WEEKLY UPDATE ON OUTBREAKS AND OTHER EMERGENCIES
Week 12: 18 – 24 March 2017
Data as reported by 17:00 24 March

2 New Events
32 Ongoing events
24 Outbreaks
10 Humanitarian crises

Legend
- Food insecurity
- Meningitis
- Rift Valley Fever
- Eruptive Fever
- Monkeypox
- Zika
- Landslide
- Floods/Cyclone
- Cholera
- Dengue Fever
- Hepatitis E
- Malaria
- Lassa Fever
- Humanitarian crisis
- Necrotising Fasciitis
- Measles
- Typhoid fever
- Crimean-Congo Haemorrhagic Fever
- post El-Nino drought
- Anthrax
- Cases
- Deaths
- Non WHO African Region
- WHO Member States with no ongoing events
- Not applicable

2 Grade 3 events
6 Grade 2 events
2 Grade 1 events
24 Ungraded events

Health Emergencies Information and Risk Assessment
This weekly update focuses on selected acute public health emergencies occurring in the WHO African region. WHO AFRO is currently monitoring 34 events, two Grade 3, six Grade 2, two Grade 1, and 24 ungraded events.

This week, two new events have been reported: meningitis outbreak in Cameroon and cholera outbreak in Malawi.

The update also focuses on key ongoing events in the region, including the two grade 3 humanitarian crises in Nigeria and South Sudan as well as outbreaks of Lassa fever in five West African countries (Nigeria, Benin, Burkina Faso, Togo, and Sierra Leone), cholera outbreaks in Tanzania and Democratic Republic of Congo, meningitis outbreak in Togo, and the El Nino phenomenon in Ethiopia.

For each of these events, a brief description followed by public health measures implemented and an interpretation of the situation is provided.

A table is provided at the end of the report with information on all public health events currently being monitored.

Major challenges to be addressed include:

- Cross-border challenges: the Lassa fever outbreak in West Africa, cholera in Malawi and Mozambique highlight the need to strengthen collaboration between Member States at district and national levels to address the threats arising from epidemic and pandemic-prone diseases. Although a number of cross-border meetings are held on an ad-hoc basis, there is need for a regional guidance document for cross-border meeting/collaboration before and during outbreaks.

- Shortage of essential supplies, reagents and vaccines to prevent occurrence of outbreaks: in the context of grade 3 humanitarian crises in South Sudan and Nigeria, prepositioning of essential supplies, reagents and vaccines in at-risk areas remains a serious challenge given the large number of population in need (over 12 million people in both countries). The contribution of partners is critical in averting morbidity and mortality through adequate preparedness and response to threats arising from epidemic and pandemic prone diseases.

- Sharing of data for evidence-driven decision making remains an issue in certain countries: as part of notification of public health events to WHO, countries are encouraged to submit to the Regional Office detailed information and data including line listing of cases for any given outbreak.
An outbreak of meningitis has been confirmed in a closed setting in Yaounde Central Prison, Kondengui, Cameroon. The outbreak emerged on 09 March 2017 when 2 suspected meningitis cases occurred among prison conscripts. The situation drastically unfolded in the coming weeks when 14 additional cases were reported within a span of 4 weeks. Outbreak investigation conducted by the Ministry of Health obtained 11 cerebro-spinal fluid (CSF) samples, 5 of which tested positive for Neisseria meningitidis (Nm) sero-group Y/W135 by rapid diagnostic test. Subsequent bacteriological culture isolated Nm W135 from two samples, thus confirming the outbreak.

During epidemiological week 12 (week ending 24 March 2017), one new case was reported, demonstrating a marked reduction in the caseload. As of 24 March 2017, a total of 23 suspected/confirmed cases including 9 deaths (case fatality rate of 39%) have been reported. While majority of the affected people were prisoners, 5 suspected cases came from the surrounding community in the affected district.

The meningitis outbreak in Cameroon occurred in a close setting, likely to have been precipitated by overcrowding and poor ventilation, which facilitated rapid transmission. The outbreak has shown sign of waning since initiation of effective control measures. The fact that the outbreak occurred in a closed setting warranted administration of chemoprophylaxis. The planned reactive vaccination campaign should avert further propagation of meningitis in the surrounding communities.

Public health actions
- The Public Health Emergency Operation Centre (PHEOC) has been activated to coordinate outbreak control activities. The Ministry of Health is working closely with the Ministry of Justice, WHO, and other stakeholders participating in the response.
- WHO supported the Ministry of Health to secure 7,079 doses of ACYW tetravalent meningitis vaccine from the International Coordinating Group (ICG), targeting 6,436 persons. Preparation for reactive meningitis vaccination campaign is being finalized.
- Since the outbreak occurred in a closed setting, chemoprophylaxis was administered to 4,007 close contacts.
- The prison hospital is providing case management services besides others control measures. Additional antibiotics and other medical supplies have been procured.
- Surveillance activities including active case finding and monitoring are taking place in the affected district.
- Communication on meningitis prevention has been enhanced in the media.

Situation interpretation
The meningitis outbreak in Cameroon occurred in a close setting, likely to have been precipitated by overcrowding and poor ventilation, which facilitated rapid transmission. The outbreak has shown sign of waning since initiation of effective control measures. The fact that the outbreak occurred in a closed setting warranted administration of chemoprophylaxis. The planned reactive vaccination campaign should avert further propagation of meningitis in the surrounding communities.
Cholera outbreak in Nsanje district, Malawi

A fresh cholera outbreak has erupted on 11 March 2017 in Nsanje district, located in the southern region of Malawi. Nsanje district, with a population of 313,675, has had recurrent cholera outbreaks in the past years including in 2016 and early 2017. This current ‘flare up’ originated in Ndamera traditional authority, Nsanje district when a cluster of three cases with acute watery diarrhoea presented to the local health facility and tested positive on rapid diagnostic test. The outbreak was eventually confirmed by the Community Health Sciences Unit (CHSU) Reference Laboratory on 15 March 2017 after culture test isolated Vibrio cholerae Ogawa O1. As of 24 March 2017, a total of 14 cases with no death (Case Fatality Rate, 0%) have been registered. No new case has been reported since 19 March 2017. Nsanje district shares borders with Mozambique. The initial cluster of cases were found to have epidemiological linkage with Villa Nova, Tete province in Mozambique, which is reported to be having an ongoing cholera outbreak.

Public health actions

- The District Emergency Management Committee (DEMC) has been reactivated to coordinate multi-sector response interventions.
- Rapid assessment of the outbreak situation was conducted to determine the risk factors for transmission and priority control interventions.
- Active surveillance is being implemented including case search, daily reporting and line listing of cases.
- Health education and preventive cholera messages are being disseminated through various medium including inter-personal communication by health workers and local drama group (Ndamera drama).
- Chlorine stock solution (1%) is being distributed to households in the communities around Ndamera to promote water chlorination.
- MSF provided infection prevention and control (IPC) materials to the cholera treatment centre and is supporting case management.
- Malawi Red Cross Society constructed a pit latrine and bath shelter for the Cholera Treatment Centre as patients were using the health centre sanitary facilities.

Situation interpretation

Malawi has been experiencing recurrent outbreaks of cholera, especially in the southern region. This region is prone to either floods or droughts, both conditions favour propagation of cholera infection. The poor sanitation and hygiene practices in these communities are some of the factors contributing to cholera transmission. In addition, the continuous cross-border activities taking place between Malawi and Mozambique (that is reported to have ongoing cholera outbreaks) is likely to lead to subsequent trans-boundary transmission of cholera.

The response to the cholera outbreak in Malawi has brought together several Partners, including UNICEF, Red Cross, Malawi College of Medicine, MSF, DFID, WHO, etc. This coordinated multi-partner and multi-sector response appears to be holding the outbreak, with no new cases reported since 19 March 2017. The response was also initiated promptly at the beginning of the outbreak, making it easy to contain. Similar efforts need to be mounted on the Mozambican side to ensure that the whole sub-region is ridded of cholera.
Lassa fever outbreaks have been confirmed across five West African countries, including Nigeria, Benin, Sierra Leone, Togo, and Burkina Faso.

In Nigeria, the index case emerged on 16 December 2016 in Ogun state. Since then, the outbreak has remained active. During week 11 (week ending 19 March 2017), 15 suspected cases were reported, with two testing positive for Lassa fever. Between 16 December 2016 and 19 March 2017, a total of 283 suspected cases including 56 deaths (case fatality rate of 19.8%) have been reported. Of the suspected cases, 99 were confirmed by the Lagos University Teaching Hospital Lassa laboratory in Nigeria. The cases have been distributed across 13 states: Ogun, Bauchi, Plateau, Ebonyi, Ondo, Edo, Taraba, Nasarawa, Rivers, Kaduna, Gombe, Cross-River and Borno.

The outbreak of Lassa fever in Benin started on 12 February 2017 from Tchaourou district, Borgou province, close to the border with Nigeria. It was established that this case had epidemiological link with the ongoing Lassa fever outbreak in Nigeria. On 23 February 2017, another suspected case from L’Atacora province was reported. Samples obtained from the two cases tested positive for Lassa fever in the laboratory in Cotonou, Benin and in the Lagos University Teaching Hospital Lassa laboratory. Both cases died, giving a case fatality of 100%.

In Togo, Lassa fever was confirmed on 23 February 2017, with the case having established epidemiological linkage to Benin. A total of 12 suspected were subsequently reported, seven of them were confirmed at the Institut National d’Hygiène in Lomé, Togo. Four of the confirmed cases died, giving a case fatality rate of 57%. The cases originated from Oti and Kpendjal districts.

On 26 February 2017, the Ministry of Health of Burkina Faso notified WHO of a confirmed Lassa fever case admitted in a hospital in the northern part of Togo. The case originated from Ouargaye district, central eastern part of Burkina Faso. Burkina Faso has not had any other case.

Sierra Leone has been reporting sporadic suspected cases of Lassa fever since 28 December 2016. However, the outbreak situation escalated in the months of February and March 2017 when a cluster of 24 cases were reported and investigated. Out of these, four cases were laboratory confirmed and all of them died, thus giving case fatality rate of 100% among the confirmed. The outbreak has since subsided.

Public health actions
- WHO has completed conducting risk assessments for the Lassa fever outbreaks in Togo and Burkina Faso. Meanwhile, risk assessments are underway in Nigeria, Benin and Sierra Leone.
- Health authorities in Benin, Burkina Faso and Togo are jointly implementing outbreak control measures including sharing of resources such as laboratory diagnostic capacity.
- WHO/AFRO convened a meeting for officials from Togo, Burkina, Mali and Benin to enhance cross border collaboration and information sharing.
- Rapid response teams were deployed to the affected areas to conduct epidemiological investigation.
- Contacts have been systematically identified and followed up.
- Infection prevention and control measures have been strengthened in health facilities including orientation of health workers.

Situation interpretation
Lassa fever is endemic in Nigeria and other West African countries. Outbreaks have occurred almost every year in different parts of the region, with yearly peaks observed between December and February. In 2016, Lassa fever outbreak occurred in Benin in the same area. During that outbreak, 54 cases including 28 deaths were reported. Both Burkina Faso and Togo have also reported sporadic cases in the past.

Given the increased population movements between Nigeria, Togo, Burkina Faso, Niger and Benin, the occurrence of sporadic Lassa fever cases in West Africa was expected and further sporadic cases may occur in countries of the region. However, with the ongoing control measures in Benin, Togo and Burkina Faso, the risk of further spread from these confirmed cases is considered to be low. Considering the seasonal peaks in previous years, increase in the disease awareness, better preparedness and response, and strengthening of regional collaboration, the risk of large outbreaks in the region is minimum.
Cholera

affected regions of Tanzania Mainland. On average, two to three cases are being reported on a daily basis. During epidemiological week 11 (week ending 19 March 2017), 18 new cases and one death were reported from the three cholera-active regions, namely Dar es Salaam, Mara, and Iringa. Meanwhile, Zanzibar has reported zero cases of cholera in the past 35 consecutive weeks.

From the onset of the outbreak on 15 August 2015 to 23 March 2017, Tanzania Mainland registered a total of 25,115 suspected/confirmed cholera cases with 390 deaths (case fatality rate of 1.5%) coming from 23 out of 25 regions; meanwhile between 19 September 2015 and 24 July 2016, Zanzibar has recorded a total of 4,330 cases including 68 deaths (case fatality rate of 1.6%) from all its 5 regions. Zanzibar observed a much higher cumulative attack rate of 293 per 100,000 populations compared to Tanzania Mainland with an attack rate of 79 per 100,000 populations. The high attack rate observed in Zanzibar depicts intense transmission potential of cholera infections in peri-urban setting, driven by compounding predisposing factors such as poor sanitation, limited access to portable water, overcrowding, and poor housing.

The outbreak was confirmed at the National Health Laboratory Quality Assurance and Training Centre on 17 August 2015. Out of 5,638 samples tested, 3,128 (55%) were positive for vibrio cholera. Genotyping was conducted at Sokoine University of Agriculture (SUA) laboratory where 99% of the isolates identified Vibrio cholerae serogroup O1 biovar.

Public health actions

National cholera task force and subcommittee meetings are ongoing including holding high level conference calls between medical officers in hotspot regions/ districts and the Ministry of Health and Partners.

An assessment of beliefs, perceptions and practices related to cholera was conducted in Mwanza, Singida and Zanzibar. Findings from the assessment guided the formulation of targeted actions on the issues elicited.

Distribution of chlorine tablets (Aqua tabs) for household water treatment in the hotspot regions are going on. Meanwhile, batch chlorination is being done in Dar es Salaam and Morogoro.

Follow up of regional and district staff to ensure prompt reporting and confirmation of suspected cholera cases.

WHO supported the government to construct 157 demonstration Ventilated Improved Pit latrine (VIP) in selected hotspots in Mwanza, Mara, Morogoro, and Dodoma. This is aimed to promote construction and use of improved latrines at household level.

The government with support from Partners constructed 18 boreholes in Mwanza and Mara in order to improve access to safe portable water by the communities.

The Ministry of Health, Community Development, Gender, Elderly and Children (MoHCDGEC), and other Partners continued to carry out WASH and social mobilization activities including community health education in hotspot areas.

WHO provided 3,000 sachets of ORS to Kigamboni, Kilolo and Mwanza in the cholera active regions.

Situation interpretation

The Republic of Tanzania has once again experienced another large cholera outbreak, similar to the one that occurred in 1997 where 40,226 people were affected and claiming 2,268 lives. This outbreak, which started within internally displaced persons setting, quickly permeated to affect over 90% of the country. The expansive spread of cholera across the entire country signifies high transmission potential of infection due to abundant known predisposing factors.

Compared to 2015 and 2016, the cholera outbreak has significantly reduced, opening a window to finally bring it to an end. We should still bear in mind that access to clean and safe water is limited, latrine/toilet coverage is remains low, and hygiene and food safety practices are inadequate. It should also be noted that funding for cholera prevention and control falls short of the optimum. Once again, Partners and the Donor communities are call upon to consolidate the gains made in controlling this prolonged cholera outbreak. Ultimately, our attention should be focused on addressing the social determinants of health.
The prolonged cholera outbreak in the Democratic Republic of Congo (since 2015) is not relenting. During reporting week 10 (week ending 12 March 2017), a total of 651 cases including 15 deaths (case fatality rate of 2.3%) were reported in the country; showing a minimum reduction in the caseload compared to epidemiological week 9 (week ending 5 March 2017) when 742 cases and 25 deaths (case fatality rate of 3.47%) were registered.

Increased cholera activity has mostly been observed in six provinces, namely Ituri, South Kivu, Tanganyika, Maindombe, Mongala, and Ecuador. There is also persistence of cholera outbreak in a prison in Matadi, Central Kongo province.

Between 01 January and 13 March 2017, 15 out of 18 provinces have had active cholera transmission. A total of 7,222 and 243 deaths (case fatality rate of 3.36%) have been reported during this period.

Tanganyika province accounted for 20% of all the reported cases in 2017. The outbreak situation in this province has been aggravated by mass population displacement due to ethnic conflicts between the Luba and Pygmies. Overall, a cumulative of 43,145 cases and 1,060 deaths (case fatality rate of 2.46%) have been reported from January 2016 to 13 March 2017.

### Public health actions

- There is increasing efforts to strengthen multi-sector and multi-partner response to the cholera outbreak. Regular coordination fora are going on at various levels.
- More Partners are supporting case management in the affected provinces, including ADRA, CARITAS, ALIMA, AGAPE ACTION, and MSF. This is intentioned to reduce the high fatality being recorded.
- An evaluation of the impact of oral cholera vaccination campaign carried out is being conducted, alongside with strengthening of surveillance.
- Water, sanitation and hygiene (WASH) interventions are going including chlorination at water points, promoting hand washing and other hygiene practices, and household disinfection.
- Communication and social mobilization to enhance community awareness and promote positive preventive behaviors and practices are being conducted in the affected provinces. raising
- Strengthening of epidemiological surveillance in the communities and along the river that serve as a sources of infection.
- WHO is proposing an in-depth review of the ongoing response and critical analysis of the outbreak data and information to serve as a basis to galvanize all sectors and partners to scale up funding and the response efforts.

### Situation interpretation

The protracted cholera outbreak in the Democratic Republic of Congo is an acute-on-chronic situation. The incessant insurgency in the country has caused massive internal population displacement and continue to restrict access by humanitarian actors to people in need of assistance. The vast geographical expanse of the outbreak has also made it difficult to ensure comprehensive coverage of intervention activities. While the need for peace and sustainable solutions cannot be overstated, continued partners’ financial and technical support is still required to mitigate ongoing transmission, morbidity and mortality. Implementation of cholera control measures need to be stepped up, based on the joint Partners plan.
The outbreak of meningitis in the Plateaux region of Togo, notified to WHO on 3 February 2017, has significantly reduced in the last week. Two districts, Akebou and Tone, have been affected. The meningitis trend in Akebou district has lowered from epidemic to alert phase. This reduction could be attributed to the reactive vaccination campaign conducted from 27 February to 5 March 2017, during which 50,559 persons aged two to 29 were vaccinated. Coverage survey showed that 97.1% of the target population were vaccinated. Tone district has remained in alert phase.

During the week ending 19 March 2017, 26 new cases and 1 death were reported, giving a case fatality rate of 3.9%. Twelve of the new cases originated from Tone, translating to an attack rate of 3.6 per 100,000 populations. Since onset of the outbreak on 3 February 2017 to 19 March 2017, a total of 376 cases and 26 deaths (case fatality rate of 6.9%) have been reported from the two districts. All regions continue to report sporadic cases. The predominant pathogen identified in Akebou district is Neisseria meningitides W 135, accounting for 64% of the PCR positives samples.

Public health actions

- The Ministry of Health, with support from WHO and UNICEF, is developing a request for vaccines from the International Coordinating Group to carry out reactive vaccination campaign in Tone District, with a total of 333,475 population.
- Partners including UNICEF, UNDP, UNFPA, Togo Plan, Togo Red Cross, WHO, etc. continue to be involved in implementing various aspects of the outbreak response such as case management, surveillance, communication, coordination, and supervision.
- WHO supported investigation of the cases, line listing of cases, coordination mechanism, mass vaccination campaign, public health information, and advocacy activities.

Situation interpretation

Togo has experienced recurrent meningitis outbreaks over the years. The country has benefited from the strong preparedness measures being provided to countries in the meningitis belt by WHO. The reactive meningitis vaccination campaign conducted in Akebou district has resulted in waning of the outbreak within two weeks. The risk of further spread of this outbreak within the country and in the sub-region is lowing as control measures take effect.

Inadequate capacity of regional laboratories to perform culture and sensitivity test, frequent stock-outs of reagents and rapid diagnostic test (Pastorex), inadequate staffing, and insufficient capacity for in-patient care are some of the challenges that need to be addresses. Given the frequency of occurrence of meningitis in the sub-region, it would have been appropriate to have in-country emergency stockpiles of vaccines. However, this is being hindered by the global shortage of vaccine stockpile and inadequate funding at the national level.
Event description
In 2017, Ethiopia continued to experience severe drought in the southern and south-eastern parts of the country due to below average rains, thus aggravating the humanitarian crisis from the El-Nino induced drought that occurred in 2016. Food insecurity, malnutrition, epidemic prone disease outbreaks, water shortages, population displacements and livestock deaths continue to increase in the affected areas. Severe acute malnutrition remains a major health problem among children, and lactating and pregnant mothers in drought affected areas in Somali, Afar, low lands of Oromia, SNNP, and pockets areas in other regions. The Somali region continues to experience a deteriorating food insecurity situation with the Nutrition cluster reporting a 56% increase (from 3,817 children in December 2016 to 5,996 in January 2017) in cases of severe acute malnutrition among children under five years of age that are newly admitted into the therapeutic feeding program sites.

An outbreak of acute watery diarrhoea/ cholera is continuing in six regions of the country (Amhara, Afar, Oromia, SNNP, Somali and Tigray). Between 01 January and 19 March 2017, a total of 10,748 cases and 67 deaths (case fatality rate of 0.62%) have been reported in the country. Somali region alone accounts for 81% of the reported cases. There has been a four-fold increase in the number of Woredas in the country that are actively reporting cases of acute watery diarrhoea/ cholera, compared to the same period in 2016.

Public health actions
- WHO is finalizing a draft operational plan for the food insecurity crisis in the Horn of Africa. The plan will streamline and standardized WHO response interventions to the food insecurity crisis.
- A surge team has been deployed to Somali Region to strengthen alert verification, active case search (surveillance), contact tracing, outbreak investigation and response, and water quality monitoring.
- Ongoing training of health care workers on cholera case management in the hotspot areas.
- Oversight of cholera treatment centres to ensure adequate case management, infection prevention and control practices including the water and sanitation aspect.
- Monitoring and assessment of water quality is being conducted in collaboration with regional and local authorities.
- Support is being provided for social mobilization, dissemination of key messages and community engagement activities

Situation interpretation
Faced with significant funding gap, the Government of Ethiopia and Partners are concerned by the deteriorating humanitarian situation arising from the failed spring rain, which is the major rainy season for the pastoralist and agro-pastoralists in the current drought affected areas. The sum of US$948 million is urgently required to respond to the new humanitarian needs targeting 5.6 million people. In 2017, the health sector requires $42.8 million to provide assistance to 4.37 million beneficiaries. The funds are required to fill up the identified human resource gaps at national and subnational levels, procure and distribute additional cholera kits, and strengthen nutrition surveillance to improve analysis and understanding of the nutrition situation. There is an urgent need to advocate for additional International Non-Governmental Organizations (INGO) to come to Somali Region to scale-up service delivery on the ground.
### Event description
The humanitarian crisis in north-eastern Nigeria has intensified after eight years of violent conflict. The crisis has evolved over the years leading to widespread displacement, devastation and a desperate shortage of essential health care. North-eastern Nigeria is at the centre of the larger Lake Chad Basin crisis (north-eastern Nigeria, northern Cameroon, western Chad and south-east Niger), which affects some 17 million people. The health cluster partners are seeking to reach 5.9 million out of the estimated 6.9 million people in need across Adamawa, Borno and Yobe states.

An elevated risk of famine persists in north east Nigeria with certain areas already classified by the Integrated Food Security Phase Classification (IPC) as Phase 4 Emergency, one phase behind Phase 5 (Famine). Over five million people are severely food insecure across Adamawa, Borno and Yobe. In the least accessible areas in Borno and Yobe, it is estimated that 55,000 people are experiencing famine-like conditions. These figures are expected to rise to 120,000 by June 2017. Over 450,000 children under five years of age, 300,000 of them are located in Borno state, will suffer from severe acute malnutrition and require specialised therapeutic treatment this year.

### Public health actions
- In response to the continued measles outbreak, a 3-pronged approach is being discussed by health partners to strengthen routine immunization by increasing the target population interval to include all children from six months to 15 years, conducting routine immunization activities in all newly accessible areas and ensure vaccination of new arrivals in both formal and informal settlements. There are over 300,000 returnees since the start of the year and most of them are unvaccinated.
- WHO and MSF are in the preparatory stage to deploy about 100,000 doses of monovalent meningitis A vaccine in April 2017 targeting returnees aged nine months to 29 years.
- A cholera Working Group has been established in order to ensure adequate preparedness measures are in place, in light of the coming rainy season that is likely to lead to an upsurge. Cholera preparedness plan for Borno state is being finalized, and aims to identify the high risks areas including IDP camps. Essential medical supplies are being prepositioned to strategic locations.
- Official results of the coverage survey following the measles mass vaccination campaign at the end of January 2017 are yet to be released, but unofficial figures indicate a coverage of 75-80% (in accessible areas). This may be one of the reasons why measles cases are still being reported.

### Situation interpretation
A multi-sector response and recovery strategy that can be used to mobilize longer term funds from the Development Partners for the entire Lake Chad region needs to be developed to provide comprehensive assistance to the population in need. A regional cross border coordination, planning and operations mechanism also needs to be established and maintained.

As of 21 March 2017, only US$ 17.4 million of the US$ 93.8 million (19%) required for the 2017 health sector humanitarian response plan has been received. There is also shortage of measles vaccines at the state and local government levels.
The security situation in South Sudan has resulted in 4.9 million people (42% of the population) being severely food insecure, and the situation is getting worse. In greater Unity region, famine has been declared in the three counties of Leer, Mayendit and Koch (total population of 180,774) with global acute malnutrition of above 30%. The burden of communicable diseases particularly malaria, pneumonia, cholera, and meningitis are likely to increase, with a risk of high mortality rates in children with moderate to severe acute malnutrition. More than 80% of the 2.7 million internally displaced populations are outside camps in inaccessible areas. In addition, the ongoing conflict is forcing the internally displaced persons to constantly move from one site to the other.

While the ongoing cholera outbreak in the country is showing a downward trend, the approaching rainy season is likely to reverse this trend. During week 11 (week ending 19 March 2017), 31 new cases were reported, bringing the cumulative number in 2017 to 5,691 with 140 deaths (case fatality rate of 2.4%) During epidemiological week 10 (week ending 12 March 2017), completeness of routine surveillance weekly reporting was 46% and for the early warning alert and disease network (EWARN) in the internally displaced persons sites was 84%. Malaria remains the leading cause of morbidity across the country, accounting for 29% and 11% of all consultations in routine surveillance and EWARN reporting sites respectively. The incidence (cases per 100,000) of Malaria decreased from 175.6 in week 9 (week ending 5 March 2017) to 151.2 in Week 10 (week ending 12 March 2017). The malaria incidence in the IDP sites has remained within expected levels.

**Public health actions**
- WHO has established the Incident Management System as a strategy to strengthen comprehensive humanitarian response. The incident management team including the incident manager and surge team at the operational level are in the process of being deployed.
- A plan of action, resource mobilization strategy and an essential package for current humanitarian response have been finalized.
- WHO supported the Ministry of Health to train cholera response teams that will be deployed to Ayod.
- Preparation in ongoing to conduct two rounds of oral cholera vaccination targeting 245,000 persons aged one year and above in Bentiu, Bor and Minkaman from 3 April 2017.
- The Ministry of Health, with support from WHO and Partners, has planned to conduct mass measles campaign covering the entire country from 17th to 28 April 2017. Microplanning for implementation have been finalized.
- Technical guidance on case management of the chicken pox have been provided to the response teams in Wau.
- As part of strengthening maternal, neonatal and child health, WHO supplied 3.5 tonnes of assorted medicines, medical supplies, anaesthetic kits, and other materials to six state hospitals among them Yambio, Aweil and Torit.

**Situation interpretation**
The humanitarian crisis in South Sudan remains critical. With the conflict intensifying, access to affected population reduced, the ongoing food insecurity, and the long rainy season approaching, recurrence of cholera, measles and meningitis outbreaks are very likely. The planned oral cholera vaccination to the most vulnerable people and the planned mass measles campaign in the entire country will go a long way in reducing avoidable morbidity and mortality. An innovative approach will be required to reach the internally displaced persons outside the camps, using mobile teams and community health services.
Summary of major challenges and proposed actions

Challenges

▷ The response to the complex humanitarian crises in the sub-region, compounded by acute-on-chronic outbreaks of communicable diseases and restricted access to populations in need of assistance, still has major gaps to be addressed by WHO and all the humanitarian actors. The dearth in funding to all responders has not helped these situations. Humanitarian Partners are call upon to strengthen and accelerate their interventions in order to avoid unnecessary suffering and loss of life. This is a race against time!

▷ Inadequate laboratory diagnostic capacity for confirmation of outbreaks and characterization of pathogens is still a challenge in many countries. While capacity may exist at the national level, most of the public health events occur at the countryside, often with poor transport and communication links to the capital. In addition, maintaining an efficient specimen transportation system has eluded many countries.

Proposed actions

▷ WHO will reach out to all development partners and donor communities soliciting for the much needed funding support to facilitate rapid scale up of humanitarian operations across all the ongoing public health emergencies. The priority countries are in the Horn of Africa, South Sudan, Nigeria and the Democratic Republic of Congo.

▷ Member States with ongoing cholera outbreaks, especially the stable countries, need to stand up and contain, forthwith, the outbreaks using known simple and feasible control measures.

▷ The need for coordinated multi-partner responses to all outbreaks and humanitarian emergencies cannot be overstated.
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<th>Event</th>
<th>Country</th>
<th>Grade</th>
<th>Date of notification to WHO</th>
<th>No. of cases / suspected (confirmed)</th>
<th>No. of deaths</th>
<th>CFR %</th>
<th>Comments</th>
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<td>Sao Tome &amp; Principe</td>
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<td>15-Jan-2017</td>
<td>1,455</td>
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<td>0.6</td>
<td>Total number of cases increased to 5, other cases reported compared to 34 last week</td>
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<td>1.2</td>
<td>Twenty-five new suspected cases, 0 deaths. Most affected regions Antananarivo (15) and Antananarivo Sud (4)</td>
<td>17/03/2017</td>
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<td>2,530</td>
<td>20</td>
<td>0.8</td>
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<td>Typhoid fever</td>
<td>Zimbabwe</td>
<td>U</td>
<td>21-Nov-2016</td>
<td>2,457 (63)</td>
<td>9</td>
<td>0.4</td>
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<tr>
<td>Lassa fever</td>
<td>Sierra Leone</td>
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<td>10-Mar-2016</td>
<td>267 (15)</td>
<td>56 (40)</td>
<td>21.0</td>
<td>Two new confirmed cases and 2 deaths in Sierra Leone</td>
<td>17/03/2017</td>
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<tr>
<td>Dengue fever</td>
<td>Cabo Verde</td>
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<td>98 (19)</td>
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<td>No update given</td>
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<td>Rift Valley fever</td>
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<td>43 (3)</td>
<td>1</td>
<td>33.3</td>
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<td>Monkeypox</td>
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<td>29</td>
<td>3</td>
<td>19.0</td>
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<td>376 (28)</td>
<td>26</td>
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<td>Measles</td>
<td>Guinea</td>
<td>U</td>
<td>15-Feb-2017</td>
<td>1,143 (291)</td>
<td>2</td>
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<td>Risk assessment conducted on 18 March, pending finalization</td>
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<td>Cameroon</td>
<td>U</td>
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<td>43</td>
<td>16</td>
<td>37.2</td>
<td>Two new cases, no deaths reported in already affected district Mediane</td>
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<td>100.0</td>
<td>No new cases reported</td>
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<td>2 (2)</td>
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<td>100.0</td>
<td>One new suspected case reported, no epidemiological link to the previous cases: laboratory result expected on 27 March 2017, further follow up</td>
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<td>No update given</td>
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<td>11/03/2017</td>
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</table>

Health Emergencies Information and Risk Assessment
Data sources
Data is provided by Member States through WHO Country Offices via regular situation reports, teleconferences and email exchanges. Situations are evolving and dynamic therefore numbers stated are subject to change.

Editor
Dr. I Socé-Fall

Editorial Board
Dr. B Impouma,
Dr. Z. Yoti,
Dr. Y. Ali Ahmed,
Dr. F. Nguessan,
Dr. M. Djingarey

Contributors
Dr. E. Hamblion, Dr. C. Okot,
Ms. C. Machingaidze, Dr. S. Dlamini,
Mr. A. Moussongo, Dr. A. Oke,
Dr. B. Bonkoungou, Dr. L. Omar,
Dr. V. Mukinda, Dr. E. Musa,
Dr. V. Sodjinou, Dr. A. Talisuna,
Mr. E. Minkoulo, Mrs. E. Kalondo,
Mr. T. MLanda, Mr. C. Massidi and Mr. S. Zielinski

Please contact Dr. B. Impouma (impoumab@who.int) for any clarifications.