WEEKLY BULLETIN ON OUTBREAKS AND OTHER EMERGENCIES

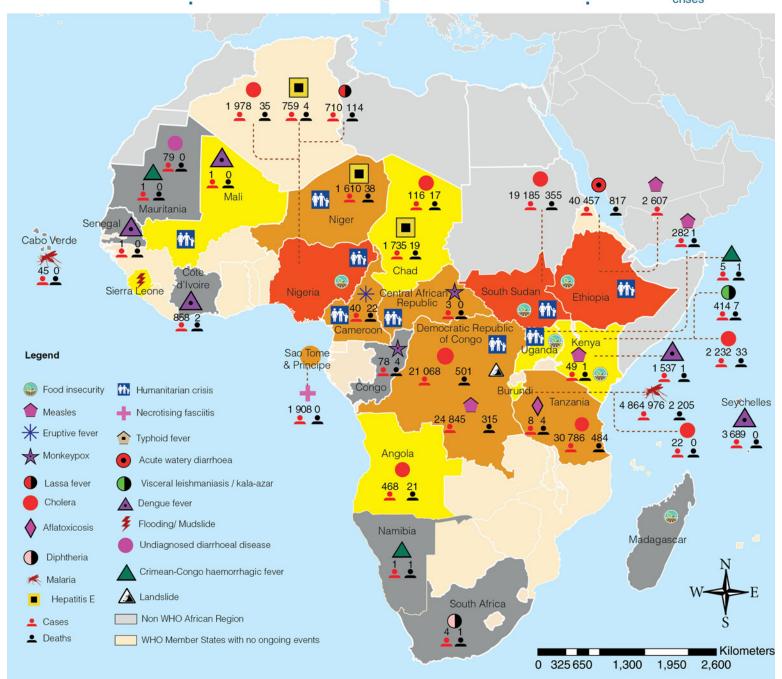
Week 34: 19 – 25 August 2017 Data as reported by 17:00; 25 August 2017



3 New events 46
Ongoing events

35 Outbreaks

14
Humanitarian



Grade 3 event

2
Protracted 3 events

6Grade 2 events

8Grade 1 events

32 Ungraded events

Health Emergency Information and Risk Assessment

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 49 events in the region. This week, three new events have been reported: Crimean-Congo haemorrhagic fever (CCHF) in Mauritania and cholera in Burundi and Chad. This week's edition also covers key ongoing events, including:
 - Cholera in Kenya
 - Hepatitis E in Niger
 - Floods/mudslide in Sierra Leone
 - 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 challenges include:
 - With increasing incidents of meteorological events (and other disasters) in the region, the existing capacity for mass casualty management remains a concern.
 - Two countries, Mauritania and Uganda, have confirmed CCHF during the reporting week, while Namibia confirmed the disease in the previous week. While it is known that CCHF is endemic in the region, the rising frequency of occurrence of human infections is beginning to raise concerns.

New events

Crimean-Congo haemorrhagic fever

Mauritania

1 Case **0** Death **0%** CFR

Event description

On 24 August 2017, the Mauritania Ministry of Health notified WHO of a confirmed case of Crimean-Congo haemorrhagic fever (CCHF) in Boutilimit Prefecture, located about 150 km south-east of the capital, Nouakchott. The case-patient is a 47-year-old shepherd, from Arafat Village in Mohammedia, Boutilimit. He developed headache, muscle and joints pains and diarrhoea on 20 August 2017 and sought medical attention at a local pharmacy (the same day), where he was prescribed anti-malarial medicines and analgesics. On 21 August 2017, the case-patient again consulted a private clinic where he had an intravenous infusion and other medication, since his condition was not improving. On 22 August 2017, his illness worsened and he presented to the emergency department of Sheikh Hamed Hospital with bleeding from the gums, persistent headache, fever, and diarrhoea. He was admitted in the Internal Medicine Department and blood samples were collected for clinical and diagnostic investigations. Clinical haematology investigation revealed very low platelet count and deviation in white cell parameters. Meanwhile, on account of the bleeding manifestation, a blood sample was shipped to the National Institute for Public Health Research (NIPHR) on 22 August 2017. The laboratory result from NIPHR released on 23 August 2017 was IgM positive for Crimean-Congo haemorrhagic fever by enzyme-linked immunosorbent assay (ELISA). The casepatient is still hospitalized and in stable clinical condition. Further investigations are being conducted and updates on the event will be provided as information becomes available.

Public health actions

- The Ministry of Health convened an emergency meeting on 24 August 2017 to strategize and plan for control interventions. The meeting was attended by officials from the Ministry of Livestock, NIPHR, WHO and other stakeholders.
- A rapid response team of officials from the Ministries of Health and Livestock has been deployed to Boutilimit to conduct outbreak investigations and support the local response, including case management, contact identification and follow-up and strengthening infection prevention and co

identification and follow-up and strengthening infection prevention and control (IPC) practices. The report of the investigations and regular updates on the evolution of the situation will be provided in the days to come.

- The case-patient has been isolated and continues to receive clinical and nursing care.
- Medical personnel in the hospital have been oriented on standard IPC measures.
- An infectious disease specialist has been deployed to strengthen IPC measures in the hospital.

Situation interpretation

The confirmation of CCHF in Boutilimit comes after two recent events where patients referred from Mauritania to Dakar, Senegal tested positive for the disease between May and June 2017 (reported in Weekly Bulletins 19 and 25). The previous cases originated from the capital city, Nouakchott, which is about 150 km away from the current foci. This may be indicative of the relative prevalence of the reservoir and vector for the CCHF virus (*Hyalomma* ticks) in the country. Mauritania experienced a fairly large CCHF outbreak in 2003, involving 38 cases with a case fatality rate of 28.6%. Over 90% of the cases (35/38) were resident in Nouakchott. The country has established adequate diagnostic capacity at the NIPHR, which facilitated rapid confirmation of the current case. The national authorities and partners, however, need to carry out extensive outbreak investigations, including seroprevalence studies, to determine the potential risk for continued CCHF outbreaks in humans and institute effective prevention and control measures, with a strong animal health component.

Geographical distribution of Crimean-Congo haemorrhagic fever, Mauritania, 24 August 2017



17

116

14.7%

CFR

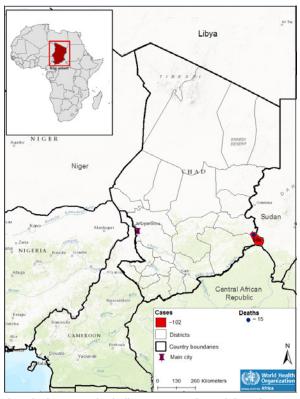
Event description

On 15 August 2017, the Chadian Ministry of Health notified WHO of a suspected cholera outbreak in Koukou District, Sila Region in the south-east of the country (bordering Sudan). The cholera outbreak emerged on 15 August 2017 when the local health facility (Tioro Health Centre) reported a cluster of 50 cases of acute watery diarrhoea including 13 deaths (case fatality rate 26%) from Marena, a remote village in Koukou District. The index case in this outbreak presented to the local health facility on 14 August 2017 while the other cases reported on 15 August 2017. On 16 August 2017, a joint regional and national rapid response team obtained two samples from the index case and transported them to the National Laboratory in N'Djamena. Laboratory results released on 20 August 2017 confirmed Vibrio cholerae O1 serotype Ogawa as the causative agent, thus confirming the outbreak. Between 14 and 23 August, 91 cases and 13 deaths (case fatality rate 14.2%) were reported in Marena.

In a related event, Dogdoré Health Centre in Koukou District reported 11 suspected cholera cases including two deaths (case fatality rate 18.2%) from Dabanalaye and Hilé Hussein villages (near the border of Sudan). These cases occurred between 19 and 22 August 2017. No epidemiological linkage has yet been established between the two clusters. Dogdoré is about 12 km from the border of Sudan but about 200 km from Marena.

Since the beginning of the outbreak on 14 August 2017, 116 cholera cases including 17 deaths (case fatality rate 14.7%) have been reported in Koukou district, as of 24 August 2017. Six cases have been confirmed to date. People aged 15 years and above accounted for 67% of the cases. However, 59% (10/17) of the deaths were in children less than 15 years of age.

Preliminary outbreak investigation carried out by the regional and district health authorities attributed the outbreak in Marena to contamination of an underground pit water source. Six water samples were collected and tested, isolating Vibrio fluvialis and Trichomonas species. The suspect community water source was immediately closed by the village leaders. An anecdotal report indicates that Geographical distribution of cholera cases in Chad, 14 - 24 August 2017



some of the suspected cases originated from Darfur, Sudan. This has created animosity between the indigenous people and the migrants, with unconfirmed reports that some migrants have since been expelled back to Darfur by the local communities. These reports are being investigated by the Office for the Coordination of Humanitarian Affairs (OCHA) in Chad.

Public health actions

- The Ministry of Health has established a technical emergency committee in Goz Beida to coordinate the response, with the support of Concern World Wide (CWW), MSF, OCHA, and WHO.
- A treatment centre has been set up in Marena village. One cholera kit deployed by WHO is currently in use and UNICEF has sent two diarrhoea kits. MSF has deployed an emergency team and additional kits, and plans to set up a cholera treatment centre in Marena and oral hydration points near Dabanalaye village. Local healthcare staff and hygienists have been trained on the management of diarrhoeal diseases. WHO has two additional cholera kits in stock in N'Djamena, ready for dispatch, if needed.
- Active case finding activities have begun within the affected community, with daily line listing of cases and deaths.
- Social mobilization activities have started, aimed to promote public awareness of hygiene (hand washing), consumption of safe drinking water and cooked food. The local authorities have restricted mass gatherings. Twelve community volunteers have been trained to assist with raising community awareness. A health and WASH team from the non-governmental organization CWW are also in Marena for a rapid needs assessment.

Situation interpretation

An explosive cholera outbreak has been confirmed in the Sila Region of Chad, bordering Sudan and Central African Republic. Following the initial spike in cases and public health response to the outbreak, the incidence of new cases and deaths has markedly declined. The affected region experiences large-scale cross-border displacement of civilians fleeing conflict and other humanitarian crises in their respective countries. The village of Marena (where the majority of cases have occurred), is a remote village of 5 000 inhabitants. Erratic rains and droughts have hampered food production, with high rates of moderate and severe acute malnutrition reported. Heavy downpours cause frequent flooding, limiting road access to the region, and greatly increasing the risk of outbreaks of malaria and waterborne diseases such as cholera. These risks are exacerbated by the poor access to drinking water, which is 35% in the Sila region. The neighbouring Salamat Region is also currently experiencing a large outbreak of hepatitis E. Strong interagency and cross border collaboration, focusing on provision of WASH interventions and early treatment to prevent cases and deaths, is urgently needed to control this outbreak.



Event description

On 20 August 2017, the Burundi Ministry of Health notified WHO of a cholera outbreak in Nyanza-Lac Health District in Makamba Province, located in the southern part of the country. The outbreak began on 14 August 2017 when the index case, a 35-year-old fisherman, presented to Mvugo Health Centre with acute watery diarrhoea, vomiting and severe dehydration. The case-patient was immediately referred to Nyanza-Lac Hospital, where he was isolated. Stool samples collected and sent to the National Institute of Public Health in Bujumbura tested positive for *Vibrio cholera* on 19 August 2017. In the subsequent days (from 18 to 25 August 2017), 20 new suspected cases including four deaths were reported from three different areas in the health district. Twelve cases were receiving treatment at the cholera treatment centre (CTC) at the Nyanza-Lac Hospital, as of 25 August 2017.

In a different event, one confirmed cholera case was reported from Cibitoke Health District in Cibitoke Province, located in the northern part of the country. The case-patient, a 40-year-old man from Rukana 1 hill village, presented to Rugombo health facility on 17 August 2017. Stool sample obtained and sent to NIPH tested positive for Vibrio cholera on 21 August 2017. The case-patient was discharged on 23 August 2017 and no new cases have since been reported. No epidemiological linkage has been established between the two chains of transmission. Further investigations are ongoing.

As of 25 August 2017, 22 suspected/confirmed cholera cases (with no deaths) have been reported from two health districts in Burundi.

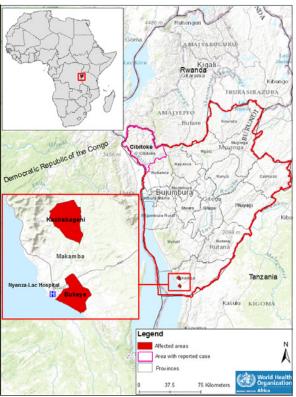
Public health actions

- The Ministry of Health emergency unit, the medical officer of the Nyanza-Lac Health District and WHO held an emergency meeting on 20 August 2017 in Bujumbura to discuss the response strategies and plans.
- The local response coordination committee has been activated to respond to the cholera outbreak
- The CTC in Nyanza-Lac Hospital has been reactivated and the Ministry of Health provided medicines and other supplies for case management.
- The United Nations agencies (WHO, UNICEF and OCHA) discussed the cholera situation and the need for joint actions on the ground.
- On 21 August 2017, a joint Ministry of Health and WHO team was deployed to Nyanza-Lac to conduct rapid risk assessment.
- The health district staff have started carrying out social mobilization activities in the affected communities.
- Plans are underway to deploy one cholera kit and two diarrhoeal kits from the WHO Regional Office to Bujumbura.

Situation interpretation

Burundi experienced a small cholera outbreak in the second week of July 2017 when a cluster of six cases was confirmed in Bujumbura, the capital city (reported in the Weekly Bulletin of week 29). In the current event, the index case had reportedly just returned (a few days before disease onset) from Karamba in South Kivu Province, Democratic Republic of the Congo, where over 700 cholera cases have been reported in the past 6 weeks. The ongoing cholera outbreak in the Democratic Republic of the Congo, particularly South Kivu Province that shares a border with Burundi, puts the country at risk of serious cholera outbreaks. There are concerns that the current outbreak could escalate and affect other districts, especially those in the south-western part of the country, where insecurity has caused the collapse of water, hygiene and sanitation facilities. The risk is further enhanced by the expected repatriation of Burundi refugees from the Democratic Republic of the Congo and Tanzania (also having an ongoing cholera outbreak). Although Burundi has successfully responded to previous cholera outbreaks, the country still faces a number of challenges, including gaps in coordinating response activities, difficult access to the affected areas, inadequate funds, and the ongoing malaria outbreak, which is depleting healthcare resources.

Geographical distribution of cholera cases in Burundi, 14 - 25 August 2017



Ongoing events

Cholera Kenya 2 232 33 1.5% Cases Deaths CFR

Event description

The cholera outbreak in Kenya has greatly improved in the last few weeks, with the weekly incidence rapidly declining since week 30, when a peak of about 300 cases was attained. During week 33 (week ending 20 August 2017), 19 new suspected cases (and no deaths) were reported from four counties, namely Nairobi (11 cases), Nakuru (3 cases), Turkana (3), and Garissa (2). Since the beginning of the year, a total of 2 232 cases including 33 deaths (case fatality rate 1.5%) have been reported, as of 20 August 2017. In addition to the counties that reported cases in the reporting week, four other counties (Kajiado, Kisumu, Siaya and Machakos) are still considered to have active cholera transmission since they have reported cases in the past 2 weeks. A total of 16 out of the 47 counties in Kenya have been affected this year.

Kenya has experienced recurrent outbreaks of cholera since December 2014, with a cumulative total of 19 248 cases reported (10 568 in 2015, 6 448 in 2016 and 2 232 in 2017). During the latest upsurge, cases have occurred mainly in densely populated settings, including the city of Nairobi and Dadaab refugee camps in Garissa County.

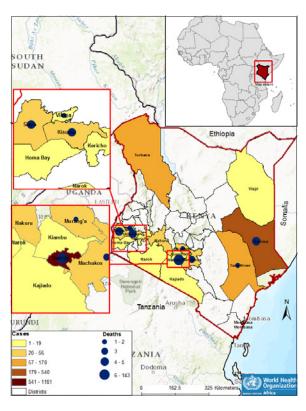
Public health actions

- The National Multisectoral Cholera Taskforce Committee meets twice a week to coordinate the response. Members include: the Ministry of Health, Nairobi County officials, Ministry of Water and Irrigation, Nairobi Water and Sewerage Company, Ministry of Tourism and partners including WHO, UNICEF, Kenya Red Cross Society, CDC, AMREF, and MSF among others.
- The Public Health Emergency Operations Centre remains activated, with the appointed incident manager coordinating response sub committees: epidemiology/surveillance, case management, laboratory, WASH, risk communication, and logistics.
- The Ministry of Health and Nairobi County has strengthened food safety practices through conducting inspection of all eateries; examination of food handlers; collection of human, food and environmental samples for laboratory tests to detect pathogens; and closure of eateries that do not meet public health standards.
- In Nairobi, cholera treatment centres (CTCs) have been set up in identified hotspots. The affected people are strongly advised to visit the nearest treatment centre for health services.
- CDC is providing technical support for coordination at the Public Health Emergency Operations Centre. They are also assisting with mapping of the cases.
- The Ministry of Health, in collaboration with AMREF, UNICEF and WHO, is conducting risk communication and social mobilization to the affected populations, informing them where services are available, as well as health talks on hygiene and water treatment.
- AMREF, UNICEF and Red Cross have rolled out response activities in Nairobi County, including setting up CTCs, training community health volunteers (CHVs), sensitizing 50 000 households on practicing safe water treatment, tracing contacts (900 contacts have been traced), and construction of 40 gender-sensitive sanitation facilities.
- Active surveillance for acute watery diarrhoea has been heightened through active case search and contact tracing.
- WHO supported re-orientation of rapid response teams at county level on outbreak management, early warning and water quality testing.
- Nairobi Water and Sewerage Company has enhanced water supplies to the affected communities by ensuring that water pipes have enough pressure, as well as free distribution of potable water by water trucks.
- Distribution of water treatment chemicals (chlorine tablets) is being done and water samples tested for free residual chlorine.

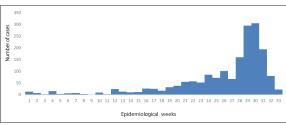
Situation interpretation

The cholera outbreak in Kenya has greatly improved in the past weeks following intensified interventions by the national authority and partners. The outbreak had escalated with several episodes of common-source transmission of infections in Nairobi city. The drastic reduction in cholera cases illustrates the fact that, when adequately responded to, cholera control is feasible. The onus remains on the national authorities and partners to sustain the ongoing interventions and ensure that the outbreak is completely controlled. This should be followed by medium to longer term preparedness and preventive measures to avert any potential recurrence of cholera in the country.

Geographical distribution of cholera cases in Kenya, week 33, 2017



Weekly trend of cholera cases in Kenya, 1 January - 20 August 2017





Event description

The hepatitis E outbreak in Niger is gradually improving, with a sustained decrease in the number of new cases observed since the second peak was attained in week 26, during which 150 cases were reported. During week 32 (week ending 13 August 2017), 37 new suspected cases were reported, compared with 48 in week 31. The last death was reported on 7 July 2017.

Between 2 January 2017 and 13 August 2017, a total of 1 610 suspected cases including 38 deaths (case fatality rate 2.4%) have been reported. The majority of cases originated from Diffa Health District (912), followed by N'Guigmi (286), and Bosso (235). Other cases were reported from Goudoumaria (9) and Mainé Soroa (8). Since the 23 July 2017, two other regions have reported cases: Zinder (1) and Tahoua (1). Women are disproportionately affected, accounting for 930 (58%) of the total cases. Of these women, 94% are aged between 15 and 49 years (reproductive age). The most affected age groups overall remain those between the ages of 20 and 34, followed by those aged 15 to 19 and 35 to 39 years.

As of 15 August 2017, samples have been taken from 85.7% (1 380/1 610) of suspected cases. Between 11 April 2017 and 5 July 2017, 653 samples were tested. Of these 441 (67.5%) were positive for hepatitis E by polymerase chain reaction (PCR).

Public health actions

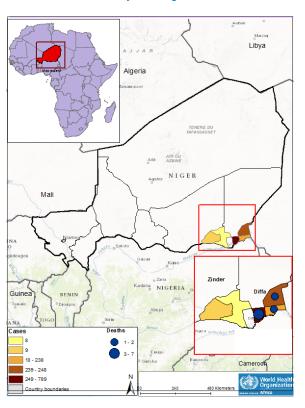
- Epidemiological surveillance has been strengthened across all affected regions, including Zinder and Tahoua, and active case search is continuing, along with mandatory reporting.
 The Niger Ministry of Public Health is deploying health kits provided by
- The Niger Ministry of Public Health is deploying health kits provided by WHO and free medical treatment is being provided at all levels, including referral of severe cases, mainly supported by WHO and MSF.
- Authorities continue to collect and transport blood samples from suspected cases for analysis at the reference laboratory.
- Water, sanitation and hygiene (WASH) activities are ongoing in the affected regions (Diffa, Tahoua and Zinder), including trucking of drinking water, disinfection and chlorination at water points, distribution of chlorine tablets (Aquatab) to households, and installation of hand washing facilities at the health centres. A joint Health and Waste Cluster meeting was held on 11 August 2017 at the WHO country office to discuss WASH supply stocks.
- Risk communication has been established with all administrative authorities and other public sector and religious leaders, engaging communities on correct personal and community hygiene practices, preventive measures and the need for early healthcare seeking, particularly among pregnant women.

Situation interpretation

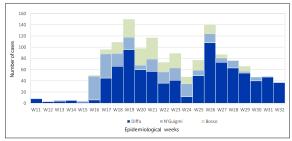
Although there has been a gradual decrease in the number of reported cases of hepatitis E in Niger, continued strengthening of surveillance, along with

timeliness and completeness of reporting is required. This is particularly important given the risk of escalation posed by the coming rainy season. The major drivers of the outbreak remain limited access to safe drinking water, inadequate sanitation and poor personal and food safety practices. The Diffa Region, the epicentre, has vulnerable populations displaced by insecurity and conflict in the subregion, who continue to face the challenges of food insecurity, limited access to essential healthcare and inadequate access to clean water and proper sanitation. A multisector approach is necessary to strengthen coordination between the various clusters, and need to take place under the leadership of both regional and national authorities.

Geographical distribution of hepatitis E cases in Niger, 2 January - 15 August 2017



Weekly trend of hepatitis E cases in Niger, week 11 - week 32, 2017



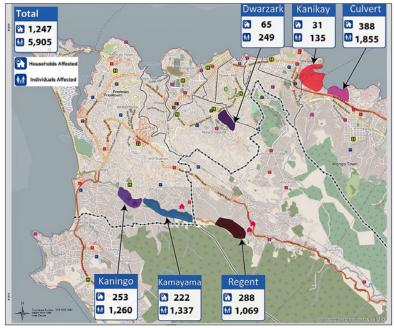
Floods/mudslide

Sierra Leone

Event description

The consequences of the disastrous floods, mudslide and mudflow in Freetown, Sierra Leone are being unravelled, as response efforts are being consolidated. As of 21 August 2017, 499 people have been confirmed dead, including 173 adult males, 169 adult females and 157 children. The deaths were mainly attributed to blunt trauma, crush-related injuries and drowning. The search and rescue operations have now transitioned into recovery, though a few new dead bodies are being recovered. Close to 600 people are still reported missing, though this figure cannot be validated. One hundred and fifty trauma cases admitted and treated in the nearby health facilities have been discharged, except one child with an amputated limb. To date, 1 247 households from six communities in Freetown have been affected, with 5 905 persons (3 011 males and 2 894 females) displaced. The affected persons are categorized as survivors whose homes have been rendered either temporarily or permanently uninhabitable, households who have lost income generating member(s), and those directly injured because of the disaster. The six severely affected communities are Culvert, Dwarzark, Kamayama, Kanikay, Kaningo and Regent. Regent and Kamayama were directly affected by the mudslide while the other areas were mainly affected by flooding. The majority of the displaced persons have settled and live with relations within their neighbourhoods. However, a group of about 210 women and children have been relocated to Don Bosco, a street children/orphanage care centre, which has now been overwhelmed.

Map of areas affected by floods/mudslides in Sierra Leone, 21 August 2017



The humanitarian issues affecting the displaced population include challenges with access to shelter, food, healthcare, water and sanitation. Overcrowding, poor infrastructure, poor drainage, inadequate water and sanitation services, and the continuing rainy season increase the risk of disease outbreaks.

Public health actions

- The Government of Sierra Leone, under the leadership of the Office of National Security (ONS), is coordinating the overall humanitarian response through the national incident command centre. The Public Health National Emergency Operations Centre (PHNEOC) continues to coordinate the public health component of disaster response.
- In the United Nations Country Team, the United Nations Resident Coordinator has designated the Country Director and Representative of the World Food Programme as Incident Manager.
- WHO continues to provide technical support to the Public Health National Emergency Operations Centre in the Ministry of Health and Sanitation to design and implement appropriate interventions on health related components of the response. All the response pillars surveillance, safe burial and infection prevention and control (IPC), case management, communication, coordination and psychosocial support have been activated. In addition, WHO facilitates the EOC briefings to ONS.
- Rapid risk assessments for flooding and possible disease outbreaks in the affected districts, as well as assessments on the health needs of the affected families and communities, were conducted. Surveillance of key epidemic prone diseases is being enhanced, with the technical leadership of WHO, to detect and prevent any potential risk of waterborne and other disease outbreaks. Furthermore, WHO is supporting the Ministry of Health and Sanitation with cholera preparedness including updating the cholera response plan and procurement of cholera testing reagents and supplies.
- In the coming weeks, WHO will continue to build on this work to support the government in several key areas including case management, surveillance, IPC, mental health and psychosocial support, community engagement, communication and operational support to the District Health Management Teams (DHMTs) in the two affected districts.

Situation interpretation

The efforts to mitigate the impact of the disaster that struck communities in Freetown have improved, with most urgent lifesaving needs being progressively addressed. The initial emergency phase of care for the wounded, body recovery and safe and dignified burials is gradually shifting to resettlement, disease prevention and health systems strengthening. In particular, provision of essential household items, food aid, health, and WASH actions are being undertaken. The risk of disease outbreaks remains high with flooding of wells and latrines, proliferation of mosquitoes, and overcrowded and suboptimal living conditions. WHO is supporting local authorities to heighten surveillance and preparedness for malaria, waterborne diseases and other potential outbreaks.

Resettlement and rehabilitation of affected communities is the next planned government and partners' action. Support for the safe and dignified voluntary relocation of displaced persons to safer zones should also be a priority and should include the provision of essential services. The government has set out the recovery phase from 24 August to 13 September 2017. To that end, additional support for response and recovery activities will be mobilized.



Humanitarian crisis

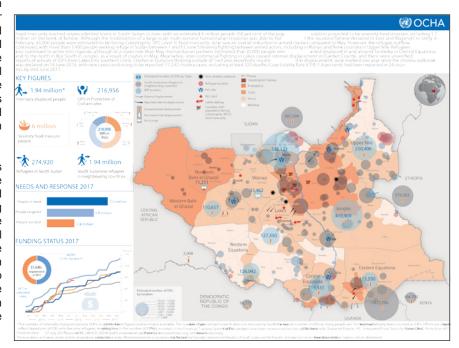
South Sudan

Event description

The security situation in South Sudan makes it currently the most dangerous country in which aid workers discharge their duties. The number of South Sudanese refugees has now passed the 1 million mark, most of whom have arrived in Uganda in the past 12 months. Over 85% are women and children, mainly from the agricultural area of Greater Central Equatoria Region, where humanitarian actors continue to experience access denials by the warring factions. Kupera and Mukaya in Yei County and areas outside Torit town remain a key concern.

The rainy season has compounded problems experienced by internally displaced people (IDPs), with flooding causing displacement and outbreaks of communicable diseases. Flooding has reportedly displaced 7 000 people, who are now living in schools in Mangala, Greater Central Equatoria Region. An additional 1 400 people have been displaced in Bari, Torit County, Eastern Equatoria. The current long rainy season has also made most parts of the country inaccessible. The western corridor for transport of humanitarian supplies from Juba to Wau has been closed by the logistics cluster because of poor road conditions.

Humanitarian snapshot in South Sudan, June 2017



In Eastern Equatoria, food insecurity is leading to school dropouts and further migration to Kenya and Uganda. Army worm infestation is affecting crops in Lopa (Lafon), Noti and Israel, exacerbating the food insecurity. On 12 August 2017, armed men looted the health facility in Ngamundu, Maridi County in Western Equatoria. Inter-communal infighting is reported in Upper Nile and the Lakes regions. In the Lakes Region, an inter-agency rapid needs assessment team estimated that 84 people were killed, 90 wounded and over 7 000 forcibly displaced. Insecurity and access restrictions have hampered assessment and monitoring activities in all areas.

A marked decline in the incidence of cholera cases has been observed since the last peak of the epidemic in week 23 of 2017. In week 33 (week ending 20 August 2017), there were 30 new cholera cases reported and no deaths. The cumulative total number of cases since the start of the current outbreak on 18 June 2016 is 19 846 cases and 355 deaths (case fatality rate 1.8%). However, the case fatality rate is likely to be an underestimate, due to under-reporting of deaths that occur in the community. Cholera cases have significantly reduced in areas where oral cholera vaccine (OCV) campaigns have been conducted so far in 2017.

In the past 4 weeks, there have been 284 394 reported cases of malaria, with 40 deaths (case fatality rate 0.01%). The cumulative total malaria cases in 2017 (1 January-20 August 2017) is 1 388 236 with 247 deaths (case fatality rate 0.01%).

Public health actions

- Multi-sectoral assessments are continuously being conducted by partners, based on identified priority needs, and response activities are ongoing across the country. Such response mechanisms are well established and constantly responding to the displaced populations.
- From 16-18 August 2017, an inter-cluster mission was deployed to Malakal by OCHA, together with gender-based violence (GBV), food security (FSC) and non-food items (NFI) clusters, to strengthen coordination.
- In Greater Central Equatoria Region partners are conducting interagency needs assessment missions to IDP sites and providing minimum response in NFI, health and water, sanitation and hygiene (WASH).
- Health partners have deployed mobile medical teams to Leer, Mayendit, Mvolo and Akobo. WHO have established emergency mobile medical teams, which have been deployed in the field to support health partners in cholera response including oral cholera vaccination campaigns. A total of 640 893 doses of OVC were deployed during the first round of vaccinations and 161 321 doses in the second round.

Situation interpretation

The danger to humanitarian workers, continuing denial of access to areas in need and the long rainy season are contributing to the already desperate humanitarian crisis in South Sudan. Almost half the population are suffering from economic hardship and food insecurity, with 2 million people displaced, internally and externally. The health system in the country continues to suffer as a result, which will require long-term, ongoing assistance from health partners and donors.

Rising incidence rates of malaria being observed are in line with the expected seasonal increases in South Sudan during June through November. Nevertheless, the increasing incidence places an additional burden on the health system. While a low level of cholera transmission have been observed in recent weeks, it is imperative that local authorities and partners remain vigilant and maintain interventions to prevent further resurgence.



Summary of major challenges and proposed actions

Challenges

- As the region was coming to terms with the disaster in Sierra Leone, another landslide occurred in the remote Ituri Region of the Democratic Republic of the Congo, killing an estimated 200 people. Around the same time, about 15 people died in Guinea due to a similar event. With the advent of increasing terrorism in many African countries, the use of person-borne improvised explosive devices is on the rise. Various forms of accidents have also caused large numbers of casualties in the region, namely those involving fuel trucks and fuel stations, industrial accidents, building collapse, etc. Undoubtedly, the African region is beginning to experience increasing incidents causing mass casualties.
- During the reporting week, Mauritania and Uganda, confirmed outbreaks of CCHF. Meanwhile, Namibia confirmed the disease in the previous week, the third event in 2017. Several other African countries have reported sporadic cases in the recent past. While it is known that CCHF is endemic in the region (and other parts of the world), the rising frequency of occurrence of human infections is beginning to raise concerns.

Proposed actions

- The national authorities in the region, in collaboration with partners, need to focus particular attention to establish capacity for mass casualty management. Such capacity can also be used to respond to any other health emergencies. WHO has clear guidelines for strengthening capacities for mass casualty management, although, its implementation remains limited.
- As part of the broader framework to strengthen capacity and structures for prevention, preparedness and response to dangerous infectious hazards, countries need to specifically conduct seroprevalence and epidemiological studies to determine the potential risk of CCHF outbreaks and institute effective prevention and control measures, with a strong animal health component.



All events currently being monitored by WHO AFRO

Event	Country	Current grade†	Date WHO notified	Total cases	Confirmed cases	Deaths	CFR %	Comments	Date of last sitrep
Newly reported events									
Cholera	Burundi	Ungraded	20-Aug-17	22	1	0	0.0%	Detailed update given above.	25-Aug-17
Cholera	Chad	Ungraded	15-Aug-17	116	6	17	14.7%	Detailed update given above.	22-Aug-17
Dengue fever	Mali	Ungraded	01-Aug-17	1	1	0	0.0%	On 1 August 2017, the WHO Country was notified by the Minister of Health and Public Hygiene on the occurrence of a dengue fever case in Mali. A report conveyed to the Regional Office on 17 August. The case was confirmed in a 14-year-old adolescent residing in the Missabougou district of Bamako. An investigation to rule out viral haemorrhagic fevers was conducted and the confirmation of dengue fever was done by RT-qPCR on 1 August 2017. The patient received treatment and has now fully recovered.	16-Aug-17
Crimean-Congo haemorrhagic fever (CCHF)	Mauritania	Ungraded	25-Aug-17	1	1	0	0.0%	Detailed update given above.	25-Aug-17
Crimean-Congo haemorrhagic fever (CCHF)	Uganda	Ungraded	21-Aug-17	5	2	1	20.0%	On 17 July 2017, the first case presented at Nakaseke Hospital with symptoms of uncontrolled nose bleeding, high grade fever, and general body weakness. The patient died shortly after admission. Between 7 and 17 August 2017, 4 more cases with similar symptoms were admitted at Nakaseke and Kibogi Hospital, located in the midpoint of the cattle corridor in Uganda. Among the 3 suspected cases with samples submitted, 2 cases are confirmed positive for CCHF by PCR testing at UVRI-Entebbe on 20 August. A one-health team has been sent to investigate the outbreak.	21-Aug-17
Dengue fever	Senegal, ex Cote d'Ivoire	Ungraded	21-Aug-17	1	1	0	0.0%	An isolated case of dengue fever was reported traveller. The case-patient experienced illness onset on 7 August during while in Cote d'Ivoire from 27 July to 8 August. On 8 August, the case presented and was hospitalised. A blood sample collected 9 August confirmed the diagnosis (result received 14 August). On 15 August, the case-patient returned to Cote d'Ivoire. No other cases were identified.	21-Aug-17
Ongoing events									
Cholera	Angola	G1	04-Jan-17	468	-	21	5.6%	Since 13 December 2016, cases have been detected in Cabinda (236), Soyo (227) and Luanda (5). Soyo reported zero cases since epidemiological week 26 where as Cabinda reported the same since epidemiologic week 29. Luanda has not reported any cases since week 5. The high transmission areas are linked to the cholera outbreak in Kongo Central Province in DRC.	06-Aug-17
Malaria	Burundi	G1	01-Jan-17	4 864 976*	-	2 205*	0.05%	*Counts include cases notified during 2017 YTD only. Weekly case counts are exceeding 2016 rates and on the rise. During week 28, 152 137 cases and 68 deaths were reported (35.6% above the same period last year).	23-Jul-17
Malaria	Cabo Verde	Ungraded	26-Jul-17	45	-	0	0.0%	An outbreak of indigenous malaria was reported in the capital city of Praia, Santiago Island, peaking in week 29. 53% of cases were adult males aged 20 years and older.	30-Jul-17
Humanitarian crisis	Cameroon	G2	-	-	-	-	-	Conflict in both north-east Nigeria and Central African Republic has led to mass population movement to Cameroon. Almost 10% of the population of Cameroon, particularly in the Far North, North, Adamaoua, and East Regions, is in need of humanitarian assistance as a result of the insecurity. A detailed update was provided in the week 31 bulletin.	23-Jul-17



Event	Country	Current grade†	Date WHO notified	Total cases	Confirmed cases	Deaths	CFR %	Comments	Date of last sitrep
Eruptive fever	Cameroon	Ungraded	16-Feb-17	40	-	22	55.0%	An outbreak of atypical paediatric eruptive fever of an unknown origin emerged in the northern regions of Cameroon during November-December 2015. Three investigations to identify a definitive cause were done. 40 suspected cases were found to fit the case definition by active-passive case research and review of register from January 2016 to July 2017. Of suspected cases, 60% were age of 12-35 months and 53% of are male sex. Most of suspected cases came from Mokolo (43%) and Mogode (33%) health districts. One third of the cases, who had their vaccination up-to-date, presented with mixed maculopapular lesions. A few concerning comorbidities were identified including acute malnutrition (90%), anaemia (73%) and HIV (40%). Among the risk factors identified, most (88%) cases suffered from frequently mosquito bites, and had pesticides and goats in the households. Seven cases were diagnosed as cutaneous leishmaniasis at histopathology analysis performed by Centre Pasteur du Cameroun and 3 cases by PECET laboratory. Only 3% of affected children recovered without any official treatment.	18-Aug-17
Humanitarian crisis	Central African Republic	G2		-	-	-	-	The security situation in the Central African Republic remains precarious, with multiple armed clashes reported in several parts of the country during the last weeks, punctuated with calm in certain areas. The conflict, characterized by targeted killings along communal lines and human rights abuses, has resulted in over 600 000 internal displaced people (IDPs). Almost half of the population (2.2 million people) is in need of humanitarian assistance and over 1 million people are food insecure. Protection, humanitarian access and food security are priority needs, which far exceed the available resources. Delivery of humanitarian assistance has continued to decline further due to underfunding and restricted access to large parts of the country. A detailed update was provided in the week 33 bulletin.	15-Aug-17
Monkeypox	Central African Republic	Ungraded	14-Apr-17	3	2	0	0.0%	During week 24 (week ending 18 June 2017), one new case was confirmed by the Institut Pasteur Bangui in a camp in Toma, Lobaye Prefecture. Further investigations supported by the Ministry of Health and WHO revealed 24 of 26 (92.3%) of close contacts had antibodies (IgG) against monkeypox, and 4 against cowpox. This suggests a high level of circulation of the virus in the region, and may explain the low number of cases recorded during these outbreaks. Including this latest case, just 2 confirmed cases and 1 suspected case have been reported since the event was first notified to WHO on 14 April 2017.	13-Jul-17
Hepatitis E	Chad	Gl	01-Sep-16	1,735	98	19	1.1%	The outbreak of hepatitis E in the Salamat region of Chad remains serious, with a high risk of escalation. During week 33, 23 new suspected cases and zero deaths were reported from four areas: Amtiman Nord (3), Amtiman Sud (2), Amsniéné (2), and Aboudeia (16). Of the 19 deaths reported, five were pregnant women. There was a resurgence of cases in Aboudeia in the reporting week. Active case detection and chlorination of water in Amtiman and Aboudeia continues.	18-Aug-17
Monkeypox	Congo (Republic of)	Ungraded	01-Feb-17	78	7	4	5.1%	Since 27 Jan 2017, suspected cases of monkeypox have been reported in the department of Likouala and the department of Cuvette (unconfirmed). Suspected cases have been reported from Bétou, Enyelle, Dongou, Impfondo and Owando districts.	14-May-17
Dengue	Cote d'Ivoire	Ungraded	06-May-17	858	375	2	0.2%	From 19 to 25 July, 122 new suspected cases were reported, 120 of them in Abidjan. Three subtypes of dengue virus have been isolated: DENV-2 (174 cases), DENV-3 (76 cases) and DENV-1 (13 cases). In addition, 112 samples were confirmed IgM positive by serology. Of 77 yellow fever virus cross reactions, further testing confirmed dengue virus on 31 samples tested to date.	25-Jul-17

Event	Country	Current gradet	Date WHO notified	Total cases	Confirmed cases	Deaths	CFR %	Comments	Date of last sitrep
Landslide	Democratic Republic of the Congo (the)	Ungraded	18-Aug-17	-	-	-	-	A landslide following heavy rains has caused mass casualties in a fishing village in Tora, Ituri Province. Early estimates suggest more than 50 households were affected, over 200 persons killed, important infrastructure destroyed, and animals lost. Four severely injured persons have been evacuated to Bunia General Hospital. A comprehensive assessment and is ongoing; however, due to the mountainous terrain, access to the affected zone has been limited. Red Cross has assisted the recovery of 50 bodies to date. WHO Country Offices are supporting the response.	20-Aug-17
Humanitarian crisis	Democratic Republic of the Congo (the)	Ungraded	August 2016	-	-	-	-	The fighting and insecurity continue to cause a humanitarian crisis with severe public health impact, mostly in the provinces of South- and North-Kivu, Ituri, Tanganyika, and Haut-Katanga. And since mid-August 2016, the security situation has significantly deteriorated in the Kasai Region.	18-Aug-17
Cholera	Democratic Republic of the Congo (the)	G2	02-Jan-15	21 068*	-	501*	2.4%	*Counts reported are for 2017 YTD only. During week 32 in 2017, 1 153 cases and 11 deaths (CFR 2.4%) were reported in the country. The endemic provinces reported 90% of the new cases, these include North Kivu (548), South Kivu (337), Tanganyika (78) and Upper Lomami (76).	23-Aug-17
Measles	Democratic Republic of the Congo (the)	Ungraded	10-Jan-17	24,845	365	315	1.2%	The incidence of new cases has declined since the current outbreak peaked in early 2017.	04-Jul-17
Humanitarian crisis	Ethiopia	Protracted 3	15-Nov-15	-	-	-	-	This complex emergency includes outbreaks of AWD and measles (reported separately below). A detailed update was provided in the week 32 bulletin.	23-Jul-17
Acute watery diarrhoea (AWD)	Ethiopia	Ungraded	15-Nov-15	40 457*	-	817	2.0%	*Counts reported are for 2017 YTD. Of 491 new cases reported in week 31. The recent resurgence is predominantly occurring in the northwest regions of Amhara (194 cases) and Tigray (182 cases) this past week. A detailed update was provided in the week 32 bulletin.	06-Aug-17
Measles	Ethiopia	Ungraded	14-Jan-17	2 607*	-	-	-	*Counts reported are for 2017 YTD. There have been 58 separate laboratory-confirmed measles outbreaks in the country. 143 new cases were reported in week 32. A detailed update was provided in the week 32 bulletin.	31-Jul-17
Drought/food insecurity	Kenya	G1	-	-	-	-	-	This event forms part of a larger food insecurity crisis in the Horn of Africa. SMART surveys highlighted that the rates of Global Acute Malnutrition increased across the country. An estimated 7.8 million population are in IPC3-5 during May/June 2017.	27-Jul-17
Cholera	Kenya	Gl	10-Oct-16	2 232*	457*	33*	1.5%	*Counts reported are for 2017 YTD. Detailed update given above.	21-Aug-17
Measles	Kenya	Ungraded	12-Mar-17	49	49	1	2.0%	The outbreak has been reported in Dagahaley, Dadaab and IFO refugee camps in Garissa County since 21 March 2017, and from communities in Mandera County since 8 June 2017. No new cases have been identified since 4 July and 5 July in the two counties, respectively.	31-Jul-17
Leishmaniasis, visceral (ka- la-azar)	Kenya	Ungraded	05-May-17	414	212	7	1.7%	Marsabit (n=295) and Wajir (n=119) counties have been affected by outbreaks since early 2017. No new cases were reported in the past week. The last cases reported from occurred 2 August and 17 June 2017 in the two counties, respectively.	21-Aug-17
Dengue fever	Kenya	Ungraded	09-May-17	1,537	706	1	0.1%	The outbreak has been reported in Mombasa County (1 455) and Wajir County (82). There were no new cases this week. The last cases reported on 7 July and 20 June 2017 within the two counties, respectively.	21-Aug-17
Food insecurity	Madagascar	Ungraded	23-Feb-17	-	-	-	-	Food insecurity continues in the south parts of the island. A recent food security assessment showed that from June to September 2017, an estimated 409 000 people (25% of the affected area population) will be in need of humanitarian assistance. A detailed update was provided in the week 30 bulletin.	15-Jul-17



Event	Country	Current grade†	Date WHO notified	Total cases	Confirmed cases	Deaths	CFR %	Comments	Date of last sitrep
Undiagnosed diarrhoeal disease	Mauritania	Ungraded	27-Jul-17	79	-	0	0.0%	On 16 July 2017, the Ministry of Health were informed of an outbreak of diarrhoeal disease at Cheikh Zayed Hospital, Wilaya, Nouakchott, which at the time included 40 cases of nonfebrile, non-riziform, watery diarrhoea without blood/mucus from 7 separate locations. 10 stool samples collected were negative for bacteria (apart of one positive Escherichia coli, not typed). In a second cluster altered on 25 July 2017 from Centre Hospitalier Mère-Enfant, 39 children presented with similar symptoms over a period of 25 days, of whom 17 were hospitalised for 2-3 weeks. Investigations are ongoing but a viral cause is suspected.	03-Aug-17
Humanitarian crisis	Mali	Gl	-	-	-	-	-	Limited information is available on this event. At the last update (3 May), the security situation remained unstable, and incidents of violence and inter-ethnic conflicts were increasingly spreading.	03-May-17
Crimean-Congo haemorrhagic fever (CCHF)	Namibia	Ungraded	09-Aug-17	1	1	1	50.0%	A confirmed CCHF case died in Windhoek Central Hospital on 09 August 2017. The case-patient was reportedly bitten by a tick at his homestead in Uukwandongo Village, Okahao District, Omusati Region. 75 close contacts were identified, 74 were monitored daily until contract tracing activities concluded on 24 August 2017, without cases identified. One suspected case Otjiwarongo District tested negative. Of 5 suspected tested, 3 were tested negative, and the 2 others (not tested) have recovered. Environmental and vector control activities are continuing.	10-Aug-17
Hepatitis E	Niger (the)	Ungraded	06-Apr-17	1,610	441	38	2.4%	Detailed update given above.	11-Aug-17
Humanitarian crisis	Niger (the)	G2	Beginning 2015	-	-	-	-	The security situation remains precarious and unpredictable as Boko Haram remains a serious threat around the region. On 28 June 2017, 16 000 people were displaced after a suicide attack on an IDP camp in Kablewa. In another attack on a 2 July 2017, 39 people from Ngalewa village, many of them children, were abducted. The onset of the rainy season is impeding the movements of armed forces around the region.	11-Aug-17
Humanitarian crisis	Nigeria	Protracted 3	-	-	-	-	-	Since April 2017 about 15 000 Nigerian refugees have returned from Cameroon after the Tripartite commission began implementing the agreement on the voluntary return of Nigerian refugees. Living conditions in areas of return are difficult as the influx has overwhelmed resources such water. On 28 July 2017, a suicide attack on a newly established camp in Dikwa LGA killed 14 people and wounded 24 others, mostly women and children.	11-Aug-17
Lassa fever	Nigeria	Ungraded	01-Dec-16	710	227	114	16.1%	The incidence of Lassa fever cases in Nigeria continues to increase despite ongoing efforts to control the disease. The outbreak is currently active in six states – (Ondo, Edo, Plateau, Bauchi, Lagos, and Ogun) – where at least one confirmed case has been reported in the past 21 days. During week 32 (week ending 13 August 2017), 10 new confirmed cases were reported from five states, namely Lagos (4), Edo (2), Plateau (2), Ondo (1), and Ogun (1). Ogun State has come back into the active outbreak category after an extended period of zero reporting (signifying no active transmission). A detailed update was provided in the week 33 bulletin.	11-Aug-17
Cholera	Nigeria	Ungraded	07-Jun-17	1 978*	26*	35*	1.8%	Nigeria has been experiencing an outbreak of cholera since the first week of May 2017. Per the national report as of 30 July 2017, a total of 1978 suspected cases including 26 confirmed cases and 35 deaths (case fatality rate 1.8%) were reported from three states where outbreaks had been confirmed (Kwara, Zamfara and Lagos). Most recently, an outbreak was confirmed in an IDP camp in Maiduguri, Borno State, with 20 suspected cases, including 4 deaths. Two suspected cases were culture confirmed while others are RDT positive.	25-Aug-17

Event	Country	Current grade†	Date WHO notified	Total cases	Confirmed cases	Deaths	CFR %	Comments	Date of last sitrep
Hepatitis E	Nigeria	Ungraded	18-Jun-17	759	42	4	0.5%	The outbreak is concentrated in Borno State, with incidence steadily declining after peaking in week 26. During week 30, 7 new suspected cases were reported, all from Ngala LGA. 19 new cases reported in Ngala. Cumulatively, Ngala (627), Mobbar (87) and Monguno (45). Overall the trend of cases is decreasing.	16-Aug-17
Necrotising cellulitis/fasciitis	Sao Tome & Principe	G2	10-Jan-17	1,908	-	0	0.0%	Case numbers continue to fluctuate a low-moderate levels. During week 33 (week ending 13 August 2017), 23 new cases were reported from Me-zochi (13), Agua Grande (4), Lobata (1), Cantagalo (4) and Principle (1). The overall attack rate stands at 9.8 cases per 1 000 inhabitants.	24-Aug-17
Dengue fever	Seychelles	Ungraded	20-Jul-17	3,689	1295	-	-	Ten new cases were reported in week 31. A detailed update was provided in the week 32 bulletin.	06-Aug-17
Flooding/mudslide	Sierra Leone	G1	14-Aug-17	-	-	-	-	Detailed update given above.	25-Aug-17
Diphtheria	South Africa	Ungraded	16-Aug-17	4	4	1	25.0%	A total of four cases (3 laboratory-confirmed cases and 1 asymptomatic carrier) were reported by Helderberg Hospital in the Western Cape. These cases are all the direct family of the index case. The two children are at the Helderberg completing their antibiotics and their parents have been discharged. A local vaccination campaign in the under 15 year age group will commence 15 August 2017.	16-Aug-17
Humanitarian crisis	South Sudan	G3	-	-	-	-	-	Detailed update given above.	06-Aug-17
Cholera	South Sudan	Ungraded	20-Feb-17	19 185	-	355	1.9%	A total of 30 new cholera cases with no fatalities (CFR 0.0%) were reported in week 32. The cumulative total since the start of the current outbreak on 18 June 2016 is 19 815 cases and 355 deaths (CFR 1.8%).Despite security and access challenges the first round of OCV campaign in four priority counties with active transmission of cholera has successfully concluded.	13-Aug-17
Drought/food insecurity	Uganda	G1	-	-	-	-	-	This event forms part of a larger food insecurity crisis in the Horn of Africa. The northern and eastern regions are predominantly affected.	24-Jul-17
Measles	Uganda	Ungraded	08-Aug-17	282	-	1	0.4%	As of 9 August 2017, a total 216 cases including one death (CFR - 0.4%) have been reported from Kampala and Wakiso District reported 66 cases. All the five divisions of Kampala have been affected, namely Rubaga (66 cases), Central (58), Kawempe (50), Nakawa (27), and Makindye (21). 47% of the cases are in the age group 1-5 years and 40% never had any measles vaccination while 39% had unknown vaccination status.	10-Aug-17
Humanitarian crisis - refugee	Uganda	Ungraded	-	-	-	-	-	As of 1 July 2017, 1 309 698 refugees and asylum-seekers have been registered in Uganda, largely from South Sudan, Somalia, Burundi, and the Democratic Republic of the Congo. A detailed update on this humanitarian crisis was provided in the week 30 bulletin.	24-Jul-17
Cholera	United Republic of Tanzania (the)	G2	15-Aug-15	30 786	-	484	1.6%	The flare-up of the cholera outbreak in the United Republic of Tanzania continues with a decline in number of cases. In week 33 (week ending 20 August 2017), 67 new suspected cholera cases and one death (case fatality rate 1.5%) were reported in Tanzania mainland, compared to 252 and 198 cases reported during weeks 32 and 31 respectively. Zanzibar Island has reported zero cases and deaths for the past 40 days. Three districts have been affected during the reporting week, namely: Mbarali (63 cases and one death), Iringa DC (1 case and one death) and Mbeya City (4 cases). A detailed update was provided in the week 33 bulletin.	20-Aug-17
Aflatoxicosis	United Republic of Tanzania (the)	Ungraded	28-Jun-17	8	-	4	50.0%	Between 15 June and 13 July 2017, two unrelated clusters of suspected acute aflatoxicosis, affecting two families in separate towns in Kiteto District, Manyara Region in the northern part of Tanzania. No further cases have been reported to date. 30 blood samples collected during community investigations have been submitted for aflatoxin testing, and 28 blood samples for pesticide poisoning; results pending.	06-Aug-17



Event	Country	Current grade†	Date WHO notified	Total cases	Confirmed cases	Deaths	CFR %	Comments	Date of last sitrep
Nodding disease	South Sudan	Ungraded	30/06/2017	70		-	-	Unconfirmed media reports of over 70 cases of nodding disease among children in Maridi, Jubek, Amadi and Gbude state since mid-2016. WCO staff were unable to confirm the event due to an upsurge in insecurity in the country and affected provinces.	23-Jul-17

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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