

# WEEKLY BULLETIN ON OUTBREAKS AND OTHER EMERGENCIES

Week 18: 29 April – 05 May 2017  
Data as reported by 17:00 05 May 2017

1

New event

44

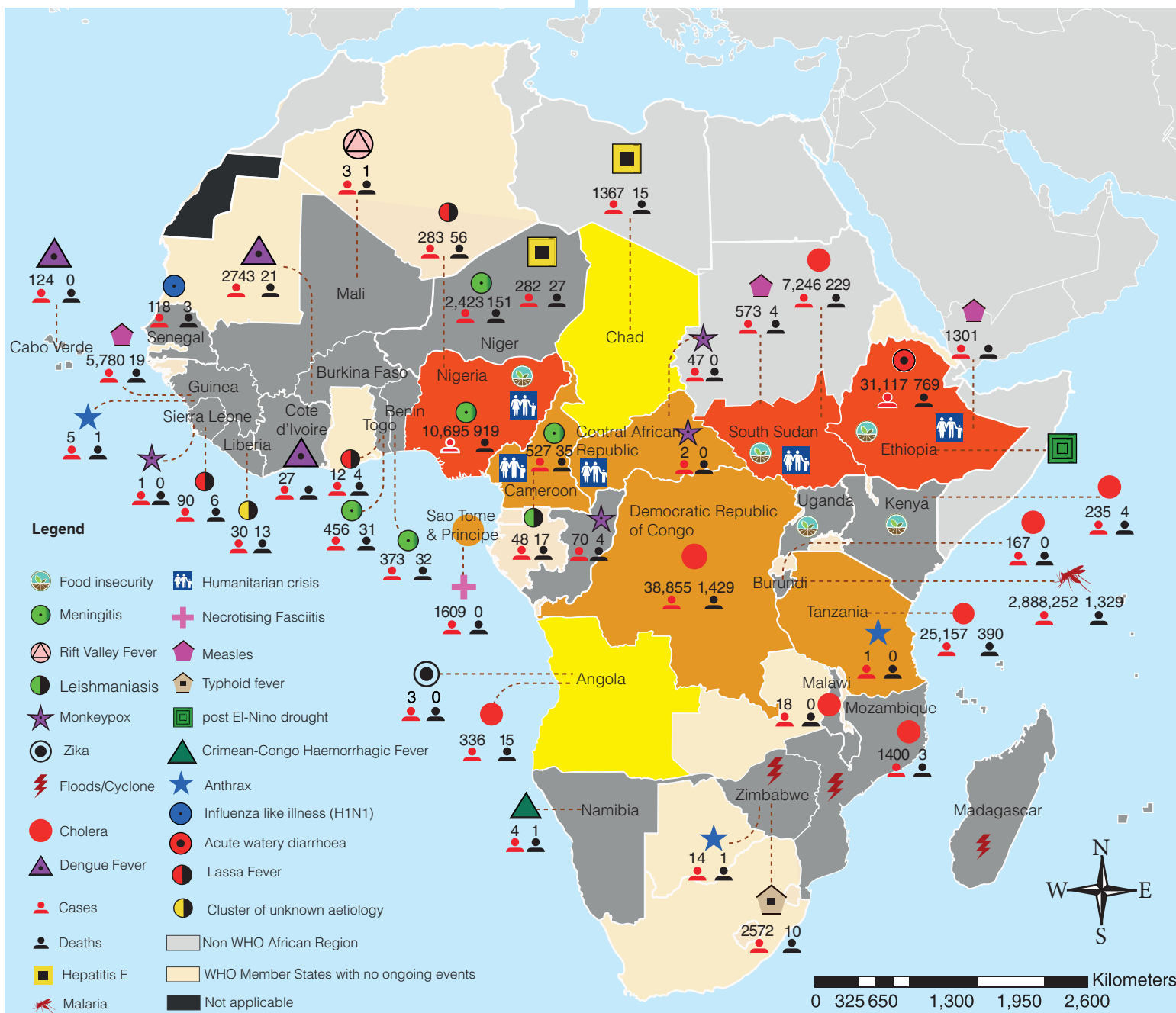
Ongoing events

37

Outbreaks

8

Humanitarian crises



3

Grade 3 events

6

Grade 2 events

2

Grade 1 events

34

Ungraded events

# Overview

## Contents

- 1 Overview
- 2 New event
- 3 - 8 Ongoing events
- 9 Summary of major challenges and proposed actions
- 10-11 All events currently being monitored

- This weekly bulletin focuses on selected public health emergencies occurring in the WHO African region. WHO AFRO is currently monitoring 45 events: three Grade 3, six Grade 2, two Grade 1, and 34 ungraded events.
- This week, one new event has been reported: a suspected outbreak of anthrax in Guinea. The bulletin also focuses on key ongoing events in the region, including the grade 3 humanitarian crises in Ethiopia, Nigeria and South Sudan, as well as outbreaks of hepatitis E in Chad, monkeypox in Congo and the undiagnosed illness in Liberia.
- 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 bulletin with information on all public health events currently being monitored in the region.
- Major challenges to be addressed include:
  - Confirmation of the aetiology of acute public health events in a timely manner in order to inform appropriate public health interventions.
  - Systematic and standardized documentation and reporting on public health events taking place in countries.

# New event

Anthrax

Guinea

5  
Cases

1  
Deaths

20%  
CFR

## Event description

On 16 April 2017, the Regional Health Department of Labé informed the central Ministry of Health of a suspected outbreak of anthrax in Matakou sub-district, Koubia district in the north of Guinea. The index case, a 35 year old man from Hamdallaye village developed ill-health on 7 April 2017. He presented to Matakaou health centre on 11 April 2017 with fever, swelling of the lower lip with black crusts, difficulty to swallow, and shortness of breath. His condition continued to deteriorate and he was referred to Labé regional hospital on 13 April 2017 from where he died on 18 April 2017. The case-patient reportedly slaughtered his cow on 01 April 2017 and the whole family ate the meat. Part of the meat was sold off to a local butcher.

Three children to the index case, aged 9, 5 and 3 years, developed milder illnesses on 7 April 2017. Two of the children, 9 and 3 year old boys, presented to the local health facility on 11 April 2017 with swelling of the cheeks with vesicles. The third child, 5 year old girl, was admitted on 13 April 2017 with swelling around the eyes. On 14 April 2017, another 9 year old boy from a different family (who consumed the same meat) developed oedema of the neck with vesicles and presented to the local health facility on 14 April 2017. The attending clinician made a provisional diagnosis of anthrax. By 03 May 2017, the children were showing good clinical improvement. No new case has been reported since 3 May 2017. As of 27 April 2017, a total of 5 cases including one death (case fatality rate of 20%) have been reported. No biological samples were obtained from these cases to facilitate confirmation of the outbreak.

Preliminary outbreak investigation conducted by a multidisciplinary rapid response team from the Ministry of Health, Veterinary Services and WHO established that the slaughtered cow was actually sick. Over 50 other persons from six families in the community reportedly bought and consumed the meat.

## Public health actions

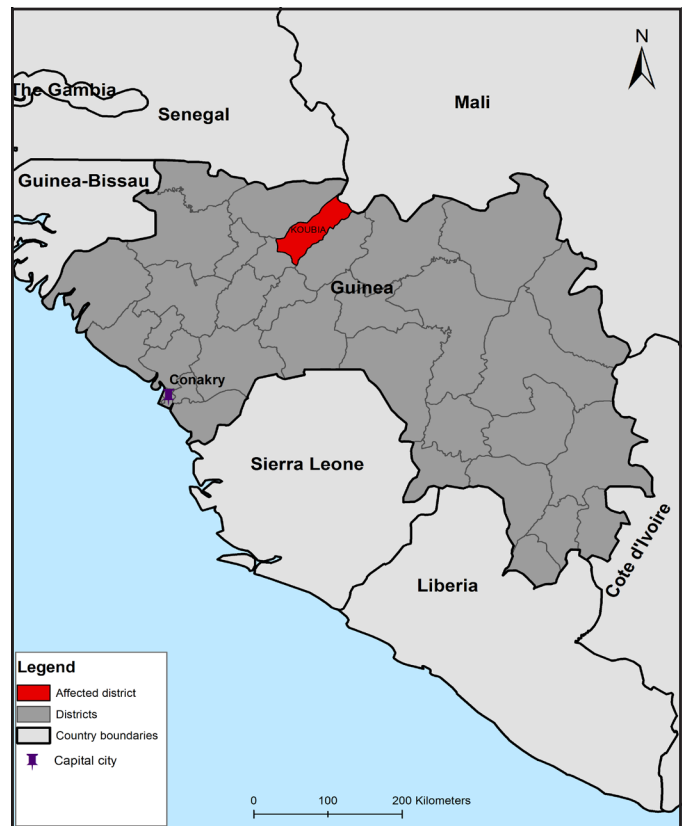
- From 15 - 16 April 2017, the Veterinary services carried out vaccination of animals in and around the affected area. Anthrax vaccine was administered to 118 cows, 25 goats and 27 sheep. Movement of livestock from the affected communities has been quarantined.
- Active case finding and awareness raising on signs and symptoms of anthrax is being undertaken in the community.
- Case management is being provided in the local prefectural hospital and health center using antibiotics, antipyretic and dressing of cutaneous lesions.
- Risk communication and social mobilization are being conducted in the affected communities, aimed to identify the persons who consumed the meat, encourage early health care seeking behavior, etc.

## Situation interpretation

A suspected outbreak of anthrax has been reported in Koubia district in the north of Guinea. This region, mainly inhabited by populations who are both cattle keepers and agriculturalists, has had recurrent outbreaks of anthrax in the past. A Ministry of Health report indicates that three different outbreaks of anthrax occurred between 2014 and 2016, affecting 145 domestic animals and 57 human cases including 11 deaths.

While outbreak investigation was conducted as expected, no human and animal biological samples were obtained to facilitate confirmation of the outbreak. This was a missed opportunity. The response to this suspected outbreak needs to be systematically reviewed in order to identify challenges encountered, both in the public and animal health sectors. Findings from the after-action review should be used to strengthen structures and systems for epidemic preparedness and response, in the context of One Health.

Geographical distribution of anthrax cases in Guinea, 7 - 27 April 2017.



# Ongoing events

Cluster of undiagnosed illness and deaths

Liberia

30  
Cases

13  
Deaths

43.3%  
CFR

## Event description

The dramatic undiagnosed acute illness and sudden deaths in Liberia is calming down as extensive investigations for causality are being carried out. Since our last report on 28 April 2017, 10 new cases and two deaths were reported. Eight of the 10 additional cases originated from Sinoe, the epicentre of the event, while one case came from Montserrado and another one from Grand Bassa. All the new cases from Sinoe and the case from Grand Bassa attended the funeral function. While the case from Montserrado did not directly participate in the funeral, she reportedly attended to a case (who developed symptoms on 24 April 2017 and died on 26 April 2017). This 26 year old lady, thought to be the first secondary case, developed symptoms on 29 April and died a few hours later. By 05 May 2017, 2 patients remain admitted at the treatment facility and are reported to be responding well to treatment.

Between 23 April and 05 May 2017, a total of 30 cases of the undiagnosed illness including 13 deaths (case fatality rate of 43.3%) were reported from 11 communities in Sinoe (27 cases and 10 deaths), 2 communities in Montserrado (2 cases and 2 deaths) and one community in Grand Bassa (1 case and 1 death). Ninety seven percent (29/30) of all the cases were directly linked to the funeral function of the religious leader on 22 April 2017 in Sinoe. The ages of the affected people ranged from 11 to 54 years and 68% of the cases were female. As of 5 May 2017, a total of 110 individuals (from 6 counties) who attended the wake/funeral in Greenville Sinoe on 21/22 April 2017 continue to be monitored daily. In addition, 156 close contacts of cases in this cluster also continue to be followed up daily. None of these individuals developed any symptoms or signs associated with this event by the reporting time.

As part of the extensive investigation, an unmatched case control study with 25 cases and 50 controls has been carried out. The preliminary analyses showed that the people who attended the wake were 22 times more likely to be a case compared to those who did not attend the wake ( $P < 0.05$ ). Further analyses showed association with food served at the wake including tea, bread, and egg nog. The strongest association was with tea, with an Odds Ratio of 11.2 ( $P < 0.05$ ). There was no significant association observed with other potential exposures.

A total of 35 biological samples have so far been obtained: 8 oral swabs, 13 whole blood, 6 urine, 5 cardiac fluid, 1 rectal swab, and 1 stool sample. Twenty two samples tested negative for *Ebola virus* and *Lassa fever virus*.

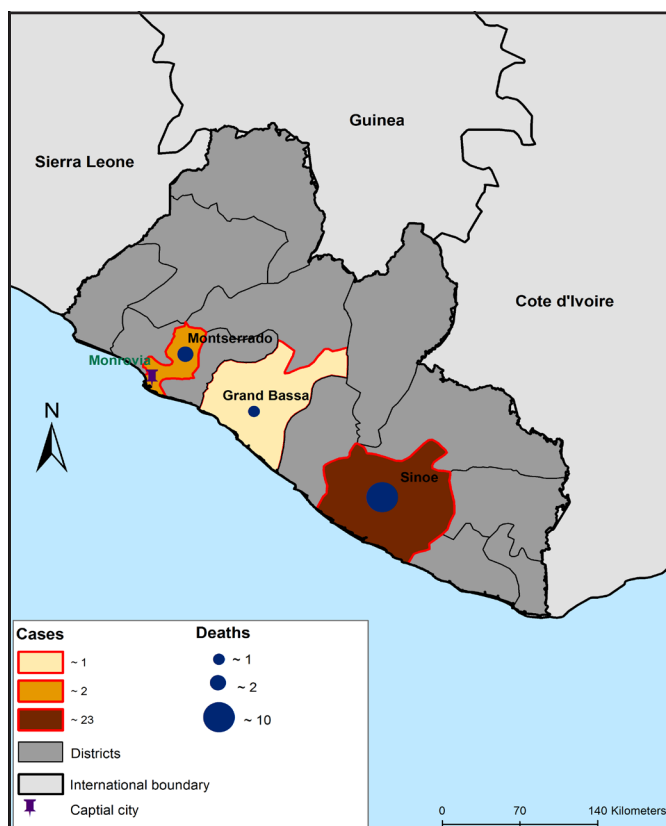
## Public health actions

- WHO has deployed a pathologist to conduct autopsy on the 2 corpses preserved in Montserrado, Monrovia.
- Aliquots of 11 specimens have been shipped to CDC-Atlanta for toxicological testing and the results are pending. MSF and WHO are making efforts to send aliquots to other laboratories for further investigations.
- The national and county epidemic preparedness and response committees continue to coordinate the response to this event. While the multidisciplinary national rapid response team is supporting outbreak investigation and response efforts in Sinoe county.
- The outbreak case definition has been finalized and disseminated to all facilities and community level. Heightened surveillance has been established at community and health facility levels including active case search in the affected and surrounding communities in Sinoe and Montserrado. Identification and listing of all the people who attended the funeral and contacts is ongoing.
- One hundred fifty six contacts are being followed from Sinoe (97) Montserrado (40), Grand Bassa (19), representing 100% contacts follow up rate.
- Health education exercise has been conducted in 5 schools while radio talk shows are being aired in Sinoe county.
- Community engagement and awareness on hygiene promotion are ongoing in 19 communities in Sinoe
- UNICEF is supporting scaling up of community engagement and surveillance activity at the community level in Sinoe.
- F J. Grante Hospital is serving as the main treatment facility in Sinoe while additional isolation facility has been prepared in Redemption hospital in Montserrado.

## Situation interpretation

In spite of the significant reduction in the number of new cases and deaths being reported, the undiagnosed acute illness and sudden deaths in Liberia remains a major concern, especially when the aetiology has not yet been identified. There is overwhelming circumstantial evidence pointing to a one-time exposure to a noxious agent. It is being widely postulated that ingestion of contaminated materials (food and/or drinks) during one of the funeral events: "wake keeping", funeral, burial, and "repass" is responsible. The intra-dermal haemorrhagic manifestation seen in the three patients is also bringing a new dimension to the investigation hypothesis. If the cause of this event is an infectious agent, incidence of secondary cases would increase several days after the first cluster, depending on the incubation period of the causative agent. The need for quick confirmation of the causative agent in this event is overriding. In the meantime, rigorous investigation and implementation of containment measures is critical.

Geographical distribution of cases of undiagnosed illness and deaths in Liberia, 23 April - 05 May 2017.



### Event description

The hepatitis E outbreak in the Salamat region of Chad has continued to show encouraging declining trend in the incidence cases since week 14 (week ending 09 April 2017). In week 17 (week ending 30 April 2017), 6 new cases of acute jaundice syndrome and no death were reported from Amtiman North (1 case), Amtiman South (2 cases) and Aboudeia (3 cases). This indicates a significant reduction in the weekly caseload compared to 41 cases reported in week 13 (week ending 02 April 2017). No new mortality has been recorded since 02 April 2017.

As of 30 April 2017, a cumulative of 1,390 cases of hepatitis E including 16 deaths (case-fatality rate of 1.2%) have been reported since onset of the outbreak in August 2016. A total of 63 pregnant women were affected, constituting 4.5% of the total case load; while 25% (4/16) of the fatality occurred in pregnant women. Fifty one percent of the cases were male while the most affected age group was 15 – 44 years, accounting for 47% of the total caseload, followed by 5 – 14 years at 35%.

Overall, 65 samples tested positive for *hepatitis E virus* in a laboratory in Holland (supported by MSF) and 33 at the Pasteur laboratory in Yaoundé. The outbreak of hepatitis E, confirmed in January 2017 and officially declared by the Ministry of Health on 14 February 2017, is still localized to Amtiman and Aboudeïa.

### Public health actions

- During week 17, delegates from the central Ministry of Health, Ministry of Water Affairs, MSF, and WHO undertook a mission to the affected districts to assess the outbreak situation and support the response. During the mission, a stakeholders' meeting was conducted with the leadership of Salamat district health delegation officers, religious leaders, civil society, the Chad Red Cross and Am Timam City Council, etc.
- Beginning 01 May 2017, Islamic Relief World (IRW) has taken over implementation of WASH activities with funding support from ECHO in partnership with UNICEF.
- Weekly technical coordination meetings are ongoing at the national level, attended by officials from the Ministry of Health, district health authorities, and partners including MSF, Red Cross Chad, Am Timam City Council, UNICEF, WHO, etc.
- Weekly coordination meetings of partners involved in the response are being conducted in Salamat under the leadership of the Health Delegate, with technical support from WHO.
- Red Cross volunteers, under the supervision of WHO, the Health Delegate, the Red Cross Health Delegates and the Aboudeia Health District, continue to carry out active case search in the communities in Am Timam and Aboudeïa.
- Treatment of water using chlorine continues. Approximately 900,000 litres of water have been treated and distributed during the reporting week.

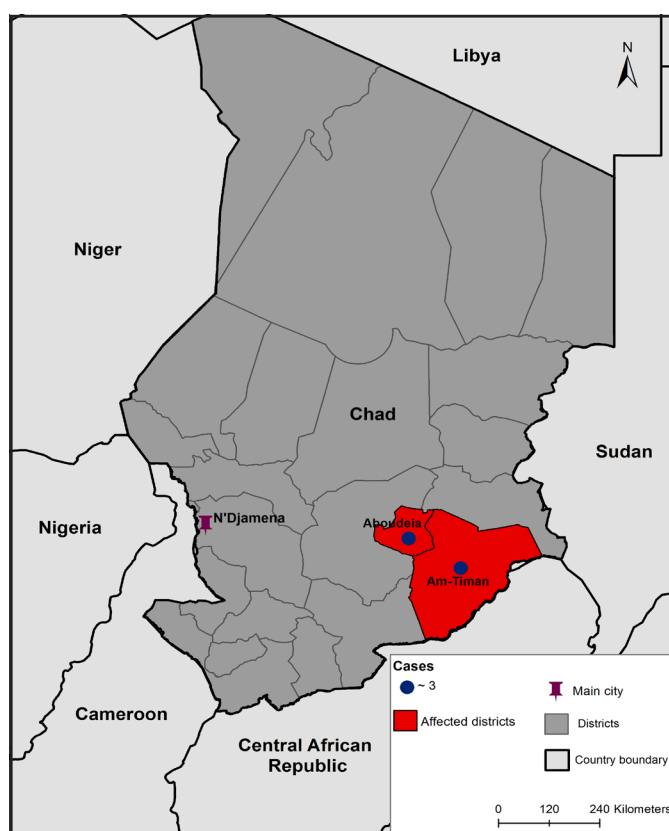
### Situation interpretation

The hepatitis E outbreak in the Salamat region of Chad is showing positive indications of being under control. Despite the challenges being encountered, the response to the outbreak appears to have started yielding results. The coming in of the Islamic Relief World to undertake WASH interventions in the communities is a welcome gesture. The Islamic Relief World is coming to fill in a critical gaps in the response to the outbreak. Success will heavily depend on selecting and implementing people-centred interventions with strong participation and involvement of the communities themselves.

The acute water shortage remains one of the important driving factors in the evolution of this outbreak and thus need to be addressed using short and medium-to-long term interventions. This responsibility should be shared between the partners and the government. In particular, the government should address the longer term developmental interventions including provision of potable water and good sanitation to the communities. WHO will continue to mobilize partners to support the Government in its efforts to combat the outbreak. WHO will also continue to advocate with the national authorities to improve sanitation services and water supply to the people

WHO will continue to mobilize partners to support the Government in its efforts to control the outbreak, with emphasis on provision of clean water to the affected populations in Amtiman and Aboudeïa. WHO will also continue to advocate to the national authorities to improve sanitation services and safe water supply in the affected areas.

Geographical distribution of Hepatitis E cases in Chad, August 2016 - 30 April 2017.



### Event description

This is an update on the outbreak of monkeypox in Likouala province located in the northern part of Congo Republic. The outbreak, notified to WHO on 01 February 2017 and formally declared by the Congo state authority on 13 March 2017 is still persisting. During week 16 (week ending 23 April 2017), 4 new suspected cases of monkeypox and zero death were reported from Betou district. As of 23 April 2017, a total of 70 cases including 4 deaths (case fatality rate of 5.7%) have been reported since onset of the outbreak on 27 January 2017. Children under 15 years of age are the most infected, accounting for 60% of the overall caseload; while the gender distribution is proportionate, with 51% of the cases being female. A total of 18 villages in 5 districts [Enyelle, Betou, Dongou, Impfondo, and Owando] have been affected.

Seven out of 43 samples collected and analysed at the Institut National de Recherche Biomédicale (INRB), Kinshasa tested positive for *monkeypox virus* by polymerase chain reaction (PCR) technique.

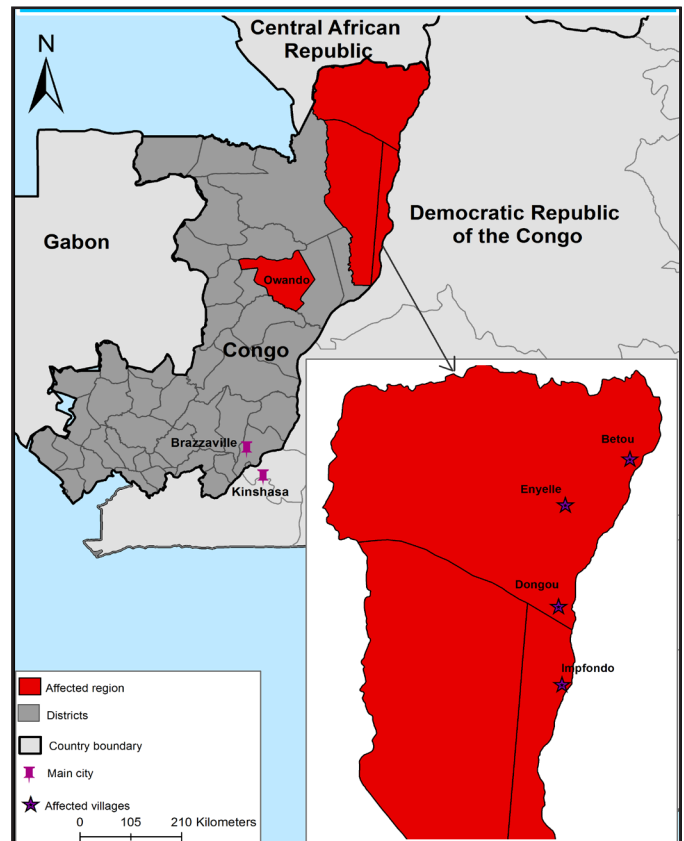
### Public health actions

- Health workers and community volunteers have been trained to strengthen surveillance and management of monkeypox and measles.
- Community mobilization through radio talk shows, screening of films and interpersonal communication are being conducted.
- Case management services are being provided at Bétou integrated health center, Moualé health center, CSI d'Enyellé, Impfondo base hospital and Manfouété. Partners including UNHCR, WHO, UNICEF and WFP are supporting case management.
- WHO conducted a rapid risk assessment on the 20 March 2017 to better orient the response
- The Ministry of Health with the support of a team from CDC, WHO and UNHCR undertook a multidisciplinary investigation missions.
- Partners including UNHCR, UNICEF and WHO are providing technical support to the Ministry of Health in implementing response measures such as strengthening local coordination mechanism, strengthening laboratory confirmation, and reinforcing social mobilization, infection prevention and control, case management and active surveillance including contact tracing and follow-up.
- WHO has deployed an epidemiologist in Likouala who continues to support the investigations and local response measures.

### Situation interpretation

The outbreak of monkeypox in Congo is insidiously continuing in the communities despite the low potential of the disease to propagate through person-to-person transmission. This trend depicts high transmission potential due to prevalent underlying exposure risk factors in the communities. The actual magnitude of the current outbreak is not clearly understood. The overall risk of the current monkeypox outbreak in Likouala province is therefore considered high at national level given the weak surveillance system coupled with the limited public health infrastructure. In addition, the risk of disease spreading to the neighbouring countries is also considered high in view of the high population mobility and the presence of refugees from Central African Republic, Democratic Republic of Congo, and Chad. Furthermore, logistical challenges and shortage of qualified human resources to provide adequate health services to the affected population remain a concern. The finalized response plan and in-country mobilization of partners to support the plan are critical to rapidly control the outbreak. In the long run, comprehensive strategies to strengthen the health systems need to be initiated. This will enhance the resilience of the health systems, in addition to building a strong preparedness and response capacity, thus avoiding such scenario in the future.

Geographical distribution of monkeypox cases in Congo, 27 January - 23 April 2017.



### Event description

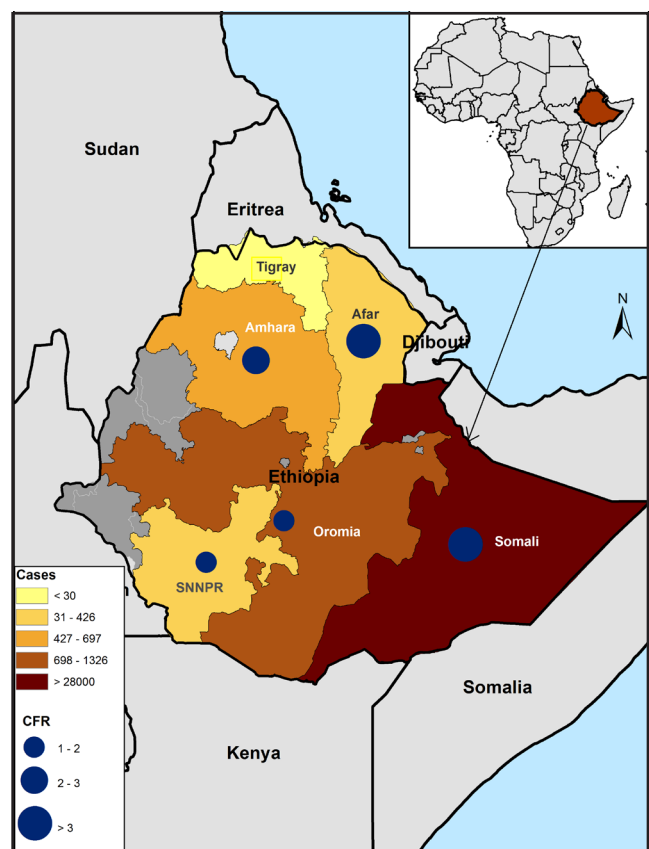
The effects of the El Niño-induced drought in Ethiopia continues in 2017, especially in the south-eastern part. The adverse effects include severe and prolonged water shortages, food insecurity associated with rising levels of severe acute malnutrition, increasing livestock deaths, and outbreaks of epidemic-prone diseases, collectively causing mass population displacements. The Somali region, the most affected part of the country, is currently experiencing a large outbreak of acute watery diarrhoea (AWD). The outbreak has been aggravated by the internal displacement of people and their livestock as a result of the drought, the arrival of refugees and their livestock from drought-affected border towns of Somalia and the recent influx of refugees from South Sudan.

The nutrition situation in Somali region has been worsening as the number of children under five years of age with severe acute malnutrition seen in the nutritional centres continue to increase. For instance, a total of 5,942 cases of severe acute malnutrition were reported in January 2017 alone. This is 56% higher than the cases reported in December 2016 and 120% higher than the cases reported in January 2016. Further assessment is ongoing to validate this finding as well as quantify the affected population.

The AWD outbreak situation has remained serious. In week 17 (week ending 30 April 2017), a total of 2,033 cases of AWD were reported from Amhara and Somali regions. Since January 2017, a total of 31,117 cases including 769 deaths (case fatality rate of 2.5%) have been reported from six regions of Somali, Oromia, Amhara, Afar, SNNP and Tigray. Ninety-one percent of these cases and 97% of the deaths were reported in Somali region alone.

In week 16 (week ending 23 April 2017), 33 suspected cases of measles were reported. As of 25 April 2017, a total 1,301 suspected measles cases were reported from across the country. Of these, 545 cases were confirmed [360 laboratory confirmed, 143 epidemiologically-linked and 42 clinically compatible].

Geographical distribution of acute watery diarrhoea cases in Ethiopia, 01 January - 30 April 2017.



### Public health actions

- The WHO AFRO Regional Emergency Director (RED) conducted a field mission to Ethiopia from 1 – 4 May 2017 to assess the situation on the ground, support the response to the humanitarian crisis and dialogue with the regional authorities and partners.
- The regional command post structure has been reinforced to provide leadership to the response operations. The inter-cluster coordination of health, water, sanitation and hygiene (WASH) and nutrition are operational at the national and regional levels.
- The updated 90 day AWD operational plan has been finalized and shared with key donors and humanitarian partners.
- Recruitment of more surveillance officers and monitors and oversight officers for the treatment centres are ongoing.
- Protocols for treatment of children with AWD and severe acute malnutrition (SAM) has been developed in collaboration between the health and nutrition clusters; and submitted for approval to the Regional Health Bureaus and the Federal Ministry of Health.
- The Regional Health Bureaus, with support from UNICEF and other partners, conducted mapping of SAM cases in the internally displaced persons (IDPs) sites.
- Laboratory supplies have been provided at both national and regional levels including 1,000 rapid diagnostic test kits and treatment kits.
- The Somali RHB has been supported to reinforce engagement of communities and other structures (religious, community, teachers and other leading figures) to promote chlorination of water at source, encourage household use of chlorine (aqua tabs/water guards), and promoting early treatment seeking behaviour.
- Up to 50,000 litres of ringers lactate intravenous fluids have been supplied: 30,000 litres delivered to RHB warehouse in Somali, 12,000 litres delivered to MSF Holland and 8,000 delivered to MSF Spain.

### Situation interpretation

Despite the decrease in number of weekly cases, the AWD outbreak situation in Somali region of Ethiopia remains serious, calling for concerted efforts and rapid scaling up of the ongoing response interventions. The risk of escalation of outbreak to other regions of the country and beyond is very high. The current water distribution system with a target of 5 litres per person per day remains insufficient. This is still way below the minimum Sphere standards of 15 litres per person per day. Over 1 million people in need of potable water have not yet been reached. In addition, monitoring of the quality of water being distributed by the private sector is still inadequate. The water shortages is being complicated by the high number and geographic dispersion of the displaced persons. There is also significant live-stock deaths. The declining trend in the number of confirmed measles cases observed in 2017 is encouraging. This declining trend is being attributed to the measles vaccination campaigns conducted in October 2015, April 2016 and then March 2017. Ethiopia implemented measles vaccination campaign targeting around 22.5 million children (9 – 59 months nationwide).

WHO and all the Partners continue to work with the Federal Ministry of Health (FMoH) and the Regional Health Bureaus (RHBs) to respond to the upsurge of AWD cases, as well as on the measles outbreak and the malnutrition situation.

**Event description**

The protracted humanitarian crisis in northern Nigeria continues to affect the lives of some 6.9 million people across Yobe, Borno and Adamawa, and 17 million people across the Lake Chad Basin. Over the past eight years, host communities and displaced persons have increasingly become vulnerable and adversely affected. Security incidents continue to occur in the form of suicide vehicle-based or person-based improvised explosive devices and insurgent attacks across Yobe, North Adamawa and Borno. The insurgency results into fatalities of civilian and the civilian joint task force (CJTF) personnel, loss of belongings, and destruction of infrastructures, and disruption of social services and livelihoods. Moreover, the ongoing military operations in southern Borno further complicate the already precarious security situation.

The Borno State Ministry of Health rapid response team (RRT) mechanism has been expanded under the umbrella of the Health Sector Coordination in readiness for the looming threats of meningitis outbreak already ongoing in several states of Nigeria. In addition, the rainy season set to start very soon has heightened the risk of increased cases of acute watery diarrhoea, cholera and malaria.

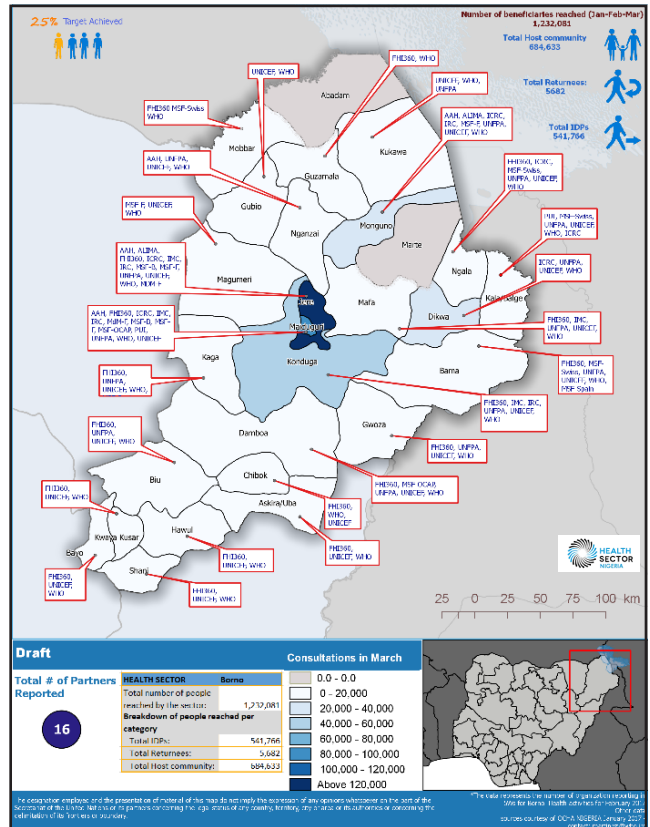
**Public health actions**

- In preparation for the meningitis outbreak, WHO has distributed rapid diagnostic test kits (Pastorex) to the health facilities. In addition, 80 health workers including clinicians, laboratory scientists and nurses from secondary health facilities in Borno and Yobe states have been trained on diagnosis and case management of meningitis.
- The Yobe state health authority and partners vaccinated 185,201 persons aged 9 – 15 years with meningitis A vaccine. In addition, more than 5,000 children aged 2-8 years were vaccinated with the routine pentavalent vaccines.
- The WHO hard-to-reach teams have received 50 health kits from UNICEF to scale up the community outreach activities in Yobe state.
- To ensure the early diagnosis of malaria, 1,000,000 rapid diagnostic test (RDT) kits were distributed in Borno, 341,582 in Adamawa and 24,582 in Yobe State.
- A total of 24 health workers including doctors, nurses, nutritionists and dietitians from the stabilization centres in Borno State attended a 6-day intensive training course on inpatient management of severe acute malnutrition with medical complications. The training was organised by Borno State Ministry of Health in collaboration with WHO. Similar trainings will be organised in northern Borno and Yobe.
- WHO and UNICEF are working out a strategy to control micro-nutrient deficiencies in Borno state. UNICEF will provide the supply of micro-nutrient powder while WHO, through its hard-to-reach teams, will distribute the products to children aged 6 – 23 months.
- WHO delivered 30 severe acute malnutrition kits to 10 health facilities in Borno state. Additional 50 kits have been ordered for distribution (in the coming months) to the stabilization centres in Borno, Yobe and Adamawa states.
- An evaluation of community resource persons (CORPS) activities is being conducted by WHO's health operation team in collaboration with the State Ministry of Health team to assess their performance, challenges and achievement.

**Situation interpretation**

The humanitarian needs in north east Nigeria remains huge although a lot of gains have been made to reach the people in need with aid, especially with the opening window of improved access. While the security situation is generally improving, it remains unpredictable in light of the changing modalities such as suicide bombings and frequent incursions. The meningitis outbreak going on in the other states is a cause for concern to the populations in the northern Nigeria who are already living in desperate situation. The preparedness and response measures being put in place by the state authorities and partners will go a long way to mitigate the consequences of the disease. The coming rainy season is also likely to increase the burden of cholera, malaria and other communicable diseases. Accordingly, health sector partners need to develop concrete strategies and interventions including prepositioning of essential health kits in high priority areas. In the bid to enhance the resilience of the health systems and avoid further deterioration, the health sector partners need to begin revitalising and reconstructing the damaged health facilities, equip them and support development of human resources capacity, among other things. Innovations such as provision of health services through mobile clinics and hard-to-reach teams should continue in order to fill in the gaps in the meantime.

Health sector partners presence in Borno state  
As of 31 March 2017



### Event description

The humanitarian situation in South Sudan has not changed much as fighting continues in many parts including Upper Nile and Yei, and tension building up in Pibor area. In addition, the economic situation continues to deteriorate with the devaluation of the South Sudanese pounds and inadequate liquidity in the Central Bank. All these factors constrain field operations, in turn impacting on provision of humanitarian aid to the populations in need.

Fresh population displacements have been reported in Kodok, Tonga and surrounding villages, where an estimated 25,000 people urgently need medical services. These displacements have been triggered by renewed fighting on the Western Bank of the River Nile with most of the displaced heading to Aburoc. The displaced population in Aburoc is estimated to swell to 50,000 within days. Fresh mass population movement have also been reported from Tonga northwards to Malakal protected camp and Aburoc. In the greater Lakes area, a humanitarian emergency team was ambushed while delivering vaccines to Wulu county, in preparation for the countrywide measles campaign that started 3 May 2017.

In week 18 (week ending 05 May 2017), completeness of weekly reporting for routine surveillance sites was 50% and 66% for the internally displaced persons (IDP) sites. Malaria accounted for 33% and 10% of all consultations in the routine surveillance and IDP reporting sites respectively. During the reporting week, suspect cholera outbreaks were being investigated in Kapoeta North, Kapoeta East, and Akobo West; while three samples from Yirol West (2) and Yirol East (1) tested positive for *Vibrio cholerae* Inaba on 26 April 2017. At least nine counties still have active cholera transmission. Since June 2016, 18 counties in 10 (31%) of 32 states countrywide have confirmed cholera outbreaks. A total of 7,386 cholera cases including 243 deaths (case fatality rate of 3.3%) have been reported. During the week, 17 suspect measles cases were reported countrywide. In 2017, 590 suspect measles cases including 4 deaths (case fatality rate of 0.7%) were reported from 20 counties. Five counties [Wau, Aweil South, Gogrial West, Gogrial East, and Juba] have confirmed measles outbreaks in 2017.

### Public health actions

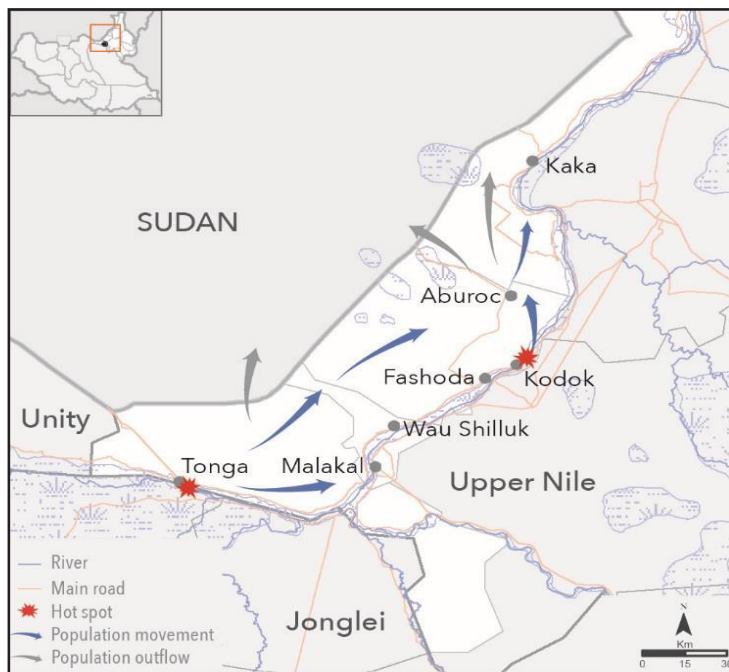
- The humanitarian country team continues to negotiate for humanitarian access to deliver the much-needed basic humanitarian needs in Aburoc.
- The first round of oral cholera vaccination campaign in Mingkaman was conducted from 25 April to 2 May 2017. The administrative coverage will be communicated.
- WHO and partners team have reached Parajok in Magwi county where they conducted rapid assessment and delivered lifesaving medicines to seven primary health facilities.
- In Lainya county, WHO is supporting a measles vaccination targeting 7,603 children under 59 months.
- In response to the famine crisis, WHO has expanded the surge team to 13, to be deployed to national and sub-national levels.
- The sub-national health cluster coordinator for Bentiu has been deployed to coordinate the famine response in the greater Unity.
- WHO has also deployed a team of technical officers to Mingkaman to support the cholera response.
- In response to the new alert in Kapoeta, WHO deployed a cholera investigation and case management team along with kits.
- During the week, the incident manager and his team conducted an induction meeting for the newly arrived surge team members and the WHO Country Office Program managers.
- A one week national measles campaign kicked off on 3 May 2017 in some state hubs e.g. Lakes, Central Equatoria, and Warrap.

### Situation interpretation

The humanitarian situation in South Sudan remains critical with increasing needs against shrinking humanitarian space. WHO, working with other humanitarian and health cluster partners, continues to negotiate and advocate for full humanitarian access while exploiting all windows of opportunity to deliver the much-needed lifesaving humanitarian services. The cholera outbreak remains a major public health concern with most cases currently being reported from the cattle camps. The integrated and comprehensive approach for cholera response has been adapted to mitigate the risk of cholera in these populations. In addition, cholera vaccines are being deployed in high-risk populations alongside conventional interventions. In response to the measles upsurge, follow-up measles campaign has kicked off on a low key due to inadequate liquidity in the Central Bank.

As the rain season is underway, it is anticipated that the cholera cases might rise. Consequently, the health and WASH cluster partners have been urged to enhance implementation of preventive interventions in high risk populations. To this end, cholera investigation, laboratory, and case management kits are urgently needed to ensure requirements are adequately and promptly met. The WHO state level famine operational response plans with tailored activities for the respective states need to be quickly finalized. It is also critical that administrative and security formalities be finalized to facilitate further deployments of the surge team members to support field operations.

Population movement in South Sudan, April 2017



# Summary of major challenges and proposed actions

## Challenges

- The ongoing event in Liberia still highlights the urgency to timely determine the aetiology of public health events in order to guide implementation of appropriate response interventions and allay the anxiety of the global community. While the national authorities in Liberia and partners have done extremely well in doing the prerequisites for the confirmation of the event, the aetiology of the event has not yet been established due to varying factors. This has kept the global public health and local communities anxious. The inability to confirm the suspected outbreak of anthrax in Guinea was also a missed opportunity that should not have occurred.
- Many countries in the region are not systematically documenting and reporting on public health events going on in their countries. In addition, many of the reports that are submitted vary significantly in content and format. A number of countries are not consistent in submitting situation reports. This goes along with the continued reluctance to share various data and information on ongoing events. All these factors make it difficult to ascertain the impact of various public health interventions, provide the right information that could be used to mobilize additional funds and inform the global public health community.

## Proposed actions

- WHO AFRO, Partners and the Member States should work towards increasing the number of advance diagnostic centres for various hazards at sub-regional level.
- WHO Country Offices should support the Ministries of Health to ensure systematic documentation and reporting of all new and ongoing public health events, based on the outbreak documentation checklist and templates provided. WHO AFRO urges all countries and other stakeholders to systematically share information on public health events in the region to [afrgooutbreakafro@who.int](mailto:afrgooutbreakafro@who.int)

# All events currently being monitored by WHO AFRO

Event	Country	Grade	Date of notification to WHO	No. of cases / suspected (confirmed)	No. of deaths	CFR (suspected) / %	Comments	Date of last sitrep
<b>OUTBREAK</b>								
Cholera	DRC	2	1 Jan 2015	38,855	1429	3.7		22/04/2017
Cholera	Tanzania	2	04 April 2015	25,157	390	1.6	Nineteen new cases reported in epi week 17. Temeke municipal council in Dar es Salaam region is the only district on the mainland still reporting suspected cholera cases for the past three consecutive weeks. However, one of the cases was reported from Zanzibar. In 2017, Zanzibar has reported 2 cases of cholera, one each in epidemiological weeks 16 and 17.	01/05/2017
Necrotising cellulitis/ fasciitis	Sao Tome & Principe	2	10 Jan 2017	1609	0	0	21 new cases were reported in week 17. The Country has authorized the deployment of six experts: two epidemiologists, one data manager, one infectiologist, one dermatologist and one plastic surgeon	03/05/2017
Meningitis	Nigeria	2	20 Feb 2017	10,695	919	8.6	A total of 823,340 doses of Men-C has arrived in the country. 423,340 doses delivered to Sokoto.	27/04/2017
Acute watery diarrhoea	Ethiopia	3	Beginning 2017	31,117	769	2.5	Somali region continues to be the worst affected region with 1,992 new cases in week 17 (24 – 30 April 2017)	02/05/2017
Hepatitis E	Chad	1	1 Sept 2016	1,390 (98)	16	1.2		16/04/2017
Cholera	Angola	1	4 Jan 2017	336	15	4.5		9/04/2017
Hepatitis E	Niger	-	12 April 2017	282	27	9.6	Patients (mainly refugees) in Diffa presenting with conjunctival jaundice were confirmed Hepatitis E positive. Diffa borders with Tchad where there is an ongoing Hepatitis E outbreak. On 19 April the MOH declared an outbreak.	03/05/2017
Cholera	Kenya	-	10 Oct 2016	235 (36)	4	1.7		16/03/2017
Dengue fever	Burkina Faso	-	29 Oct 2016	2743	21	0.8		12/04/2017
Typhoid fever	Zimbabwe	-	21 Nov 2016	2572 (95)	10	0.4		20/03/2017
Lassa fever	Nigeria	-	Dec 2016	283 (99)	56	19.8	Outbreak in 13 states	17/04/2017
Dengue fever	Cabo Verde	-	4 Jan 2017	124 (30)	0	0	Investigations by the deployed entomologist and virologist from IPD determined the recent circulation of the virus and the presence of <i>Aedes aegypti</i> as the vector.	16/04/2017
Cholera	South Sudan	-	Beginning 2017	7,246	229	3.16	Currently, 9 (50%) out of 18 counties ever affected (since June 2016) have reported cases in the past 4 reporting periods (weeks) and are considered to have active transmission	28/04/2017
Measles	South Sudan	-	Beginning 2017	573	4	0.7	A total of 17 suspect measles cases were reported from Juba, Tonj North, Wau and Aweil South	30/04/2017
Measles	Ethiopia	-	Beginning 2017	1301 (545)			Measles campaign targeting around 22.5 million children been conducted from February to current	02/05/2017
Monkeypox	Congo	-	1 Feb 2017	70 (7)	4	5.7	Reported from four different districts in Likouala Department and one district in Cuvette department	20/04/2017
Meningitis	Togo	-	03 Feb 2017	456 (28)	31	6.8		16/04/2017
Meningitis	Benin	-		373 (13)	32	8.6		16/04/2017
Monkeypox	Central African Republic	-	09 Feb 2017	47 (5)	0	0		19/04/2017
Measles	Guinea	-	08 Feb 2017	5780 (3951)	19	0.3		26/04/2017
Cholera	Mozambique	-	16 Feb 2017	1400	3	0.2		13/03/2017
Meningitis	Niger	-	19 Feb 2017	2423 (762)	151	6.2	A steady increase in cases has been seen since epi week 7. A vaccination campaign was launched by the MOH on 13 April 2017.	28/04/2017
Leishmaniasis	Cameroon	-	20 Feb 2017	48	17	35.4	Deployment of an expert to train people in managing cases and perform active screening in process	30/03/2017
Lassa fever	Togo	-	24 Feb 2017	12 (7)	4	33		19/03/2017
Meningitis	Cameroon		9 Mar 2017	527(32)	35	6.6		20/04/2017
Lassa fever	Sierra Leone	-		90 (7)	6	6.7 (86)		10/04/2017
Anthrax	Tanzania	-	11 Mar 2017	1	0	-		-
Malaria	Burundi	-	13 Mar 2017	2,888,252	1329	0.05	Outbreak declared by MOH	30/04/2017
Cholera	Malawi	-	15 Mar 2017	18	0	0		19/03/2017
Influenza like illness (H1N1)	Senegal	-	28 Mar 2017	118	3	2.5	Presence of the H1N1 influenza virus has been confirmed in 23/29 samples tested at IPD, Dakar.	10/04/2017
Monkeypox	Central African Republic	-	15 April 2017	1 (1)	0	0	New confirmed case reported in Mbaki district bordering Likouala province in Congo where an outbreak is ongoing. Previous 5 confirmed cases in February 2017 in Mbomou province	19/04/2017
Anthrax	Zimbabwe	-	15 April 2017	14	1	7.1	Detailed update above	25/04/2017
Anthrax	Guinea	-	16 April 2017	5	1	20	All cases eaten meat from same cow. 37 additional persons being followed up. Indepth investigation ongoing	22/04/2017
Monkeypox	Sierra Leone	-	17 April 2017	1 (1)	0	0	No new cases have been reported	
Cluster of unknown aetiology	Liberia	-	25 April 2017	30	13	43.3	Ebola has been ruled out as the cause of the event. Food, water, and other environmental parameters are being investigated	04/05/2017
Dengue fever	Cote d'Ivoire	-		27 (1)			A confirmed case of dengue fever was reported by Institut Pasteur Dakar on April 28, 2017	05/05/2017

Event	Country	Grade	Date of notification to WHO	No. of cases / suspected (confirmed)	No. of deaths	CFR (suspected) / %	Comments	Date of last sitrep
<b>EMERGENCIES</b>								
Humanitarian crisis	South Sudan	3					Detailed update given above	24/04/2017
Humanitarian crisis	Nigeria	3					Detailed update given above	15/04/2017
Humanitarian crisis	Ethiopia	3					Ethiopia's on-going drought, acute water shortages, population movements (IDPs) and rising malnutrition, increasing the spread of AWD/cholera. The situation has been re-graded as an internal WHO level 3 on 20/04/17.	02/05/2017
Humanitarian crisis	Cameroon	2						
Humanitarian crisis	Central African Republic	2						
Food insecurity	South Sudan, Kenya, Uganda, Ethiopia, NE Nigeria	-	23 Feb 2017				OCHA and IGAD estimate up to 22.9 million people are food insecure in the Horn of Africa.	
Floods	Zimbabwe	-	02 Mar 2017				The Government of Zimbabwe has declared the flooding situation affecting 36 districts in the country a national disaster, and has appealed for international assistance. They estimate 251 people killed and 128 others injured by various impacts of the floods. An estimated 100,000 people lack access to safe drinking water	06/04/17
Cyclone	Madagascar	-	07 Mar 2017				Flooding is persisting in the district of Maroantsetra. WHO is strengthening district capacity for coordination of interventions and monitoring of epidemic-prone diseases. US \$1 million allocated by CERF to partners in the health sector for the response to cyclone Enawo.	11/04/2017

Data is taken from the most recently available situation reports sent to WHO AFRO. Numbers are subject to change as the situations are dynamic.

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**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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