

Health emergencies

WHO response in severe, large-scale emergencies

Report by the Director-General

1. This report is submitted pursuant to the request by the Executive Board in resolution EBSS3.R1 (2015).¹ It provides information on all Public Health Emergencies of International Concern, WHO Grade 3 emergencies and United Nations Inter-Agency Standing Committee Level 3 emergencies in which WHO took action between 1 January and 1 October 2016. In addition, it provides an update on WHO's action in Grade 2 emergencies. An earlier version of this report was considered by the Executive Board at its 140th session in January 2017.²

2. During the period under review, WHO responded to major emergencies in 47 countries, areas and territories, including 31 acute graded emergencies (see Annex 1) and 19 protracted emergencies (four countries had both types). Five acute graded emergencies were classified Grade 3, the highest severity level based on WHO's Emergency Response Framework and newly adopted incident management approach, indicating that the response requires substantial, Organization-wide support: the complex humanitarian crises in Iraq (graded in August 2014), South Sudan (revised grading in February 2015), Syrian Arab Republic (including Jordan, Lebanon and Turkey, graded in January 2013) and Yemen (revised grading in July 2015); and the Ebola virus disease outbreak in West Africa (graded in 2014, deactivated June 2016). Because during the period under review the response to the Ebola virus disease outbreak consisted primarily of risk management activities related to the persistence of virus in survivors, details are described only briefly.

3. WHO declared one new Grade 3 emergency between January and October 2016: the escalating humanitarian crisis in Nigeria (initially graded 2 in April 2015 and upgraded in August 2016). This is the first Grade 3 emergency since the establishment of the WHO Health Emergencies Programme. Based on WHO's interim protocols for risk assessment, grading of emergencies and incident management, the Organization's incident management system was activated and included deployment of an Incident Manager and staff members to fulfil six critical incident management system functions in-country and implementation of crucial actions as specified in the draft guide for emergencies.

¹ Resolution EBSS3.R1 (2015) on Ebola: ending the current outbreak, strengthening global preparedness and ensuring WHO's capacity to prepare for and respond to future large-scale outbreaks and emergencies with health consequences.

² Document EB140/7; see also the summary records of the Executive Board at its 140th session, second meeting, section 3 and third meeting, section 3.

4. With the exception of the complex emergency in Nigeria and the Ebola virus disease outbreak, all the Grade 3 emergencies were also classified by the Inter-Agency Standing Committee as system-wide Level 3 emergencies. For South Sudan, the Inter-Agency Standing Committee Level 3 designation was deactivated in May 2016, although WHO and several other United Nations partners have continued with their own internal Grade 3 declarations, based on organizational assessments of scale, urgency, complexity, capacity and reputational risk. At the time of writing, WHO has ongoing responses to five Grade 3 emergencies (see Table).

Table. Summary of WHO's activation of Grade 3 emergencies in the reporting period

Country/region	Grade 3 activation date	Current status
Iraq, Eastern Mediterranean Region	12 August 2014	Ongoing
Nigeria, African Region	18 August 2016	Upgrade
South Sudan, African Region	12 February 2014	Ongoing
Syrian Arab Republic, Eastern Mediterranean Region	3 January 2013	Ongoing
West Africa – Ebola virus disease outbreak, African Region	26 July 2014	Deactivated 1 and 9 June 2016
Yemen, Eastern Mediterranean Region	1 July 2015	Ongoing

5. On 1 February 2016, the Director-General declared the recent cluster of microcephaly cases and other neurological disorders reported in Brazil, following a similar cluster of cases in French Polynesia in 2014, associated with the outbreak of Zika virus infection a Public Health Emergency of International Concern and WHO classified it as a Grade 2 emergency. Through the Incident Management System WHO's technical expertise and expert networks were integrated into the response – a broad range from maternal and child health, reproductive health and vector control to research and product development.

6. WHO also responded to the health needs of affected populations in 16 other low-graded emergencies (see Annex 2). These ranged from natural disasters in Ecuador and Fiji; public health emergencies in Angola, Brazil, the Democratic Republic of the Congo and Ethiopia; and conflicts and/or related displacement in Cameroon, the Central African Republic, Libya, Mali, the Niger, Nigeria, Ukraine and the United Republic of Tanzania.

7. WHO is also responding to protracted crises in 19 countries, areas and territories: Afghanistan, the Democratic Republic of the Congo, countries in the Horn of Africa (Djibouti, Eritrea and Ethiopia), Myanmar, the Sahel (Burkina Faso, Cameroon, Chad, the Gambia, Mali, Mauritania, the Niger, Nigeria and Senegal), Pakistan, Somalia, Sudan and the West Bank and Gaza Strip.

8. All new emergencies have been managed through WHO's Incident Management System, which allowed incident management structures to be rapidly established at country, regional and headquarters levels, as needed. These structures were supported by funds released within 24 hours from the WHO Contingency Fund for Emergencies. In the first nine months of 2016, US\$ 15.8 million has been disbursed from the Contingency Fund to fast-track support for WHO's response to the Zika virus disease outbreak; the humanitarian crisis in north-eastern Nigeria; the cholera outbreak in the Democratic Republic of the Congo; the public health impact of the consequences of the El Niño

phenomenon in Papua New Guinea; the conflict in Libya; the yellow fever outbreaks in Angola, the Democratic Republic of the Congo and Uganda; the response to the Grade 2 emergency in Ethiopia, the consequences of tropical cyclone Winston in Fiji and the cholera response in Yemen.

WHO'S ACTIONS IN GRADE 3 EMERGENCIES

Iraq

9. Since June 2014, the humanitarian crisis in Iraq has affected more than one third of its population and displaced almost four million people. About 7.8 million people are in need of health assistance. In four of the most severely affected areas in the country – Al Anbar, Ninewa, Salah Aldin and Diyala – 14 hospitals and more than 170 health facilities have been damaged or destroyed. Health services, protection, shelter, supplies of food and drinking-water, and sanitation are priority needs, as violence and displacement continue to exacerbate the dire humanitarian situation across the country.

10. As at September 2016, WHO had provided 500 inter-agency emergency health kits, 118 inter-agency diarrhoeal disease kits, 68 trauma kits and 11 surgical kits, and organized 902 000 consultations.

11. WHO and its Health Cluster partners maintained their support to the Ministry of Health and its health directorates for primary health care services by procuring and delivering mobile clinics and caravans, and establishing and equipping clinics in displacement camps and newly accessible areas. They also supported referral services, including procurement of ambulances and mobile secondary health care units, linking services with reception sites, training, and spatial analysis of available referral services.

12. WHO has supported improved control of infectious diseases, including detection and response to outbreaks, emergency vaccination, a robust disease early warning and response network system with 121 active reporting sites, and a strengthened Expanded Programme on Immunization. WHO is implementing a system to report on the protection of health workers through implementation of the Monitoring Events Against Safe Use and Running of Health Services system that tracks attacks on health care workers and facilities.

13. WHO and its partners provided an essential package of health services to newly displaced populations following major military operations in Al Anbar, Salah Aldin and Ninewa governorates.

14. WHO and its partners have also assisted local health authorities with the following: fixed primary health care facilities in established camps; health posts in informal settlements and newly liberated areas; and mobile clinics in areas of new displacement (18 mobile teams and a fleet of 47 mobile clinics managed by nongovernmental organizations and health directorates).

15. The Mosul humanitarian operation is expected to be the largest and most complex in 2016. An additional 1.5 million people are expected to flee Mosul now that military operations have begun.¹ WHO and its partners have prepared a response plan, and the United Nations Office for the Coordination of Humanitarian Affairs has launched a flash appeal for the response. Health interventions will include measles and polio vaccination campaigns, provision of primary care,

¹ Military operations began on 17 October 2016.

secondary care and reproductive health services, injury/trauma care and referral of complicated cases. Medical services will be provided for survivors of sexual violence.

16. Ensuring a continuum of care to all events in Iraq remains a major challenge because of financial shortfalls. In 2016, US\$ 83 739 344 was required for Health Cluster partners according to the 2016 Iraq Humanitarian Response Plan; less than 50% has been funded. By the time of writing, WHO had received US\$ 24.1 million (88.2%) out of US\$ 27.3 million requested through that Plan and US\$ 13.4 million (67%) out of US\$ 20.0 million requested through the Mosul Flash Appeal.

Nigeria

17. Since 2009, Nigeria has experienced instability and insecurity in the north-eastern part of the country, leading to the internal displacement of 2.2 million people. The crisis has resulted in damage to most health facilities and infrastructure, and many health workers have been killed or abducted, while others have fled. As a result, an estimated 3.7 million people in north-eastern Nigeria have limited or no access to basic primary health services. Once military operations improved access to previously unreachable areas, rapid assessments revealed mortality rates and levels of malnutrition that exceed emergency thresholds. The Nigerian Government declared a state of emergency in three States: Borno, Yobe and Adamawa. On 18 August 2016, WHO declared the crisis a Grade 3 emergency.

18. Following the declaration of the Grade 3 emergency, an Incident Management System was established in Maiduguri, Borno State. An Emergency Operations Centre was staffed with an initial team of 20 international and 10 national staff members. The WHO country office in Abuja was strengthened and US\$ 2.1 million was released from the WHO Contingency Fund for Emergencies, while efforts were undertaken to mobilize resources. Close collaboration with the polio eradication team has allowed for mass emergency vaccination campaigns. However, because of security constraints and limited access, the full extent of the needs is unknown and it is likely that figures will rise significantly when more areas become accessible. Coordination of health sector partners is chaired by the Ministry of Health and co-chaired by WHO, supporting 17 health partners.

19. WHO's immediate goal is to reduce the high rates of preventable deaths and disease. WHO is working closely with the Government, focusing efforts on Borno State where 800 000 people in newly-liberated areas are in vital need of aid. Activities include rapid assessments of existing health facilities, delivery of essential health services and training community health workers. WHO supports outreach activities in difficult-to-access areas; teams provide integrated health services including routine vaccination, deworming, detection and treatment of diseases, and screening for severe acute malnutrition.

20. Three Inter-agency Emergency Health Kits were procured and prepositioned at the Borno State Ministry of Health and later distributed to various communities. Ten additional kits were ordered in September 2016. Plans are under way to vaccinate 1.6 million children against measles in a mass campaign.

21. WHO and the Borno State's Ministry of Health have also conducted an assessment of the availability of health services in the state's local government areas that host most of the displaced population; the findings informed decisions on the introduction of the early warning alert system. WHO also provided technical support to Borno State's Ministry of Health to establish a robust supply pipeline. Supply-chain operational and logistics teams have been deployed to build the capacity of the Emergency Operations Centre in the State.

22. Three cases of paralytic poliomyelitis due to wild poliovirus type 1 have been detected in Borno State, the first cases in Nigeria since 2014.¹ A regional outbreak response in north-eastern Nigeria was launched with large-scale supplementary immunization activities. The Government of Nigeria declared the outbreak to be a national public health emergency, and the Governments of Cameroon, the Central African Republic, Chad and the Niger declared a regional public health emergency for the countries of the Lake Chad subregion.

23. From January to June 2016, WHO, the Nigerian Ministry of Health and health partners supported the delivery of life-saving health services to 1.44 million people; about 2.7 million people received health care by the end of August 2016. More than 83 000 children aged 9 to 59 months were vaccinated against measles and 1.7 million children against poliomyelitis. Disease outbreak surveillance has been strengthened: reporting sites increased from 18 to 56 by August 2016. More than 200 health facilities are receiving essential medicines and equipment and around 500 000 people have been reached through mobile medical teams. Needs currently outweigh capacity; some partners are ready to mobilize more staff members but are constrained by registration procedures and budgetary limitations. Funding gaps and access are a key challenge.

24. As at September 2016, WHO had received US\$ 350 000 (7%) of US\$ 5 031 200 requested. The Health Cluster had received US\$ 6.6 million (27%) of US\$ 24 748 290 requested. WHO is requesting about US\$ 13 million for the next 16 months. The crisis and its consequences also affect the bordering countries of Cameroon, Chad and the Niger, and a subregional approach is required.

South Sudan

25. In South Sudan, needs have increased rapidly as a result of multiple threats, including armed conflict and intercommunal violence, economic decline, disease, and climatic shocks. The resurgence of violence in July 2016 resulted in an influx of civilians into protection of civilian sites, particularly in Juba and Wau. Since December 2013, about 2.3 million people have been forced to flee their homes, 197 000 are sheltering in protection of civilian sites, and eight out of the 10 former states are experiencing insecurity and access constraints. Health services are also needed for more than 300 000 refugees who have fled into South Sudan as a result of conflicts in neighbouring countries.

26. Widespread insecurity in the states formerly not affected by conflict has also generated a need for an emergency response. Northern and Western Bahr el Ghazal are in the emergency food insecurity phase (Integrated Food Security Phase Classification Phase 4) and face an increased risk of acute malnutrition and elevated mortality rates.

27. From January to October 2016, there were multiple outbreaks of epidemic-prone diseases including cholera, malaria, measles and visceral leishmaniasis, as well as suspected cases of viral haemorrhagic fever. Outbreaks are occurring at the same time as the presence and capacity of Health Cluster partners to respond are at an all-time low: as at 29 September there were only 29 partners, compared with 67 in 2015, the difference resulting from evacuations due to increased insecurity earlier in the year.

28. WHO has a total of 230 staff members working in South Sudan. WHO focal points are in all 10 states, with a focus in protection of civilian sites. WHO leads the Health Cluster and has deployed surge personnel to sustain the Cluster's functions. However, surge deployments have decreased owing

¹ See document EB140/13, paragraphs 3 and 12.

to insecurity, while demands for health services have increased. Once security and access improve, there will be a need to increase the number of subnational Health Cluster coordinators.

29. WHO's emergency technical units have provided support to the Ministry of Health at national and subnational levels for strengthening health services' ability to deliver effective, safe and quality interventions. This collaboration has included capacity-building by Health Cluster partners and government counterparts on integrated disease surveillance and response, sustained support to the early warning and response system and policy guidance on emergency preparedness and response.

30. From January to October 2016, WHO and its partners delivered life-saving medicines and supplies to more than one million people, including surgical supplies and equipment in 10 trauma-response facilities and 73 000 oral cholera vaccine doses to vulnerable groups. As at September 2016, progress on the 12 indicators for the inter-agency Humanitarian Response Plan averaged 68% coverage per indicator; emergency measles vaccination coverage of children aged 6–59 months reached 78%, against a target of 80%.

31. The health sector component of the Humanitarian Response Plan was revised mid-year from US\$ 110 million to US\$ 144 million. WHO received US\$ 4 476 131 (17%) of US\$ 17.6 million requested. The Health Cluster received US\$ 43.3 million (33%) out of US\$ 144 million requested. Improved funding for the core humanitarian pipeline is urgently required.

Syrian Arab Republic

32. In the Syrian Arab Republic, as at September 2016, 13.5 million people were in need of humanitarian assistance, including 6.6 million internally displaced people; a further 4.8 million have fled to surrounding countries. More than 5.5 million people are in hard-to-reach areas and more than 800 000 in besieged locations. Health Cluster partners are targeting the needs of 11.5 million people.

33. More than half the country's health facilities are either closed or are only partially functioning. Water supplies are at one third of their pre-crisis levels. Water shortages have reached emergency levels in some areas with large numbers of internally displaced people, resulting in outbreaks of hepatitis A. Childhood immunization programmes are almost at a standstill. About 3.2 million children aged under 5 years are at risk of malnutrition, and some 86 000 children under 5 suffer from acute malnutrition.

34. Almost 1.2 million people have been injured since the conflict began. Challenges in health care delivery include the high number (about 25 000) of people injured each month, damaged operating theatres, restricted access to surgical supplies and anaesthetics, reduced access to safe blood products and a severe shortage of trauma care specialists.

35. The long-term rehabilitation of severely wounded patients remains a challenge. There is an urgent need to improve access for essential medicines for people with chronic diseases. Mental health and psychosocial services are greatly needed; about 3–4% of people are expected to be suffering from severe mental disorders and 20% from mild-to-moderate mental disorders. Additionally, 20–40% of the population is experiencing mild psychological distress. Only one of the country's three psychiatric facilities is functioning and there is a need for psychotropic medicines.

36. In the country, WHO has a main office in Damascus with 90 staff members and suboffices in Homs, Aleppo, Lattakia and Al-Hasakeh, in addition to a network of 59 focal points across the country, including hard-to-reach areas. Cross-border operations are managed from operational bases in

Gaziantep in southern Turkey and from Amman in Jordan. The Whole-of-Syria response for the health sector is coordinated by a team in Amman.

37. From January through September 2016, WHO delivered more than eight million treatment courses across the country. By October 2016, WHO and its partners had delivered medicines and health supplies from inside the country to all 18 besieged areas. WHO participated in 53 inter-agency convoys to besieged and hard-to-reach locations, delivering 208 tons of medical and health supplies, sufficient for two million medical treatments. However, officers of the national security service removed a total of 58 tons of essential medicines and medical supplies from 38 of those convoys.

38. WHO supported two rounds of a nationwide multi-antigen vaccination campaign in hard-to-reach and besieged areas. The campaign was carried out despite escalating violence, especially in Aleppo and Rural Damascus, and long processes of obtaining approvals from area-controlling authorities. WHO also supported the vaccination of 2.4 million children against poliomyelitis.

39. WHO distributed life-saving medicines, surgical supplies and trauma kits in eight governorates. It prepared a one-year plan to expand services for disabled people; screened more than 293 000 children aged under 5 years for malnutrition; trained almost 12 000 health workers on various health, nutrition and water, sanitation and hygiene interventions; and expanded coverage of the disease early warning and response system to more than 1100 sentinel sites. WHO provided critical medical equipment to Aleppo, Damascus, Hama, Homs, Idleb, Lattakia, Rural Damascus and Tartus. For the first time, mental health services are being provided at more than 130 primary and secondary health centres in 11 governorates.

40. In cooperation with United Nations agencies, particularly UNHCR, WHO offices in surrounding countries monitored the populations outside the Syrian Arab Republic. The WHO suboffice in Gaziantep organized and implemented support to areas accessible only from Turkey. All supplies procured by the WHO office in Gaziantep were prepositioned in northern Syria and delivered to Aleppo to support health services in eight hospitals.

41. WHO and its partners have increased their condemnations of attacks on health care workers, delays in medical evacuations and removal of medicines and other medical supplies from convoys. WHO provides regular updates on health and humanitarian needs to members of the International Syria Support Group to inform the political and peace negotiations. In Gaziantep, the Health Cluster has established a mechanism for reporting regularly on attacks on health care workers and facilities in the Syrian Arab Republic.

42. As at September 30, WHO had received 24.6% of the requested US\$ 155 million for operations in the Syrian Arab Republic.

Yemen

43. In Yemen, the conflict that erupted in March 2015 has had a significant impact on most of the population: more than 21 million people are in need of humanitarian assistance and 10.6 million are targeted for health interventions, including 3.1 million internally displaced people. After the peace talks in August 2016 failed to end the conflict, the number of casualties per month rose dramatically, almost doubling in August alone. Infrastructure has suffered widespread damage and destruction. Restrictions on commercial imports have caused severe shortages in fuel, food and medicines.

44. More than half the health facilities located in security-compromised governorates have either ceased to function or are only partially functioning. Nearly 600 of 3507 health facilities in 16 governorates are non-functioning. Most qualified health professionals have left the country owing to the conflict, creating a gap in delivery of primary health care, trauma, surgical and obstetric care services. In August 2016, the Ministry of Public Health and Population informed WHO that it can pay the salaries of health workers in only the main hospitals and health facilities, further disrupting health services.

45. WHO has 62 national and 13 international staff members working in Yemen. In addition to its main office in Sana'a and suboffice in Aden, WHO has scaled up its presence with suboffices in Hodeida, Hadramout, Amran and Sa'ada governorates and another suboffice covering the governorates of Ibb and Taiz. WHO Yemen also has a liaison office in Amman, Jordan, and a logistics base in Djibouti City, Djibouti.

46. WHO and the Ministry of Public Health and Population co-lead the Health Cluster, which has 32 partners. Despite the deteriorating security situation, restricted humanitarian access and the limited availability of external funding, WHO and its partners have been responding to increasing health needs by ensuring the functionality of primary, secondary and tertiary health care facilities, reopening health facilities, and maintaining the supply chain for medicines and cold chain.

47. As at September 2016, WHO has supported the Ministry of Public Health and Population in procuring and delivering more than 475 tons of medicines, medical supplies and vaccines; training and deploying 22 mobile teams (11 with the Ministry and 11 with partners); and supporting 29 health facilities in 16 governorates. WHO has also provided around 1 million litres of fuel to support 88 hospitals. WHO and its health partners have supported treatment for more than 2 million patients, including thousands requiring trauma care and surgery.

48. Moreover, WHO has provided around 19 million litres of clean water for health facilities and internally displaced people, and distributed hygiene supplies to the latter in all affected governorates. A total of 4.8 million of the targeted 5.1 million children under 5 years of age (92%) have been vaccinated against poliomyelitis, and 92% of the target population was vaccinated against measles and rubella in high-risk areas. Since January 2016, the surveillance system generated and investigated 12 500 disease alerts and supported the Ministry of Public Health and Population in preparedness and response, including a cholera control plan and a dengue fever response plan.

49. In 2016, the Health Cluster appealed for US\$ 184 million, including US\$ 124 million for WHO, to respond to the health needs of 10.6 million beneficiaries, including 3.1 million internally displaced persons. WHO's funding gap as at 31 August 2016 was 65%. The current financial crisis is posing a serious threat to the functionality of health facilities.

ZIKA VIRUS DISEASE OUTBREAK (PUBLIC HEALTH EMERGENCY OF INTERNATIONAL CONCERN)

50. In view of the continuing spread of Zika virus and the strong association between infection with the Zika virus and a rise in detected cases of congenital malformations and neurological complications, the Director-General declared on 1 February 2016 that the cluster of microcephaly cases and other neurological disorders reported in Brazil, following a similar cluster in French Polynesia in 2014, constituted a Public Health Emergency of International Concern. At the time of writing, a total of 75 countries, areas and territories have reported outbreaks of local Zika virus transmission. The

Secretariat expects that Zika virus will continue to spread, and local transmission is possible in all countries, areas and territories where vector-competent *Aedes* mosquitoes are present.

51. The Secretariat's and other international experts have concluded that Zika virus infection during pregnancy is a cause of congenital brain abnormalities, including microcephaly. Zika virus infection can also trigger Guillain-Barré syndrome. Mounting evidence has shown that sexual transmission of Zika virus is possible and more common than previously assumed.

52. On 1 September 2016, the Director-General convened the fourth meeting of the Emergency Committee under the International Health Regulations (2005) regarding microcephaly, other neurological disorders and Zika virus. Based on the advice of the Emergency Committee, the Director-General declared the continuation of the Public Health Emergency of International Concern.¹ The Committee recommended that the Director-General consider developing an appropriate infrastructure and response plan within WHO, to ensure coordination and accountability over the longer-term.

53. The Secretariat encourages Member States to continue to report cases of Zika virus infection, congenital Zika virus syndrome and Guillain-Barré syndrome to help to support the global understanding of Zika virus circulation, including lineages and strains, and the causal link. The Secretariat continues to develop and update guidance on all aspects of preparing for and managing the response to Zika virus infection.

54. WHO and its partners have issued a revised Zika Strategic Response Plan, July 2016–December 2017, to guide international response. The revised plan places a greater focus on preventing and managing medical complications caused by Zika virus infection and expanding health systems' capacities.

55. The Regional Office for the Americas requires US\$ 39.6 million to implement the Strategic Response Framework for the period July 2016–December 2017. Although funding was limited during the first five months of the response, as at 29 September the Regional Office for the Americas had mobilized US\$ 21.5 million from 12 donors for the global Zika virus disease response, leaving a funding gap of 46%. The sum mobilized has ensured continuity of core activities and support to the incident management system structure across headquarters and all regions. In addition, these funds enabled the reimbursement of US\$ 1 million to the WHO Contingency Fund for Emergencies, which had disbursed US\$ 3.8 million to the Zika virus disease response in February 2016. As the response moves from an acute emergency setting to a longer-term programme, funding must also shift to supporting longer-term national and international development and technical assistance programmes.

EBOLA VIRUS DISEASES OUTBREAK (PUBLIC HEALTH EMERGENCY OF INTERNATIONAL CONCERN)

56. The Director-General terminated the Public Health Emergency of International Concern related to the Ebola virus disease outbreak in West Africa, in accordance with the International Health Regulations (2005) on 29 March 2016. A total of 28 616 confirmed, probable and suspected cases had been reported in Guinea, Liberia and Sierra Leone, with 11 310 deaths. The last case resulting from

¹ After the report was written, the Expert Committee reviewed the evidence at its fifth meeting on 18 November 2016. Based on the Committee's advice the Director-General declared the end of the Public Health Emergency of International Concern but reissued the Temporary Recommendations.

the usual forms of person-to-person transmission occurred in Guinea in October 2015; the last documented case associated with persistence of virus in survivors occurred in Liberia in April 2016. On 9 June 2016 WHO declared the end of the most recent outbreak of Ebola virus disease in Liberia. WHO and its partners continue to work on the needs of survivors and on strengthening the capacities of the three most affected countries to detect and respond to possible future outbreaks of Ebola virus and other diseases.

ACTION BY THE HEALTH ASSEMBLY

57. The Health Assembly is invited to note this report.

ANNEX 1

**LIST OF ACUTE/GRADED EMERGENCIES IN THE REPORTING PERIOD
(1 JANUARY–1 OCTOBER 2016)**

Country, territory or area/emergency	Type of crisis	Date of initial emergency grading	Date of revision of grading	Current grade
Afghanistan	Earthquake	28/10/2015		1
Angola	Yellow fever outbreak	12/02/2016		2
Bangladesh	Tropical cyclone Roanu	21/05/2016		1
Cameroon	Conflict/civil strife	01/04/2015	18/08/2016	2
Central African Republic	Conflict/civil strife	13/12/2013 (grade 3)	03/06/2015	2
Democratic People's Republic of Korea	Floods	12/09/2016		1
Democratic Republic of the Congo	Cholera outbreak	23/06/2016		2
	Yellow fever outbreak	27/04/2016		2
	Complex emergency	20/07/2013		2
Ecuador	Earthquake	17/04/2016		2
Ethiopia	Impact of El Niño phenomenon	18/11/2015		2
Fiji	Tropical cyclone Winston	24/02/2016		1
Guinea	Ebola virus disease outbreak	24/03/2014	01/06/2016 (grade end)	ungraded
Indonesia	Mount Sinabung eruption	22/05/2016		1
Iraq	Conflict/civil strife	12/08/2014		3
Kenya	Severe acute respiratory illness outbreak	20/04/2016		1
Liberia	Ebola virus disease outbreak	26/07/2014	09/06/2016 (grade end)	ungraded
Libya	Conflict/civil strife	28/08/2014 (grade 1)	10/12/2015	2
Mali	Conflict/civil strife	04/02/2013 (grade 2)	16/10/2015	1
Myanmar	Floods	12/08/2015		2
Niger	Conflict/civil strife	01/04/2015	18/08/2016	2
	Rift Valley fever outbreak	26/09/2016		2
Nigeria	Complex emergency	01/04/2015 (grade 2)	18/08/2016	3
Pakistan	Earthquake	28/10/2015		1
	Displacement	20/06/2014		1
Papua New Guinea	Drought related to El Niño/food insecurity	01/09/2015	31/05/2016	1
Philippines	Moro conflict-Mindanao	24/10/2013		2
	Typhoon Koppu	25/10/2015		1

Country, territory or area/emergency	Type of crisis	Date of initial emergency grading	Date of revision of grading	Current grade
Sierra Leone	Ebola virus disease outbreak	26/07/2014	09/06/2016 (grade end)	ungraded
South Sudan	Conflict/civil strife	12/02/2014	12/02/2015	3
Sri Lanka	Floods/landslides	15/05/2016		1
Syrian Arab Republic	Conflict/civil strife	03/01/2013	26/08/2015	3
Thailand	Conflict/civil strife	19/10/2013		1
Ukraine	Conflict/civil strife	20/02/2013 (grade 1)	12/02/2015	2
United Republic of Tanzania	Refugee displacement	18/05/2015 (grade 1)	15/12/2015	2
	Cholera outbreak	15/12/2015		2
West Bank and Gaza Strip	Conflict/civil strife	13/07/2014 (grade 2)	10/11/2015	1
Yemen	Complex emergency	04/04/2015 (grade 2)	01/07/2015	3
Zika virus disease outbreak – globally (75 countries)	Public Health Emergency of International Concern	20/01/2016		2

ANNEX 2

WHO'S ACTIONS IN GRADE 2 EMERGENCIES

Cholera in the African Region

1. During the period under review, 13 countries, areas and territories reported a cumulative total of some 99 000 cases of cholera and 2000 cholera-related deaths. Three countries accounted for 87% of all cholera cases: the Democratic Republic of the Congo (43%, case-fatality rate 2.5%), United Republic of Tanzania (27%, case-fatality rate 1.5%), and Kenya (17%, case-fatality rate 1.3%). The increase in cholera outbreaks in 2016 is likely due to heavy rains and the effect of El Niño in East and southern Africa, as well as to the humanitarian crises in Burundi, the Central African Republic and South Sudan associated with the displacement of thousands of people.

Table. Cholera in the African Region, June 2015 to June 2016

Country	Onset	Deactivation/downgrading of outbreak
Benin	17 February 2016	Ongoing
Burundi	01 August 2016	Ongoing
Central African Republic	01 August 2016	Ongoing
Democratic Republic of the Congo	20 September 2015	Ongoing
Ethiopia	07 November 2015	Ongoing
Kenya	01 June 2015	Controlled
Malawi	18 December 2015	Controlled
Mozambique	01 August 2015	Controlled
Nigeria	07 September 2016	Ongoing
South Sudan	01 June 2015	Ongoing
Uganda	01 October 2015	Ongoing
United Republic of Tanzania	21 August 2015	Ongoing
Zambia	04 February 2015	Ongoing

2. In response to the multiple outbreaks of cholera, WHO and its partners provide support to the respective health ministries in coordination, surveillance, laboratory capacity, case management, water, sanitation and hygiene interventions, social mobilization, logistics and supplies. Reactive oral cholera vaccination campaigns were conducted in Cameroon, Malawi, South Sudan and the United Republic of Tanzania. Overall declining trends in the number of cases have been observed in some countries, including Malawi, Mozambique, the United Republic of Tanzania and Zambia. WHO is supporting countries to develop multisectoral, multidisciplinary multiyear plans for cholera preparedness and response.

3. Preventing and controlling cholera remains challenging because of weak health systems and inadequate preparedness and response capacities in countries. There continues to be low multisectoral and multiagency involvement to deal effectively with the root causes of cholera and other waterborne diseases. There is need for cross-border collaboration to strengthen cholera prevention and control, in particular at subregional levels.

Central African Republic

4. Over the past three years, the Central African Republic has experienced a major political crisis, with violent conflict affecting nearly the entire population. About 2.3 million people, more than half the population, are in need of assistance. More than 1.1 million people are targeted for health interventions, including 385 750 internally displaced people. Frequent armed clashes make delivering life-saving assistance extremely difficult and risky. WHO and its partners are supporting the health ministry to meet the health needs of the affected people, disease early warning, outbreak response and control and health systems strengthening.

5. The Government declared a cholera epidemic on 10 August 2016. Between the 27 July and 30 September, 265 suspected cholera cases, including 20 deaths, were reported in six health districts bordering the Oubangui River. Since week 34 (22–28 August) a decline in the number of cholera cases has been observed. Health and water, sanitation and hygiene partners are supporting the health ministry to strengthen the response to the outbreak by providing case surveillance and laboratory testing; case management; social mobilization; water, hygiene and sanitation interventions; logistics; and security.

6. Additionally, WHO and its partners are supporting the response to an outbreak of monkeypox in Mingala subdistrict of Basse Kotto, where 20 cases, including two deaths, were reported between 17 August and 1 October.

Ecuador

7. On 16 April 2016, a 7.8 magnitude earthquake struck coastal areas in north-west Ecuador, with the epicentre about 170 km northwest of the capital Quito. Six provinces sustained severe impact: in particular Manabí and Esmeraldas, but also Santa Elena, Guayas, Santo Domingo de los Tsáchilas and Los Ríos. The Government of Ecuador declared a state of emergency shortly after the earthquake.

8. The Regional Office for the Americas/PAHO provided technical expertise (for example, in assessing hospitals using WHO's Hospital Safety Index and in setting up the epidemiological surveillance system) and operational support (for example, coordination and logistics) to the national disaster response to the earthquake and is assisting the Government of Ecuador in the recovery strategy.

Ethiopia

9. In Ethiopia, more than 200 000 people remain displaced as a result of flooding and 458 000 people are severely malnourished following the drought associated with the El Niño phenomenon. In Oromia region alone, 1635 cases of severe acute malnutrition were treated at treatment centres. Cumulatively, the region has reported 64 143 people with severe acute malnutrition who have received outpatient treatment, and 7901 patients receiving treatment at stabilization centres, with support from WHO. The cases of severe acute malnutrition in Oromia region accounts for 48% of the national figures.

10. WHO and its partners have also supported the response to outbreaks of infectious diseases in Amhara and Somali regions with case management and reactive vaccination conducted by the local health authorities. WHO supports the Government in leading the Health Cluster in order to provide response coordination at national and subnational levels.

Libya

11. Over the past five years, violence, conflict and instability have spread to almost every corner of Libya, with more than three million people, nearly half the country's population, affected; 435 000 people have fled their homes, and 175 000 internally displaced people are experiencing food insecurity. The Humanitarian Response Plan launched in December 2015 identified health as the highest humanitarian priority. About 1.9 million people are in need of health services; the Health Cluster is targeting 1.2 million people. The situation in Sirte is reported to be worsening following recent military operations which have displaced about 90 500 people. Partners have launched a flash appeal to respond.

12. WHO leads the health sector working groups, which face challenges due to the fractured health system, non-functionality of numerous hospitals, lack of financial resources and limited health workforce. Access to areas in conflict poses a tremendous challenge. Nonetheless, WHO and its partners have strengthened the supply chain for essential medicines and supplies and have been able to procure and supply emergency medicines and supplies.

13. In addition to improving access to life-saving medicines, WHO established a tablet-computer-based disease early warning system in 24 sentinel sites to mitigate the risk of outbreaks. Together with UNICEF, WHO conducted the first polio vaccination campaign, immunizing 1.3 million children under six years of age, including internally displaced people and immigrants. WHO has trained psychiatrists and psychologists to ensure the provision of mental health services for those in need.

14. National staff members undertake in-country work. Operations are managed remotely from Tunisia because the high levels of insecurity restrict WHO and its partners from deploying international staff members inside Libya. Of the US\$ 50.3 million requested by WHO for work in Libya, US\$ 6.5 million has been received.

Niger

15. Between 2 August and 22 September 2016, 60 cases of Rift Valley fever, with 23 deaths, were reported in Tchintabaraden health department in Tahoua region, Niger, the country's first outbreak of its kind. On 21 September 2016, the Niger health authorities declared an epidemic. On 26 September, WHO graded the event as Grade 2. WHO has established an incident management system, and is actively reinforcing the response to the outbreak particularly with laboratory capacity for diagnosis of Rift Valley fever. As Rift Valley fever virus is mainly transmitted to humans through contact with cattle, WHO is collaborating closely with FAO and OIE. The Regional Office for Africa has provided guidance to neighbouring countries including Benin, Burkina Faso, Chad, Mali and Nigeria in order to strengthen surveillance and minimize the risk of spread of the disease.

Ukraine

16. Since 2014, conflict in Ukraine has divided the country, affecting 3.1 million people and displacing almost 3 million, with 10 000 deaths to date directly related to the conflict. WHO has organized a large-scale response, delivering medical supplies to support facilities that have treated

close to 2 million people, including specialized treatment for acute respiratory diseases, diabetes, diarrhoeal diseases and HIV disease, and services for complex surgeries, obstetrics and laboratory testing. WHO supports disease surveillance and response activities and a comprehensive network of mobile medical units to provide health services to internally displaced people. WHO and its partners are working on implementing a new crisis response strategy with a stronger geographical focus for health humanitarian interventions to evolve into a protracted crisis response and are contacting donors for support.

Yellow fever outbreak in Angola and the Democratic Republic of the Congo

17. An outbreak of yellow fever was first reported in Angola in December 2015, and confirmed in January 2016. The number of cases increased rapidly, and WHO declared the event a Grade 2 emergency on 12 February 2016. As at 23 September 2016, 16 of Angola's 18 provinces had reported confirmed cases, with a national total of 4100 suspected cases, 884 confirmed cases and 121 deaths. Cases imported from Angola were subsequently confirmed in the Democratic Republic of the Congo (57 cases), China (11 cases) and Kenya (2 cases).

18. The Democratic Republic of the Congo declared an outbreak of yellow fever on 23 April 2016. As at 23 September, the country had reported 2707 suspected cases, with 76 confirmed and 16 deaths. Of these confirmed cases, 57 were imported from Angola, 13 are autochthonous cases reported in three provinces (Kinshasa, Kongo Central and Kwango), and 6 are sylvatic cases not related to the outbreak.

19. In Uganda, 51 suspected cases and 7 laboratory-confirmed cases were reported from three districts: Masaka, Rukungiri and Kalangala. The outbreak was not linked with that in Angola, and was declared over on 6 September. Elsewhere, other outbreaks of yellow fever have been reported: in Peru with 59 confirmed sylvatic cases in known endemic areas, in Brazil with 1 confirmed sylvatic case, and in Colombia with 17 sylvatic cases. None of these outbreaks has an epidemiological link to Angola.

20. An incident management system at WHO headquarters, regional and country levels was established for the response in Angola and the Democratic Republic of the Congo and allowed for the development of joint strategic and operational plans. The Governments of Angola and the Democratic Republic of the Congo organized mass vaccination campaigns within days of the declaration of the outbreak. Because of the limited number of yellow fever vaccine doses available, priority was given to districts with virus circulation and/or high risk of exportation to neighbouring areas. WHO advised all countries bordering, or with links to, Angola to monitor and implement the policy that one dose of yellow fever vaccine confers immunity for life for travellers to and from Angola and other countries where yellow fever is endemic. Affected countries are implementing robust point-of-entry surveillance, including monitoring of vaccination status of travellers and offering vaccinations to travellers, as required.

21. As at 21 September 2016, 1 620 820 persons in 73 districts in Angola had been vaccinated, with 95% vaccination coverage. The next phase of the vaccination campaigns will target 2 136 225 persons in the remaining 12 high-risk districts. The Democratic Republic of the Congo organized campaigns in 11 districts in the provinces of Kongo Central and Kinshasa, where 3 107 488 persons were vaccinated. Campaigns in Kinshasa and along the Angolan border targeted 10 474 988 individuals, reaching vaccination coverage of 90% or higher in all districts. Given the shortage of yellow fever vaccine doses, eligible persons in Kinshasa received a fractionate dose (0.1 mL), which

grants immunity for at least one year. Children younger than two years old and pregnant women received a full dose. Persons vaccinated along the Angolan border received a full dose.

22. The second meeting (by teleconference) of the Emergency Committee under the International Health Regulations (2005) concerning yellow fever was convened on 31 August 2016. As in the first meeting in May, the Committee decided that the outbreaks did not constitute a Public Health Emergency of International Concern, but it concluded that the outbreak remains a serious public health event that warrants continued national action and international support. The Committee advised intensified surveillance in Angola and the Democratic Republic of the Congo, and pre-emptive vaccination campaigns in the Congo.

23. Efforts are under way to interrupt virus circulation and prevent further transmission. The Governments of Angola and the Democratic Republic of the Congo are planning the last reactive and pre-emptive vaccination campaigns in high-risk districts. Discussions with donors are ongoing to cover vaccine and operational costs. The Governments are planning to administer a full dose of vaccine to all eligible people in all districts.

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