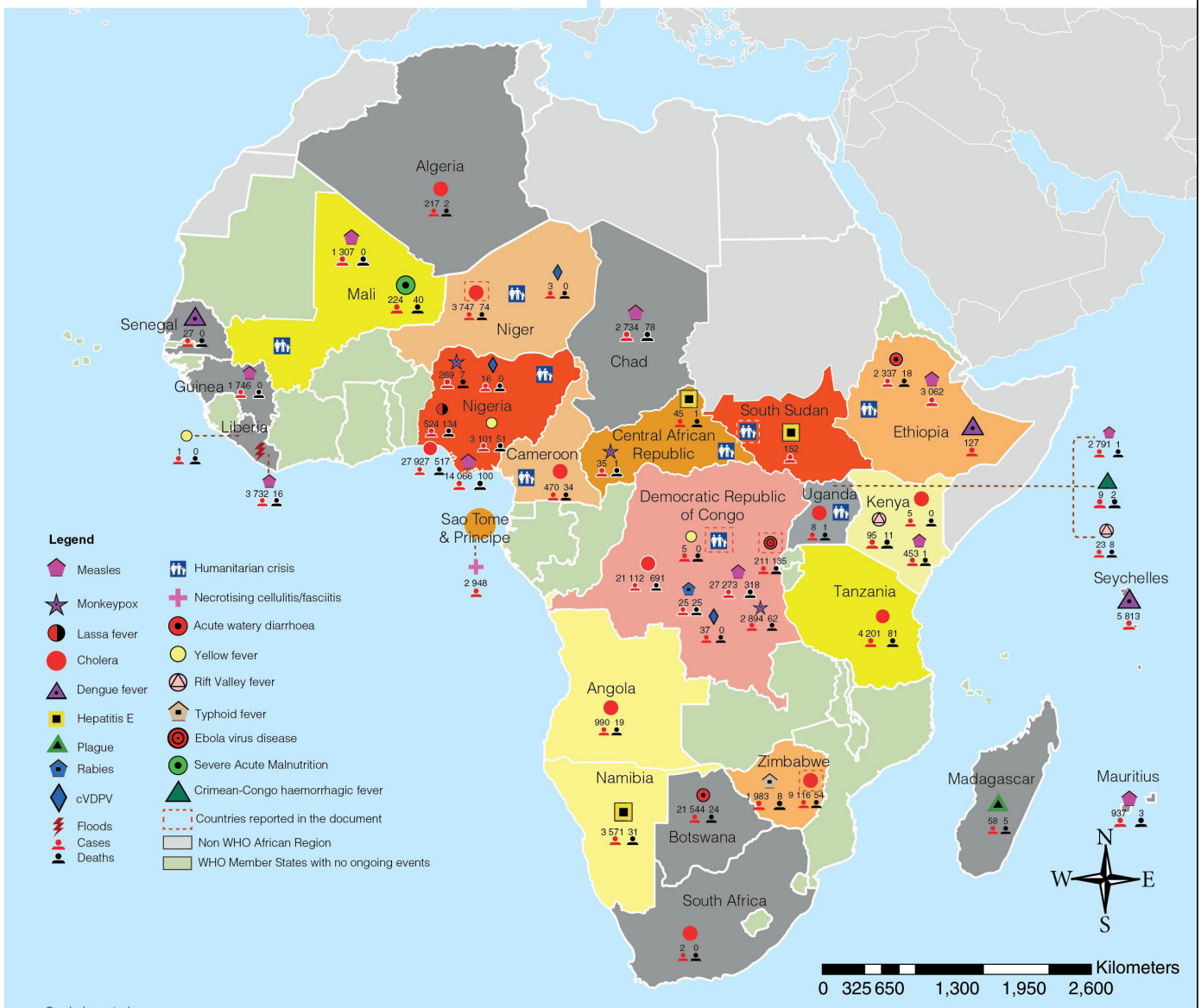
WEEKLY BULLETIN ON OUTBREAKS AND OTHER EMERGENCIES

Week 41: 6 – 12 October 2018
Data as reported by 17:00; 12 October 2018

World Health Organization
REGIONAL OFFICE FOR Africa
WHO Health Emergencies Programme

2	56	46	12
New events	Ongoing events	Outbreaks	Humanitarian crises



Graded events †

2 Grade 3 events	**7** Grade 2 events	**5** Grade 1 events	**35** Ungraded events
2 Protracted 3 events	**2** Protracted 2 events	**4** Protracted 1 events	

Health Emergency Information and Risk Assessment

Overview

Contents

- This Weekly Bulletin focuses on selected acute public health emergencies occurring in the WHO African Region. The WHO Health Emergencies Programme is currently monitoring 58 events in the region. This week's edition covers key ongoing events, including:

  - Ebola virus disease outbreak in the Democratic Republic of the Congo
  - Cholera outbreak in Zimbabwe
  - Cholera outbreak in Niger
  - Humanitarian crisis in the Democratic Republic of the Congo
  - Humanitarian crisis in South Sudan.

- 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 cholera outbreaks in Niger and Zimbabwe have been on a downward trend over the past weeks. Although this rapid decline is encouraging, it should be taken with caution. The risk factors for cholera transmission, including inadequate potable water supply as well as limited sanitation and hygiene infrastructure, persist in the affected areas. These risk factors need to be addressed comprehensively with involvement of relevant sectors in order to curb the spread of the disease in areas that remain at high risk for cholera outbreaks.

  - The Ebola situation in North Kivu remains precarious. The recent increase in the incidence of new Ebola cases, mostly reported in Beni, is of great concern and highlights the multiple challenges faced by response teams who continue to operate in a complex and difficult environment. Security issues have severely hampered key response activities such as contact tracing, active case finding and vaccination. Community mistrust and resistance remain a major obstacle faced by response teams in their effort to control the spread of this outbreak.

Ongoing events

Ebola virus disease | **Democratic Republic of the Congo** | 211 **Cases** | 135 **Deaths** | 64% **CFR**

EVENT DESCRIPTION

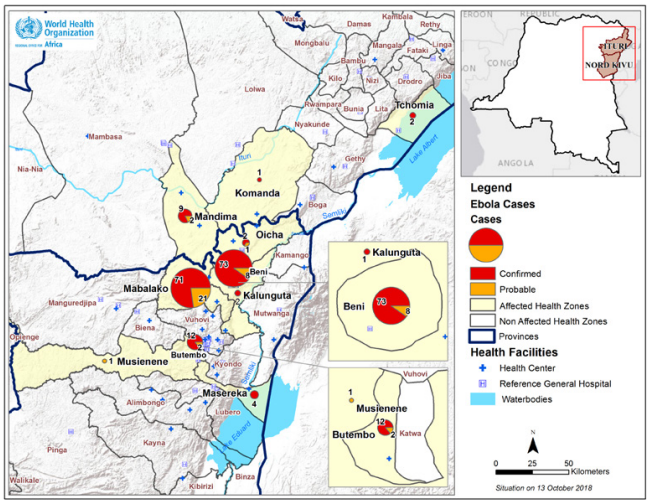
The Ebola virus disease (EVD) outbreak in North Kivu and Ituri provinces, Democratic Republic of the Congo, continues to evolve. Since our last report on 8 October 2018 *(Weekly Bulletin 40)*, 34 new confirmed EVD cases and 22 new deaths have been reported. The 34 new confirmed cases were reported across five health zones: Beni (26), Masereka (3), Butembo (3), Mabalako (1) and Kalunguta (1). On 13 October 2018, eight health zones reported 24 new suspected cases under investigation: Beni (15), Mabalako (2), Musienene (1), Masereka (1), Butembo (1), Mandima (4).

As of 13 October 2018, a total of 211 confirmed and probable EVD cases, including 135 deaths, have been reported, resulting in a case fatality ratio (CFR) of 64%. Among the 211 cases, 176 are confirmed and 35 are probable. The CFR among confirmed cases is 57% (100/176). The confirmed cases were reported from six health zones in North Kivu Province: Beni (73), Mabalako (71), Butembo (12), Masereka (4), Oicha (2) and Kalunguta (2) ; and three health zones in Ituri Province: Mandima (9), Tchomia (2) and Komanda (1). During week 41 (ending on 13 October 2018), a health care worker from a health facility in Beni was confirmed among the new cases. This brings the total number of health care workers affected in this outbreak to 20, including 19 confirmed. To date, three health workers have died from the disease. During the same week, a MONUSCO plumber working at the coordination headquarters in Beni tested positive for Ebola and is currently hospitalized at the CTE in Beni. The surveillance team has already started the investigation to identify all contacts and prevent transmission of the virus.

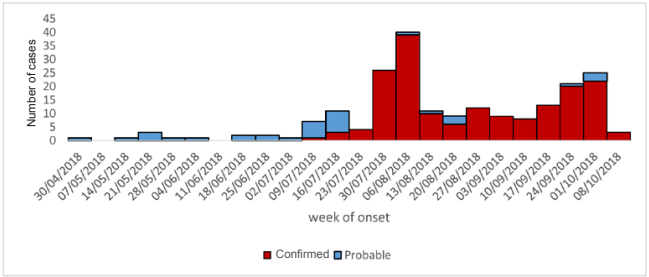
As of 13 October 2018, 55 patients have recovered, been discharged from the Ebola treatment centres (ETCs) and re-integrated into their communities. A total of 56 patients remain hospitalized, including 24 confirmed and 32 suspected cases. Fifty-three confirmed cases are receiving compassionate therapy, and the eligibility of the remaining three is currently under evaluation. Mabalako and Beni are the most affected health zones, accounting for 44% (92/211) and 38% (81/211) of all cases, respectively. Beni continues to be the current epicentre of the outbreak, as it is where the majority of confirmed and probable cases have been reported since mid-August 2018.

The average proportion of contacts which were seen during week 41 ranged from 84% to 100% in all health zones, with the exception of Beni where it was only 68%. This is the result of community resistance in Beni, which hinders response activities including contact tracing and monitoring. During week 41, a total of 2 663 new contacts were identified from seven health zones, mostly in Beni (2 094). Contacts continue to be traced, in the face of insecurity and community resistance.

Geographical distribution of confirmed and probable Ebola virus disease cases reported betwwen 1 May to 13 October 2018, North Kivu and Ituri provinces, Democratic Republic of the Congo.



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



PUBLIC HEALTH ACTIONS

- On 13 October 2018, a total of 455 people were vaccinated in seven rings, bringing the cumulative number of people vaccinated to 16 973 in the two affected provinces. No major adverse events have been reported. With reception of 2 160 doses on 13 October, the current stock of available vaccine is 3 660 doses.
- The capacity of the Ebola Treatment Centre in Beni was increased to 41 beds distributed in four new tents.
- There are continuing investigations and contact listing around the latest cases in Beni and Masereka, particularly in-depth investigation of the latest confirmed cases not known as contacts in Beni, along with continued search for lost contacts and active case finding in Beni, Tchomia and Komanda health zones.
- The local authorities continue their efforts to find the confirmed case who left the Beni Ebola treatment centre since 20 September 2018.
- Twenty care providers (paramedics, nurses and hygienists) were trained in the transfer of patients with EVD and a total of 15 patients were transferred to Ebola treatment centres and transitional segregation units.
- Psychosocial activities for patients and their families continue, with information sessions in Tchomia, prevention of stigma in patients discharged from treatment centres, and in support of the activities of other commissions, including monitoring, to persuade suspected cases to accept transfer to Ebola treatment centres, and to accept safe and dignified burials of those who died.
- Decontamination of the coordination headquarters in Beni and all health facilities receiving confirmed cases continues.
- Infection prevention and control (IPC) activities have been conducted in Rwangoma Clinic, Amani Dispensary, Mapendo Clinic, Saint Pierre Paediatric Centre and Tulizeni Clinic in Butembo Health Zone.
- On 10 October 2018, Congolese authorities announced a ban on harbouring suspected Ebola patients and promised police protection for health workers at burials, in an effort to address current challenges linked to local resistance and attacks on response teams.

SITUATION INTERPRETATION

The EVD outbreak in the Democratic Republic of the Congo has reached a critical juncture with high mobility of the population, community resistance, and insecurity in some localities continuing to pose a challenge to the implementation of required response activities. Due to the complex situation, response strategies need to be continuously adapted including enhanced surveillance and identification and monitoring of all contacts. With the changing dynamic of the outbreak observed in Beni, health authorities in Beni are focusing on the rapid investigation of all deaths occurring in the community and health centre, and effort must be carried out to ensure adequate community engagement. The recent increase of new confirmed cases not known as contacts upon identification is a new challenge which must be urgently addressed. Continued strengthening of cross-border surveillance between the Democratic Republic of the Congo and Uganda is crucial given the occurrence of confirmed cases in Tchomia Health Zone, which borders Uganda and has a high flow of people across the border.

Go to overview

Go to map of the outbreaks

EVENT DESCRIPTION

The outbreak of cholera in Zimbabwe has been ongoing for the past 5 weeks. However, the weekly case incidence has been on a downward trend since week 39 (week starting on 23 September 2018). Since our last report *(Weekly Bulletin 39)*, there have been 1 968 new cases reported including five deaths. Bulawayo Province is the latest to report cases with a total of 38 cases with one death since 25 September 2018.

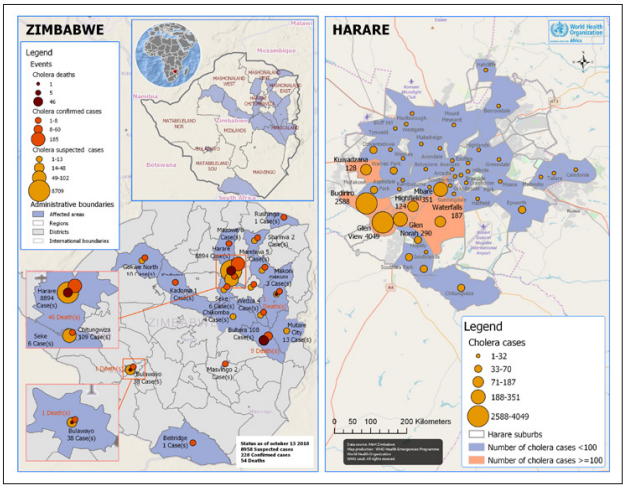
As of 12 October 2018, a cumulative total of 9 116 cases with 54 deaths (case fatality ratio 0.59%) have been reported from eight provinces across the country. Of the reported cases, 228 are confirmed by culture. Harare (8 824 cases) and Chitungwiza (109 cases) cities in Harare Province have reported the majority of the cases accounting for 98% of the cumulative cases reported across the country. The most affected areas in Harare City are from the densely populated urban suburbs of Glen View (4 036 cases), Budiriro (2 538 cases), Mbare (349 cases) and Glen Nora (287 cases). Other provinces reporting cases outside of Harare include Manicaland Province (85), Bulawayo (38), Mashonaland East province (35), Mashonaland Central province (11), Midlands Province (10), Masvingo (2), Matabeleland South (1), and Mashonaland West (1).

There are equal proportion of males and females affected. Of the 8 836 cases for which age is known, the majority (5 011; 57%) are in the age group 5 to 34 years; children under 5 years represent 22% of cases. Of the 54 deaths reported, the majority have occurred in Harare City (46) followed by Buhera in Manicaland (5). The majority of deaths (33/46; 72%) in Harare City have occurred in a healthcare institution, with most (30) reported from the Beatrice Road Infectious Diseases Hospital (BRIDH).

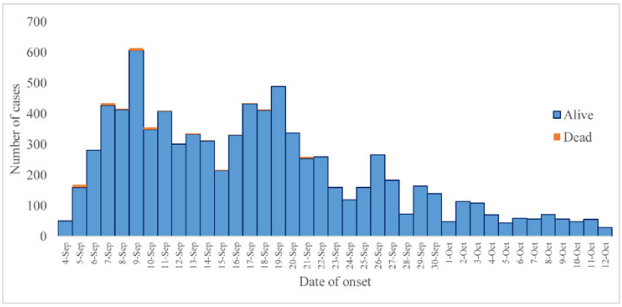
The pathogen detected among confirmed cases is *Vibrio cholerae* O1 serotype Ogawa. Since confirmation on 6 September 2018, a multi-drug resistant strain has been identified and is in circulation; however, antibiotics are only recommended for severe cases. Contaminated water sources, including wells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

On 5 October, South Africa notified WHO of a confirmed diagnosis of cholera in a returning traveler from Zimbabwe. The case -patient, a 50-year-old female who traveled to Zimbabwe (Mashonaland) on 16 September 2018 and arrived back in South Africa on 30 September 2018, commenced with diarrhoea on 29 September 2018 just after leaving Harare for South Africa and was admitted to a Tshwane hospital on 1 October 2018 with profuse watery diarrhea and dehydration. A second case, husband of the first case-patient has also been confirmed for cholera. The pathogen identified in both cases is the same *Vibrio cholerae* O1 serotype Ogawa.

Geographical distribution of cholera cases and deaths in Zimbabwe, 4 September -12 October 2018



Number of cases of cholera by date of onset, Harare City, Zimbabwe, 4 September - 12 October 2018



PUBLIC HEALTH ACTIONS

- The National Emergency Operations Centre (EOC) which was activated continue to support coordination of response activities led by the Ministry of Health and Child Care with support from WHO, MSF, US CDC, and other partners.
- Enhanced surveillance including active case finding is ongoing. The case definition in Harare City for a suspected case of cholera has been updated as "Any person in an outbreak area presenting with acute watery diarrhoea, with or without vomiting". Refresher trainings were conducted from 3 to 4 October 2018 for approximately 70 staff at BRIDH, Budiriro and Glen View on the correct use of case definition.
- WHO is providing technical oversight into case management and providing guidance on the interpretation of laboratory findings to guide the choice of antibiotics.
- The 2009 Zimbabwe Cholera Control guidelines, adapted from WHO guidelines, are now in use, with Médicines sans Frontièrs (MSF) orientating health workers on these guidelines.
- Cases are being treated at four treatment sites in and outside of Harare City. UNICEF has prepositioned seven tents at Glenview for the cholera treatment centers (CTCs) and Oxfam is providing mobile toilets in three CTCs.
- The first phase of a reactive mass oral cholera vaccination campaign targeting 422 722 people in the most affected suburbs of Harare (Glen View, Budiriro, Glen Norah, and Mbare) commenced on 3 October 2018. At the end of phase I on11 October 2018, a total of 403 167 people (administrative coverage: 95.4%) were vaccinated across all four suburbs. Administrative coverage according to suburbs are as follow: Mbare (118%), Glen Norah (110%), Glenview (91%), and Budiriro (75%). A second phase of the vaccination campaign is expected to commence on 15 October targeting 170 000 people in Epworth and Seke districts and a third phase on 17 October 2018 targeting 200 000 people Chitungwiza district.
- Water, sanitation and hygiene (WASH) activities include enforcement of regulations for food vendors, City of Harare fixing burst water pipes and increasing the water supply to hotspots, and private sector players supporting installation of water tanks and water trucking.
- WASH partners (UNICEF, Higher life Foundation, Oxfam, WHH, Mercy Corps, Christian Care, World Vision and ADRA) are also supporting distribution of hygiene kits to vulnerable households.
- Risk communication, social mobilization, and community engagement activities continue with approximately 350 000 posters and flyers produced and distributed to inform the public on cholera prevention messages as well as the oral cholera vaccination campaign.

SITUATION INTERPRETATION

The daily number of cases reported is beginning to show a declining trend. With the launch of the mass reactive vaccination campaign, it is anticipated that the outbreak will be brought under control. However, authorities will need to step up efforts to ensure that a high vaccination coverage is attained. While the OCV campaign may provide short-term remedy for controlling the outbreak, the risk factors are still present. There is a need for implementing conventional cholera prevention and control strategies focus on ensuring access to clean water, sanitation and hygiene, and strengthening surveillance and preparedness activities.

The reports of cross-border cases in South Africa underline the potential for infection to spread to neighbouring countries. Cross-border collaboration aimed at early detection and control measures will need to be strengthened.

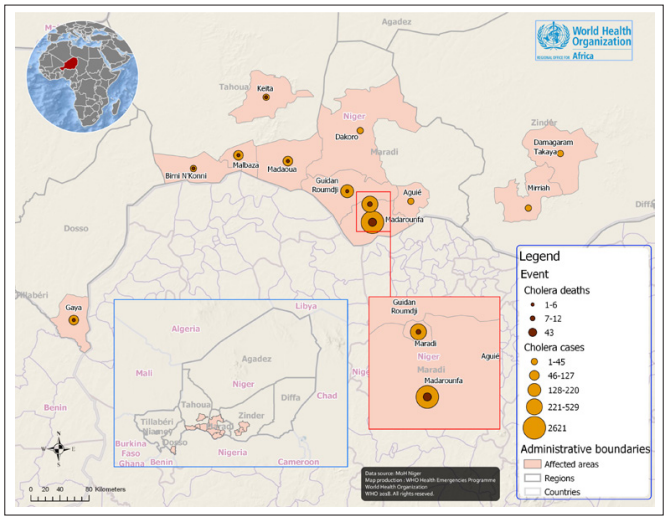
EVENT DESCRIPTION

The cholera outbreak in Niger is showing a decreasing trend in the number of new suspected cases since the peak of the outbreak in week 37 (week ending on 15 September 2018). From our last report on 21 September 2018 *(Weekly Bulletin 38)*, 344 new suspected cholera cases and seven deaths have been reported. In week 40, (week ending on 6 October 2018), a total of 38 new suspected cholera cases and five deaths were reported. As of 10 October 2018, five patients were hospitalized in Cholera Treatment Centres (CTCs) in Madarounfa.

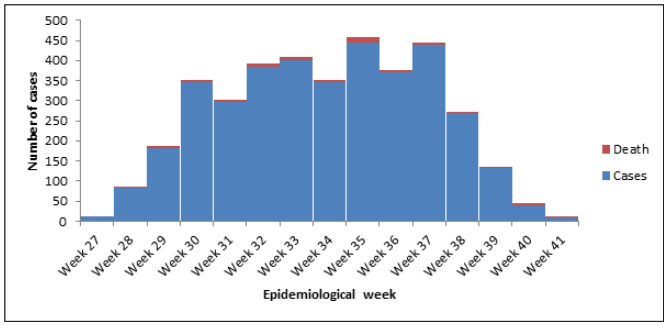
Since the beginning of the outbreak on 5 July 2018, as of 10 October 2018, a total of 3 747 suspected cholera cases, including 74 deaths (case fatality ratio 2%) have been reported across 12 out of 72 districts. Most cases are 15 years and older (58% of cases) and children under five years old represent 16 % of cases. Fifty-six percent (56%) of the reported cases are females.

Seven health districts, namely Madarounfa, Maradi, Guidan-Roumdji, Malbaza, Keita, Madaoua, and Konni are still reporting new cases. Maradi remains the most affected region with Madarounfa district accounting for 70% (n=2 620) of the total reported cases and Maradi Ville accounting for 14% (n=524) of total reported cases. However, a decreasing trend in reporting of cases has also been observed in these two districts over the last two weeks. Gaya District, which was considered as an inactivated spot (last case reported on 30 August 2018) reported nine new cases and four deaths between 4 and 5 October 2018. Some areas that are still reporting cases are classified as at high risk for the spread of cholera given the presence of local risk factors such as poor hygiene and sanitary conditions, coupled with major population movement and trade between these districts and neighbouring areas in Nigeria.

Geographical distribution of cholera cases and deaths in Niger, 5 July - 10 October 2018



Distribution of Cholera cases and death, Niger, from 5 July - 10 October 2018



PUBLIC HEALTH ACTIONS

- The Ministry of Health continues to coordinate response to the cholera outbreak at national and subnational levels. Coordination meetings continue in all regions.
- WHO supported the deployment of six epidemiologists and six risk communication experts from the Ministry of Health in Maradi and Tahoua.
- WHO has finalized its operational plan in support of the national cholera outbreak response plan. On 28 September 2018, WHO delivered assorted inputs for the management of cholera.
- WHO is supporting the Ministry of Health to prepare for a cross-border meeting with the neighbouring countries. Terms of reference for the cross-border meeting are being developed.
- Active surveillance is ongoing, including active case finding and case investigations, with support from WHO.
- Risk communication and community engagement is ongoing, with preparation for training of journalists in Niamey, Maradi and Tahoua, with WHO's support. Red Cross and Médecins sans Frontières (MSF) are conducting outreach activities in the affected communities.
- Case management is being provided in six cholera treatment centres in the affected regions, supported by MSF and ALIMA.
- Water, sanitation and hygiene interventions continue, with support by UNICEF, MSF France and Spain, ALIMA and Red Cross.
- An oral cholera vaccine (OVC) campaign is planned, with a request to ICG submitted on 29 September 2018 for vaccination in three districts. An international expert to support implementation of the OVC campaign arrived on 3 October 2018.

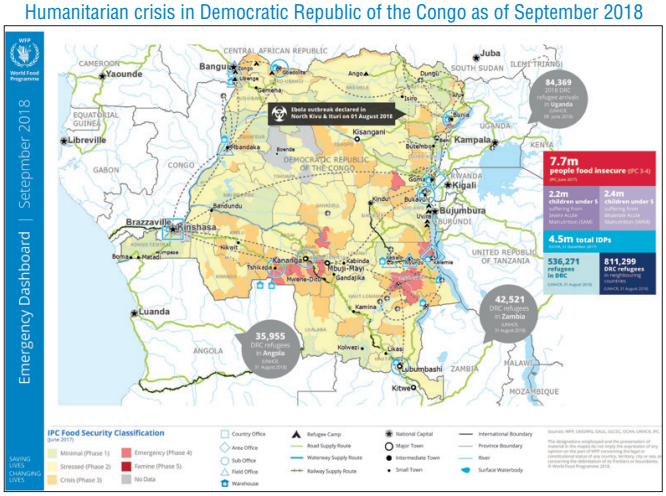
SITUATION INTERPRETATION

The cholera outbreak in Niger is showing a decreasing trend; however, some districts are still reporting cases and deaths. The outbreak continues to be localized to areas considered to be at high risk for the spread of cholera given the presence of local risk factors such as poor hygiene and sanitary conditions, coupled with major population movement and trade between the affected districts and neighbouring areas in Nigeria which are also experiencing a cholera outbreak. The upcoming end of rainy season and the vaccination campaign, which will start very soon, are promising factors that may curb the outbreak. Other challenges remain in strengthening cross-border activities with Nigeria, who are themselves experiencing cholera outbreaks. National authorities and humanitarian actors need to address these issues urgently in order to bring the outbreak to a close.

EVENT DESCRIPTION

The complex humanitarian crisis in the Democratic Republic of the Congo remains fragile and is deteriorating, particularly in Ituri, South Kivu, Maniema and Tanganyika. Estimates from the Humanitarian Response Plan 2018 indicate that over 13 million people are in need of humanitarian assistance, primarily as a result of armed conflict which exacerbates unstable food and nutrition security. Inter-ethnic conflict in the Bijombo Health Zone (Uvira territory, South Kivu) has resulted in the movement of 76 000 people who are now facing significant barriers to access basic healthcare. Furthermore, as a result of the recent closure of internally displaced people (IDP) sites by the Provincial Government, 890 households mainly from the Katanika and Moni health zones (Kalemie Territory, Tanganyika province) are without assistance. In addition, seven health zones in Tanganiyka province are completely non-functional due to inter-ethnic conflict.

Humanitarian crisis in Democratic Republic of the Congo as of September 2018



The persistence of the Ebola virus disease outbreak in North Kivu and Ituri provinces in the context of the poor security situation is of grave concern, as is community reluctance and resistance to accept Ebola prevention and response activities. This is hindering the efficacy of the response in affected regions.

In addition, the country continues to face multiple outbreaks of epidemic-prone diseases. The cholera outbreak which has been ongoing since 2017 continues to affect several provinces. From January 2018, as of 30 September 2018, a total of 21 905 cases and 770 deaths (CFR 3.5%) was reported nationally. During week 39 (week ending 29 September 2018), a total of 647 suspected cholera cases including 24 deaths were reported in 13 of the 26 provinces of the country, with Kasai Oriental, Tanganyika, Kongo Central and South Kivu accounting for 82% of the case load. Despite the reduction of the reported cases, due to the intensification of community activities, the case fatality ratio remains high due to the absence of a comprehensive approach integrating health facilities and community interventions in some health zones.

Malaria is responsible for 78.5% of deaths reported by health facilities. Of the 12 413 malaria associated deaths reported in 2018, 81% were in children under the age of five years. Since the beginning of 2018 to the 23 September 2018, 1 814 people have died of acute respiratory infections, 79% of whom were children under five. During the same period, 1 264 maternal deaths were reported, including 29 in week 38. Measles cases continue in provinces in the extreme south-east of the country (high Katanga, Lualaba, Tanganyika) and also in the central region (Sankuru).

PUBLIC HEALTH ACTIONS

- WHO is collaborating with partners to improve access to primary healthcare and epidemic response for internally displaced persons, returnees, hosts and victims of armed conflict in the provinces of Ituri, Tanganyika, Kasai Oriental, Kasai, North Kivu, South Kivu and Lomami, through the continued implementation of the Central Emergency Fund (CERF) Under Funding project.
- The Ministry of Health continues to respond to the Ebola virus disease outbreak in Ituri and North Kivu, with the support of all technical, financial and operational partners in a context of insecurity, community reluctance and risk of spread to neighbouring countries.
- WHO has set up an incident management structure in Kinshasa and in the main hot spots in support of the response to the cholera outbreak.
- The national and provincial coordinating committees are meeting on a regular basis in order to guide surveillance activities and response to epidemics.
- Oral cholera vaccine campaigns are planned in hotspot areas, with support of WHO.
- Water, sanitation and hygiene activities are being strengthened in cholera-affected areas, with support from UNICEF, Save the Children and other partners.
- Médecins sans Frontières is supporting case management of cholera and measles patients in affected provinces, as well as supplying medication for other illnesses.

SITUATION INTERPRETATION

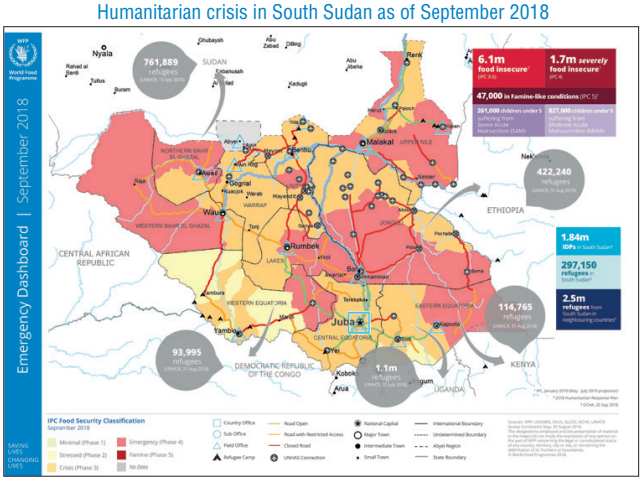
The complex humanitarian crisis in the Democratic Republic of the Congo is of major concern, particularly as it hinders the efficacy of the response to the ongoing Ebola virus disease outbreak in Ituri and North Kivu provinces. Response to the ongoing cholera outbreak is likewise hampered, as is access to healthcare generally, which, along with challenges around access to sanitation and hygiene, drive the constant outbreaks of diseases such as measles and malaria.

A coordinated, reactive comprehensive response to the most urgent current needs (Ebola, cholera, measles and polio) is critical, in conjunction with preventive measures in target areas. The start of the rainy season will cause increases in water- and vector-borne disease, while also complicating suspect case identification for other communicable diseases. National and international agents need to act urgently, both to prevent further inter-communal conflict and improve the ability of the country's authorities to respond to major outbreaks of epidemic-prone diseases.

EVENT DESCRIPTION

Despite the commitment of South Sudanese parties to the recent peace efforts, the insecurity situation persists and continues to drive the ongoing humanitarian crisis in the country. Multiple episodes of armed clashes, intercommunal fighting, criminality and road ambush are still being reported in different parts of the country. Between July and September 2018, armed robberies were reported along the road from Kapoeta to Torit. In addition, civilian casualties have been reported in Mundu and Bundit following renewed fighting in Kupera and Kajo-Keji counties in Yei River state. Armed attacks on non-governmental organization's sites have also been reported in several locations, including Bunj in Maban County, Upper Nile State; Pibor town in Jonglei state; Mankei town in Unity state, and UN sites for protection of civilians (PoCs) in Juba.

Humanitarian crisis in South Sudan as of September 2018



The deteriorating food security situation remains of concern. According to the Integrated Food Security Phase Classification (IPC) analysis, an estimated 1.7 million people were severely food insecure and 261 424 children under five suffered from severe acute malnutrition at the peak of the lean season (July-August 2018). Conflicts continue to prompt population displacement, with an estimated 1.91 million internally displaced persons (IDPs) and 2.47 million South Sudanese refugees in neighbouring countries as of 30 September 2018. Vulnerable and fleeing individuals face limited access to basic social services and an estimated 7 million people are in need of humanitarian assistance.

The continued insecurity and poor living conditions predisposes the already vulnerable populations to disease. Malaria remains the major cause of morbidity and mortality. As of week 37 (week ending 15 September 2018), 62% of disease cases and 81% of deaths were associated with malaria and reported from 15 counties in five hubs; Aweil, Rumbek, Kuajok, Bentiu, and Juba. A rising number of cases have been observed in Lol state, Abyei and Melut County in Upper Nile State following floods. In week 38 (week ending 22 September 2018), acute bloody diarrhoea, acute watery diarrhoea and measles were the most frequent infectious hazards reported. In addition, from the beginning of 2018 to 23 September 2018, 18 out of 139 suspected cases of Hepatitis E virus arising in Bentiu PoC have been confirmed by polymerase chain reaction. Moreover, from week 25 to week 38 of 2018, at least 18 suspected cases of measles (zero deaths) were reported in Yirol East, none of which were in vaccinated individuals.

PUBLIC HEALTH ACTIONS

- Due to South Sudan's proximity to the area affected by the ongoing Ebola virus disease (EVD) outbreak in Democratic Republic of the Congo, it is one of the four countries, with Uganda, Burundi and Rwanda, prioritized by WHO for EVD preparedness and readiness. In this regard, the Ministry of Health of South Sudan with the support of WHO, CDC and other partners is implementing an EVD contingency plan with multi-sectoral activities, including screening at points of entry, mapping of Ebola treatment centres, risk communication and social mobilization across the country with focus in the high-risk states.
- WHO has prepositioned supplies in malaria upsurge areas with four Interagency Emergency Health kits (IEHKs) Basic Malaria Module to treat 4 000 people in primary healthcare units and at community level, one IEHK supplementary Malaria Module to treat 10 000 people with severe malaria in hospitals and primary healthcare centres and one IEHK Basic Unit Malaria to Relief International.
- An integrated Measles, Meningitis and Oral polio vaccine campaign is planned to start on 8 October 2018 in Ulang County. Microplanning and training of vaccination teams has already been completed.
- Periodic Intensification of Routine Immunization (PIRI) activities are ongoing in non-conflict affected states.

SITUATION INTERPRETATION

The humanitarian situation in South Sudan remains of concern in the East African region. Restricted humanitarian access to affected areas as well as disrupted life-saving interventions due to insecurity leave thousands of people relying on humanitarian aid with no access to food, medical services and psychosocial support, among other needs. Lasting peace is needed for an effective implementation of humanitarian activities and for the country to effectively recover from years of conflicts and subsequent damage caused.

Summary of major issues challenges, and proposed actions

Issues and challenges

- While substantial progress has been made, the response to the Ebola virus disease (EVD) outbreak in the Democratic Republic of the Congo is becoming increasingly undermined by security challenges in at-risk areas, particularly in Beni. As a result, teams on the ground have been forced to suspend EVD response activities on several occasions, thus hampering crucial efforts to identify and monitor thousands of Ebola contacts. These incidents severely impact both civilians and frontline workers and increase the risk that the virus will continue to spread geographically.
- The cholera outbreaks in Niger and Zimbabwe have been linked to key risk factors such as inadequate potable water supply and deteriorating sanitation and hygiene infrastructure. Although the incidence of new cases has been declining over the past weeks, these risk factors persist in affected and at-risk areas and urgently need to be addressed in order to control the current outbreak and prevent future outbreaks.

Proposed actions

- WHO will continue to work in close coordination with the Ministry of Health and other partners to strengthen all the EVD response pillars. There is a crucial need to reinforce community engagement in order to ensure their understanding and acceptance of response activities. Furthermore, response strategies should be adapted and strengthened to address the complex dynamic of the outbreak in Beni.
- While OCV campaigns may provide a short-term remedy for controlling cholera outbreaks, it is essential to address underlying risk factors. There is therefore an urgent need to improve access to clean water, sanitation and hygiene in order to effectively prevent and control cholera. Reinforcing national preparedness to rapidly detect and respond to cholera outbreaks will also be crucial in order to mitigate the risk of geographical spread.

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
New events										
Uganda	Cholera	Ungraded	10-Oct-18	10-Oct-18	11-Oct-18	8	2	1	12.5%	The cholera outbreak was notified in Kampala on 10 October 2010 after laboratory confirmation of two cases. The two cases are children of 5 and 7 years old from Mubalak Zone, Makindye division that were admitted in Mulago National Referal Hospital. The laboratory results have confirmed the two cases to be infected with *Vibrio cholerae* subtype Ogawa. Six more suspected cases have been reported in Hoima (5) and Kikuube district (1 death) since 3 October 2018. Sixty per cent of the suspected cases are reported to have tested RDT positive for cholera and their stool samples were shipped for *Vibrio cholerae* culture. Culture results from Central Public Health Laboratories have not yet been released.
Botswana	Acute watery diarrhoea (AWD)	Ungraded	19-Sep-18	3-Sep-18	10-Oct-18	21 544	246	24	0.1%	On 19 September WHO was notified of an unusual increase of cases of diarrhoea among children under-five years across the country. From week 36 (when the alert threshold was crossed) to week 39 (included), 21 544 cases were recorded, out of which 17 283 were diarrhoea without dehydration, 3987 were diarrhoea with dehydration, and 274 were diarrhoea with blood. In the same period, a total of 24 deaths were documented across the country. As of week 39, 17 out of 27 districts are in outbreak status while 3 are in the alert status. Eighty percent of the reported cases are below 2 years of age. Samples from 487 patients with diarrhoea were tested, among them 246 (51%) were positive for rotavirus. Stool samples were sent to regional Reference laboratory in South Africa for genotyping: among the samples positive for rotavirus, most were identified as G3[P8] strain.
Ongoing events										
Algeria	Cholera	Ungraded	25-Aug-18	7-Aug-18	6-Sep-18	217	83	2	0.9%	The outbreak was initially announced by the Ministry of Health of Algeria on 23 August 2018 following confirmation of 41 cases for *Vibrio cholerae* out of 88 suspected cases reported from four provinces (wilayas). By 6 September 2018, a total of 217 suspected cases with two deaths (CFR 0.9%) have been reported from six wilayas. Laboratory examinations conducted at Institute Pasteur of Algeria have confirmed 83 of the cases for *Vibrio cholerae* O1 serotype ogawa.

Country	Event	Grade†	WHO notified	Start of reporting period	End of reporting period	Total cases	Confirmed cases	Deaths	CFR	Comments
Angola	Cholera	G1	2-Jan-18	21-Dec-17	29-Jul-18	990	12	19	1.9%	On 21 December 2017, two suspected cholera cases were reported from Uíge district, Uíge province. Both of these cases had a history of travel to Kimpangu (DRC). From 21 December 2017 to 18 May 2018, a total of 895 cases were reported from two districts in Uíge province. The neighbouring province of Luanda started reporting cases on 22 May 2018. From 22 May to 29 July 2018, 95 cases with seven deaths (CFR 7.4%) have been reported from fourteen districts in Luanda Province. Twelve cases have been confirmed for *Vibrio cholerae*. Fifty-seven percent of cases are males and 69% are aged five-year and above. The most affected district is Talatona having reported a total of 26 cases with five deaths (CFR 19%).
Cameroon	Humanitarian crisis	G2	31-Dec-13	27-Jun-17	18-Sep-18	-	-	-	-	The humanitarian situation in Cameroon remains precarious with several regions of the country affected. In the Far North, the situation is marked by attacks linked to Boko Haram thus generating an influx of refugees from Nigeria including mass displacement of the local population. In the north-west and south-western regions, the crisis is marked by fighting between separatist militia and government forces leading to displacement of about 160 000 people in these regions. The regions of the North, Adamawa and East are also affected by the huge influx of refugees from neighboring Central African Republic thus placing pressure on the limited resources available to the local population. In the runup to the 7 October presidential elections, thousands of people started fleeing the anglophone regions of Cameroon, fearing an escalation of violence.
Cameroon	Cholera	G1	24-May-18	18-May-18	12-Oct-18	470	45	34	7.5%	Between 18 May and 12 October 2018, a total of 470 suspected cholera cases with 34 deaths (CFR 7.5 %) have been reported from the North, Central and littoral regions of Cameroon. Fourty five cases have been confirmed for *Vibrio cholerae* by culture in the North (35), Central (4) and littoral (4) regions. No new case has been reported from the central region since 27 August 2018. The age of cases ranges from 1 to 85 years with a female to male ratio of 1.25.
Central African Republic	Humanitarian crisis	Protracted 2	11-Dec-13	11-Dec-13	5-Sep-18	-	-	-	-	Despite the commitment of armed groups to the African initiative for peace in the country, the security and humanitarian situation remain precarious. This climate of insecurity continues to cause population displacement and disrupt the implementation of health sector activities in several localities. The situation is particularly volatile along Kaga Bandoro, Bocaranga-Paoua axis, and Alindao. About 2 500 new displaced people arrived at the Pk3 site in Bria following the clashes between armed groups on the Bria- Irabanda and Bria-Ippy routes since August 31.

Country	Event	Grade†	WHO notified	Start of reporting period	End of reporting period	Total cases	Con-firmed cases	Deaths	CFR	Comments
Central African Republic	Monkey-pox	Ungraded	20-Mar-18	2-Mar-18	9-Oct-18	35	14	1	2.9%	On 9 October 2018, Central African Republic reported six cases of Monkeypox in Mbaiki district. The six cases are from the same village, in a forest area. Five cases belong to a same household. The five cases were sampled: three were confirmed at Institut Pateur de Bangui and results are pending for the remaining two cases. The first case of the household was most probably infected by handling infected rodents and there is evidence of further inter-human transmission in the household. The sixth case, which was not sampled, is not reported as having had contacts with the cases of the household. This is the fourth monkeypox public health event in the Central African Republic in 2018, and it is the second time this year that Mbaiki District has been affected by the disease. Previous clusters have occurred in three districts: Bangassou (weeks 9-11, nine cases including six confirmed), Bambari (weeks 13-16, 15 cases, including three confirmed) and Mbaïki (weeks 26-27, five cases, including two confirmed). One death had been reported among the confirmed cases.
Central African Republic	Hepati-tis E	Ungraded	2-Oct-18	10-Sep-18	12-Oct-18	45	29	1	3.2%	On 2 October 2018, the Minister of Health and Population declared an epidemic of viral hepatitis E (HVE) in the health district of Bocaranga-Koui. This declaration was made following an outbreak of fever with jaundice between epidemiological weeks 37 to 39 in the city of Bocaranga. As of 12 October 2018, a total of 45 suspected cases with one death involving a pregnant woman (case fatality ratio 3.2%) has been reported from three districts in the City of Bacaranga. Of the 31 samples tested by the Institute Pasteur Bangui Laboratory, 29 were positives for viral hepatitis E (IgM HVE POS).
Chad	Measles	Ungraded	24-May-18	1-Jan-18	9-Sep-18	2 734	650	78	2.9%	In week 36, 155 suspected cases with no deaths were reported. An increase in the number of cases compared to the previous week when 122 cases and 1 death were reported. Twelve districts: Faya, Mondo, Moussoro, Amzoer, Iriba, Kalait, Chadra, Oum Hadjer, Mangalme, Biltine, Isseriom and Ngouri have reported at least 5 suspected cases of measles during the last 4 weeks (week 31-35). The last 2 districts crossed the threshold for the first time. As of week 36, there are 2 734 suspected cases with 78 deaths (CFR 2.9%). A total of 650 cases have been confirmed (IgM-positive -231, Epi-linked-419, and clinically confirmed 30). Children aged 1 to 4 years are the most affected constituting 31% of cases reported.

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	23-Sep-18	-	-	-	-	Detailed update given above.
Dem-ocratic Republic of the Congo	Cholera		16-Jan-15	1-Jan-18	23-Sep-18	21 112	0	691	3.3%	In week 38 (week ending 23 September 2018), 724 cases with 18 deaths (CFR 2.5%) were reported from 12 out of 26 provinces. Six out of the total provinces that reported cases (Kasai Oriental, Tanganyika, Katanga, Kasai, Kongo Central, and Sankuru) reported 92% of the total cases. Since the beginning of 2018 to the week 38, a total of 21 112 cases were reported including 691 deaths (CFR 3.3%). There has been a trend of increasing cases since week 21. A similar trend was observed in the same period in 2017.
Dem-ocratic Republic of the Congo	Ebola virus disease	G3	31-Jul-18	11-May-18	13-Oct-18	211	176	135	64%	Detailed update given above.
Dem-ocratic Republic of the Congo	Measles	Ungraded	10-Jan-17	1-Jan-18	23-Sep-18	27 273	505	318	1.2%	During week 38 (week ending 23 September 2018), 615 cases including eight deaths were reported across the country. Four (4) prov-inces including 3 of the extreme Southeast (Haut Katanga, Lualaba and Tanganyika) and Sankuru in the center of the country reported 84.4% of cases and 87.5% of deaths. From 2018 week 1 to week 38, 27 273 cases with 318 deaths (CFR 1.2%) have been reported across the country. Seventy-two percent (72%) of cases and 93% of deaths are children aged 12 to 59 months. Epidemic zones are mainly focused in the eastern part of the country.
Dem-ocratic Republic of Congo	Monkey-pox	Ungraded	n/a	1-Jan-18	23-Sep-18	2 894	-	62	2.1%	From week 1 to week 38 (week ending 23 September 2018), 2018, there have been 2 894 suspected cases of monkeypox including 62 deaths (CFR 2.1%). In week 38, a total of 48 suspected cases including two deaths were reported. 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	5-Oct-18	37	37	0	0.0%	The latest case of cVDPV2 was report-ed from Bumba Health Zone, Mongala Province. As of 5 October 2018, a total of 37 cases with onset in 2017 (22 cases) and 2018 (15 cases) have been confirmed. Six prov-inces have been affected, namely Tanganyika (15 cases), Haut-Lomami (9 cases), Mongala (8 cases), Maniema (2 cases), Haut Katanga (2 cases), and Ituri (1 case). The outbreak has been ongoing since February 2017. A public health emergency was officially declared by the Ministry of Health on 13 February 2018 when samples from 21 cases of acute flaccid paralysis were confirmed ret-rospectively for vaccine-derived poliovirus type 2.
Dem-ocratic Republic of Congo	Rabies	Ungraded	19-Feb-18	1-Jan-18	23-Sep-18	25	0	25	100.0%	In epi week 38 (week ending 23 September 2018), two new cases were reported. From week 1 to 38, a total of 25 cases of probable rabies have been reported. Case fatality ratio is 100%.

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 Congo	Yellow fever	Ungraded	16-Aug-18	1-Jul-18	17-Aug-18	5	4	0	0.0%	Samples from four out of five suspected cases have been confirmed for Yellow fever by Plaque Reduction Neutralization Test (PRNT) at Institute Pasteur Dakar (IPD). One of the cases is a 29-year-old male from Ango District in Bas Uele Province and the other is a 42-year-old male from Yalifafu district in Tshuapa Province. The other 2 cases are from Tshuapa and Lualaba Province. Vaccination status of the cases are unknown and detailed investigation is ongoing.
Ethiopia	Human-itarian crisis	G2	15-Nov-15	n/a	3-Oct-18	-	-	-	-	As of 3 october 2018, Over 70 000 people have been displaced in Kamashi zone of Benishangul Gumuz to East Wollega and West Wollega zones of Oromia region by violence. Urgent humanitarian needs are reported in that area. From 11-26 Sep-tember 2018, over 15 000 Eritreans have crossed into Ethiopia, many to travel to the refugee settlements. The daily arrival rate of Eritreans to Ethiopia has increased from an average of 50 people per day to 180 people per day since 11 September 2018. The latest humanitarian report show that 6.9 million peole are in need of WASH, 2.6 million people are internaly displaced, and 350 000 children suffer from Severe Acute Malnutrition.
Ethiopia	Acute watery diarrhoea (AWD)	Protracted 1	15-Nov-15	1-Jan-18	26-Aug-18	2 337	-	18	0.8%	This has been an ongoing outbreak since the beginning of 2017. In most parts of the country, the situation has stabilized except for two regions which continue to report cases. In weeks 33 and 34, a total of 850 AWD cases were reported from two regions, Dire Dawa (8), and Tigray (842). No new AWD cases have been reported from Afar and Somali regions since week 32 and week 25 respectively. From week 1 to 34 (week ending 26 August 2018) in 2018, a cumula-tive 2 337 AWD cases have been reported from Afar 1 004 (43%), Dire Dawa 103 (4%), Somali 116 (5%) and Tigray 1 114 (48%).
Ethiopia	Measles	Protracted 1	14-Jan-17	1-Jan-18	26-Aug-18	3 062	877	-	-	This has been an ongoing outbreak since the beginning of 2017. In 2018, a total of 3 062 suspected measles cases have been reported across the country. From the total suspected cases reported, 877 were confirmed cases (137 laboratory confirmed, 688 epi-linked and 52 clinically compatible). In week 34 (week ending 26 August 2018), no new sus-pected or confirmed cases were reported.
Ethiopia	Dengue fever	Ungraded	18-Jun-18	19-Jan-18	29-Jul-18	127	52	-	-	An outbreak of Dengue fever which started on 8 June 2018 involving 52 cases in the flood-affected Gode Zone of Somali Region has been confirmed by laboratory testing. In week 30, two cases were reported from Liban Zone in Somali Region.

Country	Event	Grade†	WHO notified	Start of reporting period	End of reporting period	Total cases	Con-firmed cases	Deaths	CFR	Comments
Guinea	Measles	Ungraded	9-May-18	1-Jan-18	23-Sep-18	1 746	440	0	0.0%	A measles outbreak was detected in epidemiological week 8, 2018. Cases has been reported in all parts of the country since the beginning of the year. The most affected zones include Kankan, Conakry and Faraneh. In week 38, 10 new suspected cases were reported including 5 IgM positive cases. The number of case has been decreasing gradually during the last four epidemiological weeks (week 35 to 38). In these last four weeks, 53 suspected cases reported, 46 samples received in the laboratory, including 20 confirmed cases in 16 sub-prefectures. Since the begging of the year, a total of 1 746 suspected cases were reported.
Kenya	Cholera	Ungraded	8-Sep-18	8-Sep-18	9 Oct-18	5	4	0	0.0%	Between 8 September and 9 October 2018, 4 confirmed cases of cholera were reported from Turkana county (2) and Embu county (2). Culture sensitivity test done on the specimens were reactive for *Vibrio Cholerae* 01 Ogawa. All the cases are epidemiologically linked to Nairobi, Embakasi East sub county. The first case was notified from Kakuma refugee camp in Turkana West sub county, Turkana county, five days after the Ministry of Health declared the end of the cholera outbreak (on 3 September 2018) which started in October 2015.
Kenya	Measles	Ungraded	19-Feb-18	19-Feb-18	9 Oct-18	453	37	1	0.2%	Since the beginning of the year, five Counties have reported measles outbreak, (Mandera, Wajir, Garissa, Nairobi and Kitui). A cumulative of 453 cases have been reported with 37 confirmed and 1 death (CFR 0.2%). Wajir and Kitui Counties have controlled the outbreak. Mandera, Garissa and Nairobi Counties are still reporting new cases.
Kenya	Rift Valley fever (RVF)	G1	6-Jun-18	11-May-18	13-Aug-18	95	21	11	11.6%	Following the initial confirmation of RVF by PCR on 7 June 2018, a total of 95 cases including 11 deaths (CFR 11%) have been reported from three counties in Kenya. Twenty-one samples submitted to the KEMRI tested positive by PCR for RVF. Wajir has reported 82 cases with six deaths, Marsabit reported 11 cases with three deaths and Siaya country reported 1 case with one death. The Eldas sub-county in Wajir has reported the highest number of cases (79) since the 11 May 2018. The last case was reported on 20 July 2018.
Liberia	Flood	Ungraded	14-Jul-18	14-Jul-18	24-Sep-18	-	-	-	-	Liberia continues to experience heavy rainfall and flooding. From 11 July to 24 September 2018, thirteen districts across 5 counties (Margibi, Montserrado, Grand Bassa, Sinoe and Bomi) have been affected, leading to 62 563 people affected (49% women and 21% children) with one death in a 4-year-old child. The number of displaced people has increased from 3 625 to 4 825 between 12 and 24 September 2018. At least 595 persons have sustained injuries as a result of the continuous floods. The floods have led to destruction of infrastructures and the water supply system forcing the people to look for alternative and unsafe water sources, thus increasing the risk for waterborne diseases. The affected people are receiving humanitarian aid for food and nonfood items and are being treated for various illnesses by mobile medical teams.

Country	Event	Grade†	WHO notified	Start of reporting period	End of reporting period	Total cases	Con-firmed cases	Deaths	CFR	Comments
Liberia	Measles	Ungraded	24-Sep-17	1-Jan-18	30-Sep-18	3 732	3 446	16	0.4%	Eighteen suspected cases including four confirmed cases were reported during week 39 (week ending 30 September 2018) across the country. There is a decrease in the number of cases reported compared to the previous week when 30 suspected cases were reported. Cumulatively, since epi-week one, 3 732 suspected cases including 16 deaths have been reported. Epi-classification are as follows: lab confirmed 281 (7.5%), epi-linked 436 (11.6%), clinically confirmed 2 729 (73.1%), discarded 283 (7.5%), and pending 3 (0.1%).
Liberia	Yellow fever	Ungraded	16-Sep-18	3-Sep-18	12-Oct-18	1	1	0	0.0%	On 27 August 2018, a 2-year-old female from Farina Town, Barclayville District, Grand Kru County, Southeastern Liberia developed symptoms of fever, jaundice, cough and convulsion. She presented at a health facility in the district on 3 September 2018 for treatment. The case had no history of yellow fever vaccination and epidemi-ological investigation revealed that both parents are farmers whose farm is located in the forest. Specimen sent to Institute Pasteur Dakar (IPD) tested positive by ELISA, PCR, and PRNT tests on 1 October 2018 thus confirming yellow fever infection. In Epi-week 40 (week ending 7 October 2018), four new suspected cases were reported from Barclayville district and all tested negative by serology for yellow fever.
Madagas-car	Plague	Ungraded	19-Aug-18	19-Aug-18	10-Oct-18	58	10	5	8.6%	From 19 August to 10 October 2018, 58 cas-es of plague (21 pneumonic and 37 bubonic) including 5 deaths (CFR 8.6%) have been re-ported from 19 districts in 10 endemic and non-endemic regions for plague. Among the 58 cumulative cases, 3 pneumonic and 7 bubonic cases were confirmed by PCR at Institut Pasteur de Madagascar. The five deaths occurred among confirmed cases (3 pneumonic and 2 bubonic). Disinfestation, disinfection, safe burials, contact tracing and chemoprophylaxis for contacts are ongoing.
Mali	Human-itarian crisis	Protracted 1	n/a	n/a	12-Oct-18	-	-	-	-	The complex humanitarian crisis exacer-bated by the political-security crisis and intercommunity conflicts continue in Mali. More than four million people (nearly a quarter of the population) are affected by the humanitarian crisis, including 61 404 who are internally displaced and nearly 140 000 who are refugees in neighbouring countries such as Niger, Mauritania and Burkina Faso (data from CMP report, 7 June 2018). The health system is still weak, while the health need is increasing. Heavy rain that began in late July 2018 has caused flooding in several parts of the country. As of late August, more than 18 000 people were affected, 3 200 houses destroyed, and some 1 800 head of cattle killed. The affected populations are in need of shelter, NFI, and WASH assistance. Longer-term livelihoods assistance is highly likely to be needed in the aftermath of the floods.

Country	Event	Grade†	WHO notified	Start of reporting period	End of reporting period	Total cases	Con-firmed cases	Deaths	CFR	Comments
Mali	Severe Acute Malnutri-tion	Ungraded	1-Aug-18	15-Mar-18	5-Aug-18	224	-	40	17.9%	Three villages in the commune of Mondoro, Douentza district, Mopti Region, Central Mali are experiencing an epidemic of malnutrition following the inter-communal conflict that prevails in the locality. From mid-March to 5 August 2018, a total of 224 cases including 40 deaths (CFR 17.9%) have been reported from three villages (Douna, Niagassadiou and Tiguila) in the commune of Mondoro, Douentza district, Central Mali. This disease is manifested by the following signs: oedema of the lower limbs, myalgia, functional impotence, dyspnoea sometimes followed by death. A dozen samples from patients analyzed at INRSP in Bamako showed iron deficiency anaemia.
Mali	Measles	Ungraded	20-Feb-18	1-Jan-18	10-Oct-18	1 307	374	0	0.0%	From Week 1 to 40 of 2018, a total of 1 307 suspected cases with zero deaths have been reported. The cumulative blood samples from 1 008 suspected cases have been tested of which, 374 were confirmed (IgM-posi-tive) at the National Reference Laboratory (INRSP). Sixty-eight percent of confirmed cases are below 5 years old. The affected health districts are Maciana, Bougouni, Kati, Koutiala, Kokolani, Kolondieba, Ouélesse-bougou, Sikasso, Douentza, Macina,Tom-bouctou, Dioila, Taoudenit and Kalaban-coro. Reactive vaccination campaigns, enhancement of surveillance, and communi-ty sensitization activities are ongoing in the affected health districts.
Mauritius	Measles	Ungraded	23-May-18	19-Mar-18	16-Sep-18	937	937	3	0.3%	From 21 March to 16 September 2018, 937 confirmed cases of measles have been reported including three deaths (CFR 0.3%). All cases have been confirmed by the virol-ogy laboratory of Candos (IgM antibodies). The onset of symptoms of the first cases was in week 12. The incidence is highest in the age groups 0 - 4 and 25 – 34 years of age, with 52% of males being affected. The three deaths were in women between the ages of 28 and 31 years. The most affected districts are Port Louis and Black River A single genotype of measles virus, D8, was detected in 13 samples. The source of infection of measles is most likely an imported case.
Namibia	Hepati-tis E	G1	18-Dec-17	8-Sep-17	30-Sep-18	3 571	474	31	0.9%	As of 30 September 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. From week 36 of 2017 (week ending 10 September 2017) to 30 Sep-tember 2018, a total of 3 571 cases including 31 deaths (CFR 0.87%) have been reported and investigated in Khomas, Omusati, Erongo ,Oshana, Oshikito, Kavango, Ohan-gwena with sporadic cases reported in other regions of Namibia. A total of 474 cases have been laboratory confirmed (IgM ELISA) and 2 643 cases epi-linked to confirmed cases. Among the confirmed cases, 174 (37%) were maternal cases and 14 (45%) of the reported deaths were maternal deaths. Over 80% of reported cases are epidemiologically linked to cases reported in Windhoek, the epi-centre of the epidemic. Seventy-six percent of the affected population is aged 20 to 39 years, with males constituting 59% of the reported cases.

Country	Event	Grade†	WHO notified	Start of reporting period	End of reporting period	Total cases	Con-firmed cases	Deaths	CFR	Comments
Niger	Human-itarian crisis	G2	1-Feb-15	1-Feb-15	3-Oct-18	-	-	-	-	Niger continue to face food insecurity, mal-nutrition, and health crises due to drought, floods, and epidemics. The insecurity instigated by Bokoharam group persists in the country. Conflict between Boko Haram (BH) and regional military forces, as well as attacks against civilian populations along the Komadougou Yobe River and the shores of Lake Chad, have caused extensive displacement. It is estimated that 2.3 million people are in need in Niger, including 419 000 people in Diffa region, where more than 200 000 people are displaced, including IDPs, returnees, and refugees from Nigeria. In Tillabéri, intercommunal tensions are rising between Peul and Tuareg communi-ties on either side of the Niger-Mali border. Niger is also a transit country for migrants heading towards Europe. Some of them become stranded around Agadez and need protection assistance.
Niger	Cholera	G2	13-Jul-18	13-Jul-18	8-Oct-18	3 747	34	74	2%	Detailed update given above.
Niger	Circulat-ing vac-cine-de-rived polio virus type 2 (cVD-PV2)	G2	8-Jul-18	8-Jul-18	10-Oct-18	3	3	0	0.0%	A circulating vaccine-derived poliovirus type 2 (cVDPV2) originating in Nigeria has spread to Niger. Three cases of acute flaccid paralysis (AFP) have been detected with this cVDPV2, from Zinder province, Niger, since 28 september 2018. Based on the genetic analyses of the isolated poliovi-ruses, these cases are linked to the ongoing cVDPV2 outbreak in Jigawa, Nigeria. Since January 2018, the neighbouring country, Nigeria has reported a total of 16 cVDPV2 cases, with virus isolated in 6 states: Sokoto, Katsina, Yobe, Gombe, Borno and Jigawa.
Nigeria	Human-itarian crisis	Protracted 3	10-Oct-16	n/a	31-Aug-18	-	-	-	-	Since the start of the conflict in 2009, more than 27 000 people have been killed in Bor-no, Adamawa, and Yobe states, thousands of women and girls abducted and children used as so-called "suicide" bombers. About 1.8 million people are internally displaced in these states. An estimated 940 000 children aged 6 to 59 months across these states are acutely malnourished, 440 000 with Severe Acute Malnutrition (SAM) and 500 000 with Moderate Acute Malnutrition (MAM). The humanitarian access situation remains challenging in the north-east. Ongoing hostilities in the northern part of Borno State led to an initial, short term downsiz-ing of humanitarian operations in several locations. Humanitarian partners are still assessing the operational environment but have started upscaling again. (OCHA 1 October 2018 report)

Country	Event	Grade†	WHO notified	Start of reporting period	End of reporting period	Total cases	Con-firmed cases	Deaths	CFR	Comments
Nigeria	Cholera	G1	7-Jun-17	1-Jan-18	9-Sep-18	27 927	45	517	1.9%	In week 36 (week ending 9 September 2018), 1 306 suspected cases including 24 deaths (CFR: 1.8%) were reported from five states: Zamfara (588 cases with 12 deaths), Katsina (377 cases with 12 deaths), Borno (280 cases), Adamawa (55 cases), and Kano (6 cases). As of 9 September 2018, a total of 27 927 suspected cases including 517 deaths (CFR 1.9%) have been reported from 19 States since the beginning of 2018. There is an overall increasing trend in the number of reported cases. No new cases were reported in the last three or more weeks from Anambra, Bauchi, Ebonyi, FCT, Gombe, Jigawa, Kaduna, Kogi, Nasarawa, Niger, Plateau, Sokoto and Yobe states. There is an almost equal proportion of males and females affected.
Nigeria	Lassa fever	Ungraded	24-Mar-15	1-Jan-18	30-Sep-18	524	514	134	25.6%	In week 39 (week ending 30 September 2018), four new confirmed cases were reported from Edo (3) and Bauchi (1). From 1 January to 30 September 2018, a total of 2 623 suspected cases have been reported from 22 states. Of the suspected cases, 514 were confirmed, 10 were probable, and 2 098 were negative (not a case). Since the onset of the 2018 outbreak, there have been 134 deaths in confirmed cases and 10 in probable cases (case ase Fatality Rate in confirmed cases is 26.1%. Thirty-nine health care workers have been affected in seven states since the onset of the outbreak, with ten deaths. Eighteen states have exited the active phase of the outbreak while four - Edo, Ondo, Bauchi and Delta states remain active.
Nigeria	Measles	Ungraded	25-Sep-17	1-Jan-18	16-Sep-18	14 066	901	100	0.7%	In week 37 (week ending 16 September 2018), 171 suspected cases of measles were reported from 31 states. Since the beginning of the year, a total of 14 066 suspected measles cases with 901 laboratory confirmed cases and 100 deaths (CFR 0.71%) were reported from 36 States and Federal Capital Territory compared with 17 772 suspected cases with 108 laboratory confirmed and 105 deaths (CFR 0.56%) from 37 States during the same period in 2017.
Nigeria	Monkey-pox	Ungraded	26-Sep-17	24-Sep-17	15-Sep-18	269	115	7	2.6%	Two cases of monkeypox were confirmed on 7 and 11 September 2018 in the UK in people with recent travel history to Nigeria and reported to NCDC by Public Health England (PHE). Following that an investigation was conducted in Nigeria and a cluster of six suspected cases with epidemiological linkages to one of the cases in the UK was identified in Rivers State. Since September 2017, a total of 269 cases including 7 deaths were reported from 26 States (Rivers, Abia, Akwa-Ibom, Bayelsa, Cross River, Delta, Edo, Enugu, Imo, Lagos, Nasarawa, Oyo, Anambra, Plateau, Ekiti, Benue, Plateau, Katsina, Kaduna, Kwara, Bauchi, Ebonyi, Kano, Kogi, Ondo) and the Federal Capital Territory (FCT). Of these, 115 cases were confirmed including 2 health care workers.

Country	Event	Grade†	WHO notified	Start of reporting period	End of reporting period	Total cases	Con-firmed cases	Deaths	CFR	Comments
Nigeria	Polio-myelitis (cVD-PV2)	Ungraded	1-Jun-18	1-Jan-18	9-Oct-18	16	16	0	0.0%	Two new cases of circulating vaccine-de-rived poliovirus type 2 (cVDPV2) cases were reported this week, bringing the total number of cVDPV2 cases in 2018 to 16. These latest reported cases had onset of paralysis in late August and mid- September, from Katsina and Borno states, linked to the cVDPV2 outbreak centred around Jigawa.
Nigeria	Yellow fever	Ungraded	14-Sep-17	7-Sep-17	23-Sep-18	3 101	47	51	1.6%	Three presumptive positive cases and one inconclusive case were reported from three of the diagnostic laboratories during week 38 (week ending 23 September 2018). From the onset of this outbreak on 12 September 2017, a total of 3 101 suspected yellow fever cases including 51 deaths have been report-ed as at week 38 from 555 LGAs in all Ni-gerian states. The last case confirmed by IP Dakar was on 6 June 2018 from River State. A total of 47 were laboratory confirmed at IP Dakar out of 138 presumptive positive and inconclusive samples tested.
Senegal	Dengue fever	Ungraded	26-Sep-18	19-Sep-18	2-Oct-18	27	27	0	0.0%	On 19 September 2018, the Pasteur Institute of Dakar notified the Ministry of Health of Senegal of three confirmed cases of Dengue fever in Fatick District. Based on the notifi-cation, a rapid investigation was conducted from 20 – 23 September 2018, during which a total of 180 cases were identified through records review at the health facilities in the district. As of 7 october 2018, a total of 777 cases were reported including 27 confirmed cases. No cases of severe Dengue or deaths have been reported since the beginning of the outbreak on 19 September 2018. Most affected areas include Ndiaye-Ndiaye (33%) and Peulgha-Poukham (33%).
São Tomé and Prin-cipé	Necro-tising cellulitis/ fasciitis	Protracted 2	10-Jan-17	25-Sep-16	23-Sep-18	2 948	0	0	0.0%	A total of 2 948 cases have been notified from week 40 in 2016 to week 38 in 2018 (week ending 23 September 2018). It should be noted that 75% of the cases notified during the last 5 weeks come from the districts of Me-zochi (45%) and Cantagalo (25%). The attack rate of cellulitis in São Tomé and Príncipe is 14.9 cases per 1000 inhabitants.
Seychelles	Dengue fever	Ungraded	20-Jul-17	18-Dec-15	2-Sep-18	5 813	1 511	-	-	As of week 35 (2 September 2018) a total of 5813 cases of Dengue have been reported, and 1 511 cases have been confirmed since the last week of 2015. There is a general decreasing trend since week 23. For week 35, a total of twenty-two (22) suspected cases were reported. The number of confirmed cases have been on a decline, with 791 Currently in circulation are the serotypes DENV1, DENV2 and DENV3. The sus-pected cases were distributed in fourteen (14) districts on Mahe Island for week 35. No suspected cases are reported from the inner islands. The number of confirmed cases report has been on a decline, from 791 cases in 2016, 595 cases in 2017, to 124 cases confirmed thus far in 2018.
South Sudan	Human-itarian crisis	Protracted 3	15-Aug-16	n/a	23-Sep-18	-	-	-	-	Detailed update given above.

Country	Event	Grade†	WHO notified	Start of reporting period	End of reporting period	Total cases	Con-firmed cases	Deaths	CFR	Comments
South Sudan	Hepati-tis E	Ungraded	-	3-Jan-18	30-Sep-18	152	19	-	-	No new cases of Hepatitis E were reported from Bentiu POC in week 40 (ending 30 September 2018). As of 30 September 2018, 152 suspect cases have been reported from Bentiu POC and Old Fangak since the beginning of the year. Of the total suspect cases, 19 cases have been confirmed by PCR (18 in Bentiu PoC and 1 in Old Fangak). No new cases identified after active follow up in Old Fangak county. Among the females, most cases have been reported in those aged 15-44 years (who are at risk of adverse outcomes if infected in the 3rd trimester of pregnancy).
South Africa	Cholera	Ungraded	5-Oct-18	29-Sep-18	9-Oct-18	2	2	0	0.0%	A second case of cholera, husband of the first case who had travel history to Zimbabwe, has been confirmed in Gauteng Province, South Africa. Cumulatively, there are two confirmed cases of cholera reported from South Africa since 29 September 2018. The pathogen identified is *Vibrio cholerae* O1 serotype Ogawa.
Tanzania	Cholera	Protracted 1	20-Aug-15	1-Jan-18	7-Oct-18	4 201	50	81	1.9%	During week 40 (week ending 7 October 2018), 98 new cases with three deaths were reported from Ngorongoro District (48 cases, two deaths) in Arusha Region; Simanjiro District (30 cases, zero deaths) in Manayara Region; Moshi District (10 cases, zero deaths) in Kilimanjaro Region and Songwe District (10 cases, one death) in Songwe Region. As of week 40, a total of 4 201 cases with 78 deaths (CFR: 1.9%) were reported from Tanzania Mainland since the beginning of 2018. No case was reported from Zanzibar (the last case was reported on 11 July 2017). Cholera cases reported from week 1 to 40 in 2018 increased and nearly doubled compared to the same period in 2017 (2 961 cases).
Uganda	Human-itarian crisis - refugee	Ungraded	20-Jul-17	n/a	21-Jun-18	-	-	-	-	Uganda continues to receive new refugees precipitated by increased tensions mainly in the neighboring DRC and South Sudan. De-spite responding to one of the largest refugee emergencies in Africa, humanitarian fund-ing has remained low especially to the health sector. Current refugee caseload stands at almost 1.5 million refugees and asylum seekers from South Sudan, DRC, Burundi, Somalia and others countries. Daily arrival stands at approximately 250 – 500 per day. A total of 376 081 refugees and asylum seekers were received in 2017.
Uganda	Crime-an-Congo haem-orrhagic fever (CCHF)	Ungraded	24-May-18	-	25-Sep-18	9	5	2	22.2%	Two new cases were confirmed on 25 Sep-tember 2018, at the Uganda Virus Research Institute (UVRI). The case-patients, 30 and 10-year-old from Isingiro and Luweero dis-tricts respectively are currently hospitalized. As of 25 September 2018, a total of nine cas-es (five confirmed and four suspected) and two deaths (CFR 22%) have been reported across the country.

Country	Event	Grade†	WHO notified	Start of reporting period	End of reporting period	Total cases	Con-firmed cases	Deaths	CFR	Comments
Uganda	Measles	Ungraded	8-Aug-17	1-Jan-17	30-Sep-18	2 791	725	1	0.0%	As of 30 September 2018, a total of 2 791 cases have been reported of which 725 cases have been confirmed either by epidemiological link or laboratory testing since the beginning of the year. Four hundred eighty-six (486) cases were laboratory confirmed by IgM. One death has been reported among the confirmed cases. Fifty-four districts in the country have reported a measles outbreak.
Uganda	Rift Valley fever (RVF)	Ungraded	29-Jun-18	20-Jun-18	14-Aug-18	23	19	8	34.8%	One new case from Kiruhura district has been confirmed for Rift Valley fever by PCR at Uganda Virus Research Institute on 14 August 2018. From 18 June to 14 August 2018, a total of 23 suspected cases with eight deaths (CFR 34.8%) have been reported from 11 districts in Western Uganda. Nineteen(19) cases have been confirmed by PCR at the Uganda Virus Research Institute (UVRI). The most affected district is Insingiro having reported 11 cases with two deaths (CFR 18.2%). Ninety-six percent (96%) of cases reported are males, the majority of whom are herdsman and butchers.
Zimbabwe	Cholera	G2	6-Sep-18	6-Sep-18	4-Oct-18	9 116	228	54	0.59%	Detailed update given above.
Zimbabwe	Typhoid fever	Ungraded	7-Aug-18	6-Jul-18	10-Sep-18	1 983	16	8	0.4%	On 7 August 2018, WHO was notified by the Ministry of Health and Child Care of Zimbabwe of a suspected outbreak of Typhoid fever in Gweru City, Midland Province of Zimbabwe. A total of 1 983 cases with eight deaths (CFR 0.4%) have been reported as of 10 September 2018. Sixteen cases have been confirmed. There is a decline in the daily number of cases reported since the peak on 8 August 2018 when 186 cases where reported.
Recently closed events										
Liberia	Lassa fever	Ungraded	14-Nov-17	1-Jan-18	23-Sep-18	29	20	13	44.8%	Three suspected cases reported across the country during week 38 (ending 23 September 2018) tested negative at the National Public Health Laboratory. Cumulatively, since epi-week one,169 suspected cases have been reported including 46 deaths. One hundred forty (140) were discarded after negative test results while 20 were confirmed and the remaining nine not tested. Case fatality ratio among confirmed cases is 65% (13/20).
Congo (Republic of)	Yellow fever	Ungraded	10-Jul-18	9-Jul-18	2-Oct-18	1	1	0	0.0%	On 21 August 2018, the sample from a 20-year-old male from Bissongo market in Loandjili district, Pointe-Noire city tested positive by seroneutralization with high titres at IP Dakar. The case initially presented to the health centre with a history of fever and jaundice in early July. No other additional cases have been confirmed since the declaration of the outbreak. A mass reactive vaccination campaign was held in Pointe Noire city from 26 September 2018. More than one million people were targeted aged 9 months and over, and on 1 October 2018 after a sixth day of vaccination the overall coverage achieved was 98.5%.

†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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Data sources
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