Overview

Health Emergency Information and Risk Assessment

Contents

1 Overview
1 - 2 New events
3 - 7 Ongoing events
8 Summary of major challenges and proposed actions
9 All events currently being monitored

This weekly update focuses on selected acute public health emergencies occurring in the WHO African region. WHO AFRO is currently monitoring 32 events, two Grade 3, six Grade 2, two Grade 1, and 22 ungraded events.

This week two new events have been reported: malaria outbreak in Burundi and landslide in Addis Ababa, Ethiopia.

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 monkeypox in Congo, Crimean-Congo haemorrhagic fever (CCHF) in Namibia, meningitis in Togo, and Necrotising Cellulitis/Fasciitis in Sao Tome and Principe; and the food insecurity crisis in the Horn of Africa.

For each of these events, a brief description followed by the 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:

- Inadequate International Health Regulations (IHR) core capacities in States Parties underpins all the challenges being observed in managing public health emergencies. Countries are urged to make bold steps to strengthen structures and systems for early detection and effective response to public health emergencies.

- Multiple ongoing public health emergencies constraining multi-partner and multi-sector responses, and the contribution from Donor Partners.

New events

Malaria

Burundi

Event description

The Government of Burundi declared an outbreak of malaria (in 10 out of 18 provinces) on 13 March 2017. The increasing trend in malaria incidence begun in 2014 and continued throughout the years until epidemiological week 9 of 2017 (week ending 5 March 2017) when the outbreak was confirmed. Retrospective analysis of data illustrates that the slow-onset malaria outbreak started around epidemiological week 40 of 2015 (week ending 4 October 2015) when the incidence cases surpassed the normal malaria channel. The country reported 4,716,152 cases of malaria in 2014, 5,365,721 cases in 2015 and 7,813,958 in 2016; reflecting a 14% and 46% increase in malaria caseload in 2015 and 2016 respectively. Meanwhile, a total of 2,328 deaths attributable to malaria were reported in 2014, 2,333 deaths in 2015, and 3,774 deaths in 2016.

Between January and mid-march of 2017, the country reported a total of 1,784,965 cases of malaria; more than the cumulative cases reported during the same period in the previous years: 1,648,394 cases in 2016 and 753,324 cases in 2015. While the entire country is reporting high burden of malaria, the northern, central and eastern regions are most affected. The 10 most affected provinces include Karusi, Gitega, Muyinga, Kirundo, Kayanza, Ngozi, Bubanza, Cankuzo, Cibitoke and Ruyigi representing 63% of the population at risk.
Public health actions

In January 2017, WHO supported a multidisciplinary team of experts from the Ministry of Public Health to conduct preliminary field investigation and situation analysis, which led to the confirmation of this outbreak.

The Ministry of Health with support from WHO and other Partners established coordination mechanisms to the outbreak response.

A comprehensive response plan detailing the response strategies, with an estimated cost of USD 37 million is being finalized. The plan will form the basis for multi-sector engagement, especially those having traditional roles in malaria prevention and control.

A detailed epidemiological and entomological risk assessment and situation analysis is being carried out. The findings will be shared in the subsequent update.

The key specific actions implemented include:

- Establishment of a malaria epidemic response task force, chaired by MOH and co-chaired by WHO and USAID.
- Deployment of staff in the most affected districts to provide support in case management through setting up mobile clinics and/or temporary treatment sites. World Vision International (WVI) supported deployment of hospital staff and recruitment of temporary staff in 2 provinces (Karusi and Kayanza).
- Scaled up malaria prevention in targeted population in some provinces in December 2016. The activities included distribution of long-lasting insecticide-treated mosquito nets (LLIN) for special groups and communities such as boarding schools, orphanages, convents, military camps and indoor residual spraying (IRS) that covered 98,078 households in 4 communes in the north of the country. This was funded by the Global Fund and Swiss Cooperation.

Situation interpretation

With an incidence rate of 51.9%, malaria has been the leading cause of morbidity and mortality in Burundi, accounting for over 50% of healthcare facility visits and 45% of hospitalizations in 2015. The country experienced outbreaks of malaria in the past, with the latest being in 2000/2001 in Kayanza province. The current epidemic has been mainly attributed to ecological phenomena (climate and rainfall) and development projects (rice cultivation) that led to change in vector bionomic and malaria epidemiology. Malaria, which was particularly prevalent in low-lying areas, is gradually spreading to high-altitude areas where populations have relatively low hard immunity. In addition, the outbreak situation is being aggravated by displacement of populations (due to the ongoing insurgency) from areas of low malaria endemicity to high endemic areas, placing the susceptible populations to risk of infections.

Low coverage of preventive interventions, delayed recognition and declaration of the epidemic (lasting over one year), and slow and limited response explain the extent and duration of the current outbreak. The current high caseload will rapidly increase consumption of anti-malarial and other medicines/ supplies, posing the risk of stock outs and accompanying consequences including elevated mortality.

The malaria outbreak in Burundi requires a multi-sector response, led by the Ministry of Health (MOH) and involving all sectors (MOH, Ministry of Environment, Ministry of Agriculture, Ministry of Interior affairs) and all technical and financial Partners (UNICEF, USAID, GFATM, World Bank, WVI, etc). WHO will coordinate technical assistance to support the country to implement effective evidence-based and coordinated response in the spirit of the ‘3 Ones’: (One Plan, One Coordination body and One Monitoring and Evaluation framework). Mobilization and support by Partner at all levels is needed to rapidly contain the outbreak.

Landslide Ethiopia

113 Deaths

Event description

A huge landside occurred on 11 March 2017 at Koshe landfill in the suburbs of Addis Ababa, Ethiopia, killing 113 persons and injuring several others. The number of persons rescued or injured has not yet been established. The large man-made mount that formed after 30 decades of dumping refuse/garbage provided a means of livelihood to nearly 150 persons who scavenge the site for items to sell and earn income. The site also served as habitation for several hundreds of people, living in makeshift temporary shelters. The landslide was reportedly triggered by earth-movement caused by heavy earth-moving equipment.

Public health actions

Search and rescue operations using excavators and heavy machinery has been ongoing to rescue/ exhume persons who may have been covered.

Situation interpretation

The landslide event in Ethiopia is a direct consequence of the rising rural-urban migration and the rapid expansion of the urban cities in Africa. This phenomenon is posing huge socio-economic pressure on the peri-urban populations with deteriorating social determinants of health such as housing, livelihood, water and sanitation, etc. The landslide in Ethiopia is a result of this rapid urbanization, leading to multiple settlements in un-gazetted areas. Given the level of ongoing humanitarian response in Ethiopia, the country should be in position to adequately response to this one-time landside event.
Monkeypox

Event description
This is an update on the monkeypox outbreak that was notified to WHO on 26 January 2017. An investigation conducted by a multi-disciplinary team of experts (drawn from the Ministry of Health, UNHCR and WHO) from 15 – 22 February 2017 established that the outbreak emerged in December 2016. As of 9 March 2017, a total of 20 suspected cases including 3 deaths (CFR 15%) have been reported across four out of seven districts in the province. The districts include Dongou (11 cases and 2 deaths), Enyelle (3 cases and 1 death), Betou (4 cases with no death), and Impfondo (2 cases and no death).

The outbreak has been localised to the Northern Province of Likouala, which shares borders with the Democratic Republic of Congo (DRC) and Central African Republic (CAR). The province is currently facing an influx of refugees from the neighbouring countries, namely DRC, CAR, Burundi and Rwanda. An estimated 35,000 refugees are currently settled in Likouala. The province is also characterized by intense social and economic activities, resulting in high population movement between the neighbouring provinces and the neighbouring countries.

Public health actions
- The epidemic management committee was activated to coordinate the response to the outbreak. One epidemiologist was deployed to Likouala to support coordination of the local response.
- UNHCR is supporting active case search and community engagement.
- A teleconference was held on 15 March 2017, attended by both WHO Congo and CAR country offices, the WHO Regional Office for Africa and WHO Headquarters in Geneva.
- UNHCR continues to provide the required logistics for the response operation.

Situation interpretation
Given the low coverage of health services, limited number of Partners to support the response, the behaviours and practices of the local population (such as hunting), and the high population movement, it is likely that the potential of the outbreak to propagate is underestimated. As such, there is need for urgent provision of human, financial and logistical resources to ensure effective response and control of the outbreak.

Historically, 3 previous monkeypox outbreaks occurred in Congo, with all being localised to Likouala region. Generally, the resulting CFR have been about 10%. For example, during the 2003 outbreak, 11 cases and 3 deaths were reported, giving a CFR of 9.1% (Learned et al., 2005); meanwhile 10 cases and 2 deaths (CFR 10%) were reported during the 2010 outbreak (Reynolds et al., 2013). Similar range of CFR has also been reported amongst other monkeypox outbreaks in Africa. The higher CFR of 15% being observed in this outbreak calls for critical analysis of the outbreak situation and/or the response. Some of the issues include:

- Reviewing the health services coverage and surveillance system to facilitate early detection, isolation and treatment of the cases, thus reducing deaths.
- Establishing an efficient system for shipment of biological specimens to ensure prompt confirmation and characterization of causative pathogens. Transportation of samples has been a challenge in both the current and previous outbreaks.
- Monkeypox is a zoonotic disease that requires concerted effort by both human and animal health authorities. All avenues for implementation of the One Health approach need to be explored.
Event description
A second case of Crimean-Congo Haemorrhagic Fever (CCHF) has been confirmed in Namibia during the week ending 12 March 2017. This new case comes after the index case was notified to WHO on 23 February 2017. The second case is a 19 year old male residing in a communal farm in Okongoua village, 250 km away from Gobabis (where the index case originated). The two cases have no established epidemiological linkage. The case is still in admission and is expected to be discharged in the coming days. Sixteen contacts have been systematically identified and monitored for 14 days from date of last contact. No new cases have since emerged.

Public health actions
- A joint investigation team consisting of personnel from health and veterinary services were deployed on 24 February to conduct initial outbreak investigation.
- A total of 64 contacts, including health care workers who had provided direct care to the cases, were identified and monitored for 14 days from the date of last contact.
- A 3-level teleconference was held on 15 March 2017 to conduct a risk assessment. Overall, the impact of the outbreak on human health, the risk of further spread of CCHF and the insufficiency of control capacities with available resources were deemed high. However, the risk to regional and global health security was deemed low.

Situation interpretation
CCHF was first reported in Namibia in 1986, with 3 cases recorded. Subsequent outbreaks have occurred in 1998 (1 case), 2001 (2 cases), 2002 (1 case) and 2010 (3 cases), scattered across 5 regions (Otjozondjupa, Khomas, Omaheke, Karas, and Kavango). The current outbreak has occurred in Gobabis (with a population of 72,306 people) in Omaheke region, which reported its last outbreak in 2001. The fact that the two cases in the current outbreak had no epidemiological link could attest to the fact that the disease is prevalent in livestock in Namibia.

CCHF is generally associated with a high CFR of 10 – 40%, necessitating prompt response and control of outbreaks. The early detection and declaration of this outbreak by the Ministry of Health and the strong collaboration between the veterinary and public health services (including WHO country office, regional office and headquarters), illustrate one of the best practices of outbreak management. Contact tracing and follow-up was performed systematically for both cases, limiting secondary transmission of infection. As such, the outbreak has been controlled with no further cases reported.

Event description
The outbreak of meningitis in the Plateaux region of Togo, notified to WHO on 3 February 2017, remains active. During the week ending 12 March 2017, 42 new cases and 2 deaths were reported. While Akebou district remains in epidemic phase (and being the most affected), a new district named Tone entered into alert phase during the week ending 12 March 2017, after reporting 17 new cases. Tone district borders Burkina Faso. There have also been sporadic cases in Région Centrale, Région Kara, and Région des Savanes. A total of 350 cases and 25 deaths (CFR 7.1%) have been reported since onset of the outbreak.

Public health actions
- The Ministry of Health, with support from UNICEF and WHO, secured 56,169 doses of ACWY meningitis vaccines and 3950 vials of Ceftriaxone for case management.
- Reactive mass vaccination campaign was successfully conducted in Akebou district between 27 February and 5 March 2017. A total of 50,559 persons aged 2 to 29 were vaccinated, attaining an administrative coverage of 100%. Coverage survey is being conducted to validate the administrative coverage.
- Partners including UNICEF, UNDP, UNFPA, Togo Plan, Togo Red Cross, WHO, etc. are involved in implementing various aspects of the outbreak response such as case management, surveillance, communication, coordination, and supervision.
- The capacity of the national reference laboratory for confirmation has been strengthened and fully functional. The national reference laboratory is providing support to the district laboratory.
- WHO supported investigation of the cases, line listing of cases, coordination mechanism, mass vaccination campaign, and public health information and advocacy activities.
- The districts are constrained with availability of health staff for case management. Nevertheless, the health workers in the country have been trained on case management and have been managing the case-patients.

Situation interpretation
Togo lies within the African meningitis belt and has experienced recurrent meningitis outbreaks over the years. Like many countries in West Africa, Togo experiences harsh dry and dusty windy climatic condition during the dry season. This environmental condition favors transmission of respiratory and meningitis infections. Occurrence of meningitis outbreak in Togo (and the other countries in the belt) is therefore not uncommon and unexpected. On an annual basis, the WHO Inter-country support team works with the countries in the meningitis belts to put in place preparedness measures. These preparedness measures facilitated early detection and effective response to the outbreak in Togo. Reactive meningitis vaccination campaign was conducted swiftly in Akebou district, averting many cases and deaths. The risk of further propagation of this outbreak at the national and regional levels is moderate, given the prevailing predisposing factors. However, the risk at the global level is low because Togo and the West African countries are well prepared and have experience in managing meningitis outbreaks. In fact, affected districts in Togo have/are already been/being immunised. In addition, six districts benefited from mass campaigns using Mencevax vaccine while two district were partially covered, following the meningitis outbreak in 2016.
Health Emergencies Information and Risk Assessment

Event description
The outbreak of Necrotizing Cellulitis/Fasciitis in Sao Tome and Principe has gradually started to slow down since epidemiological week 6 (week ending 12 February 2017). A total of 34 new cases were reported during epidemiological week 10 (week ending 12 March 2017). This shows a significant reduction in the caseload compared to epidemiological week 50 (week ending 11 December) of 2016 when the outbreak peaked with 108 cases. Between 25 September 2016 and 10 March 2017, a cumulative of 1,455 cases has been reported. To date, no death has directly been attributed to Necrotizing Cellulitis/Fasciitis.

The overall attack rate of the disease in Sao Tome and Principe, with an estimated population of 193,800, is 7.5 cases per 1000 inhabitants. The cases are distributed across all 7 health districts. Caue (South) continues to be the most affected with an attack rate (AR) of 22/1000 populations. Lembà (West) with AR of 13/1000 populations and Lobata (North) with AR of 8.4/1000 population are some of the most affected health districts.

Public health actions
- A team of laboratory experts from the Ministry of Health of Portugal and Cambridge University are in the country to support confirmation and characterization of the causative pathogen. A technical report is expected next week.
- Coordination mechanism through the Incident Management System has been established and daily meetings are going on.
- The WHO country office is supporting finalization of the response plan.
- A case control study was conducted between 7 and 9 March 2017. Preliminary analysis has been performed and the report is in the finalization phase.
- The case management protocol is being revised, taking into account available antibiotics in the country.

Situation interpretation
The Necrotizing Cellulitis/Fasciitis disease in Sao Tome and Principe has been going on for several months without the etiology being identified. With the deployment of a multi-disciplinary team of experts, comprising of laboratory scientists, an infectious disease specialist, dermatologist, epidemiologist, and a plastic surgeon, it is expected that the etiology of the outbreak will be defined, appropriate response measures implemented and the outbreak ultimately controlled.

Humanitarian crisis
Nigeria

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 and devastation and a desperate shortage of essential health care. North-eastern Nigeria is at the heart of the larger Lake Chad Basin crisis (north-eastern Nigeria, northern Cameroon, western Chad and south-east Niger), which affects some 17 million people. Continued violence has forced 2.3 million people to flee their homes with one in three families affected by food insecurity. Health cluster partners are seeking to reach 8.2 million people with health assistance across the region.

Public health actions
- On 11 March 2017, WHO participated in an Inter-Agency Initial Rapid Needs Assessment (IRNA) mission to Damasak, a newly accessible town in Borno State, 3km from the border with Niger. Over 30,000 returnees from 7,019 households have been registered, either as internally displaced persons (IDPs) or refugees. WHO has established two transit vaccination teams, including one at the Niger-Nigeria border to vaccinate all new arrivals aged 06 months to 15 years against polio and measles.
- On 14 March 2017, WHO (on behalf of Borno State Ministry of Health and the Health Sector Partners) presented the 2017 Health Sector strategy to the donor and wider community in Abuja.
- On 14 March 2017, the health sector coordination Partners meeting was formalised in Yobe State. The three most affected states in north east Nigeria (Adamawa, Borno and Yobe) are now conducting regular coordination meetings.
- A total of 430 trained community volunteers and 35 mobile medical teams supported by WHO are deployed to the most remote and insecure parts of Borno, providing urgently needed health care.
- As of 17 March, 35 WHO Hard-to-Reach Teams (H2R) had been trained. The teams vaccinated 33,889 children between 0-59 months with oral polio vaccine (OPV) in February 2017, dewormed 11,575 with Albendazole tablets and consulted 16,108 clients including 238 referrals.
- The team also screened 16,974 children for malnutrition, out of which 1.1% were categorized as severely malnourished while 7.1% were moderate.
- Cholera preparedness plan for Borno State was finalised with the identification of the high risks areas including IDP camps. Prepositioning of emergency supplies is ongoing.

Situation interpretation
The prolonged conflict in the Lake Chad Basin has had a devastating impact on vital infrastructure, social services and economic activity. This combined with rapid population growth, severe vulnerability of the region to climate change, environmental degradation, and poverty has translated into record numbers of people in need of emergency relief across the entire region.

As the security situation evolves, funding for the overall humanitarian response and transition to early recovery in the health sector will continue to remain the major focus. WHO will engage and provide leadership to the health sector in mobilizing resources to address the huge public health gaps caused by the 8 years of conflict.
While the outcome of the Oslo conference in terms of resource mobilization and awareness creation for the ongoing situation in the region is encouraging, current declarations and trends regarding the risk of famine in some countries of sub Saharan Africa (including parts of Nigeria) present another opportunity to highlight the situation to a wider audience and attract the longer term development expertise and funds required. A multi-sector response and recovery strategy that can then be used to mobilize longer term funds from the development sector for the entire Lake Chad region needs to be developed.

### Humanitarian crisis

#### South Sudan

**Event description**
The protracted humanitarian crisis in South Sudan continues unabated, with the conflict currently concentrated in the Equatoria, Unity and Upper Nile regions. Between February and April 2017, 4.9 million people (42% of the population) are estimated to be severely food insecure, spanning across the Integrated Phase Classification (IPC) 3, 4 and 5. This number is expected to peak to 5.5 million (47% of the population). Leer and Mayendit in the Greater Unity region are already experiencing classified famine, while Koch is approaching. Global Acute Malnutrition (GAM) rate of above 15% has been documented in 14 out of 23 counties, defining a ‘critical level’ of malnutrition. Leer, Mayendit, and Panyijiar counties in Greater Unity have a GAM rating close to or above 30%. Health infrastructures have been damaged/destroyed, severely affecting provision of health services including surveillance functions. A recent WHO report on access and utilization of health services indicates that, as of 14 February 2017, only 13 out of 80 counties (16%) have adequate healthcare services. During epidemiological week 9 (week ending 5 March 2017), completeness of weekly reporting for routine surveillance (Non IDP sites) was 49% and 84% for the early warning alert and disease network (EWARS) in the internally displaced persons (IDP) sites. Malaria remains the leading cause of morbidity across the country, accounting for 32% and 12% of all consultations in the IDSR and IDP sites respectively. The incidence (cases per 100,000) of Malaria decreased from 202.8 in week 8 (week ending 26 February 2017) to 175.6 in Week 9 (week ending 5 March 2017). Comparatively, the incidence in week 9 of 2017, is still higher than that for the same period in 2014, 2015 and 2016. The malaria incidence in the IDP sites has remained within expected levels. There has been a proportionate decline in acute respiratory infections (ARI) morbidity in the last three weeks. However, the ARI trend in 2017 is still high compared to same period in 2014, 2015 and 2016. Acute Watery Diarrhea (AWD) accounted for 12% and 8% of consultations in routine reporting (IDSR) and IDP sites respectively. Cholera epidemic has been protracted, affecting provinces along the Nile River. Fourteen counties from 9 of the 32 states countrywide have been affected. A total of 19 new cases were reported in the week ending 19 March 2017, bringing the total number of cases to 5,640 with 138 deaths (CFR 2.4%), registered between 18 June 2016 and 17 March 2017. The risk factors fueling transmission include ingesting untreated water from the River Nile and water tankers, lack of household chlorination of drinking water, eating food from unregulated roadside food vendors or makeshift markets, and open defecation/poor latrine use.

**Public health actions**
- Humanitarian and disease outbreak response are being provided by the Government and Partners.
- WHO emergency task forces supported reactive vaccinations with oral cholera vaccine; deployed investigative and relief missions that worked closely with other Partners to respond to the cholera outbreak. WHO is also supporting the MoH to train the national response teams.
- Although Humanitarian Partners continue to lead in the provision of health care services, coverage of partner presence in unevenly distributed (37 partners are currently on the ground), largely concentrated in Juba, Malaakal and Bentiu. The majority of counties have at least 1 or 2 Partners present.

**Situation interpretation**
The magnitude of food insecurity in South Sudan is serious and exacerbated by conflict. Provision of humanitarian assistance is impeded by this conflict and access by international non-governmental organization (INGOs) and other humanitarian agencies to deliver the much needed support should be prioritised. The IPC report emphasizes that the famine classification is still reversible if timely interventions are implemented, thus averting further deaths.

Completeness and timeliness of surveillance data, especially from the east of the country, needs to be improved to ensure disease outbreaks, famine, and/or displacement are detected and responded to without delay and with appropriate resources. Reduction in disease morbidity over the last two to three weeks is encouraging, however, these decreases in incidence have slowed. The continued support and engagement of the MOH, WHO, and other Partners in assisting the people of South Sudan is highly needed and welcomed.
Event description

More than 12 million people in the Horn of Africa are affected by food insecurity. According to UN OCHA, close to 600,000 children below five years of age in the region are expected to suffer from Severe Acute Malnutrition and more than 15 million people will not have access to safe drinking water. The governments of South Sudan and Kenya have declared state of famine in affected areas of their respective countries. The effects of the prolonged drought have been compounded by inadequate health service delivery and inadequate access to health care in most of the affected areas. In addition, the prevailing insecurity and limitation in humanitarian space especially in South Sudan and parts of Ethiopia and Kenya, render the crisis even more complex. The ongoing cholera outbreaks in the Somali region of Ethiopia, Kenya, South Sudan, and Uganda still have the potential to flare up in light of the inadequate water supply and high level of malnutrition.

Public health actions

These are highlights of the Horn of Africa Food Insecurity Regional Planning meeting held in Nairobi, Kenya from 14 – 15 March 2017. The meeting was attended by senior management and technical staff from across the three levels of WHO [Headquarter, Regional Offices (EMRO and AFRO), WHO Country Offices (Ethiopia, Kenya, Somalia, South Sudan, and Uganda) while Rwanda provided resource support]. The meeting aimed to (a) review the overall health aspects of the food insecurity crisis affecting the Horn of Africa (b) review WHO's ongoing activities, and (c) ensure that the ‘One WHO’ approach continues to work effectively, to define and deliver WHO operational objectives. Critical gaps or weaknesses in response that might lead to unacceptable levels of risk (operational and institutional) were analyzed and mitigation plans developed.

The key outcomes of the meeting, include:

1- A draft strategic framework for action to guide and ensure a consistent approach to the work of WHO across the affected countries was designed.
2- The capacities and needs of the WHO Country Offices to manage the response operations in the next six months were identified.
3- The roles, responsibilities and staffing complement of the Horn of Africa operational coordination team to be established in Nairobi have been agreed upon.
4- Key deliverables for the next 30-60-90 days were agreed on.
5- The broader application of the new World Health Emergencies (WHE) country business model in priority countries was discussed in order to sustain the capacity at country level.
6- The meeting proposed to set up a sub-regional emergency support team in Nairobi with clear functions.

Situation interpretation

The inadequate rainfall or the short rainy season in parts of Horn of Africa aggravated the drought and food insecurity situation. The rainfall deficit was particularly acute across Somalia, southern and south-eastern Ethiopia, northern and coastal Kenya and south-western Ethiopia and central and south-western Uganda and south-eastern South Sudan. The response to the present drought and food insecurity crisis in the Horn of Africa requires a multi-partner and multi-sector approach. It is therefore imperative to galvanize partnership among all humanitarian actors including donor communities. The response to this crisis will quickly outstrip WHE resource base. WHO urges Partners and Donors to help in ensuring additional funding to sustain the operations for the duration of this crisis in order to avoid preventable deaths.
Summary of major challenges and proposed actions

Challenges
Delay in detection of public health events and its consequences have again come on the spot this week in relation to the malaria outbreak in Burundi. Early detection, especially of slow-onset events like malaria requires consistent and meticulous analysis and use of surveillance data at all levels. Simple tools contained in the integrated disease surveillance and response (IDSR) technical guidelines have been designed to facilitate health workers, particularly at the district level.

Countries experiencing public health emergencies should strive to develop response plans immediately after conducting initial outbreak investigation, risk assessment and situation analysis. The response plan articulates the strategies that guide the response interventions and also serve as a tool for resource mobilization and engagement of other stakeholders including Partners.

The concerted and coordinated multi-partner response is highlighted in nearly all outbreaks and emergencies.

Proposed actions
WHO Regional Office, Country Offices and Partners should continue to support Member States to conduct preparedness activities and ensure appropriate response plans are available.

There remains a continued need to advocate for coordinated multi-partner responses to all outbreaks and humanitarian emergencies.
## OUTBREAKS

<table>
<thead>
<tr>
<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 % among suspected cases (confirmed)</th>
<th>Updates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cholera</td>
<td>DRC</td>
<td>2</td>
<td>01-janv-15</td>
<td>35923</td>
<td>1045</td>
<td>2.9</td>
<td>742 cases and 25 deaths (CFR 3.4%) this week against 734 cases and 41 deaths (CFR 5.6%) last week.</td>
</tr>
<tr>
<td>Cholera</td>
<td>Tanzania</td>
<td>2</td>
<td>04-avr-15</td>
<td>26415</td>
<td>456</td>
<td>1.6</td>
<td>31% increase in cases compared to week 9</td>
</tr>
<tr>
<td>Necrotising cellulitis</td>
<td>Sao Tome &amp;</td>
<td>2</td>
<td>10-janv-17</td>
<td>1455</td>
<td>9</td>
<td>0.6</td>
<td>Decrease from week 50 (108 cases) but still 34 cases in last week and 3 cases more than previous week. Detail above.</td>
</tr>
<tr>
<td></td>
<td>Principe</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cholera</td>
<td>Angola</td>
<td>1</td>
<td>04-janv-17</td>
<td>271</td>
<td>11</td>
<td>4.1</td>
<td>No update received</td>
</tr>
<tr>
<td>Hepatitis E</td>
<td>Chad</td>
<td>1</td>
<td>01-sept-16</td>
<td>1242</td>
<td>15</td>
<td>1.2</td>
<td>60 cases since last week</td>
</tr>
<tr>
<td>Dengue fever</td>
<td>Burkina Faso</td>
<td>-</td>
<td>29-oct-18</td>
<td>2530</td>
<td>20</td>
<td>0.8</td>
<td>No update received</td>
</tr>
<tr>
<td>Typhoid fever</td>
<td>Zimbabwe</td>
<td>-</td>
<td>21-nov-16</td>
<td>2457 (93)</td>
<td>9</td>
<td>0.4</td>
<td>No update received</td>
</tr>
<tr>
<td>Lassa fever</td>
<td>Nigeria</td>
<td>-</td>
<td>18-déc-16</td>
<td>267 (91)</td>
<td>56 (40)</td>
<td>20 (44)</td>
<td>Outbreaks in 13/36 states so far.</td>
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<td>Dengue fever</td>
<td>Cabo Verde</td>
<td>-</td>
<td>04-janv-17</td>
<td>98 (19)</td>
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<td></td>
<td>No update received</td>
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<tr>
<td>Zika virus</td>
<td>Angola</td>
<td>-</td>
<td>06-janv-17</td>
<td>3</td>
<td>0</td>
<td>0.0</td>
<td>No new cases reported</td>
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<td>Rift Valley fever</td>
<td>Mali</td>
<td>-</td>
<td>01-fevr-17</td>
<td>3 (3)</td>
<td>1</td>
<td>33.0</td>
<td>No new case reported this week. The outbreak is controlled.</td>
</tr>
<tr>
<td>Monkeypox</td>
<td>Congo</td>
<td>-</td>
<td>01-fevr-17</td>
<td>20</td>
<td>3</td>
<td>15.0</td>
<td>Detailed update given above</td>
</tr>
<tr>
<td>Meningitis</td>
<td>Togo</td>
<td>-</td>
<td>03-fevr-17</td>
<td>356 (28)</td>
<td>25</td>
<td>7.1</td>
<td>A new area, the district of Tone, which borders Burkina Faso, entered alert in the week ending 12 March with 17 reported cases.</td>
</tr>
<tr>
<td>Monkeypox</td>
<td>CAR</td>
<td>-</td>
<td>09-fevr-17</td>
<td>5</td>
<td>0</td>
<td>0.0</td>
<td>No new cases reported this week. The outbreak is controlled.</td>
</tr>
<tr>
<td>Measles</td>
<td>Guinea</td>
<td>-</td>
<td>16-fevr-17</td>
<td>1109 (691)</td>
<td>2</td>
<td>0.2</td>
<td>Lower cases/deaths estimate this week</td>
</tr>
<tr>
<td>Eruptive fever</td>
<td>Cameroon</td>
<td>-</td>
<td>20-fevr-17</td>
<td>43</td>
<td>16</td>
<td>37.2</td>
<td>No new case reported this week</td>
</tr>
<tr>
<td>Meningitis</td>
<td>Nigeria</td>
<td>-</td>
<td>20-fevr-17</td>
<td>596 (38)</td>
<td>81</td>
<td>14.0</td>
<td>20 new cases this week</td>
</tr>
<tr>
<td>Lassa fever</td>
<td>Benin</td>
<td>-</td>
<td>21-fevr-17</td>
<td>2 (2)</td>
<td>2</td>
<td>100.0</td>
<td>No new case in the last 3 weeks</td>
</tr>
<tr>
<td>Crimean-Congo hemorrhagic Fever</td>
<td>Namibia</td>
<td>-</td>
<td>23-fevr-17</td>
<td>4 (2)</td>
<td>(1)</td>
<td>(50)</td>
<td>No new cases reported this week.</td>
</tr>
<tr>
<td>Lassa fever</td>
<td>Togo</td>
<td>-</td>
<td>24-fevr-17</td>
<td>5 (2)</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Malaria</td>
<td>Burundi</td>
<td>-</td>
<td>13-mar-17</td>
<td></td>
<td></td>
<td></td>
<td>Detailed update given above</td>
</tr>
<tr>
<td>Cholera</td>
<td>Burundi</td>
<td>-</td>
<td>28-juil-16</td>
<td>167 (5)</td>
<td>0</td>
<td>0</td>
<td>No cases since 30 January</td>
</tr>
</tbody>
</table>

## EMERGENCIES

<table>
<thead>
<tr>
<th>Event</th>
<th>Country</th>
<th>Grade</th>
<th>Date of notification to WHO</th>
<th>Details</th>
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<tbody>
<tr>
<td>Humanitarian crisis</td>
<td>South Sudan</td>
<td>3</td>
<td></td>
<td>Detailed update given above</td>
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<tr>
<td>Humanitarian crisis</td>
<td>Nigeria</td>
<td>3</td>
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<td>Detailed update given above</td>
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<tr>
<td>post El-Nino drought</td>
<td>Ethiopia</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Humanitarian crisis</td>
<td>Cameroon</td>
<td>2</td>
<td></td>
<td></td>
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<tr>
<td>Humanitarian crisis</td>
<td>Central African Republic</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cyclone</td>
<td>Mozambique</td>
<td>-</td>
<td>16-fevr-17</td>
<td></td>
</tr>
<tr>
<td>Famine/pre-famine (Food insecurity)</td>
<td>South Sudan, Kenya, Uganda, Ethiopia, NE Nigeria</td>
<td>-</td>
<td>févr-17</td>
<td>Update provided next week</td>
</tr>
<tr>
<td>Floods</td>
<td>Zimbabwe</td>
<td>-</td>
<td>02-mars-17</td>
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<tr>
<td>Cyclone</td>
<td>Malagasyar</td>
<td>-</td>
<td>07-mars-17</td>
<td></td>
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<tr>
<td>Landslide</td>
<td>Ethiopia</td>
<td>-</td>
<td>113</td>
<td></td>
</tr>
</tbody>
</table>

*The number of persons affected or injured has not yet been established.*
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.

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