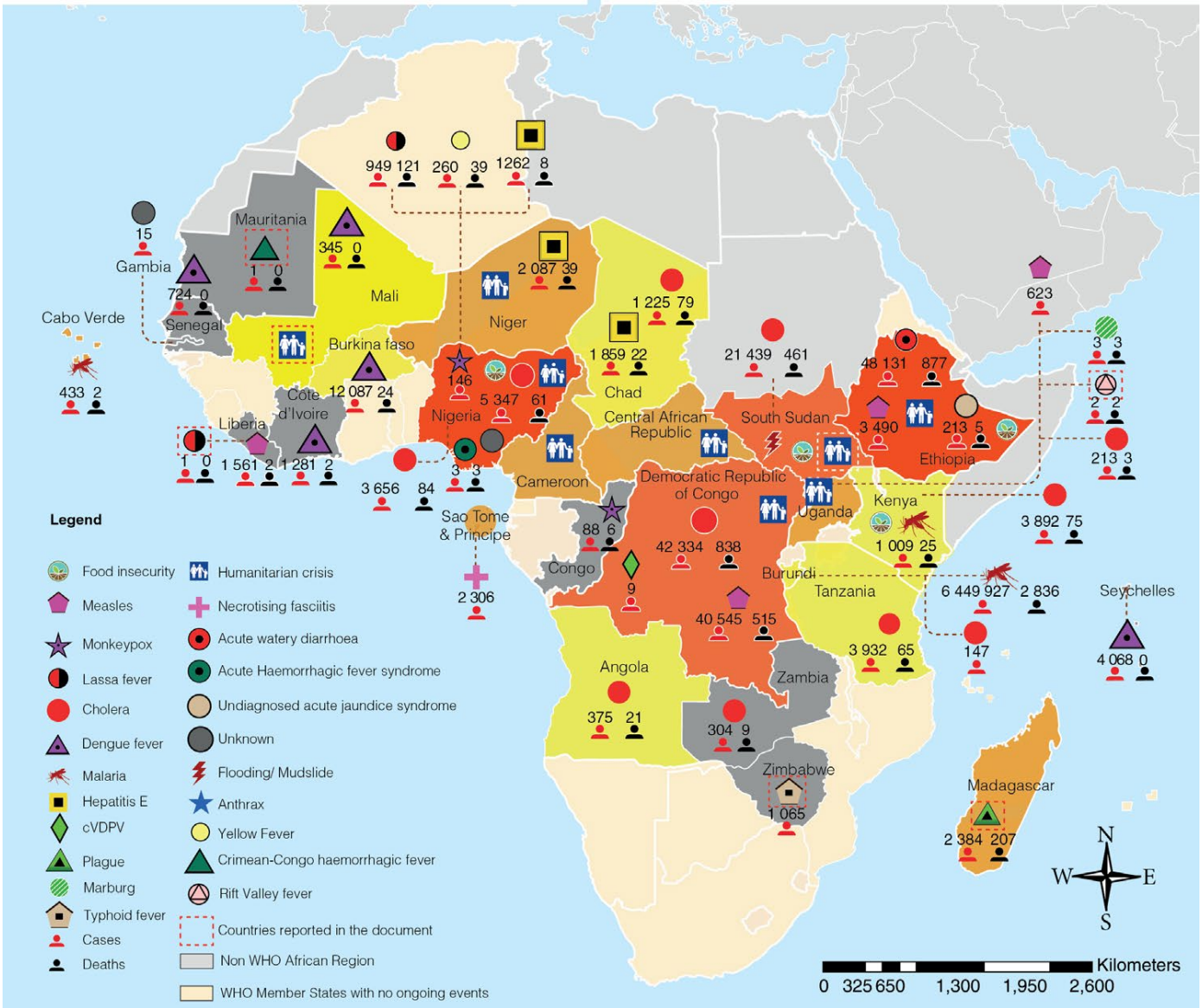
WEEKLY BULLETIN ON OUTBREAKS AND OTHER EMERGENCIES

Week 47: 18 - 24 November 2017
Data as reported by 17:00; 24 November 2017

World Health Organization
REGIONAL OFFICE FOR Africa
WHO Health Emergencies Programme

3	47	37	10
New events	Ongoing events	Outbreaks	Humanitarian crises



2	7	9	26
Grade 3 events	Grade 2 events	Grade 1 events	Ungraded events
2	0	1	
Protracted 3 events	Protracted 2 events	Protracted 1 event	

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 47 events in the region. This week's edition covers key new and ongoing events, including:

  - Rift Valley fever in Uganda
  - Crimean-Congo haemorrhagic fever in Mauritania
  - Lassa fever in Liberia
  - Typhoid fever in Zimbabwe
  - Plague in Madagascar
  - Humanitarian crisis in South Sudan
  - Humanitarian crisis in Mali.

- 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 simultaneous occurrence and confirmation of Rift Valley fever in two districts (Kiboga and Mityana) in Uganda may be indicative of a much wider spread of the disease, thus calling for particular attention and actions.

  - There is a steady decline in the incidence of plague in Madagascar and the urban pneumonic plague outbreak has been contained. However, because plague is endemic in Madagascar and as the plague season lasts from September to April, more cases of bubonic and sporadic pneumonic plague are expected to be reported until April 2018. It is therefore important that control measures continue through to the end of the plague season.

New events

Rift Valley fever | **Uganda** | 2 **Cases** | 2 **Deaths** | 100% **CFR**

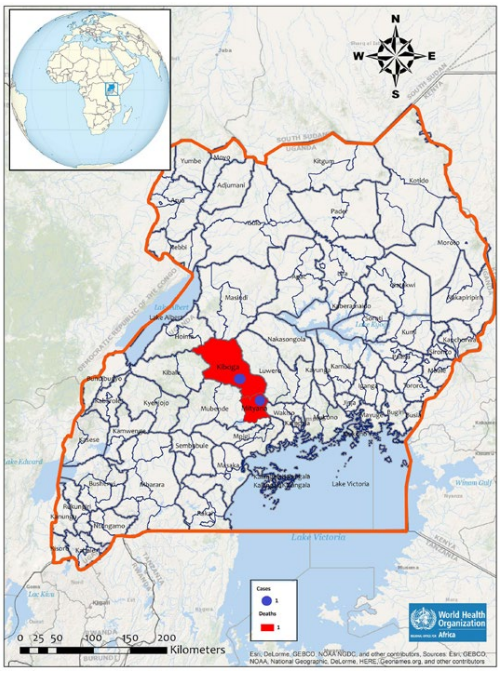
EVENT DESCRIPTION

On 21 November 2017, the Uganda Ministry of Health notified WHO of a confirmed case of Rift Valley fever (RVF) in Kiboga District, in the central region of the country. The case-patient is 26-year-old male, a forest ranger from Gogonya village in Kibiga Sub-county. He developed a febrile illness on 14 November 2017 and presented to a private clinic on 16 November 2017 with bleeding from the mouth and nose, in addition to other clinical features. He died hours later and was buried on 17 November 2017. A blood specimen was collected prior to his death (on 16 November 2017) and shipped to the Uganda Virus Research Institute (UVRI) on 17 November 2017. A laboratory test result from UVRI, released on 21 November 2017, was positive for RVF by reverse transcription-polymerase chain reaction (RT-PCR).

In a similar but unrelated event, a second case of RVF was confirmed in Mityana District, adjoining Kiboga District. The case-patient is a 69-year-old male, a farmer/fisherman from Gombe-Mwalo village in Busimbi Division, Mityana Municipality. He developed a febrile illness on 18 November 2017 and presented to Naama Health Centre III on 20 November 2017 with bleeding from the gums and nose, and vomiting and coughing up blood. He died on 21 November 2017 and was buried under supervision the same day. A blood specimen was collected on 21 November 2017 and shipped to UVRI. On 23 November 2017, UVRI released a test result positive for RVF by RT-PCR.

Further investigations are ongoing and updates will be provided as more information becomes available.

Geographical distribution of Rift Valley fever cases in Uganda, 21 - 23 November 2017



PUBLIC HEALTH ACTIONS

- The Ministry of Health, in conjunction with the Ministry of Agriculture, Animal Industry and Fisheries (MAAIF), officially declared the outbreak of RVF. The two ministries made a joint press release on 24 November 2017.
- The Ministry of Health has formally notified WHO, as required by the International Health Regulations (IHR 2005). Key political and government offices in the country, including the Presidency, have been officially informed of the outbreak.
- The Public Health Emergency Operations Centre has been activated to coordinate response to the outbreak and an Incident Command has been established. Key sub-committees have been formed to provide technical guidance and implement response interventions.
- National and district response plans and budget are being prepared to guide the response and mobilize the necessary resources.
- A national rapid response team has been deployed to Kiboga District to conduct further outbreak investigation and support the local response. An additional response team is being deployed.
- A comprehensive risk assessment, including ecological studies, is being planned.
- Draft RVF social mobilization materials are being reviewed and will be submitted for approval.

SITUATION INTERPRETATION

Rift Valley fever is a viral zoonosis that primarily affects animals but also has the capacity to infect humans. Infection can cause severe disease in both animals and humans. The disease also results in significant economic losses due to death and abortion among RVF-infected livestock. Outbreaks of RVF have not been common in Uganda. The last documented outbreak was in March 2016 in Kabale District (in the Western Region), during which two cases were confirmed. Apart from the 2016 event, the disease was last reported in the country in 1968.

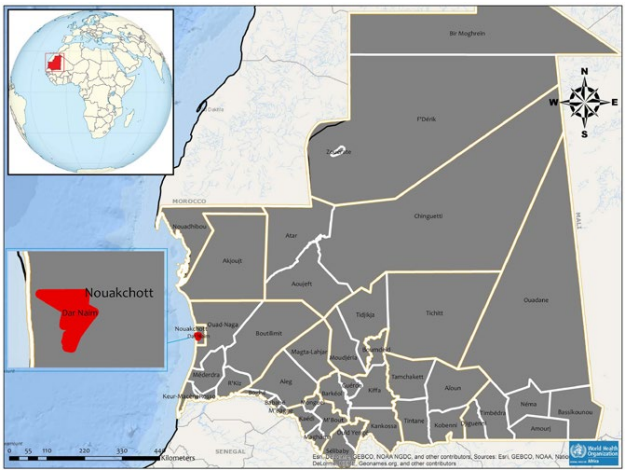
It has been established that the current outbreak was preceded by death of animals. Two bulls from a cattle herd tended by the case-patient died on 19 and 31 October 2017, respectively. However, the forest plantation workers denied having eaten the carcasses. They reported that the second carcass was buried.

No apparent epidemiological links have been established between the two confirmed RVF cases in Kiboga and Mityana Districts. This may be indicative of multiple transmission chains going on. An in-depth outbreak investigation, as well as a comprehensive risk assessment, needs to be conducted to guide the response to this event.

EVENT DESCRIPTION

On 20 November 2017, the Mauritania Ministry of Health notified WHO of a confirmed case of Crimean-Congo haemorrhagic fever (CCHF) in Dar Nairn, at the outskirt of the capital city, Nouakchott. The case-patient is a 48-year-old male farmer from Haye Sakin community who fell ill on 11 November 2017 and presented to the local health facility (Teyarett Health Centre) with a fever, fatigue and headache. He was treated as an out-patient for a condition that was not definitively diagnosed. Following persistence of symptoms and development of a haemorrhagic diathesis, the case-patient returned to the health centre on 15 November 2017 and he was referred to the Cheikh Zayed Hospital in Nouakchott. The case-patient was isolated, blood specimens collected and a thick blood slide was positive for malaria. An additional blood specimen sent to and analysed at the National Institute for Public Health Research (INRSP), Nouakchott, tested positive for CCHF viral infection by polymerase chain reaction (PCR) on 17 November 2017. The case-patient has improved on treatment and was discharged on 22 November 2017.

Geographical distribution of Crimean-Congo haemorrhagic fever case in Mauritania, 11 - 26 November 2017



As of 26 November 2017, 24 contacts (including 13 healthcare workers) have been listed and are being monitored. Further epidemiological investigations are being conducted and updates on the event will be provided as information becomes available.

PUBLIC HEALTH ACTIONS

- The WHO Representative held a meeting with the Minister of Health to strategize on the response to the CCHF outbreak.
- An emergency technical meeting was convened, attended by officials from the Ministries of Health and Livestock, and other partners, to plan and undertake response interventions.
- WHO provided logistical support to facilitate field investigation, active case search and contact tracing and follow up.
- The home of the case-patient and the two health facilities that handled the case-patient have been disinfected.
- The case-patient has been isolated and continues to receive clinical and nursing care.
- Active surveillance, including active case search and contact tracing, is ongoing.

SITUATION INTERPRETATION

Mauritania has confirmed an isolated case of CCHF, following a similar event in August 2017, and two other events in May and June 2017 where patients referred from Mauritania to Dakar, Senegal tested positive for the disease. The frequency of these events affirms the relative prevalence of the pathogen and the reservoir and vector for CCHF virus (*Hyalomma* ticks) in the country.

The detection and response to the current event was rapid and effective, pointing to enhanced capacity to respond to CCHF and (hopefully) other public health emergencies. The country had just concluded a simulation exercise on 16 November 2017, which could have contributed to this observed capacity and effective response. In addition, availability of diagnostic capacity for CCHF at the NIPHR facilitated rapid confirmation of the case. The national authorities and partners, however, need to carry out extensive outbreak investigations, including seroprevalence studies, to determine the potential risk for continued CCHF outbreaks in humans and institute effective prevention and control measures, with a strong animal health component.

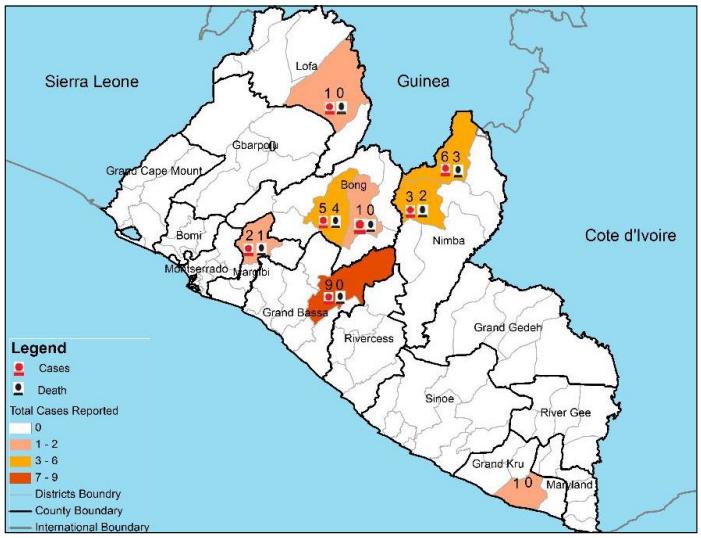
EVENT DESCRIPTION

On 14 November 2017, the Liberia Ministry of Health reported a confirmed case of Lassa fever in Bong County, located in the north-central part of the country. The case-patient is a 5-year-old girl from Frog Island community, Jorquellie District, with onset of illness on 5 November 2017. She presented to Phebe Hospital (a designated Lassa fever isolation/treatment centre) on 8 November 2017 with high fever, conjunctival injection, vomiting, joint and abdominal pains. A blood specimen was collected and sent to the National Reference Laboratory in Margibi. A laboratory test result released on 14 November 2017 was positive for Lassa fever on reverse transcriptase-polymerase chain reaction (RT-PCR). Eleven contacts of the case-patient have been identified in the community and are being monitored daily. During the same period, three other suspected cases with no epidemiological links to the confirmed case were investigated, but tested negative for the disease.

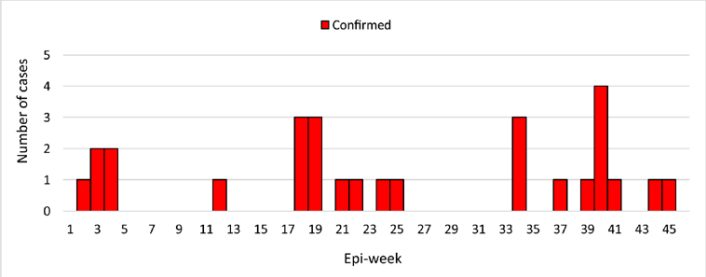
The country has been reporting sporadic cases of Lassa fever. On 18 October 2017, a 36-year old male from the same community was confirmed with Lassa fever by RT-PCR. This case-patient fell ill on 4 October 2017 and was admitted to Phebe Hospital isolation unit on 13 October 2017 with bleeding from the nose, rectum and mouth. The case-patient died on 14 October 2017. None of the eight contacts identified became symptomatic within 21 days of monitoring. Therefore, no apparent epidemiological link has been established between this case and the current confirmed case.

Since the beginning of 2017, a total of 70 suspected Lassa fever cases including 21 deaths (case fatality rate 30%) have been reported from nine counties in Liberia. Out of this, 28 cases have been confirmed as Lassa virus infection, including 10 deaths from six counties. The case fatality rate among confirmed cases is 35.7%. Bong County has reported a total of 20 suspected cases out of which six have been confirmed.

Geographical distribution of confirmed and probable Lassa fever cases in Liberia, week 1 - 46, 2017



Epidemic curve of Lassa fever cases in Liberia, week 1 - 46, 2017



PUBLIC HEALTH ACTIONS

- WHO and partners are supporting the Ministry of Health to develop and adapt a contingency plan for Lassa fever response.
- Active case search and contact tracing have been initiated in the affected communities. A total of 11 contacts are being followed up for the next 21 days.
- All cases are being managed at Phebe Hospital isolation unit using ribavirin, in addition to other supportive therapy.
- The environmental health team has been trained to ensure that safe and dignified burials are conducted should the need arise.
- Risk communication and social mobilization activities have been intensified in the affected communities, with messaging focusing on proper food storage, waste disposal, personal hygiene, and vector control.

SITUATION INTERPRETATION

Lassa fever is endemic in Liberia, with sporadic cases and occasional outbreaks reported annually. Bong County is considered one of the endemic areas. In this county, poor sanitation coupled with improper food storage and handling (which attract the Lassa virus-carrying rodents – the *Mastomys* rats), have been considered a risk factor for the high incidence of the disease. Overcrowding and poor environmental management are also contributing factors facilitating transmission of the disease in this population.

Concerted efforts have been made in recent years to strengthen active surveillance for Lassa fever in the country, through training of healthcare workers in Integrated Disease Surveillance and Response. Additionally, infection prevention and control practices have greatly improved in healthcare facilities (in the aftermath of the Ebola outbreak) and this may be the reason why no hospital-acquired cases of Lassa fever have been reported in 2017.

Go to overview | Go to map of the outbreaks

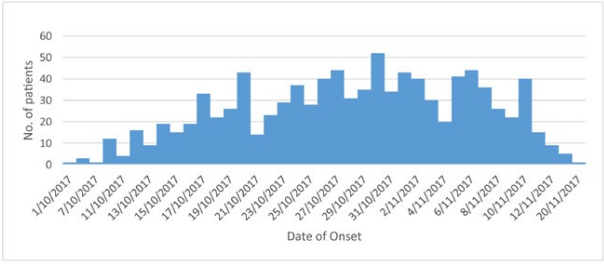
Ongoing events

Typhoid fever | **Zimbabwe** | 1 065 **Cases** | 0 **Death** | 0% **CFR**

EVENT DESCRIPTION

Zimbabwe has been experiencing an outbreak of typhoid fever since the beginning of October 2017, principally in an around the capital city, Harare. The initial case of typhoid fever was confirmed on 17 September 2017 and the outbreak was detected in the densely populated Mbare suburb on 1 October 2017. The disease eventually spread to other suburbs in the western, southern and eastern parts of Harare, while the northern part of the city remains largely unaffected. Cases have also been reported outside Harare. The incidence of typhoid fever gradually increased since the beginning of October 2017 and peaked by the end of October 2017. Since then, the disease trend has been steadily declining.

Epidemic curve of typhoid fever cases in Harare, Zimbabwe
1 October - 20 November 2017



As of 20 November 2017, a cumulative total of 1 065 suspected cases have been reported. Thus far, no deaths have been attributed to the disease. Of the reported suspected cases, 82 were confirmed to have *Salmonella typhi* infection by culture at the National Microbiology reference laboratory. Fifty-six percent of the reported cases and 61% (50) of the confirmed cases are from Mbare suburb, the epi-centre of the outbreak.

PUBLIC HEALTH ACTIONS

- An Inter-Agency Coordination Committee, working in collaboration with the provincial rapid response and the district health executive, is leading the response efforts to the outbreak. Coordination meetings are being held at Matapi, with involvement of the local leadership. WHO and partners are supporting the response.
- Active surveillance has been enhanced, including line listing of all cases meeting the case definition for typhoid fever. The Environmental Division is following up all cases for contact identification.
- A treatment centre has been set up at Matapi clinic, with support from MSF, where most of the mild cases are being treated. Cases requiring admission are referred to Beatrice Road Hospital.
- Healthcare workers have been oriented in infection prevention and control procedures. Treatment areas have been cordoned off to prevent the risk of contamination.
- Laboratory diagnostic tests, including blood, stool and rectal swabs cultures are being conducted for diagnosis and to ascertain antibiotic sensitivity pattern of the *S. typhi* bacteria.
- Community sensitization and social mobilization activities are ongoing in all affected areas. School health campaigns are being conducted, with support from UNILIVER. The health promotion team has been disseminating key preventive messages through radio and television.

SITUATION INTERPRETATION

The ongoing typhoid fever outbreak in Harare has been attributed to an acute shortage of potable water in the affected communities. Mbare, the epi-centre of the outbreak, is one of the oldest commercial suburbs with several residential flats. The Mbare Flats, initially designed to accommodate about 2 000 residents, currently house over 23 000 people. Matabi flats in Mbare, where the outbreak originated, reportedly had no water supply 2 weeks prior to onset of the outbreak. Environmental assessment identified burst sewer pipes flowing from Matapi flats, which are believed to have caused contamination of nearby boreholes (the main sources of potable water). Water quality testing done on three boreholes in Matapi and one borehole in Block 9 revealed contamination with *Escherichia coli*.

The outbreak of typhoid fever in Harare is steadily declining. However, the unresolved water and sanitation challenges, characterized by erratic piped water supplies, sewerage bursts as well as uncollected solid waste, constitute a serious and continuous risk factor for recurrence of the disease.

EVENT DESCRIPTION

The unprecedented outbreak of plague in Madagascar, which started on 1 August 2017, has been contained, with a marked reduction in human-to-human transmission of pneumonic plague. From 1 August to 24 November 2017, a cumulative total of 2 384 confirmed, probable and suspected cases of plague, including 207 deaths (case fatality rate 8.7%), have been reported by the Ministry of Health of Madagascar to WHO. Since the beginning of the outbreak, 1 828 (77%) have been clinically classified as pneumonic plague, including 390 (21%) confirmed, 614 (34%) probable and 824 (45%) suspected cases. In addition to the pneumonic cases, 347 (15%) cases of bubonic plague, one case of septicaemic plague and 208 (9%) unspecified cases have been reported.

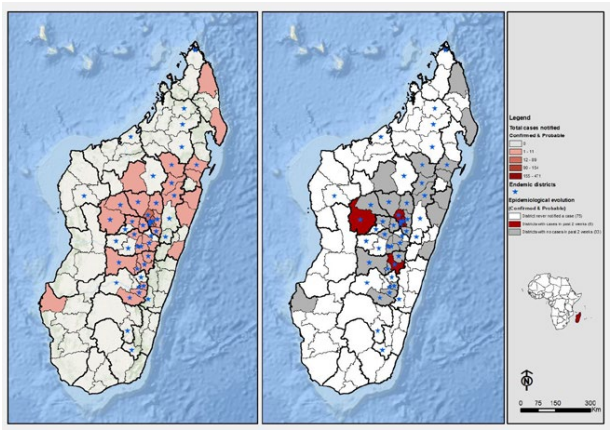
Since the beginning of the outbreak, cases of pneumonic and bubonic plague have been detected in 57 out of 114 districts (50%), including non-endemic areas and major cities. Analamanga Region has been the most affected, with 68% of the cumulative reported cases.

In total, 81 healthcare workers have had an illness compatible with plague, none of whom have died.

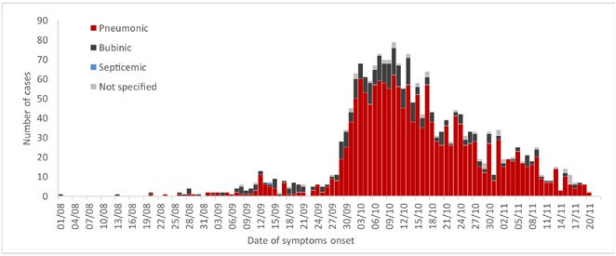
A total of 7 289 contacts identified during this outbreak have completed their course of prophylactic antibiotics, including 11 contacts who developed symptoms compatible with plague and were classified as suspect cases.

Laboratory confirmation of plague cases is being conducted by the Institute Pasteur of Madagascar, and the National WHO Collaborating Centre for plague in Madagascar. Out of 317 cultures performed, only 10% (33) of isolates of *Yersinia pestis* had a positive culture, all sensitive to antibiotics recommended by the National Program for the Control of Plague.

Geographical distribution of confirmed and probable pneumonic plague cases in Madagascar, 1 August through 24 November 2017



Epidemic curve of confirmed, probable and suspected cases of plague in Madagascar 1 August - 24 November 2017



PUBLIC HEALTH ACTIONS

- WHO coordinated and mobilised regional and global partners in the Global Outbreak Alert and Response Network (GOARN) to support outbreak response, and will continue to work with partners to ensure further rapid response support as needed.
- Strengthened epidemiological surveillance in all affected districts, including active case finding, investigation of new cases, tracing and monitoring of contacts and provision of free prophylactic antibiotics.
- Isolation and treatment of all pneumonic cases.
- Disinsection of homes of affected people, including rodent and vector control.
- Raising public awareness on prevention for bubonic and pneumonic plague.
- Raising awareness among healthcare workers and providing information to improve case detection, infection control measures and protection from infection.
- Providing information about infection control measures during burial practices.

SITUATION INTERPRETATION

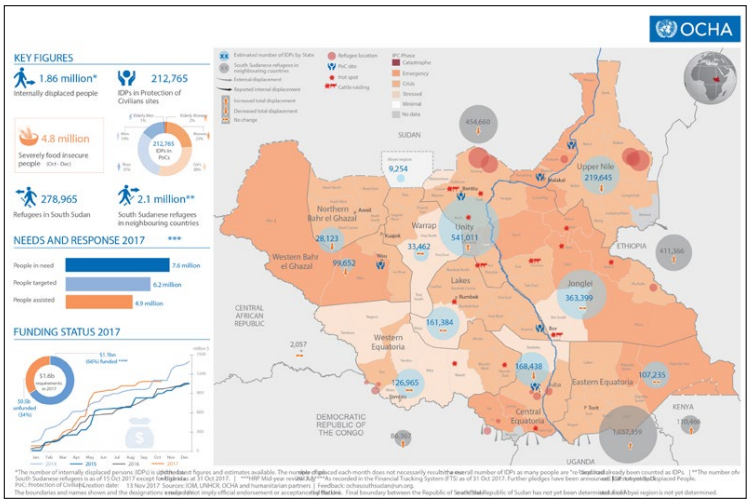
The outbreak of plague in Madagascar affected major cities and other non-endemic areas, with intense transmission resulting in high numbers of plague cases and a higher proportion of pneumonic plague cases occurring during the latter half of September 2017, and beginning of October 2017. The outbreak peaked during the second week of October 2017, and declining numbers of cases have been reported since the third week of October 2017. The last confirmed bubonic case was notified on 8 November 2017 and the last pneumonic case was notified on 21 November 2017. Nevertheless, the last confirmed pneumonic case was a secondary case, resulting from a bubonic case who developed pneumonic plague one day after being admitted into the treatment centre.

Since plague is endemic in Madagascar and as the plague season lasts from September to April, more cases of bubonic and sporadic pneumonic plague are expected to be reported until April 2018. WHO and other stakeholders will continue to support the Ministry of Health to maintain vigilance and to sustain a strong alert and response system in order to timely detect and respond to new plague cases as they emerge.

EVENT DESCRIPTION

The humanitarian crisis in South Sudan continues unabated, as the conflict continues to spread. In the first two weeks of November 2017, flare-up of violence was reported in several regions of the country, resulting in fresh population displacements. Humanitarian access remains a major challenge and is getting worse. In October 2017 alone, 116 access impediment incidents were reported by partners, of which over 60% involved violence against humanitarian personnel or assets. On 14 November 2017, a transport contractor working with a humanitarian partner in Torit was killed by unknown gunmen. In a bid to improve access for humanitarian actors, goods and services, the government of South Sudan has ordered the removal of all roadblocks. This gesture is welcome and it is hoped that all warring factions will comply.

Map showing humanitarian snapshot in South Sudan, October 2017



A recent Integrated Food Security Phase Classification (IPC) assessment showed that food security and nutritional status in South Sudan have deteriorated due to armed conflict, economic crisis, and a below average harvest season. The outlook for October-December 2017 is that 4.8 million people are food insecure, with 25 000 in a humanitarian catastrophe. The projection for January-March 2018 portrays an even worse nutrition scenario, with 5.1 million (48% of total population) and 20 000 in a humanitarian catastrophe.

Outbreaks of communicable diseases, especially cholera and measles, are ongoing. In week 45 (week ending 12 November 2017), 66 new suspected cholera cases were reported from Juba and Budi. Since the start of the current outbreak on 18 June 2016, a cumulative total of 21 530 cases, including 461 deaths (case fatality rate 2.1%), were reported. Following the confirmation of a measles outbreak in Panyijiar when five cases tested measles IgM positive in week 42, a total of 204 cases including four deaths (case fatality rate 1.9%) have been reported since week 26 of 2017. A vaccination campaign has been completed in the county. In addition, there are an increasing number of cases of kala-azar reported from the traditionally endemic areas in Balliet County.

PUBLIC HEALTH ACTIONS

- WHO and health cluster partners are actively engaged in developing the 2018 Humanitarian Response Plan (HRP) to address the needs of 2.4 million people targeted for healthcare services.
- WHO supported deployment of a rapid response team to six cholera treatment centres, to carry out supervision and conduct on-site training of healthcare workers
- The Ministry of Health, supported by WHO, UNICEF and other partners, conducted a Polio Outbreak Simulation Exercise (POSE), to enhance preparedness and readiness.
- WHO is also supporting the Ministry of Health to respond to the measles outbreak in Nyal, Panyijar.
- WHO supported the Ministry of Health to train 20 frontline healthcare workers on clinical management of epidemic-prone diseases, a much-needed health service across the country.
- Preparations are underway to conduct an oral cholera vaccination campaign in Budi county, targeting around 150 000 individuals aged one year and above.

SITUATION INTERPRETATION

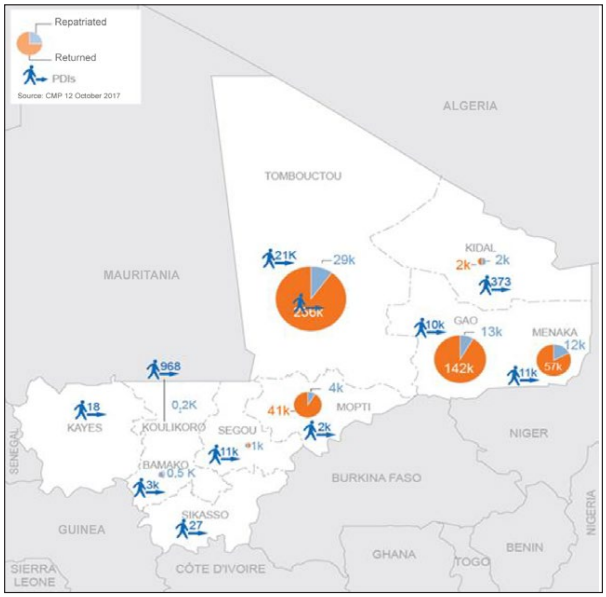
The current situation in South Sudan, characterized by continued violence, increasing internal displacements and refugee influx to neighbouring countries, reduced purchasing power by the people, ongoing communicable diseases outbreaks, and worsening nutritional status, presents a picture of perpetual suffering for a population already vulnerable and traumatized. Urgent intervention from international humanitarian actors and the South Sudanese government is required.

EVENT DESCRIPTION

The security situation in Mali remains volatile, especially in the central and northern part of the country. Little progress has been made to end the conflict despite the signing of the peace agreement in 2015. A state of emergency has been effective in the country in the last 2 years, and has been extended for another year, from 31 October 2017. Crime and terrorism are real threats to the population, and robberies targeting humanitarian workers and politico-administrative authorities persist. During the reporting week, a contingent of United Nations peacekeepers was attacked.

Humanitarian access has deteriorated in northern and central regions, mainly due to the insecurity and restriction of movement. The number of access constraints increased in early 2017. Between January and September 2017, OCHA recorded 100 cases of security incidents. It is the highest number of humanitarian access incidents registered in Mali since 2013. Of these incidents, 75% were related to carjacking, robbery and physical aggression. In addition, vulnerable populations have been pushed to move within the country, due to the clashes between different armed groups or the inter-communal conflicts.

Map showing population movements in Mali, November 2017



** This map does not take into account the boundaries of the new regions of Mali.*

Insecurity and population movement have led to an increase in the level of food insecurity and malnutrition. It estimated that around 3.8 million people are food insecure nationwide, and in need of humanitarian assistance. This includes around 600 770 severely food insecure people. Results of a recent Standardized Monitoring and Assessment of Relief and Transitions (SMART) survey conducted by UNICEF across the country showed a global acute malnutrition prevalence of 10.7%, which is high by WHO standards. The prevalence is particularly high among children from Timbuktu and Gao regions, at 15.7% and 15.2% respectively. More results from the survey estimated that around 630 000 children will face severe acute malnutrition in 2018.

PUBLIC HEALTH ACTIONS

- Humanitarian actors in Mali continue to play a critical role in providing life-saving interventions and re-establishing basic social services.
- The Nutrition Department of the Ministry of Health, in collaboration with UNICEF, FAO, WHO and WFP, and the National Institute of Statistics (INSTAT), conducted the national nutrition SMART survey for 2017, targeting nearly 10 000 children nationwide.
- WHO recruited and deployed 30 field medical officers in 10 regions across the country to reinforce the local capacities for surveillance, preparedness and response to health emergencies, especially in the northern regions of Mali.

SITUATION INTERPRETATION

Overall, insecurity continues, especially in the northern and central part of the country, coupled with lack of access to basic health and social services, which drives humanitarian needs. WHO, along with other partners, will continue working with national counterparts, to address the humanitarian needs of the country, and to facilitate access to the crisis-affected population, especially in the north and other vulnerable areas.

Summary of major challenges and proposed actions

Challenges

- The simultaneous occurrence and confirmation of Rift Valley fever in two districts (Kiboga and Mityana) in Uganda may be indicative of a much wider spread of the disease. In addition, the Rift Valley fever outbreak has come immediately on the back of a Marburg outbreak in the eastern part of the country. The frequent occurrence of communicable disease outbreaks in Uganda stretches the response capacity and overall resilience of the healthcare system.

- The unprecedented urban outbreak of pneumonic plague in Madagascar has been contained, with a marked reduction in human-to-human transmission of pneumonic plague. However, because plague is endemic the country and as the plague season lasts from September to April, more cases of bubonic and sporadic pneumonic plague are expected to be reported until April 2018.

Proposed actions

- The national authorities and partners in Uganda need to conduct an in-depth outbreak investigation and a comprehensive risk assessment of the Rift Valley fever in order to determine the extent of the disease and the likelihood of further transmission.

- All stakeholders are called upon to continue supporting the Ministry of Health of Madagascar to maintain vigilance and to sustain a strong alert and response system to timely detect and respond to new plague cases as they emerge. Support is also needed to rebuild the country's preparedness and response capacity, as well as the overall healthcare system.

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										
Liberia	Lassa fever	Ungraded	14-Nov-17	3-Nov-17	24-Nov-17	70	28	21	30%	Detailed update given above.
Mauritania	Crimean-Congo haemorrhagic fever (CCHF)	Ungraded	20-Nov-17	11-Nov-17	26-Nov-17	1	1	-	-	Detailed update given above.
Uganda	Rift Valley fever (RVF)	Ungraded	22-Nov-17	14-Nov-17	23-Nov-17	2	2	2	100%	Detailed update given above.
Ongoing events										
Angola	Cholera	G1	15-Dec-16	1-Jan-17	22-Oct-17	375	-	21	5.6%	The outbreak began during December 2016. From week 1-42 of 2017, cases have been reported from Cabinda (219), Zaire (151), Luanda (3) and Maquela de Zombo (2). Only one new case (from Maquela de Zombo) was reported in week 42. No new cases have been reported in Luanda since week 4, in Soyo Zaire since week 26, and in Cabinda since week 28.
Burkina Faso	Dengue	G1	4-Oct-17	1-Jan-17	15-Nov-17	12 087	-	24	0.2%	Weekly case counts increased from week 32 to week 43 and decreased in weeks 44 and 45. The majority (61%) of cases were reported in the central region, notably in Ouagadougou (the capital). Dengue virus serotypes 1, 2, and 3 are circulating.
Burundi	Malaria	G1	22-Mar-17	1-Jan-17	30-Oct-17	6 449 927	-	2 836	0%	Weekly case counts are below the epidemiologic threshold but have increased since week 41. In week 42, 117 917 cases and 42 deaths were reported. The most affected health districts (DS) are: Kirundo (5 094), Muyinga (5 450) and Giteranyi (5 295).
Burundi	Cholera	Ungraded	20-Aug-17	15-Aug-17	30-Oct-17	147	-	0	0%	During week 43, 9 suspected cases were reported in the health zones of Cibitoke (6) et Isare (3). As of 30 October a cumulative total of 147 cases and no deaths were reported. Seven districts have reported suspected cases to date.

Country	Event	Grade†	WHO notified	Start of reporting period	End of reporting period	Total cases	Confirmed cases	Deaths	CFR	Comments
Cameroon	Humanitarian crisis	G2	31-Dec-13	27-Jun-17	3-Nov-17	-	-	-	-	In the beginning of November, the general security situation in the Far North Region becomes worse. Terrorist attack and suicide bombings are continuing and causing continuous 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 out camp. In addition around 238 000 Internal Displaced People have been registered.
Cape Verde	Malaria	G2	26-Jul-17	1-Jan-17	19-Nov-17	433	-	2	0.5%	As of 19 November, a total of 433 cases have been reported, including 419 indigenous and 18 imported cases. The outbreak has been contained to the city of Praia. Cases reported from other areas/ islands all likely all acquired the infection during travel to Praia or overseas, and there is currently no evidence of indigenous transmission outside of Praia. Two deaths have been reported (1 in an indigenous case and 1 in an imported case).
Central African Republic	Humanitarian crisis	G2	11-Dec-13	11-Dec-13	31-Oct-17	-	-	-	-	The security situation in the Central African Republic has deteriorated in recent weeks, marked by widespread armed clashes across the country. Over 10 communities have been attacked in the past weeks, reportedly resulting in over 100 deaths, mostly civilians. These security incidents continue to cause new internal displacements.
Chad	Hepatitis E	G1	20-Dec-16	1-Aug-16	15-Oct-17	1 859	98	22	1.2%	Outbreaks are ongoing in the Salamat Region predominantly affecting North and South Am Timan, Amsinéné, South Am Timan, Mouraye, Foulonga and Aboudeia. Of the 64 cases occurring in pregnant women, five died (case fatality rate 7.8%) and 20 were hospitalized. Chlorination of water sources ended at the end of September 2017 because of a lack of partners and funding.

Country	Event	Grade†	WHO notified	Start of reporting period	End of reporting period	Total cases	Confirmed cases	Deaths	CFR	Comments
Chad	Cholera	G1	19-Aug-17	14-Aug-17	12-Nov-17	1 225	6	79	6.4%	The case incidence has been decreasing since week 42. In week 45, 9 new cases were reported in the Salamat region: Am-Timan (2), Mirer (5), Khachkhacha (1) and Mouraye (1). From week 37 to week 45, a total of 789 cases and 27 deaths occured in Salamat region. No additional cases have been reported in the Sila Region since week 42.
Congo (Republic of)	Monkeypox	Ungraded	1-Feb-17	18-Jan-17	30-Sep-17	88	8	6	6.8%	Since January 2017, the Republic of Congo has been going through an outbreak of monkeypox. 88 cases with 6 deaths have been reported since the beginning.
Cote d'Ivoire	Dengue fever	Ungraded	3-May-17	22-Apr-17	23-Oct-17	1 281	311	2	0.2%	Abidjan city remains the epicentre of this outbreak, accounting for 95% of the total reported cases. The main health districts affected include Cocody, Abobo, Bingerville and Yopougon. Of the 272 confirmed cases with available information on serotypes, 181 were dengue virus serotype 2 (DENV-2), 78 were DENV-3 and 13 were DENV-1. In addition, 39 samples were confirmed IgM positive by serology.

Country	Event	Grade†	WHO notified	Start of reporting period	End of reporting period	Total cases	Confirmed cases	Deaths	CFR	Comments
Democratic Republic of the Congo	Humanitarian crisis	G3	20-Dec-16	17-Apr-17	19/11/2017	-	-	-	-	An estimate of 8.5 Million are in need of emergency aid assistance, including around 4.1 Million Internally Displaced Persons (IDPs), and 552 000 refugees. More than 74% of the country's total IDPs are from Kasai region, north and south Kivu, and Tanganyika, and the last region had an increase in the number of IDPs by 16% this week. Access to healthcare services remains one of the major challenges due to the disruption of the health system infrastructure and insecurity.
Democratic Republic of the Congo	Cholera		16-Jan-15	1-Jan-17	3-Nov-17	42 334	-	838	2%	During week 43, 1 906 new suspected cases and 44 deaths were reported; these numbers have remained stable from week 42 (2 039 suspected cases, 67 deaths). The majority of cases this week were reported from North Kivu, South Kivu, Tanganyika, Haut Lomami, and Kongo Central.
Democratic Republic of the Congo	Circulating vaccine-derived polio virus type 2 (cVDPV2)		17-May-17	20-Feb-17	4-Oct-17	9	9	0	0%	One new case of cVDPV2 reported in a 17-month-old child from Lwamba, Haut Lomami. Ongoing transmission is occurring in two separate outbreaks in Haut Lomami Province (7 cases, most recent case onset was 27 July 2017), and Maniema Province (2 cases with onset on 26 March and 18 April 2017, and an additional isolate detected in a sample collected 2 May 2017 from a healthy individual).
Democratic Republic of the Congo	Measles		10-Jan-17	2-Jan-17	19-Nov-17	40 545	449	515	1.3%	The outbreak still ongoing and has affected all 26 provinces. Although the current humanitarian situation disrupted the routine vaccination services, however, vaccination campaigns have been implemented early in 2017.

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	15-Nov-15	n/a	17-Nov-17	-	-	-	-	This is a complex emergency includes outbreaks (acute watery diarrhea, measles, and acute jaundice syndrome), the severe drought across northern, eastern, and central Ethiopia, and high levels of food insecurity and malnutrition. An estimate of 8.5 M poeple are food insecure and in need of humanitarian assistance. Including 6.26 M are in need of health assistance and 0.376 M child are severely malnourished. IDPs are estimated to be around 1 099 776 and refugees are estimated around 883 546 refugees.
Ethiopia	Acute watery diarrhoea (AWD)		15-Nov-15	1-Jan-17	3-Nov-17	48 131	-	877	1.8%	The outbreak is still ongoing in the country. During week 44, a total of 285 cases were reported from 6 regions, and the majority of cases are from Amhara and Somali regions. As of now, 8 regions in Ethiopia have been affected, and 74% of total cases are from Somali region. Oromia and Amhara regions are account for 12.8% and 9% and of the total respectively. The rest of the cases are from Tigray, Afar, Beneshangul Gumuz, SNNP, Dire Dawa, and Addis Ababa.
Ethiopia	Measles		14-Jan-17	1-Jan-17	3-Nov-17	3 490	-	-	-	The outbreak of measles is still ongoing but continues to improve. During week 44, 35 cases were reported including 3 lab-confirmed cases. Oromia Region remains the most affected region with 46% of the total reported cases, followed by Amhara 21 %, Addis Ababa 16 %, and Somali 20 %.
Ethiopia	Acute jaundice syndrome (AJS) - hepatitis A suspected		23-Aug-17	23-Aug-17	29-Sep-17	213	11	5	2.3%	Twenty-three blood samples were sent to IP Dakar. Laboratory results show that 11/23 samples were positive on hepatitis A RT-PCR, and one sample was IgM positive (PCR negative) for dengue virus. All other tests performed as part of the differential diagnosis were negative.

Country	Event	Grade†	WHO notified	Start of reporting period	End of reporting period	Total cases	Confirmed cases	Deaths	CFR	Comments
Gambia	Event of unknown etiology	Ungraded	11-Jul-17	n/a	n/a	15	-	-	-	An unknown public health event is being investigated in North Bank East Region after admission of a child with fever and severe arthralgia. The illness is said to be self-limiting and nearly all recoved within 7-10 days of onset with no mortality reported. Blood samples have been tested negative for Dengue fever, yellow fever, Zika, West nile, Chikungunya, Crimean-Congo heamorrhagic fever, and Rift Valley fever. Patients with fever have also been tested for malaria, all of them were negative.
Kenya	Cholera	G1	6-Mar-17	1-Jan-17	22-Nov-17	3 892	696	75	1.9%	Nationally, the outbreak still ongoing, with new districts being affected. Now the outbreak is active in 6 counties: Nairobi, Garissa, Kajiado, Mombasa, Kilifi, Embu, and Kirinyaga counties; with approximately 60% of the cases coming from Nairobi county.
Kenya	Drought/food insecurity	G1	10-Feb-17	n/a	24-Aug-17	-	-	-	-	As of 24 August, SMART surveys estimated the (low-medium-high) prevalence of global acute malnutrition (GAM in Kenya at 2.6-22.9-32.8, and SAM at 0.2-4.0-9.8%.
Kenya	Malaria	Ungraded	-	25-Sep-17	26-Oct-17	1 009	604	25	2.5%	The suspected outbreak is affecting 3 wards in Marasbit which are Durkana (598 cases), North Horr (236 cases) and Loiyangalani (175 cases) wards.
Liberia	Measles	Ungraded	24-Sep-17	6-Sep-17	19-Nov-17	1 561	227	2	0.1%	From week 1 to week 46, 1 561 suspected cases were reported from 15 counties, including 227 laboratory confirmed, 338 clinically compatible and 191 epi-linked. Nimba county displayed the highest cumulative incidence. Children between 1-4 years accounted for 38% of the cases. Of the 800 measles-IgM negative cases that were tested for Rubella, 338 tested positive for Rubella.
Madagascar	Plague	G2	13-Sep-17	13-Sep-17	24-Nov-17	2 384	490	207	8.7%	Detailed update given above.
Mali	Dengue fever	Ungraded	4-Sep-17	1-Aug-17	15-Oct-17	345	26	0	0%	Active case search activities completed following detection of a case during a study has identified a total of 26 confirmed cases from 345 suspected cases tested as of 15 October 2017.
Mali	Humanitarian crisis	Protracted 1	n/a	n/a	19-Nov-17	-	-	-	-	Detailed update given above.

Country	Event	Grade†	WHO notified	Start of reporting period	End of reporting period	Total cases	Confirmed cases	Deaths	CFR	Comments
Niger	Hepatitis E	Ungraded	2-Apr-17	2-Jan-17	19-Nov-17	2 087	439	39	1.9%	The outbreak continue improving, with majority of cases have been reported from the Diffa, N'Guigmi, and Bosso health districts. Case incidence continues to decline, 11 suspected cases have been reported in week 46 (ending 19 November 2017).
Niger	Humanitarian crisis	G2	1-Feb-15	1-Feb-15	11-Aug-17	-	-	-	-	The security situation remains precarious and un-predictable. On 28 June 2017, 16 000 people were displaced after a suicide attack on an internally displaced persons (IDP) camp in Kablewa. In another attack on 2 July 2017, 39 people from Ngalewa village, many of them children, were abducted. The onset of the rainy season is impeding the movements of armed forces around the region.
Nigeria	Lassa fever	Ungraded	24-Mar-15	1-Dec-16	17-Nov-17	949	284	121	12.8%	The outbreak is currently active in five states: Ondo, Edo, Plateau, Bauchi, and Kaduna. In Week 46 (11-17 November), five new confirmed cases were reported from Edo (2), Kaduna (1), Ondo (1), and Bauchi (1) States.
Nigeria	Humanitarian crisis	Protracted 3	10-Oct-16	n/a	1-Oct-17	-	-	-	-	An estimated 8.5 million people are in need in Borno State, including 1.8 million IDPs. Aside from the cholera outbreak (see below), malaria remains the leading cause of morbidity with over 6 800 suspected cases reported through IDSR in week 39.
Nigeria	Cholera (Borno State)		20-Aug-17	14-Aug-17	24-Nov-17	5 347	354	61	1.1%	As of 24 November 2017, three LGAs are still reporting cases : Jere (2 692 cases), Monguno (1 758 cases), and Guzamala (83 cases). No cases reported from Dikwa, MMC and Mafa for over six weeks. Out of the 431 samples tested using RDTs, 354 (82%) were positive while 175 (46%) of 381 samples were culture positive.
Nigeria	Cholera (nation wide)	Ungraded	7-Jun-17	1-Jan-17	5-Nov-17	3 656	42	84	2.3%	Between weeks 1 and 44, 3 656 cases were reported from 19 States compared to 714 suspected cases from 12 States during the same period in 2016. The cumulative total of cases and deaths in 2017, surpasses that observed during the same period in 2016 (560 suspected cases, 25 deaths).

Country	Event	Grade†	WHO notified	Start of reporting period	End of reporting period	Total cases	Confirmed cases	Deaths	CFR	Comments
Nigeria	Hepatitis E	Ungraded	18-Jun-17	1-May-17	16-Nov-17	1 262	182	8	0.6%	Since the peak of the outbreak in Borno state in week 25. The number of cases has been re-increasing from week 42 to week 46, mainly due to the spread of the outbreak in Rann, Kala Balge. No case of acute jaundice was reported in Mobbar since week 35.
Nigeria	Yellow fever	Ungraded	14-Sep-17	7-Sep-17	14-Nov-17	260	27	39	15.0%	260 suspected cases have been reported and 27 cases have been laboratory-confirmed at IP Dakar (from Kogi State, Kwara State and Zamfara State). Suspected cases have been reported from twelve states: Abia, Borno, Kogi, Kwara, Kebbi, Plateau, Zamfara, Enugu, Oyo, Anambra, Edo, and Lagos States. Seven of the confirmed cases have died.
Nigeria	Monkeypox	Ungraded	26-Sep-17	24-Sep-17	19-Nov-17	146	42	0	0%	Suspected cases are geographically spread across 20 States and the Federal Capital Territory (FCT). 42 laboratory-confirmed cases have been reported from 11 states (Akwa Ibom, Bayelsa, Delta, Edo, Ekiti, Enugu, Lagos, and Rivers) and the FCT.
Nigeria	Acute haemorrhagic fever syndrome	Ungraded	17-Nov-17	11-Nov-17	n/a	3	-	3	100%	Three people have died from an undiagnosed disease in Mabera area of Sokoto South LGA. Cases developped symptoms of bleeding from orifices, high fever and severe headache. The first case died on 11 November 2017, and the two other cases both died on 13 November 2017. No samples were collected from the deceased. Retroactive case search and clinicians sensitization are ongoing.
Nigeria	Event of unknown etiology	Ungraded	16-Nov-17	1-Jul-17	n/a	-	-	-	-	During week 44, the Nigerian CDC received reports of unknown disease and unexplained deaths in Gidan Dugus village of Wangara district. Cases were mostly children under 5 and onset dates of the first cases were in July 2017. Preliminary examination. Further investigation is ongoing.
São Tomé and Principé	Necrotising cellulitis/fasciitis	G2	10-Jan-17	25-Sep-16	17-Nov-17	2 306	0	0	0.1%	The incidence of new cases is fairly stable, with 30 (suspected (28) and confirmed (2)) cases reported during week 46. Six out of 7 districts in the country have reported cases in week 46. Currently, 21 cases are receiving care in hospital. No deaths have been directly attributed to the infection.

Country	Event	Grade†	WHO notified	Start of reporting period	End of reporting period	Total cases	Confirmed cases	Deaths	CFR	Comments
Senegal	Dengue fever	Ungraded	30-10-2017	28-09-2017	17-Nov-17	724	115	0	0%	Since 28 September, the date of confirmation of the first cases of dengue fever in the Louga region, a total of 724 suspected cases have been reported and 115 cases confirmed. Analyses of by IPD have shown that DEN-1 is the only serotype circulating. 104 confirmed cases have been reported from Louga district, 8 from Dahra district (86 km from Louga), 2 from Coki district (30 km from Louga), and 1 from Keur Momar Sarr district (55 km from Louga). As of 17 November 2017, no severe cases had been reported.
Seychelles	Dengue fever	Ungraded	20-Jul-17	18-Dec-15	23-Oct-17	4 068	1 413	-	-	As of 23 October, 4 068 cases have been reported from all regions of the three main islands (Mahé, Praslin and La Digue).
South Sudan	Humanitarian crisis	G3	15-Aug-16	n/a	31-Oct-17	-	-	-	-	Detailed update given above.
South Sudan	Cholera	Ungraded	25-Aug-16	18-Jun-17	15-Nov-17	21 439	1 585	461	2.2%	Cholera transmission continues to decline nationally. Twenty new cases and no deaths (CFR 0.0%) were reported in week 44 as compared to over 1 700 cases per week at the height of the most recent wave of the epidemic in week 23. In the past four weeks, only two counties (Juba and Budi) reported cases.
Tanzania	Cholera	G1	20-Aug-15	1-Jan-17	5-Nov-17	3 932	-	65	1.7%	The trend of reported cholera cases has increased, with 131 cases including one death in week 45 compared to 82 new cases and 2 deaths in week 44. The number of reporting regions increased to 6 in week 45 compared to 4 regions in week 44. The 6 regions reporting cases this week are Kigoma (95 cases, 1 death); Mbeya (11 cases); Songwe (10 cases); Manyara (5 cases); Dodoma (5 cases); Morogoro (5 cases). Zanzibar has reported zero cases since 11 July 2017.

Country	Event	Grade†	WHO notified	Start of reporting period	End of reporting period	Total cases	Confirmed cases	Deaths	CFR	Comments
Uganda	Humanitarian crisis - refugee	Ungraded	20-Jul-17	n/a	30-Aug-17	-	-	-	-	The influx of refugees to Uganda has continued as the security situation in the neighbouring countries remains fragile. According to UNHCR, the total number of registered refugee and asylum seekers in Uganda stands at 1 326 750, as of 1 August 2017. More than 75% of the refugees are from South Sudan. Detailed update given in the week 35 bulletin.
Uganda	Measles	Ungraded	8-Aug-17	24-Apr-17	3-Oct-17	623	34	-	-	The outbreak is in the two urban districts of Kampala (310 cases) and Wakiso (313 cases).
Uganda	Drought/food insecurity	G1	1-Jul-17	n/a	24-Aug-17	-	-	-	-	This event forms part of a larger food insecurity crisis in the Horn of Africa. The northern and eastern regions are predominantly affected.
Uganda	Cholera	Ungraded	28-Sep-17	25-Sep-17	16-Nov-17	213	24	3	1.4%	The outbreak in Kasese District is still ongoing. The number of sub-counties affected by this outbreak has continued to rise and has now reached twelve sub-counties. Nyakiyumbu Sub County remains the most affected in the district. Another outbreak was identified in Kisoro district. So far, three cases were admitted, including 1 confirmed.
Uganda	Marburg	G2	17-Oct-17	20-Sep-17	21-Nov-17	3	2	3	100%	As of 21 November 2017, there is still a total of 3 cases (two confirmed and one probable). All previously suspected cases have tested negative. Active case finding is ongoing.
Zambia	Cholera	Ungraded	4-Oct-17	4-Oct-17	26-Nov-17	304	217	9	3.1%	The outbreak is no longer localised in the peri urban townships on the Western side of Lusaka City, but has spread to the Eastern Side with a new case reported in Chelstone Sub Ditrict. Affected sub districts now include: Chipata, Kanyama, Chawama, Matero, Chilenje and Chelston.
Zimbabwe	Typhoid fever	Ungraded	-	1-Oct-17	19-Oct-17	1 065	82	-	-	Detailed update given above.

Country	Event	Grade†	WHO notified	Start of reporting period	End of reporting period	Total cases	Confirmed cases	Deaths	CFR	Comments
Recently closed events										
Kenya	Marburg	Ungraded	28-10-2017	28-10-2017	11-Nov-17	-	-	-	-	In Kenya, all high-risk contacts of the second confirmed case from Uganda who had travelled to Trans Nzoia and West Pokot Counties prior to his death completed their 21 days of follow-up on 13 November 2017.

†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
Data is provided by Member States through WHO Country Offices via regular situation reports, teleconferences and email exchanges. Situations are evolving and dynamic therefore numbers stated are subject to change.

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