

Purpose of the Emergency Response Framework

The ERF provides WHO staff with essential guidance on how the Organization manages the assessment, grading and response to public health events and emergencies with health consequences, in support of Member States and affected communities. This second edition has been developed to incorporate lessons learned from the Organization's response to recent outbreaks and emergencies, and the reform of WHO's emergency work. This includes the creation of the WHO's Health Emergencies Programme (WHE) in 2016 and the adoption of the Incident Management System (IMS) as the main organizational approach to managing the response to emergencies. While the ERF focuses primarily on acute events and emergencies, it also introduces WHO's new grading process for protracted emergencies.

The ERF adopts an all-hazards approach and it is therefore applicable in all public health events and emergencies (see Annex 1 for classification of hazards). It is complemented by WHO's Emergency Standard Operating Procedures (SOPs), and is consistent both with technical documents (e.g. WHO guidance on risk assessment) and with interagency emergency protocols and commitments (for example the Transformative Agenda protocols of the Interagency Standing Committee). Many elements are therefore aligned with similar internal guidance of partner agencies.

Key definitions

WHO applies the following definitions in its emergency work:

• Public health event: any event that may have negative consequences for human health. The term includes events that have not yet lead to disease in humans but have the potential to cause human disease through

exposure to infected or contaminated food, water, animals, manufactured products or environments.¹

 Emergency: a situation impacting the lives and well-being of a large number of people or significant percentage of a population and requiring substantial multi-sectoral assistance. For WHO to respond, there must be clear health consequences.²

Both public health events and emergencies can be acute or slow onset.

WHO's Health Emergencies Programme functions

The ERF deals with WHO's response to emergencies – but the Organization takes a comprehensive approach to all aspects of emergency management, embracing prevention/mitigation, preparedness/readiness, response and recovery. WHO supports Member States to build their capacities to manage the risks of outbreaks and emergencies with health consequences. When national capacities are exceeded, WHO assists in leading and coordinating the international health response to contain outbreaks and to provide effective relief and recovery to affected populations.

The WHO Health Emergencies Programme (WHE) has been designed and structured to implement this approach, with the following functions:

- Country health emergency preparedness and International Health Regulations core capacity building
- Infectious hazard management
- Health emergency information and risk assessment
- Emergency operations
- Management and administration
- External relations

WHO's obligations under the International Health Regulations (2005) and Interagency Standing Committee

While WHO manages risks and emergencies due to all hazards, it has special responsibilities with respect to infectious hazards, especially in light of its role as custodian of the International Health Regulations (2005) (IHR). The IHR define the obligations of countries to assess, report and respond to

¹ Rapid Risk Assessment of Acute Public Health Events. Geneva, World Health Organization; 2012 (http://apps.who.int/iris/bitstream/10665/70810/1/WHO_HSE_GAR_ARO_2012.1_eng.pdf, accessed 27 February 2017).

² Adapted from Definition of Complex Emergencies. Geneva: Interagency Standing Committee; 1994 (https://interagencystandingcommittee.org/system/files/legacy_files/WG16_4.pdf, accessed 27 February 2017).

public health events, and the procedures that WHO must follow to uphold global public health security. Early detection, risk assessment and response are vital to ensuring that infectious disease events do not escalate into largescale outbreaks or pandemics. The ERF has been developed with this as a central objective.

WHO works closely with Member States and partners – including those through the Global Outbreak Alert and Response Network (GOARN) and other expert networks – to strengthen national, regional and global capacities to prevent, detect and respond to outbreaks, consistent with the IHR. Stronger WHO readiness at all three levels of the Organization represents an important component of these capacities.

WHO also has specific responsibilities and accountabilities within the global humanitarian system as the lead agency of the Inter-Agency Standing Committee (IASC) Global Health Cluster. WHO leads and coordinates the Health Cluster at global level and leads country Health Clusters when these are activated, ideally in co-leadership with the Ministry of Health. WHO has aligned the ERF and its Standard Operating Procedures to the IASC Transformative Agenda protocols, while embracing more recent developments such as the Grand Bargain³ and the New Way of Working.⁴

Similarly, WHO leads and coordinates the Emergency Medical Team (EMT) initiative globally and assists the Ministry of Health in coordinating the arrival, registration, licensing, reception and tasking of EMTs when necessary. Both Health Cluster and EMT partners have important roles in building national capacities for preparedness and response.

WHO's critical functions for emergency response

When responding to an emergency, WHO has clearly defined functions that reflect its responsibilities under the IHR and the IASC's cluster approach, as well as the expectations of Member States and partners. These response functions are operationalized through the Incident Management System

³ The Grand Bargain is a collective initiative among key humanitarian partners and donors to strengthen the effectiveness and efficiency of humanitarian action. While WHO is not a formal signatory to the Grand Bargain, much of WHO work in emergency operations is aligned with its principles and commitments. http://www.agendaforhumanity.org/initiatives/3861

⁴ The New Way of Working has been developed in light of the multiple protracted and recurring crises globally. It promotes greater collaboration between humanitarian and development actors, and among operational sectors/clusters, in the spirit of not just delivering effective aid, but ending need. The New Way of Working "aims to meet people's immediate humanitarian needs, while at the same time reducing risk and vulnerability over multiple years through the achievement of collective outcomes" https://interagencystandingcommittee.org/system/files/update_on_the_new_way_of_working.pdf

(IMS). The IMS is based on recognized best practices of emergency management and is increasingly used by emergency management systems globally, including within the health sector.

WHO's critical functions for emergency response under the IMS are:

- Leadership
- Partner coordination
- Information and planning
- Health operations and technical expertise
- Operations support and logistics
- Finance and administration

Details regarding these critical functions are presented in chapter 3 on Incident Management.

WHO's core commitments in emergency response

WHO's core commitments in emergency response are those actions that the Organization will always deliver and be accountable for during the assessment and response to public health events and emergencies. These actions are undertaken in support of national health authorities and the affected population, and in close collaboration with national and international partners.

In response to public health events and emergencies, WHO will:

- 1. Undertake a timely, independent and rigorous risk assessment and situation analysis.
- 2. Deploy sufficient expert staff and material resources early in the event/ emergency to ensure an effective assessment and operational response.
- 3. Establish a clear management structure for the response in-country, based on the Incident Management System.
- 4. Establish coordination with partners to facilitate collective response and effective in-country operations.
- 5. Develop an evidence-based health sector response strategy, plan and appeal.
- 6. Ensure that adapted disease surveillance, early warning and response systems are in place.
- 7. Provide up-to-date information on the health situation and health sector performance.
- 8. Coordinate the health sector response to ensure appropriate coverage and quality of essential health services.

- 9. Promote and monitor the application of technical standards and best practices; and
- **10**.Provide relevant technical expertise to affected Member States and all relevant stakeholders.

WHO's guiding principles for emergency response

- Country focus: WHO works primarily in support of the national response to emergencies, including working with government and local partners. Through its critical functions, WHO supports the Ministry of Health in all aspects of the operational response, supports local actors and encourages participation of communities. To do so effectively, WHO concentrates its resources as close to the emergency – and the affected population – as possible. Regional and Headquarters offices work in support of the Incident Management Team and the WHO Office in countries, territories and areas (WCO).
- Humanitarian principles: The fundamental humanitarian principles humanity, impartiality, independence, neutrality – are central to WHO's emergency work. The humanitarian imperative of saving lives and relieving suffering supersedes all other considerations. In contexts where principled humanitarian action is constrained, WHO will work with partners to identify comparative advantages in addressing operational constraints.
- Evidence-based and knowledge-based programming: To ensure the quality and effectiveness of its emergency response, WHO applies evidence-based and knowledge-based programming. This includes the promotion of and adherence to technical standards⁵ and best practices, and close monitoring of key performance indicators to guide operations. It also includes the global coordination of knowledge-based development and research, to fill vital knowledge gaps, including during the response.
- **Partnership:** Effective response is dependent on the work of many partners dedicated to improving the health and well-being of populations affected by emergencies. Recognizing that through collective action WHO can optimize its effectiveness, the Organisation prioritizes partnership at all levels. Key partners include Member States, United Nations (UN) agencies, the Red Cross and Red Crescent movement, GOARN, the Global Health Cluster and other clusters under the IASC, EMTs, expert networks, technical networks, standby partners, and many

⁵ Including the Sphere Project's Minimum Standards in Humanitarian Response; Classification and Minimum Standards for Foreign Medical Teams in Sudden Onset Disasters; and other technical standards.

others. At country level, WHO looks to support and strengthen local actors, including non-governmental organizations (NGO) and other civil society groups. The work of other sectors/clusters – especially water and sanitation, food, nutrition, protection, animal health and husbandry, and security – is also vital in improving health outcomes during emergencies.

- Protection: The IASC Principals (the heads of the organizations that form the IASC) have affirmed that protection must be at the heart of humanitarian action and that all humanitarian organizations should commit to promoting protection and working towards collective outcomes.⁶ Protection entails activities that secure the rights of the individual in accordance with relevant bodies of international law. In practice, for WHO and health partners, this means ensuring the availability of health services to prevent and alleviate human suffering, prioritizing the safety and dignity of patients and their families, meeting the health needs of diverse groups, and responding to the specific needs of survivors of sexual and gender-based violence and other forms of violence. It also means advocating for the protection of populations, health workers and health facilities.
- Gender, age and vulnerability sensitivity: Certain groups are more vulnerable to the health consequences of emergencies, due to various public health and socio-cultural factors. Women and girls are at special risk, particularly in settings of conflict. Ensuring that they have ready access to reproductive health services and are protected from gender-based violence are humanitarian response priorities. The vulnerabilities and special needs of other groups, such as children, older people, the disabled, those living with HIV, and ethnic or religious minorities, must also be addressed in the design and implementation of emergency operations.
- Accountability: WHO's primary accountability is to the populations it serves, but also to Member States, partners and donors.
 WHO strengthens accountability through evidence-based programming, clarification of roles and responsibilities, transparent information sharing, participation of affected populations, securing feedback from communities and other stakeholders, and maintenance of a risk register.
- Strengthening the humanitarian-development nexus. Consistent with the Grand Bargain and the New Way of working, WHO looks to

⁶ Inter-Agency Standing Committee Policy on Protection in Humanitarian Action. Geneva, Inter-Agency Standing Committee; 2016 (https://interagencystandingcommittee.org/protection-priority-globalprotection-cluster/documents/inter-agency-standing-committee-policy, accessed 27 February 2017).

engage more effectively with development partners to reduce risks and vulnerabilities of communities, working towards collective outcomes. During the response to emergencies, WHO and its partners aim to lay the foundation for health sector recovery, based on a health systems approach.

WHO's "no regrets" policy

At the onset of all emergencies, WHO ensures that predictable levels of staff and funds are made available to the WCO, even if it is later realized that less is required, with full support from the Organization and without blame or regret. This policy affirms that it is better to err on the side of over-resourcing the critical functions rather than risk failure by under-resourcing.

In terms of financial resources, this policy provides the Head of the WHO Office/WHO Representative (HWO/WR) and/or the Incident Manager with increased authority to approve expenditure, as defined in WHO eManual section XVII.2.3: Delegation of Authority & Standard Waivers. The related procedures for accountability and documentation remain in place, as described in the emergency Standard Operating Procedures.

Immediate access to funds is provided from either the Contingency Fund for Emergencies (CFE) or the Regional Office's rapid response accounts, and is replenished as funds are raised for the emergency. This "no-regrets" policy applies to any expenditure incurred during the first three months of an acute emergency.

Successful implementation of the ERF

Successful implementation of the ERF requires:

- Sufficient risk reduction and preparedness capacities in Member States
- Institutional readiness of WHO in line with standardized checklists at country, regional and headquarters offices
- Sufficient and sustainable core funding for the above
- Sufficient and timely response funding
- Access to the affected population
- Rapid and transparent information-sharing

CHAPTER 1: RISK ASSESSMENT AND SITUATION ANALYSIS

WHO undertakes a range of assessments in its emergency work. The most important for guiding initial emergency response are the risk assessment conducted for public health events⁷ and the situation analysis conducted for sudden onset emergencies (see Box 1).⁸ The outcomes of these assessments will determine if an operational response⁹ is required by WHO, and if it is, the event or emergency will be referred for grading (see Chapter 2). This chapter outlines the key steps for the detection, verification and risk assessment of public health events, and for the situation analysis and subsequent health sector assessments for emergencies.

Box 1: Examples of common public health events and emergencies requiring assessment or analysis

Public health events that may require a risk assessment include, but are not limited to:

- Outbreaks of infectious diseases: diseases of unknown origin, new emerging or re-emerging diseases, epidemic-prone diseases, or zoonoses.
- Events resulting from exposure to toxic or hazardous materials: falsified and counterfeit drugs or vaccines; unusual reaction to medications or vaccines; food or water contamination; environmental contamination/exposure; accidental release or deliberate use of biological and chemical agents or radio-nuclear material.
- Other unusual or unexpected events representing a risk for public health.

Emergencies that may require a situation analysis include, are but not limited to:

- Emergencies due to natural hazards: earthquakes, tsunamis, floods, landslides or avalanches, extreme temperatures, progressive drought, and wildfires.
- Emergencies due to human-induced hazards: armed conflict, civil unrest, terrorism, transportation crashes, structural fires, industrial explosions.

⁷ Rapid Risk Assessment of Acute Public Health Events. Geneva, World Health Organization; 2012 (http://apps.who.int/iris/bitstream/10665/70810/1/WHO_HSE_GAR_ARO_2012.1_eng.pdf, accessed 27 February 2017).

⁸ IASC Reference Module for the Implementation of the Humanitarian Programme Cycle. Geneva: Inter-Agency Standing Committee; 2015 (https://interagencystandingcommittee.org/iasc-transformativeagenda/documents-public/iasc-reference-module-implementation-humanitarian, accessed 27 February 2017).

⁹ An "operational response" consists of WHO emergency actions that exceed the usual country-level cooperation that the WHO Country Office has with the Member State. These actions are summarized under the Health Operations and Technical Expertise function of the IMS: disease prevention and control measures; risk communication and community engagement; health service delivery; technical expertise, science and research; and training of health staff.

Risk assessment and situation analysis are not completely distinct activities. Risk assessment always integrates elements of situation analysis; similarly, the situation analysis for emergencies always includes an assessment of risks.

The relationship between initial detection, verification, assessment, grading and WHO operational response is outlined in Figure 1.

Figure 1: Linking risk assessment and situation analysis to WHO grading and operational response



For acute events and emergencies, grading occurs within 24 hours of risk assessment/situation analysis

Public health events: rapid risk assessment¹⁰

Early detection and risk assessment are critical to WHO's work. Early detection is required for early action, to prevent public health events from becoming emergencies, and risk assessment improves decision making for effective response.

¹⁰ This section deals with risk assessment of public health events; it does not include the risk profiling and risk assessments that may be undertaken as a component of preparedness activities, e.g. Vulnerability and Risk Analysis Mapping (VRAM).

WHO has a responsibility to monitor the event either until it is over or no longer represents a significant risk to public health. The Organization also commits to providing sufficient staff and core funding that are essential to maintaining capacities for event detection, risk assessment and monitoring. Information sharing, transparency and open communication are paramount, and are directly linked to accountability. The IHR provide the legal framework for requiring the sharing of information among Member States.

WHO cannot provide an effective response to emergencies without close coordination and collaboration with Member States and with partners.

Information collection and analysis

The Detection, Verification, and Risk Assessment (DVA) Team in WHE's Health Emergency Information and Risk Assessment (HIM) Department has teams at headquarters and regional levels. DVA works closely with WHO Regional Offices (RO) and WCOs to detect public health events of national or international concern and to conduct risk assessments. The ongoing collection and analysis of information is undertaken using several approaches:

- Maintaining direct, ongoing communications with WHO offices and Ministries of Health, UN partners, NGOs, and other professional networks.
- Receiving formal notification of IHR events through the National IHR Focal Points.
- Sharing information about events through partnership networks, including GOARN, the FAO-OIE-WHO Global Early Warning System (GLEWS), the International Food Safety Authorities Network (INFOSAN), the IASC Early Warning, Early Action and Readiness working group, the World Animal Health Information System (WAHIS) and others; and through media monitoring systems and tools (e.g. ProMED).
- Searching public and open sources of information for key words across different electronic media, using computer-aided algorithms.

The information received through these various channels is reviewed continuously by the DVA team to identify signals or events that require further verification or immediate action.

Event verification

Event verification is undertaken when the occurrence, nature, or cause and extent of a potential public health event are not known, or where the sources of the report require substantiation.¹¹ Verification may take between a few hours to several days depending on context.

An event is usually considered as verified following an official Member State notification, e.g. through direct reporting to WHO under the IHR or a government press release. In some circumstances, an event may require verification by WHO and partners even when official information is not available. The IHR lays out the provisions for initiating event verification by WHO without official reporting by a Member State.

Event verification is done through active systematic information-gathering from various sources, for triangulation and technical review. These sources include but are not limited to:

- **WHO reference person**: the Regional Office IHR contact person, technical/disease focal points, WCO, etc.
- **Country-level contacts**: health authorities, national IHR focal points, head of laboratories and other technical experts, United Nations agencies and health sector partners.
- **Other sources**: expert networks, published reports, media information.

If necessary, a team will deploy to the event location for verification, in-depth investigation and, as required, risk assessment. The team will be comprised of experts from the country, regional or global levels, including from technical networks and partners such as GOARN.

Activation of Standard Operating Procedures and use of emergency funding for field investigation and risk assessment

When the verification process indicates that further information is required, WHO's Emergency Standard Operating Procedures (SOPs) can be activated to facilitate rapid deployment for field investigation and risk assessment.¹² In addition, the CFE – up to a maximum of US\$ 50,000 – can be accessed¹³ to

¹¹ Early detection, assessment and response to acute public health events: Implementation of Early Warning and Response with a focus on Event-Based Surveillance Interim Version. Geneva: World Health Organization; 2014 (http://apps.who.int/iris/bitstream/10665/112667/1/WHO_HSE_GCR_LYO_2014.4_ eng.pdf, accessed 27 February 2017).

¹² e-Manual section XVII.7.1 Human Resources: https://emanual.who.int/p17/s07/ss01/Pages/XVII.7.1%20 Human%20Resources.aspx

¹³ e-Manual section XVII.7.0.1 CFE – Request for Support: https://emanual.who.int/p17/s07/ss03/Pages/ XVII.7.3.1%20Contingency%20Fund%20for%20Emergencies%20(CFE).aspx

support these activities. Any additional WHO actions or expenditures require grading (see chapter 2).

Rapid risk assessment

Once an acute event is verified, it may then undergo a structured rapid risk assessment. The decision to conduct a full and rigorous risk assessment is context-specific and signals the need to document the public health risks of an event, its likely impact and actions recommended by WHO.

Events that may require a structured rapid risk assessment include those that: are likely to be reportable under IHR, exceed the response capacity of local authorities, and are likely to become a graded emergency for WHO. A structured risk assessment may also be conducted for slow-onset events where the situation is dispersed and complex, and where a risk assessment may bring greater focus on an event and response needs.

In public health there are many types of risk assessments that apply different methodologies. For acute events, the WHO Health Emergencies Programme applies the methods outlined in the 2012 WHO manual *Rapid Risk Assessment of Acute Public Health Events*.¹⁴

The main objectives of the risk assessment are to characterize the risk to public health and to recommend the most effective public health actions – especially to prevent amplification of an event into an outbreak. The key features are:

- The assessment is undertaken as quickly as possible ideally within 24 hours of verification. Nonetheless, the timing may vary by hazard, the accessibility of the affected areas, and the rate of onset or evolution of the acute event.
- An absence of verification does not preclude a risk assessment if other information suggests it is warranted.
- A multidisciplinary team of WHO staff from different levels of the Organization will undertake the risk assessment. The team always includes at least one DVA team member and input from an infectious disease specialist or other hazard-specific expert.

¹⁴ http://www.who.int/csr/resources/publications/HSE_GAR_ARO_2012_1/en/

- WHO engages partners in risk assessments, including through GOARN and technical networks¹⁵, the "One Health" collaboration among WHO, FAO and OIE; INFOSAN; and IASC members.
- The outputs of the risk assessment are WHO's independent opinion. While the risk assessment process integrates inputs from Member States and partners, it does not require approval or concurrence of a Member State. The HWO/WR has the responsibility of ensuring that Member State inputs are appropriately included in the risk assessment and that the independent conclusion and recommendations by WHO of the risk assessment is communicated to the Member State.

Elements of the rapid risk assessment

When a public health event is verified, questions are developed around the following criteria to determine the level of risk and to characterize it:

- Hazard(s): identifying the hazard(s) that could be causing the event and its potential impact, characterizing the hazard(s), ranking potential hazards when one or more is considered a possible cause of the event.
- Exposure (or potential exposure) of individuals and populations: the numbers of people known or likely to have been exposed, the number or groups of people who are likely to be susceptible, the extent/intensity of exposure, and the geographical distribution.
- Context, including an evaluation of the environment in which the event is taking place:
 - health impact, including number of cases, number of deaths, number of hospitalizations and case fatality ratios
 - vulnerability of exposed or potentially exposed populations
 - capacity of local and national authorities to successfully address the risk
 - impact on the national health care system
 - occupational risks to responders
 - WHO's reputational risk

Risk characterization and determination of risk level

Following the verification of a public health event, the likelihood of public health consequences and the severity of their impact are estimated. The risk assessment team then assigns an overall risk level of low, moderate, high or

¹⁵ The major technical networks include the Global Chemical Incident Emergency Response Network (Cheminet), the Emerging and Dangerous Pathogen Laboratory Network (EDPLN), the Emerging Diseases Clinical Assessment and Response Network (EDCARN), and the Radiation Emergency Medical Preparedness and Assistance Network (REMPAN).

very high to the event. The risk level is therefore a product of the likelihood and the public health impact of the event.

The level assigned to the risk does not, however, indicate the level of response required by WHO, since that is determined by the grading process (see chapter 2).

Recommendations regarding risk assessment

The risk assessment team makes recommendations regarding follow-up actions in a standardized template.¹⁶ Depending on the level and type of risk, the recommendations may include advice to:

- Discard the event since it does not present a public health risk.
- Implement monitoring, mitigation, preparedness and readiness measures. The majority of events can be effectively managed through standard prevention and mitigation measures using in-country resources. Nonetheless, a proportion of these events will require on-going monitoring by WHO and partners, as well as active preparedness and readiness measures. Such events can be considered as ungraded or pre-grading. The Regional Emergency Director (RED) is responsible for ensuring that such events are documented in the Event Management System (EMS).
- Refer the event for grading, if the event:
 - Requires an operational response by WHO;
 - Has been assessed as high or very high risk. Moderate risks may also be referred for grading, at the discretion of the assessment team.
- Classify it as an event that is reportable under the IHR, in accordance with the IHR Annex 2 decision instrument for the assessment and notification of events that may constitute a public health emergency of international concern (PHEIC).
- Refer the event for consideration as a PHEIC. The determination of a PHEIC is made by the WHO Director-General, following a review of recommendations from the IHR Emergency Committee convened for the event by WHO.

Communication of event detection, verification and risk assessment

Regular reporting of events: Information about verified events and decisions for subsequent action will be recorded in the WHO Event

¹⁶ Send an email to outbreak@who.int to obtain the latest version of the template.

Management System (EMS).¹⁷ Creation of an EMS event can be done at any level of the organization. Further uploading of information can be done by HIM staff or other WHO staff granted administration rights for the particular event.

Reporting on risk assessments (see Figure 2): When a risk assessment is performed for a verified event, the results are communicated by the assessment team to the RED, the HWO/WR and the Directors of Health HIM and Emergency Operations (EMO) at headquarters. The assessment team also uploads the results in a centralized database managed by the HIM department.

- Informing the WHE Executive Director and Regional Director: Once notified, the RED forwards a summary email to the WHE Executive Director and the Regional Director. The email includes the outcomes of the risk assessment, proposed recommendations and initial actions by WHO to mitigate any potential public health consequences.
- Informing the WHO Director–General: For high and very high risk events, the WHE Executive Director informs the WHO Director-General, with copy to members of the Global Policy Group and the WHE Directors at headquarters and Regional Office levels. Note that all high and very high risk events are referred for grading, within 24 hours.
 - The WHO Director-General may consider convening an Emergency Committee for consideration of whether the event constitutes a PHEIC.
- Informing the United Nations system: Based on the IASC Level 3 Activation Procedures for Infectious Disease Events, the Director-General of WHO will inform the UN Secretary-General, with copy to the Emergency Relief Coordinator, within 72 hours of detection/reporting of an infectious disease event that is assessed as high or very high risk, or when it is assessed as a WHO Grade 2 or Grade 3 emergency.

¹⁷ EMS is the system in operation at the time of publication, however, it is to be replaced by an alternate system.

Figure 2: Notification chain and timeline for communication of risk assessments



Other considerations:

- Informing national authorities: The HWO/WR will share the risk assessment with the Ministry of Health and other relevant national authorities. The WHO Regional Office and Headquarters will support the HWO/WR in managing any sensitivities related to the outcomes of the risk assessment.
- Informing partners: Risk assessments will also be shared externally through agreed partner networks and other communication channels. The WHE communications team will ensure that a clear risk statement is prepared if further dissemination is needed or if there is interest by media outlets.
- Events reportable under IHR: Verified events that are reportable under the IHR and the results of their assessment should be communicated through the Event Information Site (EIS), which is a restricted site available to all IHR National Focal Points. Sharing information publicly about events notifiable under IHR is done in accordance with the provisions of Article 11 of IHR.

Emergencies: situation analysis

In natural disasters, acute conflicts and other acute emergencies with obvious health impact or risks from the outset, WHO and partners support governments in undertaking a rapid situation analysis to determine the nature and scale of the emergency, its health consequences and risks, the gaps in available response and coordination capacities, and the need for an operational response by the Organization. This initial situation analysis is usually based on a review of secondary data and conducted within 24–72 hours of onset, as per the IASC's Humanitarian Programme Cycle, together with partners.

If an operational response is required, WHO immediately repurposes the country office, activates the emergency contingency plan and business continuity plan¹⁸, initiates response activities and proceeds to grading within a maximum of 24 hours of the situation analysis (see chapter 2). For slow onset emergencies, e.g. due to drought, conflict, there may be a longer, context–specific interval before grading.

An interagency Multi-sector Initial Rapid Assessment (MIRA)¹⁹ is then completed, usually within 14 days for sudden onset emergencies, although this may take longer for slower onset emergencies. WHO leads the health component of the MIRA. More detailed health sector needs assessments are also usually conducted thereafter. Based on the context, these may include Health Resource Availability Mapping System assessments (HeRAMS), mortality surveys, or nutrition surveys.

Activation of Standard Operating Procedures and use of emergency funding for early warning/early action

For some natural hazards (e.g. cyclones, drought) and societal hazards (e.g. civil unrest), an early warning may be issued by relevant authorities to alert of an impending emergency. In such instances, WHO may deploy staff, supplies and equipment to support in-country readiness and early action. As for public health events, WHO's Emergency SOPs can be activated in these circumstances, and a request made for CFE funds up to a maximum of US\$ 50,000. Any additional WHO actions or expenditures require grading (see chapter 2).

¹⁸ An emergency contingency plan and a business continuity plan are key elements of WHO office readiness for emergency response.

¹⁹ Multi-Cluster/Sector Initial Rapid Assessment Guidance. Geneva: Inter-Agency Standing Committee; 2015 (https://docs.unocha.org/sites/dms/documents/mira_final_version2012.pdf, accessed 27 February 2017).

Criteria for assessing needs

WHO considers the following criteria to assess the scale and significance of health consequences related to the emergency and the associated needs of the affected population²⁰:

- Impact
 - Scope and scale
 - Numbers of people affected, disaggregated by sex and age wherever possible.
 - · Size of geographic area affected.
 - · Underlying causative factors and drivers of the emergency.
 - · Ongoing hazards and associated risks to health.
 - Primary and secondary effects, e.g. forced displacement of refugees complicated by outbreak, earthquake complicated by fire.
 - Conditions of the affected population
 - Extent and type of health consequences and risks.
 - Vulnerabilities and vulnerable groups, e.g. women, children, older people, disabled, ethnic and minority groups.
 - Functionality of national health system
 - · Physical damage to health facilities and other vital infrastructure.
 - Disruption of health service delivery, including cessation of programmes.
- Operational environment
 - Response Capacity
 - National and local capacities and response, including in emergency management, and in health and other related sectors.
 - International capacities and response both in-country and available for mobilization.
 - · WHO capacities and response
 - · Coordination capacity.
 - Access and gaps
 - · Physical, political and security access to the affected area.
 - Coverage and gaps of essential health services and other related services.
 - Overall strategic humanitarian priorities.
 - Context and/or conflict analysis.

²⁰ Multi-Cluster/Sector Initial Rapid Assessment Guidance. Geneva: Inter-Agency Standing Committee; 2015 (https://docs.unocha.org/sites/dms/documents/mira_final_version2012.pdf, accessed 27 February 2017).

Recommendations regarding situation analysis

Similar to risk assessments, recommendations are made following the situation analysis regarding appropriate follow-up actions, which may include advice to:

- Discard the event since it does not present a public health risk requiring WHO action.
- Implement monitoring, mitigation and preparedness/readiness measures since some emergencies will not require an immediate operational response by WHO, but necessitate on-going monitoring and active preparedness and readiness measures. These include slower onset emergencies, such as drought, food insecurity, and evolving political and civil crises. Such emergencies are considered as ungraded or pre-grading. The RED is responsible for ensuring that such events are documented in the EMS.
- Refer the emergency for grading. Grading is required for all emergencies requiring an operational response by WHO.

CHAPTER 2: WHO GRADING OF PUBLIC HEALTH EVENTS AND EMERGENCIES

Grading is an internal activation procedure that triggers WHO emergency procedures and activities for the management of the response. The grading assigned to an acute emergency indicates the level of operational response required by WHO for that emergency.

WHO's immediate operational response to acute events and emergencies is not dependent on grading. If the risk assessment or situation analysis indicates the need for an operational response, WHO immediately repurposes the country office(s), initiates response activities and then proceeds to grading within a maximum of 24 hours of the analysis.

Protracted emergencies (that persist for longer than 6 months) are assigned protracted grades to indicate the level of operational response to be sustained by WHO over a prolonged, often indefinite period.

Purpose of grading

Grading is an internal WHO process that is conducted to:

- Activate WHO's Incident Management System and Emergency SOPs;
- Inform the Organization of the level of WHO's operational response to an emergency and the need for mobilization of internal and external resources;
- Determine the need for a surge of additional human and material resources.
- Permit the use of resources from the CFE above US\$ 50,000;
- Convey to partners, donors and other stakeholders WHO's assessment of the scale of unmet needs within the health sector and, by extension, the requirement for additional international resources.

For Grade 2 and 3 emergencies due to an infectious hazard, as well as any high or very high risk that remains ungraded, the UN Secretary General and the UN Emergency Relief Coordinator are notified, as per the IASC Level 3 Activation Procedures for Infectious Disease Events.

Triggers for grading

- Any public health event with a risk assessed as high or very high;
- Any public health event with a risk assessed as moderate or low, but that requires an operational response by WHO;
- Any emergency situation for which the initial situation analysis indicates a health impact likely to require an operational response by WHO;
- Any request for emergency assistance from a Member State.

Timing of grading

For acute events and emergencies, the grading exercise is conducted within 24 hours of:

- A risk assessment that characterizes an acute event as high or very high risk.
- A situation analysis that indicates the likely need for an operational response by WHO to a sudden onset emergency, e.g. earthquake, tropical storm.

For moderate risks or slower onset events, e.g. due to conflict or drought, grading may only happen several days after initial assessment.

Responsibility for grading

Grading may be initiated by any level of the Organization (country, regional, headquarters), however the primary responsibility lies with the RED. For large-scale emergencies with potential for substantial multi-regional impact, the grading process will be overseen by the Director of Emergency Operations (EMO). While the relevant WCOs participate in the grading exercise, the HWO/WR never single-handedly determines the grade of an emergency.

WHO levels for graded emergencies

Ungraded	A public health event or emergency that is being monitored by WHO but that does not require a WHO operational response.
Grade	A single country emergency requiring a limited response by WHO, but that still exceeds the usual country-level cooperation that the WHO country Office (WCO) has with the Member State. Most of the WHO response can be managed with in-country assets. Organizational and/or external support required by the WCO is limited. The provision of support to the WCO is coordinated by an Emergency Coordinator in the Regional Office.
2 Grade	A single country or multiple country emergency, requiring a moderate response by WHO. The level of response required by WHO always exceeds the capacity of the WCO. Organizational and/or external support required by the WCO is moderate. The provision of support to the WCO is coordinated by an Emergency Coordinator in the Regional Office. An Emergency Officer is also appointed at headquarters to assist with the coordination of Organization-wide support.
3 Grade	A single country or multiple country emergency, requiring a major/maximal WHO response. Organizational and/or external support required by the WCO is major and requires the mobilization of Organization-wide assets. The provision of support to the WCO is coordinated by an Emergency Coordinator in the Regional Office(s). An Emergency Officer is also appointed at headquarters, to assist with the coordination of Organization-wide inputs. On occasion, the WHE Executive Director and the Regional Director may agree to have the Emergency Coordinator based in headquarters. For events or emergencies involving multiple regions, an Incident Management Support Team at headquarters will coordinate the response across the regions.

The grading process

The grading process is conducted via a teleconference/webex with staff from the three levels of the Organization.

- The RED, or her/his delegate, sends an electronic meeting invitation for the grading call to all relevant participants.
- The RED, or her/his delegate, chairs the grading call.
- The WCOs provide a situation analysis using the five IASC criteria.
 - Scale: Consider the number and health status of people affected (with special attention to vulnerable groups), proportion of population affected or displaced, size of geographical area affected, number of affected countries, level of destruction of health infrastructure, extent of international disease spread, degree of deviation from the norm in the case of annual predictable events (e.g. seasonal outbreaks, annual floods or drought).

- Urgency (of mounting or scaling up the response): Consider mortality rates and trends, disease rates and trends, major causes of morbidity and mortality, rates of acute malnutrition, case fatality ratio, degree of transmissibility of pathogen, risk of international spread, changing environmental conditions (e.g. onset of winter or wet season), speed of population displacement and potential for further displacement, intensity of armed conflict or natural disaster, potential for further communal or intrastate conflict, degree of environmental or food and water contamination (chemical, radiological, toxic).
- **Complexity**: Consider the range of health consequences, including potential downstream public health consequences, concurrent emergencies, unknown pathogen or chemical or toxin, specialized technical knowledge and skills required, presence of non-state actors or anti-government elements, political context, problems of humanitarian access, security, number of countries and regions involved; interference with international trade and travel.
- Capacity: Consider level of preparedness, coordination and response capacities of national authorities, level of international capacities and readiness in-country (including those of WCO) to respond to the emergency and coordinate partners, robustness of civil society coping mechanisms, and type and effectiveness of pre-existing WHO programmes.
- **Reputational risk:** Consider WHO's specific responsibilities (e.g. to lead on outbreak response, Health Cluster Lead Agency), requests from the affected population and government(s), media and public attention and visibility, expectations of Member States, donors, partners and other stakeholders; consider reputational risk for international response, e.g. IASC.

Single countries with multiple grades or multiple countries with a single grade

Emergencies are graded, not countries. A single country may have multiple graded emergencies at any given time. In general, multiple emergencies in a single country should be graded separately if they are geographically and epidemiologically distinct from one another, e.g. an earthquake in one part of the country and a disease outbreak in another. New emergencies that are directly associated with an on-going graded emergency do not require a separate grade, e.g. measles outbreak in the context of conflict and displacement. A multi-country emergency is graded collectively and has only one grade; however the extent of the mobilization of staff and resources by country may differ depending on the country-specific response requirements.

Documentation of the grading process

The outcome of the grading call is documented in a standard template (see Annex 2). The RED is responsible for completing the grading template and sharing with those who participated in the grading call within 6 hours of the call.

The following issues are documented in the grading template:

- The agreed grade with explanations based on the grading criteria.
- Immediate health sector and WHO's response objectives over a specified immediate period, until a more detailed action plan is established (see chapter 3 on Incident Management System).
- Name of Incident Manager in country (or temporary focal point) and the names of the Emergency Coordinators (or Focal Points, as appropriate – see Incident Management System) at RO and HQ, as well as their contact information.
- The initial assignment of extraordinary resources (staff, funding and supplies), especially for country level.
- For Grade 2 or 3 emergencies, an agreed timeline for delivering on WHO's performance standards, based on context (e.g. sudden onset, slow onset).
- For Grade 2 or 3 emergencies due to infectious hazards, a recommendation to the WHO Director-General of whether the emergency may represent a PHEIC.
- For Grade 3 emergencies due to infectious hazards, a recommendation of whether consideration should be given to mobilization of IASC resources, as per the Level 3 Activation Procedures for Infectious Disease Events.
- The date and time of the next three-level meeting for the response.

Declaration and communication of grades

- Informing the WHE Executive Director:
 - For a single-region graded emergency, the relevant RED informs the Executive Director (EXD) of WHE and the relevant WHO Regional Director within 12 hours, with copy to the Director of Emergency Operations (EMO).
- For a multiple-region graded emergency, the Director EMO immediately informs the WHE Executive Director, with copy to all Regional Directors and REDs.
- Informing the WHO Director-General:
 - The EXD informs the WHO Director-General and all WHO Regional Directors of all Grade 2 and 3 emergencies, along with recommendations for the leadership model and action plan (see IMS section).
- Informing WHO staff:
 - All graded emergencies are announced to all WHE staff within 24 hours of grading by email from the EXD. This process is overseen by the Director EMO.
 - All Grade 3 emergencies are also announced to all WHO staff by email from the WHO Director-General. This process is overseen by the office of the EXD.
- Informing the United Nations system:
 - For Grade 2 and Grade 3 emergencies that are caused by an infectious hazard, the WHO Director-General will inform the United Nations Secretary-General within 24 hours, with copy to the United Nations Emergency Relief Coordinator (ERC) and the IASC Principals. Grade 3 emergencies due to an infectious hazard may require mobilization of resources through the IASC, as per the Level 3 Activation Procedures for Infectious Disease Events.

Graded emergencies are tracked and published continuously on the WHE website - which is also linked with WHO eManual to guide administrative procedures - under the supervision of the Director of Health Emergency Information & Risk Assessment (HIM) at headquarters.

For Grade 3 and Grade 2 emergencies, the WCO immediately activates the ERF implementation monitoring tool to track progress against performance standards, in close coordination with HIM and EMO Departments.

Review of the grade

A review of operational requirements and grade is conducted every three months. Although the frequency may vary, depending on the evolution of the emergency and the operational context.

Review of grade is the responsibility of the RED and follows the same process as the grading call. The RED and Director EMO will receive an

automatic email through the intranet platform that the grading for a given emergency is up for review.

Removal of the grade or conversion to protracted emergency

After six months, emergency grades are removed, except for emergencies for which the IASC decides to maintain a Level 3 (in which case, WHO would maintain Grade 3), or when WHO determines to extend the grade for a prescribed timeframe based on the operational context and response requirements.

For an emergency that persists for longer than six months, WHO will consider whether it meets the definition of a protracted emergency.²¹ If so, a protracted grade is then applied. In these settings, the WHO Protracted Emergency Framework will guide the operational response.

Grading of protracted emergencies

WHO will transition from an emergency grade to a protracted grade provided that the following criteria are met:

- Adequate resources have already been deployed to meet the acute emergency needs.
- An agreement has been made among the three levels of the Organization that a sustained operational response is required by WHO beyond 6 months.
- The emergency is no longer an IASC Level 3 emergency or PHEIC.

Any situation in which ongoing humanitarian needs in a country are addressed through an IASC Humanitarian Response Plan (HRP) or equivalent will also be graded as a protracted emergency.

The main purpose of WHO's protracted grades are to indicate the level of operational response to be sustained by WHO over a prolonged, often indefinite period. They also assist to communicate to external stakeholders WHO's assessment of the need for sustained international resources in the health sector to assist the affected communities.

²¹ A protracted emergency is defined as "an environment in which a significant proportion of the population is acutely vulnerable to death, disease and disruption of livelihoods over a prolonged period of time. The governance of these environments is often weak, with the state having a limited capacity to respond to, and mitigate, the threats to the population, or provide adequate levels of protection". Source: A Harmer and J Macrae (eds). 2004. *Beyond the continuum: aid policy in protracted crises*. HPG report 18. London, Overseas Development Institute

Definitions of WHO Protracted Grades:

- Protracted 1: A single country emergency that persists for longer than six months and is associated with limited ongoing health consequences, but still requires a sustained WHO response. Most of the WHO response can be managed with in-country assets. Organizational or external support required by the WCO is limited. The provision of support to the Country Office is coordinated by an Emergency Coordinator in the Regional Office.
- Protracted 2: A single or multiple country emergency that persists for longer than six months and is associated with moderate ongoing public health consequences. Sustained WHO operational presence and response is still required. Moderate organizational or external support is required by the WCO. The provision of support to the Country Office is coordinated by an Emergency Coordinator in the Regional Office. A counterpart Emergency Officer is also appointed at Headquarters level, to coordinate any required support from other levels of the Organization.
- **Protracted 3**: A single or multiple country emergency that persists for longer than six months and is associated with major ongoing health consequences. Sustained WHO operational presence and response is still required. Major organizational or external support is required by the WCO. The provision of support to the Country Office is coordinated by an Emergency Coordinator in the Regional Office. A counterpart Emergency Officer is also appointed at Headquarters level, to coordinate Organization-wide support.

WHO's emergency SOPs will continue to apply to protracted emergencies for the first twelve months of the grading period for Protracted 1 and 2; and for the full duration of the grading period for Protracted 3.²² Emergency SOPs will always apply when an acute event or emergency occurs in the context of a protracted emergency (as evidenced by the assignment of a new emergency grade). Performance standards and related monitoring tools for protracted emergencies will be included in the Protracted Emergencies Framework.

²² Emergency SOPs apply to human resources and activities for protracted emergencies implemented through WHO Health Emergency Programme (WHE) work-plans, and Outbreak and Crisis Response (OCR) work-plans.

CHAPTER 3: THE INCIDENT MANAGEMENT SYSTEM (IMS)

The grading of an emergency triggers the activation of WHO's Incident Management System, which provides a standardized, yet flexible approach to managing WHO's response to the emergency. WHO applies the IMS regardless of the underlying hazard, or the scale or operational context of the emergency. The IMS approach is internationally recognized as best practice for emergency management.

Key concepts and principles

- Standardized emergency functions: There are key management functions to be undertaken for any emergency response, regardless of the number of people available or involved in the operations. These functions are brought together in a unified structure (see Figure 3).
 For WHO, the primary IMS functions are:
 - Leadership
 - Partner coordination
 - Information and planning
 - Health operations and technical expertise
 - Operations support and logistics
 - Finance and administration
- Standardized terminology: Consistent use of terminology across the Organization improves communications and limits ambiguity. As far as possible, WHO aims to use similar terms as our partners, to optimize interoperability (see below).
- Flexibility, adaptability and scalability: The IMS is applicable to all types and scales of emergencies. It can be easily adapted, while maintaining standards and predictability. The organizing structure can be expanded or contracted as needs evolve, with sub- functions being added or removed. Similarly, the number of staff designated to each function is scalable.
- Interoperability: Application of the IMS allows WHO to interact and work more effectively with operational partners. This includes functional interoperability (e.g. use of standardized terminology, procedures) and technological interoperability (e.g. standardized telecommunications).

Interoperability is also promoted through WHO's consistent adherence to interagency protocols and procedures, e.g. the IASC Humanitarian Programme Cycle.

Activation of the Incident Management System

Within 24 hours of grading of acute emergencies WHO will:

- Ensure the safety and security of all staff.²³
- Appoint an Incident Manager in-country for a minimum initial period of three months.
- Activate the emergency SOPs.
- Establish an initial Incident Management Team (IMT) in-country, to cover the six critical IMS functions. This will be done initially through repurposing of country office staff.
- Establish contact with government officials, partners and other relevant stakeholders.
- Determine the need for surge support to the country to cover the critical IMS functions. This determination is made following an analysis of WCO capacity to manage the emergency.
- Begin the deployment of surge support on "no regrets" basis, as needed.
- Elaborate the initial response objectives and action plan, until a more detailed plan is developed (see below).
- Appoint an Emergency Coordinator and Incident Management Support Team (IMST) at regional or headquarters levels to coordinate Organization-wide support for the response to Grade 2 and Grade 3 emergencies. A focal point will be appointed at both regional and headquarters levels for Grade 1 emergencies to coordinate any required support.

The IMT is established as close to the emergency as possible, and this is almost always in-country. However, flexibility may be required, especially for:

- Emergencies for which high levels of insecurity do not permit an in-country presence of international staff. In these instances, elements of the IMT may be located in a neighbouring or nearby country, providing remote support for in-country IMT members.
- Emergencies occurring in countries where WHO does not have a country office. This may occur when a developed country requests WHO

²³ This activity commences as soon as the emergency is recognized and does not depends on grading. Ensuring the safety and security of staff is an ongoing activity throughout the response.

technical and operational support, especially for outbreak response. In these instances, the IMT would be located in the Regional Office.

 Multi-country, multi-regional emergencies. An IMT may be established at Regional and/or Headquarters Offices.

The WHO Health Emergencies Programme at regional and headquarters levels is responsible for overseeing the establishment of the IMT, and the development of the strategic and other action plans for graded emergencies.

For protracted emergencies, the role of the Incident Manager will transition to a longer-term Emergency Manager or the HWO/WR, and the IMT will transition to an emergency management team. Nonetheless, emergency operations should still follow the key IMS principles and most of the critical IMS functions should be maintained. Management of the response will be guided by the Protracted Emergency Framework.

WHO responsibilities and accountabilities in operational response

There are three main categories of WHO responsibilities for managing the response to emergencies (see Table 1):

- Field operations: This entails day-to-day management of the in-country response. The primary responsibility for field operations rests with the Incident Manager. The HWO/WR will supervise the Incident Manager directly, unless alternate arrangements are agreed by the WHE Executive Director and WHO Regional Director.
- **Operational oversight**: This entails direct supervision of the HWO/WR for the emergency operations, day-to-day monitoring of the effectiveness of the Organizational response to the emergency, and delegated authority to make technical, operational and management decisions regarding the response.
- Technical and operational support: This includes the provision of day-to-day support for each of the IMS critical functions from other levels of the Organization. It is the responsibility of the Programme Area Manager (PAM) for Emergency Operations for support from the Regional Office and the Director of Emergency Operations (EMO) for support from Headquarters.

Ultimately, the WHO Director-General is accountable for the timeliness and effectiveness of all WHO emergency operations, but on a day-to-day, accountabilities are shared between the WHE Executive Director and WHO Regional Director.

Table 1: Operational Responsibilities and Organizational Accountabilities for Emergencies

	RESPONSIBILITIES			
GRADE	FIELD OPERATIONS*	OPERATIONAL OVERSIGHT	TECHNICAL & OPERATIONAL SUPPORT	ACCOUNTA- BILITY
Grade 1	Incident Manager	RED	PAM and Director EMO (or delegates)	WHO Regional Director
Grade 2	Incident Manager	RED	PAM and Director EMO (or delegates)	WHE Executive Director / WHO Regional Director
Grade 3	Incident Manager	RED and Director EMO**	PAM and Director EMO (or delegates)	WHE Executive Director
Protracted 1	Emergency Manager	RED	PAM and Director EMO (or delegates)	WHE Executive Director / WHO Regional Director
Protracted 2	Emergency Manager	RED	PAM and Director EMO (or delegates)	WHE Executive Director / WHO Regional Director
Protracted 3	Emergency Manager	RED and Director EMO**	PAM and Director EMO (or delegates)	WHE Executive Director

* The Incident Manager and the Emergency Manager will be supervised by the HWO/WR, unless alternate arrangements have been agreed by the WHE Executive Director and the WHO Regional Director.

** Specific arrangements to be agreed by the WHE Executive Director and the WHO Regional Director.

Emergency SOPs

WHO's e-manual defines the SOPs that are activated only during emergencies.²⁴ Emergency SOPs will be established for each of the main IMS functions and sub-functions outlined below. They provide the respective manager or team lead within the IMT with clear, concrete guidance on managerial, operational, administrative and financial measures.

Technical and Operational Support to Country Operations

Technical and operational support from other levels of the Organization to country-level operations for graded emergencies is managed through the following mechanisms (see Table 2):

Regional level support: An Emergency Coordinator and Incident
Management Support Team (IMST) will be appointed at the Regional

²⁴ WHO's emergency SOPs can be accessed at: https://emanual.who.int/p17/Pages/default.aspx

Office for all graded emergencies, within 24 hours of grading. The size and composition of the IMST will vary according to the grade. In general, however, there should be an identified focal point to address each of the critical IMS functions.

- Headquarters and Organization-wide support: An Emergency Officer and IMST will also be appointed at Headquarters for all graded emergencies. For most emergencies, they will work through the Regional Office to coordinate headquarters-level and Organization-wide support. On occasion, the WHE Executive Director and WHO Regional Director may agree to coordinate all country-level support for a specific emergency from headquarters.
- Protracted emergencies: An Emergency Coordinator will be appointed at the Regional Office for all protracted emergencies and an Emergency Officer at the Headquarters Office for protracted grades 2 and 3.
 A Country Support Team will be appointed at the Regional Office and a Regional Support Team at Headquarters.

OFFICE*	GRADE 3	GRADE 2	GRADE 1	PROTRACTED	
Country Office	Country Office				
Team Lead	Incident Manager	Incident Manager	Incident Manager	Emergency Manager	
Operations Team	IMT	IMT	IMT	Emergency Management Team	
Regional Office					
Team Lead	Emergency Coordinator	Emergency Coordinator	Emergency Coordinator	Emergency Coordinator	
Support team	IMST	IMST	IMST, as needed	Country Support Team	
Headquarters					
Team Lead	Emergency Coordinator/ Officer	Emergency Officer	Emergency Officer	Emergency Officer (for protracted grades 2 and 3)	
Support team	IMST	IMST	IMST	Regional Support Team (for protracted grades 2 and 3)	

Table 2: Team arrangements for in-country operations and regional and headquarters support

WHO's critical functions in the IMS

To deliver an effective operational response. WHO has six critical functions that it must fulfil at country level (each with one or more sub-functions (Figure 3)). As an emergency evolves, the IMS functions will need to be contextualized and adapted, while sub-functions can be added (or removed) to address expanding (or shrinking) needs for services and support. According to the scale of the response and the availability of staff, several functions may be filled by one person or several people may work on specific functions. Focal points may be identified at Regional and Headquarters Offices for each of the functions, to provide the requisite technical and operational support.

Figure 3: WHO's Incident Management System organizational structure: critical functions and sub-functions



WHE Incident Management System (IMS) structure

IMS sub-functions

1. Leadership

The leadership function is responsible for overall management of the WHO response, including supervision of Team Leads for all other IMS functions. It is comprised of five main sub-functions: Incident Management; Staff Health, Well-being and Security; Communications; External Relations; and Emergency Operations Centre (EOC) management.

1.1 Leadership

This function is responsible for strategic leadership and day-to-day oversight and management of WHO's own specific response to the emergency. The Incident Manager works with the health authorities and partners to agree on priorities and objectives for the health response, fully consistent with humanitarian principles.

The primary leadership function is delegated to an Incident Manager, who manages the emergency response, including assigning responsibilities to other critical functions as they are established. For outbreaks in particular, the Incident Manager works closely with technical experts in defining response priorities, designing the response strategy and specifying the essential disease control interventions. Outbreak response differs for each pathogen and during the outbreak itself – hence, the response needs to be expertise-driven.

For Grade 1 emergencies, the Incident Manager will often be appointed from within the country office. For Grade 2 and Grade 3 emergencies, the WHE Executive Director and the WHO Regional Director will agree on the leadership and reporting arrangements for the Incident Manager, following a consideration of the capacities of the HWO/WR and the operational context. There are three main options with clear reporting and accountabilities, as per Table 1:

- Incident Manager reports directly to the HWO/WR. This is the default arrangement and presupposes that the HWO/WR has the capacity to oversee the response and supervise the Incident Manager.
- Incident Manager reports to an alternate designated officer appointed by the Regional Director and Executive Director. Infrequently, senior management may decide that the scale and complexity of the response exceeds the capacities of the HWO/WR. In such circumstances, they may agree to appoint either the RED or Director EMO as the direct supervisor of the Incident Manager.

 HWO/WR is appointed as the Incident Manager. On occasion, the HWO/ WR may be considered as best suited to assume the role of Incident Manager. In this situation, the HWO/WR may require additional capacity both to manage the emergency (e.g. staffing for the IMT) and to manage the non-emergency country programme (e.g. a Deputy HWO/WR).

The indicative roles and responsibilities of the Incident Manager and the HWO/WR are outlined in Table 3. A delegation of authority will be developed for each post in relation to the emergency response. A close working relationship must be established between the Incident Manager and the HWO/WR, with each respecting the other's role and delegation of authority.

Table 3: Indicative roles and responsibilities of Incident Managerand HWO/WR

Head of WHO Office	Incident Manager
 Facilitation of initial WHO response: Activation of WHO contingency plan and business continuity plan Initial repurposing of WHO staff and assets, and assigning key functional roles Placement of country office assets at disposal of response operations Staff security, safety, health and well-being (ultimate responsibility) Supervision and support of Incident Manager in his/her strategic leadership and management of the response Main representation of WHO to Ministry of Health and other government ministries Representation of WHO on UN Humanitarian Country Team as representative of both WHO and Cluster Lead Agency (may be delegated to Incident Manager) Donor relations for the response (shared with Incident Manager) External communications (shared with Incident Manager) Creation of separate OCR activity and HR work plans and budgets for response; close work plans at the end of the emergency Approval of expenditures, local procurements and cash advances as per SOPs Leadership and management of on-going WHO programmes, not related to the emergency 	 Strategic leadership and management of overall WHO response and subsequent phase-out plan Staff security, safety, health and well-being related to in-country deployments for the response Supervision of functional leads under the IMS Strategic guidance to Ministry of Health and to health sector/ health cluster on response operations Tracking of progress towards meeting strategic and operational objectives; implementation of course corrections, as required Donor relations for the response (shared with HWO/WR) External communications (shared with HWO/WR) Representation of WHO on Health sector/ Cluster forums Approval of expenditures, local procurements and cash advances as per SOPs Close collaboration and consultation with HWO/WR

1.2 Staff health, wellbeing and security

This sub-function tracks security issues and takes concrete measures to ensure the safety and well-being (both physical and mental) of all personnel in WHO's response team. It ensures that reasonable occupational health measures are in place and that WHO staff have ready access to medical care, medical evacuation, psychosocial services and counselling, as required. WHO programmes and operations are implemented in accordance with UN and WHO security policies, protocols and contextspecific guidance.

1.3 Communications

This sub-function is responsible for the coordination of WHO's response to media and public queries for information, and develops and disseminates both internal and external communication products. Working with other response agencies and technical experts, Communications takes a pro-active approach so that risk and crisis communications are coherent and consistent.

1.4 External relations

This sub-function coordinates all activities related to resource mobilization, donor relations, and advocacy to support the implementation of the strategic, operational and IMS action plans.

1.5 Emergency Operations Centre management

The IMT works out of an Emergency Operations Centre, which is a central facility for emergency management. If the Ministry of Health has such a centre, elements of the IMT should be located there, to support the government response. Depending on the operational context, including the Ministry of Health's capacity to lead and coordinate the response, a large proportion of the IMT may be located in the government Emergency Operations Centre. When the Ministry of Health does not have an Emergency Operations Centre, a specific area within the country office should be repurposed to function as such a facility.²⁵ The Emergency Operations Centre Facility Manager ensures that all of the centre's systems (hardware and software) and staff support tools are well maintained and operational when needed.

²⁵ For further details on the management and standards for operating an EOC, see: WHO. Framework for a Public Health Emergency Operations Centre. 2015.

2. Partner coordination

2.1 Health and intersectoral coordination

Health partner coordination ensures that collective action results in appropriate coverage and quality of essential health services for the affected population, especially the most vulnerable. Different coordination models can be developed, depending on the Ministry of Health's capacity, the operational context, and the constraints on principled humanitarian action. Examples include Health Sector Working Groups, outbreak coordination groups, activated Health Clusters, EMT Coordination Cells and more informal bodies.

Ideally, the health sector coordination mechanism is established and managed by the Ministry of Health, with technical and operational support from WHO. It should preferably be managed from an Emergency Operations Centre within the Ministry of Health. In conflict settings and fragile states, alternate, more independent coordination mechanisms may be required. Regardless of the mechanism, the purposes of coordination are similar: to engage stakeholders in risk assessments and needs assessments, planning, information management and sharing, service delivery, monitoring, quality assurance, and advocacy.

The partner coordination function is represented on the Humanitarian Country Team by the HWO/WR (alternatively by the incident Manager) and is represented at all inter-sectoral and inter-cluster meetings (by the Health Cluster Coordinator, where clusters are activated).

When a Health Cluster is formally activated – whether it is co-led with the government or not – WHO has specific accountabilities for cluster performance to the Humanitarian Coordinator, as Cluster Lead Agency.²⁶ Because the cluster coordination function requires a degree of independence from the Cluster Lead Agency, the Health Cluster Coordinator should coordinate the cluster, while the Incident Manager (or designee) should represent WHO on the cluster.

²⁶ For more details on IASC Cluster coordination, see the IASC Reference Module for Cluster Coordination at Country Level, https://www.humanitarianresponse.info/en/coordination/clusters

2.2 Liaison

Led by the Liaison Officer, this sub-function responds to requests or concerns from both health and non-health stakeholder groups. The Liaison Officer brings issues and concerns related to inter-organizational issues to the attention of the Incident Manager with a recommended course of action.

3. Information and planning

This function collects, analyses and disseminates information on health risks, needs, service coverage and gaps, and performance of the response. It uses information to develop and continually refine the response, as well as inform recovery planning.

3.1 Information

The Information sub-function is responsible for collecting, collating, analyzing and disseminating emergency-specific data, emergency management information and context data. It is comprised of the following additional sub-functions:

3.1.1 Risk and needs assessment

On-going risk assessments allow stakeholders to make informed decisions on preventing or mitigating the impact of the emergency. Needs assessment is the systematic process that determines the overall impact and health consequences of the emergency, the functionality and performance of health services, and identifies gaps in capacities and operations, thereby informing the prioritization and implementation of the response (see chapter 1).

3.1.2 Early warning & surveillance

This sub-function strengthens the systematic collection, analysis and communication of any information used to detect, verify, and investigate events and health risks. It also supports the dissemination of data related to public health events. In collaboration with the Health Operations and Technical Expertise team, it establishes, strengthens and operationalizes rapid response teams that are responsible for the rapid investigation of alerts, field risk assessment and, when required, early operational response.

3.1.3 Monitoring & evaluation

This sub-function systematically tracks the evolution of the emergency and the progress of the WHO and health sector response in meeting the objectives of the operational response plan. It involves identifying technically sound indicators and the sources of information; setting operational targets; gathering and interpreting data; and tracking progress to determine whether the response is meeting its objectives. If the response is not on track, personnel responsible for this sub-function analyse the reasons for it and make recommendations regarding corrective actions and/or modification of targets, in collaboration with partners and other responsible areas. This sub-function also supports IASC operational peer reviews, Inter-Agency Humanitarian Evaluation (IAHE) processes, and other relevant internal or external performance evaluations.

3.1.4 Information products and dissemination

This sub-function compiles information from sources such as risk/needs assessments, early warning and surveillance systems, response monitoring mechanisms (e.g. service coverage) and surveys to develop information products that allow stakeholders to monitor public health risks and needs, to monitor effectiveness of the health sector response, and to take appropriate actions. Examples of such information products include:

- Regular information products: internal and external situation reports (sitreps), Health sector/Cluster bulletins, epidemiological/ EWARS bulletins;
- Intermittent or one-off products: reports from health risk/needs assessments, Health Resources Availability Mapping (HeRAMS) reports, and Health Cluster contribution to the IASC humanitarian needs overviews (HNO).

3.2 Planning

The Planning sub-function is responsible for coordinating the development of response, recovery and/or contingency planning as well as developing plans for demobilization. It determines potential future impacts of the emergency, and provides periodic updates on advance planning issues for the Incident Manager and the IMT. It is comprised of the following sub-functions:

3.2.1 Strategic and operational planning

The planning sub-function coordinates the development of emergency-specific plans, with detailed inputs from other functions, especially Information and Health Operations and Technical Expertise. Effective planning requires contributions from governmental agencies, non-governmental organizations, civil society entities, private sector and others, both from health and those outside. It involves the development of common strategic priorities, joint operational objectives and plans, and strong coordination within and among sectors and clusters. For humanitarian emergencies, there is a clear planning process with which WHO aligns fully, as outlined in the IASC's Humanitarian Programme Cycle. Emergency-specific plans include:

- WHO Action Plan: An initial, brief action plan is developed following the grading process to guide immediate response activities. A more detailed version is elaborated once the strategic and joint operational plans have been completed (see below). The action plan specifies WHO's priorities, strategy, objectives and activities in support of collective priorities. It details what WHO will do, where and when. The action plan can form the basis of projects and donor proposals.
- Strategic Response Plan/Humanitarian Response Plan: This is a high-level, multi-sectoral strategic plan that outlines the overall impact and needs arising from an emergency including within the health sector and the priorities for addressing these. Wherever possible, it is a sub-element of the national plan, or closely linked to that plan. For outbreaks, WHO will often lead the planning process, while for humanitarian emergencies, the Office for the Coordination of Humanitarian Affairs (OCHA) leads, with contributions from clusters/sectors. The best examples for humanitarian emergencies are a Flash Appeal, issued 3–5 days after a sudden-onset emergency by the Humanitarian Country Team, and Humanitarian Response Plans (HRPs), which are multi-sectoral plans that are issued 30 days after sudden onset disasters and annually in protracted emergencies.²⁷
- Joint Partner Operational Plan: This plan integrates the contributions of the key health partners working in an emergency to support the Ministry of Health most effectively. It aims to ensure that collective operations consistently address gaps and avoid duplication. It should ensure the optimal coverage of health services, promote adherence to

²⁷ For more details on Flash Appeals and Humanitarian Response Plans, see the IASC reference Module for Implementation of the Humanitarian Programme Cycle: http://reliefweb.int/report/world/iasc-referencemodule-implementation-humanitarian-programme-cycle-version-20-july-2015

technical standards and best practices, and commit partners to common operational targets and reporting. It should also specify how health sector partners link with and complement other relevant sectors, e.g. water and sanitation, nutrition, or protection.

• Initial recovery needs and plan: In most natural sudden-onset disasters, governments start assessing needs for recovery in the first month after the onset of the emergency. Depending on their capacities, they may request support from the international community. Support for formal post-disaster need assessments is coordinated by the World Bank, United Nations and European Union: these assessments assess damage, loss and recovery needs, including aspects for risk reduction and improved resilience, as well as to establish priorities for the recovery and its costing.

3.2.2 Project management

This sub-function supports the design, structure and content of donor updates and other reports; monitors project implementation; and promotes standardized management throughout the project management cycle. In humanitarian settings, it applies the IASC's Humanitarian Programme Cycle, especially when contributing to multi-sectoral, interagency plans such as Flash Appeals and HRPs.

4. Health Operations and Technical Expertise

WHO works with the Ministry of Health and partners to ensure optimal coverage and quality of health services in response to emergencies. It does this by promoting the implementation of the most effective, context-specific public health interventions and clinical services by operational partners. This function provides up-to-date evidence-based field operations, policies and guidance, and technical expertise.

4.1 Prevention & control measures

This sub-function identifies and develops clear recommendations, disseminates guidance and provides technical assistance to the Ministry of Health and partners on the most relevant actions to prevent and/ or control public health risks. These include enhanced surveillance, point-ofcare laboratory services, specimen transport and specialized laboratory tests, vaccination campaigns, mass prophylaxis, clinical management (and management of contacts in case of a transmissible disease outbreak), infection prevention and control, vector control, enhanced water, sanitation and hygiene, food safety and nutritional services, prepositioning of drugs and medical supplies. The recommended actions will be defined based on regular risk and needs assessment. A rapid response team will usually be established to undertake the rapid response to new outbreaks and those related to health service delivery (see below).

4.2 Risk communication & community engagement

WHO collaborates with the Ministry of Health and partners such as UNICEF, to frame the event and risk, and provide authoritative information using all relevant communication platforms. The sub-function assesses the social and cultural context of populations at risk, engages stakeholders at national and local levels, develops tailored and targeted messages for dissemination, ensuring that they are technically sound and socio-culturally appropriate, and conducts rapid surveys and other assessments to determine the barriers to adopting health advice. It delivers health messages using the most effective means preferred by the target population in local languages and monitors their effectiveness. The sub-function also builds risk communications and community engagement capacities in-country and coordinates key international and national partners.

4.3 Health service delivery

WHO coordinates and collaborates with the Ministry of Health and partners, including through the Health Cluster, GOARN and EMTs, to ensure the delivery of essential health services. This involves clarifying standards and defining an essential package of health services that covers community, primary and referral levels. While a range of technical standards may applicable in different contexts, the Sphere Minimum Standards in Humanitarian Response are relevant in all humanitarian operations. In general, the direct delivery of clinical care should be the responsibility of partners; however, in practice there are often unfilled service delivery gaps during emergencies that necessitate WHO action. As the lead agency of the Global Health Cluster, WHO has obligations as provider of last resort. In practice, this often requires WHO to provide health services, through financial, material or staffing support to health facilities. Much of this is through NGO partners, including local NGOs. WHO will often establish rapid response teams to respond to acute escalations in outbreaks or other emergencies, increasingly as a component of a multi-cluster/sector rapid response mechanism. For certain outbreaks, particularly those

caused by high-threat pathogens, WHO frequently engages in clinical care and management of contacts, in close collaboration with frontline healthcare providers and partners. WHO also frequently distributes emergency kits, drugs, medical supplies and equipment, most often to support national authorities and national NGOs. For specific outbreaks (e.g. cholera, meningitis, or yellow fever), WHO also works with partners of the International Coordination Group for Vaccine Provision to facilitate the deployment of vaccines.

4.4 Technical expertise, science and research

This sub-function ensures that health operations are informed by the best available technical expertise and guidance, and adhere to recognized standards and best practices. WHO often provides this technical expertise directly to the Ministry of Health and partners, or leverages expert networks and partnerships, e.g. through GOARN, to do so. Strong technical input is required for all aspects of the operations – including initial risk and needs assessment, priority setting, planning, information management, health operations and health logistics. For outbreaks, technical expertise is especially important to identify the responsible pathogen/s, and to ensure that the response is designed and implemented to manage the specific pathogen/s and is commensurate with the risk. As noted under Leadership, the Incident Manager relies heavily on technical experts, especially in outbreak settings. This sub-function also identifies knowledge gaps on the etiology, pathophysiology, transmission, diagnosis and effective prevention and control of the risks and the causes of excess morbidity and mortality. It advises on key research, knowledge and product development issues that can address these gaps and provides all available information that may accelerate results. It engages with donors, academics, research institutions, the private sector and operational partners to promote, advise on and coordinate relevant research, and knowledge or product development.

4.5 Training of health staff

In most emergency response, WHO supports the training of health staff, including local and international personnel. This training is often related to the sub-functions outlined above, including on information management (e.g. risk assessments, HeRAMS), risk communication, disease surveillance, disease prevention and control, and various aspects of clinical care.

5. Operations Support and Logistics

This function ensures that WHO staff – and, where agreed, operational partners through GOARN, the Health Cluster and EMTs – have a reliable operational platform in order to deliver effectively on the WHO action plan and joint operational plan. It may also support the logistics capacities of the Ministry of Health.

The function is comprised of three main sub-functions: Supply Chain Management, Operational Support, and Health Logistics. As with the other critical functions, partnership is key to ensuring effective and efficient operational support and logistics, e.g. through active participation in the Logistics and Emergency Telecommunications Clusters, through agreements with partners such as World Food Programme and UNICEF. Leveraging the comparative advantages of other partners – for example in procurement, warehousing, convoy management, and telecommunications – has clear advantages for WHO operations. It is comprised of three sub-functions.

5.1 Supply chain management

This sub-function ensures an end-to-end, timely and efficient provision of consumables and equipment to support the emergency operations. This includes selection, forecasting, procurement, transportation, customs clearance, storage and distribution of these material assets.

5.2 Field support

This sub-function provides logistics strategy, management and field support to response teams. This includes secure and comfortable accommodations, functional and secure working spaces and equipment, communications capabilities, safe staff transport and effective fleet management.

5.3 Health logistics

This sub-function provides technical expertise, tools, methods and means to meet the specific logistical needs of medical facilities, cold chain management, laboratories and blood banks.

6. Finance & administration

This function provides finance, management and administrative support to enable the smooth functioning of the WHO response. It ensures that decisions made by the Incident Manager trigger the provision of management and administrative services according to WHO SOPs and performance standards. Prior to grading, it ensures the availability of funds (up to US\$ 50,000) and activation of Emergency SOPs to allow for risk assessments and detailed field investigations. It is comprised of the following sub-functions.

6.1 Finance, budget & grants management

This sub-function develops WHO work-plans and budgets based upon WHO action plans as determined by the Leadership function; manages funding allocations and awards; tracks and reports on financing against budget; supports, monitors and reports on financial implementation; monitors and follows-up on donor proposals and reporting deadlines; supports resource mobilization in the preparation of proposals and reports; and facilitates local payments.

6.2 Procurement

In coordination with Operations Support and Logistics, this sub-function procures all necessary supplies for the response and for the response team, tracks inventory, coordinates with logistics and human resources (HR) sub-functions to provide supplies and equipment to the local response team.

6.3 Human Resources and Surge

This sub-function fills the human resource needs of the WHO response team, as determined by the Leadership function, including sourcing, recruitment, medical clearance, travel to the relevant duty station, entry formalities, briefing and training, on-site administrative support, de-briefing and performance evaluations. It tracks and reports on HR requirements against plans, status of filled positions/vacancies, and projected HR needs.

CHAPTER 4: EMERGENCY PERFORMANCE STANDARDS AND KEY PERFORMANCE INDICATORS

Progress in implementation of a select number of response procedures (see chapter 5) will be monitored during each Grade 2 and 3 emergency to document the effectiveness of the WHO response and to inform course corrections, as appropriate. These performance standards are outlined in Table 4.

Progress against meeting the performance standards will be documented by using the ERF Monitoring Tool that is activated following the grading decision for Grade 2 and Grade 3 emergencies. The responsibility for completing the ERF Monitoring Tool is with the Country Office, with oversight from the Regional Office. Timelines for meeting the performance standards may be adjusted by the grading team, based on the context.

The WHO performance standards are monitored primarily through process indicators. To assess the effectiveness of the overall health sector/ Health Cluster response, these will be complemented by a number of key performance indicators, which will measure at the output and/or outcome level. The key performance indicators will be agreed upon on a case-bycase basis and reported monthly and should initially be limited to no more than eight indicators.

Examples include:

- 1. Consultation rate for outpatient services
- Vaccination coverage, e.g. for measles, diphtheria/pertussis/ tetanus (DPT3)
- 3. Percentage of births attended by a skilled birth attendant
- Coverage and timeliness of the Early Warning Alert and Response System (EWARS)
- 5. Case fatality ratio for outbreak-prone diseases
- 6. Coverage of health services by area and target population
- 7. Number and percentage of health facilities that are fully functional
- 8. Number and percentage of health facilities providing an essential package of health services

Table 4: WHO Performance Standards for Emergency Response

PERFORMANCE STANDARD	IMS CRITICAL FUNCTION	PRIMARY RESPONSIBILITY	TIMELINE
PS 1: Ensure safety and security of all staff; activate cascade of calls with all WHO personnel, their dependents, and visitors to ensure their safety and whereabouts, and liaise with UN Department of Safety and Security (UNDSS) locally	Leadership	Country Office	24 hours
PS 2: Activate country Incident Management Team (IMT) and assign critical functions by repurposing WCO; locate as close to the emergency as possible	Leadership	Country Office	24 hours
PS 3: Activate rosters; initiate surge	Finance and Administration	Regional and Headquarters Offices	24 hours
PS 4: Convene first health sector/ Health Cluster meeting	Partner Coordination	Country Office	24 - 72 hours
PS 5: Issue initial response strategy, objectives and action plan	Leadership; Information & Planning	Country Office	24 - 72 hours
PS 6: Issue initial internal situation report (sitrep)	Leadership; Information & Planning	Country Office	24 - 72 hours
PS 7: Review CFE request and clear, as appropriate	Leadership	Headquarters	24 - 72 hours
PS 8: Issue global donor alert	Leadership	Headquarters	24 - 72 hours
PS 9: Issue initial health sector/ Health Cluster bulletin	Partner Coordination	Country Office	3 - 10 days
PS 10: Establish/strengthen EWARS	Information and Planning; Health Operations	Country Office	3 - 10 days
PS 11: Agree with Ministry of Health and partners on priority interventions related to: risk communications, community engagement, disease control measures, health services and health staff training	Health Operations	Country Office	3 - 10 days
PS 12: Establish monitoring framework for response, including key performance indicators (KPIs)	Information & Planning	Country Office	10 - 30 days
PS 13: Finalize and issue the strategic response plan /HRP and joint operations plan	Leadership; Information & Planning	Country Office; Headquarters (for multi-country / multi-regional emergency)	10 - 30 days

PERFORMANCE STANDARD	IMS CRITICAL FUNCTION	PRIMARY RESPONSIBILITY	TIMELINE
PS 14: Develop Operations Support and Logistics and procurement plan	Operations Support and Logistics; Finance and Administration	Country Office	10 - 30 days
PS 15: Develop WHO emergency human resource and activity work- plans, and associated budgets	Finance and Administration	Country Office	10 - 30 days
PS 16: Fill priority coordination gaps at sub-national level	Partner Coordination; Finance and Administration	Country, Regional and Headquarters Offices	30 - 60 days
PS 17: Report at least monthly against key performance indicators	Information and Planning	Country Office	30 - 60 days

CHAPTER 5: WHO EMERGENCY RESPONSE PROCEDURES

WHO's Emergency Response Procedures are described in the following tables. They summarize expected activities and outputs from each level of the Organization by the six IMS critical functions, with concrete deliverables and indicative timelines for the first 60 days. Responsibilities for a number of these activities and outputs may be shared by more than one level of the Organization, as indicated in the table. The timelines below represent those following a sudden onset event/emergency, but timelines will vary according to context.

In general, these response procedures apply from the time of grading. However, some procedures should be applied before grading in certain contexts, e.g. ensuring the safety and security of staff following a sudden onset disaster.

Table 5: Leadership

Sub-functions: Incident management; staff health, wellbeing and security; Communications; External relations; EOC management

WHO COUNTRY OFFICE	REGIONAL OFFICE	HEADQUARTERS
Within 24 Hours		
 PS 1: Ensure safety and security of all staff; liaise with UN Department of Safety and Security (UNDSS) locally Activate country office contingency plan and business continuity plan, including: Appoint an Incident Manager in- country and share contact details PS 2: Activate country Incident Management Team (IMT) and assign critical functions, by repurposing the WCO Request deployment of surge staff to fulfil IMS critical functions, as necessary 	 Appoint Emergency Coordinator and share contact details. Establish IMST, with focal points for critical functions Identify surge staff and initiate processes for country-level deployment, in collaboration with Finance and Administration; seek assistance from HQ, as needed 	 Appoint Emergency Officer and share contact details Establish IMST, with focal points for critical functions Consult with WHO Director-General's office on need to inform Secretary General and Emergency Relief Coordinator (for Grade 2 or Grade 3 emergencies due to infectious hazard, or high or very high risk)

WHO COUNTRY OFFICE	REGIONAL OFFICE	HEADQUARTERS
Within 24 Hours		
 Agree on initial response objectives Establish contact with key government officials, partners, and UN Country Team (UNCT) Initiate and manage initial response activities. 		Consult with WHO Director-General's office on need to convene Emergency Committee
Within 24 – 72 Hours		
 Establish WHO presence at the site of the emergency and make contact with local officials Submit request for resources from CFE and/or regional fund Receive surge team and transition IMS functions, as appropriate Agree on health sector coordination mechanism with Ministry of Health and partners Represent WHO on the initial meetings of the UNCT/UNHCT Lead Health sector/Cluster component of initial inter-agency situation analysis and MIRA PS 5: Issue initial response strategy, objectives and action plan PS 6: Issue first WHO SitRep Issue local donor alert; commence outreach to donors in-country Assist Ministry of Health with activation of its EOC 	 Formalize IMST, with confirmation of focal points for critical functions Review request for regional emergency fund Establish meeting and teleconference schedule with WCO Provide technical support and operational support to WCO, including on strategy and priority setting Issue initial press statement, as appropriate Provide regular briefings to senior management, 	 Formalize IMST, with confirmation of focal points for critical functions Coordinate response to requests from WCO and RO for surge, technical and operational support Support RO with communications and press statement, as needed PS 7: Review CFE request and clear, as appropriate PS 8: Issue global donor alert Provide regular briefings to senior management
Within 3 – 10 days		
 Update security assessment and identify needs for additional security services and equipment Submit Health sector/Cluster contributions to Flash Appeal, including budget for initial CERF funding (3 – 5 days). Compile and produce media brief and other communications products (and then on-going at least weekly). Commence outreach to in-country donors Initiate processes to monitor progress against Performance Standards by activating ERF Monitoring tool. Consider need for establishment of sub-national hubs 	 Maintain regular communications with HWO/WR and IM and coordinate technical and operational support Explore options for regional fundraising Monitor implementation of Performance Standards 	 Follow up with donors, following donor alert and flash appeal Support developmen of resource mobilization strategy Provide weekly situation updates for donors Monitor resource mobilization and provide back-up support

WHO COUNTRY OFFICE	REGIONAL OFFICE	HEADQUARTERS			
Within 10 – 30 days	Within 10 – 30 days				
 Review human resources plan Establish frequency of sitreps (e.g. daily, bi-weekly, weekly) Oversee WHO contribution to UNHCT Humanitarian Response Plan (HRP) 	 Ensure health section of HRP adheres to technical standards and is of good quality Actively seek opportunities for regional fundraising 	 Brief Member States and donors at global level, as needed Expand outreach to donors and media Review health section of HRP, as required Actively seek opportunities for global fundraising 			
Within 30 – 60 days					
 Request second surge team Finalize longer-term staffing plan Share WHO project proposals with donors and partners Explore options for transition and recovery planning, as appropriate 	 Coordinate deployment of second surge team Assist with staffing plan Continue coordination of technical and operational support 	 Contribute to second surge team, as needed Provide back-up technical and operational support 			

Table 6: Partner Coordination

Sub-functions: Health and inter-sectoral coordination; Liaison

WHO COUNTRY OFFICE	REGIONAL OFFICE	HEADQUARTERS				
Within 24 Hours	Within 24 Hours					
 Establish contact with operational partners and Ministry of Health 	 Commence initial outreach to regional partners Identify and begin deployment of candidates for in- country coordination roles, e.g. health sector, Health Cluster, EMTs 	 Commence initial outreach to global partners (e.g. GOARN, Global Health Cluster, EMTs, Standby Partners) Support identification and deployment of candidates for coordination roles, e.g. health sector, Health Cluster, EMT Engage GOARN partners in risk assessments and monitoring, if not already initiated 				

WHO COUNTRY OFFICE

REGIONAL OFFICE

HEADQUARTERS

Within 24 – 72 Hours

- Support leadership function in determining coordination mechanism, with Ministry of Health officials
- Advise Humanitarian Coordinator on need for activation of Health Cluster, if not already activated
- **PS 4:** Convene first health sector/ Health Cluster meeting
- Establish EMT coordination cell
 within Ministry of Health, as needed
- Ensure partner contribution to initial situation analysis and MIRA
- Map initial partner deployments

Expand outreach to regional partners and request mobilization/ deployments, as necessary Lead/participate in global calls with partners Engage GOARN and other partners at regional level

to contribute to monitoring of risks and evolution of situation (see Information and Planning)

- Expand outreach to global partners and request mobilization or deployments as necessary
- Engage GOARN and other partners at global level to contribute to monitoring of risks and evolution of situation (see Information and Planning)
 Monitor deployment
- of EMTs through Virtual On-site Operations Coordination Centre (VOSOCC) or dedicated system

Within 3 - 10 days Coordinate overall development of Collaborate with Collaborate with initial health sector/Health Cluster regional partners to alobal partners to response strategy and action plan, mobilize resources to mobilize resources to address operational for inclusion in UNHCT flash appeal address operational (3-5 davs), as needed and technical gaps and technical gaps -Work with partners to identify and onaoina ongoing Ensure quality of address immediate priority gaps health sector/Health in service delivery and coverage through 4W (Who's doing What, Cluster bulletin Where and When) matrix/exercise Participate in inter-cluster/sector meetings and activities

 PS 9: Issue initial health sector/ Health Cluster bulletin

Within 10 - 30 days

- Lead partners in development and submission of UNHCT HRP
 Finalize health section of MIRA.
- in collaboration with Information Management team
- Conduct regular health sector/ Health Cluster meetings regular (e.g. daily, twice weekly) - review status of response needs, risks and activities
- Monitor effectiveness of health response and engage partners to address gaps in service delivery and coordination
- Reach out to other sectoral partners regionally, including nutrition, water, sanitation and hygiene (WASH), protection, food security, etc Represent health sector/Health Cluster in regional forums, e.g. IASC

teleconferences and

meetings

- Reach out to other sectoral partners globally, including nutrition, WASH, protection, food security, etc
- Represent health sector/Health Cluster in global forums, e.g. IASC and GOARN teleconferences and meetings

WHO COUNTRY OFFICE

REGIONAL OFFICE

HEADQUARTERS

Within 10 – 30 days

 Commence planning of more detailed health sector needs assessment, with Information and Planning team Determine frequency of Health Cluster/health sector bulletin, e.g. weekly, bi-weekly 		
Within 30 – 60 days		
 PS 16: Fill priority coordination gaps at sub-national level Strengthen coordination mechanisms, including with other Clusters/sectors Contribute to transition and recovery planning 	 Engage regional partners on on-going basis, exchange information and advocate for additional resources/ mobilization 	Engage global partners on on-going basis, exchange information and advocate for additional resources/ mobilization

Table 7: Information and Planning

Sub-functions: Information; Planning

WHO COUNTRY OFFICE	REGIONAL OFFICE	HEADQUARTERS		
Within 24 Hours				
 Undertake ongoing monitoring of risks and needs; update leadership regularly 	 Provide methodologies and tools for risk assessment and situation analysis Provide technical support for monitoring of risks and evolution of situation 	 Provide additional methodologies and tools support for risk assessment and situation analysis, as needed Provide additional technical support for monitoring of risks and evolution of situation 		
Within 24 – 72 Hours	Within 24 – 72 Hours			
 Contribute health sector/Health Cluster component of initial inter- agency situation analysis and MIRA, with partners Support leadership in developing initial response strategy, objectives and action plan for WHO response Issue first situation report Generate or update 4W matrix Initiate humanitarian or outbreak public health risk assessment 	 Engage GOARN and other partners at global level to contribute to monitoring of risks and evolution of situation (see Partner Coordination) Provide support for initial response strategy, objectives and action plan Propose key performance indicators for initial monitoring 	 Engage GOARN and other partners at global level to contribute to monitoring of risks and evolution of situation (see Partner Coordination) - ongoing Provide back- up support on information and planning 		

WHO COUNTRY OFFICE	REGIONAL OFFICE	HEADQUARTERS
Within 3 – 10 days		
 Continually monitor, analyse and disseminate health information related to emergency Lead health sector/Health Cluster on MIRA (up to 14 days) Coordinate detailed strategic and joint operational planning, in collaboration with Partner Coordination and Health Operations teams Produce first external sitrep Initiate monitoring against ERF performance standards Establish/strengthen response reporting systems, PS 10: Establish/strengthen EWARS 	 Consolidate situation analysis for multi- country emergency Provide technical support and tools for information and planning activities and products Review and clear sitrep, information and planning products; disseminate to regional partners 	 Consolidate situation analysis for multi- regional emergency Coordinate detailed strategic and joint operational planning for multi-country/ regional emergency, in collaboration with Partner Coordination and Health Operations teams Disseminate external sitrep and informatior products to global partners
Within 10 – 30 days	· · · · · · · · · · · · · · · · · · ·	
 Finalize health sector/Health Cluster section of MIRA PS 12: Establish monitoring framework for response, including key performance indicators PS 13: Finalize and issue the strategic response plan/HRP and joint operations plan Establish frequency of main information products, e.g. sitreps, epidemiological bulletins, health sector/Health Cluster bulletins Initiate detailed health sector needs assessment, including HeRAMs 	 Review and clear health section of MIRA; disseminate regionally Review and clear strategic response plan/HRP and joint operations plan; disseminate regionally Oversee quality of information products; disseminate regionally Review progress of response against ERF performance standards 	 Disseminate MIRA globally PS 13: Finalize and issue strategic and joint operational plan for multi-country/ regional emergency; disseminate globally
Within 30 – 60 days	·	
 Refine and further develop reporting system and products PS 17: Report regularly against key performance indicators (e.g. weekly, monthly) Refine strategy and planning, based on monitoring of KPIs and outcomes of health sector needs assessment, HeRAMS Coordinate transition and recovery planning 	 Oversee quality of information products; disseminate regionally Track progress against key performance indicators; advise on course corrections Continue to provide technical support with information management and planning 	 Disseminate information products globally Track progress against key performance indicators, especially for multi-country/ regional emergencies advise on course corrections Contribute to technical support with information management and planning

Table 8: Health operations and technical expertise

Sub-functions: Prevention and control measures; Risk communications and community engagement; Health service delivery; Technical expertise, science and research; Training health workers.

WHO COUNTRY OFFICE	REGIONAL OFFICE	HEADQUARTERS
Within 24 Hours		
Access existing risk communication material and technical guidance	Share existing technical guidance and risk communication materials from regional level	 Share existing technical guidance and risk communication materials from global level
Within 24 – 72 Hours		
 Assist the Ministry of Health to determine whether the event/ emergency is reportable under the IHR (2005), in accordance with the IHR (2005) Annex 2 Decision Instrument Develop initial risk communications messages and initiate community engagement Contribute health operations and technical inputs into risk assessments, situation analysis and MIRA Contribute health operations and technical inputs into initial response strategy, objectives and action plan 	 Support the development of risk communications messages and community engagement approaches Coordinate other technical support from relevant Regional Office departments Contribute to technical inputs for consideration by the WHO Director- General of the need to convene an Emergency Committee 	 Support the development of risk communications messages and community engagement approaches Coordinate other technical support from relevant HQ departments Provide technical inputs for consideration by the WHO Director-General of the need to convene an Emergency Committee
Within 3 – 10 days		
 PS 11: Agree with Ministry of Health and partners on priority interventions related to: risk communications, community engagement, disease control measures, health services and health staff training Refine risk communications messages and develop community engagement strategy Collaborate with Ministry of Health and partners to rapidly address priority operational gaps Promote and monitor the application of standardized treatment protocols, technical standards (e.g. Sphere) and best practices 	 Support refinement of risk communication messages and strategy, including for regional/global levels Promote application of national +/- international protocols, technical standards (e.g. Sphere) and best practices Coordinate technical support from relevant Regional Office departments and partners 	 Support refinement of risk communication messages and strategy, including for regional or global levels Assess, adapt and, if necessary, fast-track high priority technical guidance and operational research Coordinate technical inputs from relevant HQ departments and partners Review and publish public health risk assessment

WHO COUNTRY OFFICE	REGIONAL OFFICE	HEADQUARTERS
Within 3 – 10 days		
 Provide technical assistance and materials to Ministry of Health and partners Support Ministry of Health in activation/establishment of EOC 		
Within 10 – 30 days		
 Ensure strategic response plan/ HRP and joint operations plan are technically and operationally sound Collaborate with Ministry of Health and partners to address gaps in coverage and quality of services Update risk communications messaging and community engagement Begin to address priority training needs of health staff Provide technical assistance and materials to Ministry of Health and partners 	 Undertake technical review and clearance of strategic response plan/HRP and joint operations plan Identify knowledge gaps related to the etiology, transmission, diagnosis and management of the event or emergency Support WCO in meeting training needs, e.g. provision and/or development of materials 	 Collaborate on identifying knowledge gaps related to the emergency Support WCO in meeting training needs, e.g. provision and/or development of materials
Within 30 – 60 days		
 Expand training activities Contribute to transition and recovery plan 	 Engage regional partners to address gaps in areas such as research, knowledge, diagnostics, vaccines, therapeutics Provide technical support and oversight 	 Engage global partners to address gaps in areas such as research, knowledge, diagnostics, vaccines, therapeutics Contribute to technical support and oversight

Table 9: Operations supports and logistics

Sub-functions: Supply chain management; Field support; Health logistics.

WHO COUNTRY OFFICE	REGIONAL OFFICE	HEADQUARTERS
Within 24 Hours		
 Rapidly review and maintain basic office support: communications, IT, and transport Review the UN minimum operation security standard (MOSS) compliance of office, vehicles, and accommodation (with security personnel) Start distribution of medical kits and supplies 	 Review availability of regional stocks, including in regional UN Humanitarian Response Depot (UNHRD) Identify staff for potential surge from global level in support of in-country Operations and Support Logistics (OSL) 	 Review availability of stocks from global strategic stockpile, including from global vaccine stockpiles and UNHRDs Identify staff for potential surge from global level in support of in-country OSL
Within 24 – 72 Hours		
 Undertake rapid assessment of supply chain, health logistics and field support needs Review stock and storage capacity Initiate customs clearance procedures Participate in logistics cluster meeting; explore options for in- country partnership 	 Initiate deployment of supplies from regional stocks Provide support on implementation of emergency SOPs 	 Initiate deployment of supplies from global stockpiles, as needed Initiate outreach to key global partners (e.g. UNICEF, WFP) for coordinated OSL support Liaise with Global Logistics Cluster Provide back-up OSL support to WCO
Within 3 – 10 days		
 Scale up field support, including accommodation, offices, fleet management, telecommunications and Emergency Operations Centre facilities Begin process to strengthen supply chain (including forecasting, procurement, warehousing, transportation, distribution, partner coordination) Organize custom clearance and transport of supplies and material Advise and support Ministry of Health and partners on health logistics Participate in logistics sector assessment Disseminate health logistics standards and OSL guidance to partners 	 Ensure OSL and procurement activities comply with WHO and donor rules and regulations Ensure adherence to health logistics standards and OSL guidance 	 Share and promote technical standards for health logistics Share and promote OSL guidance and tools; update as required Provide specific technical expertise, as required, e.g. safe burials, health logistics Support procurement and delivery of medical supplies

WHO COUNTRY OFFICE	REGIONAL OFFICE	HEADQUARTERS
Within 10 – 30 days		
 Undertake more detailed assessment of supply chain, health logistics and field support needs PS 14: Develop an OSL plan and procurement plan (in collaboration with the Finance and Administration Team) Expand field support to sub-national level Provide training and capacity building for Ministry of Health, WHO and partners on OSL Contribute to strategic response plan/HRP and joint operations plan 	 Provide training and capacity building on OSL Review and clear OSL contributions to strategic response plan/HRP and joint operations plan 	 Support training and capacity needs on OSL Further explore agreements with global partners
Within 30 – 60 days		
 Ensure full establishment of end-to- end supply chain, in collaboration with partners Review and adjust logistics, supply and fleet needs Contribute to transition and recovery planning 	 Provide support and oversight of OSL 	Contribute to support and oversight of OSL

Table 10: Finance and administration

Sub-functions: Finance, Budget/grants management; Procurement; Human resources and surge.

WHO COUNTRY OFFICE	REGIONAL OFFICE	HEADQUARTERS
Within 24 Hours		
 Support activation of WCO contingency plan and business continuity plan Release emergency cash on no-regrets basis 	PS 3: Activate rosters and initiate surge deployments	 PS 3: Activate rosters and support surge deployments, as needed Support activation of emergency SOPs
Within 24 – 72 Hours		

WHO COUNTRY OFFICE	REGIONAL OFFICE	HEADQUARTERS
 Facilitate arrival of surge team Provide emergency administrative, human resources, finance, grant management and procurement services Apply emergency SOPs 	 Advise on reprogramming of existing WCO funds Facilitate release of financial resources from regional emergency fund, as appropriate Provide technical support on implementation of emergency SOPs 	 Activate emergency work- plan Create award/project code for new emergency Process CFE request and release funds following approval of the Executive Director Provide technical support on implementation of emergency SOPs
Within 3 – 10 days		
 Process critical activities approved by incident manager against the emergency work plan Fill all IMS critical functions, through appropriate assignment of WCO and surge staff Provide briefings for incoming surge staff Track donor contributions and ensure compliance and timely reporting 	 Manage grants that come through the Regional Office Support briefings (country context, accommodation, health, travel information) Develop sourcing strategy and plan for staff deployments over 3–6 months, in collaboration with HQ 	 Manage grants that pass through HQ (negotiate agreements, initiate awards, negotiate no-cost extension and waivers) Develop sourcing strategy and plan for staff deployments over 3–6 months, in collaboration with Regional Office
Within 10 – 30 days		
 PS 15: Develop WHO emergency human resource and activity work- plans, and associated budgets Facilitate the rotation of personnel (deployment, arrival handover and departure) 	 Support development of WHO emergency human resource and activity work- plans, and associated budgets Continue to support emergency administrative, human resources, finance, grant management and procurement services 	 Provide project management support, as needed Continue to support emergency administrative, human resources, finance, grant management and procurement services
Within 30 – 60 days		
 Prepare for arrival of second surge team and/or longer term staff Contribute to transition and recovery planning 	 Contribute to longer term staffing plan 	 Collaborate on longer-term staffing plan

ANNEX 1: C	LASSIFICATION OF
HAZARDS	

1.1 Geologica#	1. Natur 1.2 Hydro-meteorological	ULASSIFICATION UF HALANUS rai 1.3 Bi	1.3 Biological ⁵	1.4 Extraterrestria#	2.1 Technological	Induced ^{e 3} 2.2. Societal
	1.2.1 1.2.2 Meteorological [#] Hydrological ⁴	1.2.3 Climatological⁴				
	Flood (H1): Storm (M1): -Riverine flood -Rash flood - Tropical Storm - Coastal flood - Convective Storm - Coastal flood - Convective Storm - Leadslide (H2): - Avalanche (snow, - Avalanche (snow, - With each (H3); - Rogue wave - Seliche - Seliche - Seliche - Severe winter condition (e.g. snow/ice, frost/ - freezel - Fog (M3)	Drought (C1) Wild Fire (C2): • Land Fire (E.g. Brush, bush, pasture] • Forest Fire Glacial lake outburst (C3)	Emerging diseases (B1) Epidemics and pandemics (B2) Insect Infestation (B3). ⁴ - Grasshopper - Locusts Foodborne e outbreaks (B4) ⁷	Impact (E1): - Alrbust Space Weather (E2): - Energetic - Energetic Stomma - Shockwave	Industrial hazards (T1): ⁴ - <i>Chemical split, Gas leak,</i> <i>Callapse, Explosion, Fire,</i> <i>Radation</i> Structural collapse (T2): ^{4,4} <i>bridge failures</i> <i>bridge failures</i> - <i>Aut, Road, Rali, Water</i> - <i>Aut, Road, Rali, Water</i> Explosions/Fire (T4) ⁴ Air pollution (T5): ⁴ - <i>Haze¹⁰</i> - <i>Haze¹⁰</i> Power outage (T6) ¹¹ Hazardous materials in air, soil, water (T7): ^{12,13} - <i>Biological, Chemical,</i> <i>Fadonuclear</i> Food contamination (T8) ⁷	Armed contlicts (S1): ¹⁴ - International - Non-international Civil unrest (S2) Civil unrest (S2) - Crientical biological, - radiological, - r

Sources:

- ¹ Terminology of disaster risk reduction. Geneva: United Nations International Strategy for Disaster Reduction; 2009 [http://www.unisdr.org/files/7817_UNISDRTerminologyEnglish.pdf. accessed 10 February 2015).
- ² Global focus model. Bangkok : United Nations Office for the Coordination of Humanitarian Affairs; 2013 [http://www.earlyrecovery.info/wp-content/uploads/2013/10/17.-DRR-GFM-2013.pdf, accessed 10 February 2015).
- ³ Types of disasters: definition of hazard [website]. Geneva: International Federation of Red Cross and Red Crescent; 2014 [http://www.ifrc.org/en/what-we-do/disaster-management/about-disasters/definition-ofhazard/, accessed 10 February 2015].
- ⁴ Em-DAT: classification of disasters [website]. Brussels: Centre for Research on the Epidemiology of Disasters; 2014 [www.emdat.be/new-classification, accessed 10 February 2015].
- ⁵ International health regulations, 2nd edition. Geneva: World Health Organization; 2005 [http://www.who. int/ihr/publications/9789241596664/en/. accessed 10 February 2015].
- ⁶ Dzud national report 2009-2010. Mongolia: United Nations Development Programme and Swiss Agency for Development and Cooperation; 2010 [https://www.academia.edu/2426652/How_Mongolian_ herders_affected_by_Dzud_natural_phermomena_2009-2010_government_and_pastoralists_disaster_ management, accesse 10 February 2015].
- ⁷ Jaykus L. Woolridge M. Frank J. Miraglia M. McQuatters-Gollop A. Tirado C. Climate change implications for food safety. Rome: Food and Agriculture Organization of the United Nations; 2008 [http://ftp.fao.org/ docrep/fao/010/i0195e00.pdf, accessed 10 February 2015].
- ⁸ Em-DAT: technological disasters trends [website]. Brussels: Centre for Research on the epidemiology of Disasters; 2009 [http://www.emdat.be/technological-disasters-trends, accessed 10 February 2015].
- ⁹ Global environmental outlook 3 : air pollution and air quality [website]. UK and US: United Nations Environment Programme; 2002 [http://www.unep.org/geo/geo3/english/366.htm, accessed 10 February 2015].
- ¹⁰ Hicks K. Kuylenstierna J. Mills R. Air pollution at the global and hemispheric scales-emerging trends. Tunis: Global Atmospheric Pollution Forum; 2009 [http://www.unep.org/transport/pctv/PDF/Tunis-KevinHicksNAEmergingTrends.pdf. accessed 10 Felbruary 2015].
- ¹¹ Coppola D. Introduction to international disaster management. 2nd edition. UK: Butterworth-Heinemann; 2011.
- ¹² Recommendations for the transport af dangerous goods, 7th edition. New York and Geneva: United Nations; 2011 [http://www.unece.org/fileadmin/DAM/trans/danger/publi/unrec/rev17/English/Rev17_ Volume1.pdf, accessed 10 February 2015].
- ¹³ IHR core capacity and monitoring framework. Geneva: World Health Organization; 2013 [http://apps.who. int/iris/bitstream/10665/84933/1/WHO_HSE_GCR_2013.2_eng.pdf, accessed 10 February 2015].
- ¹⁴ The protocol additional to the Geneva conventions for 12 August 1949, and relating to the protection of victims of international armed conflicts [Protocol I] of 8 June 1977. Geneva: International Committee of the Red Cross; 1977 [https://www.icrc.org/ihl/INTRO/470, accessed 10 February 2015].
- ¹⁵ National strategy for chemical, biological radiological, nuclear, and explosives (CBRNE) standards (website). US: U.S. Department of Homeland Security; 2010 [http://www.dhs.gov/national-strategychemical- biological-radiological-nuclear-and-explosives-cbr-ne-standards, accessed 10 February 2015].
- ¹⁶ Treaty on the non-proliferation of nuclear weapons [website]. US: United Nations Office for Disarmament

Affairs; 2012[http://www.un.org/disarmament/WMD/Nuclear/NPT.shtml, accessed 11 February 2015].

ANNEX 2: EMERGENCY GRADING TEMPLATE

WHO EMERGENCY GRADING TEL	MPLATE			
Date:	Chair:			
Time	Participants:			
Country:	• WCO			
Emergency Type:	RO HQ			
Grading decision (Grade 1, 2 or 3):				
Agenda				
Situation analysis – summary				
Risk assessment – summary (attach risk assessment template as appropriate)				
Assessment of grading criteria	 Scale: Urgency: Complexity: Capacity: Reputational risk: 			
Names and contacts of key staff	 Head of WHO Office in countries, territories and areas/WHO Representative: Incident Manager: Emergency Coordinator/Focal Point (RO): Emergency Coordinator/Focal Point (HQ): 			
Immediate WHO and health sector objectives/priorities:				
AGREED NEXT STEPS				
Action	Details Person Date responsible			
Surge of staff				
CFE application				
Dispatch of supplies				
Outreach to partners				
Timeline for performance standards				
For public health events: does this emergency warrant referral to the Emergency Committee for consideration of a PHEIC?				
Date and time of next teleconference				
Other				





