WEEKLY BULLETIN ON OUTBREAKS AND OTHER EMERGENCIES

Week 31: 29 July – 04 August 2017
Data as reported by 17:00; 04 August 2017

Legend
- Food insecurity
- Measles
- Eruptive fever
- Monkeypox
- Lassa fever
- Cholera
- Aflatoxicosis
- Rift Valley fever
- Nodding disease
- Cases
- Deaths
- Humanitarian crisis
- Necrotising fasciitis
- Typhoid fever
- Acute watery diarrhoea
- Visceral leishmaniasis / kala-azar
- Dengue fever
- Hepatitis E
- Undiagnosed diarrhoeal disease
- Malaria
- Non WHO African Region
- WHO Member States with no ongoing events

1 New event
37 Ongoing events
26 Outbreaks
12 Humanitarian crises

Grade 3 events
6 Grade 2 events
7 Grade 1 events
22 Ungraded events
This weekly bulletin focuses on selected acute public health emergencies occurring in the WHO African Region. The WHO Health Emergencies Programme is currently monitoring 38 events in the region. This week, one new event has been reported: malaria outbreak in Cabo Verde. This week’s edition also covers key ongoing events, including:

- Lassa fever in Nigeria
- Hepatitis E in Nigeria
- Cholera in Kenya
- Humanitarian crisis in Cameroon
- Humanitarian crisis in Nigeria

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 new and ongoing public health events currently being monitored in the region, as well as events that have recently been closed.

Major challenges include:

- The multiple ongoing public health emergencies in Nigeria remain a concern, overstretcing communities’ resilience and response capacities.

- The resurgence of malaria in Cabo Verde, a low transmission country where the population lacks immune protection, needs to be tackled swiftly.
Health Emergency Information and Risk Assessment

There has been a sudden and unprecedented increase in the incidence of malaria in Cabo Verde in July 2017. The island country is a low malaria risk area, with typically limited local transmission from September to November each year—coinciding with the rainy season. Between January and June 2017, 11 sporadic cases were reported, many of which had recent travel history from either Angola or Nigeria. However, between 30 June and 30 July 2017, 45 indigenous cases and one imported case were notified, compared to an average of one locally acquired case reported each year during the last 5 years (2012-2016). All the 45 recent locally acquired cases live in the capital city of Praia, Santiago Island. Fifty-three percent of these cases were adult males aged 20 years and older. The causative agent has been confirmed as *Plasmodium falciparum* using both microscopy and rapid diagnostic tests (RDTs).

Preliminary investigations have attributed the recent increase in local transmission to several factors, including suboptimal vector control strategies, possibly coupled with inappropriate use (incorrect dilution) of a new insecticide introduced into the country in November 2016; the unauthorized installation of a rice paddy field in the affected area; and an increase in mosquito breeding sites within construction zones of a shopping centre and houses. The local authorities are in the process of removing the paddy field as further investigations are ongoing.

**Public health actions**
- The WHO Country Office and WHO Malaria Control Programme are providing technical support to the Ministry of Health to conduct outbreak investigation and establish the key response pillars.
- Surveillance and treatment are ongoing in the local clinics, and investigation teams have initiated active case finding within affected households; however, these activities to date have been limited by challenges in accessing households, a lack of adequate surveillance tools, and non-standardised case management practices.
- Mass media (television and radio) messages are being broadcast to encourage preventative behaviours and vector control.
- A local youth group is conducting a door-to-door campaign to educate the community on malaria prevention and control.
- Laboratory diagnostics (microscopy and RDTs) are readily available; however, there is currently limited capacity to conduct testing for other arboviruses as differential diagnoses.

**Situation interpretation**
Cabo Verde is a low malaria transmission country, eligible for elimination of the disease. With limited underlying immunity, all people (irrespective of their age group) are at risk of infection and of developing severe disease. Thus far, local transmission has been restricted to Praia. Nevertheless, there is a high risk of the disease spreading within the archipelago, given the presence of a potential vectors (*Anopheles gambiae*) throughout Santiago and neighbouring islands, regular travel within the islands and with other malaria-endemic countries, and the current high temperatures and humidity, and the upcoming rainy season, which enhance vector density. The observed high proportion of cases in adult males is also interesting and possibly explained by increased transmission around workplaces such as the new rice paddy fields and construction sites. Further investigations are needed to establish the risk factors and guide outbreak response.

Local authorities are facing several challenges in responding to this unprecedented increase, including gaps in identifying and managing severe cases, inadequate capacity for sustained vector control interventions (currently only done during the rainy season), and limited laboratory capacity to diagnose other infections due to arboviruses, such as dengue (noting that an outbreak occurred as recently as January 2017). As the rainy season approaches, it is important that appropriate malaria control strategies, including entomological investigations and vector control are developed and implemented.
The outbreak of Lassa fever in Nigeria is still ongoing, with active transmission reported in five states (Bauchi, Edo, Ogun, Ondo, and Plateau) in the last 21 days. Bauchi reported a new confirmed case during the reporting week, bringing the state back into the active outbreak category. In week 30 (week ending 30 July 2017), 13 new suspected cases were reported from four states, namely: Plateau (5), Ondo (5) Bauchi (2), and Ogun (1). There were eight new confirmed cases reported during week 30 from Plateau (4), Ondo (3) and Bauchi (1). Two deaths have occurred among the confirmed cases in Bauchi (1) and Ondo (1) States. Laboratory result of one sample from Bauchi State is pending.

Since the resurgence of the current Lassa fever outbreak in December 2016, 681 suspected cases including 112 deaths (overall case fatality rate 16.4%) have been reported. Of these, 212 cases were confirmed and 14 classified as probable. There were 66 deaths among the confirmed cases and 14 in the probable cases, giving a case fatality rate of 37.7% in this group. In the current wave of Lassa fever outbreak, 17 out of 36 (47%) states (Ogun, Bauchi, Plateau, Ebonyi, Ondo, Edo, Taraba, Nasarawa Rivers, Kaduna, Gombe, Cross-River, Borno, Kano, Kogi, Enugu, and Anambra) have reported at least one confirmed case.

Public health actions
- The Nigeria Centres for Disease Control (NCDC) Lassa fever response working group is leading coordination of weekly review meetings, in conjunction with partners (WHO, CDC, UMB, AFENET). Reports are shared with the National Surveillance and Outbreak Response Committee each week for prompt decisions.
- Preparations for the 2016/2017 national Lassa fever outbreak review and preparedness meeting are ongoing.
- Confirmed cases are being managed at identified treatment and isolation centres across the affected states with ribavirin and other supportive treatment.
- Active surveillance has been enhanced in all the affected states while contact tracing is ongoing in the states with active transmission, carried out by the State Surveillance Teams.
- Suspected cases reported across the states are continuously line-listed and uploaded onto the viral haemorrhagic fever (VHF) management system. Entries into this system now stand at 284 from 16 states. Kano, Gombe and Kogi States are yet to send in completed forms for all identified cases. The VHF case-based management database is being regularly updated, particularly for states with missing epidemiological data, and data quality checked.
- The NCDC distributed an additional 100 complete sets of personal protection equipment (PPE) and laboratory reagents to the Irrua Specialist Teaching Hospital (ISTH) and a further 100 PPE sets, 50 disposable aprons, five packets of gloves, and 10 hand washing buckets to the Federal Medical Centre Owo, Ondo State.

Situation interpretation
Nigeria is one of several West African countries in which Lassa fever is endemic, with seasonal outbreaks occurring annually between December and June. In 2016, Nigeria reported 273 suspected cases and 149 deaths (case fatality rate 55%) from 23 states. In 2017, Benin, Burkina Faso, Sierra Leone, and Togo experienced outbreaks that have since been controlled.

The current outbreak of Lassa fever in Nigeria, however, is continuing beyond the normal season. The outbreak peaked in weeks 9 of 2017, with subsequent intermittent spikes in weeks 13, 15, 25 and 30, this pattern is consistent with recent reports of increasing frequency of Lassa fever cases outside the usual season and from non-endemic areas.
The hepatitis E outbreak in Borno State, north-east Nigeria, has improved, with incidence steadily declining after peaking in week 26 at 133 cases. During week 30 (week ending 30 July 2017), seven new suspected cases were reported from Ngala Local Government Area (LGA). Since the onset of the outbreak in June 2017, a total of 696 suspected/confirmed cases including four deaths (case fatality rate 0.6%) have been reported. Ten (40%) LGAs in Borno State have been affected, with Ngala being the most affected, accounting for 84.2% (586/696) of all reported cases. The other affected LGAs include: Mobbar (60 cases, 8.6%), Monguno (41, 5.9%), Chibok (2), Askira Uba (2), Bayo (1), Dikwa (1), Gubio (1), Mafa (1), and Maiduguri (1). The four reported deaths were in Ngala (3) and Mafa (1) LGAs. Most cases occur in the age group 20-29 years, followed by those aged 30-39 years. The outbreak is concentrated among internally displaced persons (IDPs) and returnees from neighbouring Cameroon, Chad and Niger.

A total of 300 samples have been collected and shipped to the Lagos University Teaching Hospital (LUTH) laboratory. Of these, 42 tested positive for hepatitis E virus while results for 232 are pending.

Public health actions
- Weekly state outbreak coordination meetings are held between the Nigeria Centre for Disease Control (NCDC), rapid response teams, WHO, and other partners, who have been providing technical, logistical and financial support to the state and federal governments, within the overall framework of humanitarian response.
- Three case management facilities have been established in Ngala LGA, managed by MSF-Swiss, UNICEF and FHI360. Case management training is planned for clinicians in other LGAs.
- A case reporting system has been set up in all the three facilities (MSF, UNICEF and FHI360) in Ngala IDP camp.
- Active surveillance continues in all affected and neighbouring LGAs, through partners.
- Laboratory reagents have been procured and are in transit to the LUTH laboratory, which has run out of supplies. An updated laboratory protocol has been developed to improve rapid processing and transport of samples, and aid early reporting of results.
- Risk communication and social mobilization continues, with information, education and communication (IEC) posters about hepatitis E in English, Hausa and Kanuri languages distributed to all health facilities in the affected LGAs, promoting hygiene and disease prevention. A total of 40 community volunteers have been engaged to carry out community sensitization in Ngala.
- Water, sanitation and hygiene (WASH) responses are ongoing, including: construction of 200 latrines and 100 showers, and rehabilitation of two water points at the Ngala International School Camp; rehabilitation of a water point at the Arabic School IDP camp; daily camp clean up by community members, supervised by community volunteers and FHI360 WASH staff; distribution of 600 hygiene kits to pregnant women in Ngala International School IDP camp; and distribution of 2,000 hygiene kits to households. A total of 15 personnel have been trained in chlorination of water points.

Situation interpretation
Although the outbreak of hepatitis E in north-east Nigeria is starting to decline, the multiple peaks observed in the past illustrate the potential of the disease to resurge. Invariably, there is still a need for diligent control measures to prevent future exacerbations. The prevailing security situation and heavy rainfall and flooding, limiting access to and preventing response activities in some of the affected LGAs is a concern, as is the inadequate number of LGA public health staff available for social mobilization and risk communication activities. The constant expansion of the populations in the IDP camps is also exerting pressure on the existing social services and infrastructure.

Awareness of hepatitis E needs to be intensified, including educating border, military, customs, and immigration authorities, as well as communication and collaboration with neighbouring Cameroon, Chad and Niger, to prevent further outbreaks.
Kenya has continued to observe increased cholera transmission in recent weeks. During week 30 (week ending 30 July 2017), 108 new suspected cases were reported from eight counties. The majority of the new cases, 78%, were from Nairobi (59 cases) and Kisumu (23 cases) counties. Since January 2017, a total of 1,551 cases including 25 deaths (case fatality rate 1.6%) have been reported. Of these, 457 have been confirmed. Thirty-eight percent (593/1,551) of the cases were reported from Nairobi County, where two point-source events have triggered outbreaks across 11 sub-counties: Kamukunji, Langata, Dagoretti North, Embakasi East, Embakasi West, Starehe, Ruaraka, Kasarani, Makadara, Kibra and Westlands. A further 34% (532/1,551) of the reported cases were from Dadaab refugee camps (Hagadera, Dagahaley and IFO2) and Fafi sub-county, where the situation has greatly improved with only three cases reported in the past week. In Kisumu County, 48 cases were reported from Kodiaga GK Prison in the last 2 weeks (19-30 July 2017).

Eighteen out of 47 counties in Kenya have been affected during the current wave of cholera outbreak; however, active transmission is currently taking place in eight counties, namely: Garissa, Nairobi, Kajiado, Nakuru, Kisumu, Machakos, Siaya, and Homabay.

Public health actions

- The Multisectoral Cholera Taskforce is meeting daily to coordinate the response to the outbreak. Members include: Ministry of Health, Nairobi County officials, Ministry of Water and Irrigation, Nairobi Water and Sewerage Company, Ministry of Tourism, and partners including WHO, UNICEF, Kenya Red Cross Society (KRCS), US Centers for Disease Control and Prevention (CDC), Amref Health Africa, and MSF, among others.
- Coordination has been enhanced by the activation of the Public Health Emergency Operations Centre, appointment of an Incident Manager to lead response measures, and development of a national cholera response plan.
- WHO is repurposing the staff members and experts deployed in Nairobi (for the response to the post-El Niño crisis in the Horn of Africa) to support rapid control of this outbreak.
- Active surveillance for cases of acute watery diarrhoea, with subsequent contact tracing, is being strengthened in the five worst affected counties, with the support of WHO.
- The Cabinet Secretary and other officials from the Ministry of Health addressed the community of Mukuru Kwa Reuben, one of the affected areas. WHO, UNICEF, KRCS, and other partners supported the mission.
- Directives were issued last week for inspection of all eateries, examination of food handlers, and closure of substandard vendors in affected areas. These activities continue to be implemented and monitored by the county and national governments.
- In Nairobi, six cholera treatment centres (CTCs) have been set up in Huruma Lions, Mukuru kwa Reuben (Reuben Centre), Riruta Health Centre, Mama Lucy Kibaki Hospital, Mbagathi Hospital, and Mukuru Health Centre (Mukuru kwa Njenga).
- Amref, UNICEF and WHO are supporting the Ministry of Health to enhance risk communication and social mobilization activities, aimed to encourage affected populations to seek healthcare at treatment centres early, as well as hygiene and water treatment practices to prevent new infections.
- The Nairobi Water and Sewerage Company has increased water supply to the affected communities while water treatment chemicals (chlorine tablets) are being distributed.

Situation interpretation

Kenya has experienced recurrent outbreaks of cholera since December 2014, with a cumulative total of 18,567 cases reported (10,568 in 2015, 6,448 in 2016 and 1,551 in 2017). During the current outbreak, cases have occurred mainly in densely populated settings, including the city of Nairobi (where 60% of the population live in informal settlements), a prison in Kisumu County and the Dadaab refugee camps. This is concerning as these settings are often favourable to the rapid propagation of cholera infections due to the underlying poor water and sanitation infrastructure, and overcrowding within households. The national authorities and partners need to reinforce response interventions to adequately control further spread of this outbreak and prevent severe disease and deaths in those affected. Some of the critical interventions include robust WASH activities, targeted use of oral cholera vaccines, facilitating timely access to treatment in all affected areas, and functional active surveillance system.
Event description
Conflict in both north-east Nigeria and Central African Republic has led to mass population movement to Cameroon. Almost 10% of the population of Cameroon, particularly in the Far North, North, Adamawa, and East Regions, is in need of humanitarian assistance as a result of the insecurity. Recent resurgence in clashes in the north-western Ngaoundaye border town of Central African Republic (between 7 and 10 July 2017) resulted in population influx to Touboro Prefecture in northern Cameroon. As of 27 July 2017, a total of 4 766 people from 1 438 households have been registered in Mbaiboum (3 347) and Helbao (1 419). The figures are expected to rise, given the volatile security situation. Most of the refugees are women and children (including several unaccompanied). These new arrivals come mainly from Ngaoundaye, Bang, Mann, Bozoum and Degaule in Central African Republic. The living conditions of these refugees is of concern since their immediate needs for shelter, healthcare, food, and non-food items have not been adequately met.

On the other hand, Boko Haram attacks in the Far North Region remain rampant, with an apparent spike since April 2017. A suicide bomb attack took place in the evening of 21 July 2017 in Dabanga in Logone and Chari Prefecture. As of 23 July 2017, Minawao camp in Mayo Tsanaga Prefecture has a total of 57 988 refugees (16 002 households), mostly from Nigeria. Around 12 000 refugees have returned to Nigeria since April 2017.

These refugees and displaced persons face chronic vulnerabilities and limited access to basic social services, resulting in high levels of malnutrition, and a high risk of epidemics. The outbreak of measles in the health districts of Kolofata and Mora is still ongoing. One suspected case of hepatitis E (from Nigeria) has been identified in Fotokol health area. Active surveillance is ongoing to find new cases.

Public health actions
- UNHCR is registering the new arrival refugees to facilitate planning and provision of humanitarian assistance (shelter, basic household items, food, and healthcare), which aid agencies have started providing.
- The local health centre is being reinforced to provide healthcare services and help assess the health needs of the refugees.
- As of 28 July 2017, WFP distributed food to 3 000 people in the last 2 weeks.
- WHO consolidated the sector contact directory to facilitate communication among the health sector partners. WHO also validated the list of key indicators to monitor the health sector performance.
- A cross border workshop between health authorities from Cameroon and Chad was conducted from 17 to 19 July 2017 in N’djamena, to promote transboundary surveillance and healthcare planning.
- WHO supported the regional delegation to conduct a health sector meeting.
- WHO supported the development and dissemination of an online report (http://bit.ly/2utmQXu) on the health situation of refugees in Minawao camp in the Far North Region. In addition, an online health sector dashboard (http://bit.ly/2f7Z6Tb) has also been developed and will be updated monthly.
- The WHO Representative (WR) visited Logone and Chari Prefecture in the Far North Region to supervise the rehabilitation of the surgical unit in Makary District Hospital. The WR and his delegation also visited the medical centre in Fotokol sub-district to assess the extent of damages.
- A total of 722 718 (54% of the target) children aged 3-59 months have received the first dose of antimalarials during the first 4 days of a malaria chemoprevention campaign.

Situation interpretation
The insecurity in north-east Nigeria and Central African Republic continues to affect large parts of Cameroon, especially in the northern and eastern parts of the country. Population movement remains dynamic, depending on the prevailing security situation. The voluntary return of Nigerian refugees has slowed down during the last months, partly attributed to increasing incursions and attacks on internally displaced persons (IDPs) camps in north-east Nigeria, as well as in Far North Region of Cameroon.

Provision of social services to the refugees, IDPs and other individuals living in informal settlements remain limited to date. Healthcare services are particularly limited, due to few health partners, especially in the Far North Region. The detection of a suspected case of hepatitis E in Fotokol health area is concerning. The back and forth movement of refugees within the Lake Chad Basin – where hepatitis E outbreak in ongoing – increases the risk of the disease in Cameroon.

The humanitarian crisis in the northern and eastern parts of Cameroon requires multisectoral support to cover the basic needs of protection, shelter, education, health, water, and sanitation. The healthcare system urgently needs rehabilitation and equipping as well as strengthening other aspects such as human resources, provision of medicines and other consumables, etc.
The humanitarian crisis in north-east Nigeria is still ongoing with little sign of improvement. Security incidents continue to occur in different parts of the region, limiting access to vulnerable populations in need of humanitarian assistance. On 24 July 2017, a bomb attack took place in Dalori Camp, during which 17 people including eight children and three women were affected. On 28 July 2017, a camp in Dikwa was hit by two suicide bombs, killing 14 people and wounding 41 others. The wounded people were treated at Dikwa General Hospital, with 14 severely injured referred to Maiduguri hospitals for further care. These are examples of the multiple security incidents that have intensified in recent weeks.

The living condition of the populations in the camps is deteriorating due to continuous influx of new IDPs and increasing number of returnees from Niger and Cameroon. The most recent rapid mortality survey conducted by Médecins Sans Frontières (MSF) Switzerland from 15-18 July 2017 showed a doubling of mortality rates among children below 5 years of age. The most prevalent health problems among the IDPs include the increasing burdens of malaria, acute watery diarrhea (AWD) and acute malnutrition, and the ongoing hepatitis E outbreak in the region. In week 28 (week ending 14 July 2017), 3 863 cases of confirmed malaria including four deaths (case fatality rate 0.1%) were reported. Meanwhile, the surveillance report for the reporting week showed a peak of AWD at 2 676 cases, with 71% occurring in children below 5 years. During week 28, 1 751 cases of severe acute malnutrition were reported, with no associated deaths.

**Public health actions**

- **Dikwa General Hospital** is currently providing general primary, reproductive health, inpatient, outpatient, laboratory, and pharmacy services. The outpatient department provides care to an average of 100 patients per day. Additionally, the hospital provides critical emergency medical services for mass casualty cases related to suicide attacks, gunshot wounds and other violent injuries.

- **UNFPA** is supporting provision of quality and timely lifesaving sexual reproductive health interventions. From 16-31 July 2017, the agency completed the distribution of reproductive health (RH) kits to cover an estimated 1 525 000 people for 3 months in health facilities. Additional RH kits have been prepositioned as contingency stock to respond to emerging needs.

- **UNICEF** provided integrated primary healthcare to 184 988 women and children in the IDP camps and host communities in Borno and Yobe States. For prevention services, 63 633 children and pregnant women were vaccinated with various antigens (including 4 403 children 6 months-15 years vaccinated against measles); vitamin A supplementation (9 369), albendazole (11 889), antenatal care visits (12 839); delivery (1 337); and postnatal care (1 816).

- As of 26 July 2017, **Borno State Ministry of Health** finalized the distribution of the 112 200 long lasting insecticide treated nets (LLITNs) donated by UNICEF with financial support from USAID. In the last 2 weeks (16-31 July 2017), 3 250 and 22 556 LLITNs were distributed in Borno and Yobe States, respectively, with 12 903 families reached.

- WHO, with grants from USAID and the Bill and Melinda Gates Foundation, trained and deployed 56 mobile teams across 25 local government areas in Borno State to offer a package of basic health services that includes vaccines, medicines, screenings and referrals when required.

**Situation interpretation**

Despite the multi-sectoral efforts to resolve the humanitarian crisis in north-east Nigeria, the situation is still far from improving. Recent bomb attacks on IDPs and the ongoing outbreaks of AWD and hepatitis E add an additional burden, not only on the affected population, but also to the response system. Overcrowding in IDP camps, continuous influx of returnees and the limited availability of shelter and WASH services are increasing the risk of diseases and outbreaks. There is no doubt that the ongoing insecurity in north-east Nigeria poses significant public health challenges. The revitalization and strengthening of the health system is vital. Secondary healthcare and referral services remain a big challenge in the remote areas due to lack of ambulance services and specialized healthcare providers. It has been predicted that the rainy season, overcrowding in IDP camps and the limited availability of WASH services will increase the risk of diseases and outbreaks.
Challenges

Nigeria is currently experiencing multiple ongoing public health emergencies, including outbreaks of Lassa fever, hepatitis E, cholera, and the complex humanitarian crisis in the northern part of the country. Inadvertently, these health emergencies are constraining the resilience of the community and the entire nation, as well as the response capacities of the national authorities and partners. In spite of the ongoing humanitarian efforts, the effects of the complex humanitarian crisis in north-east Nigeria remain serious as access to the populations in need is restrained.

The resurgence of malaria in Cabo Verde needs to be tackled swiftly. This island country is a low malaria risk area and the absence of immune protection puts the population at risk of developing severe illness with high mortality. The potential of the disease to propagate is high given the presence of an efficient vector, the favourable climatic condition and challenges in implementing vector control strategies.

Proposed actions

There is a need for enhanced multisectoral engagement and mobilization of additional resources to sustain the response to the multiple ongoing public health emergencies in the country. All stakeholders, both government and partners, are urged to step up efforts to control the ongoing disease outbreaks and mitigate the effects of the humanitarian crisis through increasing the requisite resources (human capacity, logistics and finance). Meanwhile, peace building initiatives to address the root-causes of the insecurity and socio-political instabilities should be explored.

Scale up implementation of appropriate malaria control strategies and interventions, including entomological studies and vector control activities.
Since early December 2016, cases have been detected in Kenya. The incidence of new cases has declined since the current peak. An outbreak of dengue fever in the Salamat region of Chad has been reported in week 29. Oromia Region has 31% of reported cases, followed by Amhara (26%), Addis Ababa (20%) and SNNP (11%).

**Undiagnosed diarrhoeal disease**
- Mauritania
- Grade: Ungraded
- Date of notification to WHO: 27-Jul-17
- No. of cases / suspected (confirmed): 79
- No. of deaths: 0
- CFR (suspected) / %: 0.0%

On 16 July 2017, the Ministry of Health were informed of an outbreak of diarrhoeal disease at Cheikh Zayed Hospital, Wilaya, Nouakchott, which at the time included 40 cases of non-jejere, non-typhoid, watery diarrhoea without blood/mucus from 7 separate locations. 10 stool samples collected were negative for bacteria (apart of one positive Escherichia coli, not typed). In a second cluster altered on 25 July 2017 from Centre Hospitalier Mitre Enfant, 39 children presented with similar symptoms over a period of 25 days, of whom 17 were hospitalised for 2-3 weeks. Investigations are ongoing but a viral cause is suspected.

**Cholera**
- Angola
- Grade: G1
- Date of notification to WHO: 04-Jan-17
- No. of cases / suspected (confirmed): 455
- No. of deaths: 24
- CFR (suspected) / %: 5.3%

Since early December 2016, cases have been detected in Cabinda (225), Soyo (225) and Lianda (5). The outbreak has been reported in Dagahaley, Dadaab Camp, Kenya. The outbreak peaked in early 2017.

**Malaria**
- Burundi
- Grade: G1
- Date of notification to WHO: 01-Jan-17
- No. of cases / suspected (confirmed): 4,376,804*
- No. of deaths: 1,996*
- CFR (suspected) / %: 0.05%

*Counts include cases notified during 2017 YTD only. Weekly counts are exceeding 2016 and the rise. During week 25, 173,355 cases, including 102 deaths were reported (22% above same period last year).

**Humanitarian crisis**
- Cameroon
- Grade: G2 extension
- Date of notification to WHO: -
- No. of cases / suspected (confirmed): -
- No. of deaths: -
- CFR (suspected) / %: -

As an outbreak of dengue parotitic fever of an unknown etiology emerged in the northern regions of Cameroon during November-December 2015. Investigations to date are yet to identify a definitive cause; however, evidence is pointing to leishmaniasis in some causes and endemic African Kaposi's sarcoma in others. A detailed update was provided in the week 30 bulletin.

**Eruptive fever**
- Cameroon
- Grade: Ungraded
- Date of notification to WHO: 16-Feb-17
- No. of cases / suspected (confirmed): 52
- No. of deaths: 20
- CFR (suspected) / %: 38.5%

**Humanitarian crisis**
- Central African Republic
- Grade: Downgraded to G2
- Date of notification to WHO: -
- No. of cases / suspected (confirmed): -
- No. of deaths: -
- CFR (suspected) / %: -

**Monkeypox**
- Central African Republic
- Grade: Ungraded
- Date of notification to WHO: 14-Apr-17
- No. of cases / suspected (confirmed): 0
- No. of deaths: 0
- CFR (suspected) / %: 0.0%

**Hepatitis E**
- Chad
- Grade: G1
- Date of notification to WHO: 01-Sep-16
- No. of cases / suspected (confirmed): 1,685 (98)
- No. of deaths: 18
- CFR (suspected) / %: 1.1%

**Monoksy**
- Congo Republic of
- Grade: Ungraded
- Date of notification to WHO: 01-Feb-17
- No. of cases / suspected (confirmed): 78 (7)
- No. of deaths: 4
- CFR (suspected) / %: 5.1%

**Dengue**
- Cote d'Ivoire
- Grade: Ungraded
- Date of notification to WHO: 06-May-17
- No. of cases / suspected (confirmed): 736 (325)
- No. of deaths: 2
- CFR (suspected) / %: 0.3%

**Humanitarian crisis**
- Democratic Republic of the Congo
- Grade: Ungraded
- Date of notification to WHO: August 2016
- No. of cases / suspected (confirmed): -
- No. of deaths: -
- CFR (suspected) / %: -

The fighting and insecurity in continue to cause a humanitarian crisis with severe public health impact, mostly in the provinces of South- and North-Kivu, Ituri, Tanganyika, and Haut-Katanga. And since mid-August 2016, the security situation has significantly deteriorated in the Kasi Region. A detailed update was provided in the week 30 bulletin.

**Cholera**
- Democratic Republic of the Congo
- Grade: G2
- Date of notification to WHO: 02-Jan-15
- No. of cases / suspected (confirmed): 44,415
- No. of deaths: 1,244
- CFR (suspected) / %: 2.8%

**Measles**
- Democratic Republic of the Congo
- Grade: Ungraded
- Date of notification to WHO: 10-Jan-17
- No. of cases / suspected (confirmed): 20,898 (312)
- No. of deaths: 241
- CFR (suspected) / %: 1.2%

**Humanitarian crisis/AWD**
- Ethiopia
- Grade: Upgraded to G3
- Date of notification to WHO: 15-Nov-15
- No. of cases / suspected (confirmed): 39,344*
- No. of deaths: 801*
- CFR (suspected) / %: 2.0%

*Counts includes cases notified during 2017 YTD only. Continued drop in the number of new cases reported. A detailed update on the protracted event will be provided every second week.

**Measles**
- Ethiopia
- Grade: Ungraded
- Date of notification to WHO: 14-Jan-17
- No. of cases / suspected (confirmed): 2,426* (1,008*)
- No. of deaths: -
- CFR (suspected) / %: -

*Counts included cases notified during 2017 YTD only. To date, there have been 28 separate laboratory-confirmed measles outbreaks in the country. 24 new cases were reported in week 29. Oromia Region has 31% of reported cases, followed by Amhara (28%), Addis Ababa (20%) and SNNP (11%).

**Drought/food insecurity**
- Kenya
- Grade: G1
- Date of notification to WHO: -
- No. of cases / suspected (confirmed): -
- No. of deaths: -
- CFR (suspected) / %: -

This event forms part of a larger food insecurity crisis in the Horn of Africa. SMART surveys highlighted that the rates of Global Acute Malnutrition increased across the country. An estimated 7.8 million population are in IPC3 during May/June 2017.

**Cholera**
- Kenya
- Grade: G1
- Date of notification to WHO: 10-Oct-16
- No. of cases / suspected (confirmed): 1,551 (457*)
- No. of deaths: 25*
- CFR (suspected) / %: 1.6%

*Counts reported are for 2017 YTD only. Detailed update given above.

**Measles**
- Kenya
- Grade: Ungraded
- Date of notification to WHO: 12-Mar-17
- No. of cases / suspected (confirmed): 49 (12)
- No. of deaths: 1
- CFR (suspected) / %: 2.0%

The outbreak has been reported in Bugesera, Dudaab and IFO refugee camps in Garissa County since 21 March 2017, and from communities in Mandera County since 8 June 2017. No new cases have been identified since 4 July and 5 July in the two counties, respectively.
<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 (suspected) / %</th>
<th>Comments</th>
<th>Date of last update</th>
</tr>
</thead>
<tbody>
<tr>
<td>Measles</td>
<td>Kenya</td>
<td>Ungraded</td>
<td>05-May-17</td>
<td>353 (212)</td>
<td>7</td>
<td>2.0%</td>
<td>Marabub (n=279) and Wajir (n=119) counties have been affected by outbreaks since early 2017. Outbreaks remain active in both areas. 23 new cases were reported from Marabub county in the last week. The last cases reported from Wajir County occurred 17 June 2017.</td>
<td>31-Jan-17</td>
</tr>
<tr>
<td>Dengue</td>
<td>Kenya</td>
<td>Ungraded</td>
<td>09-May-17</td>
<td>1 385 (706)</td>
<td>1</td>
<td>0.1%</td>
<td>The outbreak has been reported in Mombasa County (n=1 223) and Wajir County (n=82). There were no new cases this week. The last cases reported on 7 July and 20 June 2017 within the two countries, respectively.</td>
<td>31-Jan-17</td>
</tr>
<tr>
<td>Food insecurity</td>
<td>Madagascar</td>
<td>Ungraded</td>
<td>23-Feb-17</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Food insecurity continues in the south parts of the island. A recent food security assessment showed that from June to September 2017, an estimated 409 000 people (25% of the affected area population) will be in need of humanitarian assistance. A detailed update was provided in the week 30 bulletin.</td>
<td>15-Jul-17</td>
</tr>
<tr>
<td>Humanitarian crisis</td>
<td>Mali</td>
<td>G1</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Hepatitis E</td>
<td>Niger</td>
<td>Ungraded</td>
<td>06-Apr-17</td>
<td>1 446 (441)</td>
<td>38</td>
<td>2.6%</td>
<td>During week 29, 55 new suspected cases and no deaths were reported, compared to 74 new cases recorded in week 28. Overall, approximately 88% of the cases came from Diffs, N’Gaung and Bosson health district in the Diffa Region.</td>
<td>23-Jul-17</td>
</tr>
<tr>
<td>Humanitarian crisis</td>
<td>Niger</td>
<td>G2 extension</td>
<td>Beginning 2015</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Humanitarian crisis</td>
<td>Nigeria</td>
<td>Protracted 3</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>31-Jul-17</td>
</tr>
<tr>
<td>Lassa fever</td>
<td>Nigeria</td>
<td>Ungraded</td>
<td>01-Dec-16</td>
<td>681 (212)</td>
<td>112</td>
<td>16.4%</td>
<td>Detailed update given above.</td>
<td>28-Jul-17</td>
</tr>
<tr>
<td>Cholera</td>
<td>Nigeria</td>
<td>Ungraded</td>
<td>07-Jun-17</td>
<td>1 403* (48)*</td>
<td>52*</td>
<td>1.8%</td>
<td>*Case counts refer to the ongoing outbreak affecting 5 LGAs in the Koura State (1 626 cases, 22 deaths), and a newly detected outbreak in 3 LGAs in Zamfara State (183 cases, 10 deaths). In addition to these, in this past week outbreaks have also been detected in 3 LGAs in Lagos. WHO is collating further information on these new events.</td>
<td>27-Jul-17</td>
</tr>
<tr>
<td>Hepatitis E</td>
<td>Nigeria</td>
<td>Ungraded</td>
<td>18-Jun-16</td>
<td>696 (42)</td>
<td>4</td>
<td>0.6%</td>
<td>Detailed update given above.</td>
<td>31-Jul-17</td>
</tr>
<tr>
<td>Necrotising cellulitis/fasciitis</td>
<td>Sao Tome &amp; Principe</td>
<td>G2</td>
<td>10-Jan-17</td>
<td>1 838</td>
<td>0</td>
<td>0.0%</td>
<td>There has been a steady decline in the disease trend since the beginning of 2017; however, this trend has stagnated in recent weeks, with between 8-32 cases being reported each week for the past 22 weeks. The most affected districts are Cau-South, Lambi and Lobata North.</td>
<td>02-Aug-17</td>
</tr>
<tr>
<td>Dengue</td>
<td>Seychelles</td>
<td>Ungraded</td>
<td>20-Jul-17</td>
<td>3 551 (1 263)</td>
<td>-</td>
<td>-</td>
<td>Ongoing dengue epidemic since end of 2015 to date. For the past two weeks (10 July 16 July 2017), 106 suspected cases were reported. Generally there has been a downward trend in the number of suspected cases since week 24.</td>
<td>20-Jul-17</td>
</tr>
<tr>
<td>Humanitarian crisis</td>
<td>South Sudan</td>
<td>G3 extension</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>30-Jul-17</td>
</tr>
<tr>
<td>Cholera</td>
<td>South Sudan</td>
<td>Ungraded</td>
<td>20-Feb-17</td>
<td>19 532 (1 921)*</td>
<td>352*</td>
<td>1.8%</td>
<td>*Counts reported in total suspected cholera cases reported on IDRS during 2017 YTD only. Cases continue to decline this past week.</td>
<td>30-Jul-17</td>
</tr>
<tr>
<td>Nodding disease</td>
<td>South Sudan</td>
<td>Ungraded</td>
<td>30-Jun-17</td>
<td>70</td>
<td>-</td>
<td>-</td>
<td>Unconfirmed media reports of over 70 cases of nodding disease in among children in Maridi, Jukub, Ambali and Gihde state since mid-2016. WHO staff are so far unable to confirm the event due to an upsurge in insecurity in the country and affected provinces. More details will be provided when available.</td>
<td>23-Jul-17</td>
</tr>
<tr>
<td>Cholera</td>
<td>Tanzania</td>
<td>G2</td>
<td>15-Aug-15</td>
<td>30 269</td>
<td>475</td>
<td>1.6%</td>
<td>Since the outbreak started in August 2015: 25 556 cases including 403 deaths on the Tanzanian mainland, and 4 689 including 72 deaths from Zanzibar. During week 30 ending 30 July 2017, 24 new cases were reported from Kibei, Pwani on the mainland.</td>
<td>30-Jul-17</td>
</tr>
<tr>
<td>Afaricocosis</td>
<td>Tanzania</td>
<td>Ungraded</td>
<td>28-Jun-17</td>
<td>8</td>
<td>4</td>
<td>50.0%</td>
<td>Between 15 June and 15 July 2017, two unrelated clusters of suspected acute aflaoticosis, affecting two families in separate towns in Kibiti District, Manyara Region in the northern part of Tanzania. No further cases have been reported to date. 30 blood samples collected during community investigations have been submitted for aflatoxin testing, and 28 blood samples for pesticide poisoning; results pending.</td>
<td>02-Aug-17</td>
</tr>
<tr>
<td>Drought/food insecurity</td>
<td>Uganda</td>
<td>G1</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>24-Jul-17</td>
</tr>
<tr>
<td>Humanitarian crisis - refugee</td>
<td>Uganda</td>
<td>Ungraded</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>24-Jul-17</td>
</tr>
</tbody>
</table>
### Health Emergency Information and Risk Assessment

<table>
<thead>
<tr>
<th>Event</th>
<th>Country</th>
<th>Grade</th>
<th>Date of notification to WHO</th>
<th>Date of last sitrep</th>
<th>No. of cases / suspected (confirmed)</th>
<th>No. of deaths</th>
<th>CFR (suspected) / %</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Malaria</td>
<td>Cabo Verde</td>
<td>Ungraded</td>
<td>26-Jul-17</td>
<td></td>
<td>45</td>
<td>0</td>
<td>0.0%</td>
<td></td>
</tr>
<tr>
<td>Recently closed events</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cholera</td>
<td>Burundi</td>
<td>Ungraded</td>
<td>15-Jul-17</td>
<td>15-Jul-17</td>
<td>6(5)</td>
<td>0</td>
<td>0.0%</td>
<td>A small cluster of six cholera cases in and around Buju- bura, was investigated. The National Institute of Public Health isolated <em>Vibrio cholerae</em> O1 serotype Ogawa in 5/6 stool samples collected from the cases on 13 and 14 July 2017. Three of the confirmed cases were from Gatumba (Isare Health District), and two came from Gaehe (Bu- jumba North Zone District), while the suspected case came from Ngagara/Chanic. No further spread has been reported to date.</td>
</tr>
<tr>
<td>Floods</td>
<td>Guinea</td>
<td>Ungraded</td>
<td>15-Jul-17</td>
<td>27-Jul-17</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>During the night of 3-4 July 2017, heavy rain caused the overflow of the waters of the river Tili, and flooding in 14 of 22 neighbourhoods in N’zérékoré, Guinea. Nine neighbour- houds have suffered material and human damages. An estimated 545 households and 3,274 people have been affected, including 1,038 men, 1,089 women and 1,147 children. Among displaced persons, 13 were wounded, 2 had diarrhea, 13 were febrile, and one person with a medical history of tuberculosis died. In 240 households surveyed, 135 collapsed, 56 were flooded and are at risk of collapse, and 12 were dilapidated. A poultry farm was destroyed and 26 water points were damaged.</td>
</tr>
<tr>
<td>Rift Valley fever</td>
<td>Mali</td>
<td>Ungraded</td>
<td>07-Jul-17</td>
<td>04-Aug-17</td>
<td>1 (1)</td>
<td>-</td>
<td>-</td>
<td>Single confirmed case (IgM positive by ELISA, PCR negative) in a 10-year-old child, son of a farmer from Ouléssébougou; illness onset 4 June 2017, results reported 6 July 2017. A Rapid Response Team deployed on 8 July. 19 blood samples collected from febrile community and family members tested negative. Of 108 blood samples from small ruminant animals, 1 tested positive for RVFV. No further human infections have been reported in the area to date.</td>
</tr>
<tr>
<td>Dengue</td>
<td>Togo</td>
<td>Ungraded</td>
<td>18-Jun-17</td>
<td>06-Jul-17</td>
<td>12 (3)</td>
<td>0</td>
<td>0.0%</td>
<td>Two events investigated by MOH. (1) From Awoossou-ou-Gbogho Polyclinic: 9 suspected cases since January 2017, of which 3 cases were confirmed (IgM positive), 2 cases were probable (RDT positive) and 4 cases were negative/excluded. No deaths were recorded. Cases come from several districts of the Gulf prefecture: Sogbodo, Toison hospital, Agou Afaché, Sogbousin, Agomoyi, with no cluster of cases. (2) From British School of Lome: 3 suspected cases, of which 1 RDT positive in school children, 2 children from same family, no other cases identified in the school.</td>
</tr>
<tr>
<td>Typhoid fever</td>
<td>Zambia</td>
<td>Ungraded</td>
<td>22-Apr-17</td>
<td>18-Jul-17</td>
<td>162</td>
<td>1</td>
<td>0.6%</td>
<td>A suspected outbreak was declared in Mipika District, Muchinga province on 4 May 2017. Since then, 162 suspected cases were reported, the last detected on 17 July 2017. Non-typhoidal Salmonella was isolated from 2 cases. There was insufficient information to conclude typhoid was the cause; however, symptoms were attribut- ed to consumption of contaminated water.</td>
</tr>
</tbody>
</table>

Data are 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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Correspondence on this publication may be directed to:
Dr Benido Impouma
Programme Area Manager, Health Information & Risk Assessment
WHO Health Emergencies Programme
WHO Regional Office for Africa
P O Box. 06 Cité du Djoué, Brazzaville, Congo
Tel: +4724139773
Email: impoumab@who.int

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Please contact (afrooutbreak@who.int) for any clarifications.
Data sources
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