

WEEKLY BULLETIN ON OUTBREAKS AND OTHER EMERGENCIES

Week 43: 20 – 26 October 2018
Data as reported by 17:00; 26 October 2018



3

New events

52

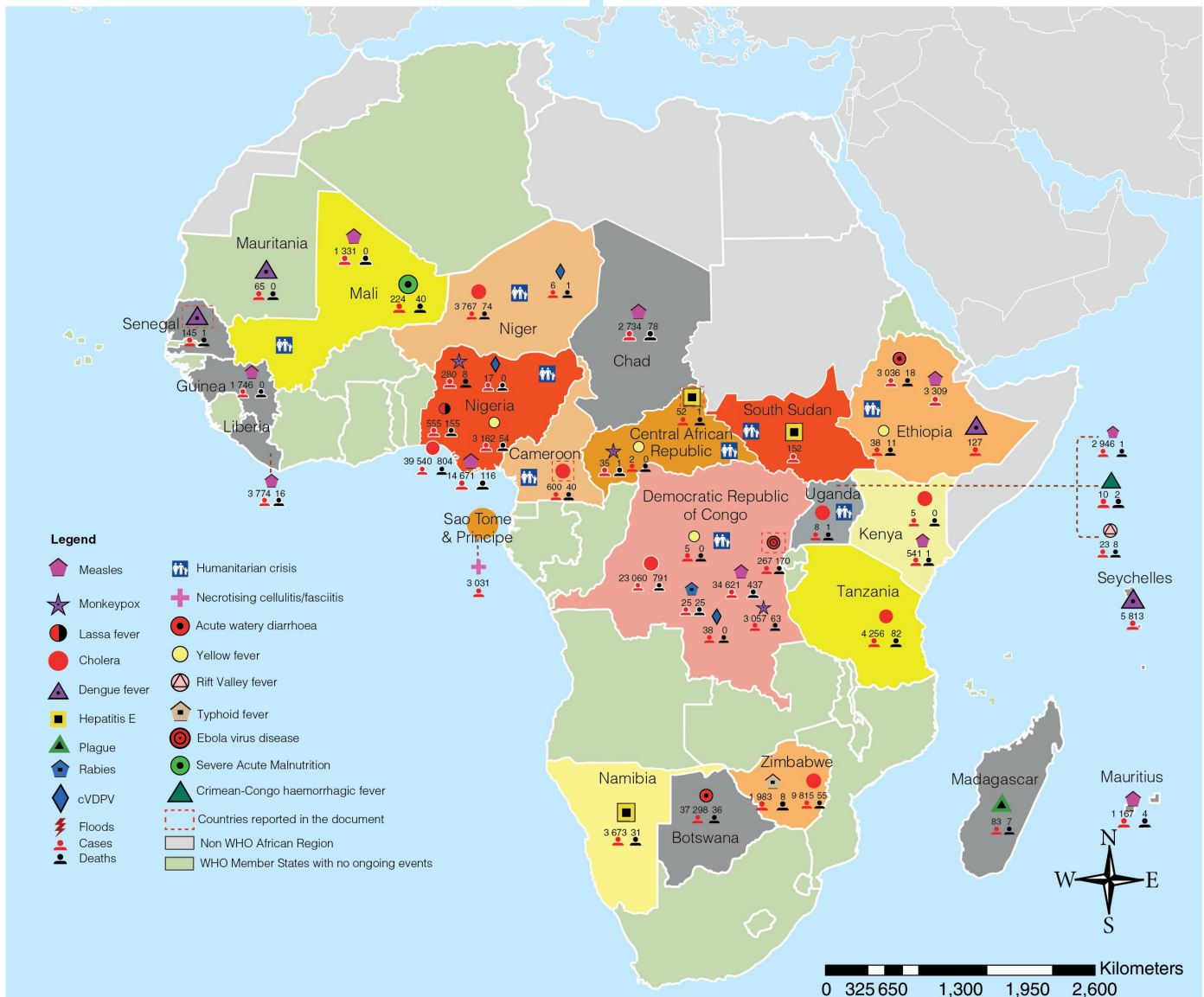
Ongoing events

44

Outbreaks

11

Humanitarian crises



Graded events †

2 Grade 3 events	6 Grade 2 events	3 Grade 1 events	34 Ungraded events
2 Protracted 3 events	3 Protracted 2 events	4 Protracted 1 events	

Overview

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7 Summary of major issues challenges and proposed actions

8 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 in Cameroon](#)
 - [Dengue in Senegal](#)
 - [Hepatitis E in Central African Republic.](#)
- 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 Ebola virus disease situation in North Kivu and Ituri provinces continues to be of serious concern with a persistent increase in the incidence of cases, especially in Beni and Butembo, and the occurrence of cases near security 'red zones'. Security incidents and community resistance continue to severely impact the work of frontline and health workers, often resulting in the suspension of response activities and increasing the risk that the outbreak spreading to neighbouring provinces and countries.
 - The dengue outbreak in Senegal has rapidly evolved, affecting several districts including Touba district in Diourbel region. The situation in Touba district is worsening; there has been a recent upsurge of confirmed cases and a new dengue serotype (DENV-3) has been identified. The occurrence of the Grand Magal celebration in Touba, which gathers over 3 million people, could increase the risk of spread of the DENV-3 serotype to other areas of the country.

Ongoing events

Ebola virus disease

Democratic Republic of the Congo

267
Cases

170
Deaths

64%
CFR

EVENT DESCRIPTION

The Ebola virus disease (EVD) outbreak in North Kivu and Ituri provinces, Democratic Republic of the Congo continues to be closely monitored by the Ministry of Health (MoH), WHO and partners. Since our last report (*Weekly Bulletin 42*), there have been, as of 27 October 2018, thirty new confirmed cases (25 in Beni and 5 in Butembo) and 17 new deaths.

As of 27 October 2018, there have been a total of 267 EVD cases, including 232 confirmed and 35 probable cases. To date, confirmed cases have been reported from nine health zones: Beni (120), Mabalako (71), Butembo (21), Masereka (4), Oicha (2) and Kalunguta (2) in North Kivu Province; and Mandima (9), Komanda (1) and Tchomia (2) in Ituri Province. A total of 170 deaths were recorded, including 135 among confirmed cases, resulting in a case fatality ratio among confirmed cases of 58.2% (133/231). Three new confirmed cases have been reported among health workers, including one physician of the general hospital of Beni, increasing the number of health workers affected to 24, including 23 confirmed and three deaths.

On 27 October 2018, 31 new patients were hospitalized, bringing the total number of patients admitted to 77, of which 34 are confirmed and 43 are suspected. The Beni and Butembo ETCs have reached 85% (51/60) and 70% (21/30) of bed occupancy, respectively. The number of patients cured and discharged back into the community is 70 (including 7 new patients discharged since the last report).

Beni and Mabalako remain the most affected health zones, with 48% (128/267) and 34% (92/267) of cases respectively. Beni is the current hotspot of the outbreak with 84% of new confirmed cases during the last two weeks (47 out of 56). There are also active chains of transmission in Butembo, which has reported 9 new confirmed cases during the last two weeks.

Contact tracing is still of concern due to insecurity and persistent community resistance. On 27 October 2018, the proportion of contacts followed was 93% (5 574/6 026) and varied between 91% in Beni and 100% in Mabalako. A total of 432 new contacts were listed on 27 October 2018, most (n=377, 87%) were in Beni, and the rest in Butembo (n=54) and Mabalako (n=1, displaced from Beni).

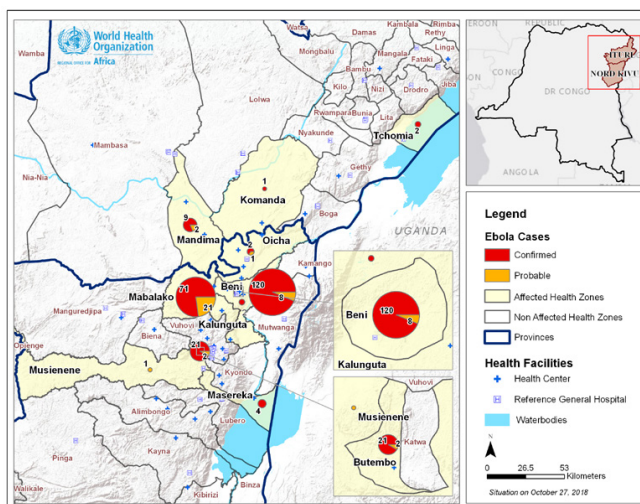
PUBLIC HEALTH ACTIONS

- All surveillance activities continue, including investigations around the last confirmed cases not known as contacts, active case finding in health facilities and in the affected health zone communities and investigation and listing of contacts around the latest confirmed cases.
- There is continued monitoring at points of entry (POE) and sanitary control points (POS), with a total of 59 functional on 27 October 2018 (out of 64), with 163 787 travellers checked, bringing the total number of travellers checked since the start of the outbreak to 11.2 million. Six transport vehicles were decontaminated the same day, bringing the total of decontaminated vehicles to 17 443.
- Vaccination continues in nine rings in Beni, one ring in Butembo and one ring in Katwa with a total of 407 people vaccinated on 27 October 2018, bringing the total number of people vaccinated since 8 August 2018 to 23 691. Vaccination sites were inaccessible on 26 October in Butembo and Vuhovi following a "dead city" day. The current stock of vaccine available in Beni is 3 120 doses.
- Several activities were carried out to raise public awareness of EVD and to combat rumours about the disease and community resistance to the response to the epidemic, including translation of EVD messages into Kiswahili, a guided tour of ETCs by five women leaders of civil society organizations in Butembo, and community relay visits to more than 4 000 households in Beni, Butembo, Katwa, Tchomia and Oicha.
- Psychoeducation sessions were organized in Beni, Mabalako, Mandima, Butembo and Masereka health zones reaching 955 people, and 22 patients discharged from ETCs were re-integrated into their communities.
- Infection prevention and control (IPC) and water sanitation and hygiene (WASH) activities continued: on 27 October, 10 IPC-WASH kits were distributed to health facilities (8 in Beni, 1 in Butembo and 1 Komanda) and IPC training was conducted in 13 health facilities (9 in Beni and 4 in Mabalako). On 27 October, four households (3 in Beni and 1 in Butembo) were decontaminated.

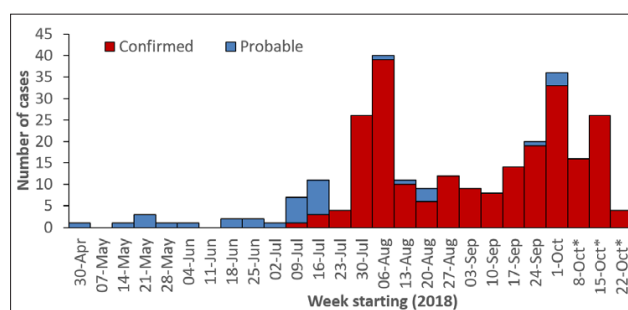
SITUATION INTERPRETATION

The cumulative number of EVD cases (confirmed and probable) reported in this outbreak has surpassed the number of EVD cases reported during the 2007 outbreak in Mweka (264 cases including 187 deaths). The number of confirmed EVD cases is still increasing, especially in Beni and Butembo. In Beni, most of the cases are coming from security red zones (where contact tracing activities are challenging) and from people who were identified as contacts but refused to be followed up and vaccinated. In addition, around 50% of confirmed cases do not present fever symptoms which hinders their detection in health facilities and increase the risk of exposure for health workers. Furthermore, security incidents and community resistance also delay the implementation of ring vaccination around new confirmed cases. These challenges highlight the need to keep strengthening community engagement activities (including partnership with armed groups) as well as IPC in health facilities.

Geographical distribution of confirmed and probable Ebola virus disease cases reported between 1 May to 27 October 2018, North Kivu and Ituri provinces, Democratic Republic of the Congo.



Distribution of confirmed and probable cases by week of onset, North Kivu and Ituri, Democratic Republic of the Congo.



* Data in recent weeks are subject to delays in case confirmation and reporting, as well as ongoing data cleaning

Go to overview

Go to map of the outbreaks

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EVENT DESCRIPTION

The cholera outbreak declared by the Ministry of Public Health in Cameroon on 14 July 2018 is persisting, although the trend is declining in two regions. Cholera cases were first reported in the country on 18 May 2018 (week 20) when three cases were notified in two health areas bordering Nigeria. Between 19-23 October 2018, there were 30 new suspected cases and three new deaths in the Extreme North Region, while there have been no new cases in the Central and Littoral Regions since 27 August 2018 and 11 October 2018, respectively.

As of 23 October 2018, four out of 10 regions have been affected by the outbreak, with a cumulative total of 600 cases and 40 deaths (case fatality ratio 6.7%). Of the deaths, 21 (53%) were community deaths, while 19 deaths occurred in hospitalized patients. To date, a total of 51 cases (8.5%) tested positive for *Vibrio cholerae* 01 Inaba by culture.

The majority (501; 83.5%) of cases were reported in the North Region, followed by Central (72; 12.0%), Extreme North (21; 3.5%) and Littoral (6; 1.0%) regions. There has been an overall improvement in detection and clinical management of cases since the start of the outbreak, although the case fatality ratio varies widely between regions, ranging from 23.8% in Extreme North to 0% in the Littoral Region. The case fatality ratio of the highly affected North region is 6.8%. As of 23 October 2018, 83 people have been admitted to treatment centres in North and Extreme North regions (47 in Golombe, 5 in Pitoa, 6 in Garoua, 14 in Bibémi and 11 in Makary).

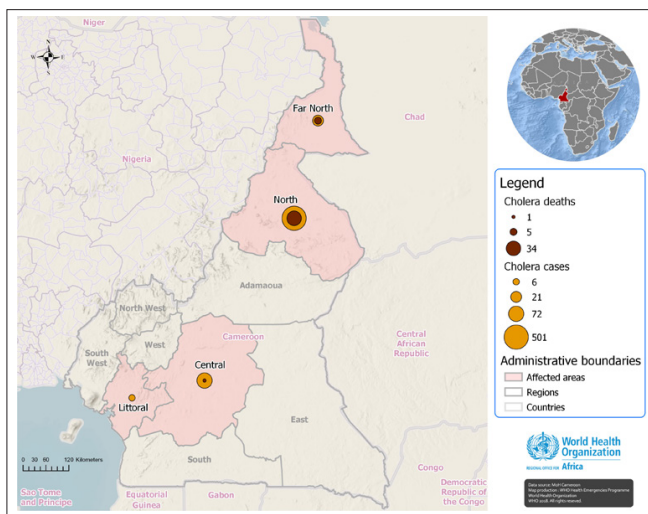
PUBLIC HEALTH ACTIONS

- From 15-19 October 2018, the Department of Disease, Epidemic and Pandemic Control, with the Ministry of Public Health visited the Extreme North and North regions to evaluate the response to the outbreak.
- The Emergency Outbreak Committee met on 19 October 2018 and a multisectoral coordination meeting was held with the governor of North Region.
- Médecins sans Frontières provided technical and financial support for the implementation of cholera treatment centres in North Region.
- Surveillance activities including active case search and contact tracing is ongoing in health districts of the North and Extreme North regions. The strengthening of community-based surveillance is planned.
- There has been improved staff capacity at the cholera treatment centre in Bibémi. Two hundred and thirty additional community health workers are to be trained in Poli and Ngong districts (North region) with the support of WHO.
- A total of 150 contacts have been followed up and briefed on cholera prevention and awareness, along with community leaders in Makary (115), and Mada (85) between 15-16 October 2018.
- Door-to-door cholera awareness activities took place from 17-21 October 2018. Additional community awareness activities are planned in North and Extreme North regions.

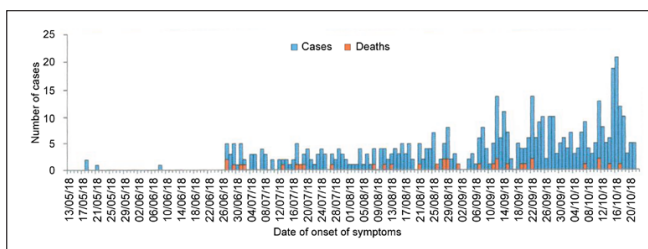
SITUATION INTERPRETATION

The ongoing cholera outbreak in Cameroon is of concern, particularly the persistence in North Region, where there is active conflict with Boko Haram. Although there has been an improvement in case detection and management, the high case fatality ratio in some regions persists. The country continues to experience challenges in water, sanitation and hygiene provision, which, along with poor logistics, contributes to the persistence of transmission. National authorities and partners need to intensify implementation of conventional cholera control activities, particularly in North Region.

Geographical distribution of cholera cases and deaths in Cameroon, 14 July - 23 October 2018



Number of cases by date of onset, 13 May to 23 October 2018, North region, Cameroon.



Source: Ministry of Health of Cameroon.

EVENT DESCRIPTION

The ongoing dengue fever outbreak in Senegal is rapidly evolving. Since our last report as of 18 October (*Weekly Bulletin 42*), 99 new confirmed cases were reported.

Since notification of the first confirmed cases in Fatick region on 21 September 2018, and as of 27 October 2018, a total of 1740 suspected cases were reported. Among them, 145 were confirmed and the remaining 1595 were discarded as non-cases. Seven districts from four regions are currently reporting confirmed cases: Touba (Diourbel region, 105 cases), Diourbel (Diourbel region, 1 case), Mbacke (Diourbel region, 1 case), Fatick (Fatick region, 33 cases), Gossas (Fatick region, 1 case), Coki (Louga region, 1 case) and Richard-Toll (Saint Louis region, 3 cases). Among the 139 confirmed cases with known age and sex, 45% are women and 65% belong to the 15-44 years age group. So far, three cases have been hospitalized. One death was reported in a confirmed case from Touba (case fatality ratio among confirmed cases: 0.7%).

Cumulatively, most confirmed cases (95%) were reported from two districts: Fatick (in Fatick region, 33 cases) and Touba (in Diourbel region, 105 cases). In Fatick district, following a peak in the number of reported confirmed cases during week 39, the weekly incidence of confirmed cases has been decreasing since week 40. No new confirmed cases were reported from Fatick district in week 42, however a steep increase in the incidence of confirmed cases has been observed in Touba district during the same week.

Serotyping analyses performed by Institut Pasteur Dakar identified a new circulating serotype in Touba district, dengue virus serotype 3 (DENV-3). There are currently two circulating serotypes in this outbreak: DENV-1 in Fatick district and DENV-3 in Touba district. Results for serotyping of additional isolates, including those from the other districts, are pending.

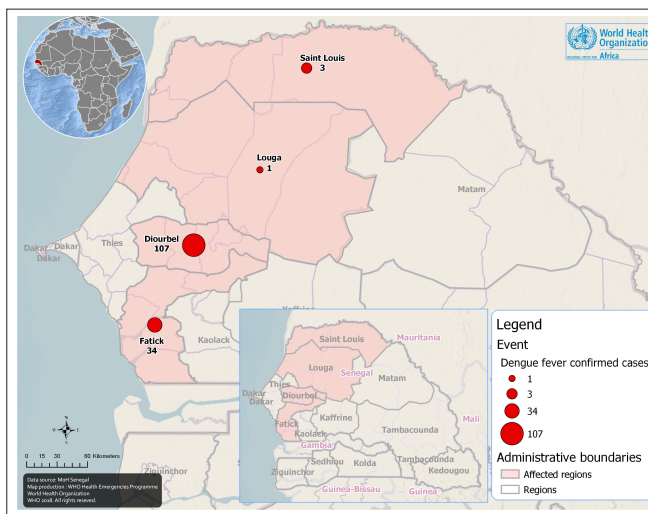
PUBLIC HEALTH ACTIONS

- ▶ WHO conducted a rapid risk assessment: the level of risk was graded high at national level, moderate at regional level and low at global level.
- ▶ The fifth meeting of the National Epidemic Management Committee took place on 22 October 2018.
- ▶ Daily coordination meetings are organized in Touba.
- ▶ The national response plan was validated. Response activities were particularly reinforced in Touba in the context of the Grand Magal. Surveillance is being strengthened in health structures with the implementation of dengue fact sheets and notification forms. The IPD mobile laboratory has been in Touba since 17 October 2018.
- ▶ The WHO Stop-Team are providing technical support for case investigation.
- ▶ Case management is being supported and free health care is implemented.
- ▶ Active case search is ongoing in districts with confirmed cases and in adjacent areas.
- ▶ Laboratory capacity is being strengthened with establishment of blood collection kits for suspected cases.
- ▶ Community actors are being mobilized to destroy vector larvae, and in-home spraying is taking place in dengue affected areas by the Diourbel Regional Hygiene Brigade. General spraying of potential larval breeding areas is being carried out in the city of Touba.
- ▶ Community actors are being mobilized in awareness-raising activities, and there are radio broadcasts in the Fatick Region.

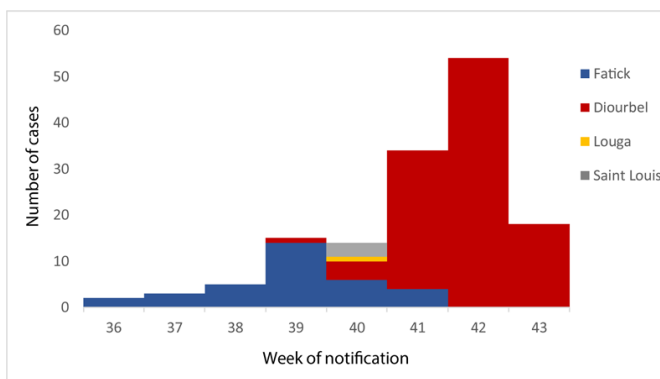
SITUATION INTERPRETATION

The concentration of cases in Touba, Diourbel region is of concern due to the organization of the Grand Magal, a pilgrimage that draws around 3 million people annually and which took place on 28 October 2018. The region often faces water supply issues. To address these, households usually store water in basins which attracts the *Aedes aegypti* mosquito, the main vector for dengue virus. Furthermore, Richard-Toll district, Saint Louis Region, borders Mauritania which has recently notified an outbreak of dengue virus serotype 2 (DENV-2). The risk of cross-border expansion of both outbreaks cannot be excluded. National and international actors need to urgently strengthen surveillance, particularly cross-border. Vector control must be strengthened together with improvement of the water situation in affected regions in order to prevent the spread of the vector.

Geographical distribution of dengue cases and deaths in Senegal, 21 September - 21 October 2018



Distribution of dengue confirmed cases by week of notification and by region, Senegal, 2018



Note: Reporting may not be complete for week 43

EVENT DESCRIPTION

The outbreak of hepatitis E continues to evolve in Bocaranga-Koui Health district, Central African Republic. Since the last WHO AFRO weekly Bulletin of 5 October 2018 (*Weekly Bulletin 40*), 21 new suspected cases of acute jaundice syndrome were notified. Fourteen samples were obtained from the 21 suspected cases and sent to Institut Pasteur of Bangui for testing. Laboratory results are still pending. A death was reported in week 42 (week ending on 12 October 2018).

Since the beginning of the outbreak on 02 October 2018, as of 20 of October 2018, a total of 52 suspected hepatitis E cases have been reported including 29 confirmed cases and two deaths (CFR 3.8%). The age range of cases was 7 to 80 years old, with the 10 to 24 years and the 25 to 59 years age groups representing 42% and 40% of cases, respectively. Forty-five percent of the confirmed cases are women.

Sixteen localities of Bokarange-Koui health district, namely Barrage II, Barage I, Bolere, Mandja, Bidanga, Bolara, Bolare, camp Commercial, Eremandji, Camp mission, Didanga, Gaiboula, Makondji-Wali, Mandja, Mbilai and Sara are affected and reporting new cases. Barage II and Barague I remain the most affected localities with 32% (n=17) and 15% (n=8) of reported cases, respectively. The two localities that reported deaths are Makondji-Wali and Bolere. Ten cases are currently followed as outpatients. To date no hospital admission has been reported for hepatitis E.

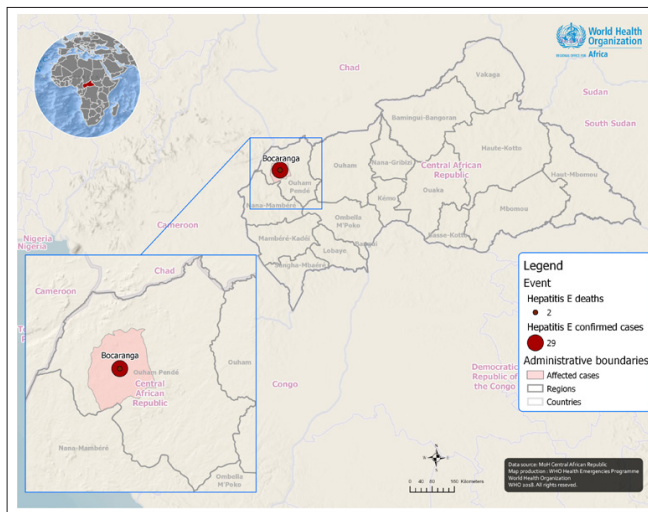
PUBLIC HEALTH ACTIONS

- The Ministry of Health (MoH) is supporting the coordination of response activities, with support from WHO.
- Meetings of MoH and partners are regularly organized to mobilize funds and to discuss challenges in the response.
- The hepatitis E revised response plan has been finalized.
- Active case search by community health workers and administrative authorities have started in affected areas.
- In-depth epidemiological investigation of the outbreak is ongoing with the support of MoH delegates (updates of the line list and outpatient treatment lists).
- WHO provided emergency health kits to support the implementation of free outpatient's care services.
- MSF-Spain is supporting Bocaranga Health District Hospital in case management, active search of cases, and referral of community cases to the hospital.
- Door-to-door awareness campaigns are ongoing, carried out by community relays, with the support of CORDAID and IRC.
- Tests for water quality and disinfection of wells are ongoing in affected areas. CORDAID is deploying a WASH specialist and kits in order to accelerate well disinfection activity and provide potable water to the population.
- A task force for hepatitis E under the leadership of the health cluster has been created to follow up on the implementation of all recommendations regarding hepatitis E response.

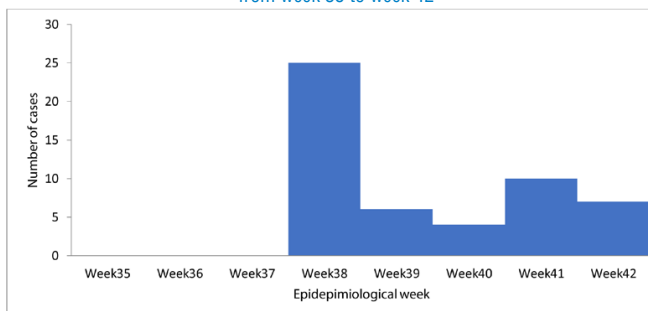
SITUATION INTERPRETATION

Three weeks after the declaration of the hepatitis E outbreak in Bokacaranga Koui Health district, Central African Republic, new localities are reporting cases. The situation in this district remains a concern due to the high levels of insecurity. Most health infrastructures are non-functional and suffer from insufficiently qualified health personnel. Furthermore, the affected population continues to live in suboptimal conditions with poor sanitation and hygiene conditions, and limited access to potable water. If these risk factors are not addressed, there is a risk that this outbreak could spread to other localities in Bokacaranga Koui district. The national authorities and partners need to intensify and scale up implementation of key conventional hepatitis E control activities to end this outbreak.

Geographical distribution of hepatitis E cases and deaths in Central African Republic, 5 - 21 October 2018



Weekly trend of hepatitis E cases in Central African Republic from week 38 to week 42



Summary of major issues challenges, and proposed actions

Major issues and challenges

- The cumulative number of EVD cases (confirmed and probable) reported in this outbreak has surpassed the number of EVD cases reported during the 2007 outbreak in Mweka. Despite significant improvements over the past weeks, notably in terms of vaccinations, community engagement and risk communication, the continued emergence of new cases from Beni, especially near security 'red zones', clearly indicates that the situation remains critical and that strong response measures need to be prioritized. The notification of new cases among healthcare workers also suggests a gap in IPC measures implementation.
- The dengue epidemic in Senegal continues to evolve and the situation is worsening, particularly in Touba district which is a highly populated district and whose population rapidly increased over the weekend due to the mass gathering during the grand Magal which was held on 28 October 2018. Although only one death has been reported since the beginning of the outbreak, dengue case management may not be adapted to the current epidemic context where free care has not yet been introduced and health care staff are not adequately trained in the management of dengue patients, including severe dengue cases.

Proposed actions

- The increasing number of EVD cases and contacts to be followed, mainly in the Beni Health Zone, requires a strengthening of human and material resources as well as medical input. The continued security incidents and persistent community resistance suggests the need to rapidly adapt response strategies with a focus on strengthening community engagement activities. Finally, IPC measures implementation should be enhanced in order to reduce the risk of nosocomial infections, notably among health care workers.
- In order to prevent the spread of the current dengue outbreak, national and international actors need to urgently enhance surveillance, particularly cross-border. Vector control must be strengthened and challenges regarding the water situation should be addressed in affected regions in order to prevent further spread of the vector. Furthermore, healthcare workers should be orientated in clinical detection and management of dengue patients in order to reduce mortality rates from severe dengue.

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										
Central African Republic	Yellow fever	Ungraded	20-Oct-18	19-Oct-18	20-Oct-18	2	2	0	0.0%	A total of two cases have been confirmed by RT-PCR for Yellow fever at Institut Pasteur de Bangui. Of the cases, one is a five-year-old male from Bangui City and the other is an 80-year-old female from Bocaranga City in l'Ouham Pendé Prefecture. Detailed investigation is ongoing to gather additional information concerning vaccination history of the cases as well as immunization coverage in the affected areas. The samples have been sent to Institut Pasteur Dakar for confirmatory testing.
Ethiopia	Yellow fever	Ungraded	4-Oct-18	21-Aug-18	26-Oct-18	38	5	11	28.9%	From 21 August through 26 October 2018, a total of 38 cases (33 suspected and 5 confirmed cases), including 11 deaths (CFR 29%), were reported from South Nation, Nationalities and Peoples (SNNP) Region of southwest Ethiopia neighbouring South Sudan and Kenya. Of 21 samples sent to Institut Pasteur Dakar for confirmatory test, preliminary results showed five cases positive for YF IgM with two cases also positive on PCR for YF. None of the cases had history of travel and none had history of yellow fever vaccination.
Mauritania	Dengue fever	Ungraded	26-Oct-18	15-Sep-18	26-Oct-18	65	65	0	0.0%	WHO has been notified of 65 confirmed cases of Dengue fever reported across six regions of the country since mid-september. Test results from the National Institute of Research and Public Health (INRSP) confirmed the cases for Dengue virus serotype II infection. Additional investigation is ongoing.
Ongoing events										
Botswana	Acute watery diarrhoea (AWD)	Ungraded	19-Sep-18	3-Sep-18	24-Oct-18	37 298	352	36	-	The outbreak peaked in week 38 (7672 cases). Case numbers decreased to 3969 cases in week 42. Three districts (Gaborone, Kanye and North-east) are still in active epidemic phase based on their district-specific thresholds. Rotavirus was detected in 67% of a total of 228 samples tested by the National Health Laboratory (NHL).
Cameroon	Humanitarian crisis	Protracted 2	31-Dec-13	27-Jun-17	18-Sep-18	-	-	-	-	The situation 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 other regions, similar trends are noted with huge influx of refugees from neighbouring Central African Republic.
Cameroon	Cholera	G1	24-May-18	18-May-18	23-Oct-18	600	51	40	6.7%	Detailed update given above.
Central African Republic	Humanitarian crisis	Protracted 2	11-Dec-13	11-Dec-13	5-Sep-18	-	-	-	-	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.

Country	Event	Grade†	WHO notified	Start of reporting period	End of reporting period	Total cases	Confirmed cases	Deaths	CFR	Comments
Central African Republic	Monkeypox	Ungraded	20-Mar-18	2-Mar-18	9-Oct-18	35	14	1	2.9%	On 9 October 2018, Central African Republic reported six cases of monkeypox in Mbaiki district. All cases are from the same village, in a forest area. Five of the cases belonging to the same household were sampled, of which three were confirmed for monkeypox infection at Institut Pasteur de Bangui. Test results for the remaining two are pending.
Central African Republic	Hepatitis E	Ungraded	2-Oct-18	10-Sep-18	20-Oct-18	52	29	2	3.8%	Detailed update given above.
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 zero deaths were reported. This is an increase in the number of cases compared to the previous week when 122 cases with one death were reported. Twelve districts: Faya, Mondo, Moussoro, Amzoer, Iriba, Kalait, Chadra, Oum Hadjer, Mangalme, Biltine, Isseriom and Ngouri have reported at least five cases in the past four weeks.
Democratic Republic of the Congo	Humanitarian crisis	G3	20-Dec-16	17-Apr-17	14-Oct-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		16-Jan-15	1-Jan-18	14-Oct-18	23 060	-	791	3.4%	A total of 559 suspected cases of cholera including seven deaths (CFR 1.25%) were reported during week 41 (week ending 14 October 2018). The five (5) most affected provinces (Eastern Kasai, Kongo Central, Lomami, Tanganyika and South Kivu) notified 91.2% of the cases and 85.7% of all deaths. There has been a declining trend in the weekly number of cases for the past four weeks.
Democratic Republic of the Congo	Ebola virus disease	G3	31-Jul-18	11-May-18	26-Oct-18	266	231	168	57.6%	Detailed update given above.
Democratic Republic of the Congo	Measles	Ungraded	10-Jan-17	1-Jan-18	14-Oct-18	34 621	505	437	1.3%	During week 41 (week ending 14 October 2018), 2 253 suspected cases including 35 deaths (CFR: 1.6%) were reported across the country. Ninety-two percent (92%) of all cases and 71% of all deaths were reported from six provinces namely; Upper Katanga, Upper Lomami, Tshopo, Kasai Oriental, Tanganyika and Ituri. Since week 23, there has been an increasing trend in the weekly number of cases.
Democratic Republic of Congo	Monkeypox	Ungraded	n/a	1-Jan-18	14-Oct-18	3 057	-	63	2.1%	During week 41 (week ending 14 October 2018), 49 suspected cases with zero deaths were reported across the country. 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	Poliomyelitis (cVDPV2)	G2	15-Feb-18	n/a	19-Oct-18	38	38	0	0.0%	The country is affected by three separate strains of circulating vaccine-derived polio virus since 2017. Distribution of cases by provinces are as follow: Tanganyika (15 cases), Haut-Lomami (9 cases), Mongala (8 cases), Maniema (2 cases), Haut Katanga (2 cases), and Ituri (2 case).

Country	Event	Grade†	WHO notified	Start of reporting period	End of reporting period	Total cases	Confirmed cases	Deaths	CFR	Comments
Democratic Republic of Congo	Rabies	Ungraded	19-Feb-18	1-Jan-18	23-Sep-18	25	0	25	100%	In epi week 38 (week ending 23 September 2018), two new cases were reported. From week 1 to 38, a total of 25 cases of probable rabies have been reported. Case fatality ratio is 100%.
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). Cases are from Ango District in Bas Uele Province, Yalifafu district in Tshuapa Province and Lualaba Province.
Ethiopia	Humanitarian crisis	G2	15-Nov-15	n/a	14-Oct-18	-	-	-	-	The latest humanitarian report shows that 2 881 975 people are internally displaced across Ethiopia with Somali (1 091 210) and Oromia (931 802) regions being the most affected. Renewed violence over the past three weeks in Benishangul Gumuz has led to a surge in internal displacement of between 93 000 to 113 152 people. High disease burden due to malaria, dysentery, typhoid fever, and severe acute malnutrition have been reported among IDPs. Limited staff and medical supplies coupled with insecurity in some areas continue to hinder access to services among the affected population.
Ethiopia	Acute watery diarrhoea (AWD)	Protracted 1	15-Nov-15	1-Jan-18	14-Oct-18	3 036	-	18	0.6%	In 2018, cases have been reported from five regions, namely; Oromia, Dire Dawa, Somalia, Tigray and Afar. There has been a general decline since the peak in week 33 when more than 500 cases were reported. In week 41 (ending 14 October 2018), 48 cases of AWD were reported from two regions: Oromia (7) and Tigray (41).
Ethiopia	Measles	Protracted 1	14-Jan-17	1-Jan-18	14-Oct-18	3 309	949	-	-	Sixty-six new cases were reported from ten regions in week 41 (ending 14 October 2018) with majority of the cases reported from Oromia (22) and Somalia (20). Of the 949 cumulative confirmed cases in 2018, 202 are lab-confirmed, 687 epi-linked and 60 clinically compatible.
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	23-Sep-18	1 746	440	0	0.0%	A measles outbreak was detected in epidemiological week 8, 2018. Cases have 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 38, 10 new suspected cases were reported including 5 IgM positive cases. The number of cases has been decreasing gradually during the last four epidemiological weeks (week 35 to 38). In these last four weeks, 53 suspected cases reported, 46 samples received in the laboratory, including 20 confirmed cases in 16 sub-prefectures. Since the beginning of the year, a total of 1 746 suspected cases were reported.

Country	Event	Grade†	WHO notified	Start of reporting period	End of reporting period	Total cases	Confirmed cases	Deaths	CFR	Comments
Kenya	Cholera	Ungraded	8-Sep-18	8-Sep-18	16-Oct-18	5	4	0	0.0%	Between 8 September 2018 and 9 October 2018, four confirmed cases of cholera were reported from Turkana County (2) and Embu County (2). All the cases are epidemiologically linked to Nairobi, Embakasi East sub county. The first case was notified from Kakuma refugee camp in Turkana West sub county, Turkana county.
Kenya	Measles	Ungraded	19-Feb-18	19-Feb-18	22-Oct-18	541	48	1	0.2%	Since the beginning of the year, five counties have reported measles outbreaks namely; Mandera, Wajir, Garissa, Nairobi and Kitui. The outbreak is still active in Mandera, Garissa, Nairobi and Wajir Counties.
Liberia	Measles	Ungraded	24-Sep-17	1-Jan-18	14-Oct-18	3 774	3 477	16	0.4%	Thirty suspected cases including seven IgM-positive cases were reported during week 41 (ending 14 October 2018) across the country. Jorwein district in Rivercess County is the latest to reached epidemic threshold. Five counties namely; Grand Gedeh, Bong, Margibi, Nimba, and Rivercess have ongoing outbreaks. Of the 3 477 cumulative confirmed cases reported in 2018, 293 are laboratory confirmed, epi-linked 453 and clinically confirmed 2 731.
Madagascar	Plague	Ungraded	19-Aug-18	19-Aug-18	17-Oct-18	83	21	7	8.4%	From 19 August 2018 to 17 October 2018, 21 confirmed cases with seven deaths (case fatality ratio 8.4%) were reported across six regions in the country. These include 16 bubonic cases with two deaths and five pneumonic cases with five deaths. Six regions are affected: Bongolava (6), Atsimo Atsinanana (5), Amoron'I Mania (3), Haute-Matsiatra (3), Analamanga (2) and Itasy (2).
Mali	Humanitarian crisis	Protracted 1	n/a	n/a	12-Oct-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 crisis, including 61 404 IDPs and 140 000 refugees in neighbouring countries such as Niger, Mauritania and Burkina Faso (data from CMP report, 7 June 2018).
Mali	Severe Acute Malnutrition	Ungraded	1-Aug-18	15-Mar-18	5-Aug-18	224	0	40	17.9%	Three villages (Douna, Niagassadiou and Tiguila) 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. A dozen samples from patients analyzed at INRSP in Bamako showed iron deficiency anaemia.
Mali	Measles	Ungraded	20-Feb-18	1-Jan-18	21-Oct-18	1 331	381	0	0.0%	Forty-six suspected cases were reported in week 42 across the country. Of the cumulative 1 021 blood samples that have been tested, 348 were confirmed (IgM-positive) at the National Public Health Reference Laboratory (INRSP). The affected health districts are Maciana, Bougouni, Kati, Koutiala, Kokolani, Kolondieba, Ouélessebougou, Sikasso, Douentza, Macina, Tombouctou, Dioila, Taoudenit and Kalabancoro.

Country	Event	Grade†	WHO notified	Start of reporting period	End of reporting period	Total cases	Confirmed cases	Deaths	CFR	Comments
Mauritius	Measles	Ungraded	23-May-18	19-Mar-18	21-Oct-18	1 167	1 167	4	0.3%	During week 42 (ending 21 October 2018), 32 new onfirmed cases were reported across the country. Of 17 throat swab analyzed, the genotype D8 was detected in 13 samples. The trend is decreasing since the peak in week 37. The most affected districts are Port Louis and Black River.
Namibia	Hepatitis E	G1	18-Dec-17	8-Sep-17	14-Oct-18	3 673	540	31	0.8%	As of 14 October 2018, seven out of 14 regions in Namibia have been affected by the HEV outbreak namely; Khomas, Omusati, Erongo, Oshana, Oshikoto, Kavango, and Ohangwena regions. Khomas Region remains the most affected accounting for 69% of the cumulative cases reported. Cases reported across the country are mainly from informal settlements with limited access to clean water and sanitation services.
Niger	Humanitarian crisis	G2	1-Feb-15	1-Feb-15	3-Oct-18	-	-	-	-	The country continues to face food insecurity, malnutrition, and health crises due to drought, floods, and epidemics. The insecurity instigated by Boko Haram group persists in the country.
Niger	Cholera	G2	13-Jul-18	13-Jul-18	21-Oct-18	3 767	34	74	2.0%	In week 42, nine new cases with zero deaths were reported across the country. The weekly number of cases continue to show a downward trend since week 37. The most affected area remains Madarounfa Health District in Maradi Region accounting for about 70% of the cumulative cases reported. Other affected regions include Tahoua, Dosso and Zinder.
Niger	Circulating vaccine-derived polio virus type 2 (cVDPV2)	G2	8-Jul-18	8-Jul-18	14-Oct-18	6	6	1	16.7%	Genomic sequencing shows that the six cases of circulating vaccine-derived poliovirus type 2 (cVDPV2) reported from Zinder Province in Niger since 28 september 2018 are linked to the ongoing cVDPV2 outbreak in Jigawa, Nigeria.
Nigeria	Humanitarian crisis	Protracted 3	10-Oct-16	n/a	10-Oct-18	-	-	-	-	Since the start of the conflict in 2009, more than 27 000 people have been killed in Borno, Adamawa, and Yobe states while thousands of girls and women abducted and children used as so-called "suicide" bombers. About 1.8 million people are internally displaced in these states.
Nigeria	Cholera	G1	7-Jun-17	1-Jan-18	7-Oct-18	39 540	47	804	2.0%	In week 40 (week ending 7 October 2018), 1 210 suspected cases including nine deaths (CFR 0.7%) were reported from six states: Zamfara (327 cases with three deaths), Katsina (342 cases), Borno (363 cases with two deaths), Adamawa (80 cases with three deaths), Gombe (18 cases), and Yobe (84 cases with one death). There is an overall downward trend but the number of cases in Katsina State remains very high.
Nigeria	Lassa fever	Ungraded	24-Mar-15	1-Jan-18	21-Oct-18	555	539	155	27.9%	In week 42 (week ending 21 October 2018), three new confirmed cases with two deaths were reported from Ondo State. This is a decrease compared to the previous week when 13 confirmed cases were reported. From week 38 to 41 an increasing trend in the number of cases has been noted. Sixteen states have exited the active phase of the outbreak while six states- Edo, Delta, Ondo, Ebonyi, Kogi and Imo states remain active.

Country	Event	Grade†	WHO notified	Start of reporting period	End of reporting period	Total cases	Confirmed cases	Deaths	CFR	Comments
Nigeria	Measles	Ungraded	25-Sep-17	1-Jan-18	7-Oct-18	14 671	901	116	0.8%	In week 39 (week ending 30 September 2018), 124 suspected cases of measles were reported from 30 states. Since the beginning of the year, a total of 14 433 suspected measles cases with 901 laboratory confirmed cases and 116 deaths (CFR 0.8%) were reported from 36 States and Federal Capital Territory compared with 18 292 suspected cases with 108 laboratory confirmed and 105 deaths (CFR 0.57%) from 37 States during the same period in 2017.
Nigeria	Monkeypox	Ungraded	26-Sep-17	24-Sep-17	13-Oct-18	280	116	8	2.9%	On 13 October 2018, the Ministry of Health of Israel reported a confirmed case of monkeypox in a person with travel history to Nigeria. The monkeypox outbreak has been ongoing in Nigeria since September 2017, with cases reported from 26 States and the Federal Capital Territory (FCT). Rivers State is the most affected having reported 58 cases.
Nigeria	Poliomyelitis (cVDPV2)	Ungraded	1-Jun-18	1-Jan-18	23-Oct-18	17	17	0	0.0%	One new case was reported from Katsina, with onset of paralysis on 16 September. The latest case from Katsina is linked to a cVDPV2 originating in Jigawa. Separately, Nigeria is affected by a second cVDPV2 outbreak, centred around Sokoto state.
Nigeria	Yellow fever	Ungraded	14-Sep-17	7-Sep-17	7-Oct-18	3 162	47	54	1.7%	Six presumptive positive cases and two inconclusive case were reported from three of the diagnostic laboratories during week 40 (week ending 7 October 2018). From the onset of this outbreak on 12 September 2017, a total of 3 162 suspected yellow fever cases including 54 deaths have been reported as at week 40 from 564 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 145 presumptive positive and inconclusive samples tested.
São Tomé and Príncipe	Necrotising cellulitis/fasciitis	Protracted 2	10-Jan-17	25-Sep-16	21-Oct-18	3 031	-	0	0.0%	During week 42 (week ending on 21 October 2018), 20 new cases were notified across six districts. Of the cases notified, 11 were hospitalized. The national attack rate as of week 42 is 15.3 per 100 000. Sixty-eight percent (68%) of the total cases reported during the last nine weeks are from Me-zochi (43%) and Cantagalo (25%) districts.
Senegal	Dengue fever	Ungraded	21-Sep-18	19-Sep-18	27-Oct-18	145	145	1	0.7%	Detailed update given above.
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.

Country	Event	Grade†	WHO notified	Start of reporting period	End of reporting period	Total cases	Confirmed cases	Deaths	CFR	Comments
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. Attack on humanitarian workers by various militias, inter-communal violence and cattle raiding continue.
South Sudan	Hepatitis E	Ungraded	-	3-Jan-18	14-Oct-18	152	19	-	-	Zero new cases were reported in week 40 (ending 7 October 2018). The last reported cases were in week 39 when two cases were reported from Bentiu PoC. Of the cumulative cases reported in 2018, 139 are from Bentiu PoC and 13 from Old Fangok. Since week 36, no new cases have been reported from Old Fangok.
Tanzania	Cholera	Protracted 1	20-Aug-15	1-Jan-18	21-Oct-18	4 256	50	82	1.9%	During week 42(week ending 21 October 2018), 20 new cases with zero deaths were reported from Ngorongoro DC (18 cases, zero deaths) in Arusha Region and Songwe DC (two cases, zero deaths) in Songwe Region. Cholera cases reported from week 1 to 42 in 2018 increased and nearly doubled compared to the same period in 2017 (3 081 cases). Since week 38 in 2018, there has been a dramatic decline in the number of cases reported weekly.
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.
Uganda	Cholera	Ungraded	10-Oct-18	10-Oct-18	11-Oct-18	8	2	1	12.5%	The Cholera outbreak was notified in Kampala on 10 October 2018 after laboratory confirmation of two cases. The two cases are children of 5 and 7 years old from Mubalak Zone, Makindye division that were admitted in Mulago National Referral Hospital. The laboratory results have confirmed the two cases to be infected with <i>Vibrio cholerae</i> subtype Ogawa. Six more suspected cases have been reported in Hoima (5) and Kikuube district (1 death) since 3 October 2018. Sixty per cent of the suspected cases are reported to have tested RDT positive for cholera and their stool samples were shipped for <i>Vibrio cholerae</i> culture. Culture results from Central Public Health Laboratories have not yet been released.
Uganda	Crimean-Congo haemorrhagic fever (CCHF)	Ungraded	24-May-18	-	23-Oct-18	10	6	2	20.0%	One new case involving a 30-year-old female from Kabarole District tested positive for CCHF and is currently in admission under-going treatment. Presentation was initially with high fever, tremors and later developed history of bleeding from the nose.

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	30-Sep-18	2 946	771	1	0.0%	As of 16 October 2018, a total of 2 946 cases have been reported of which 771 cases have been confirmed either by epidemiological link or laboratory testing since the beginning of the year. Five hundred and twelve (512) cases were laboratory confirmed by IgM. One death has been reported among the confirmed cases. Fifty-four districts in the country have reported a measles outbreak.
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 butchers.
Zimbabwe	Cholera	G2	6-Sep-18	6-Sep-18	26-Oct-18	9 815	261	55	0.6%	Cases have been reported from 19 provinces across the country. Harare City is the most affected constituting about 97% of the cumulative cases reported. The main affected areas in Harare are Glen View and Budiriro suburbs. A downward trend in case incidence has been observed since week 39.
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										
Angola	Cholera	G1	2-Jan-18	21-Dec-17	29-Jul-18	990	12	19	1.9%	On 21 December 2017, 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 fourteen districts in Luanda Province. Twelve cases have been confirmed 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%).

Country	Event	Grade†	WHO notified	Start of reporting period	End of reporting period	Total cases	Confirmed cases	Deaths	CFR	Comments
Liberia	Yellow fever	Ungraded	16-Sep-18	3-Sep-18	12-Oct-18	1	1	0	0.0%	On 27 August 2018, a 2-year-old female from Farina Town, Barclayville District, Grand Kru County, Southeastern Liberia developed symptoms of fever, jaundice, cough and convulsion. She presented at a health facility in the district on 3 September 2018 for treatment. The case had no history of yellow fever vaccination and epidemiological investigation revealed that both parents are farmers whose farm is located in the forest. Specimen sent to Institute Pasteur Dakar (IPD) tested positive by ELISA, PCR, and PRNT tests on 1 October 2018 thus confirming yellow fever infection. No new confirmed case has been reported for more than three consecutive weeks.
South Africa	Cholera	Ungraded	5-Oct-18	29-Sep-18	9-Oct-18	2	2	0	0.0%	Two cases of cholera were confirmed in Gauteng Province, South Africa involving a couple. One of the cases had travel history to Zimbabwe and developed had onset of symptoms in Zimbabwe before returning to South Africa. The pathogen identified is <i>Vibrio cholerae</i> O1 serotype Ogawa. No new case has been reported since 9 October 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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