

WEEKLY BULLETIN ON OUTBREAKS AND OTHER EMERGENCIES

Week 39: 22 – 28 September 2018
Data as reported by 17:00; 28 September 2018



2

New events

53

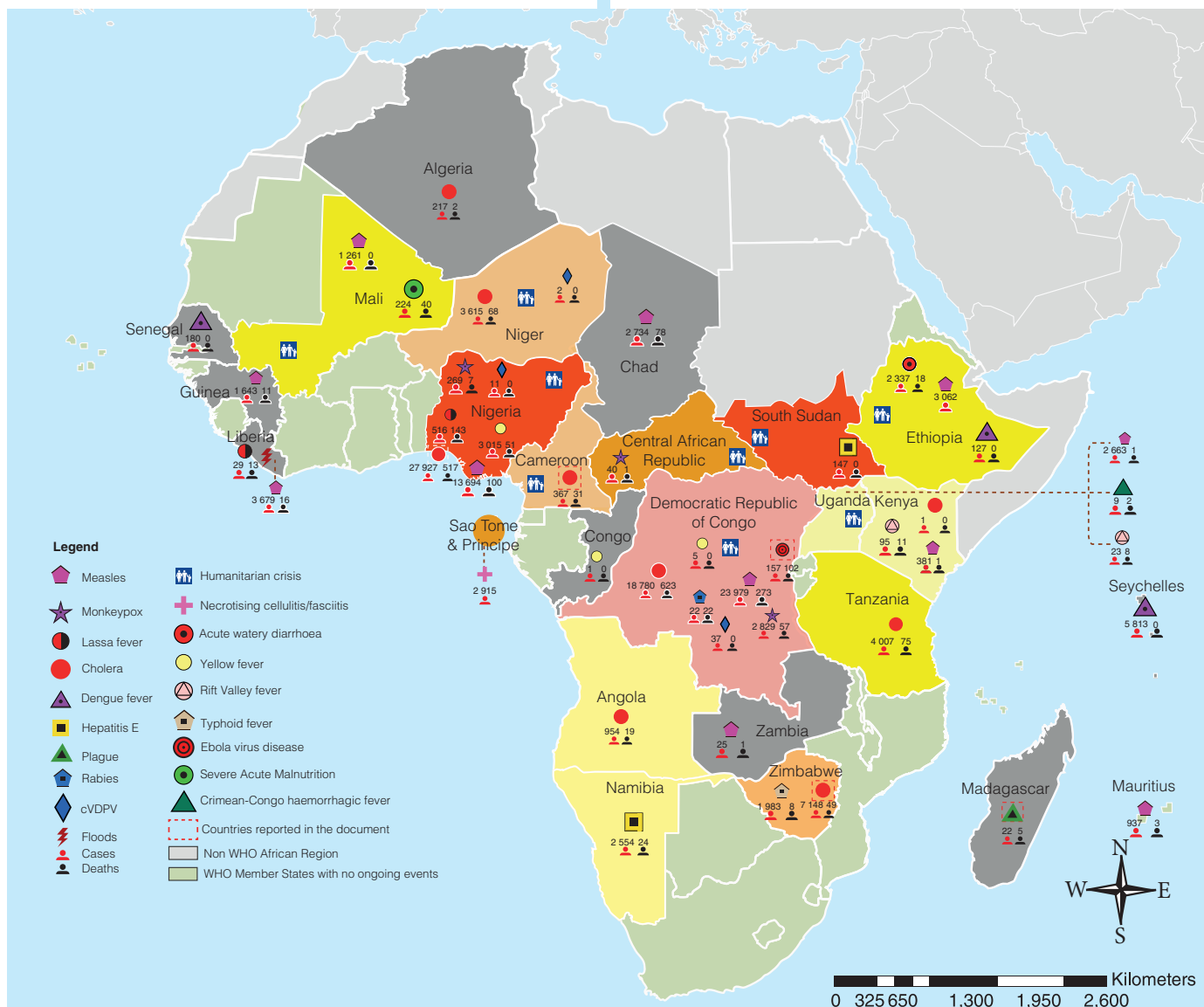
Ongoing events

44

Outbreaks

11

Humanitarian crises



Graded events †

2 Grade 3 events	6 Grade 2 events	5 Grade 1 events	33 Ungraded events
2 Protracted 3 events	2 Protracted 2 events	4 Protracted 1 events	

Overview

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9 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 55 events in the region. This week's edition covers key ongoing events, including:

- [Ebola virus disease outbreak in the Democratic Republic of the Congo](#)
- [Cholera outbreak in Zimbabwe](#)
- [Cholera outbreak in Cameroon](#)
- [Plague outbreak in Madagascar](#)
- [Monkeypox outbreak in Nigeria.](#)

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

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

➤ **Major issues and challenges include:**

- The persistence of active transmission of Ebola virus in Beni remains a challenge. The worsening security situation last week in Beni has severely limited response operations over recent days. Fear, misunderstanding and scepticism around Ebola virus disease has made community acceptance of response teams difficult. However recent community engagements initiatives are showing effect. The detection of new confirmed Ebola cases near the Ugandan border is of concern considering the high risk of spread to neighbouring countries.
- The current cholera outbreak in Cameroon is characterized by a high case fatality ratio and large proportion of deaths in the community. The co-occurrence of active conflict in the affected area restricts healthcare access for communities, which is likely to exacerbate poor clinical outcomes and underreporting of cholera cases. Recurrent flooding, poor water and sanitation conditions as well as population movements within the country and cross-border with Nigeria, constitute the main risk factors driving the transmission of the disease in the North region. Furthermore, the influx of refugees from Central African Republic and Nigeria may predispose the population to further spread of the disease and put a strain on the country's resources and capacity to respond to the outbreak.

Ongoing events

Ebola virus disease

Democratic Republic of the Congo

157
Cases

102
Deaths

65%
CFR

EVENT DESCRIPTION

The Ebola virus disease (EVD) outbreak in North Kivu and Ituri provinces, Democratic Republic of the Congo continues to evolve. The Ministry of Health, WHO and partners have made progress in response to the outbreak and recent trends suggest that control measures are working. However, these trends must still be interpreted with caution. Since our last report on 21 September 2018 (*Weekly Bulletin 38*), 15 new EVD cases and four new deaths have been reported. On 28 September 2018, two new confirmed cases were reported in Beni (1) and Butembo (1). Twenty-three new suspected cases were identified following the investigation of 48 alerts. These new suspected cases were reported from five health zones: Tchomia (7), Beni (6), Mabalako (6), Butembo (2) and Masereka (1) and Mandima (1)

As of 28 September 2018, there was a cumulative total of 157 confirmed and probable EVD cases, including 102 deaths (case fatality ratio 65%). Among the 157 cases, 126 are confirmed and 31 are probable. The confirmed cases have been reported from eight health zones: Mabalako (69), Beni (35), Oicha (2), Masereka (1), Butembo (7), Kalunguta (1), Mandima (9) and Tchomia (2). This is the first time that confirmed cases have been reported from Tchomia Health Zone, in Ituri, which borders Uganda. Both confirmed cases reported from Tchomia were linked to the ongoing Beni transmission chain. Of the 102 deaths, 71 occurred in confirmed cases. Cumulatively, 19 health workers have been affected, of whom 18 are confirmed cases and three have died. Since the onset of the outbreak, 45 patients have recovered from the disease and been discharged and re-integrated into their communities.

Of the 140 confirmed and probable cases with known age and sex, 56% (78/140) are female. Among females, the most affected age group is 25-34 years, while among men, the most affected age group is 35-44 years.

The epicentres of the outbreak remain in Mabalako and Beni health zones in North Kivu Province, reporting 57% (n=90) and 24% (n=39) of all confirmed and probable cases, respectively. Beni is reporting an increasing number of all new cases, indicating the persistence of active transmission of Ebola virus in this area. The Beni Health Zone has reported 60% of all cases reported since early September 2018. Of the total deaths reported to date, 42% (n=65) were from Mabalako, while 17% (n=26) were from Beni. Additionally, five other health zones in North Kivu Province and three in Ituri Province have reported confirmed and probable cases.

Field activities were suspended in Beni on 23 September 2018 following clashes between rebels and the Congolese armed forces, which took place on 22 September 2018. Consequently, the proportion of contacts followed-up in Beni fell to 35% on that day. Activities have resumed on 26 September 2018, but movement remains restricted in the city. As of 28 September 2018, a total of 1 410 contacts remain under surveillance and 1 1281 (91%) have been followed.

On 25 September 2018, three refugees from the Democratic Republic of the Congo (DRC) reported to be contacts of an EVD-confirmed case that died on 20 September 2018 in Tchomia health zone, Ituri Province (DRC) arrived at the Sebaboro point of entry in Hoima (Uganda) and are currently being monitored. Alerts have been reported and investigated in several provinces of the Democratic Republic of the Congo as well as its neighbouring countries, namely Burundi, Central African Republic, Rwanda, and Uganda, and to date, EVD has been ruled out in all these alerts.

PUBLIC HEALTH ACTIONS

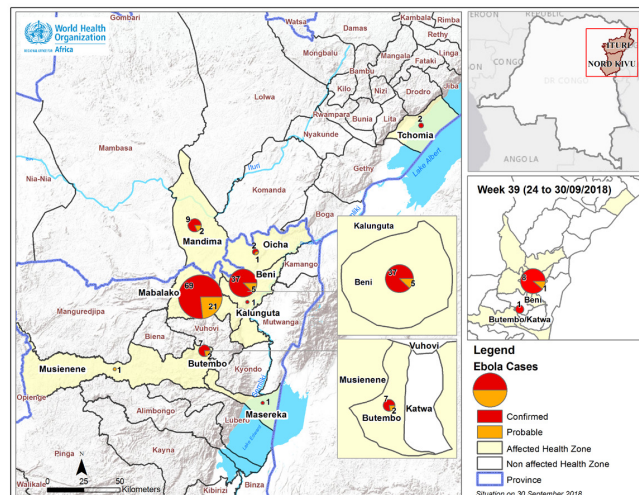
- ▶ All public health measures continue to be implemented in key areas of the response; coordination of response activities, surveillance, laboratory services, medical care, infection prevention and control, vaccination, communication, logistics and psychosocial care.
- ▶ Systematic monitoring and rapid investigation of all alerts continues in all provinces of the Democratic Republic of the Congo, and in neighbouring countries.
- ▶ Routine psychosocial activities are provided to affected people and families, to contacts and to orphans in Ebola treatment centres.
- ▶ The Ministry of Health, WHO, UNICEF, the Red Cross and partners are intensifying activities to engage with local leaders and community networks in affected areas.
- ▶ As of 22 September 2018, more than 5 million travellers have been screened at Points of Entry and over 17 000 means of travel have been decontaminated.
- ▶ Ebola treatment centres continue to provide therapeutics and to date, 39 patients have been treated with mAb 114, Remdesivir or Zmapp. Of these 39 patients, 19 are cured and have been discharged, 12 have died and eight are still hospitalized.
- ▶ Since the start of the vaccination campaign on 8 August 2018, 12 549 people at risk have been vaccinated, including 5 191 health care or frontline workers.
- ▶ Operations hubs have been established in Butembo and Tchomia with dedicated coordination support from WHO, partners and the Ministry of Health.

SITUATION INTERPRETATION

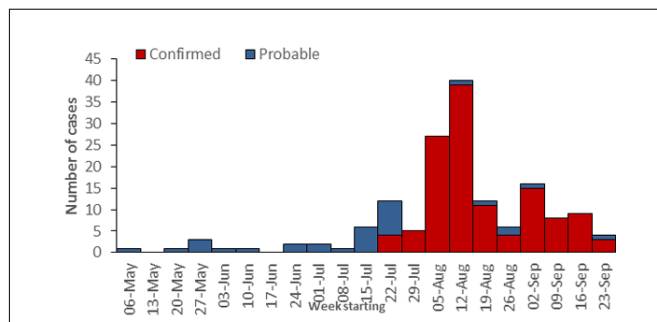
The EVD outbreak in the Democratic Republic of the Congo has been ongoing for over seven weeks and a lot of progress has been made to limit the spread of the disease to new areas. The situation in Mangina (Mabalako health zone) is stabilising, while Beni has become the new hotspot, and teams must continue to enhance response activities to mitigate potential clusters in the city of Butembo and Masereka Health Zone.

There are still significant threats for further spread of the disease. Continued challenges include contacts lost to follow up, delayed recognition of EVD in health centres, poor infection control in health centres, and cases leaving health centres and refusing transfer to Ebola treatment centres. While the majority of communities have welcomed response measures, in some, risks of transmission and poor disease outcomes have been amplified by unfavourable behaviours, with reluctance to adopt prevention and risk mitigation strategies. The priority remains strengthening all components of the response in all affected areas, as well as continuing to enhance operational readiness and preparedness in the non-affected provinces of the Democratic Republic of the Congo and neighbouring countries.

Geographical distribution of confirmed and probable Ebola virus disease cases reported between 1 May to 30 September 2018, North Kivu and Ituri provinces, Democratic Republic of the Congo.



Confirmed and probable cases of Ebola virus disease by week of symptoms onset, 1 May to 28 September 2018, North Kivu and Ituri provinces, Democratic Republic of the Congo.



[Go to overview](#)

[Go to map of the outbreaks](#)

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EVENT DESCRIPTION

The cholera outbreak in the city of Harare is evolving and continues to be closely monitored. The outbreak was declared on 6 September 2018 by the Ministry of Health and Child Care, starting with a cluster of 25 case-patients from Glenview and Budiriro suburbs of Harare. Since our last report (Weekly Bulletin 38), there have been 1 257 new cases reported, with 81 new cases reported in Harare City on 28 September 2018.

As of 28 September 2018, a cumulative total of 7 148 cases have been reported, of which 123 are confirmed, with 49 deaths (case fatality ratio 0.69%). Of the 6 916 cases for which age is known, the majority (3 712/6916; 54%) are aged between 5 to 35 years. Male and females were equally affected by the outbreak. From 1 to 28 September 2018, the majority of deaths (33/49; 67%) have occurred in a healthcare institution, with most (30) reported from the Beatrice Road Infectious Diseases Hospital (BRIDH) in Harare.

The pathogen is known to be *Vibrio cholerae* O1 serotype Ogawa. Since confirmation on 6 September 2018, a multi-drug resistant strain has been identified and is in circulation; however, antibiotics are only recommended for severe cases. Contaminated water sources, including wells and boreholes, are suspected as the source of the outbreak.

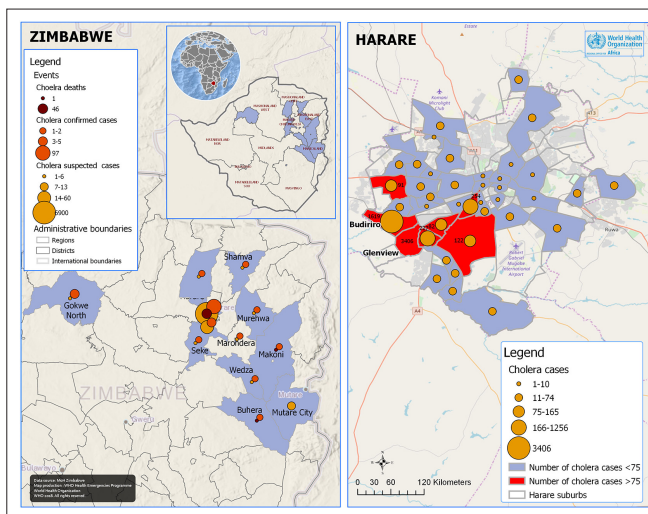
PUBLIC HEALTH ACTIONS

- ▶ Weekly meetings of the Inter-Agency Coordination Committee on Health (IACCH) have been held since confirmation of the outbreak.
- ▶ On 12 September 2018, following the declaration of the cholera outbreak as a state of disaster, the Cabinet Committee on Emergency Preparedness and Disaster Management was reactivated.
- ▶ On 18 September 2018, the national government set up an inter-ministerial committee on the cholera outbreak, involving all major government stakeholders, to provide leadership and to monitor the cholera response efforts and provide regular briefs to the President.
- ▶ On 21 September 2018, the National Emergency Operations Centre (EOC) was activated, with support provided by local business organizations. The Incident Command Structure (ICS) was finalized and will be published by the EOC.
- ▶ A data validation exercise is being carried out to improve the quality of data and reporting.
- ▶ An oral cholera vaccine (OCV) mass vaccination campaign is planned for Harare City and surrounding areas such as Chitungwiza and Epworth. A total of 500 000 doses was due to arrive on 26 September 2018.
- ▶ The 2009 Zimbabwe Cholera Control guidelines, adapted from WHO guidelines, are now in use, with Médecines sans Frontières (MSF) orientating health workers on these guidelines.
- ▶ WHO is providing technical oversight into case management and providing guidance on the interpretation of laboratory findings to guide the choice of antibiotics.
- ▶ UNICEF has prepositioned seven tents at Glenview for the cholera treatment centre and Oxfam is providing mobile toilets in three CTCs.
- ▶ Sixty volunteers have been deployed to provide risk communication, community engagement and social mobilization support to CTCs in Budiriro and Glenview. Health and hygiene promotion is taking place through drama shows at schools and business centres, roadshows and door-to-door visits, which also focus on identification and case referral.
- ▶ Water, sanitation and hygiene (WASH) activities include enforcement of regulations for food vendors, City of Harare fixing burst water pipes and increasing the water supply to hotspots, and private sector players supporting installation of water tanks and water trucking.
- ▶ UNICEF is supporting distribution of non-food items (soap, buckets), along with Oxfam, Christian Care, Mercy Corps and WHH, as well as key components of community mobilization.
- ▶ WHO has sent two Cholera Central Reference complete kits, 12 Cholera Periphery complete kits and 24 Cholera Community kits to the country and arrangements are in place for additional supplies to arrive in the coming days.

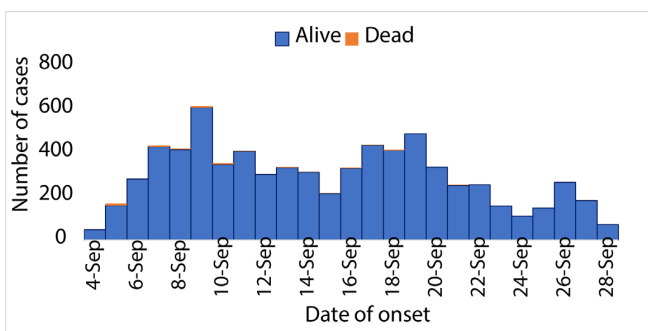
SITUATION INTERPRETATION

The scale of this cholera outbreak in Harare, Zimbabwe's capital city, is of serious concern. Major challenges remain around the supply of safe water and interruption of municipal water supplies due to repairs, leaving communities for hours with no clean water and no mobile tanks in place, as well as an inadequate supply of Aqua tabs. There are also inadequate numbers of volunteers and poor funding for communication and social mobilization responses, which are currently rather haphazard in their application. Strong support is required for the OCV vaccination campaign as this is the first use of the vaccine in Zimbabwe, along with the development of a risk communication plan for cholera prevention and outbreak control. Local authorities and international actors need to act swiftly and effectively to identify the main transmission chains, implement effective prevention and control measures and bring this outbreak under control.

Geographical distribution of cholera cases and deaths in Zimbabwe, 1 - 21 September 2018



Cases of cholera by date of symptom onset, 1-28 September 2018, Harare City, Zimbabwe



EVENT DESCRIPTION

The cholera outbreak that started on 18 May 2018 (Week 20) in Cameroon is persisting. The outbreak initially spread from the North region of the country to the Central and Littoral regions. Although the North and Littoral regions continue to report new suspected cases, the Central region has not reported suspected cases since 27 August 2018 (Week 35).

Since our last report on 7 September 2018 (*Weekly Bulletin 36*) and as of 24 September 2018, an additional 116 suspected cases and 11 deaths have been reported, raising the total number of suspected cholera cases to 367, including 31 deaths (case fatality ratio 8.4%), 14 of which occurred in the community.

The North Region remains the epicentre of the outbreak, accounting for 79% (291 cases including 29 confirmed cases and 30 deaths) of reported cases. The case fatality ratio (CFR) in this region is the highest with 30 deaths reported (CFR 10.3%), compared to one death in the Central Region (CFR 1.4%) and no deaths in the Littoral Region.

Since the beginning of the outbreak, 37 out of 126 stools specimen analysed at the Centre Pasteur du Cameroon were confirmed positive for *Vibrio cholerae* O1 Inaba by culture. The majority (56%) of cases are women and 47% are between 16 and 45 years old. Children under five years represent 8.7% of cases. In total 12 districts are currently reporting cholera cases, 10 in the North Region and two in the Littoral Region.

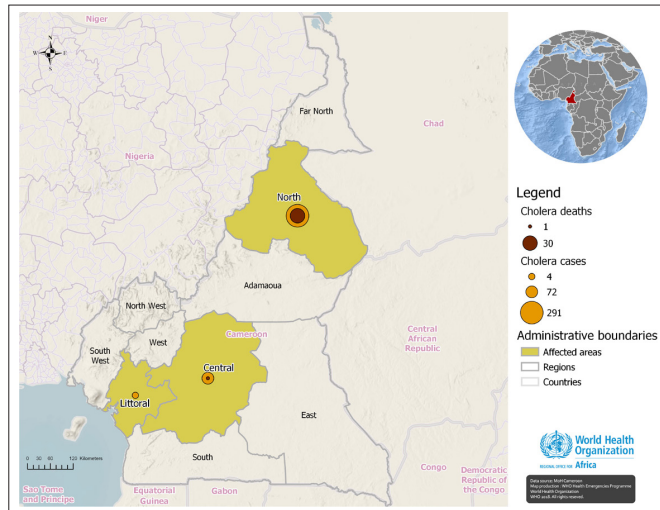
PUBLIC HEALTH ACTIONS

- The Ministry of Health is coordinating the response to the outbreak, with support from WHO, MSF, IMC and other partners.
- The Ministry of Health has deployed a team of field epidemiologists from the central level in the North region to support the response team in place.
- The Ministry of Health and its partners are conducting active case search activities in outbreak affected districts in the North and Littoral regions.
- Free treatment and care of cholera cases ongoing in all Cholera Treatment Units (CTU) in the country.
- The ministry of health and partners are distributing kits to make water safe for domestic use in affected districts to ensure that the population has access to clean water.
- The Ministry of Health with the support of WHO, is providing case management training to health workers in affected districts.
- A door-to-door sensitization campaign raising awareness of cholera and its prevention is ongoing in the communities of affected districts in the North and Littoral regions.

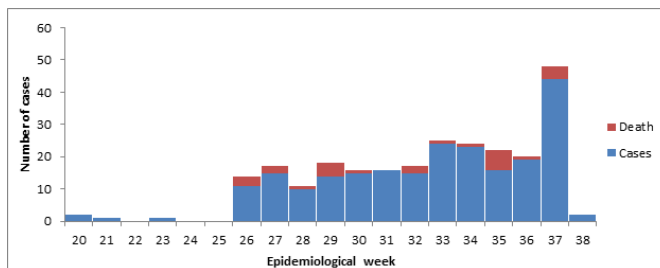
SITUATION INTERPRETATION

The cholera outbreak in Cameroon is ongoing, affecting mainly the North Region, which is experiencing active conflict related to the fight against Boko Haram. The persistence of cases and the high CFR, especially in the North Region, is concerning. The country continues to report challenges in the areas of surveillance, case management and logistics, which may negatively impact the current response efforts. National authorities and partners need to intensify implementation of conventional cholera control activities in order to address the cholera situation in the North where the case fatality ratio is persistently high.

Geographical distribution of cholera cases and deaths in Cameroon, week 20 - 38, 2018



Number of cases per and epidemiological week, week 20 - 38 2018, North Cameroon.



Source: Ministry of Health of Cameroon.

EVENT DESCRIPTION

On 19 August 2018 (week 34), a suspected case of bubonic plague was reported from Ankazobe district, a plague endemic area in the central highlands, where the last epidemic started in August 2017. This initial case was a 41-year-old male living in the rural community of Fiadanana. He was confirmed by polymerase chain reaction (PCR) and culture at Institut Pasteur de Madagascar (IPM) and is currently being treated. Subsequently, additional suspected bubonic and pneumonic cases were reported from five endemic regions in central highlands.

As of 27 September 2018 (week 39), a total of 25 cumulative cases including five community deaths (case fatality ratio 20%) have been reported from nine districts across five endemic regions, namely, Haute-Matsiatra, Amoron'i Mania, Itasy, Vakinankaratra, and Analamanga. Six of these 25 suspected cases have been laboratory confirmed by RDT, PCR and/or culture at IPM (three pneumonic and three bubonic cases) and 19 are currently classified as suspected cases. Four of the five deaths were reported among confirmed cases; three in confirmed pneumonic cases and one in confirmed bubonic cases. The six confirmed cases have been reported across four regions: Analamanga (2 cases), Haute Matsiatra (1 case), Itasy (2 cases) and Amoron'i Mania (1 case) regions. Among the remaining 19 suspected cases, 10 (53%) presented clinical signs compatible with pneumonic plague, while 9 (47%) had a clinical presentation of bubonic plague.

The first confirmed pneumonic case was a 36-year-old female from Ambalavao district, Haute Matsiatra region in the central highlands. She developed respiratory symptoms on 5 September 2018 and died on 7 September 2018 in the community. The last two confirmed cases of pneumonic plague were a couple from Miarianarivo district, in Itasy region. The husband, aged 38 years, developed severe respiratory symptoms on 15 September 2018 and died on 18 September 2018. Prior to his death, he participated in a religious gathering on 14 September 2018 in Analavory town, Miarianarivo district. His 24-year-old wife, died one hour after his death, following symptom onset on 16 September 2018. All confirmed pneumonic cases were confirmed post-mortem and are currently classified as primary pneumonic plague cases; their contacts are currently under follow-up.

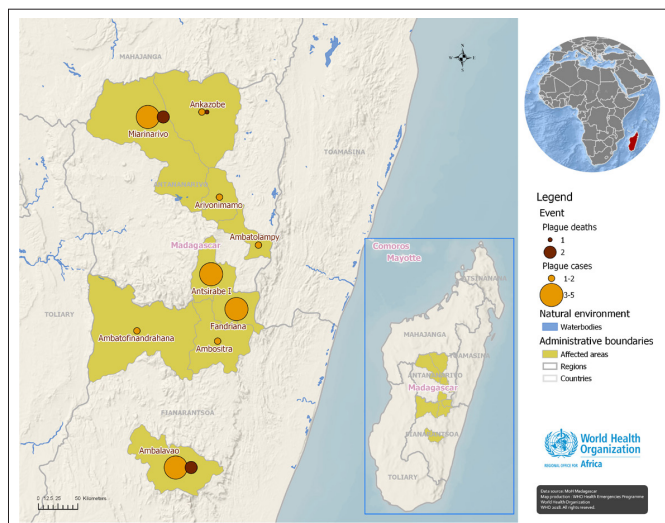
PUBLIC HEALTH ACTIONS

- ▶ A multisectoral coordination structure, the GIALP led by the Ministry of Public Health, has been activated to support health interventions.
- ▶ A national response plan is being developed with support from WHO.
- ▶ Active case finding, field investigations and contact tracing are ongoing in the affected areas with the support of WHO and other partners.
- ▶ Chemoprophylaxis is being provided to all contacts of the confirmed and suspected cases.
- ▶ Disinfection and disinfection are being conducted in the affected households.
- ▶ Technical support for testing and analysis is being provided by Institut Pasteur de Madagascar.
- ▶ Prepositioning of drugs and other supplies for preventive and curative treatments in the affected districts is ongoing.

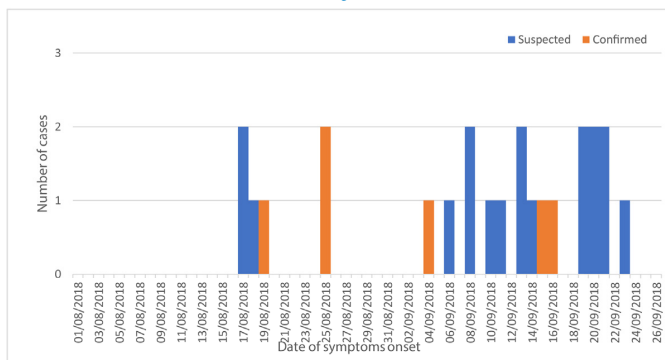
SITUATION INTERPRETATION

Plague is endemic on the Plateaux of Madagascar. Cases are typically recorded from September to April. Although bubonic cases are predominantly reported during the endemic season, pneumonic cases are also expected and are associated with human-to-human transmission and a high case fatality of 30-100% if left untreated. The recently notified cases of confirmed pneumonic cases have been reported from endemic and non-overcrowded areas so far. However, deaths among these cases have occurred in the community. There is currently no information concerning the source of infection of the three confirmed pneumonic cases. But, given their classification as primary pneumonic plague cases, it is important to investigate potential unidentified transmission chains in order to mitigate the risk of spread of the disease to other districts and major urban centres. Madagascar is experienced in the management of plague outbreaks. Further spread of the disease to highly populated cities could be prevented by strengthening preparedness and readiness activities in districts neighbouring the affected areas and at entry points, scaling up infection prevention including safe burials and vector control, enhancing community engagement, strengthening epidemiologic surveillance and ensuring early linkage to care in the affected areas. National and international authorities need to act swiftly to put these measures in place.

Geographical distribution of plague case in Madagascar, 1 August - 26 September 2018



Number of plague cases by symptom onset date, 1 August-26 September 2018, Madagascar.



EVENT DESCRIPTION

Since September 2017 Nigeria has been experiencing a large and sustained outbreak of monkeypox. Although there has been a significant decline in case incidence since the peak of the outbreak in week 41 of 2017 (week starting on 8 October 2017), sporadic cases have continued to be reported monthly until now.

Recently, two imported and confirmed cases of monkeypox were reported in the United Kingdom on 7 and 11 September 2018 (weeks 36 and 37, respectively). Both cases were linked to the ongoing outbreak in Nigeria through their travel history and the identification of the West African monkeypox clade as an etiological agent. On 26 September 2018 (week 39), the United Kingdom reported its third confirmed case of monkeypox in a healthcare worker who had been caring for one of the two imported cases. A cluster of six suspected cases, with epidemiological linkages to one of the first two cases reported in the United Kingdom has been identified in Rivers State, Nigeria. Of these one has been confirmed positive for monkeypox and is currently in isolation. In addition, two new confirmed cases have been recorded in Rivers State, but they are not linked to the cluster described above.

Since the beginning of the outbreak and as of 15 September 2018, a cumulative total of 269 cases were reported from 27 States in Nigeria. Of these, 115 cases were confirmed, including seven deaths, four of which occurred in patients with a pre-existing immune-compromised condition. In 2018, there has been a total of 76 cases, including 37 confirmed, one probable and two deaths; all reported across 15 states (Rivers, Akwa-Ibom, Bayelsa, Cross River, Delta, Edo, Enugu, Imo, Lagos, Nasarawa, Oyo, Abia, Anambra, Plateau) and the Federal Capital Territory.

The outbreak mostly affected adults between 21-40 years (median age: 31 years) and males represented 79% of confirmed cases. Two healthcare workers were identified among confirmed cases. The highest number of confirmed cases was reported from Rivers (34 cases), Bayelsa (20 cases) and Cross River (9) states.

To date, no epidemiological linkage has been identified between states. Genetic sequencing suggests multiple sources of introduction of monkeypox virus into the human population.

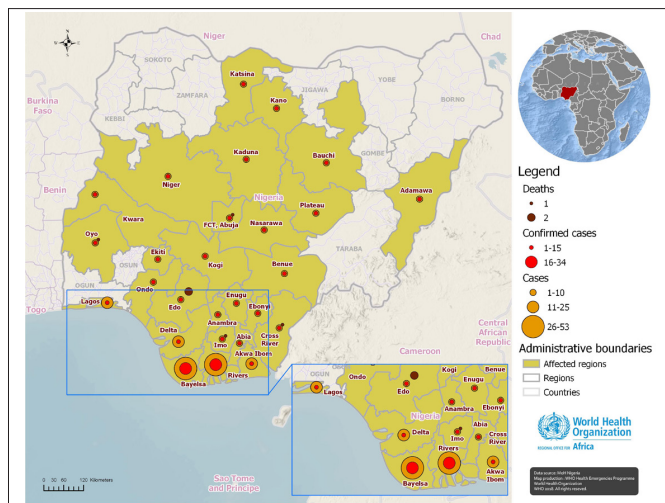
PUBLIC HEALTH ACTIONS

- ▶ The Nigerian Centre for Disease Control (NCDC) is collaborating with Public Health England to investigate and strengthen further control measures on the cases confirmed in the United Kingdom.
- ▶ NCDC, in collaboration with the State's Ministry of Health and WHO, are investigating suspected cases and monitoring contacts in Nigeria.
- ▶ Enhanced surveillance is ongoing in all States, with particular attention to the most affected states. Investigations are ongoing around the cluster of cases in Nigeria with epidemiological links to one of the cases in the UK.
- ▶ Suspected and confirmed cases in Nigeria are managed in designated health facilities in affected states using the National Guidelines.
- ▶ A National Interim Monkeypox guideline review was held on 20-21 September 2018 in Abuja and Regional Monkeypox training is scheduled for October 2018. Animal surveillance will start in October 2018.
- ▶ The pox virus unit of CDC Atlanta is supporting genomic studies and quality control.

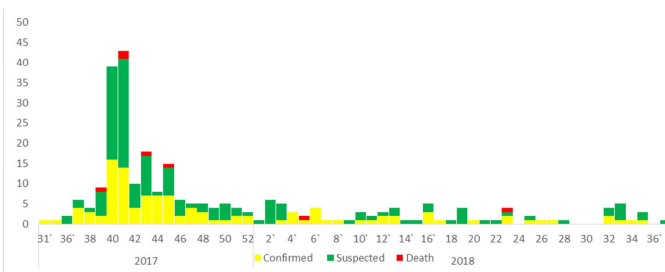
SITUATION INTERPRETATION

Monkeypox is a re-emerging disease in Nigeria. Before the latest outbreak which started in September 2017, the last monkeypox case was reported in 1978. The current multistate outbreak in Nigeria is the largest reported monkeypox outbreak caused by a West African clade. Since the West African clade is associated with limited human-to-human transmission, the sudden re-emergence and persistence of this large-scale outbreak suggests that the main route of infection is through contact with infected wildlife animals (e.g. squirrels, rodents and monkeys). Additional sporadic imported cases may be expected among travellers returning from endemic areas/countries. The secondary transmission which occurred in the United Kingdom further illustrates the importance of monitoring and sharing information on monkeypox in endemic countries or countries with re-emergence, in order to raise awareness and improve control measures. Since 2017, seven countries from the African region have reported monkeypox cases (Cameroon, Central Africa, Congo, DRC, Liberia, Nigeria and Sierra Leone). Local and national authorities need to remain vigilant.

Geographical distribution of monkeypox cases and deaths in Nigeria, week 32, 2017 - week 37, 2018.



Monkeypox case distribution by week of reporting, week 32, 2017 - week 37, 2018, Nigeria.



Summary of major issues challenges, and proposed actions

Issues and challenges

- The security situation in and around Beni has been unstable for many years and continues to worsen. This has impacted the local population's access to healthcare and other services. As a result, the ability to rapidly identify and treat those infected with Ebola is currently restricted. The uncontrolled displacement of undetected or non-monitored cases and their contacts can facilitate the spread of this outbreak within and beyond the country's borders. Furthermore, the volatile security context recently led to the suspension of critical response activities between 22-26 September 2018 such as: contact tracing, active case search, vaccination, and infection, prevention and control activities, which are all crucial for the interruption of transmission chains.
- In the Northern Region of Cameroon, the poor sanitary and hygienic conditions coupled with limited access to healthcare and treatment in affected communities, as well as the influx of refugees from Nigeria and the Central African Republic may predispose the population to further spread of cholera. Furthermore, the insecurity in the area, including frequent attacks by groups of organized bandits, may severely hinder the implementation of response activities and exacerbate the already high case fatality ratio by limiting access to healthcare.

Proposed actions

- WHO will continue to work in close coordination with the Ministry of Health and other partners to strengthen all the EVD response pillars, especially in Beni where transmission is persisting and in Tchomia where two new confirmed cases have been reported at the border with Uganda. In addition, WHO will continue to enhance operational readiness and preparedness in the non-affected provinces of the Democratic Republic of the Congo and in neighbouring countries.
- There is a need to reinforce surveillance, particularly at the community level in the Northern Region of Cameroon, in order to detect cholera cases in a timely manner and reduce the proportion of community deaths. Appropriate case management should also be implemented in affected areas to decrease transmission and mortality in healthcare settings. Reinforcing national preparedness to rapidly detect and respond to the cholera outbreak will be crucial in order to mitigate the risk of spread to new areas. As the outbreak is occurring in border areas with active population movements, the need for cross-border coordination and surveillance activities should be emphasized.

All events currently being monitored by WHO AFRO

Country	Event	Grade†	WHO notified	Start of reporting period	End of reporting period	Total cases	Confirmed cases	Deaths	CFR	Comments
New events										
Niger	Polio-myelitis (cVDPV2)	Ungraded	8-Jul-18	8-Jul-18	24-Sep-18	2	2	0	0.0%	A circulating vaccine-derived poliovirus type 2 (cVDPV2) originating in Nigeria has spread to Niger. Two cases of acute flaccid paralysis (AFP) have been detected with this cVDPV2, from Zinder province, Niger, with dates of onset of paralysis on 8 July and 8 August. The isolated cVDPV2 is linked to ongoing circulation of this virus in Jigawa, Nigeria. Nigeria is also affected by a separate cVDPV2, centred around Sokoto state
Senegal	Dengue fever	Ungraded	26-Sep-18	19-Sep-18	26-Sep-18	180	6	0	0.0%	On 19 September 2018, the Pasteur Institute of Dakar notified the Ministry of Health of Senegal of three confirmed cases of Dengue fever in Fatick District. Based on the notification, a rapid investigation was conducted from 20 – 23 September 2018, during which a total of 180 cases were identified through records review at the health facilities in the district. Additional epidemiological and laboratory investigations are ongoing.
Ongoing events										
Algeria	Cholera	Ungraded	25-Aug-18	7-Aug-18	6-Sep-18	217	83	2	0.9%	The outbreak was initially announced by the Ministry of Health of Algeria on 23 August 2018 following confirmation of 41 cases for <i>Vibrio cholerae</i> out of 88 suspected cases reported from four provinces (wilayas). By 6 September 2018, a total of 217 suspected cases with two deaths (CFR 0.9%) have been reported from six wilayas. Laboratory examinations conducted at Institute Pasteur of Algeria have confirmed 83 of the cases for <i>Vibrio cholerae</i> O1 serotype ogawa.
Angola	Cholera	G1	2-Jan-18	21-Dec-17	29-Jul-18	954	12	19	2.0%	On 21 December 2018, two suspected cholera cases were reported from Uíge district, Uíge province. Both of these cases had a history of travel to Kimpangu (DRC). From 21 December 2017 to 18 May 2018, a total of 895 cases were reported from two districts in Uíge province. The neighbouring province of Luanda started reporting cases on 22 May 2018. From 22 May to 29 July 2018, 95 cases with seven deaths (CFR 7.4%) have been reported from 14 districts in Luanda Province. Twelve cases have been confirmed positive for <i>Vibrio cholerae</i> . Fifty-seven percent of cases are males and 69% are aged five-year and above. The most affected district is Talatona having reported a total of 26 cases with five deaths (CFR 19%).
Cameroon	Humanitarian crisis	G2	31-Dec-13	27-Jun-17	27-Aug-18	-	-	-	-	The humanitarian situation in Cameroon remains precarious with several regions of the country affected. In the Far North, the situation is marked by attacks linked to Boko Haram thus generating an influx of refugees from Nigeria including mass displacement of the local population. In the north-west and south-western regions, the crisis is marked by fighting between separatist militia and government forces leading to displacement of about 160 000 people in these regions. The regions of the North, Adamawa and East are also affected by the huge influx of refugees from neighboring Central African Republic thus placing pressure on the limited resources available to the local population. The humanitarian needs include food, shelter, access to basic health services including water, sanitation and hygiene.
Cameroon	Cholera	G1	24-May-18	18-May-18	24-Sep-18	367	37	31	8.4%	Detailed update given above.

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	Protracted 2	11-Dec-13	11-Dec-13	5-Sep-18	-	-	-	-	Despite the commitment of armed groups to the African initiative for peace in the country, the security and humanitarian situation remain precarious. This climate of insecurity continues to cause population displacement and disrupt the implementation of health sector activities in several localities. The situation is particularly volatile along Kaga Bandoro, Bocaranga-Paoua axis, and Alindao. About 2 500 new displaced people arrived at the Pk3 site in Bria following the clashes between armed groups on the Bria- Irabanda and Bria-Ippy routes since August 31. Testimonies mention several wounded and dead. Humanitarian workers have been targeted with eight deaths reported in 2018 including the latest fatality occurring on 1 August 2018. There are an estimated 90 000 vulnerable people in the localities of Paoua, Markounda, Bambari, and Zémio.
Central African Republic	Monkeypox	Ungraded	20-Mar-18	2-Mar-18	22-Aug-18	40	13	1	2.5%	The outbreak was officially declared on 17 March 2018 in the sub-province of Ippy, Bambari district. Since the beginning of the outbreak, three districts have been affected, namely Bambari, Bangassou and Mbaiki districts. Cumulatively, 40 cases of monkeypox with one death (case fatality ratio 2.5%) have been reported from 2 March to 22 August 2018 in the country, and 13 cases have been laboratory confirmed out of 23 samples tested. No new cases notified in the three districts after the end of the epidemic.
Chad	Measles	Ungraded	24-May-18	1-Jan-18	9-Sep-18	2 734	650	78	2.9%	In week 36, 155 suspected cases with no deaths were reported. An increase in the number of cases compared to the previous week when 122 cases and 1 death were reported. Twelve districts: Faya, Mondo, Moussoro, Amzoer, Iriba, Kalait, Chadra, Oum Hadjer, Mangalme, Biltine, Isseriom and Ngouri have reported at least 5 suspected cases of measles during the last 4 weeks (week 31-35). The last 2 districts crossed the threshold for the first time. As of week 36, there are 2 734 suspected cases with 78 deaths (CFR 2.9%). A total of 650 cases have been confirmed (IgM-positive -231, Epi-linked-419, and clinically confirmed 30). Children aged 1 to 4 years are the most affected constituting 31% of cases reported.
Congo (Republic of)	Yellow fever	Ungraded	10-Jul-18	9-Jul-18	25-Sep-18	1	1	0	0.0%	On 5 July 2018, a 20-year-old male from Bissongo market visited Bissongo health centre in Loandjili district, Pointe-Noire city, Congo, with fever for one day. On 9 July 2018, due to beginning of jaundice and persistent fever, he returned to the same health facility. The case did not have a history of yellow fever (YF) vaccination and travelled to Ngoyo and Tchiamba Nzassi districts, the latter one which is a rural district in Pointe-Noire located along the border with Angola during two weeks prior to symptoms onset. Following admission with suspected YF as a differential diagnosis, a blood sample was collected on 10 July 2018 and sent to INRB in Kinshasa for testing. On 26 July 2018, the sample tested positive for YF by serology. On 30 July 2018, the lab sent a sample to IP Dakar for confirmation. On 21 August 2018, the sample tested positive by seroneutralization with high titres. In week 37, six new suspected cases were reported from Loandjili (2) and Tié-tié (4) districts. Blood samples were taken from all the new suspected cases and sent to the IP Dakar for testing.

Country	Event	Grade†	WHO notified	Start of reporting period	End of reporting period	Total cases	Confirmed cases	Deaths	CFR	Comments
Democratic Republic of the Congo	Humanitarian crisis		20-Dec-16	17-Apr-17	2-Sep-18	-	-	-	-	The humanitarian crisis in the country remains volatile. Inter-communal conflicts and violence perpetrated by militias including the kidnapping of humanitarian staffs continue to contribute to mass population displacement and difficulty in access to humanitarian assistance in several localities in the east of the country.
Democratic Republic of the Congo	Cholera	G3	16-Jan-15	1-Jan-18	2-Sep-18	18 780	0	623	3.3%	In week 35, 888 cases with 26 deaths (CFR 2.9%) were reported from 13 out of 26 provinces. Five out of the total provinces that reported cases (East Kivu, South Kivu, Sankuru, Tanganyika and Kasai) reported more than 89% of the total cases and 92% of all cholera deaths. Since the beginning of 2018 to the week 35, a total of 18 710 cases were reported including 623 deaths (CFR 3.3%). The number of cases has been increasing since week 21, a similar trend was observed in 2017. Compared with 2017, an upward trend was also observed in the case fatality ratios.
Democratic Republic of the Congo	Ebola virus disease	G3	31-Jul-18	11-May-18	28-Sep-18	157	111	102	65%	Detailed update given above.
Democratic Republic of the Congo	Measles	Ungraded	10-Jan-17	1-Jan-18	2-Sep-18	23 979	505	273	1.1%	From 2018 week 1 to week 35 (week ending 2 September 2018), 23 979 cases with 273 deaths (CFR 1.1%) have been reported. During week 35, a total of 962 new cases were reported with nineteen deaths (CFR 1.98%). Epidemic zones are mainly focused in the eastern part of the country.
Democratic Republic of Congo	Monkeypox	Ungraded	n/a	1-Jan-18	2-Sep-18	2 829	-	57	2.0%	From week 1 to week 35 (week ending 2 September 2018), 2018, there have been 2 829 suspected cases of monkeypox including 57 deaths (CFR 2%). In week 35, a total of 87 suspected cases including six deaths have been reported. Suspected cases have been detected in 14 provinces. Sankuru Province has had an exceptionally high number of suspected cases this year.
Democratic Republic of the Congo	Polio-myelitis (cVDPV2)	G2	15-Feb-18	n/a	27-Sep-18	37	37	0	0.0%	The latest case of cVDPV2 was reported from Bumba Health Zone, Mongala Province. As of 21 September 2018, a total of 37 cases with onset in 2017 (22 cases) and 2018 (15 cases) have been confirmed. Six provinces have been affected, namely Tanganyika (15 cases), Haut-Lomami (9 cases), Mongala (8 cases), Maniema (2 cases), Haut Katanga (2 cases), and Ituri (1 case). The outbreak has been ongoing since February 2017. A public health emergency was officially declared by the Ministry of Health on 13 February 2018 when samples from 21 cases of acute flaccid paralysis were confirmed retrospectively for vaccine-derived poliovirus type 2.
Democratic Republic of Congo	Rabies	Ungraded	19-Feb-18	1-Jan-18	2-Sep-18	22	0	22	100.0%	This outbreak began towards the end of October 2017 in Kibua health district, North Kivu province. In epi week 35 (week ending 2 September 2018), one new suspected case was reported. A total of 159 suspected cases with 22 deaths (CFR 13.8%) have been reported from week 1 to 35, 2018.
Democratic Republic of Congo	Yellow fever	Ungraded	16-Aug-18	1-Jul-18	17-Aug-18	5	4	0	0.0%	Samples from four out of five suspected cases have been confirmed for Yellow fever by Plaque Reduction Neutralization Test (PRNT) at Institute Pasteur Dakar (IPD). One of the cases is a 29-year-old male from Ango District in Bas Uele Province and the other is a 42-year-old male from Yalifafu district in Tshuapa Province. The other 2 cases are from Tshuapa and Lualaba Province. Vaccination status of the cases are unknown and detailed investigation is ongoing.

Country	Event	Grade†	WHO notified	Start of reporting period	End of reporting period	Total cases	Confirmed cases	Deaths	CFR	Comments
Ethiopia	Humanitarian crisis	G2	15-Nov-15	n/a	26-Aug-18	-	-	-	-	As of July 2018, an estimated 860 056 displaced people have been reported from Gedeo zone (SSNP region) with an additional 188 747 IDPs estimated to be spread across six woredas in West Guji zone (Oromia region). Peace negotiations are still on going and succeeded in some of the Woredas like Hambela Wamena where all IDPs returned to their original villages.
Ethiopia	Acute watery diarrhoea (AWD)	Protracted 1	15-Nov-15	1-Jan-18	26-Aug-18	2 337	-	18	0.8%	This has been an ongoing outbreak since the beginning of 2017. In most parts of the country, the situation has stabilized except for two regions which continue to report cases. In weeks 33 and 34, a total of 850 AWD cases were reported from two regions, Dire Dawa (8), and Tigray (842). No new AWD cases have been reported from Afar and Somali regions since week 32 and week 25 respectively. From week 1 to 34 (week ending 26 August 2018) in 2018, a cumulative 2 337 AWD cases have been reported from Afar 1 004 (43%), Dire Dawa 103 (4%), Somali 116 (5%) and Tigray 1 114 (48%).
Ethiopia	Measles	Protracted 1	14-Jan-17	1-Jan-18	26-Aug-18	3 062	857	-	-	This has been an ongoing outbreak since the beginning of 2017. In 2018, a total of 3 062 suspected measles cases have been reported across the country. From the total suspected cases reported, 857 were confirmed cases (137 laboratory confirmed, 688 epi-linked and 52 clinically compatible). In week 34 (week ending 26 August 2018), no new suspected or confirmed cases were reported.
Ethiopia	Dengue fever	Ungraded	18-Jun-18	19-Jan-18	29-Jul-18	127	52	-	-	An outbreak of Dengue fever which started on 8 June 2018 involving 52 cases in the flood-affected Gode Zone of Somali Region has been confirmed by laboratory testing. In week 30, two cases were reported from Liban Zone in Somali Region.
Guinea	Measles	Ungraded	9-May-18	1-Jan-18	12-Aug-18	1 643	418	11	0.7%	A measles outbreak was detected in epidemiological week 8, 2018. Cases has been reported in all parts of the country since the beginning of the year. The most affected zones include Kankan, Conakry and Faraneh. In week 32, 5 new suspected cases were reported and no samples sent to the laboratory. During the last 4 epidemiological weeks (week 29 to 30), 71 suspected cases were reported, 25 samples received at the laboratory, including 7 confirmed cases from 5 sub-prefectures. Since the beginning of the year, a total of 1 643 suspected cases were reported
Kenya	Cholera	Ungraded	8-Sep-18	8-Sep-18	18-Sep-18	1	1	0	0.0%	A new case of cholera was reported from Kakuma refugee camp in Turkana West sub-county, Turkana County, Northwest of Kenya, on 8 September 2018. Culture sensitivity test done on the case specimen was reactive for <i>Vibrio cholerae</i> 01 Ogawa. The patient was discharged on 13 September 2018. This case was notified five days after the Ministry of Health declared the end of the cholera outbreak (on 3 September 2018) which started in October 2015. During this epidemic, Turkana County was one of the affected counties. The last case in Turkana was reported on 9 July 2018. The last affected county was Garissa located in the eastern part of the country.

Country	Event	Grade†	WHO notified	Start of reporting period	End of reporting period	Total cases	Confirmed cases	Deaths	CFR	Comments
Kenya	Measles	Ungraded	19-Feb-18	19-Feb-18	18-Sep-18	381	20	1	0.3%	Since the beginning of the year a total of 381 cases with 20 confirmed and 1 death (CFR 0.3%) have been reported in five Counties; Mandera, Garissa, Wajir, Nairobi and Kitui. The outbreak has been controlled in Wajir and Kitui Counties. Mandera, Garissa and Nairobi Counties are still reporting new cases. Mandera County is now reporting the 2nd wave this year. A total of 170 cases with 9 confirmed has been reported in Mandera West and North sub-counties. Garissa county has reported 40 cases including 9 confirmed cases from Garissa and Dadaab sub-counties. Nairobi County has reported 22 cases including 4 confirmed cases from Kamukunji sub-county.
Kenya	Rift Valley fever (RVF)	G1	6-Jun-18	11-May-18	13-Aug-18	95	21	11	11.6%	Following the initial confirmation of RVF by PCR on 7 June 2018, a total of 95 cases including 11 deaths (CFR 11%) have been reported from three counties in Kenya. Twenty-one samples submitted to the KEMRI tested positive by PCR for RVF. Wajir has reported 82 cases with six deaths, Marsabit reported 11 cases with three deaths and Siaya country reported 1 case with one death. The Eldas sub-county in Wajir has reported the highest number of cases (79) since the 11 May 2018. The last case was reported on 20 July 2018.
Liberia	Flood	Ungraded	14-Jul-18	14-Jul-18	24-Sep-18	-	-	-	-	Liberia continues to experience heavy rainfall and flooding. From 11 July to 24 September 2018, thirteen districts across 5 counties (Margibi, Montserrado, Grand Bassa, Sinoe and Bomi) have been affected, leading to 62 563 people affected (49% women and 21% children) with one death in a 4-year-old child. The number of displaced people has increased from 3 625 to 4 825 between 12 and 24 September 2018. At least 595 persons have sustained injuries as a result of the continuous floods. The floods have led to destruction of infrastructures and the water supply system forcing the people to look for alternative and unsafe water sources, thus increasing the risk for waterborne diseases. The affected people are receiving humanitarian aid for food and nonfood items and are being treated for various illnesses by mobile medical teams.
Liberia	Lassa fever	Ungraded	14-Nov-17	1-Jan-18	16-Sep-18	29	20	13	44.8%	Five suspected cases reported across the country during week 37 (ending 16 September 2018) tested negative at the National Public Health Laboratory. Cumulatively, since epi-week one, 165 suspected cases have been reported including 37 deaths. One hundred thirty-six (136) were discarded after negative test results while 20 were confirmed and the remaining nine not tested. Case fatality ratio among confirmed cases is 65% (13/20).
Liberia	Measles	Ungraded	24-Sep-17	1-Jan-18	16-Sep-18	3 679	3 409	16	0.4%	Since the peak in week 14 when approximately 230 suspected cases were reported, the number of new cases has declined dramatically. Ten suspected cases were reported across the country in week 37 (ending 16 September 2018). Cumulatively, since epi-week one, 3,679 suspected cases including 16 deaths have been reported. Of these, 550 have been tested by the laboratory. Epi-classification are as follows: lab confirmed 265 (7%), epi-linked 433 (11.7%), clinically confirmed 2 711 (73.8%), discarded 264 (7%), and pending 6 (0.2%).
Madagascar	Plague	Ungraded	19-Aug-18	19-Aug-18	24-Sep-18	22	5	5	22.7%	Detailed update given above.

Country	Event	Grade†	WHO notified	Start of reporting period	End of reporting period	Total cases	Confirmed cases	Deaths	CFR	Comments
Mali	Humanitarian crisis	Protracted 1	n/a	n/a	20-Jul-18	-	-	-	-	The complex humanitarian crisis exacerbated by the political-security crisis and intercommunity conflicts continue in Mali. More than four million people (nearly a quarter of the population) are affected by the humanitarian crisis, including 61 404 who are internally displaced and nearly 140 000 who are refugees in neighbouring countries such as Niger, Mauritania and Burkina Faso (data from CMP report, 7 June 2018). The health system is still weak, while the health need is increasing. The departure of health system personnel and incidents targeting health infrastructure, personnel and health equipment are worsening the existing health system. There are 1.7 million people in need of health assistance in the face of inadequate numbers of health care workers (3.1 per 10 000 people, compared to the WHO recommended 17 per 10 000). The security incidents are increasing in Mopti and Meneka.
Mali	Severe Acute Malnutrition	Ungraded	1-Aug-18	15-Mar-18	5-Aug-18	224	0	40	17.9%	Three villages in the commune of Mondoro, Douentza district, Mopti Region, Central Mali are experiencing an epidemic of malnutrition following the inter-communal conflict that prevails in the locality. From mid-March to 5 August 2018, a total of 224 cases including 40 deaths (CFR 17.9%) have been reported from three villages (Douna, Niagassadiou and Tigoula) in the commune of Mondoro, Douentza district, Central Mali. This disease is manifested by the following signs: edema of the lower limbs, myalgia, functional impotence, dyspnoea sometimes followed by death. A dozen samples from patients analyzed at INRSP in Bamako showed iron deficiency anaemia.
Mali	Measles	Ungraded	20-Feb-18	1-Jan-18	23-Sep-18	1 261	346	0	0.0%	From Week 1 to 38 of 2018, a total of 1 261 suspected cases with zero deaths have been reported. The cumulative blood samples from 966 suspected cases have been tested of which, 346 were confirmed (IgM-positive) at the National Reference Laboratory (INRSP). Sixty-eight percent of confirmed cases are below 5 years old. The affected health districts are Maciana, Bougouni, Kati, Koutiala, Kokolani, Kolondieba, Ouélesseboungou, Sikasso, Douentza, Macina, Tombouctou, Dioila, Taoudénit and Kalabancoro. Reactive vaccination campaigns, enhancement of surveillance, and community sensitization activities are ongoing in the affected health districts.
Mauritius	Measles	Ungraded	23-May-18	19-Mar-18	16-Sep-18	937	937	3	0.3%	From 21 March to 16 September 2018, 937 confirmed cases of measles have been reported including three deaths (CFR 0.3%). All cases have been confirmed by the virology laboratory of Candos (IgM antibodies). The onset of symptoms of the first cases was in week 12. The incidence is highest in the age groups 0 - 4 and 25 - 34 years of age, with 52% of males being affected. The three deaths were in women between the ages of 28 and 31 years. The most affected districts are Port Louis and Black River. A single genotype of measles virus, D8, was detected in 13 samples. The source of infection of measles is most likely an imported case.
Namibia	Hepatitis E	G1	18-Dec-17	8-Sep-17	29-Jul-18	2 554	395	24	0.9%	As of 29 July 2018, four out of 14 regions in Namibia have been affected by the HEV outbreak namely, Khomas, Erongo, Erongo and Oshana regions. From week 36 of 2017 (week ending 10 September 2017) to 29 July 2018, a total of 2 554 cases with 24 deaths (CFR 0.9%) have been reported in Khomas, Erongo, Erongo, Oshana and six other regions of Namibia. A total of 395 cases have been laboratory confirmed (IgM ELISA) and ten maternal deaths (probable and confirmed cases) have been notified. Over 80% of reported cases are epidemiologically linked to cases reported in Windhoek, the epi-centre of the epidemic.

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	2-Aug-18	-	-	-	-	The security situation in Niger's Diffa Region remains precarious. According to USAID's Lake Chad Basin complex emergency report dated 2 August 2018, Boko Haram-related insecurity continues to restrict food access and livelihood activities for displaced populations in Diffa Region, Southeast Niger. Limited access to pasture is also undermining livestock activities in Diffa's pastoral zones, reducing herders' purchasing power. According to the report, crisis levels of acute food insecurity may persist in parts of Diffa through January 2019, although food security in many areas could improve to Stressed levels beginning in October. UNHCR's June 2018 report indicated around 104 288 internally displaced people in the Diffa Region. From January–June, relief actors admitted nearly 7 000 children ages five years and younger experiencing severe acute malnutrition for treatment in Diffa, including nearly 650 patients with medical complications, according to the UN Children's Fund (UNICEF).
Niger	Cholera	G2	13-Jul-18	13-Jul-18	26-Sep-18	3 615	34	68	1.9%	As of 26 September 2018, a total of 3 615 cases with 68 deaths (CFR 1.9%) have been reported from fourteen health districts in four regions of the country, namely, Maradi, Dosso, Zinder, and Tahoua regions. Madarounfa District in Maradi Region remains the most affected with 72% of the cumulative cases reported. Eighty-three percent of cases are age 5 and above and females constitute 56.2% of the cases reported. A total of 34 samples have tested positive by culture for <i>Vibrio cholerae</i> O1 inaba. Fourteen percent (14%) of the cumulative cases reported are residents from Nigeria.
Nigeria	Humanitarian crisis	Protracted 3	10-Oct-16	n/a	5-May-18	-	-	-	-	The security situation in north-east Nigeria remains volatile, with frequent incidents, often suicide attacks using person-borne improvised explosive devices (PBIED) and indiscriminate armed attacks on civilian and other targets. On 1 May 2018, an attack in Mubi town in Adamawa State resulted in 27 deaths and more than 50 injuries, while 13 people were killed in Zamfara State on 3 May 2018. In a related incident that took place on 5 May 2018, at least 45 people from Gwaska village in Kaduna State (outside north-east Nigeria) died in fighting between bandits and armed militia. Internal displacement continues across north-east Nigeria, especially in Borno, Adamawa and Yobe states, partly fuelled by deteriorating living conditions and the ongoing conflict. The number of internally displaced persons (IDPs) across the six states (Adamawa, Bauchi, Borno, Gombe, Taraba, and Yobe) in northeast Nigeria increased to over 1.88 million in April 2018, from 1.78 in February 2018. In addition, there are over 1.4 million returnees in the area. The communal conflicts between herders and farmers, which has been taking place since January 2018 outside north-east Nigeria, also displaced approximately 130 000 people in Benue, Nasarawa, Kaduna, and Taraba States.

Country	Event	Grade†	WHO notified	Start of reporting period	End of reporting period	Total cases	Confirmed cases	Deaths	CFR	Comments
Nigeria	Cholera	G1	7-Jun-17	1-Jan-18	9-Sep-18	27 927	45	517	1.9%	In week 36 (week ending 9 September 2018), 1 306 suspected cases including 24 deaths (CFR: 1.8%) were reported from five states: Zamfara (588 cases with 12 deaths), Katsina (377 cases with 12 deaths), Borno (280 cases), Adamawa (55 cases), and Kano (6 cases). As of 9 September 2018, a total of 27 927 suspected cases including 517 deaths (CFR 1.9%) have been reported from 19 States since the beginning of 2018. There is an overall increasing trend in the number of reported cases. No new cases were reported in the last three or more weeks from Anambra, Bauchi, Ebonyi, FCT, Gombe, Jigawa, Kaduna, Kogi, Nasarawa, Niger, Plateau, Sokoto and Yobe states. There is an almost equal proportion of males and females affected.
Nigeria	Lassa fever	Ungraded	24-Mar-15	1-Jan-18	16-Sep-18	516	506	143	27.7%	In week 37 (week ending 16 September 2018), two new confirmed cases were reported from Edo state with zero new deaths. From 1 January to 16 September 2018, a total of 2 559 suspected cases have been reported from 22 states. Of the suspected cases, 506 were confirmed, 10 were probable, and 2 044 were negative (not a case). Thirty-nine healthcare workers have been affected in seven states since the onset of the outbreak, with ten deaths. Eighteen states have exited the active phase of the outbreak while two, Edo and Delta states remain active.
Nigeria	Measles	Ungraded	25-Sep-17	1-Jan-18	2-Sep-18	13 694	901	100	0.7%	In week 35 (week ending 2 September 2018), 151 suspected cases of measles were reported from 25 States. Since the beginning of the year, a total of 13 694 suspected measles cases with 901 laboratory confirmed cases and 100 deaths (CFR 0.73%) were reported from 36 States and Federal Capital Territory compared with 17 340 suspected cases with 108 laboratory confirmed and 105 deaths (CFR 0.61%) from 37 States during the same period in 2017.
Monkey-pox	Ungraded	26-Sep-17	24-Sep-17	15-Sep-18	269	115	7	2.60%	2.6%	Detailed update given above.
Nigeria	Polio-myelitis (cVDPV2)	Ungraded	1-Jun-18	1-Jan-18	18-Aug-18	11	11	0	0.0%	Three new cases of circulating vaccine-derived poliovirus type 2 (cVDPV2) cases were reported this week, bringing the total number of cVDPV2 cases in 2018 to eleven. These latest reported cases all had onset of paralysis in August, from Katsina and Borno states, linked to the cVDPV2 outbreak centred around Jigawa. The country continues to be affected by two separate cVDPV2 outbreaks, the first centered in Jigawa state, and the second in Sokoto state.
Nigeria	Yellow fever	Ungraded	14-Sep-17	7-Sep-17	16-Sep-18	3 015	47	51	1.7%	Six presumptive positive cases and one inconclusive case were reported from two of the diagnostic laboratories during week 37 (week ending 16 September 2018). From the onset of this outbreak on 12 September 2017, a total of 3 015 suspected yellow fever cases including 51 deaths have been reported as at week 37 from 548 LGAs in all Nigerian states. The last case confirmed by IP Dakar was on 6 June 2018 from River State. A total of 47 were laboratory confirmed at IP Dakar out of 134 presumptive positive and inconclusive samples tested.
São Tomé and Príncipe	Necrotising cellulitis/fasciitis	Protracted 2	10-Jan-17	25-Sep-16	9-Sep-18	2 915	0	0	0.0%	A total of 2 915 cases have been notified from week 40 in 2016 to week 36 in 2018 (week ending 9 September 2018). It should be noted that 75% of the cases notified during the last 5 weeks come from the districts of Me-zochi (48%) and Cantagalo (27%). The attack rate of cellulitis in São Tomé and Príncipe is 14.7 cases per 1000 inhabitants.

Country	Event	Grade†	WHO notified	Start of reporting period	End of reporting period	Total cases	Confirmed cases	Deaths	CFR	Comments
Seychelles	Dengue fever	Ungraded	20-Jul-17	18-Dec-15	2-Sep-18	5 813	1 511	-	-	As of week 35 (2 September 2018) a total of 5 813 cases of Dengue have been reported, and 1 511 cases have been confirmed since the last week of 2015. There is a general decreasing trend since week 23. For week 35, a total of 22 suspected cases were reported. The number of confirmed cases have been on a decline, with 791 Currently in circulation are the serotypes DENV1, DENV2 and DENV3. The suspected cases were distributed in fourteen (14) districts on Mahe Island for week 35. No suspected cases are reported from the inner islands. The number of confirmed cases report has been on a decline, from 791 cases in 2016, 595 cases in 2017, to 124 cases confirmed thus far in 2018.
South Sudan	Humanitarian crisis	Protracted 3	15-Aug-16	n/a	23-Sep-18	-	-	-	-	The complex emergency in South Sudan has continued for five years, with multiple episodes of armed conflict, population displacement, disease outbreaks, malnutrition and flooding. Despite recent regional efforts and commitment by the government and opposition groups toward lasting peace, the humanitarian situation remains dire and the needs are huge. Attacks on humanitarian workers by various militias, inter-communal violence and cattle raiding continue.
South Sudan	Hepatitis E	Ungraded	-	3-Jan-18	16-Sep-18	147	19	-	-	Two new cases of hepatitis E were reported from Bentiu POC in week 37 (ending 16 September 2018). As of 16 September 2018, 147 suspect cases have been reported since the beginning of the year. Of the total suspect cases, 19 cases have been confirmed by PCR (18 in Bentiu PoC and 1 in Old Fangak). No new cases identified after active follow up in Old Fangak county. Among the females, most cases have been reported in those aged 15-44 years (who are at risk of adverse outcomes if infected in the 3rd trimester of pregnancy).
Tanzania	Cholera	Protracted 1	20-Aug-15	1-Jan-18	9-Sep-18	4 007	50	75	1.9%	During week 38 (week ending 23 September 2018), 150 new cases with six deaths were reported from Ngorongoro District (128 cases, five deaths) in Arusha Region; Moshi District (4 cases, no deaths) in Kilimanjaro Region; Simanjiro District (18 cases, one death) in Manayara Region. As of week 38, a total of 4 007 cases with 75 deaths (CFR: 1.9%) were reported from Tanzania Mainland since the beginning of 2018. No case was reported from Zanzibar (the last case was reported on 11 July 2017). Cholera cases reported from week 1 to 38 in 2018 increased and nearly doubled compared to the same period in 2017 (2 689 cases).
Uganda	Humanitarian crisis - refugee	Ungraded	20-Jul-17	n/a	21-Jun-18	-	-	-	-	Uganda continued to receive new refugees precipitated by increased tensions mainly in the neighboring DRC and South Sudan. Despite responding to one of the largest refugee emergencies in Africa, humanitarian funding has remained low especially to the health sector. Current refugee caseload stands at almost 1.5 million refugees and asylum seekers from South Sudan, DRC, Burundi, Somalia and others countries. Daily arrival stands at approximately 250 - 500 per day. A total of 376 081 refugees and asylum seekers were received in 2017.
Uganda	Crimean-Congo haemorrhagic fever (CCHF)	Ungraded	24-May-18	-	25-Sep-18	9	5	2	22.2%	Two new cases were confirmed on 25 September 2018, at the Uganda Virus Research Institute (UVRI). The case-patients, 30 and 10-year-old from Isingiro and Luweero districts respectively are currently hospitalized. As of 25 September 2018, a total of nine cases (five confirmed and four suspected) and two deaths (CFR 22%) have been reported across the country.

Country	Event	Grade†	WHO notified	Start of reporting period	End of reporting period	Total cases	Confirmed cases	Deaths	CFR	Comments
Uganda	Measles	Ungraded	8-Aug-17	1-Jan-17	18-Sep-18	2 663	662	1	0.0%	As of 18 September 2018, a total of 2 663 cases have been reported of which 662 cases have been confirmed either by epidemiological link or laboratory testing since the beginning of the year. Four hundred fifty-two (452) cases were laboratory confirmed by IgM. One death has been reported among the confirmed cases. Fifty-three districts in the country have reported a measles outbreak. Ninety-nine percent of the confirmed cases are from rural areas.
Uganda	Rift Valley fever (RVF)	Ungraded	29-Jun-18	20-Jun-18	14-Aug-18	23	19	8	34.8%	One new case from Kiruhura district has been confirmed for Rift Valley fever by PCR at Uganda Virus Research Institute on 14 August 2018. From 18 June to 14 August 2018, a total of 23 suspected cases with eight deaths (CFR 34.8%) have been reported from 11 districts in Western Uganda. Nineteen (19) cases have been confirmed by PCR at the Uganda Virus Research Institute (UVRI). The most affected district is Insingiro having reported 11 cases with two deaths (CFR 18.2%). Ninety-six percent (96%) of cases reported are males, the majority of whom are herdsman and butcher.
Zambia	Measles	Ungraded	2-Aug-18	6-Jul-18	28-Aug-18	25	6	1	4.0%	On 1 August 2018, an outbreak of measles was reported in the Paul Mambilima catchment area of Mansa District in Luapula Province, Zambia. The affected community lies astride the international border with the Democratic Republic of the Congo. The first case has been traced to a one-year-old child who died in Lukanga Village in the Paul Mambilima catchment area after presenting with fever, conjunctivitis, and rash. As of 28 August 2018, a total of 25 cases with one death (CFR 4%) have been reported. The last case was reported on 17 August 2018. Age of cases range from four months to 42 years. Six out of eight samples collected have tested IgM-positive.
Zimbabwe	Cholera	G2	6-Sep-18	6-Sep-18	28-Sep-18	6 877	123	49	0.69%	Detailed update given above.
Zimbabwe	Typhoid fever	Ungraded	7-Aug-18	6-Jul-18	10-Sep-18	1 983	16	8	0.4%	On 7 August 2018, WHO was notified by the Ministry of Health and Child Care of Zimbabwe of a suspected outbreak of typhoid fever in Gweru City, Midland Province of Zimbabwe. A total of 1 983 cases with eight deaths (CFR 0.4%) have been reported as of 10 September 2018. Sixteen cases have been confirmed. There is a decline in the daily number of cases reported since the peak on 8 August 2018 when 186 cases were reported.
Recently closed events										
Cameroon	Monkeypox	Ungraded	16-May-18	30-Apr-18	17-Aug-18	36	1	0	0.0%	On 30 April 2018, two suspected cases of monkeypox were reported to the Directorate of Control of Epidemic and Pandemic Diseases (DLMEP) by the Njikwa Health District in the North-west Region of Cameroon. On 14 May 2018, one of the suspected cases tested positive for monkeypox virus by PCR. As of 17 August 2018, a total of 36 suspected cases have been reported from both North-west and South-west regions. No new case has been reported since 28 May 2018.

†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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