# WEEKLY BULLETIN ON OUTBREAKS AND OTHER EMERGENCIES

Week 45: 3 - 9 November 2018

Data as reported by 17:00; 9 November 2018

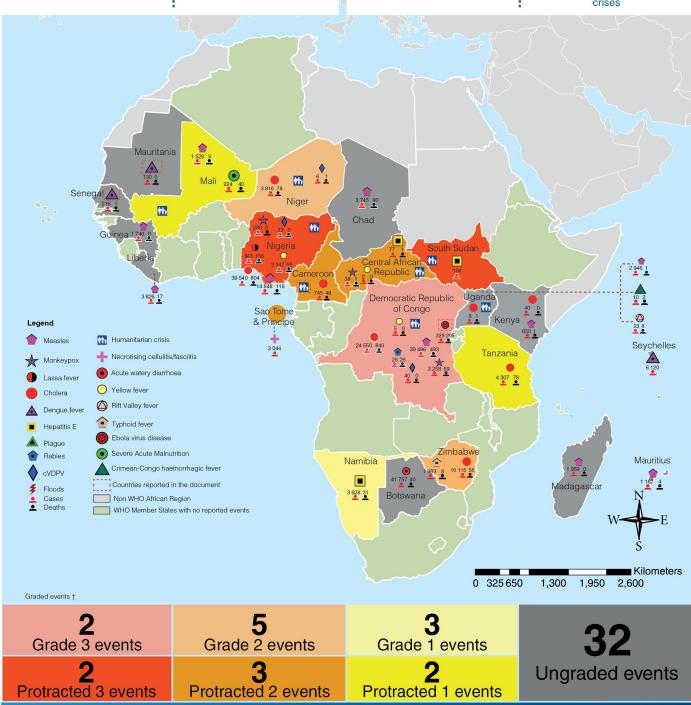


New events

50
Ongoing events

40
Outbreaks

10 Humanitarian crises



### **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 50 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
  - Dengue fever in Mauritania
  - Dengue fever in Senegal
  - Humanitarian crisis in Cameroon.
- For each of these events, a brief description, followed by public health measures implemented and an interpretation of the situation is provided.
- A table is provided at the end of the bulletin with information on all new and ongoing public health events currently being monitored in the region, as well as events that have recently been closed.

#### • Major issues and challenges include:

• The Ebola virus disease (EVD) outbreak in North Kivu and Ituri provinces, Democratic Republic of the Congo continues to evolve. With a total of 329 confirmed/probable cases, this event has now become the largest EVD epidemic in the country's history - outnumbering the first outbreak that occurred in Yambuku in 1976, during which 318 confirmed/probable cases were reported. However, the death toll of 205 is still lower than the 250 deaths that occurred in Yambuku.

New EVD cases and deaths continue to emerge, and three health zones reported confirmed EVD cases for the first time during the reporting week. The Ministry of Health, WHO and partners continue to adopt dynamic strategies and new measures in response to the challenging response environment. Specifically, the United Nations Stabilization Mission in the Democratic Republic of the Congo, MONUSCO, has taken a more active role in the response. Although the outbreak situation remains dangerous and unpredictable, it is anticipated that the dynamic approaches being undertaken will bring the outbreak to an end.

The humanitarian situation in Cameroon, arising from conflicts within and outside the country, is fast deteriorating. The internal socio-political unrest has escalated into a fully-fledged armed rebellion, with serious negative consequences. The latest abduction of civilians, including school children raised a lot of public concern. There has been mass population displacement, both internally and to neighbouring Nigeria, while provision of healthcare services has been disrupted. With the near collapse of the healthcare system and deteriorating living conditions in the North-west and South-west regions, the risk of excess morbidity and mortality in the populations is high. To that effect, this situation needs to be averted.

## **Ongoing events**

Ebola virus disease

**Democratic Republic of the Congo** 

Democratic Republic of Congo, Data as of November 10, 2018 329 **Cases** 

Distribution of the new confirmed and cumulative Ebola cases by Health Zone

Geographical distribution of confirmed and probable Ebola virus disease cases

reported between 1 May to 10 November 2018, North Kivu and Ituri provinces,

Democratic Republic of the Congo.

205 **Deaths**  62% CFR

> (4) World Health Organization

#### **EVENT DESCRIPTION**

The Ebola virus disease (EVD) outbreak in North Kivu and Ituri provinces, Democratic Republic of the Congo continues to evolve. Since our last report on 2 November 2018 (Weekly Bulletin 44), 31 new confirmed EVD cases and 19 new deaths have occurred. Three new health zones have reported confirmed EVD cases during the reporting week: Mutwanga Health Zone close to Uganda border confirmed one new case on 7 November 2018 while Kyondo Health Zone close to Butembo reported one confirmed case on 8 November 2018. Musienene Health Zone (which had a probable case previously) reported a confirmed EVD case on 9 November 2018. Insecurity persists, with an attack on a safe and dignified burial team by Mai-Mai at Mutembo village, on the road between Beni and Butembo.

As of 10 November 2018, there have been a total of 329 EVD cases, including 294 confirmed and 35 probable cases. To date, confirmed cases have been reported from 14 health zones: Beni (153), Mabalako (73), Butembo (34), Kalunguta (9), Masereka (4), Vuhovi (3), Oicha (2), Kyondo (2), Komanda (1), Musienene (1) and Mutwanga (1) in North Kivu Province; and Mandima (9) and Tchomia (2) in Ituri Province. A total of 205 deaths were recorded, including 170 among confirmed cases, resulting in a case fatality ratio among confirmed cases of 57% (170/294). Two new health workers were affected on 9 November 2018, bringing the total number of health workers affected to 30, including 29 confirmed, and three deaths.

On 10 November 2018, 28 new patients were hospitalized, bringing the total number of patients admitted to 97, including 37 confirmed cases. As of 9 November 2018, the number of patients cured and discharged back into the community is 98.

Beni and Butembo remain the main hot spots of the epidemic, reporting 65% and 20% of the 99 confirmed cases reported in the last 21 days, respectively.

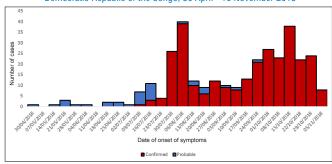
Contact tracing is still of concern due to insecurity and persistent community resistance. On 10 November 2018, the proportion of contacts followed was 94% (4476/4779), with the proportion varying between 90% and 100%.

#### **PUBLIC HEALTH ACTIONS**

- On 6 November 2018, a delegation made up of the Minister of Health, the Governor of North Kivu Province, the United Nations Under-Secretary General of UN Peace Keeping Operations, the Deputy Director General of WHO in charge of preparedness and response, the WHO Regional Emergencies Director visited Beni to assess the response activities.
- All surveillance activities continue, including investigations of confirmed cases, active case finding in health facilities and in the communities around affected health zone, and identification and listing of contacts around the latest confirmed cases. There is intensification of the search for contacts lost to follow up.
- On 6 November 2018, all 67 points of entry were functional and 223 404 travellers were checked, bringing the total number checked to 13.3 million.
- On 6 November 2018, a total of 333 people were vaccinated, including 100 in Mutwanga, 30 in Kalunguta and 203 in Beni, bringing the total number of people vaccinated to 27 058. The current stock of vaccine in Beni is 1 950 doses.
- Psychological support and food assistance was given to 557 contacts around the last confirmed cases in Beni and Butembo; psychosocial support was offered to 114 people (caregivers and patients) in Ebola Treatment Centres (ETCs), along with education of 23 patients discharged from ETCs in Beni, Mandima and Mabalako.
- Psychoeducation sessions were provided to 979 community participants in Beni, Mandima, Mabalako, Butembo and Masereka, and 27 caregivers were given a psychological debriefing.
- Infection prevention and control (IPC) and water, sanitation and hygiene (WASH) activities continue, with two households and two health facilities linked with confirmed cases in Beni and Butembo decontaminated, eight personal protection kits issued in Beni; IPC briefing of 175 service providers in Beni and Butembo; distribution of 12 hygiene kits in schools, including nine in Beni and formative supervision of IPC in 18 health facilities.
- Seven safe and dignified burials took place in Beni (4), Butembo (2) and Mandima (1).
- Ommunity awareness and mobilization sessions continue, with 44 mass awareness sessions conducted; 4 232 households received door-to-door outreach; 772 community leaders were involved in the response and there were 47 local media broadcasts, magazine inserts and spotlights on the EVD response.

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Epidemic curve of Ebola virus disease outbreak in North Kivu and Ituri provinces, Democratic Republic of the Congo, 30 April - 10 November 2018



#### SITUATION INTERPRETATION

The EVD outbreak continues to be of grave concern, particularly with geographical spread of the disease to new areas, as well as the increasing number of confirmed cases and contacts to be followed. The plan for strengthening the prevention and control of infection in Beni and other health areas needs to be implemented, along with continued collaboration with Mai-Mai groups in Kalunguta to facilitate community and hospital death investigations and follow-up and vaccination of contacts. All national and international actors need to continue to offer their strongest support to the continuing EVD response. Attacks by armed groups in Béni and surrounding areas continue to be a major security challenge.



Dengue fever Mauritania 130 0 0.0% Cases Deaths CFR

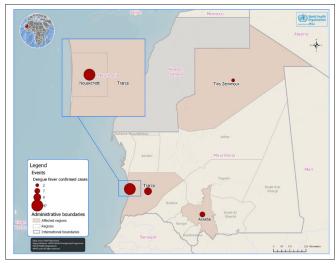
#### **EVENT DESCRIPTION**

On 23 October 2018, the Ministry of Health in Mauritania formally notified WHO of an outbreak of dengue fever in six out of 15 regions (wilayas) in the country. The event raised the attention of health authorities when an increase in consultations with febrile illness was observed in health facilities within Nouakchott city between mid-September and mid-October 2018. On 2 October 2018, nine specimens collected from the initial case-patients tested positive for dengue fever at the Institut National de Recherche en Santé Publique (INRSP) in Nouakchott by polymerase chain reaction (PCR). Retrospective investigations revealed that sporadic cases of dengue fever had occurred in several parts of the country since July 2018.

Between 01 July and 23 October 2018, 130 blood specimens collected from suspected cases across the country were tested at the INRSP, of which 65 were positive for dengue fever by PCR. Of these 65 confirmed cases, 47 (72%) were reported from three regions of Nouakchott, nine (14%) came from Rosso District in Trarza Region, seven (11%) from Guérou District in Assaba Region and two (3%) from Zouérat District in Triris Zemmour Region.

One circulating serotype, dengue virus serotype 2, has been identified in all affected regions. No case of dengue haemorrhagic fever and no fatalities have been registered among the confirmed cases. Females are slightly more affected than males, with a male to female ratio of 0.98. The ages of the confirmed cases range from 2 to 60 years, with a mean of 35 years.

#### Geographical distribution of dengue fever cases and deaths in Mauritania, 1 July - 23 October 2018



#### **PUBLIC HEALTH ACTIONS**

- Regular coordination meetings of the Technical Committee for Public Health Emergencies are ongoing in Nouakchott, under the leadership of the Disease Prevention and Control unit of the Ministry of Health, and with participation of WHO and partners.
- The Ministry of Health issued a health alert on dengue fever to all the regions in order to enhance disease surveillance. Distribution of case definitions and case notification forms to regional directorates of health is ongoing in all affected regions. Training of health workers on dengue fever case management and Integrated Disease Surveillance and Response is being conducted across the country.
- A national dengue fever response plan was developed and its implementation is ongoing. Additionally, the implementation of the national plan for integrated vector control management is ongoing.
- Two multidisciplinary national rapid response teams were deployed to Zouerate and Rosso districts since 17 October 2018, with the technical and financial support of WHO, to support outbreak investigation and local response activities, as well as the development of a regional response plan.
- Entomological surveys are being carried out in Rosso and Zouerate districts and in Nouakchott regions.
- Sensitization of populations on hygiene and sanitation measures, through the mass media (television, national and rural radios broadcasts), is being conducted.
- Procurement and distribution to affected districts of rapid diagnostic tests for dengue, drugs and other supplies necessary for the prevention and control of the disease are ongoing, with the support of WHO.

#### **SITUATION INTERPRETATION**

Mauritania is currently experiencing an outbreak of dengue fever, with the first cases of the disease confirmed in May 2018. Since the occurrence of the first outbreak in Nouakchott in 2014, dengue fever cases are being registered annually. Floods due to heavy rains that occurred across the country in the last months as well as poor sanitation in the affected areas are thought to have contributed to the proliferation of mosquitoes and the subsequent increase in dengue fever cases. The high population movements within and out of the country could potentially increase the risk of spread of the disease to other non-affected regions in Mauritania and neighbouring countries. Currently, Senegal is also facing a huge outbreak of dengue fever. Nonetheless, the drier season, usually starting in November, is anticipated to curtail the proliferation of mosquitoes and reduce further transmission of the virus. Urgent measures have to be undertaken to bring this outbreak to a speedy end, including active surveillance for early detection, reporting and management of cases, risk communication/social mobilization, vector control measures (destruction of vector larvae, in-home spraying, waste management, use of insecticide treated materials, active monitoring and surveillance of vectors), etc.

Dengue fever Senegal 216 1 0.5% Cases Death CFR

#### **EVENT DESCRIPTION**

The outbreak dengue fever in Senegal continues to evolve, with four new health districts being affected for the first time. In week 44 (week ending 4 November 2018), 71 new confirmed cases of dengue fever were reported. The health districts of South Dakar, Guédiawaye, Pikine and Tivaouane confirmed dengue fever cases during the reporting week, bringing the number of health districts with at least one confirmed case to 11.

As of 3 November 2018, the cumulative number of suspected cases is 2 123, of which 216 are confirmed. Six regions are currently reporting confirmed cases: Diourbel (169), Fatick (34), St Louis (6), Dakar (3), Louga (3) and Thiès (1). Of the 200 confirmed cases of known age and sex, 53% are female (n=105) and 45% are aged between 10 and 24 years. So far, six cases have been hospitalized. One death of a confirmed case has been reported, in Touba, giving a case fatality ratio among confirmed cases of 0.5%

Serotyping by the Institut Pasteur Dakar has identified three circulating serotypes in the country: dengue virus type 3 (DENV-3) in Touba, DENV-1 in Fatick and DENV-2 in Richard-Toll, bordering Mauritania. Results of additional isolates, including those from other districts, are pending.

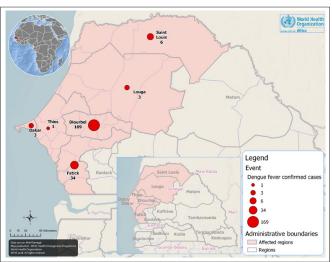
#### **PUBLIC HEALTH ACTIONS**

- The National Epidemic Management Committee meets regularly to plan, implement and coordinate the response with partners. The seventh meeting was held on 5 November 2018.
- The existing sentinel surveillance system for febrile illness has been strengthened by enhancing surveillance in all regions of the country.
- A rapid response team has been established in each affected district and these teams are currently conducting active screening, risk communication and vector control activities around each confirmed case.
- Ocase management is provided free of charge in local health facilities in affected districts.
- Ommunity awareness and sensitization activities continue, emphasising early care-seeking, destruction of vector breeding sites and use of long-acting insecticide-treated bed nets.
- Radio broadcasts are taking place in Fatick region, along with mobilization of community actors in awareness promotion.
- Local authorities are being urged to become involved in treatment of water retention basins and destruction of vector species larvae.

#### SITUATION INTERPRETATION

The outbreak of dengue fever in Senegal continues, with the disease being confirmed in new districts. The risk of spread of dengue nationally remains high due to the presence of the vector, *Aedes aegypti*, in the country, poor water supply and storage issues and influx of people from the sub-regions for religious ceremonies. Although the Grand Magal is now over, the Mauloud is scheduled for the 20-21 November 2018. Strong public health measures have been implemented, and the national surveillance system has been improved in all regions, particularly in terms of collection and testing of specimens. However, the significant increase in numbers of samples collected may soon put the country's laboratory services under strain. The presence of three circulating virus strains increases the potential for secondary heterotypic infection, which is generally more severe, which may stress clinical services. National and international actors should continue to implement all public health measures and bring the outbreak to a close.

## Geographical distribution of dengue fever cases and deaths in Sengal, 4 November 2018



#### **Cameroon**

#### **EVENT DESCRIPTION**

The humanitarian crisis in Cameroon continues to deteriorate, with almost 10% of the population in need of aid assistance, primarily in Far North, North, Adamaoua, and East regions. In recent months, political violence (referred to as the Anglophone crisis) in the North-west and South-west regions of Cameroon has escalated dramatically. At least 400 civilians and 160 state security personnel have died in the conflict, which started in 2016 as a "peaceful strike of lawyers and teachers". On 5 November 2018, about 102 people in Bamenda, including 79 school children from a boarding school were abducted and spent several days in captivity before being released. This event raised public tension and a call for peaceful resolution of the socio-political contestations. The crisis continues to disrupt livelihood systems and driving internal displacement as well as refugees into Nigeria. By September 2018, an estimated 437 000 people have been internally displaced as a result of conflict in

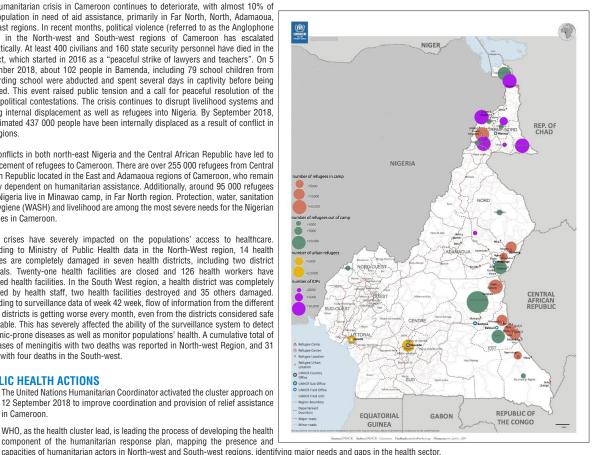
The conflicts in both north-east Nigeria and the Central African Republic have led to displacement of refugees to Cameroon. There are over 255 000 refugees from Central African Republic located in the East and Adamaoua regions of Cameroon, who remain strictly dependent on humanitarian assistance. Additionally, around 95 000 refugees from Nigeria live in Minawao camp, in Far North region. Protection, water, sanitation and hygiene (WASH) and livelihood are among the most severe needs for the Nigerian refugees in Cameroon

These crises have severely impacted on the populations' access to healthcare. According to Ministry of Public Health data in the North-West region, 14 health facilities are completely damaged in seven health districts, including two district hospitals. Twenty-one health facilities are closed and 126 health workers have deserted health facilities. In the South West region, a health district was completely deserted by health staff, two health facilities destroyed and 35 others damaged. According to surveillance data of week 42 week, flow of information from the different health districts is getting worse every month, even from the districts considered safe and stable. This has severely affected the ability of the surveillance system to detect epidemic-prone diseases as well as monitor populations' health. A cumulative total of 134 cases of meningitis with two deaths was reported in North-west Region, and 31 cases with four deaths in the South-west.

#### **PUBLIC HEALTH ACTIONS**

- The United Nations Humanitarian Coordinator activated the cluster approach on 12 September 2018 to improve coordination and provision of relief assistance in Cameroon
- WHO, as the health cluster lead, is leading the process of developing the health component of the humanitarian response plan, mapping the presence and

#### Humanitarian crisis in Cameroon as of July 2018



- WHO carried out a detailed public health situation analysis of the humanitarian situation in Cameroon, as part of the process to scale up health sector operations response.
- WHO secured funding from the United Nations Central Emergency Response Fund to scale up its response efforts, in support of the Ministry of Health and health partners.
- Cholera preparedness activities continue, along with community-based polio surveillance in the North Region, as a result of the extension of the audiovisual acute flaccid paralysis detection and reporting system to a total of six health districts

#### SITUATION INTERPRETATION

The humanitarian situation in Cameroon, arising from conflicts within and outside the country, is fast deteriorating. The internal socio-political unrest has escalated into a fully-fledged armed rebellion with serious negative consequences. Populations have been displaced both internally and to neighbouring Nigeria. Healthcare services have been disrupted. With the collapse of the health system in the North West and South West regions, the risk of excess morbidity and mortality faced by populations in these two regions is high. The country is already experiencing multiple threats of communicable outbreaks, including cholera, yellow fever, monkeypox, measles, etc. Aid actors have started scaling up their humanitarian response, and this needs to be done rapidly in order to reduce excess morbidity and mortality among internally displaced persons in the North-west and South-west regions.

## Summary of major issues challenges, and proposed actions

#### **Major issues and challenges**

- The Ebola virus disease (EVD) outbreak in North Kivu and Ituri provinces, Democratic Republic of the Congo continues, becoming the largest epidemic the country has ever experienced. During the reporting week, the Minister of Health, the WHO's Director-General, the head of UN Peacekeeping force (MONUSCO) and other dignitaries visited Beni (the epicentre of the outbreak) in a show of commitment and solidarity with the affected people. The goal of the mission was to explore further strategies to strengthen the response in the field. The delegation held high level meeting with the Prime Minister and other senior government officials. It is anticipated that the dynamic approach and new measures being adopted will bring the outbreak to a speedy end.
- The humanitarian crises in many parts of Cameroon have become serious in the recent past, especially the socio-political conflict in the Southwest and North-west regions. The situation that started as a peaceful demonstration quickly evolved into fully-fledged armed rebellion. Several thousand people have been internally displaced while others have fled to neighbouring Nigeria. Means of livelihood have been disrupted as well as provision of social services such as healthcare and education, The current humanitarian situation in Cameroon needs to be responded to more swiftly.

## **Ongoing events**

#### **Proposed actions**

- The national authorities and partners in the Democratic Republic of the Congo to continue working closely with community leaders and local structures using innovative approaches.
- The national authorities and partners in Cameroon need to quickly scale up the response operations to the humanitarian situation in the country.

## All events currently being monitored by WHO AFRO

Country	Event	Grade†	WHO notified	Start of reporting period	End of reporting period	Total cases	Con- firmed cases	Deaths	CFR	Comments
Ongoing ev	ents									
Botswana	Acute watery diarrhoea (AWD)	Ungraded	19-Sep-18	3-Sep-18	3-Nov-18	41 757	352	40	0.1%	The outbreak peaked in week 38 (7 672 cases). In total, 6 022 diarrhoea cases with dehydration were reported. Only two districts (Kanye and Okavango) are still in active epidemic phase based on their district-specific thresholds and both reported 16 cases with dehydration. Rotavirus was detected in 67% of a total of 228 samples tested by the National Health Laboratory (NHL).
Cameroon	Human- itarian crisis	Protracted 2	31-Dec-13	27-Jun-17	1-Nov-18	-	-	-	-	Detailed update given above.
Cameroon	Cholera	G1	24-May-18	18-May-18	2-Nov-18	745	53	48	6.4%	From 31 October 2018 to 02 November 2018, 91 new suspected cases were reported from the Far North region and 17 cases from the North region. No new confirmed case has been reported from the Central and Littoral regions since the 27 August 2018 and 11 October 2018 respectively.
Central African Republic	Human- itarian crisis	Protracted 2	11-Dec-13	11-Dec-13	30-Sep-18	-	-	-	-	In October 2018, the Central African Republic had 642 842 internally displaced persons and 573 200 refugees in neighbouring countries. Acts of violence against humanitarian workers persist (338 incidents reported in 2018).
Central African Republic	Monkey- pox	Ungraded	20-Mar-18	2-Mar-18	5-Nov-18	39	19	1	2.7%	From 9 October - 05 November 2018, Central African Republic reported eight confirmed cases of Monkeypox in Mbaiki district. 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. The last case was confirmed on 26 October.
Central African Republic	Hepati- tis E	Ungraded	2-Oct-18	10-Sep-18	5-Nov-18	77	35	1	1.4%	Sixteen localities of Bokarangue-Koui health district are affected of which Barage II and Barague 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 Institute 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.
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 an Hepatitis E outbreak. Despite ongoing case investigations, no additional case was detected after 18 October. 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, Matadjana, Ndjamena East, Ndjamena South, Ngouri and Oum Hadjer.

Go to map of the outbreaks

Country	Event	Grade†	WHO notified	Start of reporting period	End of reporting period	Total cases	Con- firmed cases	Deaths	CFR	Comments
Dem- ocratic Republic of the Congo	Human- itarian 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.
Dem- ocratic Republic of the Congo	Cholera		16-Jan-15	1-Jan-18	28-Oct-18	24 550	-	840	3.4%	A total of 784 suspected cases of cholera including 26 deaths (CFR: 3.32%) were reported during week 43 (week ending 28 October 2018). Fourteen (14) out of twenty-six provinces have reported at least one case. The five (5) most affected provinces (Eastern Kasai, Kongo Central, Lomami, Tanganyika and South Kivu) notified 82.3% of the cases and 46.2% of all deaths. There is an increase in the total number of cases reported in week 43 compared to the previous week.
Dem- ocratic Republic of the Congo	Ebola virus disease	G3	31-Jul-18	11-May-18	10-Nov-18	329	294	205	62%	Detailed update given above.
Dem- ocratic 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. Eightynine 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.
Dem- ocratic Republic of Congo	Monkey- pox	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.
Dem- ocratic Republic of the Congo	Polio- myelitis (cVD- PV2)	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.
Dem- ocratic Republic of 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%.
Dem- ocratic Republic of Congo	Yellow fever	Ungraded	16-Aug-18	1-Jul-18	17-Aug-18	5	4	0	0.0%	Samples from four out of five suspected cases have been confirmed for Yellow fever by Plaque Reduction Neutralization Test (PRNT) at Institute Pasteur Dakar (IPD). Cases are from Ango District in Bas Uele Province, Yalifafu district in Tshuapa Province and Lualaba Province.
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.

Country	Event	Grade†	WHO notified	Start of reporting period	End of reporting period	Total cases	Con- firmed cases	Deaths	CFR	Comments
Kenya	Cholera	Ungraded	8-Sep-18	8-Sep-18	6-Nov-18	40	8	0	0.0%	A new wave of cholera outbreak is hitting Turkana, Embu and Isiolo Counties since 8 September 2018. No new case was detected since 23 October. Cumulatively, 5 796 cases including 78 deaths (CFR 1.3%) have been reported since 1 January 2018 in 20 out of 47 counties.
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 measels outbreak, namely Mandera, Wajir, Garissa, Nairobi, Kitui and Muranga. Except of Kitui, the outbreak is still ongoing active in those counties.
Liberia	Measles	Ungraded	24-Sep-17	1-Jan-18	28-Oct-18	3 826	3 519	17	0.4%	Twenty-seven suspected cases with zero deaths of which four were confirmed (IgM-positive) were reported during week 43 (week ending 28 October 2018) across the country. Six health districts in five counties (Grand Gedeh, Bong, Margibi, Nimba, and Rivercess) are at the epidemic threshold for measles. Of the 3 519 cumulative confirmed cases reported in 2018, 301 are laboratory-confirmed, 476 epidemiologically linked, and 2 742 are clinically confirmed.
Madagas- car	Measles	Ungraded	26-Oct-18	4-Oct-18	3-Nov-18	1 959	1 959	0	0.0%	As of 3 November 2018, a total of 1 959 measles cases were confirmed by laboratory diagnostics (n=96) and epidemiological link (n=1 863). No deaths were reported. Confirmed cases were reported from nine district in the country including Antananarivo.
Mali	Human- itarian crisis	Protracted 1	n/a	n/a	12-Oct-18	1	-	-	1	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 assistanc, including 77 046 IDPs and 140 123 refugees in neighbouring countries such as Niger, Mauritania and Burkina Faso.
Mali	Severe Acute Malnutri- tion	Ungraded	1-Aug-18	15-Mar-18	5-Aug-18	224	0	40	17.9%	Three villages (Douna, Niagassadiou and Tiguila) in the commune of Mondoro, Douentza district, Mopti Region, Central Mali are experiencing an epidemic of malnutrition following the inter-communal conflict that prevails in the locality. A dozen samples from patients analyzed at INRSP in Bamako showed iron deficiency anaemia.
Mali	Measles	Ungraded	20-Feb-18	1-Jan-18	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). Fourty five Health districts in the country have reported cases since the beggining of the outbreak.
Maurita- nia	Dengue fever	Ungraded	23-Oct-18	15-Sep-18	23-Oct-18	130	65	0	0.0%	Detailed update given above.
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.

Country	Event	Grade†	WHO notified	Start of reporting	End of reporting	Total cases	Con- firmed	Deaths	CFR	Comments
Namibia	Hepati- tis E	GI	18-Dec-17	period  8-Sep-17	period 21-Oct-18	3 628	506	31	0.9%	A total of 34 cases (one lab-confirmed, 27 epilinked, 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	Human- itarian 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 Bokoharam group persists in the country.
Niger	Cholera	G2	13-Jul-18	13-Jul-18	8-Nov-18	3 816	42	78	•	In week 45 (as of 8 November 2018, week ends on 11 November 2018), one new case and no deaths were reported from Madarounfa district (Maradi region). The weekly number of cases continue to show a downward trend since week 37, including in Tessaoua (Maradi region) where an acute spike in cases (37) had occured in weeks 41 to 43 has not reported any cases since 25 October 2018. 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 (cVD-PV2)	G2	8-Jul-18	8-Jul-18	21-Oct-18	6	6	1	16.7%	No new cases have been reported in the past week. A total of six cVDPV2 cases have been reported in 2018 in Niger, which are genetically linked to a cVDPV2 case in Jigawa and Katsina states, Nigeria.
Nigeria	Human- itarian crisis	Protracted 3	10-Oct-16	n/a	10-Oct-18	-	-	-	-	Since the start of the conflict in 2009, more than 27 000 people have been killed in Borno, Adamawa, and Yobe states while thousands of girls and women abducted and children used as so-called "suicide" bombers. About 1.8 million people are internally displaced in these states.
Nigeria	Cholera	G1	7-Jun-17	1-Jan-18	7-Oct-18	39 540	47	804	2.0%	In week 40 (week ending 7 October 2018), 1 210 suspected cases including nine deaths (CFR 0.7%) were reported from six states: Zamfara (327 cases with three deaths), Katsina (342 cases), Borno (363 cases with two deaths), Adamawa (80 cases with three deaths), Gombe (18 cases), and Yobe (84 cases with one death). There is an overall downward trend but the number of cases in Katsina State remains very high.
Nigeria	Lassa fever	Ungraded	24-Mar-15	1-Jan-18	28-Oct-18	565	548	158	28.0%	In week 43 (week ending 28 October 2018), ten cases (nine confirmed and one probable) were reported from three states. The confirmed cases were reported from Ondo (4 cases with one death), Edo (4 cases with one death), and Ebonyi (one case with zero deaths) states. The probable case (deceased without sample collected) was reported from Ebonyi State. This is an increase compared to the previous week when three confirmed cases were reported. Sixteen states have exited the active phase of the outbreak while six states- Edo, Delta, Ondo, Ebonyi, Kogi and Imo states remain active.

Country	Event	Grade†	WHO notified	Start of reporting period	End of reporting period	Total cases	Con- firmed cases	Deaths	CFR	Comments
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.
Nigeria	Monkey- pox	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	Polio- myelitis (cVD- PV2)	Ungraded	1-Jun-18	1-Jan-18	30-Oct-18	23	23	0	0.0%	Two new cases have been reported: one from Daura Local Government Area, Katsina State with onset of paralysis on 18 September 2018 and the other from Monguno Local Government Area, Borno State, with onset of paralysis on 25 September. The country continues to be affected by two separate cVDPV2 outbreaks, the first centered in Jigawa State, and the second in Sokoto State.
Nigeria	Yellow fever	Ungraded	14-Sep-17	7-Sep-17	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	216	216	1	0.5%	Detailed update given above.
São Tomé and Prin- cipé	Necro- tising cellulitis/ fasciitis	Protracted 2	10-Jan-17	25-Sep-16	28-Oct-18	3 044	-	0	0.0%	During week 43 (week ending 28 October 2018), 13 new cases were notified across six districts. Of the cases notified, 8 were hospitalized. The national attack rate as of wek 42 is 15.4 per 100 000. Sixty-eight percent (67%) of the total cases reported during the last nine weeks are from Me-zochi (43%) and Cantagalo (24%) districts.
Seychelles	Dengue fever	Ungraded	20-Jul-17	18-Dec-15	21-Oct-18	6 120	1 511	-	1	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 Sudan	Human- itarian 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	Hepati- tis 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%), Manyara Region 9 (5.8%), Kilimanjaro 6 (3.9%) and Songwe Region 11 (7.2%) of 153 cases in total.

Country	Event	Grade†	WHO notified	Start of reporting period	End of reporting period	Total cases	Con- firmed cases	Deaths	CFR	Comments
Uganda	Human- itarian 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	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.
Uganda	Crime- an-Congo haem- orrhagic 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 developed a history of bleeding from the nose.
Uganda	Measles	Ungraded	8-Aug-17	1-Jan-17	30-Sep-18	2 946	771	1	0.0%	In total, 771 cases have been confirmed either by epidemiological link or laboratory testing (IgM-positive) since the beginning of the year. Fifty-four districts in the country have reported a measles outbreak.
Uganda	Rift Valley fever (RVF)	Ungraded	29-Jun-18	20-Jun-18	14-Aug-18	23	19	8	34.8%	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, nineteen cases have been confirmed by PCR. Ninety-six percent (96%) of cases reported are males, the majority of whom are herdsman and butcher.
Zimbabwe	Cholera	G2	6-Sep-18	6-Sep-18	8-Nov-18	10 116	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 where reported.

<sup>†</sup>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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