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ANNUAL REPORT

Saving lives and reducing suffering: WHO's work in emergency response operations in the WHO African Region in 2018

WHO Health Emergencies Programme

Emergency Operations: Annual report

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EMERGENCY OPERATIONS

ANNUAL REPORT

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WHO Health Emergencies Programme

Table of contents

1. Overview

Member States of the World Health Organization (WHO) African Region are beset by recurrent emergencies with health consequences due to infectious disease outbreaks, conflicts, natural disasters, chemical or radio-nuclear spills and food contamination. Some of the emergencies are complex and caused by more than one event.

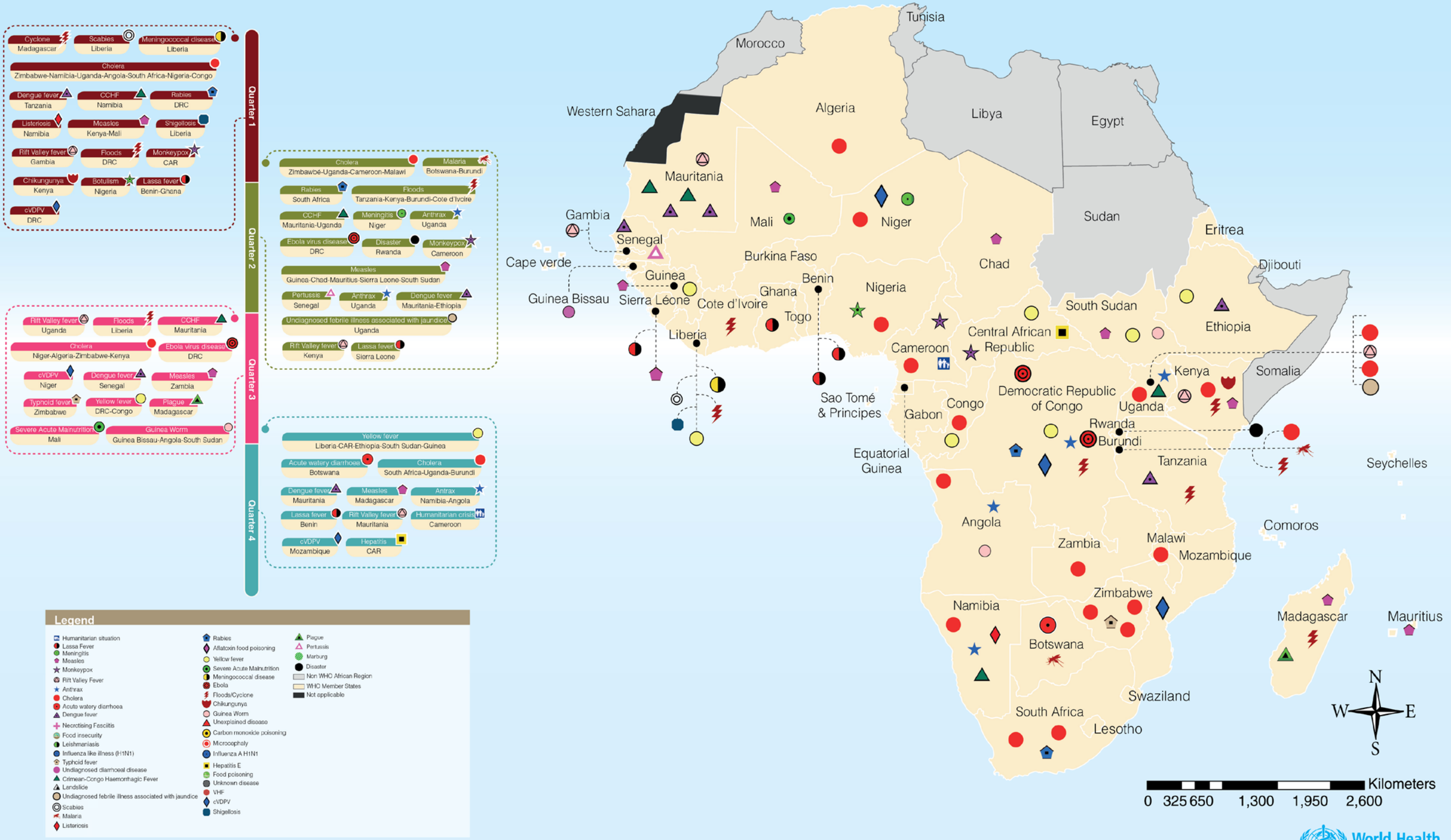
Every year, more than 100 public health emergencies are reported to WHO by Member States, of which 80% are of infectious origin. These health emergencies threaten national, regional and global public health security, and, if not contained effectively, result in high morbidity, mortality, disability and socioeconomic disruptions.

In the year under review, 162 public health emergencies were reported to and monitored by WHO. Of this number, 142 were disease outbreaks and 20 were humanitarian crises (see figure 1). The most reported outbreak was cholera, with 34 outbreaks in 19 countries, followed by measles (16 countries), Dengue fever (nine countries) and yellow fever (nine countries). Uganda reported the highest number of events (15), followed by the Democratic Republic of the Congo (10), Nigeria (10), South Sudan (10), Liberia (8), Kenya (7) and Mauritania (7). In 2017, one hundred and forty-two public health emergencies were reported: 123 disease outbreaks and 19 humanitarian crises and natural disasters.

Two major outbreaks of Ebola virus disease (EVD) were recorded in the Democratic Republic of the Congo, with a high risk of spread to nine neighbouring and other countries.

Of these events, 50 resulted in further action by WHO, including grading and provision of technical and operational support.

Figure 1. Map of the outbreaks and other emergencies reported to WHO AFRO in 2018.



2. The WHO Health Emergencies (WHE) Programme

The work of the WHO Health Emergencies (WHE) Programme in the African Region is driven by its vision and mission of protecting health and saving lives in outbreaks and other public health emergencies, through support to countries and coordination of international action to prevent, prepare for, detect, rapidly respond to, and recover from outbreaks and other emergencies.

The vision, mission and strategic directions of the WHE Programme are consistent with the Transformation Agenda of the WHO Regional Director for Africa, which focuses on strengthening national capacity for health security and led to the development of a regional strategy for health security that was adopted by all Member States. Likewise, they are aligned with the triple billion targets of "promoting health, keeping the world safe and serving the vulnerable" outlined in WHO's Thirteenth General Programme of Work.

WHE operates as a single programme across the three levels of the Organization (country offices, regional offices and headquarters) with one workforce, one budget, one line of accountability, one set of processes and systems, and one set of benchmarks.

The key programme areas of WHE are:

- infectious hazards management that ensures the establishment of strategies and capacities for priority high-threat infectious hazards;
- country health emergency preparedness and the International Health Regulations (2005) that ensure the establishment of the required critical country capacities for all-hazards emergency risk management;
- emergency operations (EMO) that ascertain that emergency-affected populations have access to an essential package of life-saving health services;
- health emergency information and risk assessments that provide timely and authoritative situation analysis, risk assessment and response monitoring for all major health threats and events; and

emergency core services that ensure that WHO emergency operations are rapidly and sustainably financed and staffed.

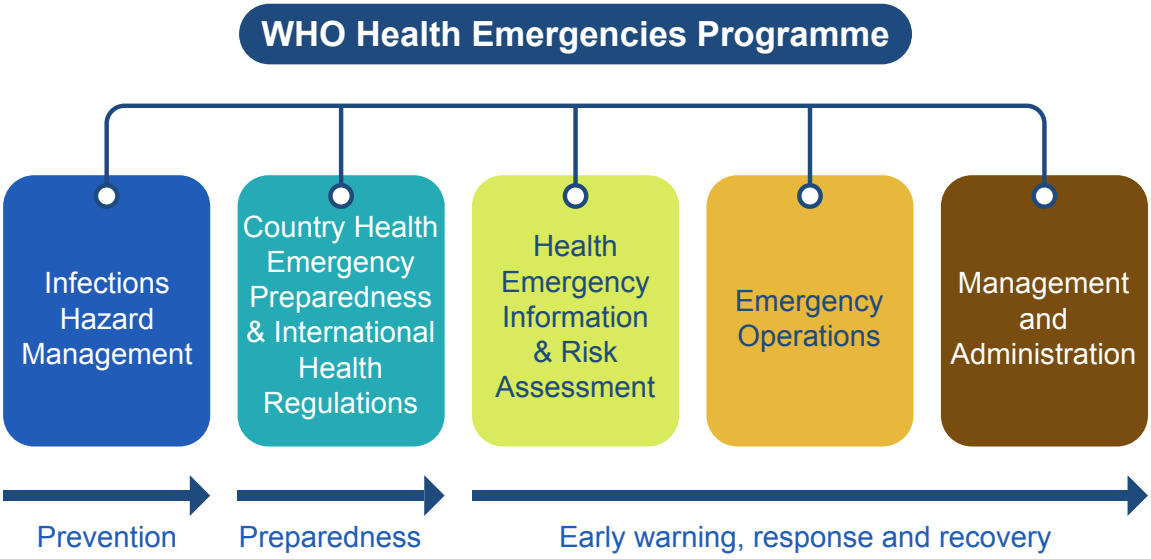


Figure 2. WHO health emergencies programme.

3. The Emergency Operations (EMO) programme area

The EMO programme area of WHE is mandated to support the provision of essential life-saving health services to populations affected by health emergencies. It does this through effective management of health response operations, coordination of response partners for collective response and addressing gaps in humanitarian policy and guidance, using the new Incident Management System, as laid down in the new WHO Emergency Response Framework (ERF-II).

The AFRO EMO programme area aims at strengthening the capacity of the Regional Office to assist Member States while also building countries' capacity to deal promptly and effectively with major public health crises, including the impact of humanitarian crises.

4. Policies, strategies, norms and standards

International Health Regulations - IHR (2005): The aim of IHR (2005) is to protect global health security. IHR core capacity requirements include the capacity to detect, assess, notify and report events; those for surveillance and response; and those for designated airports, ports and ground crossings. WHO has specific responsibilities and accountability for emergency operations under IHR (2005).

In the WHO African Region, the International Health Regulations are implemented in the context of the integrated disease surveillance and response (IDSR) strategy. All Member States of the WHO African Region have adopted the IDSR strategy and are implementing it for surveillance and response.

Emergency Response Framework (ERF): WHE has developed a set of policies, tools, standards, and procedures for effectively responding to health emergencies to save lives and reduce the suffering of affected populations. In the reporting period, WHE has released its second version of the Emergency Response Framework (ERF II) that provides guidance on WHO's approach to risk assessment, grading and response to public health emergencies. The framework details how WHO applies the Incident Management System (IMS) at all levels of the Organization in response to emergencies. The IMS is based on recognized best practices of emergency management and is adopted by WHO to provide effective support to national health authorities and partners in responding to health emergencies. The purpose of the IMS is to:

- define incident objectives, strategies and priorities
- ensure reliable and rapid processing of data and information
- assign clear roles and responsibilities
- ensure effective management of resources and accountability
- ensure reliable communication
- ensure competent and confident decision-making.

WHO's critical emergency response functions under the IMS are: leadership; partner coordination; information and planning; health operations and technical expertise; operations support and logistics; and administration and finance.

The ERF is complemented by the standard operating procedures (SOPs) for emergencies. The SOPs include essential procedures in the areas of activation, delegation of authority, emergency procurement, release and deployment of resources, etc. The ERF comprises sets of time-bound performance standards and emergency response procedures that allow WHO to measure its performance and monitor emergency response effectiveness.

Preparedness and readiness: The WHO Regional Office for Africa (WHO AFRO) developed preparedness and readiness checklists for five major outbreaks in the Region (listeriosis, cholera, Ebola, Rift Valley fever, and Lassa fever). The checklists encompass 10 components and tasks for countries to assess and test their level of readiness. These have been used to identify gaps and define concrete actions. WHO AFRO also developed the implementation concept of the Emergency Medical Teams (EMT) initiative to strengthen the capacity of national emergency medical teams (EMTs) as key pillars of country readiness to respond to outbreaks and other health emergencies at country and regional levels. The Regional Office intends to adjust the EMT concept to integrate IMTs dealing with…

PHEOC framework: The framework provides high-level guidance for establishing and strengthening public health emergency operations centres (PHEOC) by defining the key components of these centres.

In 2018, WHE AFRO effectively implemented these standards, tools and procedures in managing health emergencies, resulting in the key achievements detailed in section 6.

5. Strategic approach to response operations

EMO's strategic approach to emergency response operations includes:

1. building a strong WHO/AFRO Rapid Response Team, backed by well-trained staff at AFRO and WHO country offices to perform the Incident Management System (IMS) functions;
2. strengthening the emergency hubs in Dakar and Nairobi, through highly skilled staff, to serve as robust operational arms of the Regional Office;
3. establishing a robust roster of experts in the WHO African Region;
4. establishing partnerships in WHO response areas for a joint effective response in collaboration with the Global Outbreak Alert and Response Network (GOARN);
5. supporting Member States and health-related organizations in the Region to set up and strengthen the capacity of emergency medical teams (EMTs), and to establish EMT coordination for a better response to outbreaks and other health emergencies;
6. stockpiling logistical supplies based on major risks/hazards identified in the Region;
7. ensuring WCOs' readiness to implement the IMS during emergencies;
8. strengthening national public health emergency operations centres for effective emergency response.

6. Major achievements in 2018

6.1. Leadership commitment to emergency response operations

At the Sixty-ninth World Health Assembly, WHO pledged to be operational in the field to support Member States in responding effectively and promptly to health emergencies and saving lives. Subsequent to the WHO emergency reform, WHO undertook to increase its staffing and strengthen staff capacity in all five WHE programme areas across the Organization, from country offices to headquarters.

WHO designed a staffing model known as country business model (CBM) to enhance the health emergency response capacity of human resources within countries to better support Member States and position staff very close to where emergencies occur. In the year under review, 38 staff members were recruited.

The leadership of WHO decided to create WHE hubs in Dakar and Nairobi to serve as operational arms of the Regional Office. These are strategically positioned to better interact and collaborate with partners. In the year under review, the hubs provided technical and operational support to all emergency-affected countries, leveraged existing collaboration with regional and subregional partners, and strengthened communication and partnerships.

At regional level, WHO AFRO engaged key partners and donors such as WFP, UNICEF, Africa CDC, WAHO, DFID, USAID and others in response operations. WHO AFRO organized weekly partner coordination calls to provide key operational partners with up-to-date information on ongoing emergencies. At least 40 partners participated in the weekly calls. These calls served as a platform for communication, information sharing and coordination of response efforts.

The WHO Director-General and the Regional Director for Africa conducted high-level official visits to countries that had been greatly affected by health emergencies, namely the Democratic Republic of the Congo, South Sudan, and Ethiopia. They advised countries to improve their health systems in order to increase access to essential life-saving health-care services.

Figure 3. WHO Director General and WHO Regional Director for Africa in the field.

They also visited the Ebola hot spots in the Democratic Republic of the Congo six times. During those visits, they encouraged front-line responders working in hard-to-reach and insecure areas; made high-level strategic decisions that facilitated response operations, and advocated for government commitment, partner collaboration and coordination, and enhanced national capacity for Ebola response through transfer of skills to local HCWs. Some of the strategic decisions made included strengthening security for responders through UN peacekeepers, and immediate availability of UN flights to inaccessible and hard-to-reach areas to facilitate transportation of supplies and staff.

6.2. Timely and effective response to public health emergencies and improved operational readiness

The new WHO Health Emergencies Programme is designed to enable WHO to:

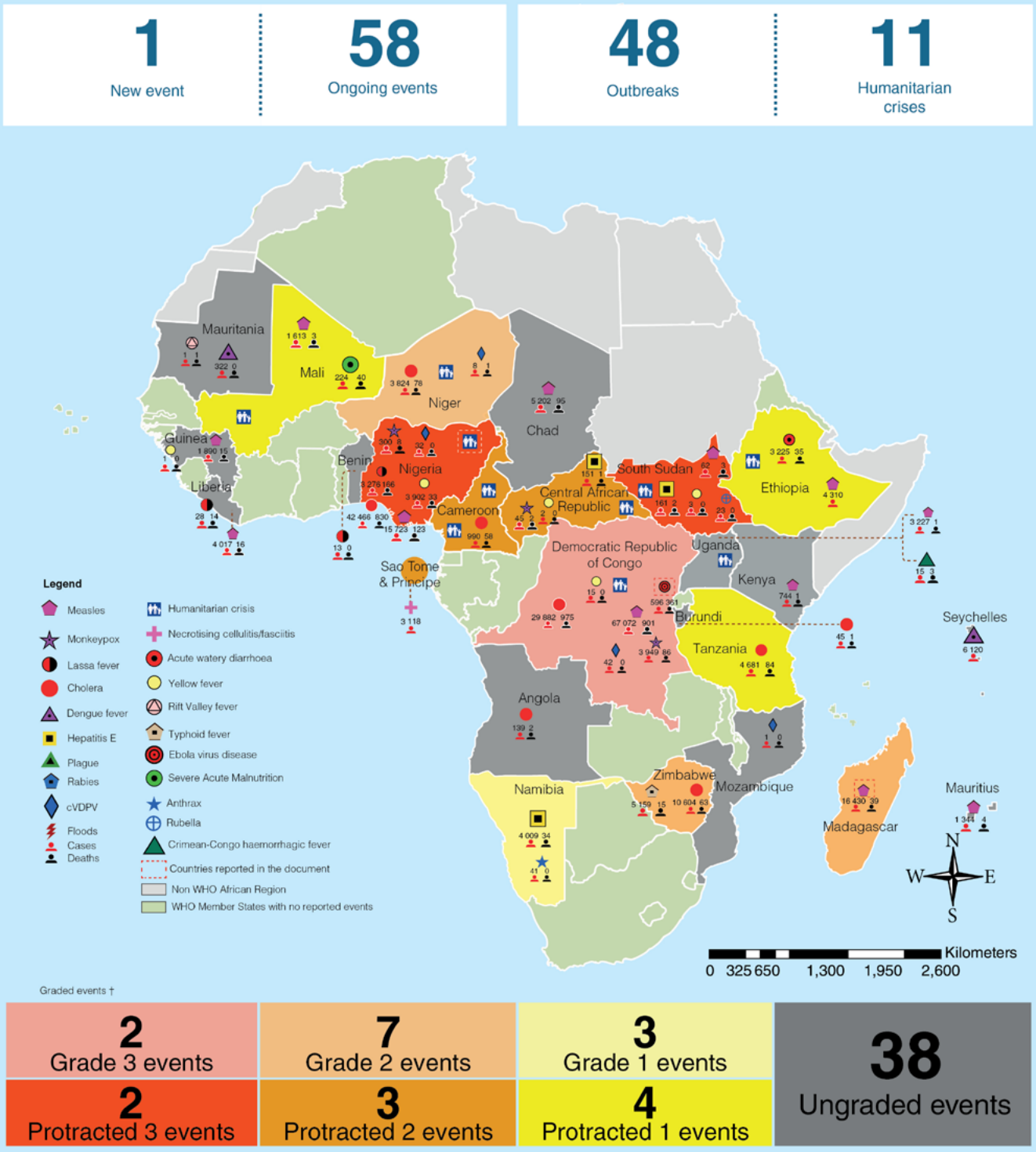
- receive and verify information, assess risks and determine the level of WHO's response in a timely fashion in order to support countries;
- better coordinate responses with clear lines of reporting and accountability across the three levels of the Organization using the IMS;
- ensure swift release of emergency funds;
- locate and rapidly move human and logistical resources to the field, and effectively engage operational partners for synergized response.

6.2.1. Incident grading

Grading is a WHO internal activation procedure that triggers WHO emergency procedures and activities for the management of emergency response. The grading assigned to an acute emergency indicates the level of operational response. There are four levels of emergency grading, namely:

- Ungraded: a public health event or emergency which is being monitored by WHO but does not require a WHO operational response;
- Grade 1: a single-country emergency requiring a limited response by WHO;
- Grade 2: a single-country or multiple-country emergency, requiring a moderate response by WHO; and
- Grade 3: a single-country or multiple-country emergency, requiring a major/ maximal WHO response.

Figure 4. Map of graded and ungraded events monitored and supported by WHO (the map of wk52, 2018).



Following risk assessments conducted by EMO in 27 Member States of the WHO African Region (see table in annex 1), 50 emergencies were graded as follows:

- three grade 3 emergencies;
- nine grade 2 emergencies;
- eight grade 1 emergencies;
- two protracted grade 3 emergencies;
- four protracted grade 2 emergencies;
- two protracted grade 1 emergencies; and
- 19 ungraded emergencies.

WHO provided full operational support for all the 50 graded public health emergencies.

The grading of incidents allowed AFRO EMO to instantly:

- activate WHO's IMS, IMST and emergency SOPs;
- inform WHO's level of operational response and mobilize internal and external resources;
- determine requirements for human and material surge capacity;
- release emergency funds; and
- coordinate with stakeholders and mobilize resources to address unmet needs.

6.2.2. Incident management system (IMS)

WHO uses the incident management system (IMS) as a coordination mechanism at all levels of the Organization to provide effective, coherent and efficient support to Member States for response operations. As such, WHO activated its in-country incident management system (IMS) within 24-48 hours in response to all 50 graded public health emergencies (outbreaks, natural disasters and ongoing humanitarian crises). Incident managers were also designated.

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In the same vain, incident management system teams (IMST) were established at regional and headquarters level. They provided necessary guidance and operational support to in-country IMS in a coherent manner, coordinating WHO's support to Member States' response operations. EMO at the Regional Office mobilized multidisciplinary experts across different clusters to constitute the incident management team (IMST) of the Regional Office and fill critical IMS functions in WHO country offices.

The IMST met regularly on an ad hoc basis – daily or three times a week depending on the need – to coordinate response and monitor implementation of response plans by critical IMS functions (See figure 5).

The AFRO IMST regularly communicated with field-level responders and coordinated operational responses on the ground. The team also provided technical and operational support through regular three-level teleconferences (country office, AFRO and headquarters. For example, the IMST established to provide support during the EVD outbreak in North Kivu, the Democratic Republic of the Congo, met three times a week to analyse the situation, monitor the response and provide necessary technical and operational support (See figure 6).

The AFRO emergency operations centres played a central role as platforms for communication, coordination, collaboration, and management of information for action.

In addition, the team met twice a week to carefully review and monitor all ongoing major incidents. These operational meetings allowed WHE, under the leadership of EMO, to share information, analyse situations, identify gaps, make decisions on the provision of operational support and highlight key issues and challenges, including those requiring leadership decisions (See figure 7).

Figure 5. WHO/AFRO incident management system team (IMST) meeting during response to EVD outbreak DRC in 2018.

Figure 6. 3 level teleconference between WHO country office, AFRO and headquarters during response to EVD outbreak in DRC, 2018.

Figure 7. Bi-weekly operations meeting to review ongoing major incidents.

6.2.3. Performance measurement

Responses to all graded emergencies were carefully monitored using the Emergency Response Framework (ERF II) performance standards. ERF II encompasses 17 time-bound performance standards (PSs) that WHO uses to measure the performance of its emergency response operations and monitor the effectiveness of the response.

> **For all graded incidents, more than 85% of the applicable performance standards (PSs) were successfully attained within the time frame. This exceeded the WHE results framework target of at least 70% of PS attainment for graded incidents.**

Furthermore, WHO AFRO conducted five (5) operational reviews of Ebola in the Democratic Republic of the Congo, humanitarian crisis and Lassa fever in Nigeria, humanitarian crisis in Ethiopia, plague in Madagascar and humanitarian crisis in South Sudan. The reviews were conducted jointly with ministries of health (MoH) and partners to assess the performance of response operations, documenting lessons learned and developing operational plans to guide response strategy.

6.2.4. Effective management of resources – timely surge capacity for response

(a) Human resources

Following the activation of the incident management system (IMS) and based on key positions required in the system, WHO developed HR plans for all graded emergencies within 24 hours. The Organization repurposed WCO staff and deployed over 1550 skilled multidisciplinary experts in all critical IMS functions, to fill required positions. The critical functions filled included leadership/management, health operations, logistics, information and planning, and administration and finance. The experts provided leadership support, technical support, direct front-line response and capacity building for countries through training, mentoring and on-the-job transfer of skills.

> **The Organization repurposed WCO staff and deployed over 1550 skilled multidisciplinary experts in all critical IMS functions, to fill required positions.**

Figure 8. Deployed staff in the field responding to emergencies.

Unlike in the pre-reform period where WHO operations were hindered by internal procedures and bureaucracy, WHO showed tremendous improvement in deploying massive skilled international personnel to the field in a timely manner, and in undertaking immediate local recruitment. This greatly contributed to WHO's effectiveness in response operations and rapid control of outbreaks and other emergencies. The SOPs for emergencies were immensely instrumental in facilitating timely deployment.

(b) Financial resources

WHO supported the development of national response plans for all affected countries. The plans were presented to donors for the purpose of resource mobilization to address funding gaps. The plans, jointly developed by WHO and national authorities, were effectively implemented to adequately respond to the emergencies using the resources mobilized. WHO AFRO also conducted weekly calls with donors to present the plans for the purpose of mobilizing resources.

> **A total of US$ 153 million was mobilized from several donors to support response operations in 16 countries facing with major public health emergencies, such as Ebola, cholera, malaria, yellow fever, Lassa fever and plague outbreaks; and humanitarian crises such as flooding, drought, conflicts, etc.**

Of this amount, US$ 20.5 million was released from the Central Emergency Response Fund (CERF) to the following 12 countries with graded emergencies within 72 hours of grading: Cameroon, Democratic Republic of the Congo, Kenya, Liberia, Madagascar, Mozambique, Namibia, Niger, Nigeria, United Republic of Tanzania, Uganda, and Zimbabwe. CERF is a fast and flexible financing mechanism that gives WHO the funding it requires to rapidly kick-off initial emergency response operations.

Potential donors in 2018 include, but are not limited to, CERF, USAID, African Development Bank, BMGF, ECHO, DFID, GAVI, IDA, Government of UK, Sweden, Germany, Italy, etc.

(c) Logistics

The foundation of a successful response operation heavily depends on the timely, balanced and speedy delivery of logistical supplies and equipment.

Logistics is one of WHO's major response pillars that saw enormous improvement and performance in terms of efficient and effective delivery of logistical services, post reform. This programme area ensured efficient logistics operations through speedy transportation of supplies and services in the right amount, at the right time, under the right conditions and to the right places in need.

WHO AFRO has strategically pre-positioned health emergency logistical supplies in a regional warehouse in Accra, Ghana. The warehouse has been redesigned specifically to stockpile supplies for five major health risks that are prevalent in the Region, namely cholera, viral haemorrhagic fever (VHF), mass gathering/trauma, displacement and SAM.

WHO delivered 48 shipments of medical and non-medical supplies worth US$ 1.6 million to 21 countries (Angola, Burundi, Burkina Faso, Cameroun, Central African Republic, Côte d'Ivoire, Congo, the Democratic Republic of the Congo, Gabon, Ghana, Guinea-Bissau, Mali, Rwanda, United Republic of Tanzania, South Sudan, Uganda, Zambia and Zimbabwe). The supplies included PPEs, IEHK, IDDK, trauma kits, blood transfusion kits, etc.

WHO delivered 48 shipments of medical and non-medical supplies worth US$ 1.6 million to 21 countries

A replenishment policy has been established that includes financial mechanisms for immediate reimbursement and replenishment of the regional stockpile after each movement.

Long-term agreements have been signed with the World Food Programme (WFP) for national and provincial warehousing in the Democratic Republic of the Congo and Ethiopia, increasing WHO warehousing capacity and stock management performance in both countries. This best practice will be expanded to other countries.

Likewise, WHO provided essential logistical support to all deployed staff in terms of accommodation, food supply, communication facilities, etc.

Figure 9. Logistics support during field response operations.

Case in point: When the EVD outbreak occurred in Equateur Province of the Democratic Republic of the Congo, WHO immediately deployed hundreds of health workers to support response operations. The affected areas were remote rural areas with no basic facilities. WHO logisticians erected tents for staff to sleep in; made necessary arrangements to provide food, drinks and electricity; facilitated communication through provision of telephones, radios, and internet connection by satellite; and made the necessary transport arrangements, including airlifting staff, in collaboration with UN agencies and the UN peacekeeping mission (MONUSCO).

6.2.5. Management of operational information

Besides disease/event-specific information, a huge amount of operational information flows to SHOC when it is activated to respond to emergencies. This information is well managed using a real-time web-based online information management system known as emergency portal (vSHOC). The operational information includes HR planning and deployment, ERF performance standards, and event task tracker to monitor response and track partners' activities in terms of who is doing what, where and when. Information products such as bi-weekly operational dashboards and external situation reports were produced and disseminated to support informed decision-making.

6.2.6. Operational partnerships

WHO AFRO, working in collaboration with GOARN, OCHA and others, developed and rolled out a map of operational partners for the management of health emergencies in the WHO African Region. This exercise resulted in the mapping of 170 key regional and international partners operating in the Region based on location, area of expertise and available capacities.

In 2018, WHO AFRO effectively engaged 40 of these key operational partners and facilitated coordinated country-level response operations in several emergency-affected countries. WHO conducted monthly operational partner calls and provided operational response information; discussed issues and challenges; agreed on response actions by each partner; and regularly monitored implementation of action points.

Figure 10. Photo of some of operational partners during a joint training.

In addition, WHO AFRO coordinated efforts with GOARN, Global Health Cluster, EMTs, Standby partners, UNICEF, OCHA and newly mapped regional partners such as Amref, Médecins d'Afrique and Alima, to support response operations in 10 graded emergencies in the Region. The emergencies included cholera in Kasai (Democratic Republic of the Congo), complex emergencies in the Democratic Republic of the Congo, Ebola in Equateur (Democratic Republic of the Congo), Ebola in North Kivu (Democratic Republic of the Congo), Lassa fever in Nigeria, listeriosis in South Africa, cholera in Zimbabwe, and humanitarian crises in Cameroon, Ethiopia and South Sudan.

6.2.6.1. Strengthening in-country emergency medical teams (EMT) as key pillars for country readiness

The EMT Initiative was launched in the WHO African Region in December 2017 in Dakar, Senegal, with the participation of 11 countries (Burkina Faso, Cameroon, Côte d'Ivoire, Democratic Republic of the Congo, Kenya, Madagascar, Nigeria, Senegal, Rwanda, South Africa and Uganda). It aims to enhance preparedness and promote the rapid deployment and efficient coordination of EMTs adhering to minimum standards in order to reduce morbidity, mortality and disability associated with public health emergencies.

A second regional workshop was organized jointly with WAHO in June 2018, in Grand Bassam, Côte d'Ivoire. Thirteen countries of the Economic Community of West African States (ECOWAS) attended the workshop and initiated national implementation plans. The participating countries were: Benin, Burkina Faso, Burundi, Cabo Verde, Côte d'Ivoire, The Gambia, Ghana, Guinea, Guinea-Bissau, Liberia, Nigeria, Sierra Leone and Togo.

In addition, five (5) national EMT awareness workshops were conducted in 2018 in: Senegal (April 2018), South Africa (June 2018), Nigeria (October 2018), Guinea (November 2018) and Ghana (November 2018). Awareness workshops were also conducted with the Alliance for International Medical Action (ALIMA) and Médecins d'Afrique (MDA). The workshops enabled Senegal, South Africa and ALIMA to sign up for the international EMT classification.

Figure 11. National EMT awareness workshops in Senegal.

Lastly, two (2) deployments were coordinated with newly identified EMTs in the African Region.

In May and August 2018, working in partnership with the Ministry of Health, WHO and other partners, ALIMA opened an 8-bed Ebola treatment centre (ETC) in Itipo (Equateur province), and a 60-bed ETC in Beni (North Kivu province), to support response operations during the ninth and tenth EVD outbreaks in the Democratic Republic of the Congo. As of 31 December, nearly 190 confirmed cases had been treated in the Beni ETC since its opening on 15 August 2018.

In October 2018, the EMT from Senegal's Ministry of the Armed Forces was deployed to the Democratic Republic of the Congo to support response operations in a major road collision. The deployment was done in partnership with the Ministry of Health and WHO. The team provided direct care to patients and capacity building in clinical burn care in two (2) hospitals in Kinshasa.

6.2.7. Strengthening public health emergency operations centres (PHEOCs) for effective response operations

The regional strategy for health security provides that 80% of Member States in the WHO African Region should have functional PHEOCs by 2020. WHO is supporting Member States to achieve this target in partnership with Africa CDC, US CDC and other partners.

WHO mobilized funding for and equipped PHEOCs in eight Member States, namely Kenya, Central African Republic, South Sudan, Guinea-Bissau, Mauritania, Rwanda, United Republic of Tanzania and Benin. The equipment provided included information and communication technology facilities, furniture and infrastructure refurbishment. WHO also developed plans and procedures including PHEOC handbooks/SOPs for his countries and conducted simulation exercises to test the plans and procedures.

WHO AFRO conducted a regional PHEOC network meeting from 22 to 26 October 2018 to finalize two PHEOC technical documents: (1) PHEOC handbook, which provides step by step guidance on the operation and management of PHEOCs, and which will be adapted by national PHEOCs to support their operations; (2) PHEOC legal framework guide, which provides guidance in the development of PHEOC legal frameworks that set out the mandate and roles and responsibilities of PHEOCs.

Figure 12. A meeting to review and finalization of PHEOC training and technical material, in Brazzaville, Congo.

The concept of PHEOC is still relatively new and many key actors have limited knowledge. Hence, WHO AFRO developed an advocacy tool aimed at raising awareness about PHEOC among national decision-makers. The tool details the need for PHEOCs as well as the key components required to establish functional PHEOCs.

WHO AFRO conducted a regional PHEOC functional simulation exercise from 8 to 9 May 2018. This was the first PHEOC-to-PHEOC exercise conducted in the Region, involving Anglophone and Francophone countries. The exercise simulated a real-life acute emergency where a novel and potentially deadly respiratory virus landed in Senegal and spread to neighbouring countries, triggering the activation of PHEOCs in six countries and the implementation of plans and procedures, including emergency response plans. The exercise also tested communication and exchange of information among PHEOCs in the Region.

Figure 13. Simulation excise in Senegal PHEOC.

As a result of the achievements highlighted above, Member States, with the support of WHO and other partners, successfully controlled the following outbreaks: cholera in Angola, Congo, Kenya, Nigeria, Niger, South Sudan, United Republic of Tanzania, Uganda and Zimbabwe; Dengue fever in Senegal; diarrhoea in under-fives in Botswana; Ebola virus disease in Equateur, Democratic Republic of the Congo; Hepatitis E in Namibia; Lassa fever in Nigeria; listeriosis in South Africa; necrotizing cellulitis in Sao Tome and Principe; plague in Madagascar; Rift Valley fever in Kenya and South Sudan; yellow fever in the Republic of Congo, Ethiopia, Nigeria and South Sudan.

In addition, WHO greatly contributed to saving lives and reducing suffering in crisis situations by providing full operational support in all protracted and complex emergencies, including humanitarian crises in Cameroon, Central African Republic, the Democratic Republic of the Congo, Nigeria, Niger, South Sudan, Ethiopia and Mali.

7. Capacity building for effective response

7.1. Pre-deployment training

WHO AFRO provided pre-deployment training to 51 WHO country office staff. Five operational partners (Africa CDC, International Medical Corps, Save the Children, WAHO and AFENET) also participated in the training. The training covered the concept of emergency management, WHO Emergency Response Framework (ERF), WHO emergency SOPs, WHO IMS and application of humanitarian principles in WHO's humanitarian actions and health emergencies.

To put theory into practice, a day-and-a-half-long functional simulation exercise was conducted. The scenario entailed rapid risk assessment, incident grading and activation of in-country IMS and IMS support teams at regional and headquarters levels. All six critical functions of the IMS (leadership, health operation and technical expertise, information management and planning, operation support and logistics, administration and finance, and partnership) were practised in both outbreak and complex humanitarian emergency situations.

The trainees augmented the regional readily deployable workforce roster of experts.

Figure 14. Pre-deployement training, Brazzaville Congo.

7.2. Training on public health emergency operations centres (PHEOCs)

WHO AFRO, working in partnership with Africa CDC and US CDC, conducted two (2) regional training workshops on PHEOC, aimed at strengthening the skills and core capacities of PHEOC staff in emergency management, so that they can effectively support the management of public health emergencies as part of an all-hazards approach.

A) Basic-level training on PHEOC operation and management – this training was held from 28 May to 1 June 2018 in Nairobi, Kenya. Thirty-six (36) PHEOC staff members from 12 Member States of the WHO African Region participated. The training provided key concepts on;

- PHEOC operation and management functions during an emergency situation and day-to-day operations for effective emergency management;
- emergency management using the IMS principles as the model for preparing for and responding to public health emergencies; and
- coordination and communication approaches to plan for and respond to public health emergencies through an all-hazards approach.

The training ended with a table-top exercise and the application of procedures for activating a PHEOC and organizing a public health emergency response using the IMS. All the functional areas of the IMS were practised.

B) Intermediate-level training on PHEOC operation and management – 50 PHEOC staff from 12 Member States of the WHO African Region who had previously attended the basic-level training took part in this training. The training took place in Dakar, Senegal, from 14 to 18 May 2018.

Participants were trained on various functional areas that are critical to the effective operation of a PHEOC, including operations, planning, logistics and communications; as well as coordination and communication approaches to plan for and respond to public health emergencies.

At the end of the training, a simulation exercise was conducted to practise how different functional areas within a PHEOC work and interact with each other. These training programmes helped countries to improve the operational capacity of their PHEOC in response to emergencies.

Figure 15. Intermediate level training on PHEOC operations and management, 14 - 18 May 2018, Dakar, Senegal.

7.3. Rapid response team (RRT) training

In its efforts to enhance the regional emergency workforce, WHO in partnership with Africa CDC trained 56 multidisciplinary teams of experts (mainly epidemiologists, microbiologists, clinicians, and veterinarians) from 22 English and French-speaking countries, namely Benin, Botswana, Central African Republic, Congo, Côte d'Ivoire, the Democratic Republic of the Congo, Ethiopia, Gabon, Ghana, Kenya, Lesotho, Liberia, Mauritania, Mozambique, Nigeria, Somalia, Sudan, United Republic of Tanzania, Tunisia, Uganda, Zambia and Zimbabwe. The training was held in Addis Ababa, Ethiopia, from 19 to 30 November 2018. The French-speaking session was held from 19 to 24 November and the English-speaking session from 26 to 30 November 2018. The training comprised both theory and practical hands-on experience, including PPE donning and doffing, hand washing, chlorination, safe and dignified burials, logistics, personal well-being, etc. These experts are now readily deployable as surge capacity for investigation and response.

Figure 16. Multidisciplinary RRT training in Addis Ababa, Ethiopia, 19 - 30 November 2018.

Furthermore, national rapid response team (NRRT) training sessions were conducted for over 350 experts to strengthen preparedness and core capacities to respond to emergencies in nine neighbouring countries of the Democratic Republic of the Congo (Angola, Burundi, Central African Republic, Congo, Rwanda, South Sudan, Uganda, United Republic of Tanzania and Zambia). The training focused on Ebola and covered the seven intervention areas, from coordination to logistics. Skill drills were conducted for participants. The NRRTs in the nine countries contributed to district-level capacity building exercises through training of subnational RRTs and specialized training such as case management, infection prevention and control (IPC) and RCCE.

Figure 17. National RRTs during training.

7.4. GOARN Training

WHO AFRO and GOARN organized the first GOARN training course in the African Region from 8 to 13 April 2018 in Brazzaville, Republic of Congo. The training was attended by 40 people mobilized from 18 partner organizations across the African Region, Europe and Asia.

The aim of the training was to improve the quality of support provided by GOARN deployees during field operations. At the end of the session, a simulation exercise was conducted to demonstrate the process of deployment, including administrative procedures and field operations, such as investigation, surveillance, epidemiology, laboratory etc.

WHO AFRO partnered with GOARN to train 24 multidisciplinary experts from GOARN partner institutions in Africa and other regions on tier 2 of the GOARN training programme in April 2018. Ten (10) of these trainees were deployed to support response operations in emergency-affected countries.

Further, WHO AFRO in partnership with AFENET organized a GOARN training session during the seventh AFENET conference held in Maputo in November 2018. The training was organized for national field epidemiologists in the African Region. Trainees were updated on the process of GOARN deployment and the WHO response mechanism and integration into field operations.

7.5. Training on operational readiness

As one of its strategic approaches, AFRO EMO endeavours to enhance the capacity of WHO country offices to acquire relevant skills in all aspects of country operational readiness. To this effect, from 11 to 17 November 2018, AFRO trained 19 WCO staff from 16 priority countries on operational readiness. The countries were: Botswana, Eritrea, Eswatini, Ethiopia, The Gambia, Ghana, Liberia, Malawi, Nigeria, Rwanda, Sierra Leone, South Africa, South Sudan, United Republic of Tanzania, Zambia and Zimbabwe.

The training concluded with two days of simulation exercises, practising all components of readiness.

The following were key recommendations for WCO readiness focal points:

- conduct strategic risk analysis to identify major health threats;
- develop/update contingency plans to address and prepare for each of the major health threats identified through the risk analysis;
- develop/update business continuity plans to address threats to the functionality of WHO offices;
- establish/reactivate early warning systems to enable risks and events alert, monitoring and timely response;
- provide training on risk communication to health promotion/communication staff and DPC/ emergency staff;
- develop an action plan for OPR implementation and monitoring.

7.6. Training on country readiness

As part of its strategic priority to strengthen country readiness, AFRO EMO trained over 200 country stakeholders in five countries (Ghana, Guinea, Nigeria, Senegal and South Africa) on the Emergency Medical Teams Initiative. The three-day workshop brought together stakeholders from ministries of health, PHEOCs, RRTs, NADMOs, ministries of environment, ministries of foreign affairs, major hospitals, etc.

The aim of the training was to help strengthen the countries' capacity to respond to outbreaks and other health emergencies, through the deployment of quality-assured clinical and public health teams. It also aimed at preparing national health authorities to embed the coordination of national and/or international EMTs within their existing health emergency operations centres (Health EOCs).

Following the workshop, all five countries adopted the Initiative, identifying focal points and adopting action plans. Senegal and South Africa signed up to the international classification process.

Figure 18. EMT training workshop.

8. Moving forward – our priorities for 2019

The achievements underlined in this report show that Member States in the African Region, with the support of WHO and partners, are making progress in their efforts to save lives and reduce suffering from health emergencies.

Moving forward, AFRO EMO has set the following priorities for 2019:

1. in collaboration with CPI, map major risks in countries and provide necessary readiness support based on identified risks;
2. ensure WCOs are capacitated and ready to provide operational support to Member States, including effective and efficient implementation of ERF and emergency SOPs;
3. enhance logistic platforms taking into account major risks and public health threats identified in countries of the Region in collaboration with key partners;
4. provide WHO staff members at country and regional levels with the required training, including in leadership, management and diplomacy during crises;
5. enhance the capacity of ministries of health through training, including in IMS critical functions: incident management, logistics, partnership, health cluster, emergency operations centre, emergency medical teams, etc.;
6. support countries to set up and operationalize public health emergency operations centres (PHEOCs);
7. monitor and evaluate WHO's performance in health emergency response operations (ERF performance standards, KPI, operational review). Develop standardized monitoring and evaluation tools;
8. create and maintain a roster of regional deployable workforce comprising different experts to perform WHO functions in emergencies within the IMS, in order to enhance regional surge capacity through the provision of a series of training courses;
9. advocate and mobilize resources to support response operations.

In addition, key planned activities for effective partner engagement include to:

- continue to collaborate with key response partners, including Africa CDC, WAHO and GOARN in workforce development using innovative approaches such as EMT, RRT etc;
- strengthen networking with regional economic communities such as ECCAS, ECOWAS, IGAD, and SADC;
- work closely with the United Nations system for effective response and provide leadership in health-related humanitarian efforts, including as the Health Cluster Lead; and promote multiagency response;
- strengthen partnership and coordination with UNICEF, OCHA, the World Food Programme (WFP), standby partners, GOARN etc. Sign long-term collaboration agreements for joint support to response operations;
- mobilize resources from key donors to address funding gaps;
- continue to collaborate with Africa CDC, US CDC and others to jointly support countries implementing PHEOCs.

9. Annexes

Annex 1

List of graded emergencies

No.	Country	Public health emergency	Grade level
1	Nigeria	cholera	Grade 1
2	Kenya	Rift Valley fever	Grade 1
3	Kenya	food security	Grade 1
4	Kenya	cholera	Grade 1
5	Cameroon	cholera	Grade 1
6	Angola	cholera	Grade 1
7	Namibia	hepatitis E	Grade 1
8	Congo	yellow fever	Grade 1
9	Ethiopia (West Guji & Gedeo)	humanitarian crisis	Grade 2
10	Nigeria	Lassa fever	Grade 2
11	DR Congo	cVDPV2	Grade 2
12	Cameroon (North West /South West)	humanitarian crisis	Grade 2
13	Niger	cVDPV2	Grade 2
14	Niger	cholera	Grade 2
15	Zimbabwe	cholera	Grade 2
16	Horn of Africa (Ethiopia, Eritrea & Kenya)	cVDPV2	Grade 2
17	Madagascar	pneumonic plague	Grade 2
18	DR Congo (North Kivu)	Ebola virus disease	Grade 3
19	DR Congo (Equateur)	Ebola virus disease	Grade 3
20	DR Congo (Kasai)	cholera	Grade 3
21	DR Congo	complex humanitarian crisis	Grade 3
22	South Africa	listeriosis	Grade 3
23	Ethiopia	humanitarian crisis	Protracted 1
24	Mali	humanitarian crisis	Protracted 1
25	United Republic of Tanzania	cholera	Protracted 1
26	Sao Tome and Principe	necrotizing cellulitis	Protracted 2
27	Cameroon (Far North Region)	humanitarian crisis	Protracted 2
28	Niger	humanitarian crisis	Protracted 2
29	Central African Republic	humanitarian crisis	Protracted 2

No.	Country	Public health emergency	Grade level
30	Nigeria (North East)	humanitarian crisis	Protracted 3
31	South Sudan	humanitarian crisis	Protracted 3
32	Ethiopia	yellow fever	Ungraded
33	Ethiopia	acute watery diarrhoea (AWD)	Ungraded
34	Nigeria	yellow fever	Ungraded
35	DR Congo	road traffic accident (mass casualty)	Ungraded
36	South Sudan	cholera	Ungraded
37	South Sudan	Rift Valley fever	Ungraded
38	South Sudan	yellow fever	Ungraded
39	Central African Republic	hepatitis E	Ungraded
40	Central African Republic	yellow fever	Ungraded
41	Congo	cholera	Ungraded
42	Mozambique	cholera	Ungraded
43	Uganda	cholera	Ungraded
44	Madagascar	measles	Ungraded
45	Senegal	Dengue fever	Ungraded
46	Mauritania	CCHF	Ungraded
47	Mauritania	Dengue fever	Ungraded
48	Benin	Lassa fever	Ungraded
49	Liberia	flooding	Ungraded
50	Botswana	diarrhoea	Ungraded

10. Acknowledgement

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