

WEEKLY BULLETIN ON OUTBREAKS AND OTHER EMERGENCIES

Week 1: 29 December 2018 – 4 January 2019
Data as reported by 17:00; 4 January 2019

2

New events

58

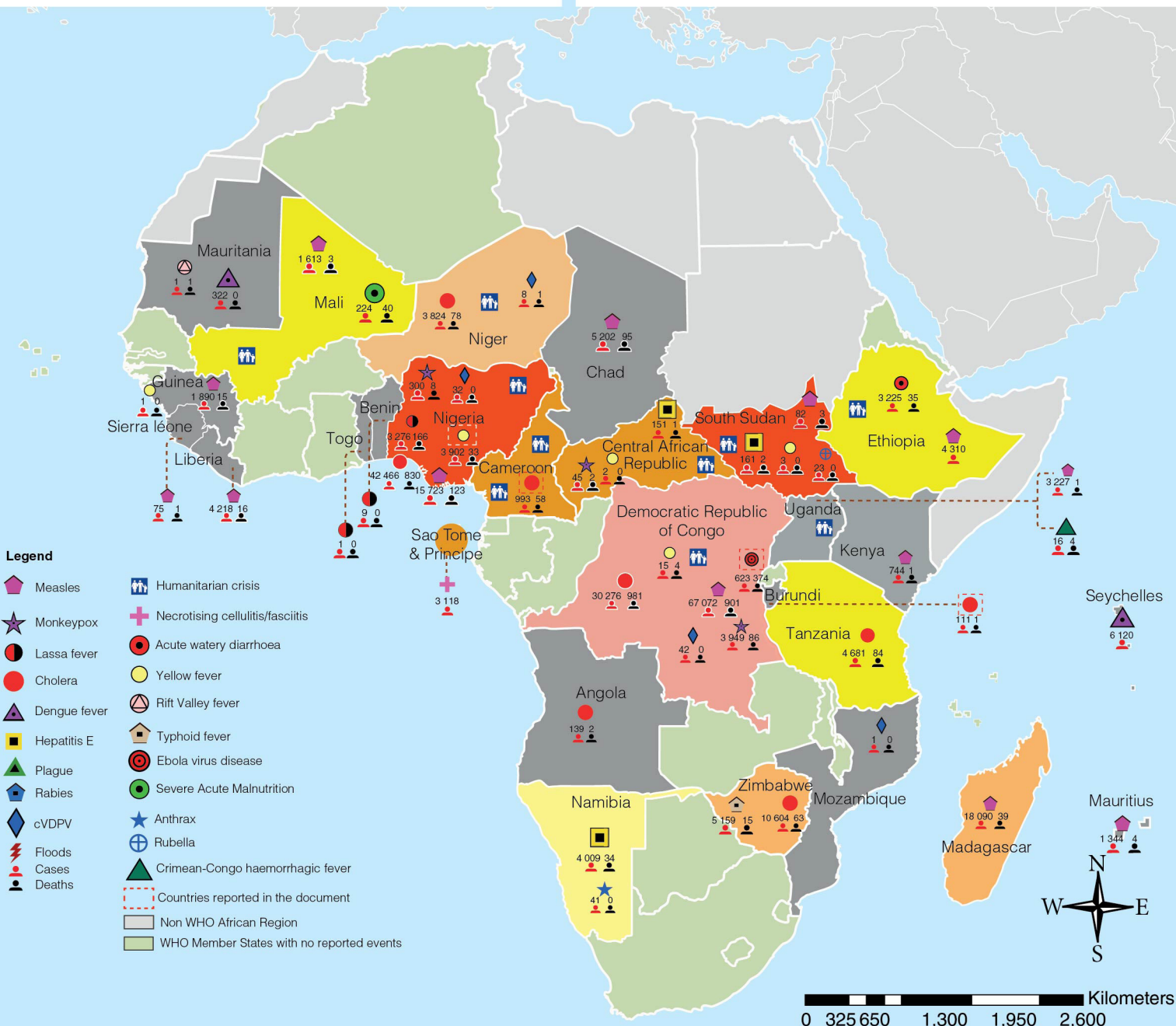
Ongoing events

49

Outbreaks

11

Humanitarian crises



Graded events †

2

Grade 3 events

8

Grade 2 events

3

Grade 1 events

2

Protracted 3 events

3

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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 (WHE) is currently monitoring 60 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 Burundi](#)
- [Cholera in Cameroon](#)
- [Yellow fever in Nigeria.](#)

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

➤ **Major issues and challenges include:**

- The Ebola virus disease (EVD) outbreak in the Democratic Republic of the Congo (DRC) is in a critical phase as it enters its sixth month since the declaration of the outbreak. Despite the use of an effective vaccine, novel therapeutics as well as other EVD strategic interventions, the outbreak is persisting due to security challenges, pockets of community reluctance and inadequate infection prevention and control in some health facilities. Nevertheless, WHO and partners, under the government's leadership, continue to respond to the EVD outbreak and remain committed to containing the outbreak.
- The Ministry of Health of Burundi has declared a new outbreak of cholera in the country. This outbreak, which is rapidly evolving, is particularly affecting people living in overcrowded areas, where sanitation conditions are precarious. Given that the risk factors for transmission of water-borne diseases are prevalent in the affected communities, there is a need to aggressively tackle this outbreak at its early stage using relevant sectors in order to avoid further spread.

Ongoing events

Ebola virus disease

Democratic Republic of the Congo

623
Cases

374
Deaths

60%
CFR

EVENT DESCRIPTION

The Ebola virus disease (EVD) outbreak in North Kivu and Ituri provinces, Democratic Republic of the Congo persists and continues to be closely monitored. Since the last report on 28 December 2018 (*Weekly Bulletin 52*), 27 new confirmed EVD cases and 13 new deaths have been reported. On 5 January 2019, nine new confirmed case were reported from in Butembo (4), Kalunguta (1), Katwa (1), Kyondo (1) and Oicha (2). Two of these cases were known contacts of a previous known case and investigations are ongoing to find the epidemiological link for the other cases. No new deaths were reported among the new confirmed cases of this day. A health worker was identified retrospectively among the cases following a database update. The number of healthcare workers infected is now 55, with 18 deaths.

As of 5 January 2019, there have been a total of 623 EVD cases, including 575 confirmed and 48 probable cases. To date, confirmed cases have been reported from 16 health zones: Beni (218), Biena (1), Butembo (46), Kalunguta (40), Katwa (86), Kyondo (8), Mabalako (88), Masereka (7), Musienene (4), Mutwanga (3), Oicha (23), and Vuhovi (8) in North Kivu Province; and Komanda (29), Mandima (17), Nyankunde (1), and Tchomia (2) in Ituri Province. Ten of the 16 affected health zones reported at least one new confirmed case in the previous 21 days (16 December 2018 to 5 January 2019). A total of 374 deaths were recorded, including 326 among confirmed cases, resulting in a case fatality ratio among confirmed cases of 57% (326/575).

Beni, Butembo, Katwa, and Oicha are the main hot spots of the outbreak, reporting respectively 14% (n=12), 19% (n=16), 26% (n=22), and 14% (n=12) of the 84 confirmed cases reported during the previous 21 days (16 December 2018 to 5 January 2019).

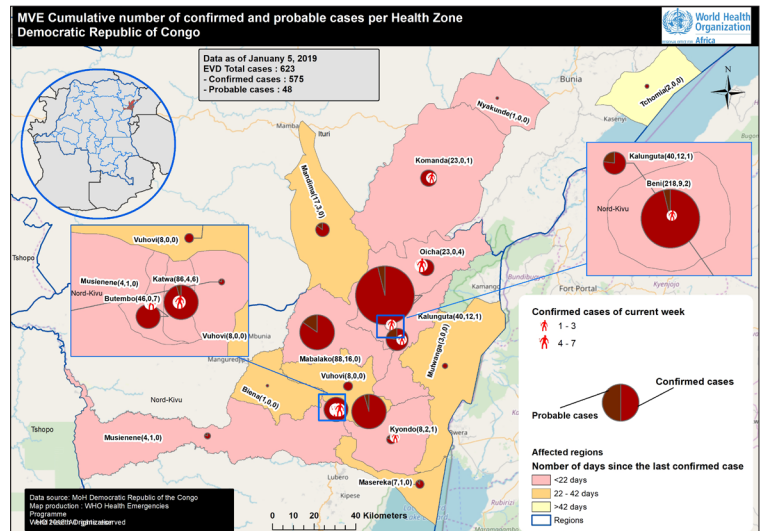
As of 5 January 2019, a total of 145 patients were hospitalized in ETCs and transit centres, of which 27 are confirmed cases. All confirmed cases are on compassionate therapy.

Contact tracing is undergoing in 12 health zones; however, it remains challenging due to insecurity and continuing pockets of community reluctance. On 5 January 2019, 209 new contacts were registered. The number of contacts being followed as of 5 January 2019 was 5 047, of whom 4 581 (91%) had been seen in the previous 24 hours. The proportion of contacts seen was 39% in Kyondo and above 85% in other Health Zones.

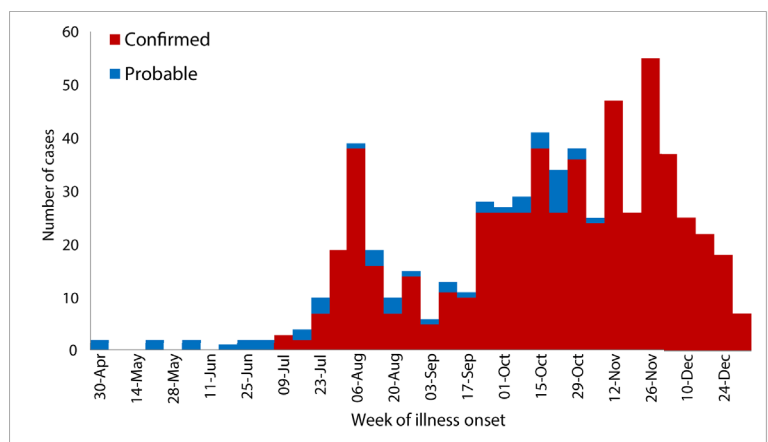
PUBLIC HEALTH ACTIONS

- All surveillance activities continue, including case investigations, active case finding in health facilities and communities, and identification and listing of contacts around the latest confirmed cases. Line-listing, contact follow-up, and active case search in Beni and Butembo are gradually resuming after disruption due to protests last week.
- On 5 January 2019, Point of Control Mavivi was destroyed by strangers at night. As of 5 January 2019, 64 of 75 PoE/PoC are functional and 253 767 travellers were screened.
- On 5 January 2019, a total of 535 new people was vaccinated in 14 rings in seven Health Zones, bringing the cumulative numbers vaccinated to 56 211.
- There are continued community reintegration activities for patients discharged from ETCs, along with psychoeducation sessions to strengthen community engagement and collaboration in the response.
- Infection prevention and control (IPC) and water, sanitation and hygiene (WASH) activities continue, with a gradual resumption of decontamination activities around confirmed cases in areas affected by last week's protests. In Komanda, 50 IPC hygienists have been deployed.
- Community awareness and mobilization sessions continue, with activities resuming in Beni and Oicha after the protests. Work is ongoing to improve communication activities in Musienene Health Zone.

Geographical distribution of confirmed and probable Ebola virus disease cases reported from 1 May to 5 January 2019, 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 as of 5 January 2019.



SITUATION INTERPRETATION

The Ebola outbreak in DRC is occurring in a particularly complex and challenging environment. WHO and partners, under the government's leadership, continue to respond to the outbreak despite recent disruptions caused by security challenges. The insecurity slowed down key response activities such as vaccinations, epidemiological surveillance, and contact tracing for several days. The resumption of these response activities is encouraging; however further interruptions could have serious negative consequences for timely containment of the outbreak.

[Go to overview](#)

[Go to map of the outbreaks](#)

EVENT DESCRIPTION

On 28 December 2018, the Ministry of Public Health and Fight Against AIDS of Burundi notified WHO of an outbreak of cholera in the Rumonge health district. The index case, from Teba locality, was confirmed on 25 December 2018, and the second case from Mutturirwa hill was confirmed on 26 December 2018. Both cases are from Rumonge health district. Although the daily case incidence peaked between 27 and 28 December 2018, additional cases continue to be reported.

From 25 December to 1 January 2019, a total of 111 cases with one death (case fatality ratio 0.9%) were reported from Rumonge health district. The majority (74%) of cases were reported from three localities out of 22 affected: Gatete (62 cases), Teba (12 cases) and Mutturirwa (8 cases). Two cases have been confirmed by the Laboratoire National de Santé Publique (INSP).

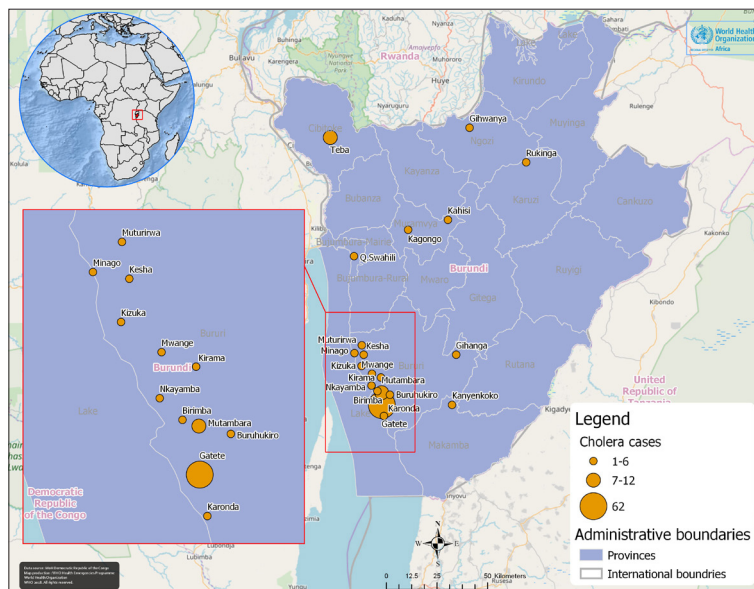
As of 1 January 2018, a total of 78 cases were still hospitalized, 30 were cured and discharged and two were lost to follow-up. The majority (70%) of admitted cases were children under 15 years old, and children under 5 years old represented 15% of cases. Males accounted for 54% of cases.

Investigations are ongoing to identify the source and possible epidemiological links between cases. Furthermore, Rumonge district faces a shortage of drinking water. This water shortage leads the population to consume water from Lake Tanganyika. The population at high risk include those living in overcrowded neighbourhoods where sanitation conditions are precarious.

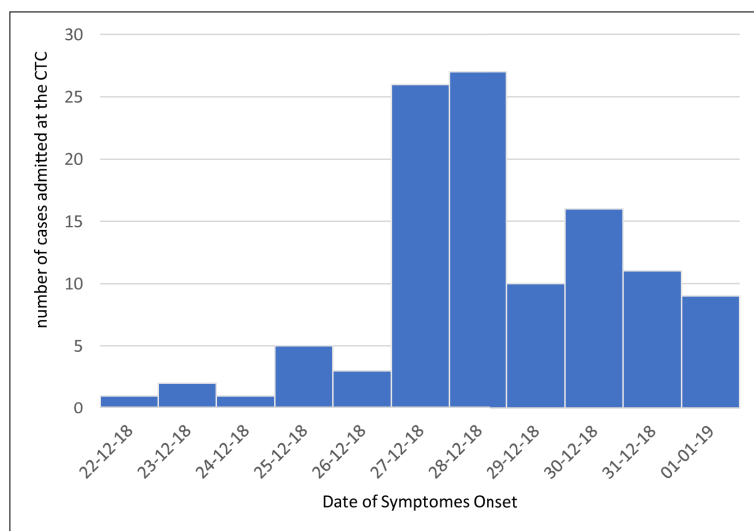
PUBLIC HEALTH ACTIONS

- A coordination meeting was held at local level with all authorities and partners, including WHO.
- A cholera treatment centre (CTC) was opened on 22 December 2018 and became operational on 28 December 2018, with support from Médecins Sans Frontières (MSF), with drugs and equipment for 100 cases.
- WHO is providing training for case management.
- Additional staff were recruited by MSF, with three doctors permanently at the CTC, a total of 18 nurses, 16 hygienists, four guards and one communicator.
- Outbreak declaration was relayed by the press to all national radio and television channels and WHO supported production of an audio spot broadcast in the Rumonge health district.
- Water, sanitation and hygiene (WASH) interventions started with disinfection of households and toilets carried out in Gatete, Romonge centre and Minago, with three water carriers installed by MSF in affected communities and in the CTC.
- The Minister for Water was asked to provide free safe water supplies until the end of the outbreak.

Geographical distribution of cholera cases and deaths in Burundi, 25 December 2018 - 1 January 2019



Number of cholera cases by date of symptom onset, 22 December 2018 to 1 January 2019, Burundi.



SITUATION INTERPRETATION

The outbreak of cholera in Burundi is of concern, particularly considering the rapid increase in the number of cases. The source of the outbreak has not yet been identified and there are gaps in key aspects of the WASH response. Since December 2018, torrential rains have caused flooding in areas around Lake Tanganyika resulting in overflowing latrines, septic tanks and sewers, particularly affecting people living in crowded areas. National authorities and partners need to urgently strengthen WASH and surveillance measures in order to rapidly contain this outbreak.

EVENT DESCRIPTION

The cholera outbreak that started on 18 May 2018 in Cameroon continues to improve in the affected regions. Since our last report on 16 November 2018 (*Weekly Bulletin 46*), 130 additional suspected cholera cases and four new deaths have been reported in two regions (Far North and North). The majority (59%) of these cases were reported from the North region (77 cases, 1 death), while 41% were reported in the Far North region (53 cases, 3 deaths). From 24 December 2018 to 1 January 2019, three new suspected cases were reported in the North region and one new community death was reported in the Far North region. The Centre and Littoral region have not reported new cases since 27 August 2018 and 11 October 2018, respectively.

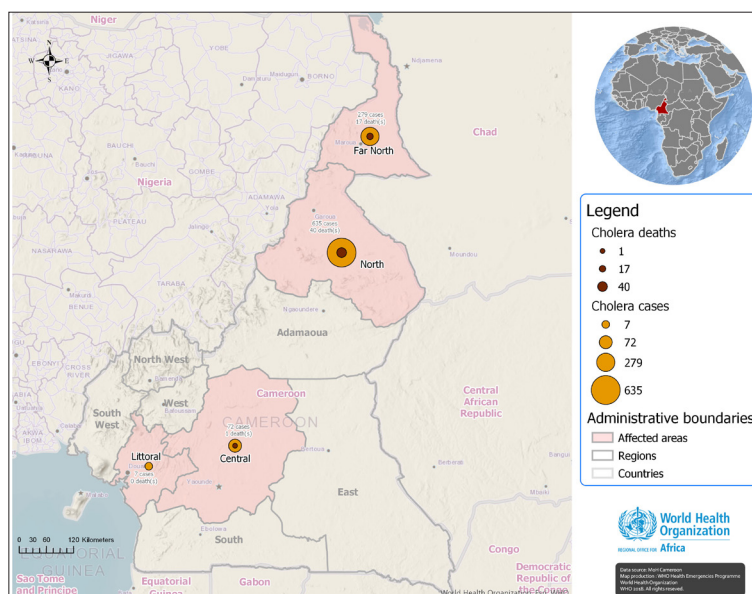
As of 31 December 2018, a cumulative total of 993 suspected cholera cases and 58 deaths (case fatality ratio 5.8%) have been reported in four of the 10 regions of the country. The majority (64%) of cases were reported in the North region (635 cases, 40 deaths), followed by Far North region (279 cases, 17 deaths), Centre region (72 cases, 1 death) and Littoral region (7 cases, 0 deaths). Most of the deaths (69%) occurred in the community while 31% were health facility deaths. All the deaths reported in the Far North region were in the community and most of them were due to security challenges that hindered access to health facilities at night.

Of 186 stool specimens collected and tested, 77 (41.4%) were confirmed positive for *Vibrio cholerae* O1 Inaba by culture.

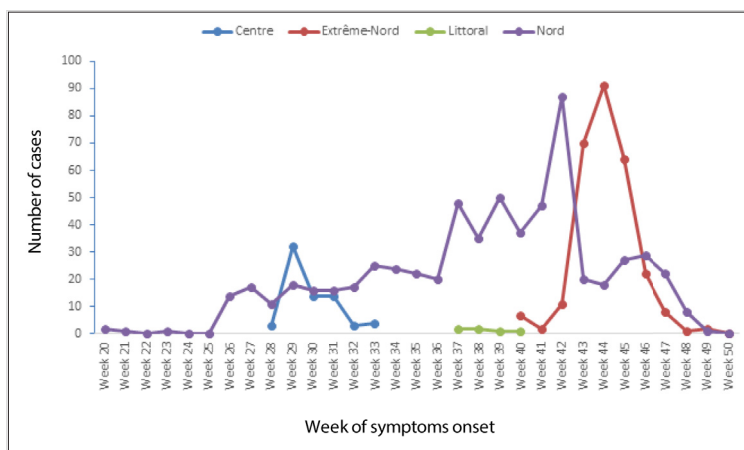
PUBLIC HEALTH ACTIONS

- The outbreak management system is in place in Far North region in response to the cholera outbreak.
- WHO, UNICEF, MSF, ALIMA, DEMTOU, AHA, MA SANTE continue to support response activities in the Far North region.
- WHO has handed over four laboratory kits for the confirmation of cholera cases to the laboratories of Centre Pasteur du Cameroun located in Yaoundé and its annex Garoua, as well as to the Laquintinie Laboratory in Douala and the CNPS reference laboratory in Maroua.
- An oral vaccination campaign against cholera was conducted from 12 to 16 December 2018 in the health areas of Fotokol and Sagme in the Far North Region. The objective of the campaign was to contribute in stopping the spread of the epidemic by achieving a coverage rate of more than 80%. Analysis of campaign data is underway.
- WHO has conducted a cholera risk assessment survey in the North and Far North regions to determine health areas at high risk of cholera transmission and to plan a large scale oral cholera vaccination campaign in North and Far North regions.
- There are continued risk communication activities in North and Far North regions including distribution of flyers and posters both in official and local languages, and community messaging on prevention and best practices.
- Two cholera treatment centres are available in the Far North region (one in Fotokol and the other in Sagme).

Geographical distribution of cholera cases and deaths in Cameroon, 18 May 2018 - 1 January 2019



Distribution of cholera cases by week of onset and affected region, Week 20 to 50, 2018, Cameroon



SITUATION INTERPRETATION

Seven months following the official declaration of the cholera outbreak in Cameroon, the situation has significantly improved. However, the rainy season in the north of the country and the security issues in the Far North have contributed to the persistence of transmission in the North and Far North regions. In addition, the high number of internally displaced persons and refugees registered in these areas has further complicated the public health response to this outbreak. Long term measures to prevent the reoccurrence of cholera outbreak have to be prioritized, especially active surveillance, public health education, social mobilization as well as WASH interventions. The vaccination campaign that was conducted in the Far North is crucial in order to protect the population; however, there is an urgent need to address key WASH issues otherwise the risk of transmission will still remain. The high case fatality ratio in the North and Far North regions and the high rate of deaths in the community underscore the necessity of strengthening the surveillance system as well as the quality of cholera case management in affected areas.

EVENT DESCRIPTION

The outbreak of yellow fever which started in Nigeria in September 2017 is ongoing. The cluster of yellow fever cases that emerged in Edo State (southern Nigeria) since late September 2018 is still active. Since our last report on 14 December 2018 (*Weekly Bulletin 50*), 494 new suspected cases and 31 additional deaths have been reported nationally. In Edo state, an additional 46 suspected cases and three deaths were reported over the past three weeks.

From the onset of the outbreak in September 2017, as of 30 December 2018, 4 004 suspected cases with 33 deaths (case fatality ratio 0.8%) have been reported from all 36 States and the Federal Capital Territory (FCT). Among the 3 451 samples that were tested, 237 were presumptive positives following testing in Nigerian national laboratories and 82 of these were confirmed for yellow fever after subsequent analyses at Institut Pasteur Dakar (IPD) - a WHO regional reference laboratory. The 82 confirmed cases are distributed across 14 states, notably: Anambra, Benue, Edo, Ekiti, FCT Abuja, Katsina, Kano, Kebbi, Kogi, Kwara, Nasarawa, Niger, Rivers and Zamfara States. A total of 13 deaths were reported among confirmed cases, resulting in a case fatality ratio of 16% in this group.

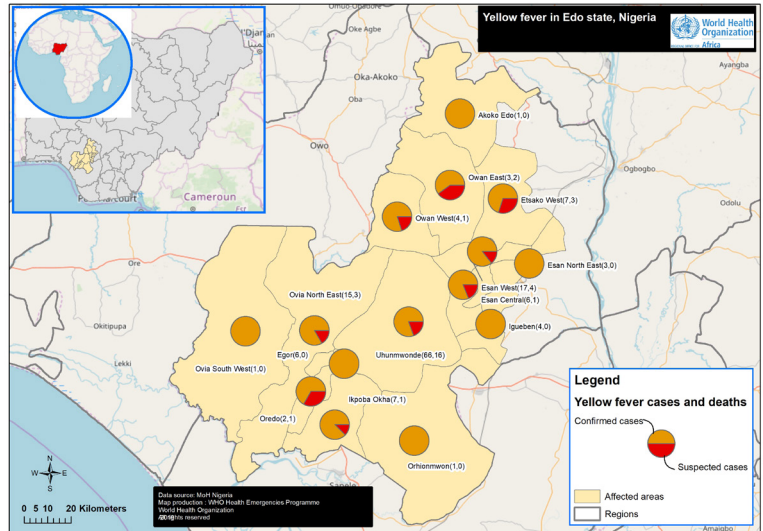
Between 22 September and 29 December 2018, a total of 143 suspected yellow fever cases, including 26 deaths (case fatality ratio 18%) were reported across 15 (out of 18) local government areas (LGAs) in Edo State. The majority (46%) of suspected cases came from Uhumwode LGA, a rural farming community whose population frequently travels to the nearby state capital, Benin City, with a population of 1.5 million people. Among the 119 samples tested, 42 were presumptive positives and 32 out of these were confirmed by IPD. The case fatality ratio among confirmed cases in Edo is 37.5% (n=12 deaths).

A large scale reactive yellow fever vaccination campaign was initiated in Edo State on 18 December 2018. The vaccination campaign implementation is ongoing in 13 LGAs. As of 24 December 2018, 1 466 588 people have been vaccinated.

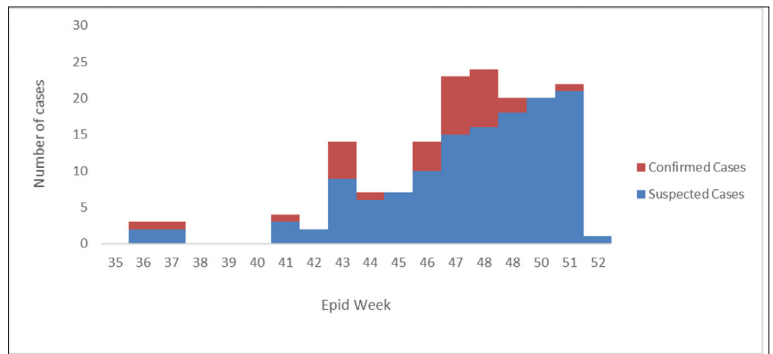
PUBLIC HEALTH ACTIONS

- WHO is providing technical support to the state and national authorities, including deploying three yellow fever experts to support the country response in Edo State.
- A National Rapid Response Team (RRT) has been deployed to Edo State to conduct epidemiological, entomological and laboratory investigations and support local response efforts.
- The RRT is working with the state health authorities, WHO and other partners to implement outbreak response activities, including active case search, sensitization of health workers and communities, and entomological surveillance.
- Active surveillance has been enhanced across the country, including active case search and case investigations of alerts.
- The International Coordinating Group (ICG) has approved 3.1 million doses of yellow fever vaccine from the global emergency vaccine stockpile for a large scale, immediate reactive mass vaccination campaign targeting 13 LGAs in Edo state. As of 24 December 2018, 1 466 588 people have been vaccinated.
- Implementation of vector surveillance and targeted vector control activities are ongoing, with emphasis on managing *Aedes* species.

Geographical distribution of yellow fever cases and deaths in Nigeria, September 2017 - 30 December 2018



Number of suspected and confirmed yellow fever cases by week of onset, Edo State, Nigeria



SITUATION INTERPRETATION

The continuation of the yellow fever outbreak in Nigeria and the rapid increase of the number of cases in Edo State is concerning. Nigeria is a high priority country for the Eliminate Yellow Fever Epidemic (EYE) strategy. As such, phased preventive yellow fever vaccination campaigns are planned to cover the entire country by 2024. Vaccination and targeted vector control measures are key interventions for the prevention and control of yellow fever. The effective implementation of these interventions is essential to interrupt transmission and bring the current outbreak under control. The outbreak in Edo state is occurring close to the state capital, Benin city, which is densely populated with high population movements due to national and international trade. The high population mobility and suboptimal vaccination coverage within Nigeria and in neighbouring countries, represent risk factors for the continued transmission and further spread of the disease.

Summary of major issues challenges, and proposed actions

Major issues and challenges

- ▶ The Ebola outbreak in DRC is occurring in one of the most complex environments possible. The volatile security context continues to hinder the implementation of key response activities such as vaccinations, epidemiological surveillance and contact tracing. The persistence of insecurity threatens to reverse recent progress achieved around disease hotspots such as Beni and Butembo.
- ▶ A new cholera outbreak has been reported in Burundi. The outbreak is of concern considering that there are gaps in key aspects of the WASH response and there is also the presence of risk factors in the affected area.

Proposed actions

- ▶ WHO and partners, under the government's leadership, continue to respond to the EVD outbreak and remain committed to ending it. The progressive resumption of key response activities following recent security challenges is encouraging; however, it is vital to ensure their continuation and intensification in order to rapidly contain this outbreak.
- ▶ WHO and partners should continue to support national authorities in order to urgently strengthen WASH and surveillance measures and rapidly control this cholera outbreak.

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										
Sierra Leone	Measles	Ungraded	2-Jan-19	21-Oct-18	2-Jan-19	75	8	1	1.3%	An outbreak of measles has been reported in Sierra Leone in districts on the border with Liberia and Guinea involving a total of 75 cases from two districts Pujehun, 16 cases as of 2 January 2019 and Kambia, 59 cases as of 31 December 2018.
Togo	Lassa fever	Ungraded	6-Jan-19	2-Jan-19	7-Jan-19	1	1	0	0.0%	The Doufelgou district notified a suspected case of Lassa fever on 02 January 2019. The case is a 20-year-old farmer who was living in Nigeria in the village of Ekwane (EWERO City) for about a year. He presented with fever and general status of weakness a month ago, and after consultations in different clinics in Nigeria, without clinical improvement, he decided to go back in Togo. The presumptive diagnosis of Lassa fever was made at CHP de Niamtougou in Togo, and the samples sent to the National referral Laboratory on disease of epidemic potential (NHI: National Hygiene Institute) turned positive for Lassa fever.
Ongoing events										
Angola	Cholera	Ungraded	20-Nov-18	9-Oct-18	12-Nov-18	139	-	2	1.4%	Two community deaths have been reported in this outbreak which began on 9 October 2018. The peak of the outbreak was in week 44 (week ending 4 November 2018) with 41 cases including one death reported. Since then, there has been a declining trend in the weekly number of cases. Papelao is the most affected area in Uige Province, reporting a total of 35 cases.
Benin	Lassa fever	Ungraded	7-Dec-18	7-Dec-18	3-Jan-19	9	6	0	0.0%	Of 16 cases notified as of 3 January 2019, six are confirmed, two are probable, one is a suspect under investigation, and seven are non-cases (tested negative). Five of the six confirmed cases reportedly have travel history from Taberu, Kwara State, Nigeria. The last confirmed case was reported on 28 December 2018. There are 27 contacts under follow-up as of 3 January 2019.
Burundi	Cholera	Ungraded	28-Oct-18	25-Dec-18	1-Jan-19	111	2	1	0.9%	Detailed update given above.

Country	Event	Grade†	WHO notified	Start of reporting period	End of reporting period	Total cases	Confirmed cases	Deaths	CFR	Comments
Cameroon (Far North, North, Adamawa & East)	Humanitarian crisis (Far North, North, Adamawa & East)	Protracted 2	31-Dec-13	27-Jun-17	23-Nov-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 a huge influx of refugees from the neighbouring Central African Republic. Humanitarian access also remains a challenge.
Cameroon (NW & SW)	Humanitarian crisis (NW & SW)	G2	1-Oct-16	27-Jun-18	7-Dec-18	-	-	-	-	The security situation in the North west and South West remain volatile. Clashes between secessionists and the army continue, triggering further displacement and disrupting the healthcare, education and livelihood systems, driving significant needs. This is impacting the health status of the population, and the possible occurrence of infectious disease outbreaks is a concern.
Cameroon	Cholera	G1	24-May-18	18-May-18	31-Dec-18	993	77	58	5.8%	Detailed update given above.
Central African Republic	Humanitarian crisis	Protracted 2	11-Dec-13	11-Dec-13	30-Dec-18	-	-	-	-	Security incidents and other crimes are recurring in many parts of the country. The major event of the week is marked by the attack on the city of Bakouma on December 31, 2018 led by a coalition of armed groups. The initial reports notified 3 seriously injured people who arrived at the district hospital in Bangassou, one of whom died as a result of his injuries. Displacement is reported towards Bangassou, 140 km south of the sub-prefecture.

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	23-Dec-18	45	25	2	4.4%	Since 2 October 2018, three clusters of monkeypox cases were reported from three health districts. Mbaiki district reported 9 cases, including 8 confirmed, from week 40 to week 46. Bangassou district reported 5 cases, including 3 confirmed, from week 46 to week 47. Bossembele district reported 15 cases, including 3 confirmed from week 46 to week 51. One death was reported in Bossembele. Previous clusters have occurred in three districts: Bangassou (weeks 9-11, nine cases including six confirmed), Bambari (weeks 13-16, 15 cases, including three confirmed) and Mbaiki (weeks 26-27, five cases, including two confirmed). One death had been reported among the previous confirmed cases.
Central African Republic	Hepatitis E	Ungraded	2-Oct-18	10-Sep-18	23-Dec-18	151	112	1	0.7%	In week 50 (week ending on 16 December 2018), one new confirmed case was reported. Since week 47, the number of confirmed cases has been decreasing progressively. Cases have been reported in Bocaranga-Koui Health District.
Central African Republic	Yellow fever	Ungraded	20-Oct-18	12-Aug-18	30-Dec-18	2	1	0	0.0%	One new suspected case from Bocaranga-Koui Health District tested IgM positive for yellow fever by IP Bangui on 7 December 2018. The patient was also positive for viral hepatitis E (positive IgM). The sample has been sent to IP Dakar for Confirmation. No additional suspected cases were reported as of 23 December 2018. The initial cases was confirmed from Bacaranga after a sample was tested in October 2018.
Chad	Measles	Ungraded	24-May-18	26-Apr-18	26-Dec-18	5 202	356	95	1.8%	As of 26 December 2018, the measles outbreak has been confirmed in 39 districts. The mean age of the affected population is nine and the investigation on 1 338 cases with information on vaccination shows that only 13% were vaccinated against measles. Currently vaccinations campaigns are ongoing and the outbreak is controlled in 31 districts.

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	G3	20-Dec-16	17-Apr-17	5-Jan-19	-	-	-	-	The humanitarian and security situation remains unpredictable because of the elections of December 30, 2018 whose results are expected. Inter-ethnic clashes in the province of Mai-Ndombe have caused about 302 deaths, several wounded, and a massive displacement of populations (estimated at about 24 000 people) towards the islets along the Congo River, Congo-Brazzaville and to other surrounding localities.
Democratic Republic of the Congo	Cholera		16-Jan-15	1-Jan-18	30-Dec-18	30 276	-	981	3.0%	A total of 394 suspected cases of cholera including 6 deaths (CFR: 1.5%) were reported during week 50. The number of suspected cases reported per week has dropped below 500 since the week 48 of 2018. Cases reported in the endemic provinces (South Kivu, Tanganyika, Haut Lomami and Haut Katanga) account for 74% of cases and 33% of deaths in week 50.
Democratic Republic of the Congo	Ebola virus disease	G3	31-Jul-18	11-May-18	5-Jan-19	623	575	374	60%	Detailed update given above.
Democratic Republic of the Congo	Measles	Ungraded	10-Jan-17	1-Jan-18	9-Dec-18	67 072	842	901	1.3%	During week 49 (ending 9 December 2018), 2 162 suspected cases including 36 deaths (CFR 1.7%) were reported across the country. Eight (8) provinces including Upper Katanga, Lualaba, Tshopo, Kasai Oriental, Tanganyika, Ituri, Lomami and South Kivu notified 84% of cases. Since week 47, there has been a decreasing trend in the weekly number of reported cases.
Democratic Republic of the Congo	Monkeypox	Ungraded	n/a	1-Jan-18	11-Nov-18	3 949	-	86	2.2%	During week 45 (ending 11 November 2018), 74 suspected cases with two 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.

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	Polio-myelitis (cVDPV2)	G2	15-Feb-18	n/a	04-Jan-19	42	42	0	0.0%	Two new genetically-linked circulating vaccine-derived poliovirus type 2 (cVDPV2) isolates were detected from an acute flaccid paralysis (AFP) case (with onset of paralysis on 7 October 2018, in a 29-month old child), and a contact of a second AFP case (the case is an 11-year old child), from Haut-Katanga province (Mufunga-Sampwe district). The isolated viruses are a new emergence and unrelated to previously-detected cVDPV2s affecting the country. No new case of circulating vaccine-derived poliovirus type 2 (cVDPV2) was reported this week.
Democratic Republic of Congo	Yellow fever	Ungraded	23-Jun-18	1-Jul-18	1-Dec-18	15	12	4	26.7%	Fifteen cases of yellow fever have been confirmed at the National Reference Laboratory (INRB) since the beginning of 2018. Of these, 12 cases were confirmed by IP Dakar from Tshuapa, Lualaba, Bas Uele, North Kivu province and Kinshasa Region.
Ethiopia	Humanitarian crisis	G2	15-Nov-15	n/a	20-Dec-18	-	-	-	-	About 2.6 million IDPs and 905 000 refugees are in Ethiopia. Although conflict is the main cause of displacement, around 500 000 have been displaced due to climatic shocks and their impact on food production. Currently there are about 946 788 IDPs in the West Guji zone (Oromia region) and neighbouring Gedeo zone (SNNPR region). Renewed violence in Benishangul Gumuz has led to a surge in the internal displacement of about 121 528 displaced persons from 7 districts consisting of 21 643 households and number are expected to increase in both East and West Wollega zones of Oromia region. The protracted complex emergencies have overwhelmed the health system.
Ethiopia	Acute watery diarrhoea (AWD)	Protracted 1	15-Nov-15	1-Jan-18	20-Dec-18	3 225	-	35	1.1%	No new cases of AWD were reported at the Country level in the last four weeks. In total, 3 225 cases have been reported in 2018, from 4 regions of Afar: Oromia, Somali, Tigray and one city administration (Dire Dawa).

Country	Event	Grade†	WHO notified	Start of reporting period	End of reporting period	Total cases	Confirmed cases	Deaths	CFR	Comments
Ethiopia	Measles	Protracted 1	14-Jan-17	1-Jan-18	20-Dec-18	4 310	1 327	-	-	396 new suspected measles cases were reported in week 50. Of the 1 327 cumulative confirmed cases reported in 2018, 295 were lab-confirmed, 963 were epi-linked and 69 were clinically compatible. The majority of cases were reported from: Somali region (22%), Oromia (21%), Addis Ababa (20%), and Amhara (16%).
Guinea	Measles	Ungraded	9-May-18	1-Jan-18	30-Dec-18	1 890	479	15	0.8%	Cases have been reported in all parts of the country. Two localities are currently considered to be in active epidemic phase: Urban district of Labé (week 43), Farmoriah sub province (since week 47). As of 30 December 2018, fifteen deaths have been reported among suspect cases.
Guinea	Yellow fever	Ungraded	10-Dec-18	10-Dec-18	21-Dec-18	1	1	0	0.0%	A case of yellow fever was confirmed by the Laboratory of the Institut Pasteur of Dakar on 10 December 2018, in a 12-years-old, female living in rurale de Cissela, village Bambafara. The onset of symptoms was on 15 October 2018, with sudden onset of fever, followed by vomiting and cough. The patient was treated in different health structures and seen by a traditional healer without success. On 20 October, 2018 the patient was referred to CT-epi of Kankan regional hospital by the health centre of Kelera, where the presumptive diagnosis of yellow fever was made and notification sent to ANSS by the DPS. The sample sent to the laboratory of Institut Pasteur Dakar was positive by seroneutralisation on 10 December 2018.
Kenya	Measles	Ungraded	19-Feb-18	19-Feb-18	31-Dec-18	744	66	1	0.1%	Since the beginning of 2018, six counties were affected by the measles outbreak, namely Mandera, Wajir, Garissa, Nairobi, Kitui and Muranga. The outbreak is ongoing in Wajir county.

Country	Event	Grade†	WHO notified	Start of reporting period	End of reporting period	Total cases	Confirmed cases	Deaths	CFR	Comments
Liberia	Measles	Ungraded	24-Sep-17	1-Jan-18	31-Dec-18	4 218	3 781	19	0.4%	Twenty four new suspected cases with zero deaths were reported during week 52 (ending 30 December 2018) across the country. The cases were reported from six counties: Montserrado, Bong, and Sinoe (17), Grand Gedeh (3), Margibi (2) and Grand Bassa (2) counties. Of the 4 218 cumulative confirmed cases reported in 2018, 358 are laboratory-confirmed, 546 epidemiologically linked, and 2 874 are clinically confirmed.
Liberia	Lassa fever	Ungraded	14-Nov-17	1-Jan-18	9-Dec-18	28	21	14	50.0%	One new suspected Lassa fever case was reported from Grand Bassa in week 49 (ending 2 December 2018), but tested negative by RT-PCR. In 2018, a total of 191 suspected cases including 50 deaths have been reported. Of these, 21 cases have been confirmed by RT-PCR (Nimba-9, Bong-5, Montserrado-3, Margibi-2, and Grand Bassa-2); 155 tested negative, and 15 specimens were not tested due to poor quality (pending). The case fatality ratio among confirmed cases is 66% (14 deaths in confirmed cases).
Madagascar	Measles	G2	26-Oct-18	4-Oct-18	2-Jan-19	18 090	18 090	39	0.2%	As of 2 January 2019, a total 18 090 cases have been reported, of which 369 were laboratory-confirmed (IgM positive) and 17 721 were epidemiologically linked. Thirty-nine deaths have been reported (CFR 0.2%). A total of 65/114 districts in all the 22 regions of Madagascar have been reporting cases.
Mali	Humanitarian crisis	Protracted 1	n/a	n/a	20-Dec-18	-	-	-	-	Mali continues to suffer a complex political and security crisis since 2012. Northern and central Mali are facing an increasing number of incidents affecting the population. More than five million people are affected by the crisis and in need of humanitarian assistance at the national level, including 77 046 IDPs and 140 123 refugees in neighbouring countries such as Niger, Mauritania and Burkina Faso. There are 77 000 displaced people from 14 000 households, mainly in Mopti, Gao, Menaka and Timbuktu.

Country	Event	Grade†	WHO notified	Start of reporting period	End of reporting period	Total cases	Confirmed cases	Deaths	CFR	Comments
Mali	Severe acute malnutrition	Ungraded	1-Aug-18	15-Mar-18	5-Aug-18	224	0	40	17.9%	Three villages (Douna, Niagassadiou and Tigoula) 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 Bama-ko showed iron deficiency anaemia.
Mali	Measles	Ungraded	20-Feb-18	1-Jan-18	30-Dec-18	1 613	413	3	0.2%	From Week 1 to 51 of 2018, a total of 1 013 blood samples have been collected, and 413 tested positive. Six samples are pending for laboratory results. The majority of affected population is under five years old (66%). Since the beginning of the outbreak, 45 health districts reported cases.
Mauritania	Dengue fever	Ungraded	26-Oct-18	15-Sep-18	22-Nov-18	322	28	0	0.0%	From 22 October 2018 to 22 November 2018, a total of 322 suspect cases of dengue fever were reported with no deaths. Of the 92 samples collected, 28 cases were confirmed by INRSP (using the PCR technique). Confirmed cases were reported from Rosso (23), Nouakchott (4) and Nouadhibou (1). The test results from the INRSP confirmed the cases for Dengue virus serotype II infection.
Mauritania	Rift Valley fever (RVF)	Ungraded	23-Nov-18	4-Nov-18	24-Nov-18	1	1	1	100.0%	On 16 November 2018, a 40-year-old male farmer from a village in Adel Bagrou commune, located 30 km away from the boarder with the Republic of Mali was confirmed by PCR with Rift Valley fever at INRSP. The case died after 11 days of symptom presentation following poor response to treatment. A safe and dignified burial was conducted and a total of 22 contacts including 12 health care workers have been listed for follow up.

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	9-Dec-18	1 344	1 344	4	0.3%	During week 49 (ending 9 December 2018), 20 new confirmed cases were reported across the country. As of 9 December 2018, a total of 1 344 laboratory confirmed cases were reported. Of 17 throat swabs 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.
Mozambique	Polio-myelitis (cVDPV2)	Ungraded	7-Dec-18	7-Dec-18	20-Dec-18	1	1	0	0.0%	A single vaccine-derived poliovirus type 2 (VDPV2) from an AFP case with onset of paralysis on 21 October 2018 was reported from Molumbo District, Zambezia province. The case is a six-year old girl, with no history of vaccination. The isolated virus has been sequenced and the results indicated that it is cVDPV2 with 10 nucleotides change
Namibia	Anthrax (suspected)	Ungraded	2-Nov-18	30-Oct-18	2-Nov-18	41	-	0	0.0%	Forty-one suspected human cases of anthrax including 6 cases of cutaneous anthrax and 35 cases of gastrointestinal anthrax have been reported from Sesfontein settlement, Opuwo district, Kunene region in north-western Namibia. Laboratory confirmation is pending.
Namibia	Hepatitis E	G1	18-Dec-17	8-Sep-17	2-Dec-18	4 009	530	34	0.8%	In week 48 (ending 2 December 2018), a total of 49 cases were reported (0 laboratory confirmed, 25 epi-linked, and 24 suspected) from six regions (Erongo, Khomas, Kavango, Omusati, Oshikoto and Ohangwena). Overall, nine out of 14 regions in Namibia have been affected by the HEV outbreak namely: Khomas, Omusati, Erongo, Oshana, Oshikoto, Kavango, Ohangwena, Hardpa and Otjozondjupa regions. Cases reported across the country are mainly from informal settlements with limited access to clean water and sanitation services.

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	30-Nov-18	-	-	-	-	The country continues to face food insecurity, malnutrition, and health crises due to drought, floods, and epidemics. The food insecurity affects more than 600 000 people and the nutritional status remain critical (Global Acute Malnutrition : 15%). The insecurity instigated by the Boko Haram group persists in the country.
Niger	Cholera	G2	13-Jul-18	13-Jul-18	16-Dec-18	3 824	43	78	2.0%	No new suspected case of cholera has been reported since 19 November 2018. A total of 125 639 persons were vaccinated (vaccination coverage: 82.5%) during the second round of the OCV campaign from 21 to 24 December 2018 in Aguié Gzaoua and Tchadoua Districts.
Niger	Circulating vaccine-derived polio virus type 2 (cVDPV2)	G2	8-Jul-18	8-Jul-18	28-Dec-18	8	8	1	12.5%	No new case of cVDPV2 has been notified in week 52. A total of eight cVDPV2 cases have been reported in 2018 in Niger, which are genetically linked to a cVDPV2 case in Jigawa and Katsina states, Nigeria.
Nigeria	Humanitarian crisis	Protracted 3	10-Oct-16	n/a	20-Dec-18	-	-	-	-	The security situation in the northeast remains volatile with palpable tension in Maiduguri and environs due to the national elections approaching and the activities of insurgents increasing in recent days. In response to this, military presence has been increased.
Nigeria	Cholera	G1	7-Jun-17	1-Jan-18	28-Oct-18	42 466	47	830	2.0%	In week 43 (ending 28 October 2018), 173 new suspected cases with one death were reported from five states: Adamawa (92 cases with one death), Zamfara (37 cases), Borno (35 cases), Yobe (6 cases), and Katsina (4 cases). There is an overall downward trend in the number of cases across the country.

Country	Event	Grade†	WHO notified	Start of reporting period	End of reporting period	Total cases	Confirmed cases	Deaths	CFR	Comments
Nigeria	Lassa fever	Ungraded	24-Mar-15	1-Jan-18	9-Dec-18	3 276	588	166	5.1%	In week 49 (week ending 9 December 2018), seven new confirmed cases were reported from Edo (1 case), Ondo (2 cases), Bauchi (1 case), Plateau (1 case) and Kaduna (2 cases) states. Two new deaths were reported in Kaduna (1) and Ondo (1) states. No new cases were identified among healthcare workers. From 1 January 2018, a total of 3 276 suspected cases, 149 deaths in confirmed cases and 17 deaths in probable cases have been reported from 23 states. Of the suspected cases, 588 were confirmed positive, 17 probables and 2 672 negative (not a case). Twenty-three states recorded at least one confirmed case in 2018. Five states are currently considered to be in active outbreak phase: Edo, Ondo, Plateau, Gombe and Kano.
Nigeria	Measles	Ungraded	25-Sep-17	1-Jan-18	11-Nov-18	15 723	1 110	123	0.8%	In week 45 (ending 11 November 2018), 205 suspected cases of measles were reported from 28 states across the country. Since the beginning of the year, 4 604 fewer cases were reported compared with the same period in 2017.
Nigeria	Monkeypox	Ungraded	26-Sep-17	24-Sep-17	13-Nov-18	300	126	8	2.7%	Nigeria continues to report sporadic cases of monkeypox since the beginning of the outbreak in September 2017. As of 13 November 2018, a total of 104 cases have been reported since the beginning of the year from 19 States (Rivers, Akwa-Ibom, Bayelsa, Cross River, Delta, Ebo-nyi, Edo, Enugu, Imo, Kebbi, Lagos, Nasarawa, Oyo, Abia, Anambra, Bauchi, Plateau, Adamawa and the FCT). Rivers state and Bayelsa state in South-south Nigeria remain the most affected states. The number of reported cases has been decreasing gradually in the last 4 epi weeks.

Country	Event	Grade†	WHO notified	Start of reporting period	End of reporting period	Total cases	Confirmed cases	Deaths	CFR	Comments
Nigeria	Polio-myelitis (cVDPV2)	Ungraded	1-Jun-18	1-Jan-18	18-Dec-18	32	32	0	0.0%	One new circulating vaccine-derived poliovirus type 2 (cVDPV2) case was reported this week (ending on 18 December 2018) from Zango LGA, Katsina State, with date of onset of paralysis on 5 November. The country continues to be affected by two separate cVDPV2 outbreaks, the first centered in Jigawa state with subsequent spread to other states as well as to neighbouring Republic of Niger, and the second in Sokoto state.
Nigeria	Yellow fever	Ungraded	14-Sep-17	7-Sep-17	30-Dec-18	4 004	78	33	0.8%	Detailed update given above.
São Tomé and Príncipe	Necrotising cellulitis/fasciitis	Protracted 2	10-Jan-17	25-Sep-16	20-Dec-18	3 118	-	0	0.0%	During week 50 (ending on 16 December 2018), 8 new cases were notified from 3 districts Agua Grande (6) and Me-zochi (2). The national attack rate as of week 50 is 15.8 per 1000.
Seychelles	Dengue fever	Ungraded	20-Jul-17	18-Dec-15	21-Oct-18	6 120	1 511	-	-	Increasing trends were observed for the past four weeks. There was a generally decreasing trend between week 23 and week 35. Analyses on serotypes from week 35 showed circulation of DENV1, DENV2 and DENV3.
South Sudan	Humanitarian crisis	Protracted 3	15-Aug-16	n/a	9-Dec-18	-	-	-	-	The complex emergency has continued for five years, with multiple episodes of armed conflict, population displacement, 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. On 29 November 2018, partners were able to access and assess the humanitarian situation in Rimenze and James Diko. Critical needs in water, sanitation and hygiene (WASH), health and food were noted.
South Sudan	Hepatitis E	Ungraded	-	3-Jan-18	23-Dec-18	161	19	2	1.2%	No new suspected case was reported in week 49 (week ending 09 December 2018). Of the cumulative cases reported in 2018, 147 are from Bentiu PoC and 13 from Old Fangak. In week 43, one new suspected death was reported from Old Fangak.

Country	Event	Grade†	WHO notified	Start of reporting period	End of reporting period	Total cases	Confirmed cases	Deaths	CFR	Comments
South Sudan	Measles	Ungraded	24-Nov-18	24-Nov-18	23-Dec-18	82	9	3	3.7%	Sixty-two cases of suspected measles were reported from Mabor Duang and Payam villages (Rumbek East) since 20 October 2018. A total of 9 samples tested positive for measles IgM on 22 November 2018. Seventy one percent of all cases are children under five years old.
South Sudan	Rubella	Ungraded	27-Oct-18	27-Oct-18	27-Dec-18	23	15	0	0.0%	Since 27 Oct 2018, a total of 23 suspected measles/ rubella cases (no deaths) have been reported in Malakal PoC. The majority of them (56.2%) are female with most cases (30.4%) aged between 5 to 9 years old. There are no cases reported in females of 10 to 14 years old and above 15 years old. Among the tested samples, a total of 15 samples tested measles IgM negative, but rubella IgM positive
South Sudan	Yellow fever	Ungraded	29-Nov-18	18-Nov-18	19-Dec-18	3	1	0	0.0%	As of 19 December 2018, only one confirmed yellow fever case and two presumptively yellow fever positive cases have been reported from Sakure payam, Nzara county, Gbudue state. Sakure payam is located at the border with Democratic Republic of Congo (DRC)
Tanzania	Cholera	Protracted 1	20-Aug-15	1-Jan-18	16-Dec-18	4 681	50	84	1.8%	During week 51 (ending 23 December 2018), 12 new cases with no deaths were reported from Momba district in Songwe region. The total number of cholera cases in the United Republic of Tanzania since 2015 is 33 296 cases including 550 deaths.

Country	Event	Grade†	WHO notified	Start of reporting period	End of reporting period	Total cases	Confirmed cases	Deaths	CFR	Comments
Uganda	Humanitarian crisis - refugee	Ungraded	20-Jul-17	n/a	5-Dec-18	-	-	-	-	After the countrywide refugee-verification process was completed on 24 October 2018, 1 091 024 refugees and asylum-seekers were registered, representing 75% of the previously estimated target population of 1.4 million. South Sudanese refugees and asylum seekers make up the largest group seeking refuge in Uganda (770 667 people), followed by those originating from DR Congo (242 608 people). The influx of refugees have strained Uganda's public services, creating tensions between refugees and host communities. Malnutrition (high SAM and GAM rates) among refugees is of particular concern. Lack of food and/or nutritional diversity in food distribution was reported by refugees. As the number of refugees is constantly increasing, gaps in the provision of WASH services have been reported.
Uganda	Crimean-Congo haemorrhagic fever (CCHF)	Ungraded	24-May-18	-	4-Jan-19	16	12	4	20.0%	Since May 2018, a total of 16 cases of Crimean-Congo haemorrhagic fever have been reported in Uganda. Twelve cases have been confirmed. Four deaths have been recorded. The cases have been reported in the following districts: Kakumiro (5), Isingiro (3), Sembabule (1), Nakaseke (2), Kiryandongo (2), Kabalere (1) and Ibanda (1), and Masindi(1).
Uganda	Measles	Ungraded	8-Aug-17	1-Jan-17	20-Nov-18	3 227	843	1	0.0%	The majority of confirmed cases were under five years old (61.4%), not vaccinated (67%) or residents of rural areas (99%). In total, 116 confirmed cases (13.8%) were below 9 months of age which is the minimum age restriction for the vaccine. Cases have been confirmed either by epidemiological link or laboratory testing (IgM-positive) since the beginning of the year. Fifty-three districts in the country have reported measles outbreaks.

Country	Event	Grade†	WHO notified	Start of reporting period	End of reporting period	Total cases	Confirmed cases	Deaths	CFR	Comments
Zimbabwe	Cholera	G2	6-Sep-18	6-Sep-18	20-Dec-18	10 604	283	63	0.6%	A new district (Murehwa) has reported cases of cholera in Week 51 (week ending on 19 December 2018). As of 19 December 2018, 2 cases have been confirmed cholera type Ogawa among the 3 suspected cases in Murehwa district. No new suspected cases has been reported in Mount Darwin District in Mashonaland Central province in week 51, while in Harare city, no new cases of cholera were reported since 11 December 2018. Mkaradzi area of Mount Darwin District has reported a total of 229 suspected cases deaths since the start of the outbreak on 25 November 2018. In Harare city, a cumulative of 9 949 cases (including 9 732 suspected cases and 217 confirmed cases) have been recorded.
Zimbabwe	Typhoid fever	Ungraded	-	1-Oct-17	11-Dec-18	5 159	262	15	0.3%	There has been a resurgence of typhoid fever in Harare, the capital city of Zimbabwe, since mid-September 2018. The increase started in week 37 (week ending 16 September 2018) when 61 suspected typhoid fever cases were reported, compared to 10 cases (which lies within normal range) in week 36. The weekly incidence eventually peaked in week 41 (week ending 14 October 2018), with 130 cases and has since been declining gradually. There were 34 suspected cases reported in week 49 (week ending 9 December 2018).
recently closed events										
Liberia	Lassa fever	Ungraded	14-Nov-17	1-Jan-18	9-Dec-18	28	21	14	50.0%	One new suspected Lassa fever case was reported from Grand Bassa in week 49 (ending 2 December 2018), but tested negative by RT-PCR. In 2018, a total of 191 suspected cases including 50 deaths have been reported. Of these, 21 cases have been confirmed by RT-PCR (Nimba-9, Bong-5, Montserrado-3, Margibi-2, and Grand Bassa-2); 155 tested negative, and 15 specimens were not tested due to poor quality (pending). The case fatality ratio among confirmed cases is 66% (14 deaths in confirmed cases).

†Grading is an internal WHO process, based on the Emergency Response Framework. For further information, please see the Emergency Response Framework: <http://www.who.int/hac/about/erf/en/>.

Data are taken from the most recently available situation reports sent to WHO AFRO. Numbers are subject to change as the situations are dynamic.

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