

WEEKLY BULLETIN ON OUTBREAKS AND OTHER EMERGENCIES

Week 42: 14 - 20 October 2017
Data as reported by 17:00; 20 October 2017



1

New event

44

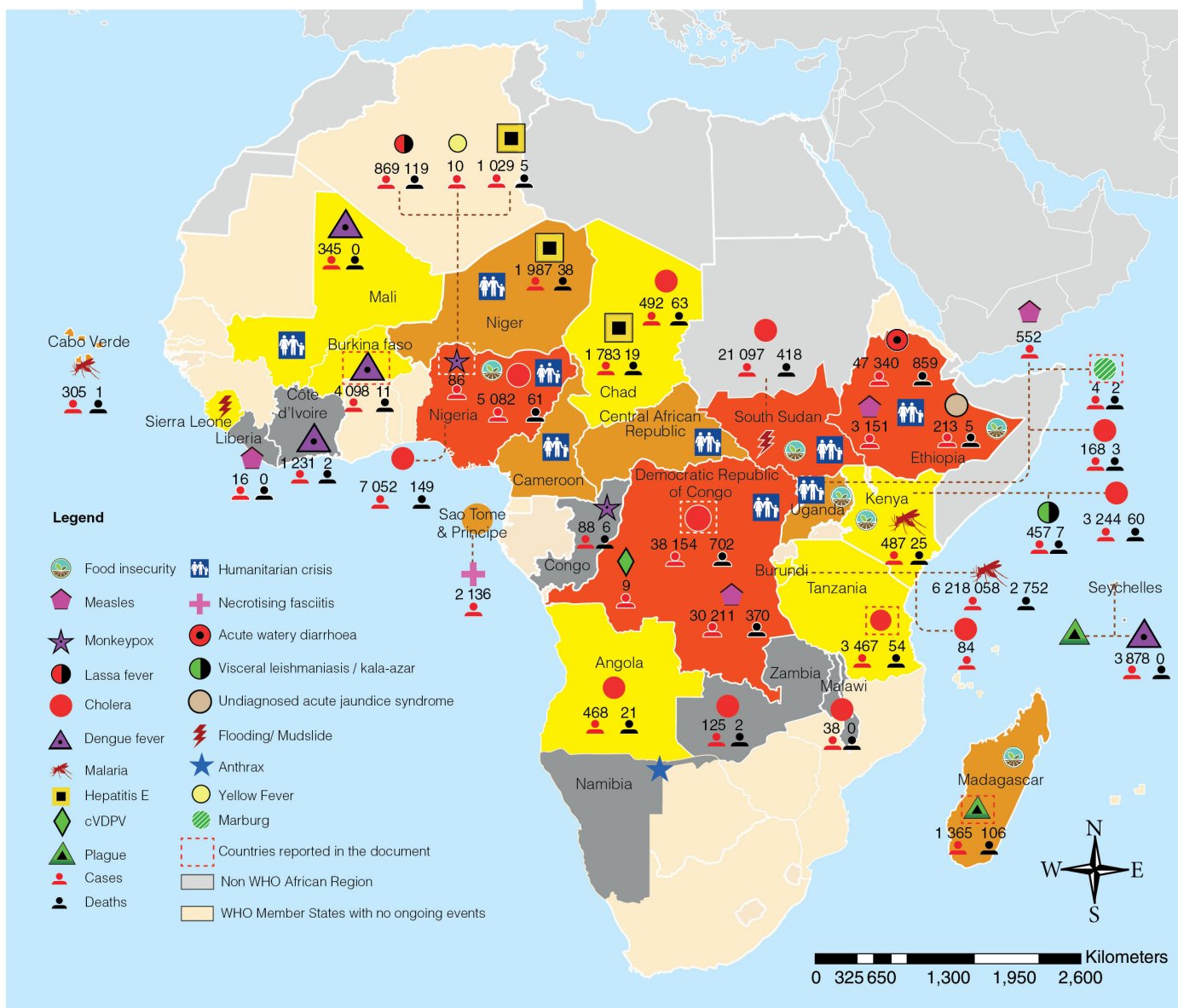
Ongoing events

33

Outbreaks

12

Humanitarian crises



2

Grade 3 events

2

Protracted 3 events

7

Grade 2 events

0

Protracted 2 events

10

Grade 1 events

1

Protracted 1 event

23

Ungraded events

Overview

Contents

- 1 Overview
- 2 - 3 New event
- 4 - 10 Ongoing events
- 11 Summary of major challenges and proposed actions
- 11 - 15 All events currently being monitored

➤ This Weekly Bulletin focuses on selected acute public health emergencies occurring in the WHO African Region. The WHO Health Emergencies Programme is currently monitoring 45 events in the region. This week's edition covers key new and ongoing events, including:

- [Marburg in Uganda](#)
- [Monkeypox in Nigeria](#)
- [Plague in Madagascar](#)
- [Dengue fever in Burkina Faso](#)
- [Cholera in the Democratic Republic of the Congo](#)
- [Cholera in Tanzania.](#)

➤ 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 emerging outbreak of dengue fever in Burkina Faso is rapidly spreading and therefore needs to be tackled more aggressively.
- An outbreak of Marburg has occurred in Uganda. While the country has ample experience and capacity to respond to viral haemorrhagic fever outbreaks, this event still calls for concerted efforts of all stakeholders.

New event

Marburg virus disease

Uganda

4
Cases

2
Deaths

50%
CFR

EVENT DESCRIPTION

On 17 October 2017, the Uganda Ministry of Health notified WHO of an outbreak of Marburg virus disease in Kween District, located in the eastern part of the country. The index case was a 50-year-old woman who became ill on 3 October 2017 and was initially admitted to a local health facility (Kapchorwa Health Centre IV) on 5 October 2017 with fever and bleeding diathesis. On 10 October 2017, the case-patient was referred to Kapchorwa Hospital where she died on the evening of 11 October 2017, and was buried on 13 October 2017 under local cultural customs. Post-mortem blood specimens were collected on 11 October 2017 and sent to the Uganda Virus Research Institute (UVRI) in Entebbe. On 17 October 2017, laboratory results from UVRI indicated that the specimens tested positive for Marburg virus disease by reverse transcription polymerase chain reaction (RT-PCR). Accordingly, the Ministry for Health officially declared the outbreak on 19 October 2017. Further investigations established that the index case had nursed and participated in the burial rituals of her brother, who is considered the primary (first) case in this outbreak.

Chronologically, the first case (probable) reported was a 30 year-old male, who worked as a game hunter and lived near a cave with heavy presence of bats. On 20 September 2017, he was admitted to Kapchorwa Health Centre IV with high fever, vomiting and diarrhoea, which did not respond to antimalarial treatment. As his condition deteriorated, he was transferred to Kapchorwa Hospital on 25 September 2017 and died the same day. No laboratory specimens were collected. He was given a traditional burial on 27 September 2017, which was attended by an estimated 200 people.

The third (probable) case is the brother of the first two cases, who transported his sister (the index case) to the hospital and subsequently became symptomatic. Further information on this case is being obtained.

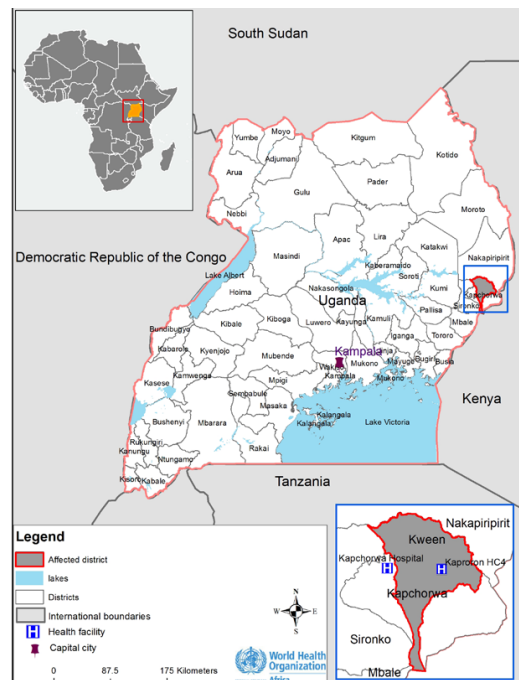
On 19 October 2017, the health authority in Kapchorwa Hospital detected a fourth suspected case in a 2-year-old child admitted with similar symptoms. Further details on this case are being obtained.

As of 19 October 2017, four cases of Marburg virus disease (one confirmed, two probable and one suspect) have been reported from Kween and Kapchorwa districts. To date, 41 contacts have been identified and are being followed up.

PUBLIC HEALTH ACTIONS

- ▶ The National Task Force has been reactivated and an Incident Management System (IMS) established, with an Incident Manager appointed. The District Task Force has also been established and an emergency response plan is being developed.
- ▶ On 18 October 2017, a rapid response team was deployed to Kween and Kapchorwa Districts to conduct outbreak investigations and support local response activities.
- ▶ On 19 October 2017, the Minister of Health held a press conference to inform the public of the outbreak, allay anxiety and disseminate preventive messages.
- ▶ Active surveillance has been initiated, including active case search, contact tracing and monitoring within the affected communities and healthcare centres.
- ▶ Healthcare workers have been put on high alert and training sessions are planned, including a thorough review of infection prevention and control (IPC) protocols. An isolation facility is being set up at the Kapchorwa Health Centre IV. Training of burial teams will be conducted in the affected districts.
- ▶ Community engagement and awareness campaigns are planned to reduce stigma, encourage reporting and early healthcare seeking behaviours, and prevention measures. Information, education and communication (IEC) materials and messages have been updated and are ready for mass production.
- ▶ Various international partners have been engaged to support the response. WHO has deployed additional staff, six viral haemorrhagic fever (VHF) kits and additional funding to scale up the response, and support local authorities with case management and facilitate specimen transportation. UNICEF is assisting with communication activities, and MSF has deployed to support treatment centres.

Geographical distribution of Marburg virus disease cases in Uganda, 3 - 17 October 2017



[Go to overview](#)

[Go to map of the outbreaks](#)

02

Marburg virus disease

Uganda

4
Cases

2
Deaths

50%
CFR

SITUATION INTERPRETATION

Marburg virus disease outbreaks have been documented in Uganda since 2007, the last being an isolated case in 2014. A large outbreak occurred in 2012, during which 15 cases and 4 deaths were reported. Cases have historically been reported among miners and travellers who visited caves inhabited by bat colonies, especially in the western part of Uganda.

Uganda has previous experience in managing recurring VHF outbreaks, including Marburg virus disease. The current outbreak involved a few cases and remains localised. The national authorities have rapidly responded to this event, promptly implementing control measures. However, concerns remain around the high number of contacts that have potentially been exposed in the community during the traditional burial ceremonies and in the healthcare facilities. It is known that the hospitalised cases were managed in the general hospital wards, without appropriate infection prevention and control precautions, and one probable case refused to be hospitalised for some time.

The affected district is about 300 km northeast of Kampala, on the northern slopes of Mount Elgon National Park, located on the border with Kenya. The mountain's caves in the region, which are a major tourist attraction, have large colonies of *Rousettus* cave-dwelling fruit bats, which are considered natural hosts of Marburg virus. While there is uncertainty around cross-border movement between the affected district and Kenya, close proximity of the affected area to the border and the potential for the virus to be transmitted between bat colonies and to humans, increases the risk of spread.

Ongoing events

Monkeypox

Nigeria

86
Cases

0
Deaths

0%
CFR

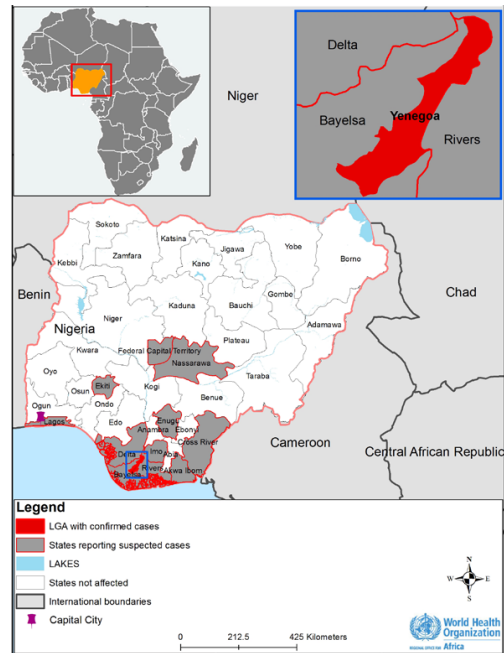
EVENT DESCRIPTION

On 26 September 2017, the Nigeria Centre for Disease Control (NCDC) notified WHO of a suspected outbreak of monkeypox in Yenagoa Local Government Area (LGA), Bayelsa State. The initial cluster of cases (two brothers, their uncle and a neighbour) developed fever and generalized skin rash over a period of 6 weeks. Their illnesses were self-limiting apart from one case, an 11-year-old male, who additionally developed painful swelling of the jaw and presented to a local private hospital. A differential diagnosis of chickenpox or impetigo was made before the child was transferred to Niger Delta University Teaching Hospital. Suspicion of monkeypox prompted the collection of laboratory specimens, as well as field investigations into the initial cluster of cases. The investigation established that there was a captured monkey in the neighbourhood, which young boys regularly played with, before it was killed and eaten about a month prior to onset of illness.

As of 19 October 2017, a total of 22 suspected cases have been reported from Bayelsa State, with seven cases admitted by then. Concurrently, an additional 64 cases have been reported from 10 other states, including Akwa Ibom, Cross River, Delta, Ekiti, Enugu, Federal Capital Territory, Imo, Lagos, Nasarawa, and Rivers. The majority of cases are male (77%) and aged 21-30 years. No deaths have been reported; however, a recovering patient has reportedly committed suicide – issues surrounding the death are being investigated.

Of the 86 cases, a total of 83 specimens have been collected and shipped to the National Reference Laboratory. Eighteen of the samples (13 from Bayelsa State, three from Lagos and two unspecified) were subsequently shipped to the Institute Pasteur Dakar (a WHO reference laboratory). Laboratory results communicated on 13 and 14 October 2017 showed that three samples tested positive for monkeypox virus infection by real-time PCR testing, while the other samples tested negative. All three confirmed samples were from Yenagoa LGA, Bayelsa State.

Geographical distribution of monkeypox cases in Nigeria, 26 September - 19 October 2017



PUBLIC HEALTH ACTIONS

- ▶ Outbreak response activities are being coordinated by a multi-agency, multi-partner Emergency Operations Centre (EOC), led by the Nigerian Centres for Disease Control (NCDC) and the Federal Ministry of Health.
- ▶ A rapid response team continues to support the response in Bayelsa State while off-site support is provided to other State Ministries of Health.
- ▶ Surveillance and case investigation activities are ongoing. The case investigation form was reviewed, investigations are ongoing to identify the primary source(s) of infection, and data are being collated and analysed.
- ▶ Contact tracing activities are ongoing. Currently, 204 contacts are being followed up.
- ▶ Health workers in Bayelsa State have been trained on infection prevention and control, and supportive management. Free treatment is being provided for admitted cases in Bayelsa and Rivers States. Interim national guidelines on monkeypox are being finalised for dissemination.
- ▶ Laboratory investigations are ongoing, with the development of a sample collection protocol, and the collection and transport of samples to the national laboratory.
- ▶ Risk communication activities are ongoing, including dissemination of information through print and electronic media to allay public anxiety and preventive key messages for public, animal handlers and health workers.

SITUATION INTERPRETATION

Monkeypox is a relatively rare zoonosis that occurs sporadically in remote parts of Central and West Africa, often near tropical rainforests. While most cases are self-limiting within 14-21 days, severe disease is more common among children and may be fatal. Confirmation of this outbreak has, however, been challenged by long delays in the collection, referral and testing of samples. Nonetheless, now that the circulation of monkeypox virus has been confirmed (at least in Bayelsa State), there is greater impetus for local authorities and international partners to investigate and control this event. Equally concerning is the observation of exaggerated and incorrect public perception about the cause, risk and severity of disease; reports of stigmatisation of cases which hinders sample collection and other patient-centred response activities; and the unethical use of patient's photographs on social media, leading to further stigmatization and concealment. Community engagement activities must be strengthened to counter these perceptions.

[Go to overview](#)

[Go to map of the outbreaks](#)

04

EVENT DESCRIPTION

Madagascar has been experiencing a large outbreak of plague affecting major cities and other non-endemic areas since August 2017. Between 1 August and 20 October 2017, a total of 1 365 cases (suspected, probable and confirmed) including 106 deaths (case fatality rate 7.8%) have been reported. Of these, 915 cases (67%) were clinically classified as pneumonic plague, 275 (20.1%) were bubonic plague, one case was septicaemic plague, and 174 cases were unspecified. Of the 915 cases of pulmonary plague, 160 (17.5%) have been confirmed, 375 (50%) were probable and 380 (41.5%) were suspected (further classification of cases is in process). A total of 54 healthcare workers have contracted plague since the beginning of the outbreak.

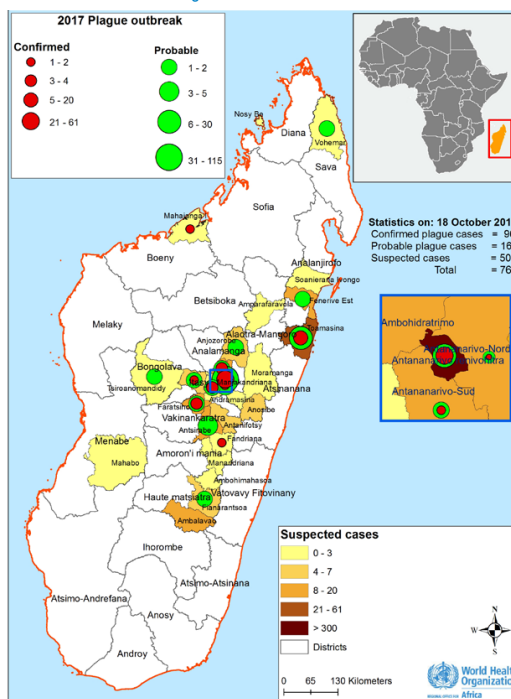
Of 1 087 cases with age and sex information available, 58% (544) were children and young people aged less than 21 years, while 36% (387) were adults aged between 21 and 40 years. Male were the most affected, accounting for 57% of all cases, and have experienced a slightly higher case fatality rates in comparison to females, 9.4% to 7.7%, respectively.

Of the 1365 cases, 219 were confirmed, 520 were probable and 626 remain suspected (additional laboratory results are in process). Eleven strains of *Yersinia pestis* have been isolated and were sensitive to antibiotics recommended by the National Program for the Control of Plague.

Overall, 40 out of 114 (35.1%) districts in 14 of 22 (63.6%) regions in the country have been affected by pulmonary plague. The district of Antananarivo Renivohitra has been the most affected, accounting for 41.4% of all reported cases.

On 20 October 2017, 1 385 out of 2 293 (60.4%) contacts were followed up and provided with prophylactic antibiotics. A total of 141 contacts completed the 7-day follow up without developing symptoms.

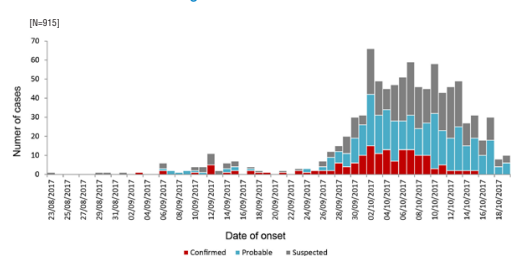
Geographical distribution of plague cases in Madagascar, 1 August - 19 October 2017



PUBLIC HEALTH ACTIONS

- A high level coordination forum to provide strategic and policy directions to the plague outbreak response has been established, chaired by the Prime Minister. Similarly, the Country Humanitarian Team of the United Nations System established a strategic coordination platform for partners, chaired by the Resident Coordinator.
- The health response is coordinated by the Ministry of Public Health, co-led by WHO and supported by agencies and partners directly involved in the health response. The health sector response is organized into four major committees: (i) surveillance, (ii) community response, (iii) case management, and (v) communication; with the logistics committee crosscutting all committees.
- By 16 October 2017, 114 experts (43 through WHO external recruitment, 17 CDC Polio Stop Team, 11 GOARN, and 43 internal WHO staff) have been deployed.
- The regional emergency operations centres (EOC) are fully operational in five hotspot areas, including Antananarivo, Tamatave, Mahajunga, Fianarantsoa, and Fenerive. Other sub-national coordination capacities are being assessed, depending of the epidemiological situation.
- A total of 1 800 community health workers in Antananarivo and 2 632 from other affected regions are carrying out contact tracing activities, being supervised by 340 medical doctors and students.
- Nine plague treatment centres have been established, of which six are in Antananarivo. The treatment centres are supported by IFRC, MSF, Mdm, UNICEF, and WHO.
- The treatment protocol has been updated to cover a large number of respiratory diseases.
- A total of 300 water, sanitation and hygiene (WASH) specialists have been trained and are now working in hospitals.
- Training of healthcare workers on infection prevention and control (IPC) has started on 19 October 2017, with 45 staff trained. The training will continue on 20 and 21 October 2017.
- Nine countries and overseas territories have been identified as priority countries in the African region for plague preparedness and readiness by virtue of having trade and travel links to Madagascar. These countries and overseas territories include Comoros, Ethiopia, Kenya, Mauritius, Mozambique, La Réunion (France), Seychelles, South Africa, and Tanzania.

Evolution of pulmonary and bubonic of plague in Madagascar, 1 August – 20 October 2017



Plague

Madagascar

1 365
Cases

106
Deaths

7.8%
CFR

SITUATION INTERPRETATION

While progress has been made in the response to the plague outbreak in Madagascar, the main focus at this stage is to strengthen effectiveness and coverage of outbreak control measures, including investigation of new cases and contact tracing, provision of outbreak response logistics, enhancing infection prevention and control to mitigate exposure of healthcare workers, vector control, and targeted operational research. Effective risk communication, social mobilization and community engagement are critical. In addition, preparedness and readiness in neighbouring regions and countries, including at the points of entry, are being enhanced.

[Go to overview](#)

[Go to map of the outbreaks](#)

06

EVENT DESCRIPTION

The outbreak of dengue fever in Burkina Faso is rapidly evolving, with a dramatic increase in incidence. During week October 17, 2017, a total of 1 130 new suspected cases and no deaths were reported across the country. Between 1 January and 17 October 2017, a cumulative total of 4 098 (suspected, probable or confirmed) cases and 11 deaths (case fatality rate 0.3%) were reported. Of the 4 098 suspected cases, 2 888 (70.4%) were probable after testing positive on dengue rapid diagnostic tests (RDTs). Fifty-two percent of the cases were female. Cases are currently reported in 12 of the country's 13 health regions, with 65.4% of cases reported in the central region, particularly in the city of Ouagadougou.

Out of 205 samples referred to the viral haemorrhagic fever (VHF) reference laboratory at the Centre Muraz, Bobo-Dioulasso, 110 (54%) were positive for dengue on polymerase chain reaction (PCR). Further characterization of 72 samples has identified three dengue virus serotypes: DENV-2 (58 positives), DENV-3 (12 positives) and DENV-1 (2 positives).

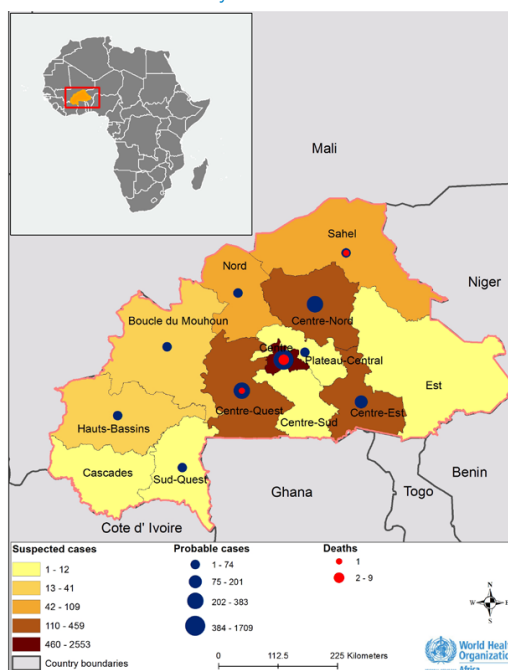
PUBLIC HEALTH ACTIONS

- The National Epidemic Management Committee has been activated to coordinate response activities.
- A preparedness and response plan (and budget) for dengue fever has been developed.
- An early warning system has been established, with daily notification in Ouagadougou and weekly in the other provinces.
- Provision of free medical care and treatment for severe cases in all hospitals is ongoing.
- A total of 10 000 rapid diagnostic tests (RDTs) have been procured, with the support of the World Bank, to facilitate early diagnosis.
- Development and dissemination of a national dengue management algorithm has been conducted.
- Delivery and dissemination of dengue awareness and key prevention measures through radio and television programs is ongoing.
- Periodic shipment of samples to the national VHF laboratory is being carried out.

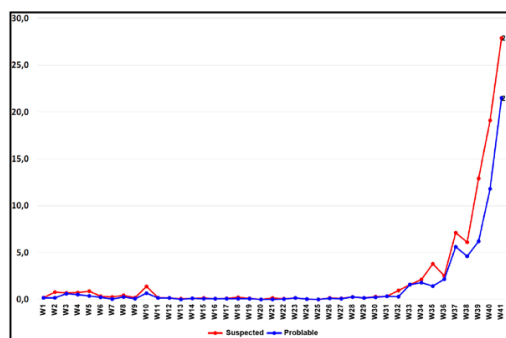
SITUATION INTERPRETATION

This outbreak of dengue fever in Burkina Faso is rapidly increasing, with the incidence doubling in the last weeks. High density of the mosquito population, facilitated by the ongoing rainy season and widespread breeding sites in the communities, is driving the rapid propagation of the disease. The current response measures being undertaken are still inadequate to interrupt and reverse the rising disease trend. The Ministry of Health has developed a comprehensive preparedness and response plan for the dengue fever outbreak, requiring about US\$ 1 million to implement; however, so far only US\$ 63 000 has been realized. The response to this outbreak needs to be urgently scaled up and strengthened, for which national authorities require funds, logistics and human capacity.

Geographical distribution of dengue cases in Burkina Faso, 1 January - 17 October 2017



Evolution of suspected and probable cases of dengue in Ouagadougou city, Burkina Faso, W1 - W41, 2017



EVENT DESCRIPTION

The cholera outbreak in the Democratic Republic of the Congo continues, with a downward trend observed in the last week. During week 41 (week ending 15 October 2017), there were 1 854 new suspected cases and 26 deaths (case fatality rate 1.4%), compared with 2 243 cases and 27 deaths (case fatality rate 1.2%) in week 40. Active transmission is ongoing in 11 provinces and 66 health zones. The most affected provinces were North Kivu (733 cases, 6 deaths), South Kivu (467 cases, 1 death), Tanganyika (217 cases, 2 deaths), Haut Lomami (188 cases, 7 deaths), Congo Central (150 cases, 3 deaths), and Maniema (48 cases, 3 deaths).

Since the beginning of the year up to 15 October 2017, there have been a total of 38 154 cases with 702 deaths (case fatality rate 1.8%), compared with 23 291 cases and 675 deaths (case fatality rate 2.9%) during the same period in 2016. North Kivu (10 512 suspected cases) and South Kivu (8 378 suspected cases) have accounted for 50% of all reported cases.

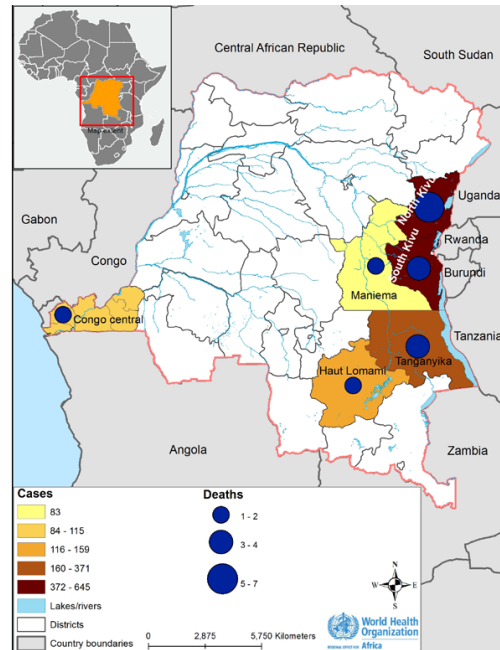
PUBLIC HEALTH ACTIONS

- WHO and partners continue to strengthen coordination of outbreak response at national level and in the affected provinces. Weekly teleconferences with the most affected provinces are ongoing to identify urgent needs and provide guidance.
- A joint mission by WHO Headquarters and African Regional Office was conducted to Kinshasa from 11-14 October 2017 to support and strategize on the emergency management in the country.
- The WHO sub-office and the Provincial Health Directorates teams are being supported to implement preparedness and response activities, including identifying potentially eligible regions for oral cholera vaccination.
- Three WHO field coordinators have arrived in Kinshasa to support the emergency response.
- There are continued bilateral and collective meetings with partners to strengthen partnership and coordination activities.
- A meeting was held on 12 October 2017 to coordinate and plan interventions for the rapid control of the cholera outbreak in Kasai.
- Between 16 and 22 October 2017, WHO supported deployment of 28 experts in the provinces of South Kivu, North Kivu, Tanganyika, Kasai, Haut Lomami, and Kwilu to strengthen the response to the outbreak. Further deployment of experts to Ilebo in Kasai is underway.
- Investigations are ongoing in Masisi, Katana and Idjwi, and line listing of cases continues, particularly in South Kivu, North Kivu, Haut Lomami, and Congo Central.
- MSF continues to provide technical and logistical support for case management in South Kivu. Provision of technical, financial and logistical support is ongoing for the operation of cholera treatment centres (CTC) in South Kivu (Katana) and Central Congo.
- The Ministry of Health has developed a new communication plan. Social mobilization and communication activities continue, with dissemination of key messages on sanitation and hygiene ongoing on national and local radio and television.

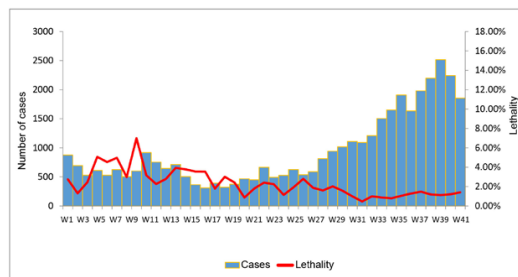
SITUATION INTERPRETATION

In spite of the observed reduction during the reporting week, the cholera outbreak in the Democratic Republic of the Congo remains a concern, with a high weekly incidence and new areas being affected. The cholera epidemic is active in eleven provinces and 66 health zones. The outbreak appears to be following three major river and lake routes, suggesting that these water bodies play an important role in transmission. Towards the east of the country, the affected areas are along Lake Tanganyika and Lake Kivu and the disease appears to be moving towards Lake Albert in the north-east. In the central region, the disease is affecting areas along the internal lakes and along the Congo River, up to Kindu and Maniema. In the western central area, the disease is affecting areas along the Kasai River. The importance of the river and lake systems in cholera transmission needs to be urgently investigated, in order to find ways to break transmission in these areas.

Geographical distribution of cholera case in Democratic Republic of the Congo, 1 - 11 October 2017



Epicurve of suspected cases of cholera in district of Nord Kivu, Democratic Republic of the Congo, W34 - W41, 2017



EVENT DESCRIPTION

The cholera outbreak in Tanzania continues, with a slight decline in the number of new cases observed during the reporting week. In week 41 (week ending 15 October 2017), 120 new cases and one death (case fatality rate 0.8%) were reported in Tanzania mainland, compared with 153 cases and one death reported in week 40 (week ending 8 October 2017). The new cases were reported from five districts, namely Songwe DC (101 cases), Chunya DC (14 cases), Mbeya City (three cases), Mbeya DC (one case), and Mkinga DC (one case and one death).

Zanzibar Island has been reporting zero cholera cases and deaths for the past 13 weeks, with the last case reported on 11 July 2017. Between weeks 1 and 41 of 2017, the cumulative number of cases and deaths reported from Tanzania mainland is 3 467, with 54 deaths (case fatality rate 1.6%). In 2017, Zanzibar Island reported 358 cases and four deaths (case fatality rate 1.1%).

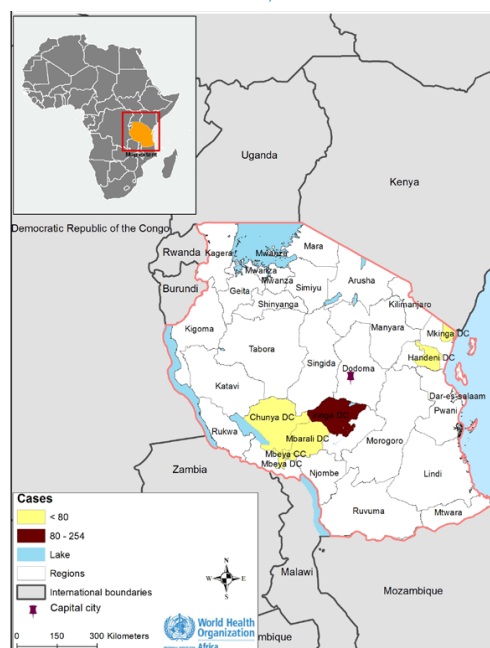
PUBLIC HEALTH ACTIONS

- WHO, with partners (UNICEF, CDC) continues to support the Ministry of Health (MOH) in the implementation of cholera control activities.
- There was a recent high-level teleconference between the MOH, the Deputy Permanent Secretary of Health in the President's Office and cholera reporting regions and districts.
- There is intensified community engagement and continued MOH leadership at all levels to identify sources of infection and prevent transmission.
- Advocacy for household water treatment at the point of use and community sensitization and awareness through local radio, television and social media continues, along with distribution of chlorine tablets (Aqua tabs) to affected communities.
- A national rapid response team has been deployed to Songwe and Mbeya Regions from 17-24 October to support response in the hotspot regions.
- There is continued follow-up of the regions to ensure prompt reporting of all suspected cholera cases and laboratory results.

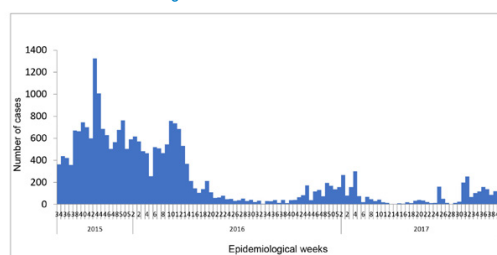
SITUATION INTERPRETATION

Active cholera transmission has persisted in Tanzania mainland, with Songwe Region now being the most active. The three wards that report the highest number of cases in Songwe District are said to be located in low land, characterised by inadequate access to safe drinking water, relying on water from shallow wells for household use. Having mapped the cholera hotspots and identified the potential risk factors for continued transmission, the national and district authorities, in collaboration with partners, ought to design appropriate and targeted outbreak control strategies and interventions. The continuous propagation of cholera in parts of Tanzania mainland is a cause for concern and could result in another upsurge affecting the whole country. The national authorities and in-country partners need to embolden their commitments to control this protracted outbreak.

Geographical distribution of cholera case in Tanzania, W1 - W41, 2017



Trend of cholera cases, Tanzania Mainland, 15 August 2015 - 15 October 2017



Summary of major challenges and proposed actions

Challenges

- The outbreak of dengue fever in Burkina Faso has exponentially increased in the last weeks. Conversely, the current response measures are as yet inadequate to interrupt and reverse the rising disease trend. The national authorities have developed a comprehensive preparedness and response plan that has not yet been funded. The national authorities require funds, logistics and human capacity in to scale up proportionate response interventions to this outbreak.
- Uganda has, once again, experienced an outbreak of Marburg virus disease, for the fifth time. While the current outbreak involved a few cases and remains localised, concerns remain around the high number of contacts potentially exposed to the initial cases. The national authorities have rapidly responded to this event, promptly implementing control measures. However, an outbreak of Marburg can never be taken lightly because of its severity, high case fatality rate and its socio-economic impact.

Proposed actions

- The government and the partners are called upon to provide the requisite resources to the response teams in order to undertake comprehensive and effective outbreak control measures, and bring this fast spreading disease under control.
- All stakeholders, including the national authorities and partners, should strengthen the ongoing response interventions, especially contact tracing, investigation of new cases and enforcing infection prevention and control measures.

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
Newly reported events										
Uganda	Marburg	G2	17-Oct-17	20-Sep-17	18-Oct-17	4	1	2	50.0%	Detailed updated given above.
Ongoing events										
Angola	Cholera	G1	15-Dec-16	13-Dec-16	6-Aug-17	468	-	21	4.5%	Since 13 December 2016, cases have been detected in Cabinda (236), Soyo (227) and Luanda (5). Soyo reported zero cases since epidemiological week 26 and Cabinda reported the same since epidemiologic week 29. Luanda has not reported any cases since week 5. The high transmission areas are linked to the cholera outbreak in Kongo Central Province in DRC.
Burkina Faso	Dengue	G1	4-Oct-17	1-Jan-17	17-Oct-17	4 098	110	11	0.3%	Detailed updated given above.
Burundi	Malaria	G1	22-Mar-17	1-Jan-17	8-Oct-17	6 218 058	-	2 752	0.0%	Weekly case counts are exceeding 2016 rates and continue to be on the rise. In week 40, 127 175 cases and 48 deaths were reported. The most affected health districts (DS) are: Kirundo (6 275) and Giteranyi (5 544).
Burundi	Cholera	Ungraded	20-Aug-17	20-Aug-17	15-Oct-17	84	4	0	0.0%	During week 41, 20 new cases were reported in the health zones of Isare (09), Cibitoke (08) and Bubanza (03). As of 15 October a cumulative total of 84 cases were reported. As of 16 October 2017 no new cases have been reported in Mabayi (for 48 days), Nyanza-Lac (for 35 days), Mpanda (for 12 days), Bubanza (for 72 days), Cibitoke (for 2 days) and Isare (for 2 days).
Cameroon	Humanitarian crisis	G2	31-Dec-13	27-Jun-17	23-Jul-17	-	-	-	-	Conflict in both north-east Nigeria and Central African Republic has led to mass population movement to Cameroon. Almost 10% of the population of Cameroon, particularly in the Far North, North, Adamaoua, and East Regions, is in need of humanitarian assistance as a result of the insecurity. A detailed update was provided in the week 31 bulletin.
Cape Verde	Malaria	G2	26-Jul-17	27-Jan-17	16-Oct-17	305	305	1	0.3%	The incidence of new cases declined since peaking in week 35 (early Sept), but increased again in week 41 with 27 new cases reported. 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. One death was reported this week in an indigenous case.
Central African Republic	Humanitarian crisis	G2	11-Dec-13	11-Dec-13	29-Sep-17	-	-	-	-	Security incidents continue in several localities in the country. Humanitarian actors reported a total of 29 deaths related to violence during the period from 19-25 September, mostly civilians. Violence was particularly concentrated in five south-eastern localities (Alindao, Kémbé, Mobaye, Kouango, Rafai and Zémio) and in Bocaranga and Niem in the north-west. These security incidents continue to cause new internal displacements.
Chad	Hepatitis E	G1	20-Dec-16	1-Aug-16	3-Sep-17	1 783	98	19	1.1%	Outbreaks are ongoing in the Salamat Region predominantly affecting North and South Am Timan, Amsiné, South Am Timan, Mouraye, Foulounga and Aboudeia. Of the 64 cases occurring in pregnant women, five died (case fatality rate 7.8%) and 20 were hospitalized.

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	3-Oct-17	492	6	63	12.8%	Cases have been reported from Koukou (342) and Goz Beida (92) health districts in the Sila Region, as well as from Am Timan Health District (58) in the Salamat Region. The incidence of new cases has markedly decreased in Sila since mid September, and are being maintained at relatively low rates in Salamat.
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	3-May-17	29-Aug-17	1 231	311	2	0.2%	Abidjan city remains the epicentre of this outbreak, accounting for 97% of the total reported cases. The main health districts affected include Cocody, Abobo, Bingerville and Yopougon. Of the cases confirmed, 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.
Democratic Republic of the Congo	Humanitarian crisis	G3	20-Dec-16	17-Apr-17	6-Oct-17	-	-	-	-	There has been a relative lull in fighting in the Kasai region. The numbers of IDPs and returnees are estimated at 1.4 million and 271 687, respectively.
Democratic Republic of the Congo	Cholera		16-Jan-15	1-Jan-17	20-Oct-17	38 154	-	702	1.8%	Detailed updated given above.
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	0.0%	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: 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	22-Aug-17	30 211	449	370	1.2%	The incidence of new cases has declined since the current outbreak peaked in early 2017.
Ethiopia	Humanitarian crisis	Protracted 3	15-Nov-15	n/a	26-Sep-17	-	-	-	-	This complex emergency includes outbreaks of AWD, measles and AJS (reported separately below) and El Niño-related drought and food insecurity affecting the Horn of Africa. The estimated IDP population stands at 1 099 776 as of 26 September 2017. Heavy rainfall causing floods have affected over 18 600 households and displaced some 93 000 people. Addis Ababa, Jima, and south-east and south-west Shewa were worst affected.
Ethiopia	Acute watery diarrhoea (AWD)		15-Nov-15	1-Jan-17	15-Oct-17	47 340	-	859	1.8%	521 new cases reported in week 41. Six regions with active transmission and two reporting over 100 cases in the week under review due to late reporting.
Ethiopia	Measles		14-Jan-17	1-Jan-17	3-Oct-17	3 151	-	-	-	382 new cases were reported in week 39.
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.
Kenya	Cholera	G1	6-Mar-17	1-Jan-17	19-Oct-17	3 244	584	60	1.8%	Nationally case numbers continue to decrease. Three countries are currently reporting active outbreaks: Nairobi, Garissa, and Kajiado, with around 60% of the cases coming from Nairobi county.

Country	Event	Grade†	WHO notified	Start of reporting period	End of reporting period	Total cases	Confirmed cases	Deaths	CFR	Comments
Kenya	Leishmaniasis, visceral (kala-azar)	Ungraded	7-Jun-17	4-Jan-17	26-Aug-17	457	362	7	1.5%	Marsabit (338) and Wajir (119) counties have been affected by outbreaks since early 2017. The outbreak remains active in Marsabit, where the last reported case was reported on 26 August 2017. The outbreak has been controlled in Wajir, where the last reported case was reported on 17 June 2017. No new cases were reported in the past week.
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 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	10-Oct-17	487	334	25	5.1%	The suspected outbreak is affected 3 wards in Marsabit which are Durkana, North Horr and Loiyangalani wards.
Liberia	Measles	Ungraded	24-Sep-17	6-Sep-17	1-Oct-17	16	4	0	0.0%	The situation remains unchanged in Bong County. In an unrelated event, Nimba County has reported an outbreak. During week 39, 17 new suspected cases were reported from Nimba; further details awaited.
Madagascar	Plague	G2	13-Sep-17	13-Sep-17	16-Oct-17	1 365	219	106	7.8%	Detailed updated given above.
Madagascar	Food insecurity	Ungraded	23-Feb-17	n/a	15-Jul-17	-	-	-	-	Food insecurity continues in the south parts of the island. A recent food security assessment showed that from June to September 2017, an estimated 409 000 people (25% of the affected area population) will be in need of humanitarian assistance. A detailed update was provided in the week 30 bulletin.
Malawi	Cholera	Ungraded	n/a	23-Jul-17	15-Oct-17	48	3	0	0.0%	A relatively small outbreak of cholera was detected in week 30 in Chikwawa District, with low rates of illness maintain in subsequent weeks. As of 15 October 2017, a cumulative total of 48 cases were reported.
Mali	Dengue fever	Ungraded	4-Sep-17	1-Aug-17	15-Oct-17	345	26	0	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	3-May-17	-	-	-	-	Limited information is available on this event. At the last update (3 May), the security situation remained unstable, and incidents of violence and inter-ethnic conflicts were increasingly spreading.
Namibia and Botswana	Anthrax	Ungraded	10-Oct-17	10-Oct-17	12-Oct-17	0	0	0	-	Mass deaths of wildlife (hippos and buffalo) in Bwabwata National Park. Dead hippos also detected downriver in Kavango River in Botswana. Public health authorities are responding. No known human infections to date.
Niger	Hepatitis E	Ungraded	2-Apr-17	2-Jan-17	12-Oct-17	1 987	441	38	1.9%	The majority of cases have been reported from the Diffa (1408), N'Guigmi (306) and Bosso (250) health districts. Case incidence continues to decline.
Niger	Humanitarian crisis	G2	1-Feb-15	1-Feb-15	11-Aug-17	-	-	-	-	The security situation remains precarious and unpredictable. On 28 June 2017, 16 000 people were displaced after a suicide attack on an 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	19-Feb-17	29-Sep-17	869	264	119	13.7%	The outbreak is currently active in nine states: Ondo, Edo, Plateau, Bauchi, Lagos, Ogun, Kaduna, Kwara, and Kogi. During week 39, 3 new confirmed cases were reported.

Country	Event	Grade†	WHO notified	Start of reporting period	End of reporting period	Total cases	Confirmed cases	Deaths	CFR	Comments
Nigeria	Humanitarian crisis		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)	Protracted 3	20-Aug-17	14-Aug-17	22-Oct-17	5 082	255	61	1.2%	The total number of suspected cholera cases reported on 22 October 2017 shows a marginal decrease compared to the number of cases reported on the 21 October 2017, and remains below 50 cases. To date, cases have been reported in 5 LGAs: Jere (2 591 cases), Monguno (1 711 cases), Dikwa (736 cases), MCC (38 cases), and Mafa (6 cases).
Nigeria	Cholera (nation wide)	Ungraded	7-Jun-17	1-Jan-17	18-Sep-17	7 052	145	149	2.1%	Confirmed outbreaks have been reported from 7 states: Borno, Kebbi, Zamfara, Kano, Lagos, Oyo, Kwara and Kaduna States. The outbreak was recently confirmed in Kaduna State (40 cases, 2 confirmed). Apart from Kwara where the outbreak has been controlled for an extended period, outbreaks are continuing on or being sustained at low levels in other states.
Nigeria	Hepatitis E	Ungraded	18-Jun-17	1-May-17	24-Sep-17	1 029	-	5	0.5%	The outbreak is concentrated in Borno State, with incidence steadily declining after peaking in week 26. The majority of cases have been reported Ngala (810), Mobbar (99) and Monguno (66) LGAs.
Nigeria	Yellow fever	Ungraded	14-Sep-17	7-Sep-17	10-Oct-17	10	1	0	0.0%	One confirmed case detected in Ifelodun LGA, Kwara State. Nine samples tested PCR positive at LUTH from four states: Kwara (4), Kogi (2), Plateau (2) and Edo (1), and 1 sample from Abia was inconclusive. Samples have been referred to IP Dakar for confirmatory testing; the sample from Edo was ELISA and PCR negative, all others are current pending. Reactive vaccination campaign scheduled to start 13 October targeting over 850 000 people in Kwara and Kogi states.
Nigeria	Monkeypox	Ungraded	26-Sep-17	24-Sep-17	19-Oct-17	86	3	0	0.0%	Detailed updated given above.
São Tomé and Príncipe	Necrotising cellulitis/fasciitis	G2	10-Jan-17	25-Sep-16	15-Oct-17	2 136	0	0	0.0%	The incidence of new cases continue to fluctuating between 17 and 39 cases per week, with 28 cases reported during week 41 of 2017. The situation must be monitored closely as cases previously increased around this time last year, peaking at over 100 cases per week in epi week 50 of 2016; corresponding with the end of the rainy season.
Seychelles	Dengue fever	Ungraded	20-Jul-17	18-Dec-15	10-Sep-17	3 878	1 295	-	-	Dengue virus serotype 2 (DEN-2) is predominating. Cases have been reported from all regions of the three main islands (Mahé, Praslin and La Digue). A detailed update was provided in the week 32 bulletin.
Seychelles ex Madagascar	Plague	Ungraded	10-Oct-17	9-Oct-17	20-Oct-17	0	0	0	-	A public health response was mounted following detection of a single RDT positive in a returning traveller from Madagascar. Ten laboratory specimens the case, his contacts and two suspected cases tested negative at IP Paris. Overall, 1 223 contacts were registered and followed-up, of which 833 were given prophylactic antibiotics.

Country	Event	Grade†	WHO notified	Start of reporting period	End of reporting period	Total cases	Confirmed cases	Deaths	CFR	Comments
Sierra Leone	Flooding/mudslide	G1	14-Aug-17	14-Aug-17	28-Sep-17	-	-	-	-	Recovery efforts are ongoing a month since mudslides and flash floods devastated parts of Freetown, Sierra Leone. Burial of 502 corpses and 139 body parts was completed. Search for dead bodies has been stopped, 500 individuals declared missing. 1 247 households were affected in 6 communities with 5 905 persons displaced.
South Sudan	Humanitarian crisis	G3	15-Aug-16	n/a	15-Oct-17	-	-	-	-	Situation remains volatile, fighting in multiple fronts and displacement continues. Humanitarian access to the most vulnerable population remains a major concern due to conflict and flooding in deep front areas. Severe Acute Malnutrition, malaria, measles, kala-azar, and cholera are the top ranking public health risks affecting the already distressed populations.
South Sudan	Cholera	Ungraded	25-Aug-16	18-Jun-17	15-Oct-17	21 097	1 585	418	2.0%	Cholera transmission has continued to decline countrywide and remains only in three counties (Juba, Budi and Fangak). Thirty-seven new cases including one death (CFR 2.7%) were reported in week 40; against >1 700 cases per week at the height of the most recent wave of the epidemic in week 23. A total of 21 097 and 418 deaths (CFR 2%) since the start of the outbreak on 23 June 2017.
Tanzania	Cholera	G1	20-Aug-15	1-Jan-17	15-Oct-17	3 467	-	54	1.6%	Detailed updated given above.
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	18-Sep-17	552	-	-	-	The outbreak is in the two urban districts of Kamala (309 cases) and Wakiso (243 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	17-Oct-17	168	15	3	1.8%	The outbreak remains confined to Kasese District but has spread from 5 sub-counties (Nyakinyumbu, Munkunyu, Bwera, Isango, and MLTC) to include Ihandiro, Karambi, and Kyondo sub-counties; however, the daily incidence of new cases remains low.
Zambia	Cholera	Ungraded	4-Oct-17	4-Oct-17	20-Oct-17	125	59	2	1.6%	The daily incidence of new cases has remained relatively low. Cases have been reported from four sub-districts of Lusaka: Chipata (27), Kanyama (90), Chawama (3), Bauleni (1), and Matero (4). Children under 5 years old account for 63% of the cases and children under 1 year account for 30% of cases.

†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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