

# WEEKLY BULLETIN ON OUTBREAKS AND OTHER EMERGENCIES

Week 36: 2 - 8 September 2017  
Data as reported by 17:00; 8 September 2017



**0**

New events

**45**

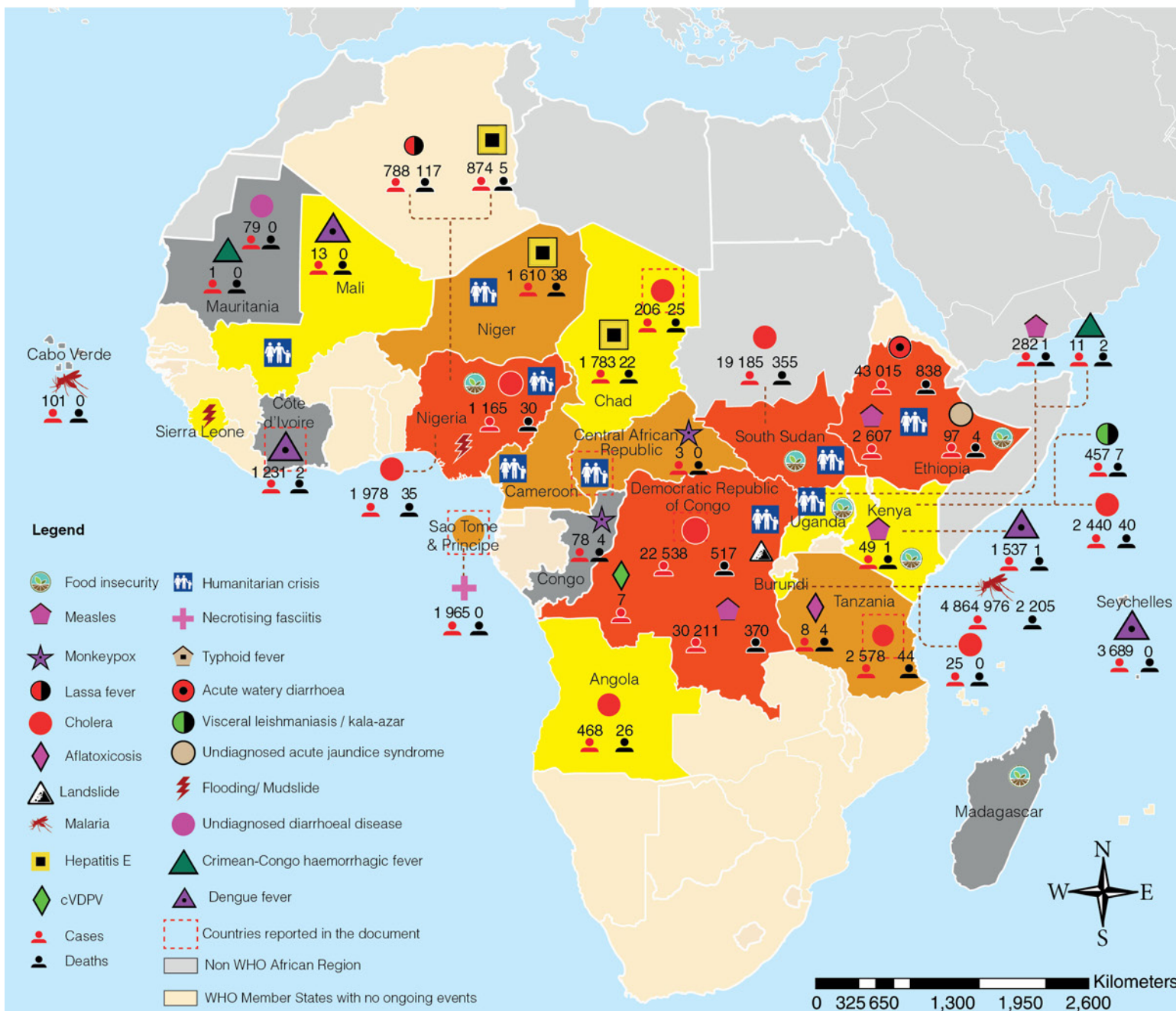
Ongoing events

**30**

Outbreaks

**15**

Humanitarian crises



**2**

Grade 3 events

**5**

Grade 2 events

**8**

Grade 1 events

**27**

Ungraded events

**2**

Protracted 3 events

**1**

Protracted 2 event

**0**

Protracted 1 event

# Overview

## Contents

- 1 Overview
- 2 - 7 Ongoing events
- 8 Summary of major challenges and proposed actions
- 9 - 11 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 also covers key ongoing events, including:
  - Cholera in Borno State, Nigeria
  - Necrotising cellulitis/fasciitis in São Tomé and Príncipe
  - Humanitarian crisis in the Central Africa Republic
  - Cholera in the United Republic of Tanzania
  - Cholera in Chad
  - Dengue fever in Côte d'Ivoire.
- 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:
  - Maintaining an adequate public health response to contain nine major outbreaks of cholera occurring across parts of east, central and west Africa.
  - Ongoing complex humanitarian crises in the region, which are driving transmission of epidemic prone diseases in vulnerable communities, while increasing the severity of infections, limiting access to healthcare, and hindering response. These humanitarian crises require adequate collaboration between the Ministry of health and other relevant sectors.

# Ongoing events

Cholera

Borno State, Nigeria

1 165  
Cases

30  
Deaths

2.6%  
CFR

## Event description

On 20 August 2017, WHO staff deployed in Borno State, north-eastern Nigeria, reported five suspected cholera cases in the Muna Garage Internally Displaced Persons (IDP) camp, northeast of Maiduguri. The first suspected case presented on 14 August 2017. On 23 August 2017, the WHO Country Office reported an increasing number of suspected cases presenting from Muna Garage, with two cases confirmed positive by culture and several additional cases testing positive on rapid diagnostic tests (RDTs). The Borno State Ministry of Health together with WHO and partners immediately scaled up efforts to contain further transmission.

Despite these efforts, the outbreak spread to other areas. As of 8 September 2017, there have been a total of 1 165 cases, including 30 deaths (case fatality rate 2.6%). Of 55 samples collected to date, 50 were positive on RDT. Of 13 specimens sent to the national public health laboratory in Lagos for confirmation, *Vibrio cholerae* was isolated on all stool samples.

Cases are currently geographically clustered in three major areas: Muna (689), Dikwa (406) and Monguno (70). In the Muna area, most cases are from the IDP camp. However, sporadic cases have also been reported from four other sites around the city of Maiduguri. The first cases in Dikwa presented on 2 September 2017 and spread rapidly to affect three camps: Agric, Sangya and Bulabulin. In Monguno, cases are reportedly coming from two camps: GGSS and Kuya. Concerns have been also raised about possible spread to Ngala in the near future.

## Public health actions

- As of 8 September, the Borno State Ministry of Health and partners have established seven treatment sites within the affected areas: Muna and Dala cholera treatment centres (CTCs), three oral rehydration points (ORP) around Muna and Custom House IDP camps, Dikwa General Hospital, and Monguno Primary Healthcare Clinic (PHC). The construction of an additional CTC in Dikwa is underway. Medical staff are being trained on cholera case management, and there is currently an adequate supply of medicines, fluids and consumables. However, further mapping of supplies is needed for better case management.
- The detailed investigation of cases is being undertaken together with active case search. Surveillance systems have been established at all treatment sites with daily collation, analysis and reporting coordinated by the Borno State Ministry of Health.
- Water, sanitation and hygiene (WASH) interventions are ongoing. Aqua tabs are being distributed, boreholes repaired and batch chlorinated, water points and water-logged areas disinfected, and water trucking increased to improve access to safe drinking water. Disinfection of latrines, affected households, bath shelters and other sites is ongoing. Hygiene promotion activities are underway with partners deploying hygiene promoters to conduct household visits, which have reached around 10 000 people to date. Around 2 000 hygiene kits have been distributed so far, and soap supplied to shelters.
- Social mobilisation activities are being conducted to sensitize the community about the outbreak.
- Planning for targeted use of oral cholera vaccine (OCV) is underway to complement other prevention measures.

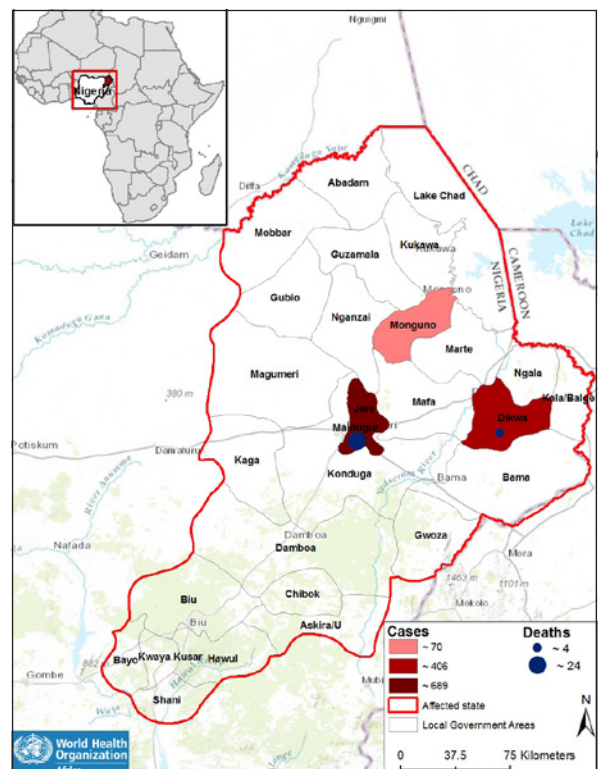
## Situation interpretation

Cholera is endemic in some states in Nigeria and the country has experience in responding to outbreaks, which appear recurrently in high risk states during the rainy season. Borno State last reported an outbreak in 2015, with over 1 000 cases recorded across 11 IDP camps and some host communities.

Several factors are driving the rapid transmission in the current outbreak. These include overcrowding, poor sanitation with limited access to latrines (estimated at approximately 1 latrine per 120 population in Muna) leading to open defecation, and limited access to potable water and use of unsafe/questionable sources. Contamination of water within households without access to proper storage containers and limited/no chlorination, is also driving transmission among families and cohabitants. Moreover, there is a complex humanitarian crisis ongoing within Borno State, with massive IDP populations (approximately 1.5 million in Maiduguri) and high rates of population movement across the Lake Chad basin, as well as other concurrent outbreaks.

Local authorities working in concert with partners have mounted an impressive response. However, these efforts have been hampered by high levels of insecurity, as well as heavy rains in recent weeks, limiting access to affected communities. These challenges need to be overcome and response activities further.

Geographic distribution of cholera cases and deaths, Borno State, Nigeria, 14 August – 7 September



[Go to overview](#)

[Go to map of the outbreaks](#)

### Event description

The outbreak of necrotising cellulitis/fasciitis in the Democratic Republic of São Tomé and Príncipe continues, with 39 new cases reported in week 35, of which 27 have been hospitalized. The outbreak was first reported in September 2016 and from week 40 of 2016 to week 12 of 2017, 1 494 cases were diagnosed and notified. However, from week 9 of 2017, the number of new cases reported declined and levelled out, with an average of 21 (range 8-32) cases reported between weeks 9 and 28. From week 29, however, the number of reported cases has slightly increased. From mid-September 2016 to 3 September 2017, there were 1 965 cases reported with no associated deaths. Individuals aged more than 35 years make up 50% of cases.

All districts have been affected, with an overall attack rate of 10.1 per 1 000 people. However, the highest attack rates remain in Caue (27.5 per 1 000) and Lemba (13.6 per 1 000). The island of Príncipe and the capital city (São Tomé-Agua Grande districts) remain the least affected areas, with attack rates of 6.3 and 7.1 per 1 000, respectively.

### Public health actions

- The Ministry of Health continues to coordinate outbreak response activities.
- A case management protocol has been developed and clinical staff trained in its use. Continued support is being provided to the Ministry of Health to establish a system for the infection prevention and control measures within healthcare facilities, and to build laboratory capacity.
- Twenty-eight patients have undergone surgery (including 19 skin grafts), while a further 30 cases have been identified as requiring skin grafts in the district of Cantagalo.
- Ninety specimens have been collected and analysed with the support of partner laboratories.
- Epidemiological surveillance and investigation of reported cases are ongoing. This, however, needs to be strengthened. Training of supervisors and clinicians on epidemiological data management, including the use of electronic data transmission technologies is ongoing.
- Further analytical, laboratory and clinical studies are being planned or are underway to better understand the cause of illness, mode of transmission and risk factors, and compare these across jurisdictions.
- A communication plan has been developed, addressing general hygiene messages and risk factors.
- About 30 international multidisciplinary experts have been deployed to support the response activities.
- Additional medicines and laboratory reagents have been secured and distributed to the health facilities.
- Negotiations are ongoing to conduct a joint (internal and external) evaluation of the outbreak situation and the response.

### Situation interpretation

The Ministry of Health, with the support of WHO and other partners, has made significant progress in controlling the outbreak. Enhanced surveillance systems, and improved clinical and surgical management of patients appeared initially to reverse the trend and resulted in a major reduction in the incidence of new cases. However, data now show that this trend is reversing, which may be exacerbated by the onset of this year's rainy season. The analysis of case-control data indicated that having an injury in the previous 2 weeks before hospitalization was a risk factor for the condition, while having had a consultation at a health unit 2 weeks before admission, as well as suffering from a recurring health problem were protective factors. These results suggest that factors associated with poor wound care increase the risk of infection, while those who are regularly consulting healthcare facilities, either for acute or chronic conditions, are relatively protected, highlighting the need for strong risk communication messaging around wound care and the importance of good access to healthcare facilities.

Despite this progress, the number of new cases continues to be higher than the background rate, which is estimated to be below 20 cases per month. In addition, the mode of transmission has not been established and laboratory capacity remains low, along with inadequate prevention and control of infection in health facilities. Further analytical studies are still required, which are currently hampered by lack of experts available to support these studies, and inadequate funding. Comparative studies are also needed between districts with very different attack rates. Continued operational research and support to the country for technical and financial assistance is required.

Geographic distribution of necrotizing cellulitis/fasciitis, São Tomé and Príncipe, September 2016 to 3 September 2017



## Humanitarian crisis Central African Republic

### Event description

The security situation in the Central African Republic remains precarious with several security incidents recorded in different areas of the country. From 24 to 25 August 2017, clashes were reported in and around the city of Kongbo resulting in several deaths and injuries. Non-Governmental Organisations (NGOs), which are assisting vulnerable populations, continue to be targeted by elements of armed groups – most recently the Catholic sisters of Bangassou were attacked on 25 August 2017. In the western part of the country, the situation remains tense between the anti-Balaka elements and the 3Rs, creating fear of a potential escalation of the humanitarian crisis in the Niem-Yélowa area.

As the conflict continues, a large number of internally displaced people (IDPs) and refugees remain scattered in the Central African Republic and in the neighbouring countries. As a result, massive and long-standing displacements within the country have increased the number of children at risk of life-threatening malnutrition. In July, an estimated 22 000 IDPs were reported in the city of Zemio. In addition, a multisectoral evaluation carried from 20 to 23 August 2017 estimated some 5 200 IDPs are currently in Obo. According to the humanitarian agencies in the country, 2.1 million people (48% of the population of the country) are suffering food insecurity, 600 000 are displaced, and 481 000 are refugees.

The ongoing insecurity in different areas is coupled with health-related problems. Sixty suspected pertussis cases, including three deaths, were reported in the Boda Health District. In addition, the country is on the alert for a possible cross-border transmission of cholera from Koukou Health District in Chad, where an outbreak is currently ongoing.

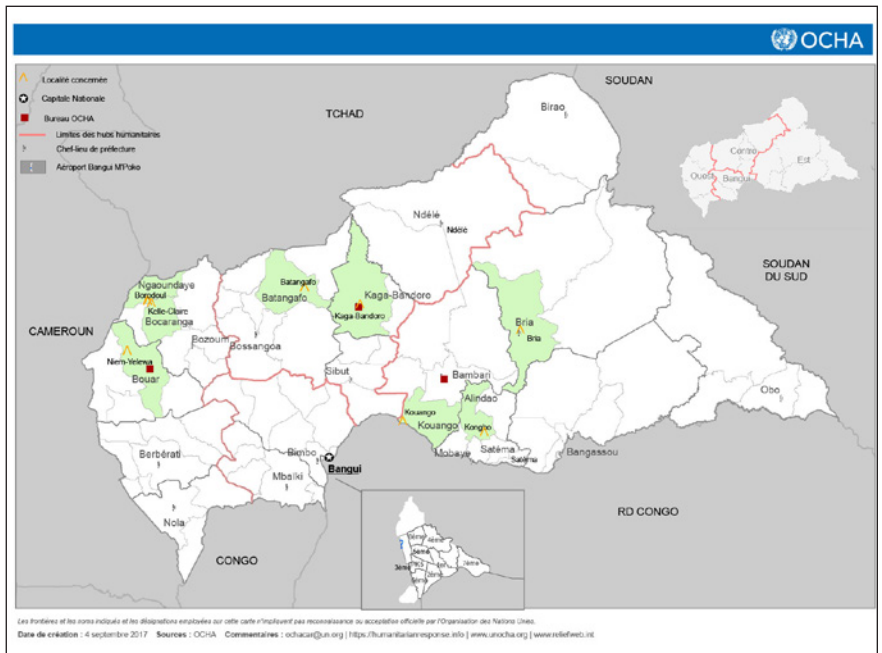
### Public health actions

- WHO continues to support the Ministry of Health in addressing the health needs of the population during this crisis. Recently a response was mounted to an increase in suspected rabid dog bites in the Boda District. The communities were sensitized on the management of an animal bite and three vaccination centres were established in Boda, Boganda and Boganagone, where 106 people, 1 540 dogs, 31 cats, and seven monkeys were vaccinated against rabies.
- The health cluster at the national level continues to hold biweekly meetings to monitor potential outbreaks of pertussis and rabies in Boda Health Districts.
- The NGO JUPEDEC (Jeunesse Unie pour la Protection de l'Environnement et le Développement Communautaire) is deploying a medical team in Obo to care for displaced persons at the Obo site.
- MSF remains the only partner providing care to IDPs, with catch-up vaccination sessions and mobile clinics at the sites.
- US\$ 10 million has been allocated from the UN Central Emergency Response Fund (CERF) to the Central African Republic to assist with the relocation of IDPs (for security and protection reasons), strengthen the response to this emergency (particularly to gender-based violence), and build local capacity.

### Situation interpretation

The humanitarian crisis in the Central African Republic remains a concern with no sign of improvement as multiple attacks and population displacements continue to occur. The proliferation and continuation of clashes between armed groups across the country could worsen the situation. Insecurity has hampered the delivery of humanitarian assistance to populations in need – an estimated 50% of the population of the Central African Republic relies on humanitarian assistance to survive. In most acute crisis areas across the country, security constraints remain a major obstacle to accessing health services, causing disruption of day-to-day operations of these centres. Given the fragile health system, the provision of humanitarian assistance, including food, water, hygiene, nutrition and health components, need to be scaled up.

Weekly humanitarian survey in Central African Republic, as of 4 September 2017



[Go to overview](#)

[Go to map of the outbreaks](#)

### Event description

The flare-up of the cholera outbreak experienced in the United Republic of Tanzania in the last 2 weeks continues. During week 34 (week ending 27 August 2017), a total of 102 new suspected cholera cases (and zero deaths) were reported in the Tanzania mainland, compared to 67 cases and one death reported in week 33. Over 80% (86/102) of the new cases originated from Mbeya Region. The other affected regions are Iringa (9 cases) and Katavi (7 cases). Zanzibar has reported zero cases and deaths for the past 47 days since 11 July 2017.

Since the beginning of 2017, 2 220 suspected/confirmed cases of cholera including 40 deaths (case fatality rate 1.8%) were reported on the Tanzanian mainland, while Zanzibar reported 358 suspected/confirmed cases and four deaths (case fatality rate 1.1%), as of 27 August 2017. Since the start of the cholera outbreak on 6 August 2015, a cumulative 26 199 cases including 411 deaths (case fatality rate 1.6%), and 4 688 cases including 72 deaths (case fatality rate 1.5%), were reported from the mainland and Zanzibar, respectively. At least 115 districts in 23 out of 25 regions on the Tanzanian mainland have been affected.

### Public health actions

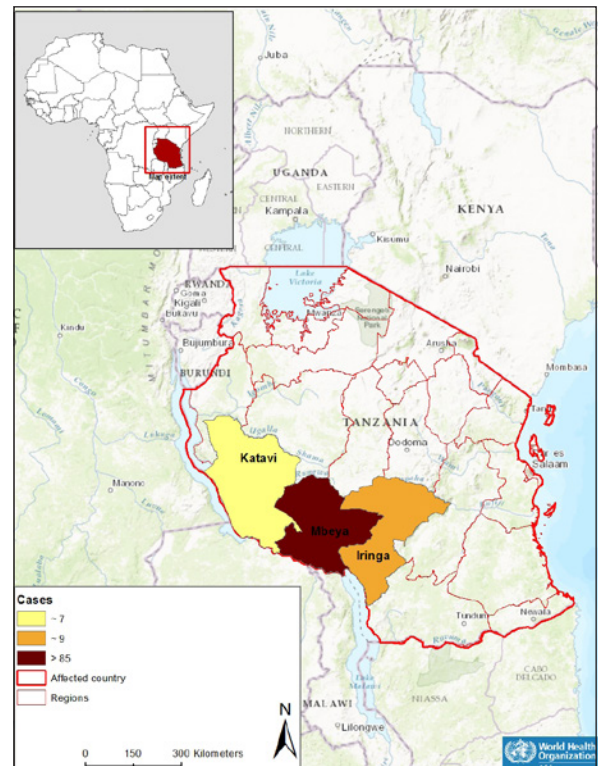
- The Ministry of Health continues to monitor the implementation of cholera control activities through the national task force and field visits in affected districts.
- On 28 August 2017, the national task force deployed response teams to Iringa and Tanga Regions to support local response capacity.
- Community sensitization and awareness through local radio, national television and social media are ongoing.
- Active surveillance is being strengthened in the affected regions, including timely reporting, contact tracing, investigating new cases to identify foci of transmission, and decontamination of patients' homes.
- There is continued advocacy for household water treatment at the point of use along with community mobilization to promote safe water utilization, and improve sanitation and hygiene practices. Distribution of water guard, oral rehydration solution and chlorine tablets (Aqua tabs) continues in hotspot regions.
- Health promotion activities have been sustained in communities through the media, community gatherings and madrassas/religious schools.
- Efforts to reinforce public health regulations on hygiene and food safety practices are ongoing.

### Situation interpretation

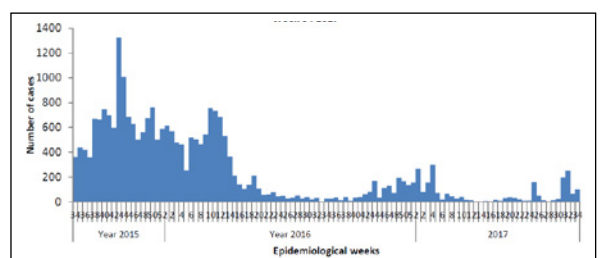
The recent flare-up of cholera in Tanzania is still persistent and not showing any signs of easing. While the risk factors for propagation are clearly understood, the ongoing strategies and interventions have not been fully effective. The country has just conducted an in-depth after-action review (AAR) of the outbreak in line with the IHR monitoring and evaluation framework (IHRMEF) using WHO guide.

It is expected that this review will inform the formulation of more effective control strategies, which should be diligently implemented in order to bring this protracted outbreak to an end. The national authorities and in-country partners are urged to galvanize their efforts to ensure containment of this outbreak.

Geographic distribution of cholera cases, Tanzania, week 34 (ending 27 August 2017)



Weekly number of cholera cases, mainland Tanzania, week 34 of 2015 to week 34 of 2017



### Event description

On 15 August 2017, the Ministry of Health of Chad notified WHO of a suspected cholera outbreak in Koukou District, Sila Region in the south-east of the country (bordering Sudan). The outbreak first emerged on 14-15 August 2017 when the local health facility (Tioro Health Centre) reported a cluster of 50 cases of acute watery diarrhoea including 13 deaths (case fatality rate 26%) from Marena, a remote village in Koukou District. Subsequently, suspected cases have been reported by the Dogdoré Health Centre (receiving cases from Dabanalaye and Hilé Hussein villages) since 19 August 2017, and most recently from the Goz-Amir and Koukou Urbain (Quartier Habilé) health centres since 4 September 2017.

As of 5 September 2017, 206 cholera cases including 25 deaths (case fatality rate 12.1%) have been reported across Koukou district. Marena (133 cases) and Dogdoré (64 cases) are currently the worst affected regions. The situation in Goz-Amir (2 cases) and Koukou Urbain (1 case) are also being monitored closely.

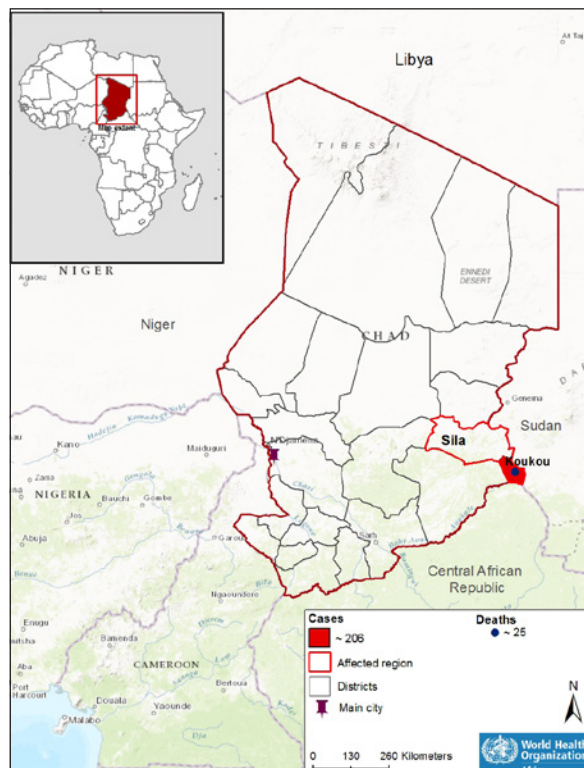
### Public health actions

- The Ministry of Public Health, WHO and UNICEF continue to coordinate surveillance and response to the outbreak, with the presence and support of partners OHCA, MSF, Association pour le Développement Economique et Social (ADES), and Concern Worldwide. On 16 August 2017, the executive team of Sila led a mission to Marena, to visit patients, sensitize the community, and review water points. Further, joint inter-agency missions were conducted from 28 August 2017 to 4 September 2017.
- Four treatment centres are now functional in Marena, Dogdoré, Goz-Amir and Koukou Urbain areas with the support of MSF Holland. WHO and UNICEF have provided three cholera kits on site. Local healthcare staff and hygienists have been trained on the management of diarrhoeal diseases.
- Active case finding activities are ongoing within the affected community, with 45 teams from MSF and ADES that travel through houses and markets for sensitization and spraying.
- WASH activities are ongoing with the disinfection of affected sites, and treatment of water supply points in affected and refuelling communities.
- Social mobilization activities have been strengthened through the recruitment of six community health workers in each area of concern, aiming to promote public awareness of hygiene (hand washing), consumption of safe drinking water and cooked food. Chlorination water sites have been set up to provide safe drinking water to households. Community volunteers have been recruited and trained to assist with raising community awareness and door to door sensitization.

### Situation interpretation

The confirmed cholera outbreak in the Sila Region of Chad, bordering Sudan and the Central African Republic is still ongoing. Following the initial spike in cases and public health response to the outbreak, the incidence of new cases and deaths had declined by the end of August 2017. However, the trend of the outbreak needs to be closely monitored as two new areas have recently reported suspected cases. The affected region experiences large-scale cross-border displacement of civilians fleeing conflict and other humanitarian crises in their respective countries. The risk of further spread is exacerbated by poor access to drinking water, which is 35% in the Sila region. Strong interagency and cross border collaboration, focusing on provision of WASH interventions, surveillance and early treatment to prevent cases and deaths, is needed to control this outbreak.

Geographic distribution of cholera cases, Chad, 14 August – 5 September 2017



### Event description

The dengue fever outbreak in Côte d'Ivoire is continuing. As of 29 August 2017, a total of 1 231 suspected cases including two deaths (case fatality rate 0.16%) have been reported since the initial cases were detected on 22 April 2017. A total of 311 cases have been confirmed by polymerase chain reaction (PCR) at the Institut Pasteur de Côte d'Ivoire (IPCI) laboratory. Of these, 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. 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.

There has been a stock out of reagents since the end of July 2017 at the IPCI. As a result of this, 308 samples from suspect cases are pending confirmation. Financial support from WHO will assist in the procurement of laboratory reagents, with delivery expected by mid-September 2017.

The outbreak was confirmed by the Institut Pasteur de Côte d'Ivoire (IPCI) on 28 April 2017 and the Ministry of Health of Côte d'Ivoire notified WHO on 6 May 2017. The main predisposing factors include the ongoing rainy season, which is driving proliferation of mosquito vectors, and insufficient community awareness of the disease and prevention methods.

### Public health actions

- The Ministry of Health, with support from WHO and other partners, is coordinating the response to the outbreak.
- Vector control interventions are being implemented, including fumigation and destruction of mosquito breeding sites.
- Active surveillance is being improved including dissemination of the case definition, active case finding, collection of samples for laboratory confirmation, and the involvement of the private health sector.
- Private and public health sector personnel have been trained on disease surveillance and case management in the cities of Abidjan and Bouake.
- Field investigation, such as household surveys in Cocody, is being systematically performed and feedback on the findings is being provided.
- Awareness campaigns are being conducted through community and religious leaders, as well as mass media such as the local radio and other communication material.

### Situation interpretation

The current dengue fever outbreak in Côte d'Ivoire has emerged after recent outbreaks in Cape Verde and Burkina Faso. Phylogenetic analysis of infected cases from Cote d'Ivoire showed homology with the strain responsible for the Burkina Faso outbreak. This is indicative of wider circulation of the virus in West Africa. High entomological indices have driven the current dengue fever outbreak in Côte d'Ivoire, supported by weather conditions, and coastal location with urban and semi-urban settings, providing favourable breeding sites. As Abidjan is a business hub in West Africa with high population movement, appropriate technical and financial support should be given to the country to contain the outbreak and reduce the risk of regional spread. Based on the current trend of the disease in the WHO African Region, all countries need to assess the risk of a dengue fever outbreak and put in place adequate preparedness measures for timely detection and response.

Geographic distribution of dengue fever cases, Côte d'Ivoire, 22 April 2017– 29 August 2017





# Summary of major challenges and proposed actions

## Challenges

- Nine major cholera outbreaks are currently occurring across the region in Angola, Chad, Burundi, the Democratic Republic of the Congo, Ethiopia, Kenya, Nigeria, South Sudan and the United Republic of Tanzania. Some of these outbreaks have been ongoing for a number of years. National health authorities and partners are challenged to maintain an adequate public health response to contain these outbreaks, amidst growing partner fatigue. Common across these outbreaks are limited access to safe water and poor hygiene, coupled with complex humanitarian crises in the worst affected communities.
- Complex humanitarian crises continue to plague the African region, which in turn are driving transmission of epidemic prone diseases in vulnerable communities, while reducing population resilience to infections resulting in high rates of severe disease and mortality. These crises furthermore limit community access to timely healthcare, and hinder public health authorities and partners from adequately responding.

## Proposed actions

- WHO and partners continue to support a comprehensive response to cholera outbreaks across all affected countries, including provision of lifesaving medical supplies and training to bolster effective case management interventions, deploying response teams, strengthening disease surveillance and investigation, and supporting community mobilization and strategic use of OCV. However, in the absence of substantial improvements in water and sanitation infrastructure, outbreaks will continue to recur. WHO continues to support WASH interventions, and calls upon Member States and partners to prioritise and invest in the development and maintenance of these infrastructures as a highly cost-effective means of preventing outbreaks of cholera and other waterborne diseases.
- Strengthened support of local authorities is needed to reduce conflict and curtail recurring attacks on healthcare centres and health actors. Under safe conditions, health and humanitarian partners can effectively support national and local governments and reduce the adverse health impacts of humanitarian emergencies and the occurrence of outbreaks.

[Go to overview](#)

[Go to map of the outbreaks](#)

# All events currently being monitored by WHO AFRO

Event	Country	Current grade †	Date WHO notified	Total cases	Confirmed cases	Deaths	CFR %	Comments	Date of last sitrep
<b>Newly reported events</b>									
Floods	Nigeria	Ungraded	03-Sep-17	-	-	-	-	On 27 August 2017, following a heavy rains and failure of the drainage system across the city a flooding disaster occurred in Makurdi, the Benue State Capital. 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 outskirts of the city. The Makurdi camp is hosting IDPs from 24 affected settlements and is being run by Civil Society Organizations.	02-Sep-17
<b>Ongoing events</b>									
Cholera	Angola	G1	04-Jan-17	468	-	26	5.6%	Since 13 December 2016, cases have been detected in Cabinda (236), Soyo (227) and Luanda (5). Cabinda reported zero cases since epidemiological week 29, whereas Soyo last reported cases in week 26. 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.	06-Aug-17
Malaria	Burundi	G1	01-Jan-17	4 864 976*	-	2 205*	0.05%	*Counts include cases notified during 2017 YTD. Weekly case counts are exceeding 2016 rates and are on the rise. During week 28, 152 137 cases and 68 deaths were reported (35.6% above the same period last year).	23-Jul-17
Cholera	Burundi	Ungraded	20-Aug-17	25	1	0	0.0%	24 cases have been reported from Nyanza-Lac Health District and 1 case from Cibitoké.	28-Aug-17
Malaria	Cabo Verde	Ungraded	26-Jul-17	101	-	0	0.0%	The unusual increase in indigenous transmission of malaria in Cabo Verde has continued since it was first noted in July 2017. Since our last report on 4 August 2017, 50 locally acquired malaria cases were reported in the country, as of 28 August 2017. All the locally acquired cases live in the capital city, Praia, Santiago Island.	28-Aug-17
Humanitarian crisis	Cameroon	G2	31-Dec-13	-	-	-	-	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.	23-Jul-17
Humanitarian crisis	Central African Republic	G2	11-Dec-13	-	-	-	-	Detailed update given above.	30-Aug-17
Monkeypox	Central African Republic	Ungraded	14-Apr-17	3	2	0	0.0%	During week 24 (week ending 18 June 2017), one new case was confirmed by the Institut Pasteur Bangui in a camp in Toma, Lobaye Prefecture. Further investigations supported by the Ministry of Health and WHO revealed 24 of 26 (92.3%) of close contacts had antibodies (IgG) against monkeypox, and 4 against cowpox. This suggests a high level of circulation of the virus in the region, and may explain the low number of cases recorded during these outbreaks. Including this latest case, just 2 confirmed cases and 1 suspected case have been reported since the event was first notified to WHO on 14 April 2017.	13-Jul-17
Cholera	Chad	Ungraded	15-Aug-17	206	6	25	12.1%	Detailed update given above.	05-Sep-17
Hepatitis E	Chad	G1	01-Sep-16	1 783	98	22	1.2%	The outbreak of hepatitis E in the Salamat region of Chad remains serious, with a high risk of escalation. During week 35, 20 new suspected cases and zero deaths were reported from six areas: Amtiman North (9), Amtiman South (4), Amsinéne (4), Mouraye (1), Foulounga (1) and Aboudeia (1). Of the 22 deaths reported, five were pregnant women. Active case detection and chlorination of water in Amtiman and Aboudeia continues.	03-Sep-17
Monkeypox	Congo (Republic of)	Ungraded	01-Feb-17	78	7	4	5.1%	Since 27 Jan 2017, suspected cases of monkeypox have been reported in the department of Likouala and the department of Cuvette (unconfirmed). Suspected cases have been reported from Bétou, Enyelle, Dongou, Impfondo and Owando districts.	14-May-17
Dengue fever	Cote d'Ivoire	Ungraded	06-May-17	1 231	311	2	0.2%	Detailed update given above.	29-Aug-17
Humanitarian crisis (Kasai Region)	Democratic Republic of the Congo	G3	August 2016	-	-	-	-	Armed conflict and general insecurity in the Democratic Republic of the Congo have created one of the world's most complex and long-standing humanitarian crisis. The current complex emergency started in 2016 in the Kasai region during the violent uprising of the local militia and the death of their customary chief. The crisis has spread to the provinces of Kasai, Kasai Oriental, Lomami, and Sankuru, with repeated attacks by the militia against the symbols of the central power.	30-Aug-17
Cholera	Democratic Republic of the Congo	G2	02-Jan-15	22 538*	-	517*	2.3%	*Counts reported are for 2017 YTD only. During week 33, 1 470 cases and 16 deaths (CFR 1.0%) were reported in the country. The majority of new cases are being reported in North Kivu and South Kivu provinces.	26-Aug-17
Landslide	Democratic Republic of the Congo	Ungraded	18-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 are being sheltered in a neighbouring village.	25-Aug-17
Measles	Democratic Republic of the Congo	Ungraded	10-Jan-17	30 211	449	370	1.2%	The incidence of new cases has declined since the current outbreak peaked in early 2017.	22-Aug-17
Circulating vaccine-derived polio virus (cVDPV)	Democratic Republic of the Congo	Ungraded	-	7	-	0	0.0%	An outbreak of a circulating vaccine-derived poliovirus type 2 (PVDVc2) strain was confirmed in the provinces of Haut-Lomami and Maniema, with a total of 7 cases (5 in Upper Lomami and 2 in Maniema). The date of the onset of paralysis of the last case of PVDVc was 13 June 2017. Since the confirmation of the last cases in March 2017, the surveillance of acute flaccid paralysis (AFP) has been strengthened and two rounds of vaccination campaigns conducted (end of June and mid-July 2017) targeting 20 health zones, including eight in Haut-Lomami, eight of Maniema. An investigation is underway on the new cases. With the support of its partners, the Ministry of Public Health is planning a vaccination campaign from 31 August to 2 September 2017.	25-Aug-17
Humanitarian crisis	Ethiopia	Protracted 3	15-Nov-15	-	-	-	-	This complex emergency includes outbreaks of AWD and measles (reported separately below) and El Niño-related drought and food insecurity affecting the Horn of Africa.	24-Aug-17
- Acute watery diarrhoea (AWD)			15-Nov-15	43 015*	-	838*	1.9%	*Counts reported are for 2017 YTD. Of 803 new cases reported in week 34. The recent resurgence is predominantly occurring in the northwest regions of Amhara (354 cases), Tigray (212), Afar (140) and Somali (95) regions this past week.	29-Aug-17
- Measles			14-Jan-17	2 607*	-	-	-	*Counts reported are for 2017 YTD. There have been 58 separate laboratory-confirmed measles outbreaks in the country. 143 new cases were reported in week 32. A detailed update was provided in the week 32 bulletin.	31-Jul-17
Undiagnosed acute jaundice syndrome	Ethiopia	Ungraded	23-Aug-17	97	-	4	4.1%	An outbreak of undiagnosed febrile illness associated with jaundice has been reported in the Dollo Zone. The index case reported symptom onset on 1 July 2017. Since then, 97 cases with similar symptoms have been reported from 20 kebeles in 4 of the 7 woredas in Dollo Zone. Apart from a single positive hepatitis E RDT, all samples tested to date have been negative for yellow fever, different types of viral hepatitis, chikungunya and malaria, and dengue RDTs were negative. Investigations are ongoing.	07-Sep-17

Event	Country	Current grade†	Date WHO notified	Total cases	Confirmed cases	Deaths	CFR %	Comments	Date of last sitrep
Drought/food insecurity	Kenya	G1	-	-	-	-	-	This event forms part of a larger food insecurity crisis in the Horn of Africa. SMART surveys highlighted that the rates of Global Acute Malnutrition increased across the country. An estimated 7.8 million population are in IPC3-5 during May/June 2017.	24-Aug-17
Cholera	Kenya	G1	10-Oct-16	2 440*	527*	40*	1.6%	*Counts reported are for 2017 YTD. Seven countries are reporting active outbreaks: Garrissa, Nairobi, Nakuru, Machakos, Siaya, Turkana, and Kilifi.	29-Aug-17
Measles	Kenya	Ungraded	12-Mar-17	49	49	1	2.0%	The outbreak has been reported in Dagahaley, Dadaab and IFO refugee camps in Garissa County since 21 March 2017, and from communities in Mandera County since 8 June 2017. No new cases have been identified since 4 July and 5 July in the two counties, respectively.	31-Jul-17
Leishmaniasis, visceral (kala-azar)	Kenya	Ungraded	05-May-17	457	362	7	1.5%	Marsabit (n=338) and Wajir (n=119) counties have been affected by outbreaks since early 2017. Twelve new cases were reported in the past week from Marsabit country. The last cases reported from Wajir occurred on 17 June 2017.	29-Aug-17
Dengue fever	Kenya	Ungraded	09-May-17	1 537	806	1	0.1%	The outbreak has been reported in Mombasa County (1 455) and Wajir County (82). There were no new cases this week. The last cases reported on 30 July and 20 June 2017 within the two counties, respectively.	29-Aug-17
Food insecurity	Madagascar	Ungraded	23-Feb-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.	15-Jul-17
Undiagnosed diarrhoeal disease	Mauritania	Ungraded	27-Jul-17	79	-	0	0.0%	On 16 July 2017, the Ministry of Health was informed of an outbreak of diarrhoeal disease at Cheikh Zayed Hospital, Wilaya, Nouakchott, which at the time included 40 cases of non-febrile, non-riziform, watery diarrhoea without blood/mucus from 7 separate locations. 10 stool samples collected were negative for bacteria (apart of one positive <i>Escherichia coli</i> , not typed). In a second cluster altered on 25 July 2017 from Centre Hospitalier Mère-Enfant, 39 children presented with similar symptoms over a period of 25 days, of whom 17 were hospitalised for 2-3 weeks. Investigations are ongoing but a viral cause is suspected.	03-Aug-17
Crimean-Congo haemorrhagic fever (CCHF)	Mauritania	Ungraded	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.	25-Aug-17
Humanitarian crisis	Mali	G1	-	-	-	-	-	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.	03-May-17
Dengue fever	Mali	Ungraded	01-Aug-17	13	13	0	0.0%	On 2 August 2017, the Mali Ministry of Health and Public Hygiene notified WHO of a confirmed case of dengue fever in a hospital in Bamako. The case-patient, a 14-year-old boy from Missabougou, Commune VI district in Bamako, developed a febrile illness on 15 July 2017. The laboratory result released on 1 August 2017 was positive for dengue fever virus on RT-qPCR method. Following the confirmation of dengue fever, a total of 133 specimens were collected during active searches in Bamako District with 12 individuals testing positive among the 61 samples tested. Two confirmed cases have been subtyped as dengue virus type 1. Results of the remaining 72 samples are currently pending.	16-Aug-17
Hepatitis E	Niger	Ungraded	06-Apr-17	1 610	441	38	2.4%	The majority of cases have been reported from the Diffa (912), N'Guigmi (286) and Bosso (235) death districts. Case incidence continue to decline. During week 32, 37 new suspected cases were reported, against 48 the previous week.	13-Aug-17
Humanitarian crisis	Niger	G2	Beginning 2015	-	-	-	-	The security situation remains precarious and unpredictable as Boko Haram remains a serious threat around the region. 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.	11-Aug-17
Humanitarian crisis	Nigeria (Borno State)	Protracted 3	-	-	-	-	-	Since April 2017 about 15 000 Nigerian refugees have returned from Cameroon after the Tripartite commission began implementing the agreement on the voluntary return of Nigerian refugees. Living conditions in areas of return are difficult, as the influx has overwhelmed resources such water. On 28 July 2017, a suicide attack on a newly established camp in Dikwa LGA killed 14 people and wounded 24 others, mostly women and children.	11-Aug-17
- Cholera			20-Aug-17	1 165	63	30	2.6%	Detailed update given above.	08-Sep-17
Lassa fever	Nigeria	Ungraded	01-Dec-16	788	261	117	14.8%	The incidence of Lassa fever cases in Nigeria continues to increase despite ongoing efforts to control the disease. The outbreak is currently active in eight states – (Ondo, Edo, Plateau, Bauchi, Lagos, Kaduna, Kwara and Ogun) – where at least one confirmed case has been reported. During week 34 (week ending 25 August 2017), 10 new confirmed cases were reported from four states, namely Ogun(3), Ondo(2), Bauchi(4) and Taraba (1). Ogun State has come back into the active outbreak category after an extended period of zero reporting (signifying no active transmission).	25-Aug-17
Cholera	Nigeria	Ungraded	07-Jun-17	1 978	26	35	1.8%	Nigeria has been experiencing an outbreak of cholera since the first week of May 2017. Per the national report as of 30 July 2017, a total of 1 978 suspected cases including 26 confirmed cases and 35 deaths (case fatality rate 1.8%) were reported from three states where outbreaks had been confirmed (Kwara, Zamfara and Lagos). An additional 1 027 cases and 30 deaths have been reported in Borno State.	30-Jul-17
Hepatitis E	Nigeria	Ungraded	18-Jun-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).	28-Aug-17
Necrotising cellulitis/fasciitis	Sao Tome & Principe	G2	10-Jan-17	1 965	-	0	0.0%	Detailed update given above.	03-Sep-17
Dengue fever	Seychelles	Ungraded	20-Jul-17	3 689	1295	-	-	Seychelles has been experiencing an insidious dengue fever outbreak since December 2015. The current outbreak, which started in week 50 of 2015, increased exponentially from week 15 of 2016 and peaked in week 24 of 2016, during which 161 suspected cases were reported. Ten new cases were reported in week 31. A detailed update was provided in the week 32 bulletin.	06-Aug-17
Flooding/mudslide	Sierra Leone	G1	14-Aug-17	-	-	-	-	The impact of the flash floods and mudslide that occurred in Freetown, Sierra Leone on 14 August 2017 is still being felt. On 26 August 2017, additional rainfall caused fresh flash floods in three areas of Freetown, resulting in the deaths of two people, damage to property and destruction of essential medical supplies and equipment as well as stockpiles of mosquito nets in one health facility. A detailed update was provided in the week 35 bulletin.	08-Sep-17
Humanitarian crisis	South Sudan	G3	-	-	-	-	-	The security situation in South Sudan makes it currently the most dangerous country in which aid workers discharge their duties. The number of South Sudanese refugees has now passed the 1 million mark, most of whom have arrived in Uganda in the past 12 months. A detailed update was provided in the week 34 bulletin.	06-Aug-17

Event	Country	Current grade†	Date WHO notified	Total cases	Confirmed cases	Deaths	CFR %	Comments	Date of last sitrep
Cholera	South Sudan	Ungraded	20-Feb-17	19 185	-	355	1.9%	A total of 30 new cholera cases with no fatalities (CFR 0.0%) were reported in week 32. The cumulative total since the start of the current outbreak on 18 June 2016 is 19 815 cases and 355 deaths (CFR 1.8%). Despite security and access challenges the first round of OCV campaign in four priority counties with active transmission of cholera has successfully concluded.	13-Aug-17
Drought/food insecurity	Uganda	G1	-	-	-	-	-	This event forms part of a larger food insecurity crisis in the Horn of Africa. The northern and eastern regions are predominantly affected.	24-Aug-17
Measles	Uganda	Ungraded	08-Aug-17	282	-	1	0.4%	As of 9 August 2017, a total 216 cases including one death (CFR- 0.4%) have been reported from Kampala and Wakiso District reported 66 cases. All the five divisions of Kampala have been affected, namely Rubaga (66 cases), Central (58), Kawempe (50), Nakawa (27), and Makindye (21). 47% of the cases are in the age group 1-5 years and 40% never had any measles vaccination while 39% had unknown vaccination status.	10-Aug-17
Humanitarian crisis (refugee)	Uganda	Ungraded	-	-	-	-	-	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. The other refugees are from the Democratic Republic of the Congo (16.8%), Burundi (2.8%), Somalia (2.7%), Rwanda (1.1%) and others (1.5%). A detailed update was provided in the week 35 bulletin.	24-Jul-17
Crimean-Congo haemorrhagic fever (CCHF)	Uganda	Ungraded	21-Aug-17	11	2	2	18.2%	On 21 August 2017, the Uganda Ministry of Health notified WHO of an outbreak of Crimean Congo haemorrhagic fever (CCHF) in Nakaseke and Kiboga Districts, in the central region of the country. On 18 August 2017, blood samples were collected from two suspected viral haemorrhagic fever (VHF) cases from Nakaseke Hospital and another suspected case from Kiboga hospital, and shipped to the Uganda Virus Research Institute (UVRI). All the samples were tested for Ebola virus, Marburg virus, Rift Valley fever virus, Sosuga virus, and CCHF virus. Two samples (one from Nakaseke and one from Kiboga) were positive for CCHF virus by RT-qPCR and were re-confirmed on Sunday 20 August 2017. Both cases are male farmers with known exposure to livestock during the time prior to infection.	21-Aug-17
Cholera	United Republic of Tanzania	Protracted 2	15-Aug-15	2 578*	-	44*	1.7%	*Counts reported are for 2017 YTD. Detailed update given above.	27-Aug-17
Aflatoxicosis	United Republic of Tanzania	Ungraded	28-Jun-17	8	-	4	50.0%	Between 15 June and 13 July 2017, two unrelated clusters of suspected acute aflatoxicosis, affecting two families in separate towns in Kiteto District, Manyara Region in the northern part of Tanzania. No further cases have been reported to date. 30 blood samples collected during community investigations have been submitted for aflatoxin testing, and 28 blood samples for pesticide poisoning; results pending.	06-Aug-17
<b>Recently closed events</b>									
Diphtheria	South Africa	Ungraded	16-Aug-17	4	3	1	25.0%	A total of four cases (3 laboratory-confirmed cases and 1 probable), and a single asymptomatic carrier were reported from Asanda village in the Cape Town Metropolitan Area, Western Cape. All cases and carriers are linked epidemiologically: 3 are siblings, 1 is the mother of the children, and 1 is an adult neighbour of the family. Over 600 contacts were identified and provided with a booster dose of Td vaccine, and throat swabs were collected from 194 contacts. No new cases have been detected since the last case experience symptoms onset on 5 August.	30-Aug-17

†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.



© WHO Regional Office for Africa

This is not an official publication of the World Health Organization.

Correspondence on this publication may be directed to:

Dr Benido Impouma

Programme Area Manager, Health Information & Risk Assessment

WHO Health Emergencies Programme

WHO Regional Office for Africa

P O Box. 06 Cité du Djoué, Brazzaville, Congo

Tel: +4724139773

Email: [impoumab@who.int](mailto:impoumab@who.int)

Requests for permission to reproduce or translate this publication – whether for sale or for non-commercial distribution – should be sent to the same address.

The designations employed and the presentation of the material in this publication do not imply the expression of any opinion whatsoever on the part of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted lines on maps represent approximate borderlines for which there may not yet be full agreement.

All reasonable precautions have been taken by the World Health Organization to verify the information contained in this publication. However, the published material is being distributed without warranty of any kind, either express or implied. The responsibility for the interpretation and use of the material lies with the reader. In no event shall the World Health Organization or its Regional Office for Africa be liable for damages arising from its use.

Please contact ([afrooutbreak@who.int](mailto:afrooutbreak@who.int)) for any clarifications.

#### **Contributors**

Dr V. Gil (São Tomé e Príncipe)  
Dr A.M. Diallo (Chad)  
Dr G.L. Folefack Tengomo (Côte d'Ivoire)  
Dr M Muita (Tanzania)  
Dr L. Tapsoba, Dr I. Mayikuli, Dr F. Richard,  
Dr T. Koyazegbe, and Dr P. Massamba  
(Central African Republic)  
Dr J. Castilla (WHE)  
Dr JP. Mulunda Nkata (WHE)

#### **Graphic design**

Mr. A. Moussongo

#### **Data sources**

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

#### **Editorial Team**

Dr. B. Impouma  
Dr. C. Okot  
Dr. E. Hamblion  
Dr. B. Farham  
Dr. V. Sodjinou  
Ms. C. Machingaidze  
Mr. B. Archer  
Dr. D. Kpandja  
Dr. Z. Kassamali

#### **Production Team**

Dr. S. Dlamini  
Mr. T. Mlanda  
Mr. C. Massidi

#### **Editorial Advisory Group**

Dr. I. Soce-Fall, *Regional Emergency Director*  
Dr. B. Impouma  
Dr. Z. Yoti  
Dr. Y. Ali Ahmed  
Dr. F. Nguessan  
Dr. M. Djingarey