

# WEEKLY BULLETIN ON OUTBREAKS AND OTHER EMERGENCIES

Week 22: 27 May – 02 June 2017  
Data as reported by 17:00 02 June 2017

**0**

New event

**41**

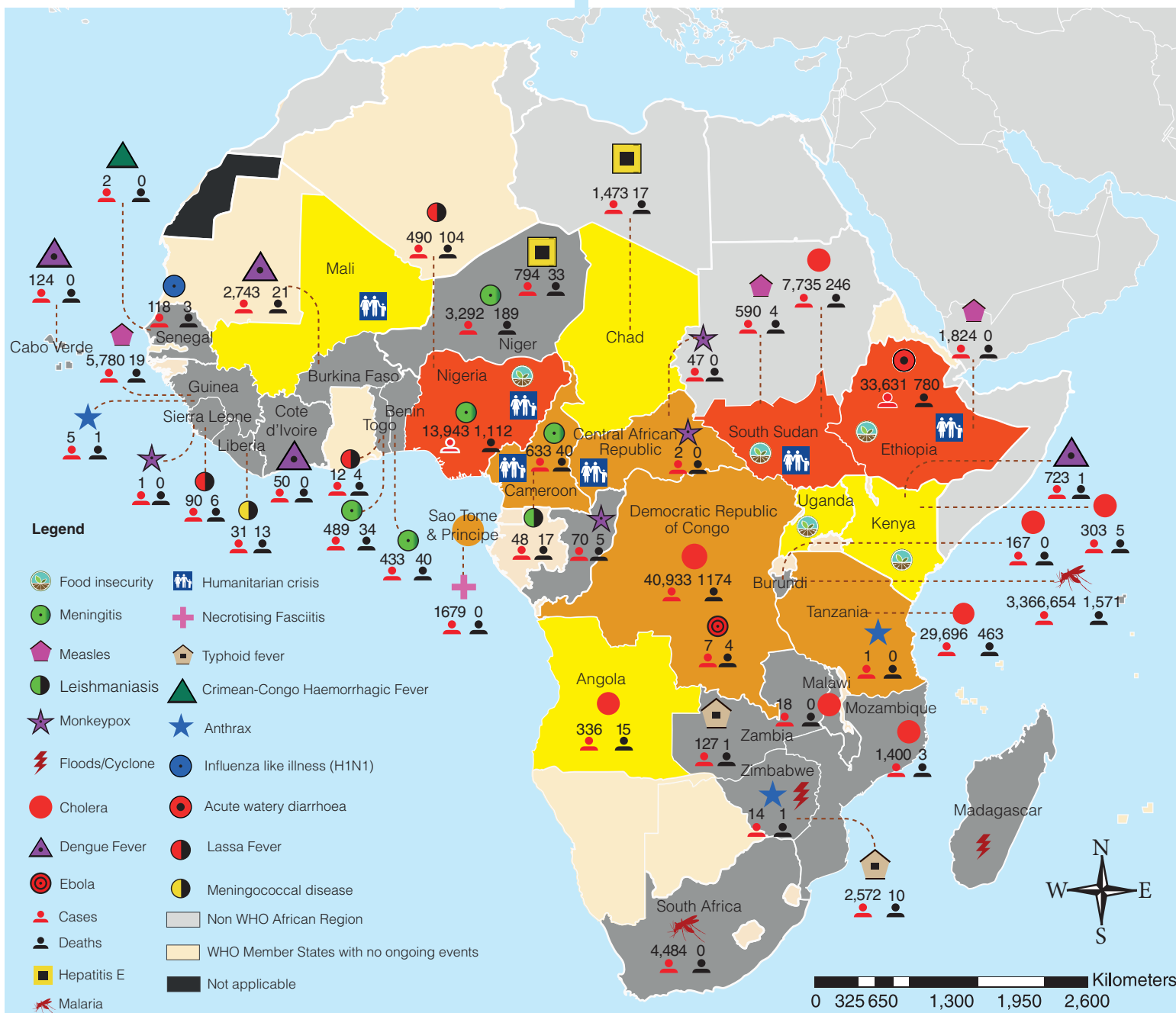
Ongoing events

**31**

Outbreaks

**10**

Humanitarian crises



**3**

Grade 3 events

**7**

Grade 2 events

**5**

Grade 1 events

**26**

Ungraded events

# Overview

## Contents

1 Overview

2 - 9 Ongoing events

10 Summary of major challenges and proposed actions

11 - 12 All events currently being monitored

- This weekly bulletin focuses on selected public health emergencies occurring in the WHO African region. The WHO Regional Office is currently monitoring 41 events: three Grade 3, seven Grade 2, five Grade 1, and 26 ungraded events.
- This weekly update focuses on key ongoing events in the region, the grade 3 humanitarian crises in Nigeria and South Sudan, the grade 2 outbreak of Ebola virus disease (EVD) in the Democratic Republic of Congo, outbreaks of dengue fever in Cote d'Ivoire, Lassa fever in Nigeria and an outbreak of typhoid fever in Zambia.
- 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 in the region.
- Major challenges to be addressed include:
  - Effective preparedness for prevention and rapid control of future outbreaks
  - The impact of the security situation on effective response

# Ongoing events

## Humanitarian crisis

## North-East Nigeria

### Event description

The protracted conflict in North Eastern Nigeria has resulted in a severe humanitarian, protection and food security crisis. More than 1.8 million people have been displaced and some 8.5 million people require humanitarian assistance across Borno, Yobe and Adamawa States. The Humanitarian Response Plan 2017 aims to reach 6.9 million people through 172 approved projects.

There has recently been high population movement as humanitarian partners continue to provide much-needed aid including food, water and healthcare services despite numerous challenges. On 27 May 2017, about 1,300 men, women and children arrived in Pulka. This is in addition to the 1,339 people who arrived unannounced from Banki on 22 May 2017, increasing the current population of Pulka to about 24,000 people. Currently, more than 42,000 displaced persons are settled in overcrowded and congested IDP camps in Banki with poor WASH conditions, exposing the vulnerable population to the risk of outbreaks. More refugees are expected to arrive in the coming days. Health services in the area consist of one WHO mobile health team for hard-to-reach areas, one UNICEF primary healthcare clinic and an MSF mobile team from Cameroon.

The food security situation is a growing concern. Recent estimates indicate that 44,000 people are in IPC Phase 5, 5,958,000 people are in IPC Phase 4 and 1,387,000 in IPC Phase 3. Forecasts for late summer estimate that 8.8 million people will be between IPC Phase 3 and 5.

A Member State briefing on the humanitarian situation in north eastern Nigeria was held in Geneva on 30 May 2017. Mr Edward Kallon, United Nations Humanitarian Coordinator for Nigeria, and Mr Peter Lundberg, United Nations Deputy Humanitarian Coordinator for Nigeria, Mr Patrick Youssef, Deputy Regional Director for Africa of the International Committee of the Red Cross (ICRC) and Ambassador Kadir Ayinla Audu provided an overview of the various dimensions of the crisis.

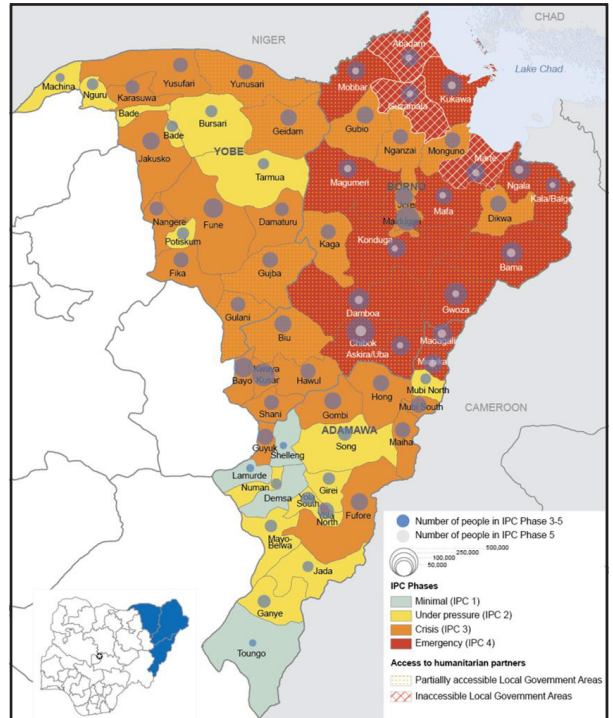
Early Warning Alert and Response System (EWARS): In Epidemiological Week 20 - 2017, a total of 17 out of 25 LGAs and 86 out of 169 reporting sites (including 20 IDP camps) submitted their weekly reports. Timeliness and completeness of reporting were 56% and 76% respectively at LGA level (target 80% respectively). Of the 25 indicator-based alerts received, 92% were verified. Out of the 11,915 reported cases of diseases, 1,980 (16.6%) were for confirmed malaria and 1,557 (13.1%) for acute respiratory infection.

The EWARS reports for epi week 20 showed the following: 1,980 cases of confirmed malaria; 33 cases of measles (93% in children <5 years old); 946 cases of acute watery diarrhoea (AWD) in Borno State, 96% from Gongulung PHC in Jere, where there is known poor sanitation – cholera kits, alkaline peptone water and Cary-Blair kits have been distributed to the affected sites for early detection of cholera; 7 suspected yellow fever cases (as yet unconfirmed) reported from Ngala LGA; 1,047 cases of SAM with 2 deaths from NYSC Borno camp clinic, Maiduguri and Magumeri MCH and one neonatal death from Biu township dispensary.

### Public health actions

- Health Sector Coordination: The Nigeria Humanitarian Fund (NHF) has been activated, which is a Country-Based Pooled Fund (CBPF) managed by OCHA in support of life-saving humanitarian and recovery operations. The NHF is a timely and effective tool to support humanitarian action in Nigeria. It allows public and private donors to pool their contributions to enable the delivery of humanitarian life-saving assistance to the most vulnerable people. Funds are directly available to a wide range of relief partners. These include national and local non-governmental organizations (NGOs), UN Agencies and Red Cross/Red Crescent Organizations.
- WHO is contributing to the planning and prioritization of humanitarian nutrition response activities with the Borno State nutrition sector and the Ministry of Health. It is currently extending support coverage to Yobe and Adamawa States.
- WHO is working with partners to detect and respond to diseases that are promoted or magnified by poor nutritional status.
- Malaria control strategies in North Eastern Nigeria are being prepared following the recommendation of the Global Malaria Programme. Malaria is known to account for over half of the disease load during the rainy season (from July to November most years) and situation models show that strong action in population-based malaria drug distribution, vector control and diagnosis and treatment would save 9,000 lives during this next rain season. Such action would require joint action by partners and multi-sectoral intervention. In addition, the early warning system weekly epidemiological report shows that malaria is the leading cause of morbidity and mortality in Borno state. WHO is working with partners to finalize the malaria preparedness plan in preparation for the rainy season, which is the peak period for malaria.
- The preparedness and response plan for cholera has been agreed. As part of the response, cholera diarrhoea kits have been distributed to hubs and NGOs, 2 in Maiduguri and one remains as a buffer. Additional kits are in the pipeline. As part of cholera preparedness, a team of 60 people were trained, including doctors, nurses, community health extension workers and environmental health workers from the LGAs and IDP camps categorized as cholera hot spots. Diarrhoeal kits have also been prepositioned in cholera high risk areas.
- The United Nations Central Emergency Response Fund (CERF) assigned US\$900,000 to WHO to increase mental health and nutrition services, and to expand hard-to-reach teams and the referral system.
- Rapid assessment conducted in Ngala LGA revealed poor WASH facilities with an increase in the number of cases of diarrhoea reported.
- WHO has increased the number of hard-to-reach teams in Borno state from 35 to 56. The WHO-supported hard-to-reach teams have

Food Insecure Population and IPC Phases (March – May 2017)



screened 102,598 children aged 6-59 months in Borno state from January 2017 to date for malnutrition. Of these, 5,819 (6%) were moderately acutely malnourished (MAM) and 1,215 (1%) were severely acutely malnourished (SAM). The acutely malnourished children were referred to the nearest CMAM sites for further care and treatment. The hard-to-reach teams also provide health services to populations in areas with difficult access.

- Services have been delivered by 580 community resource persons in communities, concentrating on the three most common childhood illnesses – malaria, acute respiratory infections and diarrhoeal diseases.
- As a result of the numbers of people moving in search of safety and livelihood, micro planning for and implementation of immunization campaigns are becoming more and more difficult. Between the April 2017 National Immunization Plus Days (NIPDs) and July 2017 NIPDs, Borno state is conducting a SIAD campaign along with 4-day Local Immunization Days (LIDs) targeting the new arrivals at the IDP camps and some host communities, with technical and financial support from WHO.

### Health priorities

- Regular nutrition screening in all the catchment areas
- Preparedness for cholera and malaria ahead of the rainy season
- Polio eradication and measles control
- Risk assessment of hepatitis E transmission at the Niger-Nigeria border
- Expansion and strengthening of the Early Warning Alerts and Response System (EWARS)
- Filling the critical gaps in healthcare services delivery through mobile and outreach teams
- Community mobilization on key health issues and public health risks
- Revitalization of damaged/destroyed health facilities
- Maintenance of supply chain of the essential medicines and supplies.

### Situation interpretation

The security situation remains volatile. Attacks on vulnerable population are expected to increase during Ramadan. There is currently a high population movement as new IDPs and refugees continue to arrive at IDP camps in Banki and Pulka, usually without warning.

As the rainy season approaches, the risk of malaria and cholera increases. To mitigate this, malaria and cholera preparedness plans have been developed. Cholera hot spots have been mapped and medicines prepositioned.



**Event description**

The security situation in South Sudan continues to worsen with the approach of the rainy season, with more areas becoming involved. On 22 May 2017, the President declared a unilateral ceasefire and the release of political prisoners as part of a national dialogue to find a peaceful solution to the current security situation.

In Greater Equatoria region a fact-finding mission to Gemieza, Terekeka and the Mangalla North Islands that took place on 24 May 2017 indicated that an estimated 12,000 internally displaced persons (IDPs) were in dire need of humanitarian assistance and had no covered accommodation. The humanitarian mission to Kajo-Keji town planned for 24 May 2017 to assess the situation of a reported 3,000 IDPs and the possibility of accessing IDPs in Liwolo from here, was postponed. All humanitarian response activities outside Yei and in Lainya and Wonduruba are on hold as a result of continued fighting in Yei and surrounding areas. The Juba-Yei road continues to be dangerous.

The food security situation in Duk county was reported as critical by REACH Food Security and Livelihoods Assessment, who recommend an urgent scale up in response. An estimated 28,500 IDPs originally from Urur, Ayod, Nyrirol and Fangak counties of Jonglei and Rubkona County of Unity, fled to Padiet, Pajut and Poltap in Duk as a result of food insecurity, conflict and lack of humanitarian services. Registration is underway in Payeul and Padiet and food distribution is planned to start later in the week ending 2 June 2017.

Duk County is also experiencing a cholera outbreak and WHO have deployed mobile teams and diarrhoeal disease kits (DDKs) to support cholera control efforts.

In Greater Upper Nile (Jonglei, Upper Nile and Unity) there are IDPs reported in Pibor town, Gumruk and surrounding villages, Likuangole and Kongor, who were allegedly displaced by Dinka youths. There are preparations for a fact-finding mission to the area. More IDPs continue to arrive in Bor Point of Care (PoC), mainly from Urur County. The IDPs, predominantly women and children, report multiple displacement since February 2017, after being caught up in fighting, during which incidents of sexual and gender-based violence took place.

In Malakal civilians hiding in the bush are too scared to return home and the authorities committed to starting the withdrawal of troops from Wau Shilluk, Kodok and other villages on the West Bank on 23 May 2017. Nearly 200 civilians have reportedly returned to Wau Shilluk and are requesting food, medicine, seeds and tools. The elderly (aged 70-80) and women and children have asked to be moved to Malakal PoC.

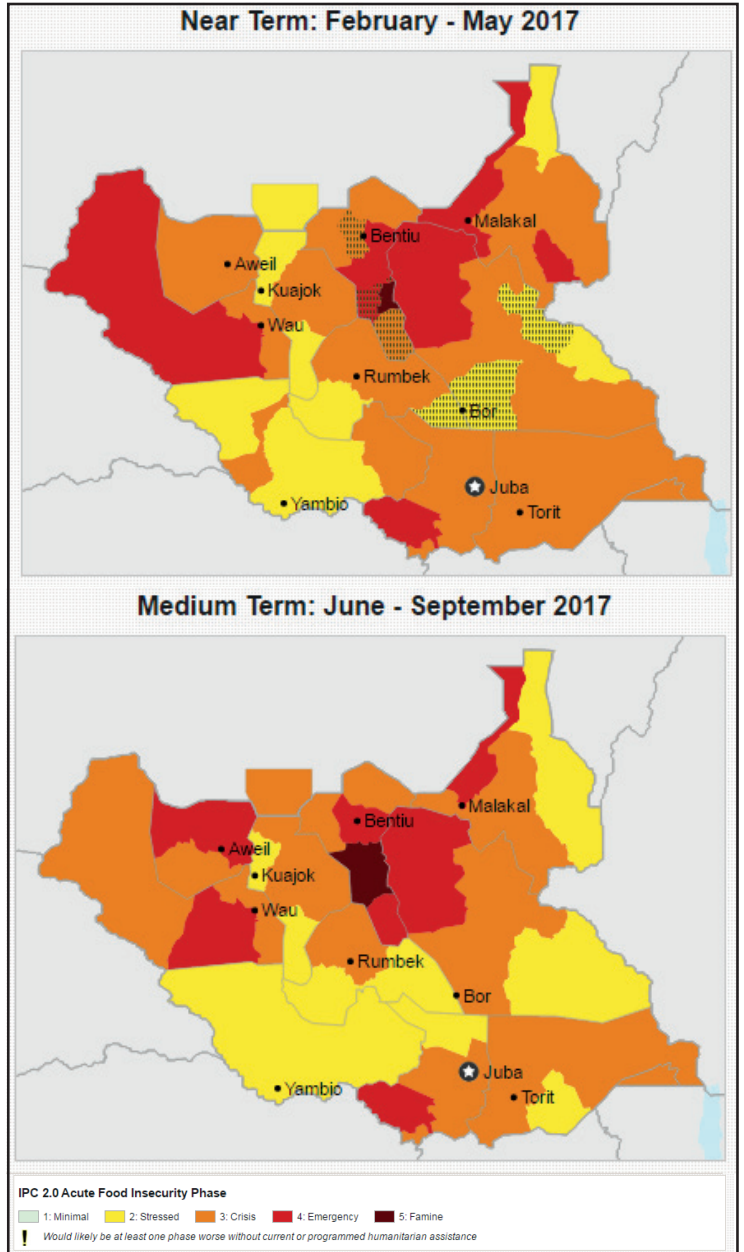
There are 700 refugees seeking protection at United Nations Mission to South Sudan Temporary Operating Base (UNMISS ToB) after shooting at a refugee camp in Maban on 22 May 2017. The local hospital in Bunj admitted seven people with serious injuries, one of whom later died. Another 13 injured people were admitted to an NGO hospital for treatment.

Inter-communal violence in Lakes continues, recently resulting in 13 dead and 18 wounded. Over 80 homes were reportedly looted during the clashes.

**Public health actions**

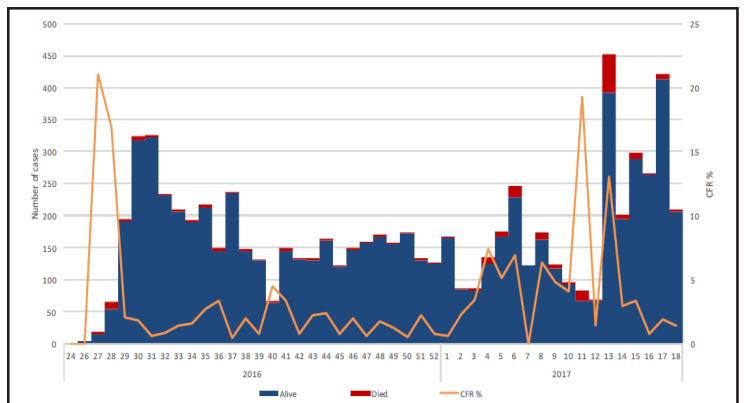
➤ Food distribution and an Inter-Cluster Response Mission (ICRM) are underway in Boang. The ICRM is taking place

Food Insecurity Crisis  
Near Term: Feb-May and Medium Term: Jun-Sept 2017



Source: FEWS NET (<http://www.fews.net/east-africa/south-sudan>)

Weekly distribution of cholera cases in South Sudan



Source: WHO country sitrep

at the same time as general food distribution and WASH and protection activities that are being undertaken by a WFP/UNICEF rapid response mission (RRM) partner. The ICRM team will provide vaccination and primary healthcare, along with nutrition (screening and distribution of severe acute malnutrition (SAM) and moderate acute malnutrition (MAM)) services.

- WHO has provided Interagency Emergency Health Kits and other assorted drugs to health partners, Nile Hope and Save the Children who are part of the mission to Boang.
- In Unity state almost 800 IDPs were transported to Megenis from abroc IDP site, following the HCT's agreement that humanitarian organizations support the relocation of vulnerable IDPs. The health cluster conducted pre-departure checks due to the ongoing cholera outbreak and FSL and WASH provided BP5 and water. Humanitarian partners are reviewing lessons learned from the exercise and protection partners are currently sharing information with IDPs in Aburoc to help them take fully informed decisions about any future movements and screening the population to identify the most vulnerable.
- Rumbek Hub: WHO conducted a field investigation in Rumbek North area where a cholera outbreak alert was reported. The outbreak was investigated, samples taken for confirmation and healthcare workers were trained in case management. The State cholera contingency plan was updated and shared with partners for implementation. The WHO office donated Diarrhoea Disease Kits (DDKs) and assorted drugs and gloves for the health facility in the area of the reported outbreak.
- Torit Hub: The WHO teams are on the ground following the outbreak of cholera in Kapoeta, where 529 cases have been line listed with 7 deaths (CFR=1.3%).
- Kuajok Hub: The WHO teams are deployed to Tonj East to provide support for the ongoing cholera outbreak in Tonj East where 543 cases and 23 deaths have been recorded so far. Samples have been taken and results are awaited.
- Yambio Hub: 48 participants are being trained for 2 weeks on the Integrated Management of Adolescent and Adult Illnesses (IMAI) in HIV/AIDs. These health workers (clinical officers, nurses, doctors, pharmacy assistants, counsellors and data entry clerks) are drawn from health facilities all over Greater Western Equatoria. WHO and SMoH have put in place preparedness plan for Ebola, which was recently confirmed in the neighbouring country of DRC.
- Malakal Hub: An interagency assessment to Kodok and Wau Shiluk on 24 May 2017 by river took place without any security incidents. The New Fashoda State Governor guaranteed the humanitarian agencies' safety and apologized for damage to agency property caused by SPLA soldiers. The State government asked OCHA to resume humanitarian services.



OCV campaign in Bentiu PoC site, former Unity State. Photo: WHO©

### Situation interpretation

The continued fighting among the warring factions, the intercommunal cattle rustling and in-fighting, the social unrest due to economic difficulties, and the political tensions in South Sudan have created a very complex situation in the country. The humanitarian consequences of this complex situation have been huge. At the same time, the humanitarian response in South Sudan has become a very risky venture, with attacks and ambushes targeting aid workers, both in their compounds and on the road, now common.

As the rainy season approaches, an increased incidence of acute watery diarrhoea is expected. WHO and partners have preparedness plans in place in spite of the challenges around human resources and access. It is anticipated that floods during the rainy season from June until at least October 2017 will damage WASH infrastructure and that safe water sources will be contaminated. Priorities will continue to be responses to outbreaks, including cholera and malaria and activities to repair and replace housing, especially in camps.

### Event description

On 4 May 2017, the Muchinga provincial health authorities were notified of a typhoid fever outbreak in Mpika district located in the north east of Zambia. The onset of the outbreak was on 6 March 2017 and as of 3 May 2017, there have been a cumulative 127 cases and one death (case fatality rate, CFR: 0.8%). Substantial reductions in the weekly case incidence have been observed since the outbreak peaked during week 18 (ending 5 May 2017).

The outbreak was initially localized to the Tazara urban health centre (UHC) catchment area; however, cases are now geographically distributed across 5 other catchment areas within Mpika district. These include Chitulika urban health post (UHP), Kamwanya UHP, Mapoma rural health centre (RHC), Mpepo RHC and Mpika UHC.

While all age-groups have been affected, children aged between 0–14 years are disproportionately affected, accounting for 53% of cases.

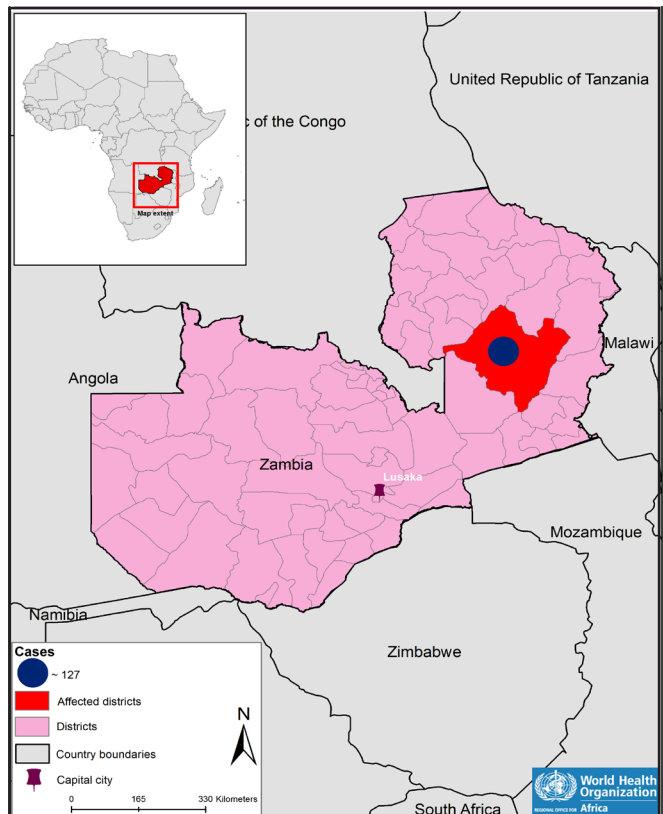
### Public health actions

- The Zambian Ministry of Health is leading the response with the support of partners.
- An environmental investigation was conducted by the provincial and district RRTs, with the support of WHO. Many drinking water sources were found to be unprotected, shallow wells. Of 28 water samples subjected to bacteriological testing, 21 were contaminated with faecal coliforms.
- Door to door campaigns, community meetings, community radio spots and schools have been used to reach at least 10,801 people with health education messages.
- WHO is providing technical support for surveillance activities to strengthen case detection at health facilities and active case finding at community level.
- Provincial and district staff continue to trace and monitor contacts.
- 1,717 chlorine bottles have been distributed.
- Case management guidelines have been provided to health workers to ensure that all cases are treated appropriately. Cases are treated with ciprofloxacin/cefotaxime while contacts are given chloramphenicol as prophylaxis.

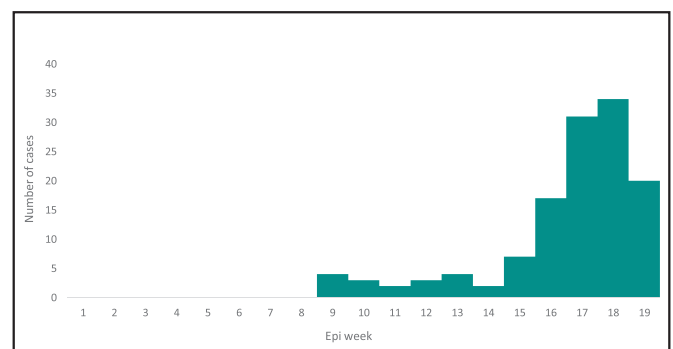
### Situation interpretation

The Zambian Ministry of Health, with the support of partners, has mounted a rapid and effective response since the beginning of the outbreak. The CFR remains below 1%, as is expected when access to a prompt and appropriate antibiotic regimen is available. While there appears to be the beginnings of a decline in cases, it is equally likely that cases may continue to surge in the coming weeks if a strong response is not maintained. The re-opening of schools in the coming weeks heightens the urgency of the situation as the school environment will likely increase the number of contacts. It is therefore critical to quickly address the challenges in the lack of potable water supply in the affected communities. Other support is required for outbreak logistics and consumables such as drugs, laboratory reagents, knap sack sprayers and disinfectant for pit latrines.

Geographical distribution of typhoid cases in Zambia, 04 May - 02 June 2017.



Weekly distribution of typhoid cases in Mpika District, Zambia 2017





**Event description**

WHO, UN Agencies, international organisations, non-governmental organisations (NGOs) and partners continue to support the Ministry of Health in the DRC to investigate and respond to the outbreak of EVD confined to Likati Health Zone, Bas Uele Province in the north-east of the country.

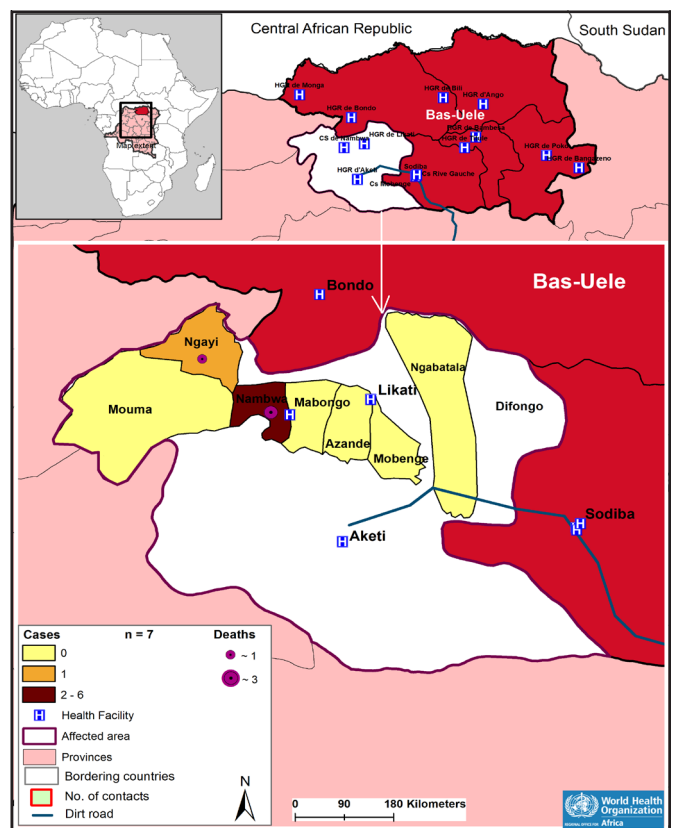
Two cases have been confirmed as positive for EVD by serology this week. These two cases were previously reported as suspected cases and are part of known transmission chains. Their contacts have been followed up. The date of the last confirmed case reported remains as 11 May 2017. Since the beginning of the outbreak on 21 April 2017, 4 confirmed and 3 probable cases have been reported, of which 4 have died (case fatality rate, CFR: 57%). Enhanced surveillance activities are ongoing in affected communities, and new suspected cases continue to be reported and screened. Predictive modelling suggests there is a low and decreasing probability of further cases; however, it is critical to remain vigilant.

Concurrently, differential diagnoses and laboratory investigations are ongoing into the causes of illness in persons who remain sick but have tested negative for EVD, and into the unusually high mortality in the local swine population in eight villages in the Nambwa Health Area.

**Public health actions**

- An interagency rapid response team was deployed to Likati Health Zone to support the immediate investigation of the outbreak and rapidly establish key pillars of the response at the epicentre. This team is coordinated by the DRC Ministry of Health and supported by WHO, GOARN, MSF, UNICEF, ALIMA, IFRC, WFP, UNHAS and other partners.
- Case and contacts identification continues through active search methods.
- The Institut National de Recherche Biomédicale (INRB) has enhanced capacity to test for EVD and other pathogens through the establishment of mobile laboratories in Likati town and Buta. Testing for EVD at INRB has also been supported by an individual from Centre Hospitalier de l'Université Laval, Canada. Support for confirmatory testing of EVD patient specimens was provided by the Centre International de Recherches Medicales (CIRMF) in Gabon to corroborate results.
- 583 contacts were registered, all of which have now completed 21 days observation or were identified as contacts of non-cases no longer requiring follow-up.
- The established Ebola Treatment Centre (ETC) continues to admit suspected cases under a support protocol developed by MSF, ALIMA and MSP. Support is being provided to survivors to prevent potential sexual transmission of EVD.
- Contingency protocols for possible ring vaccination with rVSV-EBOV vaccine has been established; however, these may not be acted on if there is no further transmission linked to a known transmission chain.
- Infection prevention and control (IPC) and Water, Sanitation and Hygiene (WASH) activities continue, with personal protective equipment (PPE) and other resources having been distributed to health facilities in affected areas, and members of the Red Cross have been trained in preparation of chlorine solutions, home disinfection and safe burial.
- Social mobilisation, community engagement and risk communications activities are ongoing with campaigns to raise awareness and encourage early presentation through radio, churches and markets, and distribution of communication materials in Lingala; French and Swahili materials are being designed. This past week, awareness raising was completed in four schools, reaching 600 attendees.
- Airlifts to affected area have restarted after a period of maintenance, with logistic support provided by specialists deployed to bases established in Kinshasa, Buta and Likati.
- The Government of the DRC has developed a comprehensive national response plan, and requested WHO's support to strengthen the response to the outbreak, and coordinate the support of major UN, NGO and International Organizations, and partners in GOARN. A donor alter of \$10 Million was issued to support critical response activities.

Geographical distribution of Ebola Virus Disease cases in Democratic Republic of Congo, 22 April - 02 June 2017.



**Situation interpretation**

Despite logistic challenges brought on by the temporary grounding of airlift support this past week, the DRC Ministry of Health together with WHO and partners have worked tirelessly to establish local capacity to respond and control the outbreak. The absence of newly confirmed cases since 11 May 2017 and completion of follow-up for all contacts without evidence of ongoing transmission, are promising signs. Nevertheless, it remains imperative that enhanced surveillance and response activities continue until such time as sufficient period has passed without new cases, and survivors and suspected cases have been definitively cleared of infection to negate the risk of further transmission. Equally important is the ongoing investigation and response to other causes of illness in human and animal populations in the area, and the strengthening of local health systems to adequately respond to these threats, and to any future outbreaks of EVD. WHO commends the Ministry and partners for their ongoing efforts.



### Event description

On 22 April the index case for a dengue fever outbreak in Abidjan presented at the Cocody University Hospital Center. This case was confirmed positive on 28 April 2017 by the Institut Pasteur de Côte d'Ivoire laboratory. On 3 May, the Côte d'Ivoire Ministry of Health and Public Hygiene notified WHO of an outbreak of dengue fever in the Cocody-Bingerville health district of Abidjan. As of 24 May, there have been 101 suspected cases, 33 confirmed cases and no deaths. Of these confirmed cases, 22 were positive for dengue serotype 2, and 5 were positive for dengue serotype 3. The laboratory also reported evidence of co-infection with yellow fever in six cases, confirmation is ongoing. In the most recent week (between 17 and 24 May) 18 new and 3 confirmed cases were reported. No cases were reported from outside Abidjan. Suspected cases have been reported from six of the ten communes of Abidjan: Abobo, Bingerville, Cocody, Port-Bouet, Treichville, and Yopougon, with Cocody accounting for over 80% of cases. Cases have fallen gradually since week 17 when there were 30 suspect cases and 9 confirmed cases reported.

### Public health actions

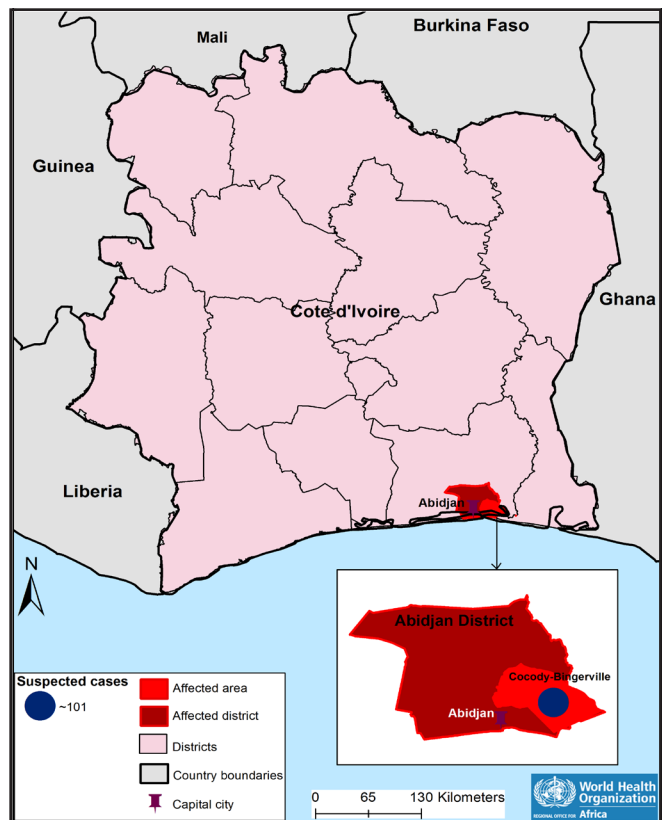
- Epidemiological surveillance continues (including active case finding and dissemination of the case definition).
- Entomological investigations are ongoing in order to assess the different levels of epidemic risk through the capture of mosquitoes (larvae and adults) for virological analyzes. A weighted Breteau Index (BI) estimating the number of mosquito larvae positive containers per 100 houses has been put at 187, which suggests a high epidemic risk.
- The entomological situation is being managed through visiting and treating dwellings (over 30,000 have been visited); distributing insecticide-treated mosquito nets to households; the elimination of breeding sites such as used tires-nearly 10,000 have been collected and destroyed; and fumigation in Cocody and other areas.
- Communication efforts include: dissemination of dengue awareness materials; community sensitization of prevention measures; media broadcasting on TV and the internet; and awareness raising in places of worship.

### Situation interpretation

Dengue fever is a mosquito-borne viral infection which usually causes a mild flu-like illness but occasionally develops into a potentially lethal complication called severe dengue. The majority of dengue virus infections are asymptomatic, which is an indication that the burden of the current outbreak in Côte d'Ivoire may be much larger than that actually seen. Dengue viruses are primarily maintained by a human-to-mosquito-to-human cycle. The primary vector is the *Aedes aegypti* mosquito, which is highly adapted to human habitations. Risk factors are influenced by local spatial variations of rainfall, temperature, relative humidity, degree of urbanization and quality of vector control services in urban areas. According to the WHO Global Strategy for Dengue Prevention and Control 2012-2020, the coastal regions of Côte D'Ivoire, including Abidjan, are at high risk of dengue transmission, having a tropical climate and with urban and semi-urban areas. The outbreak may also have occurred and been perpetuated by the ongoing long rainy season which occurs annually between March and July.

The high entomological indices observed during the rapid assessment conducted in the affected community illustrate the high transmission potential of the disease. However, the experience of managing previous dengue fever outbreaks, existing laboratory and entomological capacities, and the existence of a multidisciplinary team of experts have been instrumental in mounting a rapid response to this outbreak. Close follow-up continues to be required to contain the outbreak transmission.

Geographical distribution of dengue fever cases in Cote d'Ivoire, 22 April - 24 May 2017.



**Event description**

Lassa fever is endemic in Nigeria with yearly seasonal outbreaks reported in the last 3 years. Since early December 2016, Nigeria has experienced an ongoing outbreak. As of 19 May 2017, a total of 490 cases (168 confirmed, 14 probable and 308 suspected) have been reported from 16 states. Of these, 104 cases have died (case fatality rate, CFR: 21%), including 73 deaths in confirmed and probable case groups collectively (CFR 40%).

During reporting week 20 (ending 19 May 2017), 3 new suspected cases and 5 confirmed cases were reported from 5 states. In 6 states to date, a period of 42 days has elapsed since the last confirmed cases and the outbreak was declared over in these areas.

In March 2017, a confirmed case was detected in Borno state – the epi-centre of the humanitarian crisis. This is the first time Borno state has reported a confirmed case since 1969 when the disease was first detected in Lassa village.

**Public health actions**

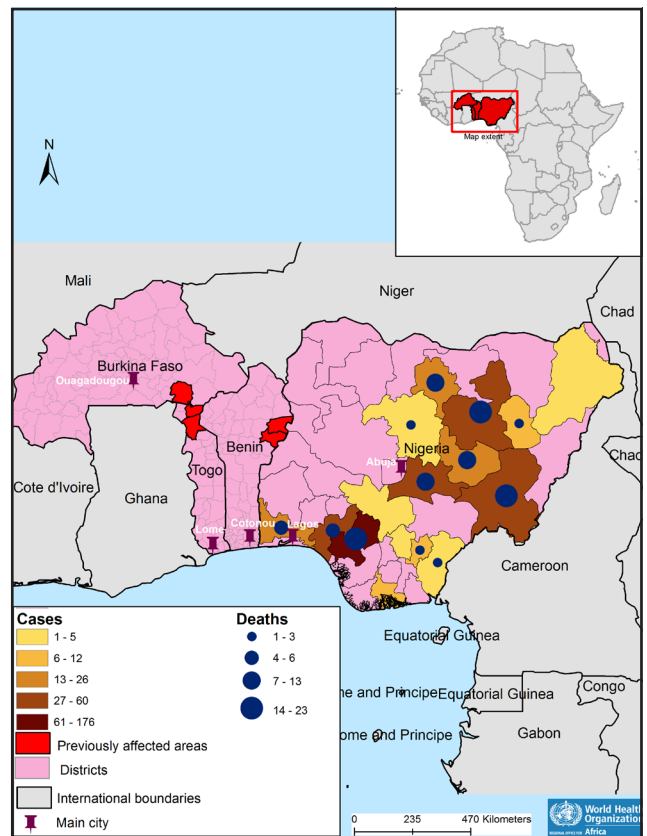
- The Nigerian Centres for Disease Control (NCDC) has convened a ‘Lassa Fever Response Working Group’ to coordinate in-country operations in conjunction with partners (WHO, CDC, UMB and AFENET).
- Active surveillance and contact tracing is ongoing in the affected states; however, effectiveness of the surveillance varies as the states have different levels capacity.
- Cases were/are being treated at identified treatment/isolation centres. Ribavirin and PPE has been provided to affected states.
- Infection prevention and control (IPC) materials have been distributed to all affected states.
- Case confirmation is completed in two references laboratories: Lagos University Teaching Hospital and the Lassa Fever Research Center, Irua Specialist Hospital.

**Situation interpretation**

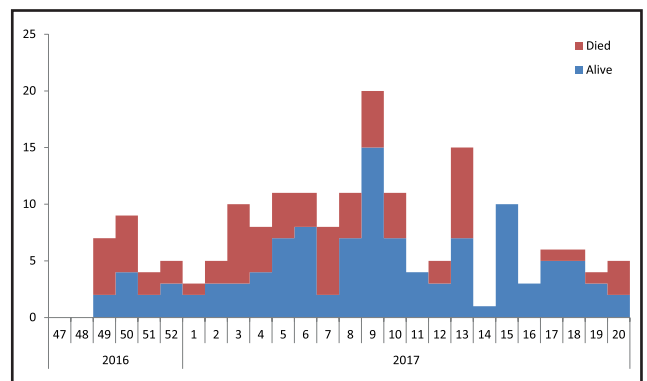
Lassa fever is endemic in West Africa. In Nigeria, seasonal outbreaks occur yearly between December and June; however, in recent years cases have been reported from non-endemic states. In 2016, 273 suspected cases and 149 deaths (CFR: 55%) were reported from 23 states. Benin, Burkina Faso and Sierra Leone and Togo have also reported outbreaks in 2017. The frequency and magnitude of these events in Nigeria and neighbouring countries is a concern; exacerbated by the ongoing humanitarian situation and intense population movements within the region. Varying capacity between states is also impacting the effectiveness of response efforts.

These outbreaks highlight the need to strengthen prevention, preparedness and readiness efforts for Lassa fever in all West African countries. It is critical to strengthen cross-border collaboration and to develop a road map for prevention and control of future outbreaks, and mitigate the high fatality rates – partly attributed to delayed reporting and treatment.

Geographical distribution of Lassa fever cases in Nigeria, December 2016 - 19 May 2017.



Weekly distribution of Lassa fever cases in Nigeria



Source: NCDC

# Summary of major challenges and proposed actions

## Challenges

- Effective preparedness for prevention and rapid control of future outbreaks

The need to develop appropriate preparedness plans for diseases is highlighted this week in a number of countries with varying capacity to effectively respond. For example for malaria and Lassa fever in Nigeria as well as cholera in South Sudan. These outbreaks highlight the need to strengthen prevention, preparedness and readiness efforts to mitigate high morbidity and mortality rates which are partially attributable to delayed reporting and treatment. These are essential to be able to identify an outbreak early and mitigate their impact.

- The impact of the security situation on effective response

The security situation remains volatile in both Nigeria and South Sudan. Attacks on vulnerable populations are expected to increase during Ramadan. At the same time, the humanitarian response is often risky, with attacks and ambushes targeting aid workers, both in their compounds and on the road, now common.

## Proposed actions

- WHO country offices should support Ministries of Health to develop and implement disease specific plans. WHO Regional office can support country offices by developing templates for response plans including appropriate costings and budgets. The funding and effective implementation of these response plans should be a priority.
- The safety of individuals, both vulnerable populations and humanitarians responders is paramount. WHO and other organisations should continue to advocate with national authorities for increased protection for response activities.

# 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	40,933	1174	2.9	551 new cases and 6 new deaths were reported in epi week 20. Free access to medical treatment continues to be provided by the Ministry of Health with the support of partners.	27/05/2017
Cholera	Tanzania	2	04 April 2015	29,696	463	1.6	A total of 55 new suspected cases and no new deaths were reported in epi week 21. There were 35 cases reported in Tanzania mainland and 20 cases reported in Zanzibar.	21/05/2017
Necrotising cellulitis/ fasciitis	Sao Tome & Principe	2	10 Jan 2017	1679	0	0	Twenty-eight patients have benefitted from reconstructive surgery (skin grafting).	24/05/2017
Meningitis	Nigeria	2	20 Feb 2017	13,943	1112	8	<i>Neisseria meningitidis</i> serogroup C remains the predominant (72.7%) cause of meningitis amongst those who tested positive. The first test ever of PCR diagnosis of bacterial meningitis was successfully carried out at the National Reference Laboratory in Abuja	14/05/2017
AWD	Ethiopia	3	Beginning 2017	33,631	780	2.3	Somali region continues to be the worst affected region with ninety-one percent (91%) of these cases and 99% of the deaths. Overall decline continues in Somali region to 535 cases in week 20 from 4175 in week 12.	21/05/2017
Hepatitis E	Chad	1	1 Sept 2016	1473 (98)	17	1.2	The outbreak was officially declared by the Minister of Health. A joint urgent response plan has been finalized amongst partners and MoH. A WASH expert has been deployed. A new area, Haraze has notified of 1 suspected case.	28/05/2017
Cholera	Angola	1	4 Jan 2017	336	15	4.5		9/04/2017
Hepatitis E	Niger	-	12 April 2017	794	33	4.2	The MoH and partners continue to intensify WASH activities. CERMES have requested support to reinforce laboratory capacity.	1/06/2017
Cholera	Kenya	-	10 Oct 2016	303 (36)	5	1.7		19/05/2017
Typhoid fever	Zimbabwe	-	21 Nov 2016	2572 (95)	10	0.4		20/03/2017
Lassa fever	Nigeria	-	Dec 2016	490 (189)	104	21	16 states have been affected so far. The outbreak is currently active in 10 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	7,735	246	3.2	Currently, 9 (47%) out of 19 counties ever affected (since June 2016) have reported cholera cases in the past 4 reporting periods (weeks) and are considered to have active transmission	05/05/2017
Measles	Ethiopia	-	Beginning 2017	1824 (920)			A total of 50-laboratory confirmed measles outbreaks have been reported up to week 19, out of which 3 of them are currently active.	14/05/2017
Monkeypox	Congo	-	1 Feb 2017	70 (7)	5	7.1	Reported from four different districts in Likouala Department and one district in Cuvette department	23/04/2017
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
Meningitis	Niger	-	19 Feb 2017	3292	189	5.7	Overall downtrend continues. Particular emphasis is placed on the continuation of free and adequate case management. There is also significant number of serogroup NmX (18%) not preventable by vaccination.	3/06/2017
Meningitis	Niger	-	19 Feb 2017	3231 (1063)	187	5.8	Particular emphasis is placed on the continuation of free and adequate case management. There is also significant number of serogroup NmX (18%) not preventable by vaccination.	19/05/2017
Leishmaniasis	Cameroon	-	20 Feb 2017	48	17	35	According to exchanges with the WHO country office, it is likely that the diagnosis for the outbreak may return to eruptive fever, with negative Leishmaniasis results obtained.	30/03/2017
Lassa fever	Togo	-	24 Feb 2017	12 (7)	4	33		
Malaria	Burundi	-	13 Mar 2017	3,366,654	1571	0.05	An upward trend has been recorded during the last 5 weeks and still above the epidemic threshold. The Ministry of Health has developed an accelerated response plan. UNICEF has donated 4,194,500 doses of antimalarial medication.	29/05/2017
Monkeypox	Central African Republic	-	15 April 2017	1 (1)	0	0	1 new suspected case was detected in M'baiki in epi week 20. To date, there has been 1 confirmed case, 2 suspected cases and 0 deaths reported. 18 contacts have been under follow up, of which 8 have completed the observation period. Mbaki district bordering Likouala province in Congo where an outbreak is ongoing. Previous 5 confirmed cases in February 2017 in Mbomou province	31/05/2017
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. In-depth investigation ongoing	22/04/2017
Dengue fever	Cote d'Ivoire	-		101 (33)	0	0	A confirmed case of dengue fever was reported by Institut Pasteur Dakar on April 28, 2017. Between 27 and 24 May 2017, there have been 18 new cases reported.	29/05/2017
CCHF	Senegal	-	06 May 2017	2 (2)			Cases arrived in Senegal from Mauritania on 29 April 2017. WHO informed on 09 May	10/05/17
Ebola Virus Disease	DRC	2	11 May 2017	7 (4)	4	57	Detailed update given above	2/06/2017
Malaria	South Africa	-		4484			Limpopo Province reported upsurge in number of reported cases on outbreak start date on week 14, April 2017	10/05/2017
Dengue	Kenya	-	Beginning 2017	723	1	0.14	The outbreak has been reported in Mombasa and Wajir counties. 686 cases were reported in Mombasa and 37 cases were reported in Wajir.	29/5/2017
Typhoid fever	Zambia	-		127	1	0.8	127 cases have been reported so far, including. Detailed summary above.	20/5/2017
Vaccine derived polio	DRC	-						



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Measles	Kenya	-		14 (8)	0		The outbreak has been reported in Dagahaley, Dadaab and IFO refugee camps in Garissa County. Date of onset of index case was 21 March, 2017. The last case reported had an onset in the first week of May 2017. There have been no new cases reported since.	29/05/2017
<b>EMERGENCIES</b>								
Humanitarian crisis	South Sudan	3					Currently insecurity is restricting the delivery of humanitarian assistance in most parts of the conflict affected states.	30/04/2017
Humanitarian crisis	Nigeria	3					Detailed update given above	15/04/2017
Humanitarian crisis	Ethiopia	3					Ethiopia continue to experience drought, acute water shortages, population displacement(IDPs) and food insecurity resulting to rising malnutrition and increasing spread of AWD	14/05/2017
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.	10/05/2017
Cyclone	Madagascar	-	07 Mar 2017				850,000 people affected. Insufficient food security persists according to the SMART nutritional study. There is medication available for mobile clinics, however some districts have run out of antimalarial drugs.	22/05/2017
Humanitarian crisis	Mali	1						
Drought/ food insecurity	Kenya	1						
Drought/ food insecurity	Uganda	1						

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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