

WEEKLY BULLETIN ON OUTBREAKS AND OTHER EMERGENCIES

Week 46: 10 - 16 November 2018
Data as reported by 17:00; 16 November 2018



1

New event

53

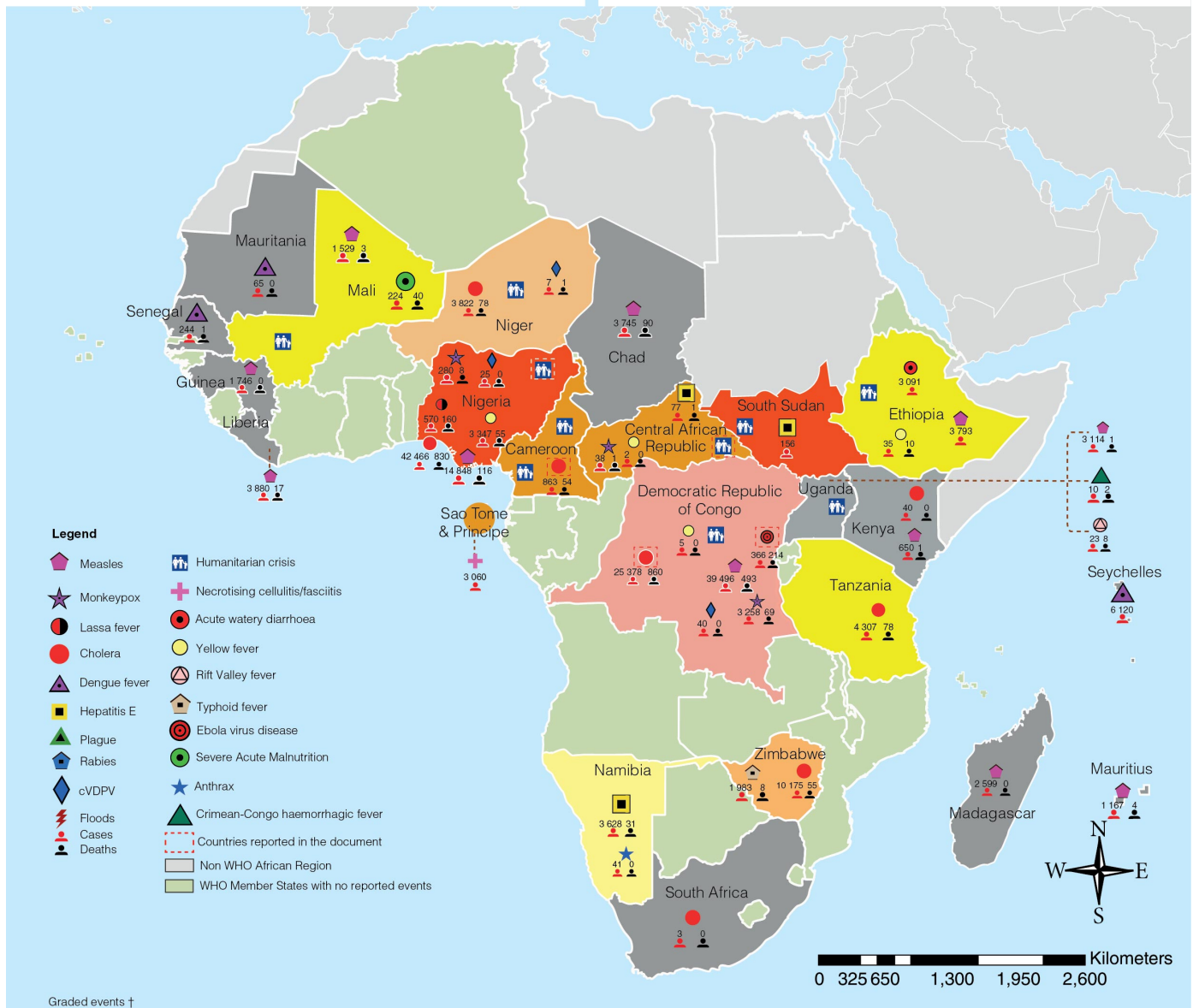
Ongoing events

42

Outbreaks

12

Humanitarian crises



Graded events †

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

Overview

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- This Weekly Bulletin focuses on selected acute public health emergencies occurring in the WHO African Region. The WHO Health Emergencies Programme is currently monitoring 53 events in the region. This week's edition covers key new and ongoing events, including:
 - Ebola virus disease in the Democratic Republic of the Congo
 - Cholera in the Democratic Republic of the Congo
 - Cholera in Cameroon
 - Humanitarian crisis in Central African Republic
 - Humanitarian crisis in north-east Nigeria.
- For each of these events, a brief description, followed by public health measures implemented and an interpretation of the situation is provided.
- A table is provided at the end of the bulletin with information on all new and ongoing public health events currently being monitored in the region, as well as recent events that have largely been controlled thus closed.
- **Major issues and challenges include:**
 - The Ebola virus disease (EVD) outbreak in North Kivu and Ituri provinces, Democratic Republic of the Congo continues, against the backdrop of increased insecurity in and around Béni city. There was an armed attack in Béni city on Friday 16 November 2018 – the second in one week. Several outbreak response operations were affected to varying extent, with some briefly suspended. This EVD outbreak remains dangerous and unpredictable, calling for more concerted efforts to strengthen all aspects of the response operations in the given circumstances.
 - The cholera outbreak in the Democratic Republic of the Congo persists and has started escalating in the past weeks, especially in four provinces. Over 800 suspected cholera cases and 20 deaths were recorded during the reporting week. This cholera outbreak has been ongoing since 2015, exacerbated by the complex humanitarian situation. Previous interventions have only managed to mitigate the situation briefly. This outbreak has caused far greater morbidity and mortality in the population compared to any other public health event in the country, thus calling for increased investment in order to step up control efforts.

Ongoing events

Ebola virus disease

Democratic Republic of the Congo

366
Cases

214
Deaths

59%
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. Since our last report on 9 November 2018 (*Weekly Bulletin 45*), 37 new confirmed EVD cases have been reported and nine new deaths have occurred.

As of 17 November 2018, there have been a total of 366 EVD cases, including 319 confirmed and 47 probable cases. To date, confirmed cases have been reported from 14 health zones: Beni (163), Mabalako (67), Kalunguta (25), Katwa (20), Butembo (10), Masereka (6), Kyondo (2), Musienene (2), Oicha (2), Vuhovi (2), and Mutwanga (1) in North Kivu Province; and Mandima (16), Tchomia (2) and Komanda (1) in Ituri Province. A total of 214 deaths were recorded, including 167 among confirmed cases, resulting in a case fatality ratio among confirmed cases of 52% (167/319). A total of 39 health workers have been infected to date, including 11 deaths.

On 17 November 2018, 49 new suspected patients were hospitalized, bringing the total number of patients admitted to 124, including 35 confirmed cases. As of 17 November 2018, the number of patients cured and discharged back into the community is 107. Bed occupancy in Beni Ebola Treatment Centre (ETC) is 100%.

Beni, Kalunguta and Katwa remain the principle hotspots of the outbreak with, respectively, 46% (n=45), 31% (n=30) and 11% (n=11) of the 97 confirmed and probable cases reported in the past 21 days (from 28 October to 17 November 2018).

Contact tracing is still of concern due to insecurity and persistent community resistance. Of the 4 430 contacts listed for followed up, 4 182 (94%) were seen on 17 November 2018. The proportion of contacts seen in the previous 24 hours varies from 80% to 100%.

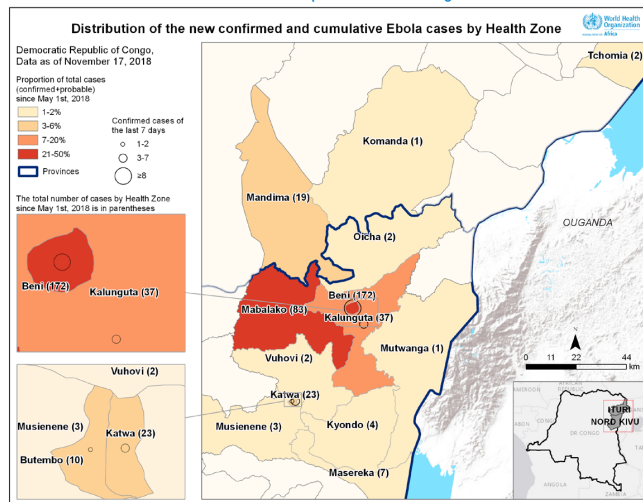
PUBLIC HEALTH ACTIONS

- ▶ All surveillance activities continue, including case investigations, active case finding in health facilities and in the communities, and identification and listing of contacts around the latest confirmed cases. There is intensified search for contacts lost to follow up. Reclassification of confirmed and probable cases by health zones and validation of suspicious community deaths are also ongoing.
- ▶ On 13 November 2018, 60 out of 67 points of entry (PoE) reported their activities; 209 071 travellers were checked, bringing the total number of travellers checked to 14.5 million. A suspected case alert was reported from the Beni PoE. Additionally, 15 vehicles were decontaminated, totalling 17 684 to date.
- ▶ On 13 November 2018, a total of 515 people were vaccinated in 15 rings, bringing the cumulative numbers vaccinated to 30 072. The current stock of vaccine in Beni is 6 220 doses after receipt of a further 2 180 doses. Targeted vaccination continues in Kanyihunga, Kalunguta Health Zone. New vaccination rings have been opened in Kyondo and Musienene health zones and there is ongoing ring vaccination in Beni, Katwa, Kalunguta and Mutwanga health zones.
- ▶ Community reintegration of 27 patients discharged from ETCs took place, with 18 psycho-education sessions in Beni (12), Butembo (5), Masereka (1) and Tchomia (1), reaching 686 participants.
- ▶ Infection prevention and control (IPC) and water, sanitation and hygiene (WASH) activities continue, with decontamination of nine households and five health facilities in Beni and Butembo and training in IPC in 14 health facilities in Beni and Mabalako.
- ▶ Of the 537 requests for safe and dignified burials since the start of the outbreak, 459 (85%) have been successfully completed.
- ▶ Community awareness and mobilization sessions continue, with working meetings with neighbourhood leaders in Beni and engagement of religious leaders in Butembo, to strengthen community involvement in surveillance; leaflets and posters were distributed by community relays in Tchomia, Nyamavi and Kasenyi.

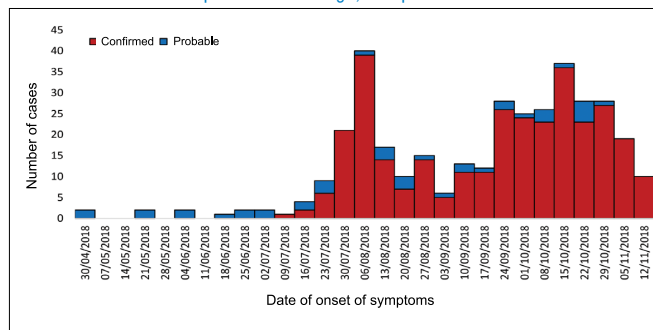
SITUATION INTERPRETATION

While the EVD outbreak in the Democratic Republic of the Congo continues, against the background of escalating insecurity, impacting on the response operations. This outbreak remains dangerous and unpredictable, calling for more concerted effort from the Ministry of Health, other national authorities, WHO, MONUSCO and all the partners. The need to strengthen the prevention and control of infection in Beni and other health areas remains critical, along with continued collaboration with Mai-Mai groups on security in Kalunguta to facilitate community and hospital death investigations and follow-up and vaccination of contacts.

Geographical distribution of confirmed and probable Ebola virus disease cases reported between 1 May to 17 November 2018, North Kivu and Ituri provinces, Democratic Republic of the Congo.



Epidemic curve of Ebola virus disease outbreak in North Kivu and Ituri provinces, Democratic Republic of the Congo, 30 April - 17 November 2018



EVENT DESCRIPTION

The cholera outbreak in the Democratic Republic of the Congo has been increasing gradually in the last three weeks, following a strong decrease in cases observed nationally between weeks 35 and 41. In 2018, the incidence of cholera cases peaked in week 35 (week ending 2 September 2018) with 883 cases. Thereafter, the weekly caseload steadily decreased until week 41 (week ending 14 October 2018) when 559 cases were reported. This downward trend was mostly due to marked improvement of the cholera outbreak situation in the Kasai region. The weekly incidence then started increasing in week 42, with 706 suspected cases reported. In week 44 (week ending 4 November 2018), 828 suspected cases and 20 deaths (case fatality ratio (CFR) 2.4%) were reported, compared to 784 cases reported in week 43. The current trend is driven primarily by an escalation of the cholera outbreak in Tanganyika, Haut Katanga, Sankuru and Kasai-Oriental provinces.

As of 4 November 2018, a total of 25 378 suspected cholera cases and 860 deaths (CFR 3.4%) were reported nation-wide, since the beginning of the year. Twenty out of 26 provinces in the country have been affected, the majority being Kasai-Oriental (5 538 cases, 22%), South Kivu (3 920, 15%), Tanganyika (3 465, 14%), North Kivu (2 591, 10%) and Kongo Central (1 456, 6%).

The greatest number of fatalities has been documented in the following provinces: Sankuru (114 deaths, CFR 8.7%), Upper Katanga (25 deaths, 6.7%), Equateur (47 deaths, 6.2%), Kasai (71 deaths, 5.4%), Lomami (32 deaths, 5.1%), Kasai Oriental (274 deaths, 4.9%), and Kongo Central (48 deaths, 3.3%).

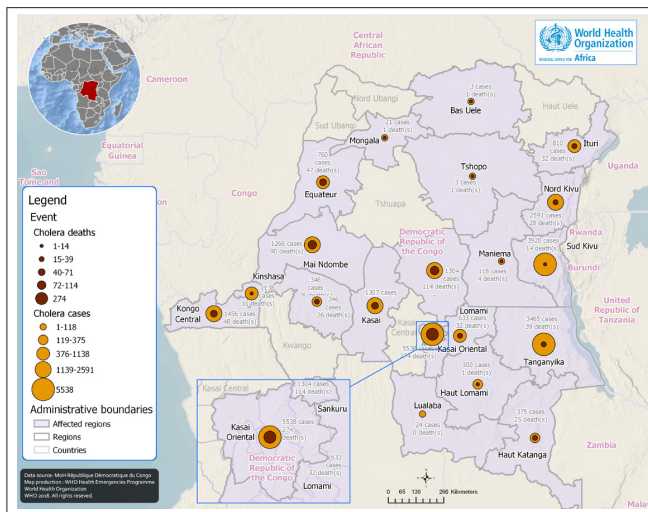
PUBLIC HEALTH ACTIONS

- ▶ The cholera response is being coordinated by the national control programme for cholera and diarrhoeal diseases (PNECHOL-MD). Coordination meetings with partners, including WHO, take place weekly. A 6-month response roadmap (September 2018 - February 2019) is currently being implemented.
- ▶ WHO is continuing its cholera response support activities in the principal cholera hotspots and risk areas: Kasai Oriental, Tanganyika, South Kivu, Kinshasa and Kongo Central. These include support to establish additional cholera treatment centres, case management, data management, surveillance strengthening, water, sanitation and hygiene (WASH) interventions, and logistical assistance.
- ▶ WHO supported a mission from the Ministry of Public Health to evaluate the situation in Tanganyika and South Kivu provinces, and to re-orientate prevention and control strategies accordingly.
- ▶ Cholera response measures are being stepped up in Kongo Central and Lomami provinces, which have shown increased cholera incidence in recent weeks.
- ▶ Vaccination of at risk populations is one of the response pillars. WHO is providing support for the planning of vaccination campaigns. Vaccination will take place in seven stages up to 2020, starting in November-December 2018. Over 6 million people will be targeted by the campaign.

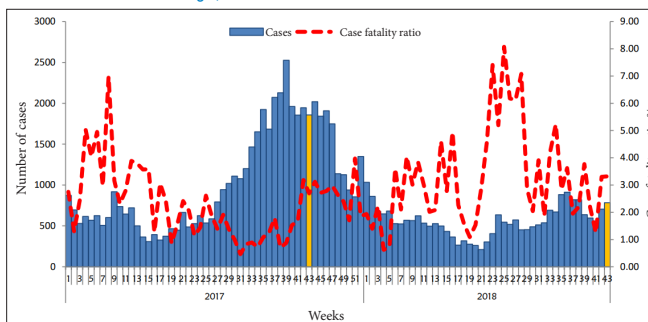
SITUATION INTERPRETATION

The cholera outbreak in the Democratic Republic of the Congo has been ongoing since the end of 2015 and is considered the worst cholera epidemic experienced by the country since 1994. The situation remains of concern, particularly in the wider Kasai region where large population displacements are occurring following the return of more than 347 000 displaced people from Angola. The planned vaccination campaign will focus initially on the Kasai region. The occurrence of cases in Kinshasa is also being closely monitored, in order to prevent a repeat of the 2017 cholera outbreak in the capital city. The country's resources and capacity to effectively respond to the current cholera epidemic are limited, and have been hampered further by the ongoing Ebola outbreak in North Kivu Province. Reinforcement of case management and risk communications strategies is critical, considering the over-stretched capacity of health providers facing multiple disease challenges and the necessity of community-level prevention.

Geographical distribution of cholera cases and deaths in Democratic Republic of the Congo, 2 September - 4 November 2018



Weekly trend of cholera cases and case fatality ratios, Democratic Republic of the Congo, week 1 of 2017 to week 43 of 2018



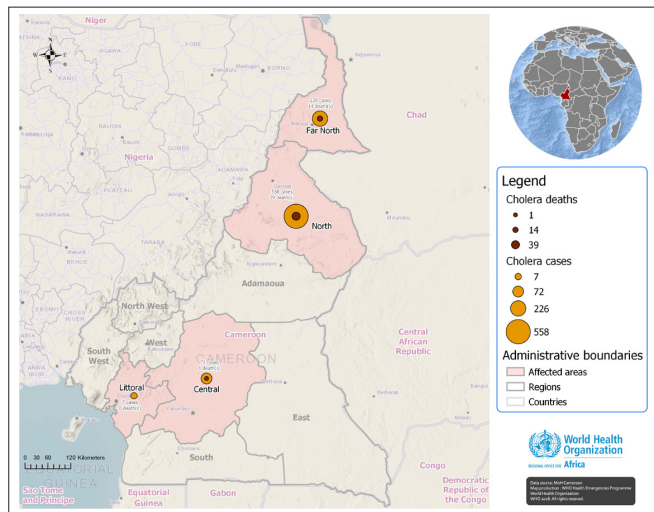
EVENT DESCRIPTION

The cholera outbreak in Cameroon is persisting and the Far North Region has shown a rapid increase in incidence cases in the last two weeks. From 2-9 November 2018, the Far North Region recorded 106 new suspected cholera cases, while North Region recorded 12. Four new deaths were reported in the Far North during this period. Since our last report on 23 October 2018 (*Weekly bulletin 43*), 263 additional suspected cholera cases and 14 deaths have been reported from the two regions. The majority (69%) of these cases came from the Far North Region (205 cases, 9 deaths), and 31% in North Region (57 cases, 5 deaths). There have been no new cases in the Central and Littoral regions since 27 August 2018 and 11 October 2018, respectively.

As of 9 November 2018, a cumulative total of 863 suspected cholera cases and 54 deaths (case fatality ratio 6.3%) have been reported from 17 health districts in four of the 10 regions of the country, since the beginning of the outbreak on 18 May 2018. The majority (64.7%) of the cases were reported in the North Region (558 cases, 39 deaths), followed by Far North at 26.2% (226 cases, 14 deaths), Central (72 cases, 1 death) and Littoral (7 cases, 0 deaths) regions. Of the 54 deaths, 34 (63.0%) occurred in the community, while 19 (35.2%) were health facility deaths. The case fatality ratio varies widely between regions, ranging from 7.0% in North to 0% in the Littoral Region. The case fatality ratio in the most affected Far North region is 6.2% and all 14 deaths occurred in the community.

Of 153 stool specimens collected and analyzed, 53 (34.6%) tested positive for *Vibrio cholerae* O1 Inaba by culture.

Geographical distribution of cholera cases and deaths in Cameroon, 9 November 2018



PUBLIC HEALTH ACTIONS

- A regional coordination meeting for the Far North region was held to discuss the cholera outbreak situation.
- WHO, UNICEF and MSF are supporting response activities in the North region. WHO has deployed three experts (1 epidemiologist, 1 communications specialist, 1 data manager).
- Active surveillance in North and Far North regions continues.
- Ongoing WASH activities in affected regions include the provision of WASH resources to households in North region, disinfection of school latrines, and installing additional wash basins in hospitals.
- Cholera management protocols have been distributed in affected areas.
- The Ministry of Health set up a cholera treatment centre in Sagme, Far North region.
- There are continued risk communication activities in North and Far North regions, including the distribution of posters, community messaging on the prevention and control of cholera, and the broadcasting of health and sensitization messages in local media.
- An oral cholera vaccination campaign is being prepared for the Far North and North regions.

SITUATION INTERPRETATION

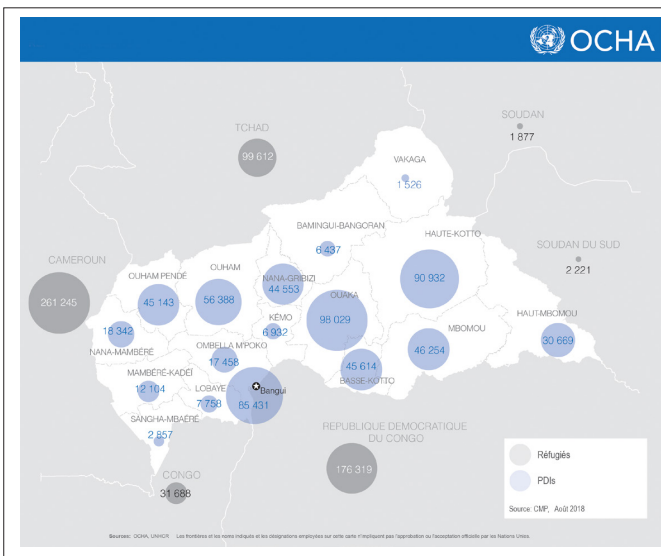
The ongoing cholera outbreak in Cameroon is of concern, particularly the persistence and the rapid increase of cases in the Far North Region. Active conflict and population displacement in these regions complicate the public health response. The high case fatality ratio in the North and Far North regions is equally concerning, as is the high proportion of community deaths in the Far North Region. Urgent measures are required to avoid an escalation of the cholera outbreak in northern Cameroon. Expansion of the cholera outbreak to the North-west and South-west regions, experiencing a deteriorating humanitarian situation, is likely, and needs to be proactively averted by stepping up preparedness measures.

EVENT DESCRIPTION

The security and humanitarian situation in Central African Republic continues to affect the population. According to the International Organization for Migration report at the end of October 2018, more than a quarter of the country's population are either internally displaced or refugees in neighbouring countries. On 31 October 2018, the internally displaced persons (IDP) site in Batangafo City, Ouham Prefecture was set on fire by armed groups, leaving seven people dead and 23 wounded, 10 seriously. More than 20 809 out of 27 400 people were affected, about 10 000 of whom found refuge in Batangafo Hospital, while others fled into the bush. The water and sanitation facilities at the IDP camp were destroyed. On 31 October 2018, clashes between the state security forces backed by the United Nations Multidimensional Integrated Stabilization Mission in the Central African Republic (MINUSCA) and those from an ex-Seleka armed group in Bambari left 19 people wounded. Humanitarian actors have now resumed activities in both areas, where a precarious peace has returned. However, there is reported population movement towards quieter areas. The non-governmental organization Agence Africaine Humanitaire suspended activities in Mobaye-Zangba because of resumption of clashes between armed groups.

Disease outbreaks continue to be experienced. In week 43 (week ending 27 October 2018) a new case of monkeypox was recorded in the village of Xome Kaka, Mbaïki Health District, in a contact of the index case, bringing the total number of cases in the outbreak to seven. The hepatitis E outbreak continues, with 77 cases recorded in the Bocaranga-Koui Health District between weeks 28 and 44, of which 35 are confirmed and 42 probable. A total of 14 neighbourhoods in Bocaranga City have reported at least one case of hepatitis E, in two affected districts, with Ngaoundaye District newly affected. No cases of yellow fever have been reported in Bocaranga-Koui Health District since 17 September 2018.

Map showing population displacement in Central African Republic, August 2018



PUBLIC HEALTH ACTIONS

- ▶ A contingency response plan targeting the 38 210 people affected by the Batangafo crisis, including 32 096 IDPs and 6 114 people in host communities, was developed and local health sector coordination has been strengthened by the deployment of the WHO Kaga Bandoro sub-office head. Healthcare is being provided by the Mentor initiative at the Bercail site, with referrals to Médecines Sans Frontières (MSF) at the Batangafo Hospital. Water, sanitation and hygiene (WASH) is being addressed at the damaged IDP site.
- ▶ A total of 19 people wounded from the Bambari clashes were treated at Bambari Hospital, with a serious case referred to Bangui.
- ▶ Responses to the disease outbreaks continue with health actors and WASH specialists working with WHO at both central and district levels. MSF recruited seven social mobilizers for active case finding in villages to support operational community mobilizers. An additional 40 community health workers are being trained to better cover Bocaranga City.
- ▶ Preparation is underway to train health facility managers in Ngaoundaye District in epidemiological surveillance of hepatitis E. WHO is supporting transportation of samples from suspected cases to the Institut Pasteur Laboratory in Bangui.
- ▶ MSF has operationalized the intensive care unit at Bocaranga Hospital and free health care continues at this facility with support of WHO and IRC.
- ▶ More than 1 085 affected people were sensitized in Mandja and Ganza by community health workers, and water treatment kits were distributed to 4 584 households, along with 1 000 supplementary hygiene kits in Bocaranga by CORAID.

SITUATION INTERPRETATION

Ongoing violence by armed insurgents continues to lead to insecurity and hamper humanitarian and healthcare interventions. The continuing hepatitis E outbreak in Bocaranga points to poor hygiene and sanitation conditions, which need urgent intervention, particularly as a new district has been affected. Response activities, particularly surveillance, case finding and follow up need to be strengthened, while the national and international authorities need to intervene urgently to address the underlying security situation.

EVENT DESCRIPTION

The humanitarian crisis in north-east Nigeria remains critical, characterized by large population displacements due to the ongoing armed conflict in the region. From 24-30 October 2018, 5 459 new arrivals were recorded from several local government areas in Borno and Adamawa states. On 11 November 2018, at least nine people, including a soldier and a Chadian businessman, were killed and scores injured when insurgents from the non-state armed group, Boko Haram, ambushed a civilian convoy led by the military on the Maiduguri/Ngala highway. They also took away five vehicles loaded with assorted items, including a truckload of foodstuff for the military. This incident happened barely 24 hours after another attack in Kareto village, a settlement about 20 kilometres away from Damaturu, the Yobe State capital. On 10 November 2018, hundreds of people fled their homes after a Boko Haram attack in Jimmi village, Borno State. The militants opened fire, set homes ablaze and attacked the informal refugee camp, though no casualties were reported. The recent upsurge in attacks has led to a curfew imposed in all communities outside the metropolis from 16:00 to 06:00 hours.

The cholera outbreak in Adamawa, Borno and Yobe states in north-east Nigeria has markedly improved in the past weeks. Across the three states, the number of cases reported has decreased by about 90%, compared to the peak of the outbreak. The situation is much better in Yobe State where two suspected cholera cases were registered during the reporting week. Since the onset of the outbreak on 2 July 2018, 1 780 suspected cholera cases with 61 deaths (case fatality ratio (CFR) 3.4%) have been reported in Yobe State, as of 17 November 2018. In Borno State, 200 new suspected cholera cases (and no deaths) were reported in week 46. A total of 6 105 suspected cases and 73 deaths (CFR 1.2%) have been reported, as of 17 November 2018. In week 45, eight new suspected cholera cases (and no deaths) were reported in Adamawa State, bringing the cumulative number to 2 749 cases and 41 deaths (CFR 1.5%).

PUBLIC HEALTH ACTIONS

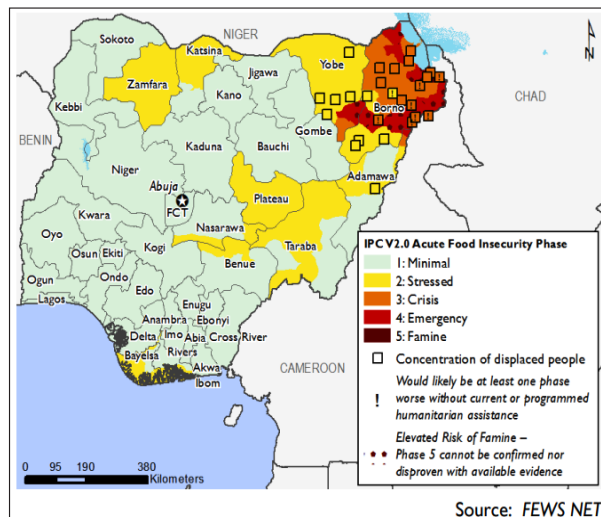
- The Health Sector response plan under the 2019 humanitarian response plan (HRP) has been finalized, including 15 projects owned by 12 partners. The HRP-2019 total financial requirement is US\$ 73.7 million to support 4.9 million people across Adamawa, Borno and Yobe states.
- Surveillance focal points in all health facilities in north-east Nigeria are being trained on prompt identification and immediate reporting of epidemic-prone diseases, especially measles and meningitis associated with the dry season.
- To support the mental health Gap Action Programme (mhGAP), WHO supported mental health specialists to conduct outreach services to various health facilities in Borno State. WHO has also supported the referral of over 1 500 patients to the Federal Neuro-Psychiatric Hospital in Maiduguri for further clinical management and care.
- WHO continues to support the cholera outbreak response across the affected states, mainly with coordination, surveillance and laboratory, case management and risk communications.
- MSF, MDM and ALIMA have set up various treatment centres to provide case management in the different affected communities mainly in Borno and Adamawa states
- UNICEF has continued to support provision of integrated primary healthcare service delivery in four internally displaced persons' camps through the engagement of 24 community health workers, four nurse midwives, two medical doctors and 20 other support staff.

SITUATION INTERPRETATION

The humanitarian crisis in north-east Nigeria remains serious, with continued population movements. Although humanitarian access reportedly improved in 2018, distances between relief activity sites and limited road networks continue to hinder travel to remote areas. Thus, humanitarian aid can only reach around 85% of people in need (approximately 5.2 million people). About 823 000 people are living in areas inaccessible to aid, because of hostilities and attacks restricting humanitarian movements and activities.

The cholera outbreak has greatly improved in recent weeks, though concerted efforts are still required, especially in Borno State, to bring the epidemic to a complete halt. With the beginning of the dry season, the risks of meningitis and measles outbreaks increase, calling for heightened preparedness measures. The dry season also provides better access for insurgents to carry out attacks using informal routes that are usually cut off during the rainy season, in effect raising the likelihood of deteriorating security situation.

Projected food security outcomes, October 2018 - January 2019 in Nigeria



Summary of major issues challenges, and proposed actions

Major issues and challenges

- ▶ The EVD outbreak in the Democratic Republic of the Congo remains serious and unpredictable, with emergence of new confirmed cases and occurrence of deaths. There were security incidents in Béni city during the reporting week, affecting several aspects of the outbreak response operations. The insecurity is being compounded by pockets of misinformation, mistrust and community reluctance to adopt preventive measures. In the given circumstances, containment of the outbreak becomes challenging. There is a need for continuous concerted efforts to strengthen all aspects of the response operations in the given circumstances.
- ▶ The cholera outbreak in the Democratic Republic of the Congo has been ongoing since 2015, becoming the largest and most protracted outbreak in the country's history. The situation has started escalating in the past weeks, especially in four provinces, with over 800 suspected cholera cases and 20 deaths registered. The occurrence of cases in the densely populated capital city, Kinshasa, is also concerning. The case fatality ratio in this outbreak has been unusually high, reaching 6% in some provinces. Previous interventions have only managed to mitigate the situation briefly. This outbreak has caused far greater morbidity and mortality in the population compared to any other public health event in the country, thus calling for increased investment in order to step up control efforts.

Proposed actions

- ▶ The national authorities and partners in the Democratic Republic of the Congo to continue working closely with community leaders and local structures to implement outbreak control interventions.
- ▶ The global community needs to increase investment towards the response to the cholera outbreak in the Democratic Republic of the Congo. Meanwhile, the national authorities and partners on the ground need to scale up response operations in order to halt further escalation of the current situation, and ultimately bring the outbreak to a complete halt.

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										
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.
Ongoing events										
Cameroon (Far North, North, Adamawa & East)	Humanitarian crisis	Protracted 2	31-Dec-13	27-Jun-17	1-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	Ungraded	31-Dec-13	27-Jun-17	9-Nov-18	-	-	-	-	The Anglophone crisis in the Northwest and Southwest regions of Cameroon is disrupting health services and disease surveillance capacities. This is impacting the health status of the population, and the possible occurrence of infectious disease outbreaks is a concern. Of particular concern is the risk of cholera resurfacing in the region as a result of the ongoing outbreak in northern Cameroon.
Cameroon	Cholera	G1	24-May-18	18-May-18	9-Nov-18	863	53	54	6.3%	Detailed update given above.
Central African Republic	Humanitarian crisis	Protracted 2	11-Dec-13	11-Dec-13	30-Oct-18	-	-	-	-	Detailed update given above.
Central African Republic	Monkeypox	Ungraded	20-Mar-18	2-Mar-18	9-Nov-18	38	19	1	2.6%	From 9 October to 9 November 2018, Central African Republic reported eight confirmed cases and 1 suspected case of monkeypox in Mbaiki district. The 8 confirmed cases belong to the same family and there are evidence of human-to-human transmission within the family. This is the fourth monkeypox public health event in the country in 2018 and the second time that Mbaiki District has been affected by the disease.
Central African Republic	Hepatitis E	Ungraded	2-Oct-18	10-Sep-18	5-Nov-18	77	35	1	1.3%	Sixteen localities of Bokarangué-Kouï health district are affected of which Barage II and Barage I report the most cases with 21% (n=16) and 10% (n=8), respectively. Since the latest update, three additional cases were confirmed for viral hepatitis E (IgM HVE POS) by Institut Pasteur Bangui Laboratory. As of 20 October 2018, 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.

Country	Event	Grade†	WHO notified	Start of reporting period	End of reporting period	Total cases	Confirmed cases	Deaths	CFR	Comments
Central African Republic	Yellow fever	Ungraded	20-Oct-18	12-Aug-18	6-Nov-18	2	2	0	0.0%	Confirmatory analyses from IP Dakar confirmed the case of a 80-year-old female from Bocaranga which is currently experiencing a hepatitis E outbreak. Despite ongoing case investigations, no additional case was detected after 18 October 2018. Population immunity is high in the country. There were national mass vaccination campaigns with high coverage in 2009-2010 and the yellow fever vaccination is also provided to children through the routine immunization programme.
Chad	Measles	Ungraded	24-May-18	1-Jan-18	28-Oct-18	3 745	356	90	2.4%	In week 43 (week ending 28 October 2018), 88 suspected cases were reported. This is an decrease in the number of cases compared to the previous week when 124 cases were reported. Twenty one districts are still reporting cases: Abdi, Abeche, Abougoudam, Adre, Am Timan, Arada, Bahai, Boi, Chadra, Guereda, Iriba, Karal, Kouloudla, Massakory, Massaguet, Massenya, Mata-djana, Ndjamena East, Ndjamena South, Ngouri and Oum Hadjer.
Democratic Republic of the Congo	Humanitarian crisis	G3	20-Dec-16	17-Apr-17	29-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. Since early October 2018, more than 308 000 displaced people have returned from Angola to the Kasai region. Returnees are in urgent need of humanitarian assistance.
Democratic Republic of the Congo	Cholera		16-Jan-15	1-Jan-18	4-Nov-18	25 378	-	860	3.4%	Detailed update given above.
Democratic Republic of the Congo	Ebola virus disease	G3	31-Jul-18	11-May-18	17-Nov-18	366	319	214	59%	Detailed update given above.
Democratic Republic of the Congo	Measles	Ungraded	10-Jan-17	1-Jan-18	28-Oct-18	39 496	842	493	1.2%	During week 43 (week ending 28 October 2018), 2 462 suspected cases including 39 deaths (CFR: 1.6%) were reported across the country. Eighty-nine percent (89%) of all cases and 87% of all deaths were reported from seven provinces: Upper Katanga, Upper Lomami, Tshopo, Kasai Oriental, Tanganyika, Ituri and Lualaba. Since week 23, there has been an increasing trend in the weekly number of cases.
Democratic Republic of the Congo	Monkeypox	Ungraded	n/a	1-Jan-18	28-Oct-18	3 258	-	69	2.1%	During week 43 (week ending 28 October 2018), 95 suspected cases with three 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	8-Nov-18	40	40	0	0.0%	One new case with onset on 13 September 2018 has been reported from Yamaluka Zone in Mongala Province. Since 2017, 40 cases have been reported from the following provinces: Tanganyika (15 cases), Haut-Lomami (9 cases), Mongala (11 cases), Maniema (2 cases), Haut Katanga (2 cases), and Ituri (1 case). The country is affected by three separate strains of circulating vaccine-derived poliovirus type 2 (cVDPV2) since 2017.

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	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 Institut 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	-	-	-	-	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 450 000 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 between 93 000 to 113 152 people.
Ethiopia	Acute watery diarrhoea (AWD)	Protracted 1	15-Nov-15	1-Jan-18	5-Nov-18	3 091	-	-	-	In 2018, cases have been reported from five regions, namely Oromia, Dire Dawa, Somalia as well as Tigray and Afar which have been most affected. Although risk factors remain in the regions, there has been a general decline since the peak in week 33 when more than 500 cases were reported. In week 43 and 44, only Tigray reported new cases (n=7). Lab data is currently reviewed for re-classification of the outbreak.
Ethiopia	Measles	Protracted 1	14-Jan-17	1-Jan-18	5-Nov-18	3 793	1 298	-	-	Cases have been reported throughout the country and appear on the rise from 66 suspected cases in week 43 to 74 suspected cases in week 44. The most affected regions in week 44 were Amhara (66%) and Somali (34%). The most affected age groups throughout 2018 were 5-14 yrs olds (42%) followed by under 5 yrs olds (35%). Of all confirmed cases in 2018, 266 were lab-confirmed, 963 epi-linked and 69 clinically compatible.
Ethiopia	Yellow fever	Ungraded	4-Oct-18	21-Aug-18	5-Nov-18	35	5	10	28.6%	Since 21 August, 35 cases were reported from Wolayita Zone in South Nation, Nationalities and Peoples (SNNP) region located in southwest Ethiopia. In total, 5 out of 21 samples sent to IP Dakar were confirmed for yellow fever using plaque reduction neutralization test (PRNT). A mass vaccination campaign targeting 1 342 701 million people was commenced on 16 November 2018 in affected and neighbouring areas.
Guinea	Measles	Ungraded	9-May-18	1-Jan-18	23-Sep-18	1 746	440	0	0.0%	In week 38, 10 new suspected cases were reported including five IgM-positive cases. The number of cases has been decreasing gradually during the last four epidemiological weeks (week 35 to 38). Cases have been reported in all parts of the country and the most affected zones include Kankan, Conakry and Faraneh.
Kenya	Cholera	Ungraded	8-Sep-18	8-Sep-18	6-Nov-18	40	8	0	0.0%	A new cholera outbreak is hitting Turkana, Embu and Isiolo Counties since 8 September 2018. No new case was detected since 23 October 2018. Cumulatively, 5 796 cases including 78 deaths (CFR 1.3%) have been reported since 1 January 2018 in 20 out of 47 counties.

Country	Event	Grade†	WHO notified	Start of reporting period	End of reporting period	Total cases	Confirmed cases	Deaths	CFR	Comments
Kenya	Measles	Ungraded	19-Feb-18	19-Feb-18	6-Nov-18	650	54	1	0.2%	Since the beginning of the year, six counties were hit by the measles outbreak, namely Mandera, Wajir, Garissa, Nairobi, Kitui and Muranga. The outbreak is ongoing in all counties except Kitui.
Liberia	Measles	Ungraded	24-Sep-17	1-Jan-18	4-Nov-18	3 880	3 566	17	0.4%	Fifty-two suspected cases (including two IgM-positive) with zero deaths were reported during week 44 (week ending 4 November 2018) across the country. Seven health districts in six counties (Grand Gedeh, Bong, Margibi, Nimba, Rivercess, and Sinoe) are at the epidemic threshold for measles. Of the 3 566 cumulative confirmed cases reported in 2018, 306 are laboratory-confirmed, 502 epidemiologically linked, and 2 758 are clinically confirmed.
Madagascar	Measles	Ungraded	26-Oct-18	4-Oct-18	12-Nov-18	2 599	2 599	0	0.0%	As of 12 November, a total of 2 599 measles cases were confirmed by laboratory diagnostics (n=142) and epidemiological link (n=2 457). No deaths were reported. Confirmed cases were reported from 15 districts in the country.
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 five million people are affected by the crisis and in need of humanitarian assistance, including 77 046 IDPs and 140 123 refugees in neighbouring countries such as Niger, Mauritania and Burkina Faso. The number of IDPs countrywide has almost doubled since December 2017. Tombouctou Region continues to host the largest number of IDPs.
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 Bamako showed iron deficiency anaemia.
Mali	Measles	Ungraded	20-Feb-18	1-Jan-18	4-Nov-18	1 529	374	3	0.2%	In week 44, 26 new suspected cases were reported from Bamako (9), Sikasso (8), Segou (5) and Mopti (1) regions. From Week 1 to 44 of 2018, a total of 1 064 blood samples that have been collected, 374 were confirmed (IgM-positive), 578 discarded (IgM-negative), and 112 are pending at the National Reference Laboratory (INRSP). Forty five health districts in the country have reported cases since the beginning of the outbreak.
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.

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 confirmed 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	21-Oct-18	3 628	506	31	0.9%	A total of 34 cases (one lab-confirmed, 27 epi-linked, and six suspected) were reported from four regions (Erongo, Khomas, Ohangwena and Omusati) across the country. As of 21 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. 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	12-Nov-18	3 822	42	78	2.0%	In week 45 (as of 12 November 2018), no new case and no deaths were reported from Madarounfa district (Maradi region). Since 8 November 2018, no new suspected cases of cholera were reported. Overall, the most affected area remains Madarounfa Health District in Maradi Region accounting for about 69% 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	9-Nov-18	7	7	1	14.3%	A total of seven 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	10-Oct-18	-	-	-	-	Detailed update given above.
Nigeria	Cholera	G1	7-Jun-17	1-Jan-18	28-Oct-18	42 466	47	830	2.0%	In week 43 (week 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.
Nigeria	Lassa fever	Ungraded	24-Mar-15	1-Jan-18	4-Nov-18	570	553	160	28.1%	In week 44 (week ending 4 November 2018), five confirmed cases with two deaths were reported from Edo (three cases with one death), Ondo (one case with zero deaths), and Ebonyi (one case with one death) states. Eighteen states have exited the active phase of the outbreak while four-Edo, Ondo, Ebonyi and Delta states remain active.
Nigeria	Measles	Ungraded	25-Sep-17	1-Jan-18	14-Oct-18	14 848	1 110	116	0.8%	In week 41 (week ending 14 October 2018), 177 suspected cases of measles were reported from 30 states across the country. Since the beginning of the year, 4 112 fewer cases were reported from 36 states and the Federal Capital Territory compared with the same period in 2017.

Country	Event	Grade†	WHO notified	Start of reporting period	End of reporting period	Total cases	Confirmed cases	Deaths	CFR	Comments
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	13-Nov-18	25	25	0	0.0%	Two new circulating vaccine-derived poliovirus type 2 (cVDPV2) cases were reported in week 45 (week ending 11 November 2018), one from Katsina State and one from Kaduna State (newly infected district and province, part of the Jigawa outbreak) with onset of paralysis on 9 October 2018 and 10 September 2018 respectively. The country continues to be affected by two separate cVDPV2 outbreaks, the first centred in Jigawa State, and the second in Sokoto State.
Nigeria	Yellow fever	Ungraded	14-Sep-17	7-Sep-17	28-Oct-18	3 347	56	55	1.6%	In week 43, 89 suspected cases were reported (ending 28 October 2018) across the country. From the onset of this outbreak, cases have been reported from 570 Local Government Areas (LGAs) in all Nigerian states. Confirmed cases have been recorded in 27 LGAs across 14 states (Kwara, Kogi, Kano, Zamfara, Kebbi, Nasarawa, Niger, Katsina, Edo, Ekiti, Rivers, Anambra, FCT, and Benue States).
Senegal	Dengue fever	Ungraded	21-Sep-18	19-Sep-18	3-Nov-18	244	244	1	0.4%	As of 3 November 2018, 216 confirmed cases have been reported from six regions across the country namely; Diourbel (169 cases), Fatick (34 cases), Saint-Louis (6 cases), Louga (3 case), Dakar (3 Cases) and Thies (1 case). There has been a downward trend of reported cases since week 42 (week ending on 21 October 2018). A total of three dengue haemorrhagic fever cases were reported, one from Diourbel and two from Dakar.
São Tomé and Príncipe	Necrotising cellulitis/fasciitis	Protracted 2	10-Jan-17	25-Sep-16	5-Nov-18	3 060	-	0	0.0%	During week 44 (week ending 05 November 2018), 16 new cases were notified across five districts. Of the cases notified, 7 were hospitalized. The national attack rate as of week 44 is 15.5 per 100 000. Sixty-eight percent (67%) of the total cases reported during the last twelve weeks are from Me-zochi (41%) and Cantagalo (26%) districts.
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 general decreasing trend between week 23 and week 35. Analyses on serotypes from week 35 showed circulation of DENV1, DENV2 and DENV3.
South Africa	Cholera	Ungraded	5-Oct-18	29-Sep-18	13-Nov-18	3	3	0	0.0%	A third case of cholera was notified to WHO on 16 November 2018. It is a migrant worker from Zimbabwe, working and living in Alidays. He is believed to have visited Zimbabwe two weeks ago. On returning he presented at Alidays Clinic complaining of acute watery diarrhea and vomiting. He was transferred to Helena Franz Hospital for further management. The laboratory tests of the stool specimen confirmed cholera

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	28-Oct-18	-	-	-	-	The complex emergency 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.
South Sudan	Hepatitis E	Ungraded	-	3-Jan-18	28-Oct-18	156	19	-	-	Four new cases were reported from Bentiu PoC in week 43 (week ending 28 October 2018). Of the cumulative cases reported in 2018, 143 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	4-Nov-18	4 307	50	78	1.8%	During week 44 (week ending 04 October 2018), 47 new cases with zero deaths were reported from Ngorongoro District in Arusha Region. In the past four weeks, Arusha Region reported 127 (83%), Man-yara Region 9 (5.8%), Kilimanjaro 6 (3.9%) and Songwe Region 11 (7.2%) of 153 cases in total.
Uganda	Humanitarian crisis - refugee	Ungraded	20-Jul-17	n/a	24-Oct-18	-	-	-	-	After the countrywide refugee-verification process was completed on 24 October, 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.
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. The presentation was initially with high fever, tremors and later bleeding from the nose.
Uganda	Measles	Ungraded	8-Aug-17	1-Jan-17	6-Nov-18	3 114	824	1	0.0%	The majority of confirmed cases were under five years old (62%), not vaccinated (67%) or residents of rural areas (99%). In total, 109 confirmed cases (13%) 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.
Uganda	Rift Valley fever (RVF)	Ungraded	29-Jun-18	20-Jun-18	14-Aug-18	23	19	8	34.8%	Cases have been reported from 11 districts in Western Uganda with Insingiro being the most affected district reporting 11 cases and two deaths. In total, 19 cases have been confirmed by PCR. Ninety-six percent (96%) of cases reported are males, the majority of whom are herdsman and butchers.

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	8-Nov-18	10 175	269	55	0.5%	Cases have been reported from 9 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 continue since week 39.
Zimbabwe	Typhoid fever	Ungraded	7-Aug-18	6-Jul-18	10-Sep-18	1 983	16	8	0.4%	An outbreak was notified of typhoid fever in Gweru City, Midland Province. A decline in daily numbers of cases was reported since the peak on 8 August 2018 when 186 cases were reported.
Recently closed events										
Botswana	Rotavirus	Ungraded	19-Sep-18	3-Sep-18	3-Nov-18	41 757	352	40	0.1%	On 19 September, WHO was notified of an unusual increase of cases of diarrhoea among children under-five years across Botswana. The alert threshold was crossed in week 36, the outbreak peaked with 7 672 cases in week 38 and decreased to 2 129 cases in week 44. The outbreak occurred during the rotavirus diarrhoea season and laboratory investigations concluded rotavirus genotype G3P8 as the causative agent. Rotavirus vaccine was introduced in the national immunization schedule in 2012 with an annual coverage above 70% leading to a reduction of diarrhoea cases with dehydration by 75% in 2017 compared to 2012. Accumulation of rotavirus susceptible children over several years most probably fuelled this outbreak. Based on national thresholds, the country had come out of epidemic phase during week 42 and case numbers continued to decrease in the past weeks.
Uganda	Cholera	Ungraded	10-Oct-18	10-Oct-18	11-Oct-18	8	2	1	12.5%	The cholera outbreak was notified in Kampala after laboratory confirmation of subtype Ogawa in two children from Mubalak Zone, Makindye division. Six more suspected cases have been reported in Hoima (5) and Kikuube district (1 death) since 3 October 2018. Culture results for 60% of the suspected cases are pending.
Democratic Republic of the Congo	Rabies	Ungraded	19-Feb-18	1-Jan-18	28-Oct-18	26	0	26	100.0%	In epi week 43 (week ending 28 October 2018), zero new cases were reported. From week 1 to 43, a total of 26 cases of probable rabies have been reported. Case fatality ratio is 100%.

†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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