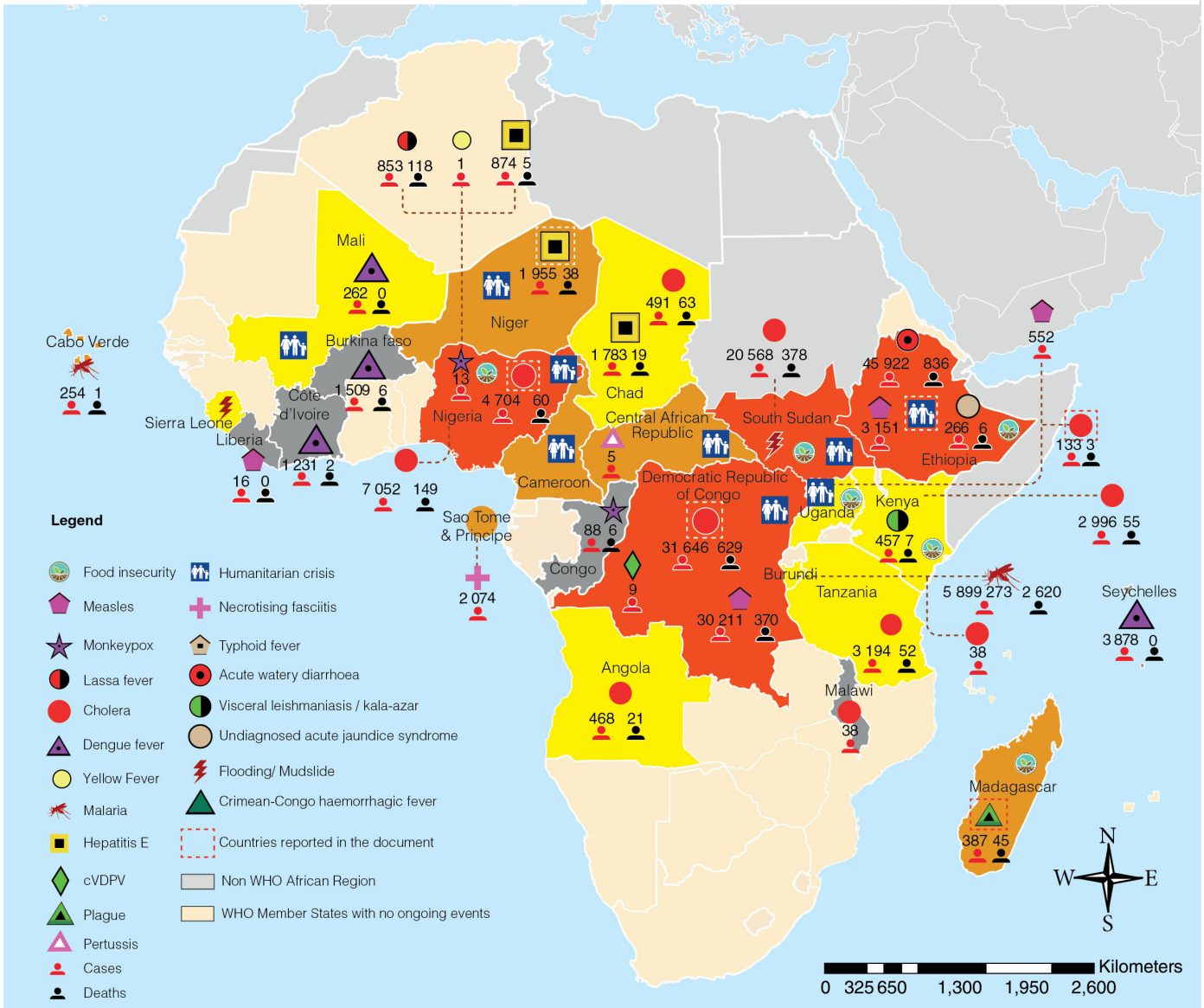
# WEEKLY BULLETIN ON OUTBREAKS AND OTHER EMERGENCIES

Week 40: 30 September - 6 October 2017
Data as reported by 17:00; 6 October 2017

World Health Organization
REGIONAL OFFICE FOR Africa
WHO Health Emergencies Programme

| 3 | 43 | 33 | 13 |
|---|---|---|---|
| New events | Ongoing events | Outbreaks | Humanitarian crises |




| 2 | 7 | 9 | 25 |
|---|---|---|---|
| Grade 3 events | Grade 2 events | Grade 1 events | Ungraded events |
| 2 | 0 | 1 | |
| Protracted 3 events | Protracted 2 events | Protracted 1 event | |

Health Emergency Information and Risk Assessment

# 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 46 events in the region. This week's edition covers key ongoing events, including:

  - Plague in Madagascar
  - Cholera in the Democratic Republic of the Congo
  - Cholera in Uganda
  - Cholera in north-east Nigeria
  - Hepatitis E in Niger
  - Humanitarian crisis in Ethiopia.

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

- A table is provided at the end of the bulletin with information on all new and ongoing public health events currently being monitored in the region, as well as events that have recently been closed.

- **Major challenges include:**

  - The ongoing outbreak of bubonic and pneumonic plague in Madagascar has continued to expand but with a decreased case fatality rate. The major concerns include the possibility of wider geographical spread, as well as the high level of public concern this event has caused.

  - The cholera outbreak in the Democratic Republic of the Congo remains serious, with increasing incidence. This outbreak requires urgent and reinforced multisectoral actions.

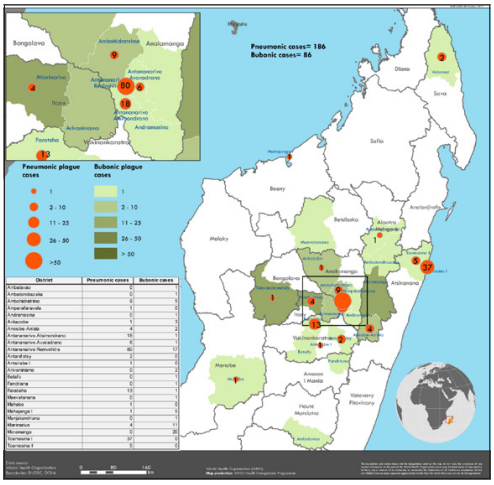
# Ongoing event

**Plague** | **Madagascar** | 387 **Cases** | 45 **Deaths** | 11.6% **CFR**

## Event description

The outbreak of plague in Madagascar has escalated in the last weeks. Since our last report on 29 September 2017, a total of 254 new suspected cases including 21 deaths were reported. Cumulatively, between 1 August 2017 and 8 October 2017, 387 cases (suspected, probable and confirmed) including 45 deaths (case fatality rate 11.6%) have been reported. Of these, 227 cases were the pneumonic form of the disease, 106 cases were bubonic plague, one was septicaemic plague, and three were an unspecified. The cases also include a confirmed death of a basketball official from Seychelles on 29 September 2017, who was participating in an international basketball tournament (Indian Ocean Club Championship) in Madagascar. Another confirmed case of a South African basketball official was identified on 30 September 2017 and the patient is undergoing treatment in Antananarivo. In addition, at least eight healthcare workers from one district health hospital have contracted plague since 30 September 2017.

Geographical distribution of plague cases in Madagascar, 23 August - 3 October 2017




Of the 387 cases, 38 were confirmed by polymerase chain reaction (PCR), 164 were classified as probable cases after testing positive on rapid diagnostic tests (RDT) and 185 remain suspected cases. Fourteen out of 22 regions in the country (including the North and South-east Regions that are considered non-endemic) have been affected.

Plague is known to be endemic on the Plateaux of Madagascar (including Ankazobe District where the current outbreak originated) and cases are usually reported nearly every year between September and April. Unlike the usual endemic pattern, the plague season begun early this year, and the disease has affected urban centres, including Antananarivo (the capital city) and Toamasina (the port city).

## Public health actions

- A multisectoral national response coordination committee has been established, under the leadership of the Minister of Public Health, to coordinate the response to the plague outbreak. Various subcommittees have been established, addressing the key thematic areas such as surveillance, social mobilization, vector control, case management, and logistics.
- A comprehensive national response plan has been developed, with the support of WHO and partners, estimated at US$ 6.8 million. The national authorities and WHO have engaged several partners, including DFID, USAID, French Embassy, GIZ, and Africa CDC to support the plague outbreak response.
- WHO made available US$ 1.5 million for immediate field operations from its Contingency Funds for Emergencies and has issued a donor alert for additional resources.
- In support of the MOH and the other national authorities, WHO and the GOARN partners have initiated deployment of emergency response teams. By 4 October 2017, 32 technical staff have been deployed, including repurposing WHO Country Office staff towards the response to the outbreak.
- Over 2000 community health workers from USAID projects, UNICEF and IFRC volunteers are being trained on contact tracing.
- WHO is providing operations preparedness/readiness support for plague to seven high risk priority countries, whose nationals participated in the basketball tournament and who also have trade and travel links to Madagascar.

## Situation interpretation

The outbreak of pneumonic plague in Madagascar has evolved quickly in recent weeks, as expected, because pneumonic plague is associated with increased transmissibility and higher case fatality. A major concern is the possibility of more rapid and wider geographical spread within the country and beyond. While the country has experience in dealing with outbreaks of plague, its capacities are currently being stretched. The government's financial contribution and operational capacity has not been able to keep up with the evolution of the outbreak, and WHO and partners are scaling up the response to the outbreak to support of the government's efforts.

Response activities are currently ongoing in the affected regions; however, there have been several challenges. The most critical needs at this stage include rapidly improving the national coordination mechanism by appointing a national coordinator with a dedicated team that will be working full time on the response. This will maximize the impact of government and partners joint actions to stop the outbreak. There is an urgent need to establish appropriate isolation and treatment facilities, and scale up infection prevention and control measures. Risk communication and community engagement are critical. Ultimately, there is a need to strengthen epidemiological and entomological investigations in the country in order to target the high risk populations and areas, strengthen vector control and community engagement to reduce disease transmission. In addition, preparedness and readiness in neighbouring regions and countries, including at the points of entry, should be enhanced. WHO and partners continue to deploy the additional human resources needed, including through GOARN.

Go to overview

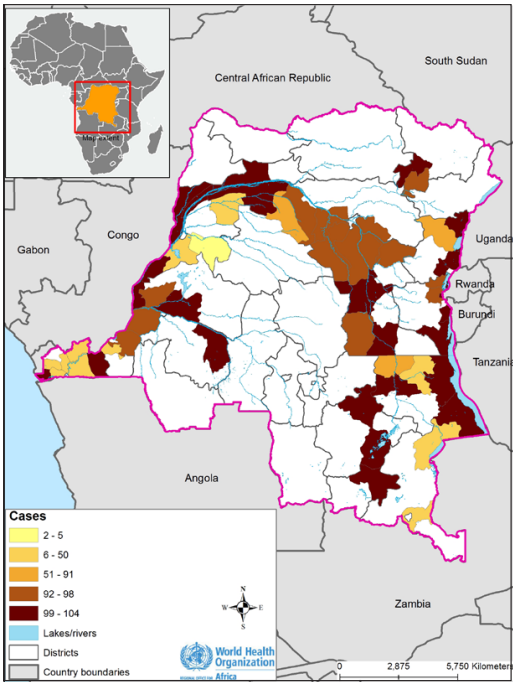
Go to map of the outbreaks

## Event description

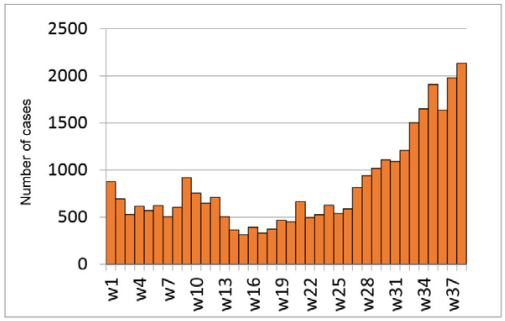
The trend of the cholera outbreak in the Democratic Republic of the Congo continues to increase. During week 39 (week ending 1 October 2017), a total of 2 496 new cases including 28 deaths (case fatality rate 1.1%) were reported across the country, similar to 2 184 cases and 15 deaths reported in week 38. Week 37 marked the first time since 2002 when the number of new suspected cholera cases exceeded 2 000 in a week. The provinces that reported the highest number of cases in week 38 were North Kivu (937 cases, 1 death), South Kivu (637 cases, 3 deaths), Tanganyika (409 cases, 7 deaths), Haut Lomami (247 cases, 4 deaths), and Kongo Central (146 cases, 5 deaths). The other affected provinces were Haut Katanga, Kwilu, Maindombe, Maniema, and Mongala. The provinces of Haut Lomami, South Kivu, North Kivu, and Maniema are currently observing rising trends, while Kwilu Province has observed reduction in the number of new cases.

Since the beginning of 2017, a total of 34 165 suspected and confirmed cases including 658 deaths (case fatality rate 1.9%) were reported from 18 out of the 26 provinces in the country, compared to 22 113 cases and 641 deaths (case fatality rate 2.9%) reported during the same period in 2016.

Geographical distribution of cholera cases in Democratic Republic of the Congo, week 38, 2017




Epidemic curve for cholera cases in Democratic Republic of the Congo, week 1- week 38, 2017




## Public health actions

- The National Program for the Elimination of Cholera and Control of Other Diarrhoeal Diseases (PNECHOL-MD), a new national authority created in response to this ongoing cholera outbreak, regularly meets to coordinate the response and identify actions to address gaps in response activities.
- Twenty-five multidisciplinary national experts have been deployed to the most affected provinces, with the support of WHO.
- A system for the daily collection of data (community-based and health facility data) has been established in the provinces of South Kivu, North Kivu and Haut Lomami.
- WHO is supporting the strengthening of community-based interventions in Upper Lomami, Kwilu, South Kivu, and North Kivu. In addition, WHO supplied 15 cholera kits to address the gap in supplies over the coming two weeks.
- MSF is providing technical and logistical support for case management activities in South Kivu.
- UNICEF, MONUSCO, MINOVA, and MSF are supporting water and sanitation (WATSAN) interventions, including establishing additional chlorination points as well as providing drinking water in North Kivu, and providing water filters in South Kivu. Other interventions include household disinfection, community outreach and education on handwashing practices in the affected provinces.
- A communication plan has been developed by the Ministry of Health and health promotion messages are being disseminated through national and local radios and televisions.

## Situation interpretation

The increasing trend of cholera cases in the Democratic Republic of the Congo is concerning. The weekly case load has surpassed 2 000 cases in week 37, the highest since 2002. While the incidence is increasing, case fatality has been declining (from over 2% to below 1% in week 38). This is probable attributed to improved technical assistance provided by the national authorities and partners recently, including the deployment of the multidisciplinary teams to the most affected provinces.

Nevertheless, the population will continue to be affected unless access to safe drinking water and poor hygiene conditions are addressed. The strengthening of partner commitment to the control of this outbreak, particularly in the areas of water and sanitation interventions, should lead to improvement in the morbidity related to this outbreak. Reagent stock-outs, insufficient rapid diagnostic tests, and difficulties in collection and transportation of samples require urgent attention, along with strengthening community-based interventions. Additionally, preparedness measures should be enhanced in provinces at high risk but not yet affected, for example, Tshopo and Ecuador.

Go to overview

Go to map of the outbreaks

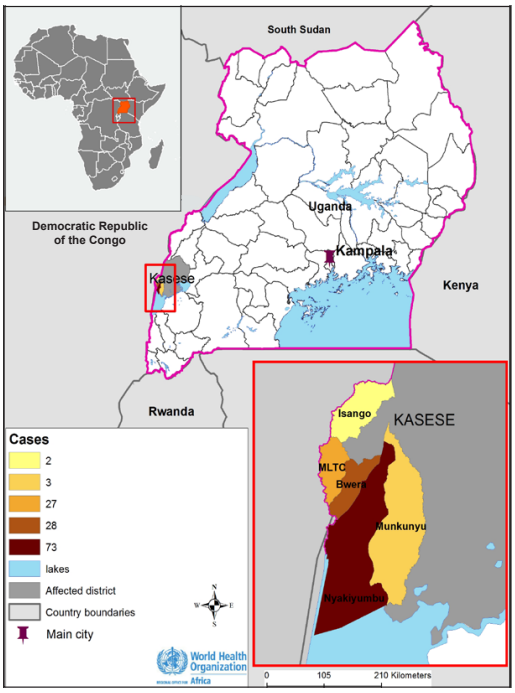
## Event description

On 26 September 2017, the Uganda Ministry of Health notified WHO of an outbreak of cholera following detection of a cluster of cases in Kasese District, located in the western part of the country. The index case was a 42-year-old female cotton farmer from Kihaghura Village in Nyakiyumbu Sub-county, Bukonzo West Health Sub-District, with onset of symptoms on 24 September 2017. The case-patient presented to the district hospital (Bwera Hospital) on 26 September 2017 with acute watery diarrhoea, abdominal pain and vomiting. Other cases eventually occurred in the same community during the same period. Fifteen stool samples collected from the initial cases cultured *Vibrio cholerae* at the Bwera Hospital laboratory. The bacteria were sensitive to ciprofloxacin and tetracycline. Isolates shipped to the Central Public Health Laboratory confirmed *V. cholerae* O1 Ogawa as the sub-type.

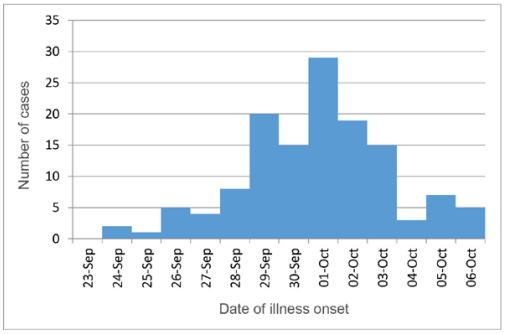
As of 6 October 2017, a total of 133 cases including three deaths (case fatality rate 2.3%) have been reported. Thirty-two (23.4%) of the cases were children under 5 years of age and 56% were female. Five out of 23 sub-counties in Kasese have been affected, namely Nyakiyumbu, MLTC, Bwera, Munkunyu, and Isango. Nyakiyumbu is the worst affected, with 55% (73/133) of the total cases.

The initial cholera cases mainly occurred among cotton farmers who live in the farms in temporary shelter for short periods, with limited sanitation and access to safe water. There were floods in Kasese District in the preceding weeks, including on the cotton farms, which washed away latrines and may have contaminated local water sources.

Geographical distribution of cholera cases in Uganda, 24 September - 6 October 2017




Epidemic curve for cholera cases in Kasese District, Uganda, 23 September - 6 October 2017




## Public health actions

- The District Task force has been activated to coordinate the response to the outbreak, with support from the Ministry of Health and partners (WHO, MSF, UNICEF, and Uganda Red Cross Society).
- Enhanced surveillance is being conducted in all health facilities, with active case finding and contact tracing underway in affected communities.
- Community sensitization and social mobilization activities have commenced, involving radio talk shows; distribution of information, communication and education (IEC) materials; microplanning for community dialogue and engagement meetings; engagement of community leaders; and orientation of the village health teams and Red Cross volunteers.
- Water, sanitation and hygiene (WASH) activities have being implemented, including the distribution of chlorine tablets (Aquatabs) and chlorine power in affected communities to disinfect water, water quality testing, and surveys to establish latrine coverage.
- Cholera cases are being managed in a dedicated cholera treatment centre at Bwera Hospital. Additional medical supplies have been provided by the National Medical Stores, UNICEF and MSF.

## Situation interpretation

Kasese District is a known cholera hotspot and had been experiencing recurrent outbreaks, almost annually. The district borders the Democratic Republic of the Congo, where a large cholera outbreak is ongoing; however, no epidemiological links have been established thus far. A large proportion of cases during the current outbreak became ill while staying on cotton farms in Nyakiyumbu Sub-county. The initial cluster might suggest a point source outbreak, which gradually spread to other sub-counties, especially when the affected farmers returned to their home community. In addition, marketplaces have been identified as a potential risk for inter-community transmission. The recent floods, causing contamination of water sources, the ongoing rainy season, and poor access to safe drinking water and proper sanitation all increase the risk of spread of the disease. It is estimated that only 20% of water sources in the affected areas are functional.

Uganda currently hosts the largest population of refugees in Africa (over 1.3 million people), coming from neighbouring countries such as South Sudan, Burundi and the Democratic Republic of the Congo. The continuous movement of displaced populations increases the risk of in-country and cross-border spread.

Given the strong in-country capacity, there is a good probability that this outbreak will be contained in one district. Nevertheless, adequate control measures need to be rapidly implemented and maintained.

Go to overview

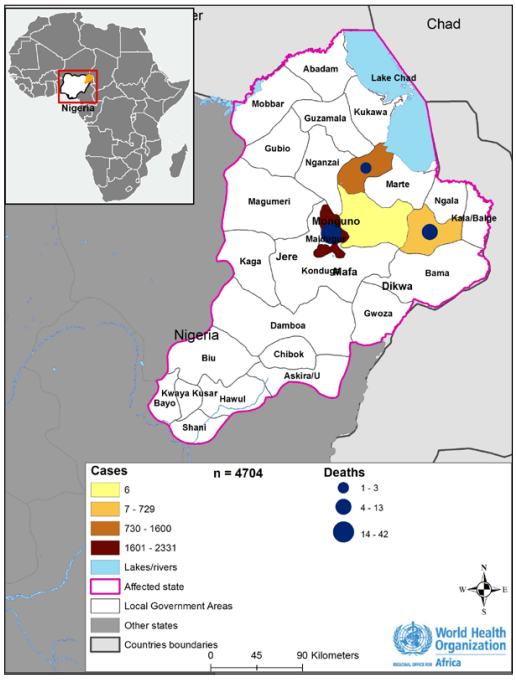
Go to map of the outbreaks

## Event description

The cholera outbreak in Borno State, north-east Nigeria has continued to improve. During week 40 (week ending 8 October 2017), a total of 348 new cases with no deaths were reported, compared to 1 200 cases reported at the peak of the outbreak in week 36 (average of 210 cases per day). The new cases originated from three local government areas (LGAs): Jere (209 cases), Monguno (112 cases) and Dikwa (27 cases). No new cases were reported from MMC or Mafa LGAs this week. However, the downward trend has stagnated in Jere LGA in recent days and must be monitored closely.

Since the beginning of the outbreak on 16 August 2017, a total of 4 704 suspected and confirmed cases including 60 deaths (case fatality rate 1.3%) were reported, as of 8 October 2017. Overall, five out of 27 LGAs in Borno State have been affected: Jere (2 331 cases, 42 deaths), Monguno (1 600 cases, 3 deaths), Dikwa (729 cases, 13 deaths), MCC (38 cases, 2 deaths), and Mafa (6 cases). Of 144 samples collected, 119 (83%) were positive on rapid diagnostic tests (RDTs) and 107 (74%) were culture positive.

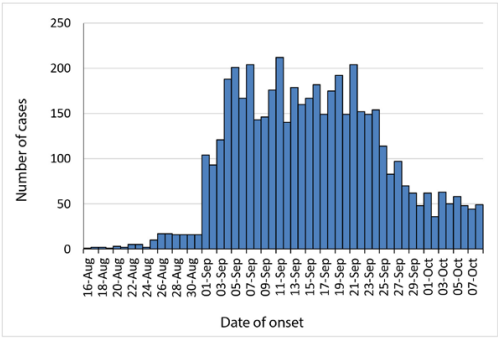
Geographical distribution of cholera cases, in Borno State, Nigeria, 16 August - October 2017




## Public health actions

- Active case search continues in hot spot and high risk areas. A central hotline has been set up at the Emergency Operation Centre (EOC) for reported alerts to be promptly investigated.
- Case management continues to be provided through four cholera treatment centres (CTCs) and eight oral rehydration points (ORP) in the hot spots. Five ORPs have been discontinued in Dikwa and replaced with a mobile ORP. New cases are being sampled systematically, for laboratory confirmation by RDT or culture.
- Water, sanitation and hygiene (WASH) interventions are ongoing: daily average of 6 600 households reached; daily average of 1 700 latrines cleaned and disinfected; a total of 6 166 shelters disinfected since 12 September 2017; a total of 45 716 Hygiene Kits distributed from 12 September to 3 October 2017; average of 147 water points batch chlorinated daily; average of 112 cubic meters of water provided daily by trucking.
- From 18-22 September 2017, an oral cholera vaccine (OCV) campaign was conducted in five local government areas, targeting 915 005 people. A total of 844 305 people were vaccinated, giving an administrative coverage of 96% of the targeted population. Further vaccination campaigns in Mafa LGA commenced as scheduled reaching 24 625 of the 54 254 people targeted on the first day of the campaign.
- Risk communication and social mobilization activities are ongoing in IDP camps.

Epidemic curve of cholera cases in Borno State, Nigeria, 16 August - 8 October 2017




## Situation interpretation

As a result of effective multisectoral control measures, the incidence of cholera cases in Borno State has markedly decreased in less than 4 weeks since the confirmation of the outbreak (on 23 August 2017). Meanwhile, the outbreak was completely averted or brought under control in days in some areas such as Dikwa LGA, despite the high risk of spread due to the ongoing humanitarian crisis. This has been attributed to the strong multisectoral actions, guided by good epidemiological analysis and a timely, well executed vaccination campaign. The current case count is in stark contrast to the 2010 cholera outbreak in Borno State, which caused some 44 000 cases.

Although too early to declare victory, the evolution of this outbreak to date serves as an example to all countries that cholera can be effectively controlled with the implementation of timely interventions that addresses all key response pillars, complimented by strategic use of new tools such as OCV. Public health authorities (both in Borno State and in neighbouring states and countries) must, however, remain vigilant and continue to reinforce key interventions and rapidly respond to any upsurges as soon as they occur to prevent spread to new areas, and conclusively bring this outbreak to an end in the coming weeks.

WHO commends the local and national authorities, response teams and partners on bringing this outbreak rapidly under control amidst trying circumstances.

Go to overview | Go to map of the outbreaks

## Hepatitis E | Niger

| 1 955 Cases | 38 Deaths | 1.9% CFR |
|---|---|---|

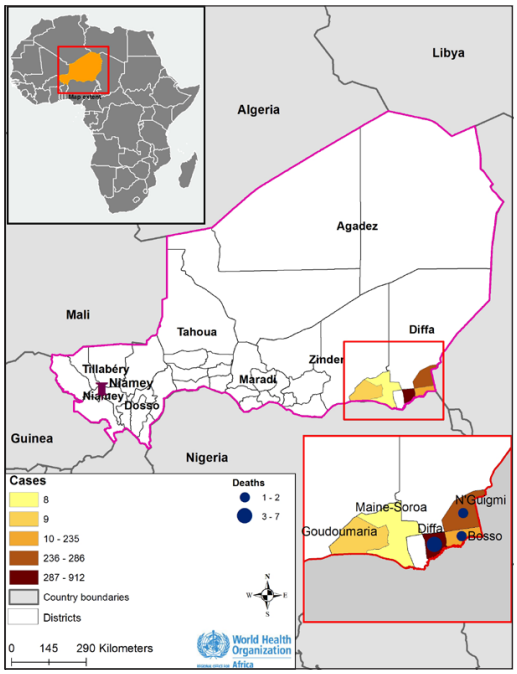
### Event description

The trend of hepatitis E cases in Niger has continued to decrease steadily after the last peak in week 26 (week ending 30 June 2017), with the incidence falling below 40 cases per week. During week 39 (week ending 1 October 2017), a total of 39 new cases and zero deaths were reported, compared to 45 cases reported in week 38. All the new cases originated from Diffa District. Since the beginning of the outbreak on 2 January 2017, a total of 1 955 suspected and confirmed cases including 38 deaths (case fatality rate 1.9%) have been reported, as of 2 October 2017. The cases have been reported from five districts, including Diffa (1 216 cases, 7 deaths), Nguigmi (305 cases, 2 deaths), Bosso (244 cases, 2 deaths), Mainé Soroa (11 cases), and Goudoumaria (9 cases). Diffa and Bosso have been the most affected districts, accounting for over 90% of the total cases. The last death occurred on 7 July 2017. During the same reporting period, a total of 1 660 samples were collected and sent to both Institute Pasteur Dakar and the national reference laboratory. A total of 653 results have been obtained as of 2 October 2017, of which 441 (67%) tested positive for hepatitis E virus by polymerase chain reaction (PCR).

Women remain disproportionately affected, accounting for about 58% of the total cases. The majority of the women affected are aged between 15 and 49 years (women of reproductive age). The most affected age groups overall remain those between the ages of 20 and 34 years, followed by those aged 15 to 19 and 35 to 39 years.

Since January 2017, the Republic of Niger has been experiencing an outbreak of hepatitis E. The outbreak started with an increase in the number of jaundice cases noted among pregnant women on 9 January 2017 in the Mother and Child Centre of Diffa.

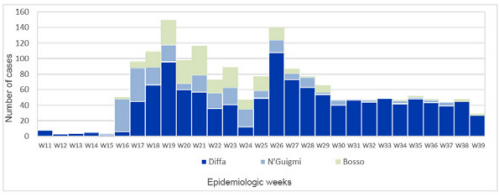
Geographical distribution of hepatitis E cases in Niger, 2 January - 2 October 2017




### Public health actions

- Response activities continue to be coordinated at both regional and national levels.
- Water, sanitation and hygiene (WASH) activities are ongoing in the affected communities and refugee camps, including awareness on personal and community hygiene measures, trucking of drinking water, disinfection and chlorination at water points, distribution of chlorine tablets (Aquatab) to households, and installation of hand washing facilities at the health centres.
- Epidemiological surveillance has been strengthened, including active case finding, laboratory confirmation and line listing of cases.
- Laboratory diagnostic capacity has been strengthened in order to perform hepatitis E tests in-country.
- MSF continue to provide free-of-charge case management, including hospitalization of severe cases.
- General community information sessions on the use of chlorine tablets (Aquatabs) have been conducted. In addition, the local health personnel were sensitized on hepatitis E prevention and case management. Messages on the signs of the disease, preventive measures and early medical visit have been posted at the health centres.

Epidemic curve for cholera cases in Diffa Region, Niger, week 11 - week 39, 2017




### Situation interpretation

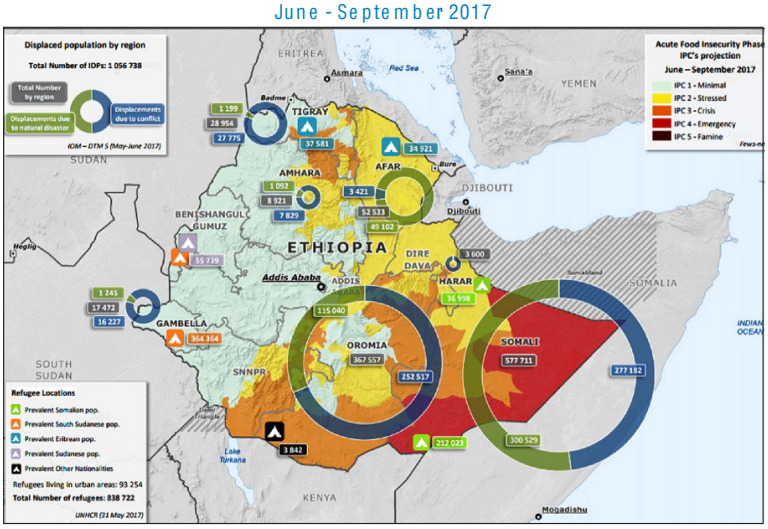
Despite the steady decrease in the number of cases, the hepatitis E outbreak in Niger still has the potential to escalate, given the ongoing movements of refugees across the borders from Nigeria and Chad. The insecurity in the region has created an ongoing displacement of vulnerable populations who continue to face the challenges of limited access to essential healthcare and inadequate access to clean water and proper sanitation. There is a need to sustain the current response efforts, especially the WASH component since faecal contamination of drinking water is one of the main routes of transmission of the virus. Safe water supply and environmental sanitation remain crucial to help control this outbreak.

Go to overview
Go to map of the outbreaks

## Event description

The humanitarian crisis in Ethiopia shows no signs of easing. The recent inter-communal conflict that occurred in September 2017 between the Oromia and Somali communities has led to new wave of displacement, with an estimated 95 000-100 000 new internally displaced persons (IDPs) in Oromia Region and 110 000-120 000 IDPs in Somali Region.

Food insecurity, internally displaced persons and refugees in Ethiopia, June - September 2017




The outbreak of acute watery diarrhoea (AWD) continues, with 405 new cases reported in week 39 (week ending 29 September 2017). Of these, 85 cases were in Somali Region (down from 199 in week 38), 114 in Amhara, 63 in Oromia, 92 in Tigray, 51 in Afar, and 32 in Benishangul Gumuz. There were no new cases in SNNP. The cumulative total number of cases since the outbreak started in October 2015 is 45 922, with 836 deaths (case fatality rate 1.82%).

Measles continues to affect communities in the country, with 382 new suspected cases reported in week 39. As of week 38 (week ending 22 September 2017) there have been a total of 3 151 suspected cases across the country. A total of 58 laboratory-confirmed measles outbreaks have been reported: Amhara (20), Addis Ababa (9), Oromia (12), SNNP (4), Somali (8), Tigray (4) and Afar (1). The immunization status of the reported cases showed that 15.6% had zero doses and 45.2% were of unknown immunization status. Children under 5 years remain the most affected group (39% of cases), with 38% of cases in children aged 5-14 years.

During week 37 (week ending 15 September 2017), a total of 1 163 new cases of severe acute malnutrition (SAM) were reported in Oromia, with 1 061 managed at the outpatient treatment centres (OTPs) and 102 admitted to stabilization centres (SCs). By 15 September 2017, the cumulative total of SAM cases in Oromia was 51 428 cases, including 45 715 cases managed at the OTPs and 5 713 admitted to SCs.

## Public health actions

- A team from the Federal Ministry of Health (FMOH) and the regional health authorities, with support from partners, continue to conduct rapid risk assessment among IDPs in two sites in Harar and Chinaksen.
- The integrated measles campaign in Somali Region has achieved 98% vaccination coverage, with more than 1.8 million children aged 6-179 months reached.
- The AWD response activities are being maintained in the region by the FMOH, supported by WHO and partners, with deployment of a WHO surge team to reinforce technical inputs in the regions.
- A drought response plan is being developed, with activities ranging from drilling boreholes, water trucking, provision of sanitation facilities, hygiene promotion, and distribution of water, sanitation and hygiene (WASH) supplies.
- There is continued engagement of religious and community leaders in risk communication and health promotion through a regional social mobilization team.
- There is continued training and orientation in AWD and SAM case management for health workers.

## Situation interpretation

The recent regional border conflict between two communities in Ethiopia has resulted in significant new population displacement, which is placing strain on the existing local infrastructure. This new situation has the potential to exacerbate the ongoing disease outbreaks, particularly AWD and measles, and the nutrition crisis in the country. The risk factors of lack of access to potable water and sanitation (particularly in new IDP camps and host communities) and the continued transmission of infection from 'holy water sites' must be addressed urgently.

Go to overview
Go to map of the outbreaks

# Summary of major challenges and proposed actions

## Challenges

- The outbreak of pneumonic plague in Madagascar has evolved quickly in recent weeks and raised a lot of public attention and concern. The major concern is the possibility of more rapid and wider geographical spread within the country and beyond. Pneumonic plague is associated with increased transmissibility, high case fatality and severe epidemics, if inadequately controlled.

- The cholera outbreak in the Democratic Republic of the Congo remains serious and concerning. The weekly incidence has surpassed 2 000 cases in week 37, the highest since 2002, and is still not showing any indication of slowing down.

## Proposed actions

- The most critical needs in the response to the plague outbreak in Madagascar include establishing and strengthening the full complement of outbreak response structures by national authorities. There is an urgent need for timely deployment of the required human, financial and logistical resources. Specifically, risk communication and community engagement are critical, as well as strengthening preparedness and readiness in neighbouring countries.

- The outbreak of cholera in the Democratic Republic of the Congo requires urgent and reinforced multisectoral actions in order to mitigate the preventable morbidity and mortality related to the disease. The partners on the ground need to follow their commitments to control the outbreak by scaling up implementation of effective interventions, particularly in the areas of water and sanitation, as well as strengthening epidemiological surveillance and case management.

# 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 | | | | | | | | | | |
| Malawi | Cholera | Ungraded | n/a | 1-Jul-17 | 16-Sep-17 | 38 | 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. During week 37, only 2 new cases were reported. |
| Burkina Faso | Dengue fever | Ungraded | 4-Oct-17 | 1-Jan-17 | 4-Oct-17 | 1 509 | 77 | 6 | 0.4% | A substantial increase in cases was observed from week 31. In week 39, 454 new cases and 2 deaths (CFR: 0.44%) were recorded. Laboratory analyses have confirmed the presence of dengue serotype 2 (DEN-2) virus in 77 cases. Figures reported are from surveillance data from week 1 to 39 of 2017. |
| Malaria | Kenya | Ungraded | 3-Oct-17 | 25-Sep-17 | 3-Oct-17 | 133 | - | 11 | 8.3% | The suspected outbreak is affecting three districts in Marasbit. |
| 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. |
| Burundi | Malaria | G1 | 22-Mar-17 | 1-Jan-17 | 26-Sep-17 | 5 899 273 | - | 2 620 | 0.04% | Weekly case counts are exceeding 2016 rates and on the rise. North-west and central provinces reported the highest incidence of disease in week 38. |
| Burundi | Cholera | Ungraded | 20-Aug-17 | 20-Aug-17 | 26-Sep-17 | 38 | 4 | 0 | 0.0% | Cases have been reported from four districts: Nyanza-Lac (27), Cibitoke (1), Bubanza (1) and Mpanda (9). |
| 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 | 24-Sep-17 | 254 | 254 | 1 | 0.4% | New indigenous cases continue to be reported from the city of Praia. Cases reported from São Vicente, Sal and Porto Novo all likely all acquired the infection during travel to Praia or overseas, and there is currently no evidence of indigenous transmission within these locations. One death was reported this week in an indigenous case. Thirteen additional cases have been identified in travellers returning from African countries where the disease is endemic. |

| Country | Event | Grade† | WHO notified | Start of reporting period | End of reporting period | Total cases | Confirmed cases | Deaths | CFR % | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| 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, Rafaï and Zémio) and in Bocaranga and Niem in the north-west. These security incidents continue to cause new internal displacements. Humanitarian workers suspended activities in Bocaranga at the end of the week following clashes. A health centre supported by the NGO ARPE was totally plundered and two humanitarian staff were victims of these clashes: one killed and the other wounded. The CS of Bongou in the High-Kotto was also vandalized by the armed men. |
| Central African Republic | Pertussis | Ungraded | 6-Sep-17 | 29-Jul-17 | 29-Sep-17 | 5 | 0 | - | - | Field investigations were conducted in the suspected outbreak of pertussis in the Boda Health District, with initially over 200 cases. After verification, the investigative team invalidated 118 suspect cases from the line list. 5 cases met the operational case definition. Nasopharyngeal samples were collected from these cases; results pending. Community liaison officers were briefed to strengthen community-based surveillance. WHO has provided a Pneumonia Kit to the district to strengthen case management in health facilities. |
| 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, 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. |
| 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% | The monkeypox outbreak is still ongoing with four new cases reported between 25 August and 04 September 2017. Other suspect cases were reported from Manfouété, which currently cannot be investigated due to inaccessibility of the area. |
| 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 | Cholera | G2 | 16-Jan-15 | 1-Jan-17 | 29-Sep-17 | 34 165 | - | 658 | 1.9% | Detailed update given above. |
| 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. |

| 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 | Circulating vaccine-derived polio virus type 2 (cVDPV2) | Ungraded | 17-May-17 | 20-Feb-17 | 22-Sep-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 | Ungraded | 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 | Acute watery diarrhoea (AWD) | Protracted 3 | 15-Nov-15 | 1-Jan-17 | 3-Oct-17 | 45,922 | - | 836 | 1.8% | 405 new cases reported in week 39, including cases in Somali (85), Amhara (114), Oromia (63), Tigray (92) and Afar (51) regions. |
| Ethiopia | Humanitarian crisis | | 15-Nov-15 | n/a | 29-Sep-17 | - | - | - | - | Detailed update given above. |
| Ethiopia | Measles | | 14-Jan-17 | 1-Jan-17 | 3-Oct-17 | 3,151 | - | - | - | 382 were new cases were reported in week 39. |
| Ethiopia | Undiagnosed acute jaundice syndrome (AJS) | | 23-Aug-17 | 23-Aug-17 | 2-Oct-17 | 266 | 0 | 6 | 2.3% | Cases have been reported from Dollo Zone (230) and Liben Zone (36). During week 39, 6 and 3 cases were reported from these respective zones. Seventeen blood samples were ent to IP Dakar on 21 Sept 2017. Results received on 2 October reported only one sample was IgM positive (PCR negative) for dengue virus. All other tests performed as part of the differential diagnosis were negative; however, complementary testing for other possible causes is ongoing. 12 new samples from 8 patients have been collected and have been referred for testing. |
| Kenya | Cholera | G1 | 6-Mar-17 | 1-Jan-17 | 3-Oct-17 | 3,059 | 572 | 56 | 1.8% | Nationally case numbers continue to decrease. Three countries are currently reporting active outbreaks: Nairobi, Machakos and Kajiado. |
| Kenya | Leishmaniasis, visceral (kala-azar) | Ungraded | 7-Jun-17 | 4-Jan-17 | 26-Aug-17 | 457 | 362 | 7 | 1.5% | Marsabit (n=338) and Wajir (n=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%. |
| Liberia | Measles | Ungraded | 24-Sep-17 | 6-Sep-17 | 22-Sep-17 | 16 | 4 | 0 | 0.0% | Of the 16 cases, ten (63%) were female. The ages of the cases range from 2 months to 29 years, with ten (63%) of them aged 5 years and below. All the cases were reportedly not previously vaccinated. No new cases have been reported since 21 September 2017. |
| Madagascar | Plague | G2 | 13-Sep-17 | 13-Sep-17 | 8-Oct-17 | 387 | 38 | 45 | 11.6% | Detailed update 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. |
| 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. |
| Mali | Dengue fever | Ungraded | 4-Sep-17 | 1-Aug-17 | 1-Oct-17 | 262 | 25 | 0 | 0.0% | Active case search activities completed following detection of a case during a study has identified a total of 25 confirmed case from 262 suspected cases tested to date. |

| Country | Event | Grade† | WHO notified | Start of reporting period | End of reporting period | Total cases | Confirmed cases | Deaths | CFR % | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| 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. |
| Niger | Hepatitis E | Ungraded | 2-Apr-17 | 2-Jan-17 | 2-Oct-17 | 1 955 | 441 | 38 | 1.9% | Detailed update given above. |
| Nigeria | Lassa Fever | Ungraded | 24-Mar-15 | 19-Feb-17 | 15-Sep-17 | 853 | 258 | 118 | 13.8% | The outbreak is currently active in nine states: Ondo, Edo, Plateau, Bauchi, Lagos, Ogun, Kaduna, Kwara and Kogi. During week 37, 2 new confirmed cases were reported. |
| Nigeria | Humanitarian crisis | Protracted 3 | 10-Oct-16 | n/a | 28-Sep-17 | - | - | - | - | As of 28 September, it is estimated 8.5 million people are in need, including 1.8 million IDPs. Reports of 7 unexplained deaths in Jere LGA, and suspected typhus in Bama LGA are being investigated. |
| Nigeria | Cholera (Borno State) | | 20-Aug-17 | 14-Aug-17 | 8-Oct-17 | 4 704 | 119 | 60 | 1.3% | Detailed update given above. |
| Nigeria | Cholera (nationwide) | 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 | 3-May-17 | 28-Aug-17 | 874 | 42 | 5 | 0.6% | The outbreak is concentrated in Borno State, with incidence steadily declining after peaking in week 26. The majority of cases have been reported Ngala (697), Mobbar (71) and Monguno (62). |
| Nigeria | Yellow fever | Ungraded | 14-Sep-17 | 7-Sep-17 | 5-Oct-17 | 1 | 1 | 0 | 0.0% | Officially one confirmed case detected in Ifelodun LGA, Kwara State. All suspected cases tested to date were negative. |
| Nigeria | Monkeypox | Ungraded | 26-Sep-17 | 24-Sep-17 | 5-Oct-17 | 13 | 0 | 0 | 0.0% | Investigations are ongoing. Of 13 suspected cases, 4 are currently admitted. Fifty-three contacts are being monitored. Six samples have been sent to IP Dakar; results pending. |
| São Tomé and Principé | Necrotising cellulitis/ fasciitis | G2 | 10-Jan-17 | 25-Sep-16 | 6-Oct-17 | 2 074 | - | 0 | 0.0% | Case numbers continue to fluctuate at low-moderate levels. During week 39, 19 new cases were reported. |
| 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. |
| Sierra Leone | Flooding/mud-slide | 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 | 28-Sep-17 | - | - | - | - | Situation remains volatile, fighting in multiple fronts and displacement continues. Malaria is at the height of the transmission season, with high rates of case fatality being observed in combination with GAM and SAM. Malaria is accounting for 70% of consultations and 52% of total deaths. Major stock outs of RDTs and ACT observed in some areas. |

| Country | Event | Grade† | WHO notified | Start of reporting period | End of reporting period | Total cases | Confirmed cases | Deaths | CFR % | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| South Sudan | Cholera | Ungraded | 25-Aug-16 | 18-Jun-17 | 24-Sep-17 | 20 568 | 1 585 | 378 | 1.8% | The number of cases has continued to decline in the past few weeks. During weeks 37 and 38, only 23 new cases were reported; against >1 700 cases per week at the height of the most recent wave of the epidemic in week 23. All cases presenting in week 38 were RDT positive. Of the cases reported in EWARS/IDSR, 11 767 were admitted to a CTC. Of 2 265 cases tested, 1 585 were RDT positive. 171 deaths occurred in the community. |
| South Sudan | Floods | Ungraded | 12-Sep-17 | 13-Sep-17 | 19-Sep-17 | - | - | - | - | On 12 September 2017 the Sudanese Ministry of Health reported that floods caused by heavy rains have affected 11 9000 people in Aweil North and Aweil West of former Northern Bahr el Ghazal State. It has caused some deaths and injuries, and deeply affected the daily lives of over 650 households in eight villages of Maban County, Upper Nile State. The floods have also destroyed roads, schools, homes, crops and vegetables in all the affected areas |
| 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 | 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 | 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 | Cholera | Ungraded | 29-Sep-17 | 25-Sep-17 | 6-Oct-17 | 133 | 15 | 3 | 2.3% | Detailed update given above |
| United Republic of Tanzania | Cholera | G1 | 20-Aug-15 | 1-Jan-17 | 1-Oct-17 | 3,194 | - | 52 | 1.6% | The trend of reported cholera cases has increased to 119 new cases and 2 deaths in week 39, compared to 86 cases and 1 death in week 38. During this week, cases were reported from Songwe (43), Mbeya (41) and Iringa (35). Zanzibar has reported zero cases since 11 July 2017. |
| Recently closed events | | | | | | | | | | |
| Benin | Flood | Ungraded | 10-Sep-17 | 18-Sep-17 | 18-Sep-17 | - | - | - | - | On 10 September 2017, the WHO Country Office in Benin was informed through French international radio of flooding in the Northern part of Benin, especially Malanville and Karimama health zones. At least 544 households with 6 635 inhabitants, 367 pregnant women, and 2 688 children under 5 years of age were affected. About 172 households with 1 032 inhabitants are displaced or homeless. Most of the displaced persons have sought refuge with their parents in non-disaster areas, on farms or in the tents offered by the Red Cross. The flooding also killed about 146 animal and affected 79.8 ha of Rice, 171 ha of Sorghum, 156.3 ha of Corn, and 39.3 ha of Pepper farms. No loss of human life has been reported and no particular increase in diarrhoea or malaria cases has been noted. |
| Democratic Republic of the Congo | Landslide | Ungraded | 18-Aug-17 | 18-Aug-17 | 25-Aug-17 | - | - | - | - | On the evening of 15-16 August 2017, torrential rains caused a landslide which destroyed almost all of the small, remote fishing village of Tara in the Djugu Territory, Ituri Province in the northeast of the country. Some 174 people are presumed dead; however, only 34 bodies were recovered. Eight seriously injured people were transferred to the Tchomia Health Centre. According to the OHCA, around 280 children were orphaned by the disaster and sheltered in a neighbouring village. |

| Country | Event | Grade† | WHO notified | Start of reporting period | End of reporting period | Total cases | Confirmed cases | Deaths | CFR % | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| Nigeria | Floods | Ungraded | 3-Sep-17 | 27-Aug-17 | 11-Aug-17 | - | - | - | - | On 27 August 2017, following heavy rains and failure of the drainage system across the city a flooding disaster occurred in Makurdi. After initial assessment of the town, the state Governor announced the setting up of two IDP camps at the Makurdi International Market and Agan town at the outskirt of the city. |
| Mauritania | Undiagnosed di-arrhoeal disease | Ungraded | 27-Jul-17 | 16-Jul-17 | 27-Jul-17 | 79 | - | 0 | 0.0% | Limited information is available on this event. At the last report, viral gastroenteritis was suspected in two clusters detected in Nouakchott. |
| Mauritania | Crimean-Congo haemorrhagic fever (CCHF) | Ungraded | 25-Aug-17 | 20-Aug-17 | 25-Aug-17 | 1 | 1 | 0 | 0.0% | Single confirmed case in a shepherd from Boutilimit Prefecture. A detailed description of the case was provided in the week 34 bulletin. All contacts have cleared the minimum follow-up period. |
| Uganda | Crimean-Congo haemorrhagic fever (CCHF) | Ungraded | 21-Aug-17 | 10-Jul-17 | 24-Aug-17 | 11 | 2 | 3 | 27.3% | A detailed description of this event was provided in the week 35 bulletin. No additional cases have been reported. All contacts have cleared the minimum follow-up period. Surveillance is ongoing. |

†Grading is an internal WHO process, based on the Emergency Response Framework. For further information, please see the Emergency Response Framework: http://www.who.int/hac/about/erf/en/.
Data are taken from the most recently available situation reports sent to WHO AFRO. Numbers are subject to change as the situations are dynamic.

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**Data sources**
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