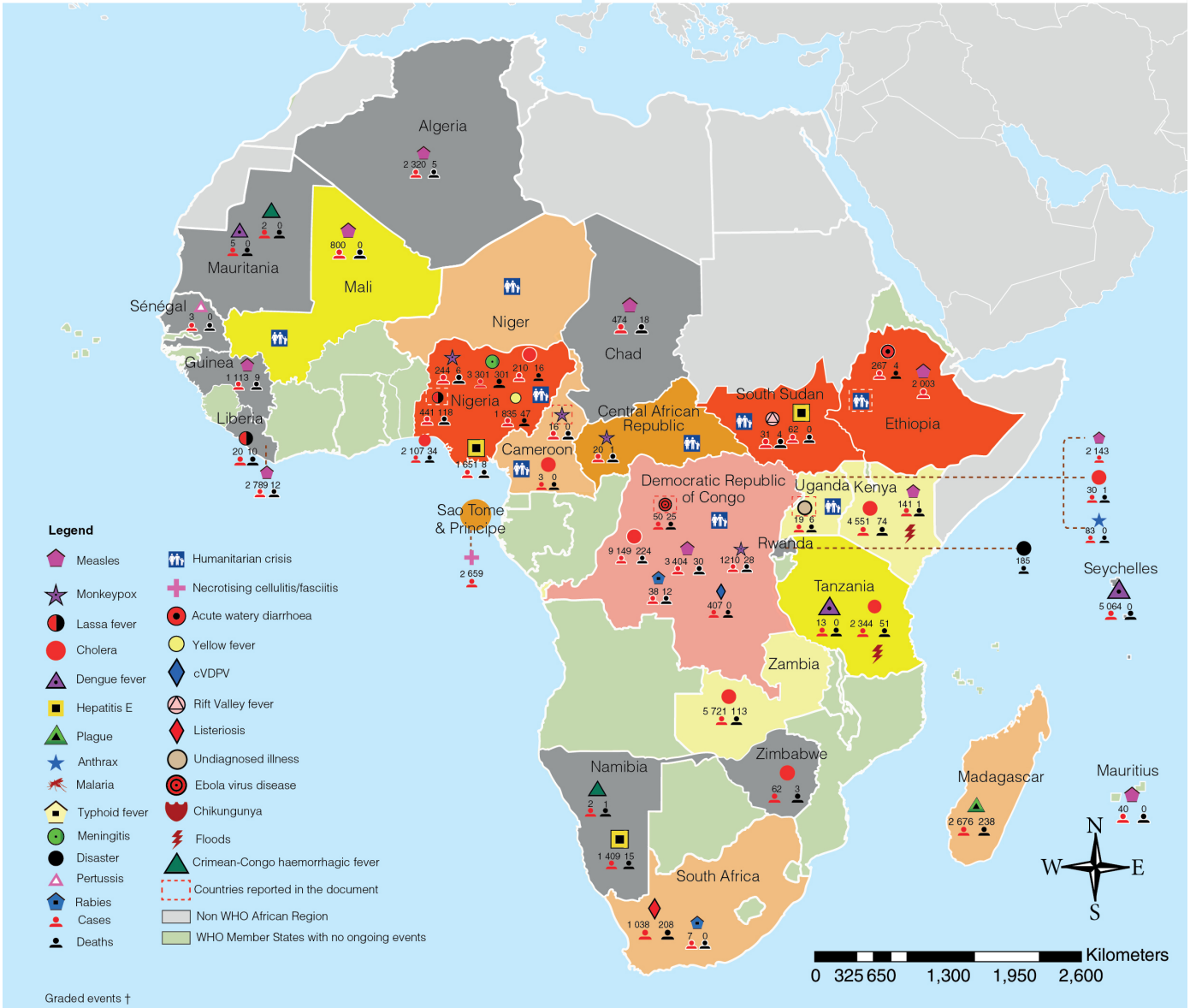
WEEKLY BULLETIN ON OUTBREAKS AND OTHER EMERGENCIES

Week 22: 26 May - 01 June 2018
Data as reported by 17:00; 01 June 2018

World Health Organization
REGIONAL OFFICE FOR Africa
WHO Health Emergencies Programme

1	57	48	10
New event	Ongoing events	Outbreaks	Humanitarian crises



Graded events †

2	4	2	40
Grade 3 events	Grade 2 events	Grade 1 events	Ungraded events
3	2	2	
Protracted 3 events	Protracted 2 events	Protracted 1 events	

Overview

Contents

- This Weekly Bulletin focuses on selected acute public health emergencies occurring in the WHO African Region. The WHO Health Emergencies Programme is currently monitoring 58 events in the region. This week's edition covers key new and ongoing events, including:

  - Undiagnosed disease in Uganda
  - Ebola virus disease in the Democratic Republic of the Congo
  - Monkeypox in Cameroon
  - Lassa fever in Nigeria
  - Humanitarian crisis in Ethiopia.

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

- A table is provided at the end of the 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 issues and challenges include:**

  - The Ministry of Health and other national authorities, WHO and partners are continuing with an intense response to the Ebola virus disease (EVD) outbreak in the Democratic Republic of the Congo. All pillars of the response are being consolidated as well as preparedness and readiness measures in neighbouring countries. The evolution of the outbreak is being closely monitored and the disease is still localised to the three initial affected health zones. It is critical to sustain the ongoing interventions as well as efforts to improve coverage and effectiveness until the outbreak is rapidly contained.

  - Manafwa district in the eastern region of Uganda is experiencing a cluster of cases of an undiagnosed illness with high fatality. The disease, commonly affecting children, appears to be chronic with frequent recurrence. In light of the ongoing EVD outbreak in a neighbouring country, this event has raised high public and media attention. While a preliminary investigation suggests a complicated form of malaria, this event calls for a comprehensive investigation to establish the etiology of the disease and implementation of control measures based on evidence.

New event

Undiagnosed disease | **Uganda** | 19 **Cases** | 6 **Deaths** | 31.6% **CFR**

EVENT DESCRIPTION

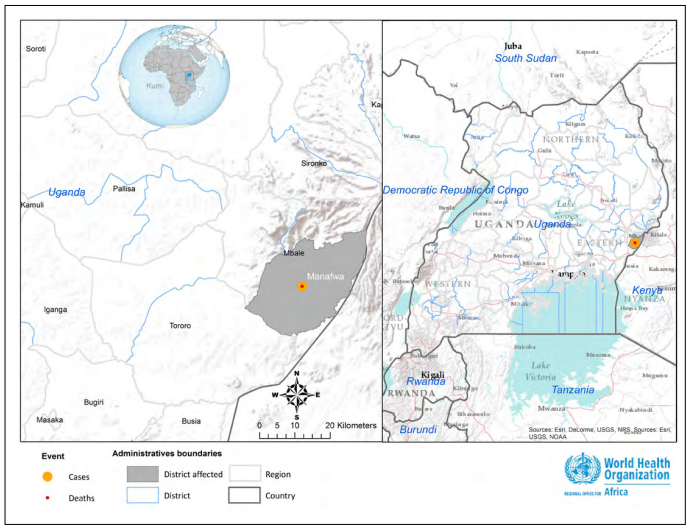
The Uganda Ministry of Health has reported a cluster of an undiagnosed disease with a high death rate in Manafwa District in the eastern region. The event was initially detected on 23 May 2018 through an informal surveillance report indicating that 14 children had been affected, eight of whom had died and six were hospitalized. The illness was (reportedly) characterised by a high fever and passing of dark-coloured urine.

A preliminary outbreak investigation (carried out by the national rapid response team) identified and line-listed 19 cases, including six deaths (case fatality rate 31.6%), as of 26 May 2018. The current event started on 19 May 2018 when the first case in the cluster became ill, and most of the cases (11) occurred between 18 and 25 May 2018. The case-patients, all children 10 years and below, commonly presented with high fever, abdominal pain, haematuria, signs of anaemia, jaundice, and other constitutional symptoms. This condition – usually responsive to antimalarial and antibiotic treatment – has (reportedly) been recurrent in all the case-patients, with 37% (7/19) getting episodes since 2016. The age of case-patients ranged from 1 to 10 years, with a mean of 4 years and median of 5 years. Most of the case-patients (79%, 15) started getting ill between 1 and 2 years, with one case-patient catching the disease at 5 months of age. Most, 74% (14/19), of the case persons are males.

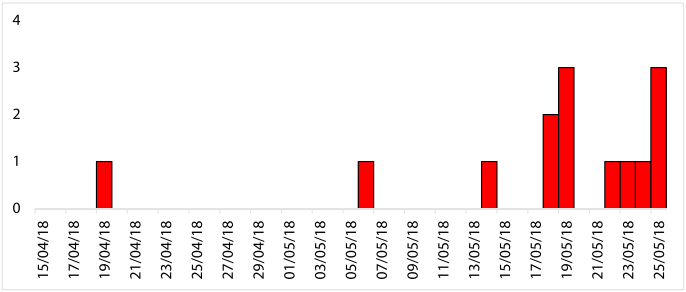
Three out of 10 sub-counties in Manafwa District have been affected: Bugobero (8 cases), Busukuya (8) and Bukusu (3).

Of the 11 blood specimens obtained and analysed, nine tested positive for malaria (*Plasmodium falciparum*) on rapid diagnostic test (RDT), while two were negative. All the six deceased cases had positive malaria RDT test results.

Geographical distribution of an undiagnosed disease cases in Manafwa District, Uganda, 19 - 26 May 2018



Epidemic curve for an undiagnosed disease in Manafwa, Uganda, 19 – 25 May 2018



PUBLIC HEALTH ACTIONS

- The Ministry of Health has deployed a national rapid response team to conduct outbreak investigation of the public health event in Manafwa District.
- Laboratory specimens (blood and urine) have been collected from the case-patients and shipped to the Central Public Health Laboratory (CPHL) for further analysis.
- Based on the working diagnosis, the National Malaria Control Program, in collaboration with the Epidemiology and Surveillance Division of the Ministry of Health, has developed an emergency response plan to guide initial interventions to the public health event.
- Active surveillance has been enhanced in the district, including active case search in the community and health facilities.
- The case-patients are being managed at the local health facilities.

SITUATION INTERPRETATION

Manafwa District in the eastern region of Uganda is experiencing a cluster of cases of an undiagnosed illness with high fatality. The disease, commonly affecting children, appears to be chronic with frequent recurrence. The preliminary investigation made a working diagnosis of black water fever, a complication of *Plasmodium falciparum* infection leading to massive rupture (haemolysis) of red blood cells, releasing haemoglobin directly into the blood vessels and in urine, and frequently leading to kidney failure.

While malaria is endemic in the affected district (and in 95% of Uganda), clinicians need to be open-minded while investigating this public health event. There is a need to conduct a wide range of diagnostic and clinical investigations in order to obtain a better understanding of the condition. Meanwhile, active surveillance needs to be enhanced as well as improved symptomatic clinical management of the cases.

Ongoing events

Ebola virus disease | **Democratic Republic of the Congo** | 50 **Cases** | 25 **Deaths** | 50.0% **CFR**

EVENT DESCRIPTION

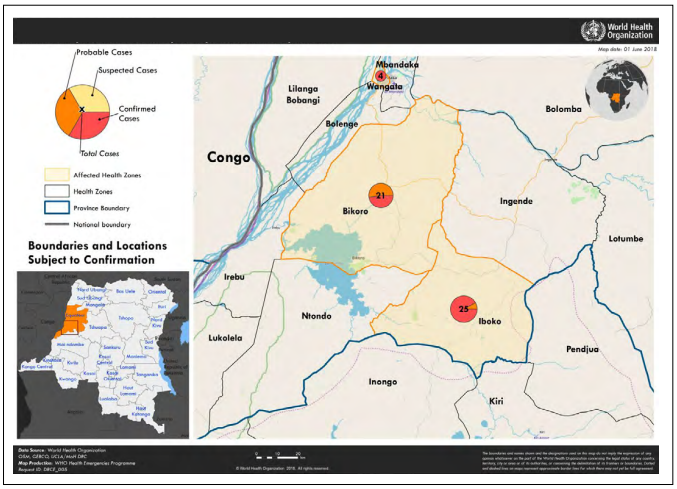
The outbreak of Ebola virus disease (EVD) in the Democratic Republic of the Congo remains active. On 30 May 2018, one new confirmed case was reported in Iboko. Three laboratory specimens (from suspected cases reported previously in Iboko (2) and Wangata (1) health zones) tested negative. There were no new suspected cases and deaths.

Since the beginning of the outbreak (on 4 April 2018), a total of 50 confirmed/probable EVD cases and 25 deaths (case fatality rate 50.0%) have been reported, as of 30 May 2018. Of the 50 cases, 37 have been laboratory confirmed and 13 are probable cases (deaths for which specimens were not obtained). Sixty-two percent (23) of the confirmed cases came from Iboko, followed by Bikoro (10 cases, 27%) and Wangata (4 cases). Of the 25 deaths, 68% (17) occurred in Bikoro, five (20%) in Iboko and three in Wangata. A total of five healthcare workers have been affected, with four confirmed cases and two deaths.

The outbreak remains localised to the three health zones initially affected: Iboko (25 cases and 5 deaths), Bikoro (21 cases and 17 deaths) and Wangata (4 cases and 3 deaths). Following ongoing data review and cleaning, one death has been moved from Iboko to Bikoro.

As of 29 May 2018, a total of 724 contacts have been recorded and are being followed up actively. Of these, 80% (579) were followed up on the day of reporting.

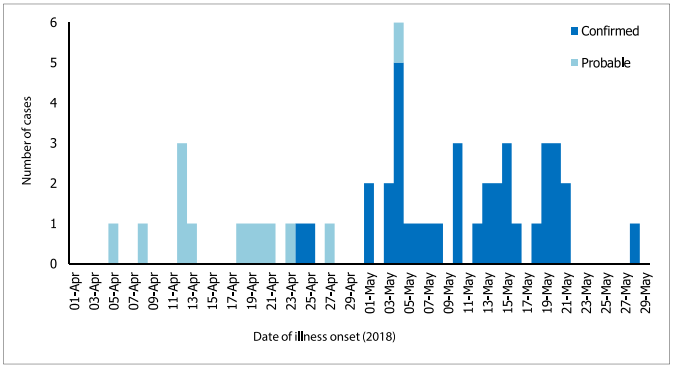
Geographical distribution of the Ebola virus disease cases in Equateur Province, Democratic Republic of the Congo, as of 30 May 2018



PUBLIC HEALTH ACTIONS

- Ring vaccination, launched on 21 May 2018, has reached a total of 682 people as of 30 May 2018.
- The Minister of Health carried out a field visit to Itipo on 29 May 2018 to review the ongoing response and provide support.
- As of 30 May 2018, WHO has deployed a total of 164 technical experts in various critical functions of the Incident Management System to support response efforts in the three hotspots of Bikoro, Iboko and Wangata (Mbandaka city).
- The Ministry of health, with support from Centers for Disease Control (CDC), WHO, Epicentre and other partners, continue to maintain an up-to-date outbreak database, including line lists, contact lists, etc.
- An Early Warning Alert and Response (EWAR) Systems and supporting field data collection tool have been deployed in Mbandaka and are being progressively rolled out in Iboko.

Epidemic curve for Ebola virus disease outbreak in Equateur Province, Democratic Republic of the Congo, 29 May 2018 (n=50)



- A mobile laboratory has been deployed in Iboko, manned by two virologists from the Institut Pasteur Dakar and INRB.
- Médicines sans Frontièrs (MSF) has set up isolation facilities in Mbandaka's main hospital (20 beds) and Bikoro hospital (15 beds) and two Ebola treatment centres (ETCs) are being set up in Iboko and Itipo.
- The GOARN partners (particularly MSF, UNICEF, IFRC, and WHO) continue to mobilize international technical and logistical support in response to the EVD outbreak. WHO is also working closely with the sister UN Agencies, partners and donors to ensure adequate support is provided to the response.
- WHO AFRO has provided a total of US$ 179 000 catalytic funds to six of the nine countries targeted for EVD preparedness.
- WHO has mobilized a total of US$ 1.55 million from the Contingency Fund for Emergencies to support preparedness and readiness interventions in the nine targeted countries.

SITUATION INTERPRETATION

The Ministry of Health, WHO and partners continue to make good progress in responding to the EVD outbreak. Never-the-less, more work still remains. There is a need to continue with the current momentum to scale up and increase the coverage of effective outbreak control interventions in the field. The objective of the response remains rapid containment of EVD in a localized area. The global community and donors have been very supportive and positive. More such support is required.

To this end, the national authorities and partners need to sustain implementation of key response activities such as ring vaccination, active surveillance, including contact tracing and active case search in the most affected areas, and intensify risk communication, social mobilisation and community engagement. Effective coordination is essential as well as enhancing preparedness and readiness in the Republic of Congo, Central African Republic and other neighbouring countries to prevent the epidemic from spreading via major points of entry.

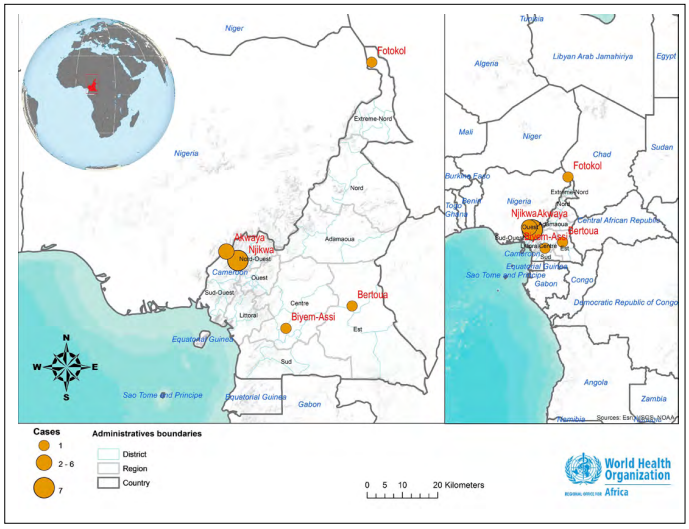
EVENT DESCRIPTION

The outbreak of monkeypox in Cameroon continues, with new areas being affected. Since our last report on 18 May 2018 *(Weekly Bulletin 20)*, nine additional cases have been reported, bringing the cumulative total to 16, including one confirmed case, as of 30 May 2018. No deaths have so far been reported. The ages of the affected people range from one month to 58 years, with a median age of 13 years, and the gender distribution is proportionate.

In addition to the two initial health districts, three others from three different regions have been affected, namely: Njikwa (7 cases) in the North-west Region, Akwaya (6) in the South-west Region, Biyem-Assi (1) in the Central Region, Bertoua (1) in the Eastern Region, and Fotokol (1) in the Far-North Region.

The outbreak of monkeypox in Cameroon was confirmed by the Centre Pasteur du Cameroun (CPC) on 14 May 2018 when one of two specimens (obtained from the initial cases) tested positive for orthopoxvirus/monkeypox virus by real-time polymerase chain reaction. The confirmed case is a 20-year-old male with clinical symptoms of fever, generalized vesiculo-pustular rash and enlarged lymph nodes. Samples from 11 suspected cases have been collected and tested at the CPC. The event was initially reported to the Ministry of Health by Bjikwa health authorities on 30 April 2018 when the first two suspected cases were detected. The Ministry of Health formally notified WHO of the event on 15 May 2018, following laboratory confirmation.

Geographical distribution of monkeypox cases in Cameroon, 30 April - 30 May 2018



PUBLIC HEALTH ACTIONS

- On 15 May 2018, the Ministry of Health activated an Incident Management System in response to the outbreak, with support from WHO.
- An action plan has been developed for the interventions and the needs of the different pillars of the response (coordination, operations, logistics, and communication) have been articulated.
- Active surveillance has been enhanced in the whole country, including case investigation of suspected cases and alerts.
- Training of healthcare workers on using personal protective equipment and advocating proper hand hygiene has been conducted. Information related to isolation of cases, symptomatic case management and handwashing technique have been shared.
- A communication plan has been developed and risk communication materials have been disseminated to increase public awareness and take precautionary measure to prevent monkeypox transmission.
- On 22 May 2018, the Regional Centre for Epidemics Prevention and Control (CERPLE) organised a coordination meeting, attended by the Njikwa Health District team, WHO, UNICEF and other stakeholders.

SITUATION INTERPRETATION

The outbreak of monkeypox continues in Cameroon, with five of the 10 regions in the country reporting at least one suspected case. The cases are being reported from remote rural areas where occupational activities such as farming and hunting are increasing animal-human interaction. The detection of additional cases in the other regions could be due to enhanced surveillance following confirmation of the outbreak.

The resurgence of monkeypox in Cameroon underscores the need to maintain a high level of vigilance and raise awareness of the disease among the local population. In the absence of specific treatment or vaccine, the only way to reduce infection in people is by raising public awareness of the risk factors, such as close contact with wildlife including rodents, and educating people about the measures they can take to reduce exposure to the virus. Surveillance measures and rapid identification of new cases is critical. People infected with monkeypox should be isolated and infection prevention and control measures should be observed in healthcare facilities caring for infected patients. Close physical contact with persons infected with monkeypox should be limited and protective equipment such as gloves, face masks and gowns should be worn when taking care of ill people in any setting. Regular hand washing should be carried out after caring for or visiting sick people.

Lassa fever | Nigeria | 441 Cases | 118 Deaths | 26.8% CFR

EVENT DESCRIPTION

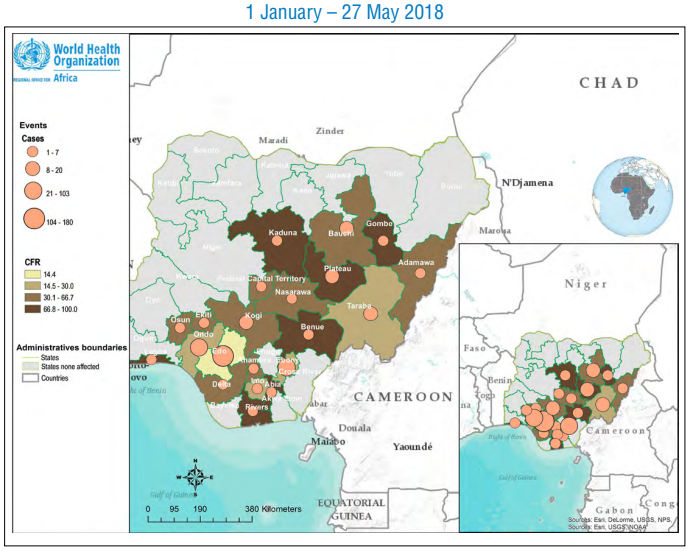
The outbreak of Lassa fever in Nigeria has improved considerably. No new confirmed case was reported in week 21 (week ending 27 May 2018) across the country. As of 27 May 2018, only one patient was admitted in the treatment centre in Adamawa State.

From 1 January to 27 May 2018, a total of 1 968 suspected Lassa fever cases were reported from 21 states. Of these, 431 have been confirmed, 10 were classified as probable, 1 523 tested negative (non-cases), and test results of four cases were pending. A total 118 deaths have occurred among the confirmed (108 deaths) and probable cases (10 deaths), giving a case fatality rate of 26.8% in this group. The main age group affected are those 21-40 years and the male to female ratio for the confirmed cases is 1.6:1. A total of 38 healthcare workers, nine of whom have died, have been affected in eight states.

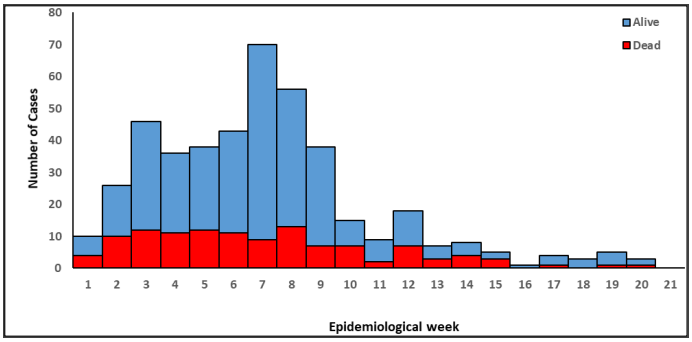
Of the total 21 states that recorded at least one confirmed case since the beginning of the outbreak, only five (Edo, Ondo, Ebonyi, Taraba, and Adamawa) are currently having active transmission (having at least one confirmed case and/or contacts within 21 days post-exposure). More than 80% of the confirmed cases came from Edo (42%), Ondo (24%) and Ebonyi (51%) state.

Of the 5 327 contacts listed in all the affected states, 99% (5 316) have completed 21-day follow up. Of these, 28 out of 82 symptomatic contacts have tested positive for Lassa fever. A total of 55 contacts are currently under follow up.

Geographical distribution of Lassa fever cases in Nigeria, 1 January – 27 May 2018



Weekly trend of Lassa fever cases in Nigeria, week 1- 21, 2018



PUBLIC HEALTH ACTIONS

- The Lassa fever multi-partner, multi-agency Technical Working Group continues to coordinate response activities at all levels. A national Lassa fever After Action Review meeting is scheduled for 5-7 June 2018
- The designated treatment/isolation centres remain operational, ready to manage suspected/confirmed Lassa fever cases.
- Enhanced surveillance is being maintained across the country, with case investigation of suspected/alert cases. Healthcare workers have been urged to maintain a high index of suspicion for Lassa fever suspected cases and take adequate precautions when handling all patients, irrespective of their health status.
- WHO is supporting Nigeria's neighbouring countries to improve their level of preparedness to readily respond to any potential outbreaks of Lassa fever.

SITUATION INTERPRETATION

The incidence of Lassa fever cases in Nigeria has declined considerably in the last consecutive weeks, signifying an end to the acute phase of the largest Lassa fever outbreak in the country. The national authorities have accordingly declared the end of the emergency phase of the outbreak in early May 2018. However, since the disease is endemic in the country, there is a need to maintain a high level of vigilance and sustain outbreak control interventions in order to avoid any potential flare up.

The high case fatality rate and number of confirmed cases among healthcare workers highlight the urgent need to strengthen access to healthcare as well as infection prevention and control (IPC).

During the current outbreak response, several challenges were observed across all pillars. The upcoming after-action-review should document the observed gaps and challenges, and make concrete recommendations for improvement.

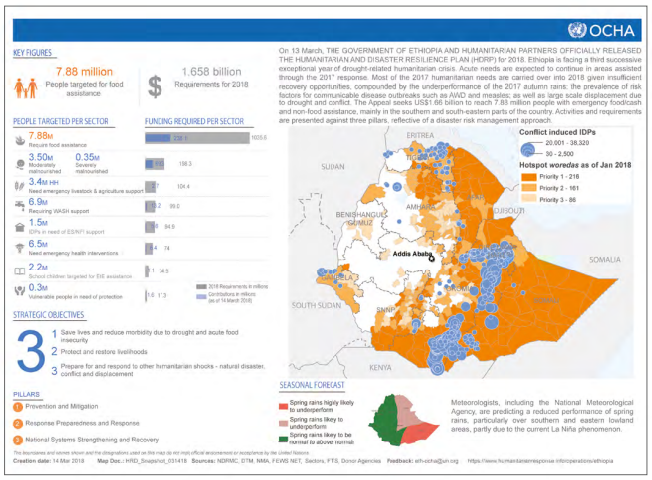
EVENT DESCRIPTION

The complex humanitarian emergency in Ethiopia continues, driven by the El-Niño-induced drought and intercommunal conflict. These repeated complex emergencies have overwhelmed the health system and disrupted primary healthcare services. The waiving of user-fees for primary and secondary level care has placed a significant burden on the under-prepared health services. Additional barriers to access are shortages of essential medicines and supplies at the public health facilities, forcing people to buy medicine privately.

Somali region, in the south-east, is most affected, with 1.7% of the population affected by severe acute malnutrition (SAM). Oromia and Southern Nations, Nationalities and People's regions (SNNPR) are also affected. Since September 2017, 794 599 people have been displaced from Somali region and zones in Oromia bordering Somali, including those displaced by conflict in the SNNP region in mid-April 2018. Of these internally displaced persons (IDPs), 322 332 have returned to their home communities, while the remaining 472 267 IDPs are in 56 designated sites of 44 *woredas* in six zones.

On 26 May 2018 there was flooding in Nensebo woreda in West Arsi, Oromia, with 23 deaths reported and seven people admitted with major injuries. Crops and farmland were also destroyed and 43 cattle lost. Two landslides were reported in SNNP, with ten deaths and 15 households (77 family members) displaced in Gamo Gofa and 22 deaths in Sidama, with an unconfirmed number of people displaced. Ongoing floods in Somali region have affected 165 000 people (120 000 displaced) in Shebelle, where one-third of the health facilities have been flood-damaged.

Snapshot map Humanitarian and Disaster Resilience Plan (HDRP) in Ethiopia, as of March 2018



From weeks 1-21 2018, a total of 953 SAM/malnourished children (MC) cases were admitted to the 33 stabilization centres (SCs). In week 21, 118 new cases of SAM/MC were admitted to 29 of the 33 SCs. From weeks 19-21 2018 there were 106 children with new cases of SAM with medical complications admitted in Fik Hospital in Erer Zone.

The current rains have increased the risk of diarrhoea, malaria and pneumonia among children under five. There is a general increase in health facility admissions, mainly due to seasonal diarrhoea with dehydration. In week 21 (week ending 27 May 2018), there were 27 acute watery diarrhoea (AWD) cases reported in Afar and one in Somali. A total of 267 AWD cases have been reported in 2018, from Somali (113), Afar (99), Tigray (38) and Dira Dawa City Administration (17), with four deaths in Afar.

A total of 28 new suspected measles cases have been reported in week 21. As of 29 May 2018, a total of 2 003 measles cases were reported, of which 539 were confirmed (62 laboratory confirmed, 453 epi-linked and 24 clinically compatible). All regions are reporting measles and children aged 5-14 years are mainly affected.

PUBLIC HEALTH ACTIONS

- WHO is co-leading the health cluster in coordinating response activities for the AWD outbreak, as well as the health response in flood-affected areas and supporting the coordination of the flood response at various flood command posts and the operational hub in Gode (Somali Region).
- WHO is coordinating activities with the regional health board (RHB) through the AWD command post/technical working group, to guide the activities of response partners for AWD, measles and other notifiable diseases.
- There is continued risk communication, community engagement and social mobilization at community level, with awareness creation sessions, active case finding and supervision of case management in health facilities by WHO zonal technical officers in at-risk zones in Gode, Elalale, Kelafo, Mustahil, Garbo and Horahsgash, reaching 113 158 people in Somali region since the beginning of 2018.
- Emergency supplies (inter-agency emergency health kits, AWD and nutrition kits and modules) were dispatched to 15 partners working across 10 regions.
- A nutrition officer (RHB), a medical nutritionist (WHO) and a water, sanitation and hygiene (WASH) officer (WHO) will deploy to Fik town to support the nutrition response and evaluate possible risk factors. An additional SAM kit has been re-purposed to Fik Hospital.
- WHO, in collaboration with the WASH cluster and water bureau, will continue to monitor water quality in different *woredas*.

SITUATION INTERPRETATION

Although WHO and partners are working with regional health boards and other actors to contain disease outbreaks and to mitigate malnutrition, the recent floods/landslides, with the prospect of more rain, potentially increase the risks of further disease outbreaks and nutritional crises. A response plan is being developed, but inadequate funding, poor coordination mechanisms in many *woredas*, lack of transport for emergency workers and the sheer geographical size of Oromia region, are hampering actions. Funding is urgently required in order for national and international actors to maintain appropriate technical expertise and operational support to sustain an improved outcome.

Summary of major issues challenges, and proposed actions

Issues and challenges

- The EVD outbreak in the Democratic Republic of the Congo remains a major global public health issue. The evolution of the outbreak is being closely monitored as the Ministry of Health and other national authorities, WHO and partners are continuing with intense response operations. All pillars of the response are being consolidated as well as preparedness and readiness measures in neighbouring countries. At this point, the disease is still localised to the three initial affected health zones. It is critical to sustain the ongoing interventions as well as efforts to improve coverage and effectiveness until the outbreak is summarily contained.
- Uganda is experiencing a cluster of cases of an undiagnosed illness with high fatality in Manafwa District in the eastern region. The disease, commonly affecting children, appears to be chronic with frequent recurrence. Preliminary investigation is attributing the event to black water fever, a complication of malaria. The ongoing EVD outbreak in the neighbouring Democratic Republic of the Congo has heightened public concerns and media attention on the event in Uganda. It is therefore imperative that this event is adequately attended to.

Proposed actions

- The Ministry of Health and other national authorities in the Democratic Republic of the Congo, WHO and partners to continue consolidating implementation of effective outbreak control interventions and ensure comprehensive coverage
- The national authorities and partners in Uganda need to conduct thorough investigations of the ongoing event in Manafwa District. The findings of the investigations should guide application of evidence-based control measures and should be effectively communicated to all stakeholders to avoid rumours and misconceptions.

All events currently being monitored by WHO AFRO

Country	Event	Grade†	WHO notified	Start of reporting period	End of reporting period	Total cases	Confirmed cases	Deaths	CFR	Comments
New events										
Uganda	undiagnosed Illness	Ungraded	30-May-18	19-Apr-18	26-May-18	19	-	6	31.6%	Detailed update given above.
Ongoing events										
Algeria	Measles	Ungraded	13-Mar-18	25-Jan-18	11-Mar-18	2 320	-	5	0.2%	A total of 2 320 cases including 5 deaths have been reported from 13 wilayas: El Oued, Ouargla, Illizi, Tamanrasset, Biskra, Tebessa, Relizane, Tiaret, Constantine,Tissemsilt, Medea, Alger, and El-Bayadh.
Cameroon	Humanitarian crisis	G2	31-Dec-13	27-Jun-17	3-Nov-17	-	-	-	-	At the beginning of November 2017, the general security situation in the Far North Region worsened. Terrorist attacks and suicide bombings have continued and are causing displacement. Almost 10% of the population of Cameroon, particularly in the Far North, North, Adamaoua, and East Regions, is in need of humanitarian assistance as a result of the insecurity. To date, more than 58 838 refugees from Nigeria are present in Minawao Camp, and more than 21 000 other refugees have been identified outside of the camp. In addition, approximately 238 000 internally displaced people (IDPs) have been registered.
Cameroon	Cholera	Ungraded	24-May-18	18-May-18	1-Jun-18	3	1	0	0.0%	Since 18 May 2018, Mayo Oulo's Health Zone has reported three cases with zero deaths of cholera in two border health areas with Nigeria. Two cases have been reported in the Guirviza Health Area and one in the Doumo Health Area. The first case was notified to the Guirviza Integrated Health Center in epi-week 20 from Mbouiri village which is likely an imported case from Nigeria. One case has been confirmed on 24 May 2018 at the Pasteur Center of Cameroon in Garoua. All cases are females. All the cases have recovered and are being observed after clinical management. No new cases were notified since 21 May 2018.
Cameroon	Monkeypox	Ungraded	16-May-18	30-Apr-18	25-May-18	16	1	0	0.0%	Detailed update given above.
Central African Republic	Humanitarian crisis	Protracted 2	11-Dec-13	11-Dec-13	2-May-18	-	-	-	-	The security situation remains tense and precarious in many places across the country. On 1 April, the armed group from the neighborhood of PK5 in Bangui, predominantly muslim attacked the Catholic Church of Our Lady of Fatima where 16 people were killed with around 100 wounded. That incident resulted in a series of violence and revenge where muslims were killed by angry christian groups. Two muslims were burned on the road and the other killed in Bangui Community Hospital. The provisional reports shows 185 wounded and 23 deaths from hospital sources. Currently, 2.5 million people are in need of humanitarian aid including 1.1 million people targeted for the health cluster partners. There are around 688 700 IDPs across the country, of which 70% are living with host families.
Central African Republic	Monkeypox	Ungraded	20-Mar-18	2-Mar-18	24-Apr-18	20	9	1	0.0%	The outbreak was officially declared on 17 March 2018 in the sub province of Ippy. In this reporting period, there is an increase in number of suspected monkey pox in Bangassou health district. As of 24 April, twenty cases including nine confirmed cases have been reported from Ippy (6) and Bangassou (3).

Country	Event	Grade†	WHO notified	Start of reporting period	End of reporting period	Total cases	Confirmed cases	Deaths	CFR	Comments
Chad	Measles	Ungraded	24-May-18	1-Jan-18	30-May-18	474	31	18	3.8%	A total of 74 cases with 4 deaths (CFR: 5.4%) were reported across the country during epi-week 21 compared to 77 cases with 11 deaths reported for the previous epi-week. Five districts (Bokoro, Gama, Ati, Am dam, and Goz Beida) are currently in epidemic phase. Cumulatively, 474 cases with 18 deaths (CFR 3.79%) have been reported since the beginning of epi-week 1, 2018. Thirty-one (31) cases have been laboratory confirmed, 126 confirmed by epidemiological link, and 10 clinically compatible.
Democratic Republic of the Congo	Humanitarian crisis	G3	20-Dec-16	17-Apr-17	26-Apr-18	-	-	-	-	The humanitarian and security situation remains very fragile in several provinces of the country, particularly in Ituri, North Kivu, South Kivu and Tanganyika. Insecurity is growing on the plain of Ruzizi, Kamanyora axis in Uvira. More than 1,300 people would be affected by heavy rain and violent winds that fell in the localities of Makama, Yandale, Milanga, Nemba and Kaska from 21 to 23 April 2018 in the territory of FIZI, southern province Kivu.
Democratic Republic of the Congo	Cholera		16-Jan-15	1-Jan-18	15-Apr-18	9 149	0	224	2.4%	This is part of an ongoing outbreak. From week 1 to 15 of 2018, a total of 9 149 cases including 224 deaths (CFR: 2.4%) were reported from DRC. In week 15, there were 432 new cases with 12 deaths reported. Nationwide, a total of 61 680 cases including 1 327 deaths (CFR; 2.2%) have been reported since January 2017.
Democratic Republic of the Congo	Ebola virus disease	G3	7-May-18	4-Apr-18	30-May-18	50	37	25	50.0%	Detailed update given above.
Democratic Republic of the Congo	Measles	Ungraded	10-Jan-17	1-Jan-18	4-Mar-18	3 404	-	30	0.9%	This outbreak is ongoing since the beginning of 2017. As of week 8 in 2018, a total of 48 326 cases including 563 deaths (CFR 1.2%) have been reported since the start of the outbreak. In 2018 only, 3 404 cases including 30 deaths (0.9%), were reported.
Democratic Republic of the Congo	Poliomyelitis (cVDPV2)	Ungraded	15-Feb-18	n/a	30-Mar-18	407	22	0	0.0%	On 13 February 2018, the Ministry of Health declared a public health emergency regarding 21 cases of vaccine-derived polio virus type 2. Three provinces have been affected, namely Haut-Lomami (8 cases), Maniema (2 cases) and Tanganyika (11 cases). The outbreak has been ongoing since February 2017.
Democratic Republic of Congo	Rabies	Ungraded	19-Feb-18	1-Jan-18	1-Apr-18	38	0	12	31.6%	This outbreak began towards the end of October 2017 in Kibua health district, North Kivu province. During Week 12 of 2018, seven new cases and two deaths were reported.
Democratic Republic of Congo	Monkeypox	Ungraded	n/a	1-Jan-18	26-Apr-18	1 210	34	28	2.3%	From weeks 1-16 of 2018 there have been 1 210 suspected cases of monkeypox including 28 deaths. Of the suspected cases, 34 cases have been confirmed. Suspected cases have been detected in 14 provinces. Sankuru Province has had an exceptionally high number of suspected cases this year (309 cases).

Country	Event	Grade†	WHO notified	Start of reporting period	End of reporting period	Total cases	Confirmed cases	Deaths	CFR	Comments
Ethiopia	Humanitarian crisis	Protracted 3 (combined)	15-Nov-15	n/a	27-May-18	-	-	-	-	Detailed update given above.
Ethiopia	Acute watery diarrhoea (AWD)		15-Nov-15	1-Jan-18	27-May-18	267	-	4	1.5%	This is an ongoing outbreak since the beginning of 2017. In 2018 only, from 1 January 2018 to 27 May 2018, a total of 267 cases with 4 deaths have been reported from the following regions: Somali (113), Afar (99 with 4 deaths), Tigray (38), and Dire Dawa City Administration (17) . In week 21, 28 cases were reported from Afar (27) and Somali (1). Between January and December 2017, a cumulative total of 48 814 cases and 880 deaths (CFR 1.8%) were reported from 9 regions.
Ethiopia	Measles		14-Jan-17	1-Jan-18	29-May-18	2 003	539	-	-	This is an ongoing outbreak since the beginning of 2017. Between January and December 2017, a cumulative total of 4 011 suspected measles cases have been reported across the country. In 2018, a total of 2 003 suspected measles cases are reported across the country and there were 28 new cases reported in the week of 21. From the total cases reported, 539 are confirmed cases (62 lab confirmed, 453 epi-linked and 24 clinically compatible). A total of 13 laboratory confirmed measles outbreaks are reported up to week 21 and ONE (in Dessie town of South Wello Zone in Amhara region) is currently active. So far, the outbreaks reported are from the regions of Amhara (3), SNNPR (1) and Somali (9). The age group mostly being affected remains under five (33%) and children 5 – 14 years (48%).
Guinea	Measles	Ungraded	9-May-18	1-Jan-18	6-May-18	1 113	267	9	0.8%	A new measles outbreak was detected in epidemiological week 8, 2018. Measles was reported in all parts of the country since the beginning of the year. The most affected zones include Kankan, Conakry and Faraneh. Out of 522 samples tested, 267 samples tested IGM positive. Out of the positive cases, 76% were not vaccinated for measles despite vaccination campaign efforts in 2017 following a large epidemic.
Kenya	Flooding	Ungraded	18-Apr-18	0-Jan-00	3-May-18	-	-	-	-	Large parts of Kenya have been experiencing floods following heavy rains, with 33 of the 47 counties in the country affected, especially those along the main rivers. The most affected counties are Tana River, Turkana, Mandera, and Kilifi. Figures from the Kenya Red Cross Society (KRCS) put the death toll at 80, with more than 33 injured. According to the United Nations Office for the Coordination of Humanitarian Affairs (OCHA), at least 244 407 people from 45 219 households across the country have been displaced, with more than 23 000 displaced in the last week. In Nandi County, 243 households were displaced following a mudslide, while landslides have been reported in Muranga County in the central region.
Kenya	Cholera	G1	6-Mar-17	1-Jan-18	28-May-18	4 551	260	74	1.6%	The outbreak in Kenya is ongoing since 2017. Between 1 January 2017 and 07 December 2017, a cumulative total of 4 079 cases with have been reported from 21 counties (data until 31 December 2017 not available). In 2018, a total of 4 551cases have been reported since the first of January. Currently, the outbreak is active in 8 counties: Garissa, Turkana, Tharaka-Nithi, West Pokot, Nairobi, Kiambu, Elgeyo Marakwet and Isiolo counties. The outbreak has been controlled in 10 counties: Kirinyaga, Busia, Mombasa, Meru, Siaya, Murang'a, Tana River, Trans-Nzoia, Nakuru and Machakos.

Country	Event	Grade†	WHO notified	Start of reporting period	End of reporting period	Total cases	Confirmed cases	Deaths	CFR	Comments
Kenya	Measles	Ungraded	19-Feb-18	19-Feb-18	7-May-18	141	11	1	0.7%	The outbreak is located in two counties, namely Wajir and Mandera Counties. As of 7 May 2018, Wajir County has reported 39 cases with 7 confirmed cases; Mandera has reported 102 cases with 4 confirmed cases and one death. Date of onset of the index case in Wajir County was on 15th December 2017. The index case was traced to Kajaja 2 village from where the outbreak spread to 7 other villages: Ducey (18 cases), ICF (2), Godade (3), Kajaja(1), Konton(2),Kurtun (1) and Qarsa (12). No new cases have been reported. Date of onset of the index case in Mandera County was on 15 February 2018.
Liberia	Measles	Ungraded	24-Sep-17	1-Jan-18	20-May-18	2 789	177	12	0.4%	During week 20 (week ending 20 May 2018), 71 suspected cases were reported from 14 counties. Montserrado (15), Grand Kru (13), Maryland (9), Nimba (9), Grand Bassa (7), Gbarpolu (5), Margibi (4), Grand Cape Mount (2), Sinoe (2), River Gee (1), Rivercess (1), Bong (1), Bomi (1), and Grand Gedeh (1). From week 1 to week 20 of 2018, 2 789 cases have been reported including 12 deaths. Cases are epidemiologically classified as follows: 177 (6%) laboratory confirmed, 1 656 (59%) epi-linked, 40 (1.4%) clinically compatible, 128 (5%) discarded, and 428 (15.3%) pending.
Liberia	Lassa fever	Ungraded	14-Nov-17	1-Jan-18	31-May-18	20	14	10	50.0%	Sporadic cases of Lassa fever have been reported since the beginning of the year. In week 21 (week ending 27 May 2018), one new confirmed case was reported from Bong County. As of 31 May 2018, two counties (Nimba and Bong) remain in active outbreak phase. A total of 104 contacts, including 56 healthcare workers, have been listed and are being followed up. From 1 January to 31 May 2018, 92 initially suspected cases including 24 deaths (CFR 26.0%) have been reported. Test results for 84 suspected cases showed 14 positive and 71 negative by RT-PCR. Ten deaths (CFR 71.4%) have been reported among confirmed cases.Cumulatively, 20 confirmed and suspected cases (negative cases removed) have been reported with 10 deaths (CFR:50.0%). Bong (2), Grand Bassa (1), Margibi (2), Montserrado (3), and Nimba (6) counties reported confirmed cases.
Madagascar	Plague	Ungraded	13-Sep-17	13-Sep-17	29-Apr-18	2 676	558	238	8.9%	From 1 August 2017 to 29 April 2018, a total of 2 678 cases of plague were notified, including 559 confirmed, 828 probable and 1 291 suspected cases. Out of them 2 032 cases were of pulmonary, 437 were of bubonic, 1 was of septicaemic form and 208 cases unspecified. In week 17, 2 suspected cases were reported but tested negative.
Mali	Humanitarian crisis	Protracted 1	n/a	n/a	19-Nov-17	-	-	-	-	The security situation remains volatile in the north and centre of the country. At the last update, incidents of violence had been perpetrated against civilians, humanitarian workers, and political-administrative authorities.
Mali	Measles	Ungraded	20-Feb-18	1-Jan-18	29-Apr-18	800	246	0	0.0%	Health districts are affected by measles in Bougouni, Koutiala, Kolondieba, Tombouctou, Dioila, Taoudenit and Kalabancoro. Reactive vaccination campaigns, enhancement of surveillance, and community sensitization activities are ongoing in the affected health districts. The national reference laboratory (INRSP) confirmed 246 cases by serology (IgM).

Country	Event	Grade†	WHO notified	Start of reporting period	End of reporting period	Total cases	Confirmed cases	Deaths	CFR	Comments
Mauritania	Crime-an-Congo haemor-rhagic fever (CCHF)	Ungraded	26-Apr-18	22-Apr-18	8-May-18	2	1	0	0.0%	On 22 April 2018, one suspected case of haemor-rhagic fever at Cheikh Zayed Hospital (CZ) was notified to the central department of the Ministry of Health. The case was a 58-year-old male cattle breeder in the locality of Elghabra, Assaba region. The onset of symptoms was on April 16, 2018 with high fever, arthralgia and headache. He reported being in contact with a dead cow, and no consump-tion of deceased animal meat was reported. The sample sent to the national reference laboratory confirmed the presence of Crimean Congo virus by serology (IgM positive). The case was discharged from the hospital on 27 April 2018. One new sus-pected case from the same area was notified on 30 April 2018 and tested negative for Crimean Congo Virus by serology and PCR. As of 8 May 2018, 22 (69%) of the 32 identified contacts have completed follow up. No death has been reported.
Mauritania	Dengue fever	Ungraded	24-May-18	15-May-18	24-May-18	5	4	0	0.0%	As of 24 May 2018, 4 confirmed cases of dengue fever (serotype II) were reported in the city of Guerou (Assaba Wilaya) located 600 km from Nouakchott. All cases have been confirmed by the Institut National de Recherches en Santé Publique (INRSP). On 15 May 2018, 5 cases were admitted at the Moughataa Guerou health center in the wilaya of Assaba); Cases presented with fever accom-panied by headache, chills, myalgia, arthralgia and vomiting. None of the cases presented with haemorrhagic symptoms. Samples were collected and 4 out of 5 (80%) tested positive for dengue. Cases were between the ages of 24-65 years with no sex predilection. The confirmed cases live in five districts of the city of Guerou and the negative case comes from the commune of Kamour (25kms of Guerou). It should be noted that these cases occur two and a half months after the end of the Nouak-chott Dengue fever epidemic in Mauritania.
Mauritius	Measles	Ungraded	23-May-18	19-Mar-18	20-May-18	40	40	-	-	As of 20 May 2018, 40 confirmed cases of measles have been notified in Mauritius with no deaths. All cases have been confirmed by the virology labo-ratory of Candos (IgM antibodies). No history of travel among measles cases. The onset of symptoms of the first cases was in week 12 (week ending 25 March 2018). A sharp increase in measles cases was observed in week 18 and 19, with 9 and 15 new cas-es respectively. More than 60% of the affected cases are between 0-15 years of age. The remaining cases were reported in adults between 26-40 years. The cases of measles are concentrated in the North and North West of Mauritius. Actions taken include: Screening of all contacts of the measles cases for fever and rash and verification of vaccine status; Screening of symptoms and vaccination status in schools; Vaccination with MMR according to vacci-nation status; Sensitization of the population on measles symptoms and the importance of vaccina-tion; and Information sheets to all doctors of both the public and private sector of Mauritius.
Namibia	Crime-an-Congo haemorrhag-ic fever	Ungraded	29-Mar-18	28-Mar-18	13-Apr-18	2	1	1	50.0%	A male subject from Keetmanshoop District became ill on 22 March 2018 after contact with a tick-infested cow. As of 28 March 2018 he was admitted to an isolation unit at Windhoek Central Hospital and PCR testing was confirmed positive on 31 March 2018. The patient died on 3 April 2018. An additional suspected case with a history of tick bite and vomiting has also been isolated as of 3 April 2018, but tested negative for CCHF on 7 April 2018.

Country	Event	Grade†	WHO notified	Start of reporting period	End of reporting period	Total cases	Confirmed cases	Deaths	CFR	Comments
Namibia	Hepatitis E	Ungraded	18-Dec-17	8-Sep-17	20-May-18	1 409	116	15	1.1%	This is an ongoing outbreak since 2017. The majority of cases have been reported from informal settlements in the capital district Windhoek, Khomas region. As of 20 May 2018, Windhoek district reported a cumulative total of 1 364 suspected including 106 confirmed cases, since the outbreak started in September 2017. There has been a cumulative total of 15 deaths reported during this period, mostly pregnant women or deaths of women following delivery. Meanwhile, Omusati region, a northern region bordering Angola reported a total of 45 suspected HEV cases, that have been reported between January and April 2018. Out of the 45 suspected, 10 cases have been confirmed as IgM positive. This region is comprised of four districts.
Niger	Humanitarian crisis	G2	1-Feb-15	1-Feb-15	11-Apr-18	-	-	-	-	The humanitarian situation in Niger remains complex. The state of emergency has been effective in Tillabéry and Tahoua Regions since 3 March 2017. Security incidents continue to be reported in the south-east and north-west part of the country. This has disrupted humanitarian access in several localities in the region, leading to the suspension of relief activities, including mobile clinics.
Nigeria	Humanitarian crisis	Protracted 3	10-Oct-16	n/a	7-May-18	-	-	-	-	The security situation in north-east Nigeria remains volatile, with frequent incidents, often suicide attacks using person-borne improvised explosive devices (PBIED) and indiscriminate armed attacks on civilian and other targets. On 1 May 2018, an attack in Mubi town in Adamawa State resulted in 27 deaths and more than 50 injuries, while 13 people were killed in Zamfara State on 3 May 2018. In a related incident that took place on 5 May 2018, at least 45 people from Gwaska village in Kaduna State (outside north-east Nigeria) died in fighting between bandits and armed militia. Internal displacement continues across north-east Nigeria, especially in Borno, Adamawa and Yobe states, partly fuelled by deteriorating living conditions and the ongoing conflict. The number of internally displaced persons (IDPs) across the six states (Adamawa, Bauchi, Borno, Gombe, Taraba, and Yobe) in northeast Nigeria increased to over 1.88 million in April 2018, from 1.78 in February 2018. In addition, there are over 1.4 million returnees in the area. The communal conflicts between herders and farmers, which has been taking place since January 2018 outside north-east Nigeria, also displaced approximately 130 000 people in Benue, Nasarawa, Kaduna, and Taraba States. (A detailed update can be found on week 19 bulletin).
Nigeria	Cholera	Ungraded	7-Jun-17	1-Jan-18	3-Mar-18	210	2	16	7.6%	There is an ongoing outbreak since the beginning of 2017. Between 1 January and 31 December 2017, a cumulative total of 4 221 suspected cholera cases and 107 deaths (CFR 2.5%), including 60 laboratory-confirmed were reported from 87 LGAs in 20 states. Between weeks 1 and 9 of 2018, 210 suspected cases including two laboratory-confirmed case and 16 deaths (CFR 7.6%), have been reported from 28 LGAs in 9 states. Most recently, cases have also been reported from Yobe and Bauchi states. During 28 March to 8 May 2018, Yobe State reported 402 cases including 15 deaths (CFR 3.7%).
Nigeria	Lassa fever	G2	24-Mar-15	1-Jan-18	20-May-18	441	431	118	26.8%	Detailed update given above.
Nigeria	Hepatitis E	Ungraded	18-Jun-17	1-May-17	31-Dec-17	1 651	182	8	0.6%	The number of cases has been decreasing since week 51 of 2017. Forty-three new cases were reported in Kala/Balge LGA in week 52 (ending 31 December 2017).

Country	Event	Grade†	WHO notified	Start of reporting period	End of reporting period	Total cases	Confirmed cases	Deaths	CFR	Comments
Nigeria	Yellow fever	Ungraded	14-Sep-17	7-Sep-17	20-May-18	1 835	46	47	2.6%	From the onset of this outbreak on 12 September 2017, a total of 1 835 suspected yellow fever cases including 47 deaths have been reported as at week 20 (week ending on 20 May 2018), from all Nigerian states in 407 LGAs. The outbreak is currently active in the country. A total of 46 samples that were laboratory-confirmed at IP Dakar recorded from ten States (Edo, Ekiti, Katsina, Kebbi, Kwara, Kogi, Kano, Nasarawa, Niger and Zamfara).From the onset of this outbreak on 12 September 2017, a total of 1 835 suspected yellow fever cases including 47 deaths have been reported as at week 20 (week ending on 20 May 2018), from all Nigerian states in 407 LGAs. The outbreak is currently active in the country. A total of 46 samples that were laboratory-confirmed at IP Dakar recorded from ten States (Edo, Ekiti, Katsina, Kebbi, Kwara, Kogi, Kano, Nasarawa, Niger and Zamfara). Yellow fever vaccination campaigns have been successfully completed in six states.
Nigeria	Monkeypox	Ungraded	26-Sep-17	24-Sep-17	30-Apr-18	244	101	6	2.5%	Suspected cases are geographically spread across 25 states and the Federal Capital Territory (FCT). One hundred one (101) laboratory-confirmed and 3 probable cases have been reported from 15 states/territories (Akwa Ibom, Abia, Anambra, Bayelsa, Cross River, Delta, Edo, Ekiti, Enugu, Lagos, Imo, Nasarawa, Oyo, Rivers, and FCT).
Nigeria	Meningitis	Ungraded	26-Dec-17	1-Sep-17	15-May-18	3 301	296	301	9.1%	From 1 September 2017 to 15 May 2018, 3 301 suspected cases have been reported from fifteen States: Katsina (1 159), Zamfara (1 115), Sokoto (372), Jigawa (186), Kano (107), Kebbi (95), Niger (70), Yobe (65), Bauchi (31), Cross River (31), Adamawa (23), Borno (27), Plateau (4), Gombe (3) and Kaduna (1). Of the 748 samples tested, 292 (39.6 %) were positive for bacterial meningitis. *Neisseria meningitides* C (NmC) accounted for 63.2% (187) of the positive cases.

Country	Event	Grade†	WHO notified	Start of reporting period	End of reporting period	Total cases	Confirmed cases	Deaths	CFR	Comments
Nigeria (North East)	Cholera	Ungraded	n/a	13-Feb-18	1-Jun-18	2 107	67	34	1.6%	North-east Nigeria is experiencing recurrent cholera outbreaks, with three states: Adamawa, Borno and Yobe currently having active transmission. The cholera outbreak in Adamawa State emerged on 12 May 2018 and has affected two local government areas (LGAs): Mubi North and Mubi South (both located at the border with Cameroon). The number of incidence cases have been increasing rapidly in the past days. On 1 June 2018, 75 new cases with 1 death were report. A total of 17 case-patients were on admission in the cholera treatment centres (CTCs) by the reporting date. As of 1 June 2018, a total of 909 cases, including 16 deaths (case fatality rate 1.8%) have been reported from Mubi North (397 cases, 10 deaths), Mubi South (508 cases, 6 deaths), Hong (2 cases) and Maiha (2 cases) LGAs. A total of 41(out of 50) stool specimens tested positive by cholera rapid diagnostic test (RDT) and 10 out of 11 specimens cultured *Vibrio cholerae*. The cholera outbreak in Yobe State started on 28 March 2018 and a total of 404 suspected cases, including 15 deaths (case fatality rate 3.7%), were reported as of 28 May 2018. Five LGAs have been affected, Bade (379 cases, 15 deaths), Karasuwa (16), Jakusko (4), Yusufari (3) and Bursari (2). No new cholera cases have been reported in any of the affected LGAs since 15 May 2018. Of 25 stool samples collected, 16 (64%) tested positive on cholera RDT while 18 (60%) out of 30 samples cultured *V. cholerae*. In Borno State, the cholera outbreak started on 13 February 2018 in Kukawa LGA. In week 21 (week ending on 27 May 2018), a total of 16 suspected cholera cases have been reported in Borno State, all coming from Kukawa LGA. A cumulative total of 794 suspected cholera cases and three deaths (case fatality rate 0.4%) has been reported, as of 27 May 2018. Out of 110 stool samples collected, 87 (79%) were positive on cholera RDT. Thirty-nine (53%) out of 74 samples were culture positive. Since February 2018, the three states in north-east Nigeria have reported a total of 1 758 suspected cholera cases and 31 deaths (case fatality rate 1.8%), as of 28 May 2018.
São Tomé and Príncipé	Necrotising cellulitis/ fasciitis	Protracted 2	10-Jan-17	25-Sep-16	20-May-18	2 659	0	0	0.0%	From week 40 in 2016 to week 20 in 2018, a total of 2 659 cases have been notified. In week 20, 12 cases were notified, five less than the previous week. Four out of seven districts reported a case, Mé-zochi (7), Agua Grande (1), Lobata (2) and Príncipe (2). The attack rate of necrotising cellulitis in Sao Tome and Príncipe is 13.4 cases per 1 000 inhabitants. The results of the PCR analysis (University of Cambridge, England) made on the samples (swabs wound and / or culture) of 21 patients including 15 Principle and 5 from Sao Tome indicate that a total of 15 were positive for *Staphylococcus aureus* (71%), 12 for pyogenic *Streptococcus* (57%), 9 (9/12: 75%) for *Corynebacterium diphtheriae*.
Senegal	Pertussis	Ungraded	10-May-18	10-May-18	1-Jun-18	3	3	-	-	On 9 May 2018, a confirmed case of pertussis was reported to the Ministry of Health. In the last three months there have been 3 confirmed cases of pertussis in infants less than 6 weeks in Senegal districts of Touba, Darou-Mousty and Dakar-Nord. The cases were confirmed in Institut Pasteur Dakar and Bio24. Since the last report on 14 May 2018 thre have been no new reported cases.

Country	Event	Grade†	WHO notified	Start of reporting period	End of reporting period	Total cases	Confirmed cases	Deaths	CFR	Comments
Seychelles	Dengue fever	Ungraded	20-Jul-17	18-Dec-15	20-May-18	5 064	1 429	-	-	A total of 4 459 cases have been reported from all regions of the three main islands (Mahé, Praslin, and La Digue). A total of 4 950 suspected cases reported by end of week 16, 2018. Significant increase in reported suspected cases for week 16 compared with week 15, a total of thirty-four (34) suspected cases. Twenty-four (24) samples tested amongst which five (5) were positive, nineteen (19) negative. Of note nine (9) suspected cases were admitted at Baie St Anne Praslin Hospital but unfortunately not tested. So far for this epidemic the serotypes DENV1, DENV2 and DENV3 have been detected.
South Africa	Listeriosis	G2	6-Dec-17	1-Jan-17	22-May-18	1 038	1 038	208	20.0%	This outbreak is ongoing since the beginning of 2017. As of 22 May 2018, 1 038 cases have been reported in total. Around 78% of cases are reported from three provinces; Gauteng (58%, 607/1 038), Western Cape (13%, 130/1 0348 and KwaZulu-Natal (7%, 76/1 038). The number of new cases reported has decreased each week cases since the implicated products were recalled on 04 March 2018. Neonates ≤28 days of age are the most affected age group, followed by adults aged 15 – 49 years of age. All cases that have been identified after the recall are being fully investigated.
South Africa	Rabies	Ungraded	-	1-Jan-18	17-Apr-18	7	6	0	0.0%	From Jan 2018 to date, a total of six human cases of rabies have been laboratory confirmed. Cases were reported from KwaZulu-Natal Province (4) where a resurgence of rabies has been reported. The remaining cases were reported from the Eastern Cape Province. For all of the cases, exposures to either rabid domestic dogs or cats were reported. Another probable case of rabies was reported from the Eastern Cape, but a sample for laboratory investigation for rabies was not available. The case did however present with a clinical disease compatible with a diagnosis of rabies and had a history of exposure to a potentially rabid dog before falling ill. During 2017, a total of six cases were reported for the year.
South Sudan	Humanitarian crisis	Protracted 3	15-Aug-16	n/a	20-May-18	-	-	-	-	The complex humanitarian crisis in South Sudan continues with ongoing incidents of armed conflict, sporadic intercommunal clashes, cattle raiding, attacks on humanitarian workers and revenge killings in multiple locations, all of which hamper the delivery of humanitarian aid. A national non-governmental organization has temporarily suspended health activities in Kupera and Mukaya in Yei County as a result of the recent detention of seven of their staff members (who were delivering medical supplies and drugs to health facilities) by an armed group. Partners also suspended the distribution of non-food items, agricultural seeds and tools to conflict-affected people in Mitika Payam (about 25 km from Yei town) due to insecurity along the Yei-Lasu road. There were no casualties reported, but supplies were looted. (A detailed update can be found in week 21 bulletin).
South Sudan	Hepatitis E	Ungraded	-	3-Jan-18	27-May-18	62	11	-	-	From 3 January 2018, a total of 62 suspect case of hepatitis E (HEV) have been reported in two counties of South Sudan as of 27 May 2018. Of the total suspect cases, 11 cases have been PCR confirmed as HEV (10 in Bentiu PoC and 1 in Old Fangak). No new cases identified after active follow up in Fangak. More than half of the total cases are between 1 and 9 years of age and 65% are male. Among the females, most cases have been reported in those aged 15 to 44 years (who are at risk of adverse outcomes if infected in the third trimester of pregnancy). The current response is coordinated by Health-WASH partners that are conducting regular meetings in Bentiu PoC since 26 April 2018.

Country	Event	Grade†	WHO notified	Start of reporting period	End of reporting period	Total cases	Confirmed cases	Deaths	CFR	Comments
South Sudan	Rift Valley fever (RVF)	Ungraded	28-Dec-17	7-Dec-17	27-May-18	31	6	4	12.9%	As of 27 May 2018, a total of 31 cases of Rift Valley fever have been reported from Yirol East of the Eastern Lakes State, including six confirmed human cases (one IgG and IgM positive and five IgG only positive), three cases who died and were classified as probable cases with epidemiological links to the three confirmed cases, 26 were classified as non-cases following negative laboratory results for RVF (serology), and samples from 20 suspected cases are pending complete laboratory testing. A total of four cases have died, including the three initial cases and one suspect case who tested positive for malaria (case fatality rate 12.9%).
Tanzania	Floods	Ungraded	18-Apr-18	15-Apr-18	17-Apr-18	-	-	-	-	Heavy rains and poor drainage systems have led to intense flooding in Dar es Salaam affecting the districts of Ilala, Kinondoni, Temeke, Kigamboni. As of 17 April 2018, 15 have died and another 10 have been injured. Response teams are mobilizing.
Tanzania	Cholera	Protracted 1	20-Aug-15	1-Jan-18	27-May-18	2 344	-	51	2.2%	This is part of an ongoing outbreak. During week 21 (week ending 27 May 2018), 239 new cases and seven deaths were reported from Sumbawanga DC (200 cases and 6 deaths) in Rukwa region; Ngorongoro DC (24 cases and 1 deaths), Longido DC (15 cases) in Arusha region; As of week 21, a total of 2 344 cases with 44 deaths (CFR: 2.1%) were reported from Tanzania Mainland, no case was reported from Zanzibar. The last case reported from Zanzibar was on 11 July 2017. Cholera cases in 2018 increased and nearly doubled during the period of January to May 2018 (2 344 cases), when compared to the same period in 2017 (1 231 cases) in the United Republic of Tanzania. Since the start of the outbreak on 15 August 2015, Tanzania mainland reported 30 950 cases including 517 deaths (CFR 1.7%) and Zanzibar reported 4 688 cases including 72 deaths (CFR 1.54%). In total, 35 638 cases including 589 deaths (CFR 1.7%) were reported for the United Republic of Tanzania.
Tanzania	Dengue fever	Ungraded	19-Mar-18	n/a	21-Mar-18	13	11	-	-	An outbreak of Dengue fever is ongoing in Dar es Salaam. Further information will be provided when it becomes available.
Uganda	Humanitarian crisis - refugee	Ungraded	20-Jul-17	n/a	2-Mar-18	-	-	-	-	The influx of refugees to Uganda has continued as the security situation in the neighbouring countries remains fragile. Approximately 75% of the refugees are from South Sudan and 17% are from DRC. An increased trend of refugees coming from DRC was observed recently. Landing sites in Hoima district, particularly Sebarogo have been temporarily overcrowded. The number of new arrivals per day peaked at 3 875 people in mid-February 2018.
Uganda	Cholera	Ungraded	7-May-18	29-Apr-18	15-May-18	30	-	1	3.3%	On 29 April 2018, a 40-year-old female presented with vomiting, acute rice watery diarrhoea at Kiruddu Hospital. She was attending to her sick child in Mulago hospital when symptoms of the disease manifested. A stool sample taken from the suspected case tested positive for *Vibrio cholerae* at the Central Public Health Laboratory (CPHL). As of 15 May 2018, a total of 30 cholera cases and one death were reported in Kampala Uganda (case fatality rate 3.3%). Two samples tested positive by RDT and sent for confirmation by culture. Surveillance in hot spots as well as door to door community mobilization and media engagements is ongoing in the city. Other cholera outbreaks in the country that have been recorded this year include: Hoima district which reported a total of 2 119 cases with 44 deaths (CFR 2.1%) and Amudat reported a total of 50 cases including 2 deaths (CFR 4.0%).

Country	Event	Grade†	WHO notified	Start of reporting period	End of reporting period	Total cases	Confirmed cases	Deaths	CFR	Comments
Uganda	Anthrax	Ungraded	-	12-Apr-18	23-May-18	83	1	-	-	Four districts in Uganda are affected by Anthrax. As of 23 May 2018, a cumulative total of 83 suspected cases with zero deaths have been reported – Arua (10), Kween (48), Kiruhura (22), and Zombo (3). One case has been confirmed in Arua district by polymerase chain reaction (PCR). The event was initially detected on 9 February 2018 in Arua district when a cluster of three case-patients presented to a local health facility with skin lesions, mainly localized to the forearms. Three blood samples collected from the case-patients on 9 February 2018 were shipped to the Uganda Virus Research Institute (UVRI). One tested positive for *Bacillus anthracis* by polymerase chain reaction (PCR) based on laboratory results released by the UVRI on 5 April 2018. Two other districts, Kiruhura in the western region and Zombo district in the northern region, have also reported suspected cases of human anthrax.
Uganda	Measles	Ungraded	8-Aug-17	24-Apr-17	30-Apr-18	2 143	610	-	-	As of 30 April 2018, a total 2 143 cases have been reported 610 cases have been confirmed either by epidemiological link or laboratory. Twenty-six districts have confirmed a measles outbreak, these include: Amuru, Butambala, Butebo, Buyende, Gomba, Hoima, Iganga Isingiro, Jinja, Kaliro, Kampala, Kamuli, Kamwenge, Kayunga, Kyegegwa, Kyotera, Kabarole, Kalungu, Luwero, Lwengo, Mbale, Mityana, Mpigi, Namutumba, Ngora and Wakiso. Two districts of Kayunga and Lwengo successfully controlled their outbreaks by intensifying the routine immunization. The main cause of the measles outbreaks is failure to vaccinate especially young children below the age of 5 years. The Ministry of Health has developed a measles response plan with an objective to rapidly interrupt measles transmission through intensified routine immunizations of susceptible children.
Zambia	Cholera	G1	4-Oct-17	4-Oct-17	15-Apr-18	5 721	565	113	2.0%	As of 15 April 2018, 5243 cases and 96 deaths have been reported in Lusaka district. From other districts outside Lusaksa, 478 cases and 17 deaths have been reported. Since the begining of the outbreak, Zambia has reported a cumulative total of 5 721 cases including 113 deaths.
Zimbabwe	Cholera	Ungraded	7-Apr-18	5-Apr-18	15-May-18	62	23	3	4.8%	A 24-year-old male subject from Stoneridge (15 km south of Harare city centre) fell ill 22 March 2018 and died 5th of April 2018. The patient's father and infant brother also had symptoms and tested positive for *Vibrio cholerae* serotype Ogawa. As of 15 May 2018, there are 62 cases (37 suspected cases, 23 confirmed cases, 2 probable case), and among them, 3 deaths (case fatality rate: 4.8%). The cases were reported from Stoneridge area (18), Belvedere West (2) and Harare and Chitungwiza (42).

†Grading is an internal WHO process, based on the Emergency Response Framework. For further information, please see the Emergency Response Framework: http://www.who.int/hac/about/erf/en/.
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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Data sources
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