

WEEKLY BULLETIN ON OUTBREAKS AND OTHER EMERGENCIES

Week 29: 15 – 21 July 2017
Data as reported by 17:00; 21 July 2017

2

New events

40

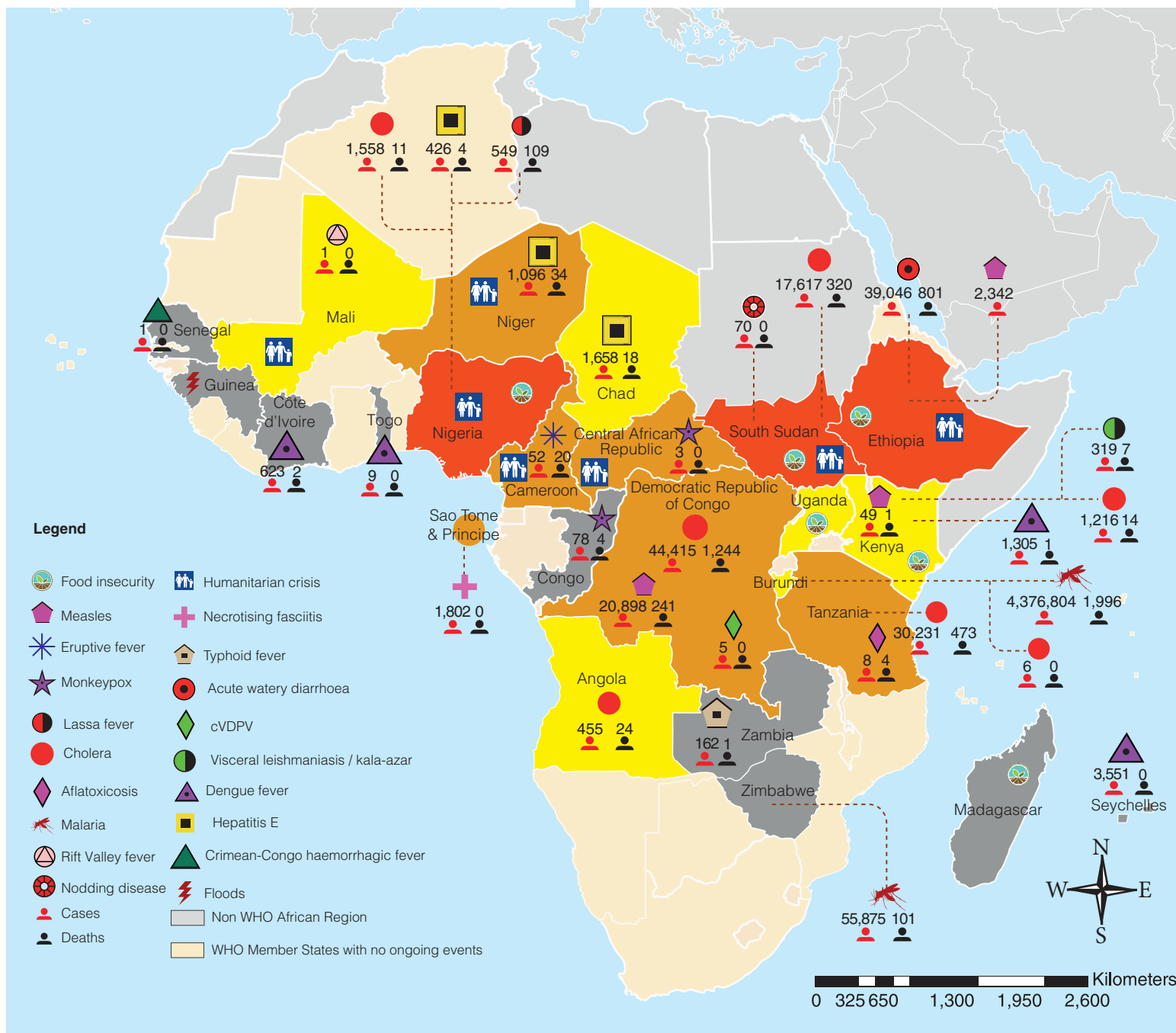
Ongoing events

31

Outbreaks

11

Humanitarian crises



2

Grade 3 events

1

Protracted 3 event

6

Grade 2 events

7

Grade 1 events

26

Ungraded events

Overview

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- This weekly bulletin focuses on selected acute public health emergencies occurring in the WHO African Region. WHO AFRO is currently monitoring 42 events. This week, two new events have been reported: outbreaks of cholera in Burundi and Crimean-Congo haemorrhagic fever in Senegal. This week's edition also covers key ongoing events in the region, including the:
 - Grade 3 humanitarian crises in South Sudan;
 - Grade 2 outbreaks of necrotizing cellulitis/fasciitis in Sao Tome and Principe, and cholera in Tanzania;
 - Grade 1 cholera outbreak in Kenya;
 - Outbreaks of hepatitis E in Nigeria and Chad; and
 - Suspected aflatoxicosis outbreak in Tanzania.
- 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 public health events currently being monitored in the region.
- Major challenges include:
 - The resurgence of cholera outbreak in the populous city of Nairobi and refugee setting in the north-eastern part of Kenya.
 - On a broader perspective, the incessant outbreaks of cholera (and other water-borne diseases such as hepatitis E) in the African region is concerning. Cholera causes the highest morbidity and mortality of all the epidemic-prone diseases in the region. Paradoxically, funding for cholera prevention and control falls short of the optimum.

New events

Cholera

Burundi

6
Cases

0
Deaths

0%
CFR

Event description

On 15 July 2017, the Burundi Ministry of Health notified WHO of a cluster of six cholera cases in and around Bujumbura, the capital city. The initial case, a 23-year-old pregnant woman, developed acute watery diarrhoea and vomiting on 7 July 2017 and sought treatment (the same day) at l'Hôpital Roi Khaled as an out-patient. On 8 July 2017, the initial case visited family before being readmitted and transferred to l'Hôpital Prince Regent Charles (HPRC) on 10 July 2017. One of the family members visited (a 4 year-old-girl) and a student intern who attended to the initial case during her first hospital visit subsequently developed acute watery diarrhoea on 9 and 10 July 2017, respectively. Between 10 and 14 July 2017, three other cases of acute watery diarrhoea were reported, without established epidemiological links to the initial cases. No new cases have been reported as of 15 July 2017.

The National Institute of Public Health isolated *Vibrio cholerae* O1 serotype Ogawa in five out of six stool samples collected from the cases on 13 and 14 July 2017. Three of the confirmed cases were from Gatumba (Isare Health District) and two came from Gahehe (Bujumbura North Zone District), while the suspected case came from Ngagara/Chanic. Further investigations are being conducted to establish the source of this outbreak.

Public health actions

- On 12 July 2017, disinfection of the homes of the sick people as well as their immediate vicinity was carried out by the health authorities in the districts of Isare and Bujumbura North.
- An inter-agency team from the Ministry of Health, WHO and UNICEF visited Prince Regent Hospital to review case management and conduct a rapid needs assessment. A report was circulated to the partners for information and actions.
- Awareness-raising activities on general hygiene measures have been carried out by the Isare District Local Administration. The sanitation situation in the community was found to be inadequate.
- Cholera kit has been pre-positioned with the support of partners.
- A joint Ministry of Health and United Nations investigation and assessment mission is scheduled for the beginning of the week.
- WHO and the Ministry of Health emergency department are closely monitoring the evolution of the situation.

Situation interpretation

An outbreak of cholera has been detected and confirmed in Bujumbura, and immediate actions have been taken. However, a detailed outbreak investigation and rapid assessment is currently pending due to limited local capacity. The source of this cholera infection needs to be quickly established to facilitate appropriate strategies and interventions for rapid containment. There is an urgent need to strengthen the cholera case management system as the current treatment centre falls short of the minimum standard. There is also a need to secure personal protective equipment, stock of medical supplies and dedicated personnel, in case of an influx of patients.

As Burundi is currently experiencing an outbreak of malaria and there is food insecurity in some areas, the occurrence of a large cholera outbreak will aggravate an already precarious situation. Urgent mobilization of the requisite resources (human capacity, funds and logistics) is therefore critical to strengthen the Burundi's preparedness for cholera outbreaks, particular in Bujumbura.

Geographical distribution of cholera cases in Burundi, 7 July - 15 July 2017



Event description

A single case of Crimean-Congo haemorrhagic fever (CCHF) was confirmed in a young shepherd (caring for 26 head of cattle) in Fatick District, Kamsaté, Senegal. The case-patient-a 10-year-old boy – developed fever, headache, arthralgia, muscle pain and vomiting on 29 June 2017. Upon presentation to a local clinic on 30 June 2017, he was febrile and lethargic with moderate epistaxis (nose bleed). Based on this syndrome and his exposure history, arbovirus infection was considered as one of the differential diagnoses. Serial blood samples (the second one collected on 13 July 2017) were tested by the Institut Pasteur Dakar, which revealed an increase in antibodies (IgM and IgG) against the CCHF virus, confirming a recent infection.

A multisectoral investigation revealed that the possible source of infection was two cows purchased from a city market less than 3 months prior to the event. The case-patient did not have any travel history to Mbour, Fouta or Mauritania in 15 days prior to illness onset. A high prevalence of ticks was observed within the implicated herd, of which samples were collected for testing – results pending.

Fifteen additional suspected cases were identified in the community, all of whom tested negative and were excluded. Twenty-one contacts of the case-patient and of the implicated animals were identified; none have shown any sign of illness at day 17 of follow-up.

This is the fourth case of CCHF reported by the Senegal Ministry of Health in 2017 to date, but the first locally-acquired infection. Three unrelated cases were previously documented in persons seeking healthcare from Nouakchott in Mauritania – see the Week 19 and Week 25 bulletins for details.

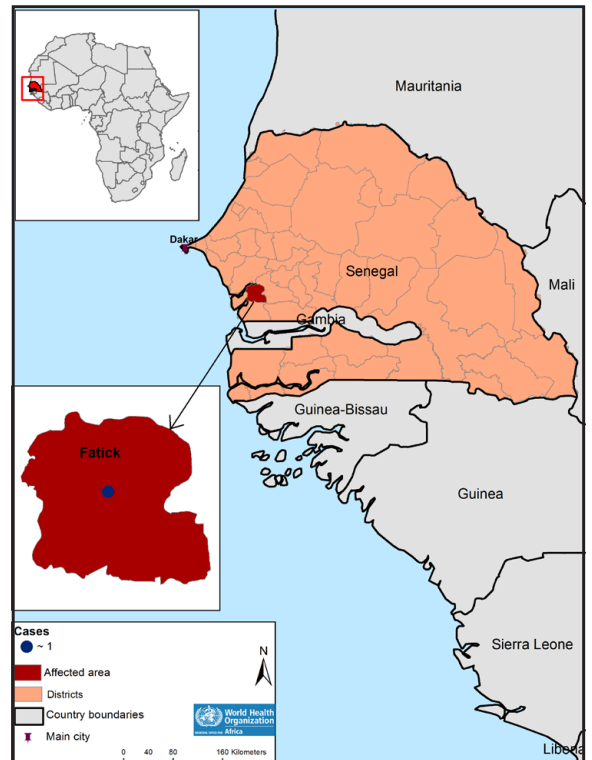
Public health actions

- The multisectoral investigation was undertaken by the Senegal Ministry of Health and Social Action, Ministry of Livestock and Production Animals, Institut Pasteur Dakar, and the Service Régional de l’Elevage de Fatick.
- A field visit was conducted to establish the epidemiological status of the disease, undertake active case search and contact tracing, identify risk factors for the spread of disease, assess the risk of a major local outbreak, and propose prevention and control measures.

Situation interpretation

Previous seroprevalence studies have highlighted that CCHF is focally endemic throughout Senegal and neighbouring countries. But this is highly variable in time and space, with the virus not known to circulate in the Fatick District, where this case occurred. Epidemics are typically correlated to the relative abundance of Hyalomma ticks; the reservoir and vector for the CCHF virus. Sporadic human infections may be expected in people with regular contact with livestock in endemic areas, but these are preventable through use of repellents, protective clothing and gloves to prevent tick bites, and avoiding contact with blood and body fluids of livestock. However, knowledge and adoption of these preventive practices is often low, especially outside known high-risk areas. While there is a low risk of a wider outbreak in this area, the documentation of local transmission of CCHF in Senegal is a reminder that the virus is present. A larger sero-epidemiological survey of humans and animals may be warranted in the risk profile in the country. Moreover, authorities should consider strengthening surveillance, undertaking vector control activities, and sensitizing the local population to adopt preventative behaviours.

Geographical distribution of Crimean-Congo haemorrhagic fever cases in Senegal, 29 June - 15 July 2017



Ongoing events

Aflatoxicosis

Tanzania

8 Cases :: 4 Deaths :: 50% CFR

Event description

Between 15 June and 13 July 2017, two unrelated clusters of suspected acute aflatoxicosis have occurred in Kiteto District, Manyara Region in the northern part of Tanzania. The first cluster, reported on 21 June 2017, involved five children aged between 3-9 years from one family in Partimbo Village, Kimotonge Ward. On 15 June 2017, the initial case – a 3-year-old child – developed general body malaise, loss of appetite, vomiting, abdominal distension and pain, dark stools (without diarrhoea), and jaundice. The child presented to the district hospital on 17 June 2017 and died the same day. On 16 June 2017, four siblings of the initial case developed similar illness and were admitted to Dodoma Regional Referral Hospital on 18 June 2017, where supportive treatment with intravenous fluids and ceftriaxone was initiated. The condition of two of the four children later deteriorated and both died on 19 June 2017. Subsequent outbreak investigation established that the affected children consumed maize that was harvested and left in the field for some time.

The second cluster of three cases from a household in Katikati Village, Makame Ward (over 100 km from the previous cluster) was reported on 13 July 2017. The cases, one aged 4 years and the other two cases aged 10 years, presented to the district hospital with symptoms of abdominal distension and pain, jaundice, vomiting, and altered mental status. The 4-year-old child died within 4 hours of admission to the hospital. The other two cases were referred to the regional referral hospital where they are currently receiving care. All three children reportedly consumed maize that was improperly stored.

As of 19 July 2017, a total of eight cases of suspected aflatoxicosis, including four deaths (case fatality rate 50%) have been reported. No new cases have been reported since 13 July 2017. Investigation of the events, spearheaded by the Tanzania Food and Drugs Authority (TFDA) in collaboration with other authorities, is being conducted.

Public health actions

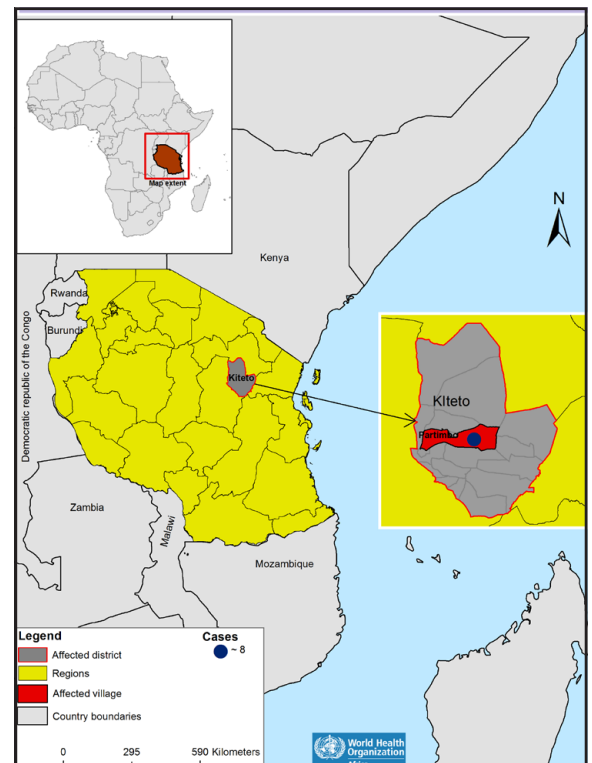
- The Ministry of Health has convened a multisectoral emergency team at the Public Health Emergency Operation Centre to coordinate the response. The team has representation from the Ministry of Agriculture, Tanzania Food and Drug Authority (TFDA) and other partners.
- A mission to the affected areas was conducted on 20 July 2017 to collect food and blood samples for further analysis, to carry out active case finding and assess food security in the district. The test results are currently pending.
- As part of the investigation, a council health management team is collecting a detailed food consumption history from the affected families and to continue searching for other cases in the community.
- Survivors continue to receive supportive care at the Dodoma Regional Hospital.

Situation interpretation

Aflatoxin is a fungal toxin that commonly grows on maize and other types of grains. People are often exposed through home-grown foods, when inadequate harvesting and storage techniques allow for the growth of aflatoxin-producing fungi. Children are particularly susceptible, and at lower doses or over a long duration, the toxin can lead to chronic disease and conditions such as stunted growth, delayed development, liver damage, and liver cancer. Acute, high-level exposure can result in aflatoxicosis, which manifests as severe acute hepatic failure with vomiting, abdominal pain and jaundice, often associated with high fatality rates.

Outbreaks of acute aflatoxicosis are a recurring public health problem throughout the world. In 2016, several families in Dodoma and Manyara regions of Tanzania were affected, resulting in 65 cases and 19 deaths (case fatality rate 29%). The current suspected aflatoxicosis poisoning is still localised in one district (Kiteto), involving two families from two villages over 100 km apart. However, there is a high probability that other villages are affected due to a low index of clinical suspicion for the disease and underreporting. The response to this outbreak has also been challenged by a lack of detailed incidence investigation reports due to limited technical capacity at regional and district levels, delayed reporting, lack of a health sector response strategy for aflatoxin poisoning, and lack of laboratory results (patient and food) to confirm the diagnosis. Further detailed investigations are required and awareness must be raised in the community

Geographical distribution of aflatoxicosis cases in Tanzania, 15 June - 19 July 2017



Event description

The cholera outbreak situation in the United Republic of Tanzania has shown marked improvement in the last week. During week 28 (week ending 16 July 2017), only one new suspected cholera case (with no deaths) has been reported. The one case originated from West B District in the Zanzibar archipelago. This is the first week that the Tanzania Mainland has reported zero cases since the cholera outbreak started in August 2015. Compared to 14 cases in Tanzania Mainland and five cases in Zanzibar reported in week 27, this reduction in the incidence cases is a positive development. After 35 consecutive weeks of zero reporting, Zanzibar experienced a resurgence of the cholera outbreak on 21 March 2017, during which 359 suspected/confirmed cholera cases with four deaths (case fatality rate 1.1%) were reported by 16 July 2017.

Between 15 August 2015 and 16 July 2017, a cumulative total of 25,542 cholera cases including 401 deaths (case fatality rate 1.6%) was reported in Tanzania Mainland. Meanwhile, 4,688 including 72 deaths (case fatality rate of 1.6%) were reported from Zanzibar. Overall, a total of 115 districts in 23 out of 25 regions in Tanzania Mainland were affected.

Public health actions

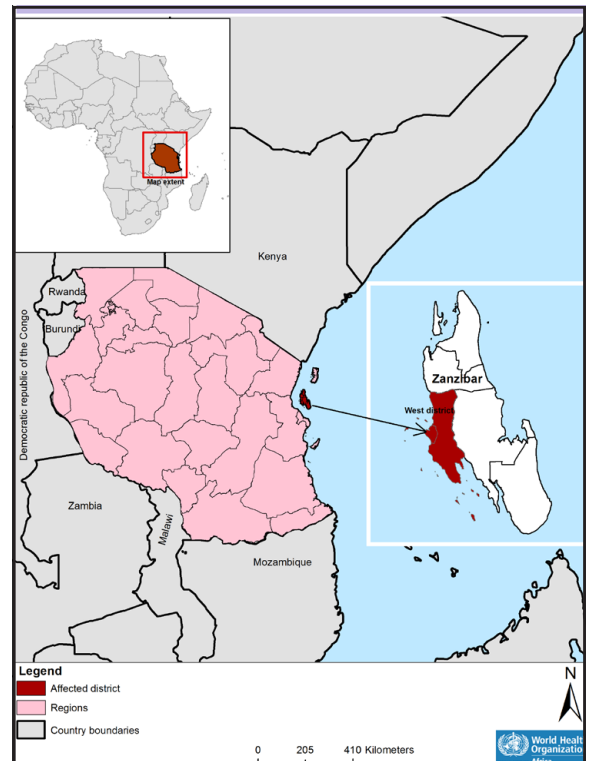
- The Ministry of Health, with the support of WHO, conducted investigations in Iringa and Korogwe Districts to identify the sources of infection, establish the appropriate response, and prompt reporting, with emphasis on laboratory confirmation of all suspected cases.
- There is continuous advocacy for household water treatment at the point of use and community owned mobilization to improve water, sanitation and hygiene.
- Promotion and distribution of chlorine tablets (Aqua tabs) for household water treatment in the affected households in Dar es Salaam and Morogoro is ongoing.
- Follow up and decontamination of affected households are being conducted.
- There is ongoing bulk chlorination of water supplied by water vendors and monitoring of free residual chlorine in Iringa, Rukwa, and Dar es Salaam.
- There is ongoing community sensitization and awareness through local radio, national television and social media.
- The public health emergency operations centre continues to monitor trends and the response activities.
- Water guard, oral rehydration salts, medicines and other consumables have been distributed to the local health facilities.
- WHO and partners are supporting the Ministry of Health to assess the coverage of activities and logistics, e.g. Aqua tabs and medical supplies in the hotspot regions.
- The Ministry of Health and WHO continue to support the regions to enhance surveillance and ensure prompt reporting of all suspected cholera cases.

Situation interpretation

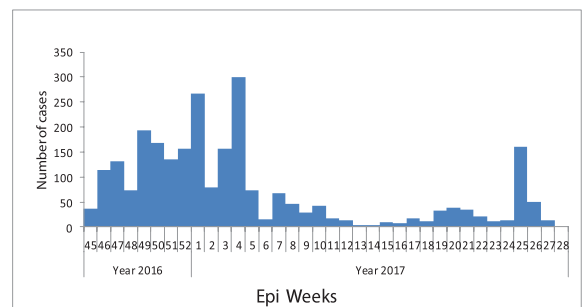
In the last week, there has been a positive trend in the cholera outbreak in the United Republic of Tanzania. With continuous concerted efforts, this encouraging trend creates an opportunity to ultimately contain this outbreak. Once again, the national authorities, partners and the donor communities are called upon to consolidate the gains made in controlling this prolonged cholera outbreak. In addition, this is also the window in which to strengthen preparedness and readiness measures for future outbreaks. Systematic after-action review needs to be conducted to draw lessons to inform future preparedness interventions. This should include improving timely access to effective medical care to bring case fatality rates below the targeted 1% in future outbreaks.

It is important to bear in mind that access to clean and safe water is still limited, latrine/toilet coverage remains low, and hygiene and food safety practices are inadequate. Ultimately, deliberate efforts need to be focused on addressing these social determinants of health. It should also be noted that funding for cholera prevention and control falls short of the optimum despite the fact that cholera causes the highest morbidity and mortality of all the epidemic-prone diseases in the region.

Geographical distribution of cholera cases in Tanzania, 15 August 2015 - 16 July 2017



Weekly trend of cholera cases in Tanzania, November 2015 - 16 July 2017



Event description

Kenya has been experiencing recurrent outbreaks of cholera since October 2016. While the general population and displaced persons (IDPs) in camps have mainly been affected, two point-source internally cholera events have occurred in Nairobi (the capital city) in recent weeks. The first common-source cholera event occurred among participants attending a conference in an upscale Nairobi hotel on 22 June 2017, affecting 146 people with no fatalities. The second, unrelated, point-source cholera event occurred on 10-12 July 2017 in a Nairobi conference centre, with 136 cases, including one death, reported. The two point-source events have been associated with foods sourced from external catering service providers.

Preceding the explosive point-source events, Nairobi and Garissa Counties have had active transmission activity in the latest resurgence of the cholera outbreak. In week 28 (week ending 16 July 2017), a total of 38 cases with no deaths were reported from Nairobi (28) and Garissa (10) Counties. Between 1 January and 17 July 2017, a total of 1,216 suspected/confirmed cholera cases including 14 deaths (case fatality rate 1.2 %) have been reported. A total of 124 samples tested positive for *Vibrio cholerae* at the reference laboratory. In 2017, the disease has so far affected 12 counties, with the outbreak already controlled in 10. In Nairobi, six sub-counties have been affected, namely: Kamukunji, Langata, Dagoretti, Embakasi, Starehe, and Ruaraka. In Garissa, the outbreak has affected Dadaab Refugee camps (Hagadera, Dagahaley and IFO2) and Fafi sub-county.

The main predisposing factors for the current wave of outbreaks include: high population density in periurban and camp settings (which is conducive for the propagation and spread of the disease), mass gatherings, low access to safe water and proper sanitation, and mass population movements within the country and with neighbouring countries. Investigations in the restaurant that provided food to the hotel and the convention centre indicated that the hygienic conditions were inadequate.

Public health actions

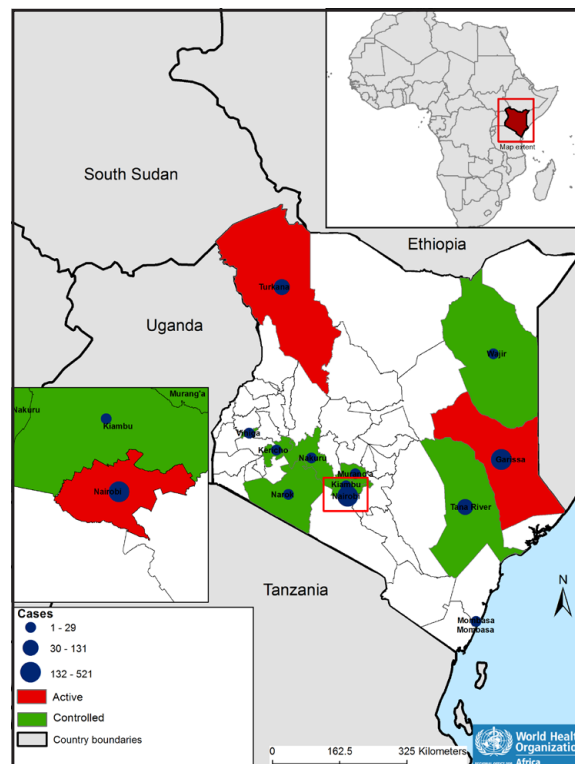
- The national authorities have activated the national task force to coordinate response to the cholera outbreak.
- Based on its Emergency Response Framework, WHO has classified the event as grade 1.
- A national cholera response plan is being finalized, with focus on containment and preparedness interventions to avert further spread of the outbreak.
- WHO is also repurposing the staff members and experts deployed in Nairobi for the response to the post-El Niño effects in the Horn of Africa to support rapid control of this outbreak.
- Active surveillance and response coordination are being strengthened in the five most at-risk counties, with the support of WHO.

Situation interpretation

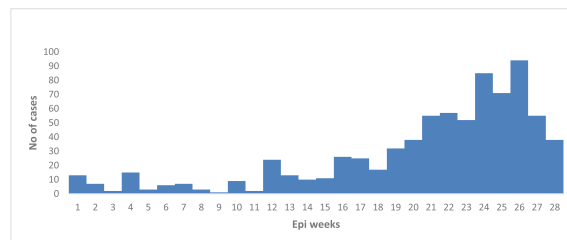
The Republic of Kenya has been experiencing cyclic outbreaks of cholera since December 2014, with a cumulative total of 18,232 cases reported (10,568 in 2015, 6,448 in 2016 and 1,216 in 2017). The current outbreak appears to be clustered around two major settings: the populous Nairobi capital city and refugee camps in Garissa. Both settings are concerning, given their high population density, which is favourable for the propagation and spread of the disease. About 60% of the population of Nairobi lives in informal settlements with inadequate water and sanitation facilities. In addition, the city has been experiencing acute water shortages for several months. Previous outbreaks in Kenya often started from these suburban counties and spread to the other counties.

The Kenya cholera outbreak is also taking place within the context of large outbreaks in the Horn of Africa, where intense mass population movement occurs, coupled with low access to safe water and proper sanitation in the camps. Accordingly, efforts should be made to improve the living conditions in Garissa camps, including improved access to safe water and sanitation. In addition, the use of oral cholera vaccines should be considered in these camps, to complement ongoing interventions. At the same time, the necessary actions should be taken to confirm the sources of infection at the mass gathering events in Nairobi. Appropriate food safety measures including inspection of eating houses (restaurants and hotels) need to be enforced. Subsequently, preparedness interventions should be enhanced in order to prevent new cholera outbreaks. Social mobilisation activities should be intensified in the whole country.

Geographical distribution of cholera cases in Kenya, 10 - 16 July 2017



Weekly trend of cholera cases in Kenya, 1 January - 16 July 2017



Event description

The Democratic Republic of Sao Tome and Principe has been experiencing an outbreak of necrotizing cellulitis/fasciitis since September 2016. However, the disease trend has been steadily declining since the beginning of 2017, with an average of 13 cases per week reported in the last 6 weeks. During week 28 (week ending 16 July 2017), 12 new cases were reported from four districts: Me-zochi (5), Agua Grande (3), Principe (3), and Caué (1). Since the beginning of the outbreak, 1,802 cases have been registered across the country. To date, no deaths have been attributed to the disease. All the seven health districts in the country have been affected. Three districts reported zero cases during the reporting week, namely Lobata, Cantagalo and Lembá. The district of Lembá has not reported any cases since week 21 (week ending 28 May 2017). The overall disease attack rate remains 9.1 cases per 1,000 populations. The most affected districts are Caué (with attack rate of 27 cases per 1,000 populations), Lembá (13.5 cases per 1,000 populations) and Lobata (10.5 cases per 1,000 populations).

Overall, men have been most affected, accounting for 57% of the total cases. The disease is more common in people aged 35 years and above, accounting for more than 50% of the total cases. As yet, there is no definitive information on the definitive pathogen responsible for the outbreak or predisposing factors. Research and investigation are ongoing.

Public health actions

- WHO and partners continue to hold regular technical meetings. WHO continues to conduct a weekly 3-level teleconference.
- Training of supervisors and technicians in epidemiological surveillance, data management and the use of electronic data transmission technologies have been conducted.
- Epidemiological surveillance and investigation of reported cases is continuing.
- Analysis of data for the descriptive and prospective case-control studies continue, including clinical and laboratory results.
- Training of technicians on the new treatment protocols has been conducted and medicines and consumables secured.
- A total of 28 patients have benefited from surgery including skin grafting for 19 patients.

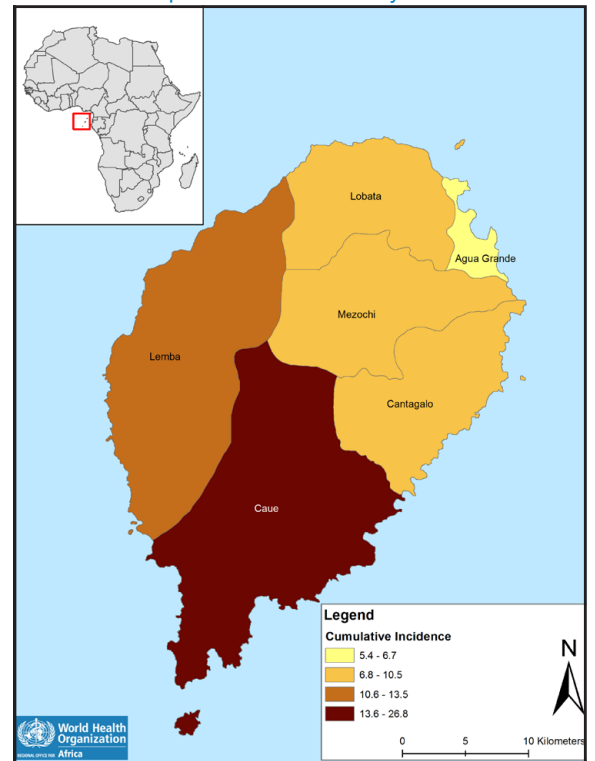
Situation interpretation

Significant progress has been made in the response to the necrotizing cellulitis/fasciitis in Sao Tome and Principe, including enhanced surveillance systems and improved clinical and surgical management of patients. Marked reduction in the number of cases is being observed, more noticeable after the start of the dry season. Despite the progress, the situation is still worrying because the determinants of the epidemic including the causative agent(s) and the mode of transmission of the disease are not clearly understood. The two case-control studies and the clinical laboratory study with the planned community component will help to confirm other risk factors and clarify the situation. Support to the country in terms of technical and financial assistance should continue under the coordination of the Ministry of Health and WHO technical support.

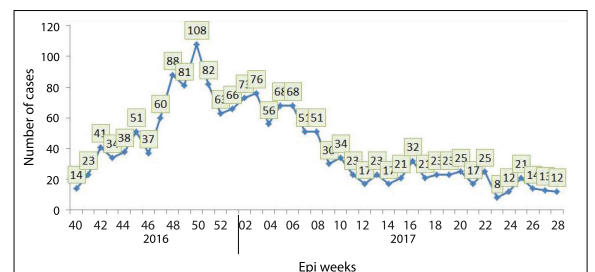
The government, with the support of WHO and partners, continues to strengthen interventions for early detection of cases using a multidisciplinary investigation approach, including laboratory testing.

WHO and partners will continue working closely with the national authorities to ensure that the causative agent, the transmission factors and predisposing conditions are ultimately determined. Meanwhile, weak laboratory capacity, inadequate social support to affected families and limited infection prevention and control interventions at health facility level need to be addressed.

Geographical distribution of necrotizing cellulitis/fasciitis cases in Sao Tome and Principe, September 2016 - 16 July 2017



Weekly trend of necrotizing cellulitis/fasciitis cases in Sao Tome and Principe, September 2016 - 16 July 2017



Event description

The outbreak of hepatitis E in Borno State, north-east Nigeria is worsening, with the number of cases doubling in the past weeks. Since the onset of the outbreak in June 2017, 426 suspected/confirmed cases have been reported, as of 15 July 2017. A total 164 samples were collected and 66 have been analysed. Of these, 42 (64%) tested positive for hepatitis E virus. Seven local government areas (LGAs) in Borno State have so far been affected. Ngala LGA is the most affected, with 355 cases reported (over 83% of the total caseload). The other LGAs are Damasak (43 cases), Monguno (23), Askira (1), Uba Bayo (1), Chibok (1), and Gubio (1). A total of 43 infected pregnant women including four deaths (case fatality rate 9.3%) have been reported in Ngala. In the past weeks, a significant increase in the number of cases has been observed in Damasak and Monguno LGAs. UNICEF and FHI-360 clinics are managing the increasing caseload. In Ngala camp, MSF-Swiss has completed an isolation unit for pregnant women and newborns with hepatitis E infection.

The hepatitis E outbreak is occurring among displaced persons and returnees. Ngala and Damasak have been the major centres where returnees and displaced persons have re-settled. An estimated 90,000 returnees have currently resettled, with many staying in un-gazetted settlements, with limited access to social services.

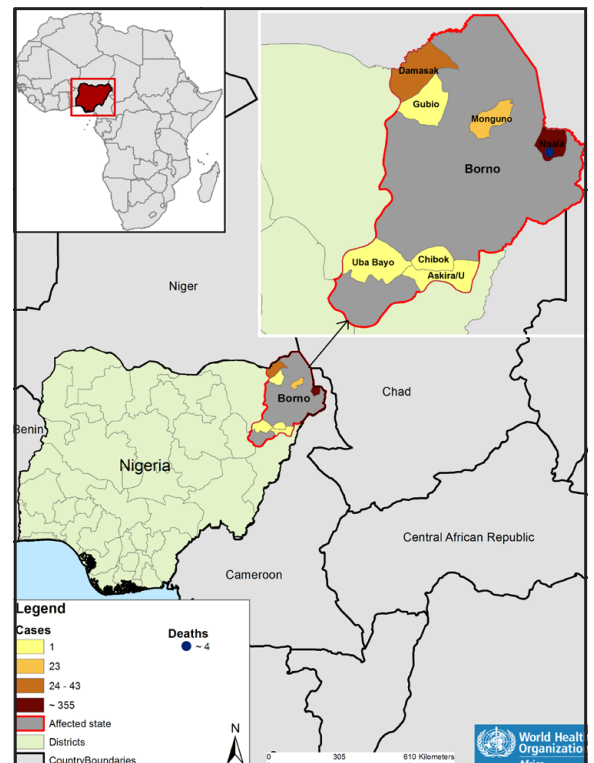
Public health actions

- The Nigeria Centre for Disease Control, WHO and other partners are providing technical, logistical and financial support to the state and federal governments, within the overall framework of humanitarian response. The response activities including case investigation; water, sanitation and hygiene (WASH) interventions; and community sensitization are ongoing. The rapid response teams, in collaboration with partners, are conducting coordination meetings in Ngala LGA.
- Following the start of the rainy season, health partners prepositioned medicines and supplies in high-risk LGAs and health facilities to prepare for likely deterioration of the health situation.
- Trucking of safe drinking water, disinfection and chlorination of water points, distribution of chlorine tablets, and disinfection of household water storage containers are ongoing in refugee camps and villages. In Monguno, a coordination meeting was held to develop a work plan for WASH and health education interventions.
- The LGAs rapid response teams, with the support of WHO, are implementing risk communication activities including community sensitization through general community information sessions. Sensitization of pregnant women is also conducted during antenatal care sessions.

Situation interpretation

The current trend of the hepatitis E outbreak in Borno State is concerning as the number of cases doubled in recent weeks. The outbreak requires diligent control measures to avoid the situation escalating, resulting in an additional burden on the already overstretched health and humanitarian services. There is also a high risk of hepatitis E spreading to other states within Nigeria and to the neighbouring countries. The northern part of Cameroon, in particular, is most at risk given the constant movement of refugees and displaced persons across the two countries. The ongoing rainy season and overcrowding in the IDP camps with limited WASH services offer favourable condition for rapid propagation of the disease. There has been continuous influx of new arrivals/returnees and refugees to border frontier cities such as Damasak, Banki and Rann, constraining social services.

Geographical distribution of hepatitis E cases in Nigeria, 18 June - 15 July 2017



Event description

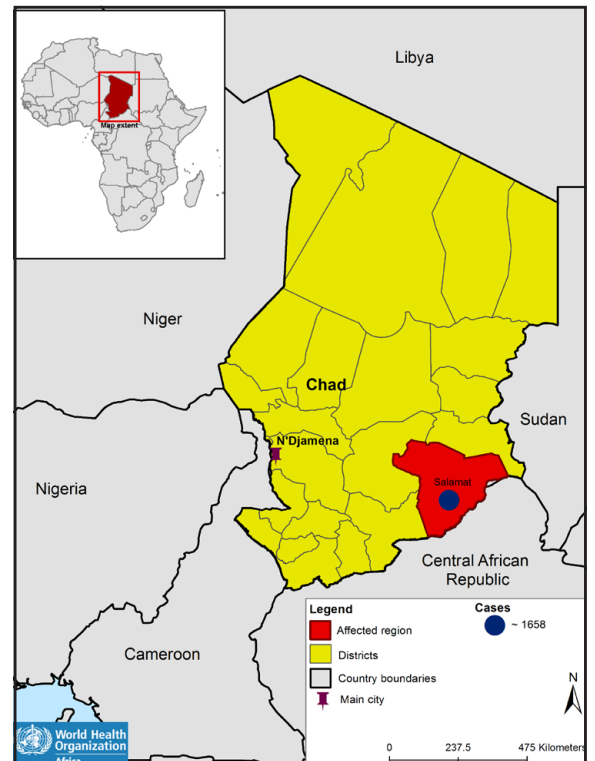
The outbreak of hepatitis E in the Salamat region of Chad remains serious, with a high risk of escalation. During week 28 (week ending 16 July 2017), 14 suspected cases and zero deaths were reported. As of 16 July 2017, 1,658 suspected/confirmed cases of hepatitis E, including 18 deaths (case fatality rate 1.1%) have been reported since the beginning of the outbreak in August 2016. Of the 18 deaths reported, five (28%) were pregnant women. Overall, 65 samples tested positive for hepatitis E virus by MSF Holland and 33 by Pasteur Institute in Yaoundé.

The outbreak of hepatitis E in the Salamat region of Chad was detected on 1 August 2016 and confirmed in January 2017. The Ministry of Health officially declared the outbreak on 14 February 2017.

Public health actions

- The Ministry of Health, in collaboration with WHO and other partners, continues to coordinate the response to the outbreak. Weekly multisectoral technical coordination meetings are held with officials from the Ministry of Health, district health authorities, and partners. Religious leaders, civil society, the Chadian Red Cross and the City Council are also invited to the coordination meetings.
- The Red Cross volunteers, under the supervision of WHO and other partners, continues conducting active case search in the communities in Aboudeia.
- Implementation of WASH interventions is ongoing. Efforts to increase access to safe water continue, with the treatment and distribution of potable water ongoing.
- Case management is being provided in the local health facilities, with the support of MSF. Symptomatic women (especially pregnant women) are receiving priority.
- Community sensitization and risk communication activities continue to be strengthened in the affected areas through general community information sessions and other channels.

Geographical distribution of hepatitis E cases in Chad, January - 16 July 2017



Situation interpretation

The hepatitis E outbreak in the Salamat region of Chad has a high potential to escalate, given that only 25% and 30% of the populations in AmTiman (63,000) and Aboudeia (82,914) respectively have access to clean and safe water. The affected communities also have poor sanitation, with open defecation widely practiced. The ongoing rainy season could also augment the potential of the disease (and other communicable diseases such as cholera) to spread to the other health districts in Chad and around the wider Lake Chad Basin, which is already destabilized by the ongoing humanitarian crisis.

The ongoing mobilization of partners to support the Government in its efforts to combat the outbreak and to focus on providing clean water to the affected populations in Amtiman and Aboudeia should continue. In addition, partners should continue to advocate to national authorities to improve sanitation services and water supply in the affected areas.

Event description

South Sudan continues to experience a complex humanitarian emergency, driven by persistent insurgency and banditry due to weak law enforcement. The insecurity manifests in many forms, including: conventional armed confrontations between warring factions, inter-communal clashes and cattle rustling, ambushes and attacks along highways, robberies, abductions and human rights abuses. Large numbers of people have been displaced either into internally displaced persons (IDP) camps or as refugees in neighbouring countries.

Ambushes, looting and attacks targeting aid workers have continued. Three incidents of looting and harassment of humanitarian workers on the roads were recorded in the previous week. Thirty-nine aid workers were relocated from Pagak and Mayendit during the week ending 9 July 2017.

Food security in South Sudan has further deteriorated due to the armed conflict, economic crisis, and below-average harvests that were exhausted well before the ongoing lean season. An estimated 6 million (50% of the population) people are expected to be severely food insecure in June-July 2017, compared with 5.5 million (45% of the population) people in May 2017. This is the greatest number of people ever to experience severe food insecurity – Integrated Food Security Phase Classification (IPC Phases 3, 4 and 5) in South Sudan.

Acute malnutrition remains a major public health emergency in several parts of the country. Recent surveys showed that the prevalence of global acute malnutrition (GAM) is above the WHO emergency threshold of 15%, with a peak of 26.1% in Duk County in Jonglei State, bordering Extremely Critical classification. The prevalence of acute malnutrition is expected to deteriorate even further during the peak lean season in July 2017, especially in Mayendit, Aweil North, and Ayod counties, which are projected to experience extremely critical levels of acute malnutrition, putting 45,000 people at risk of famine.

Provision of healthcare services have been severely compromised, with many health facilities vandalized and healthcare workers displaced. During week 27 (week ending 9 July 2017), 219 new cholera cases and zero deaths were reported across the country. Since the beginning of the outbreak on 18 June 2016, a total of 17,617 cases including 320 deaths (case fatality rate 1.8%) have been reported, as of 9 July 2017.

Public health actions

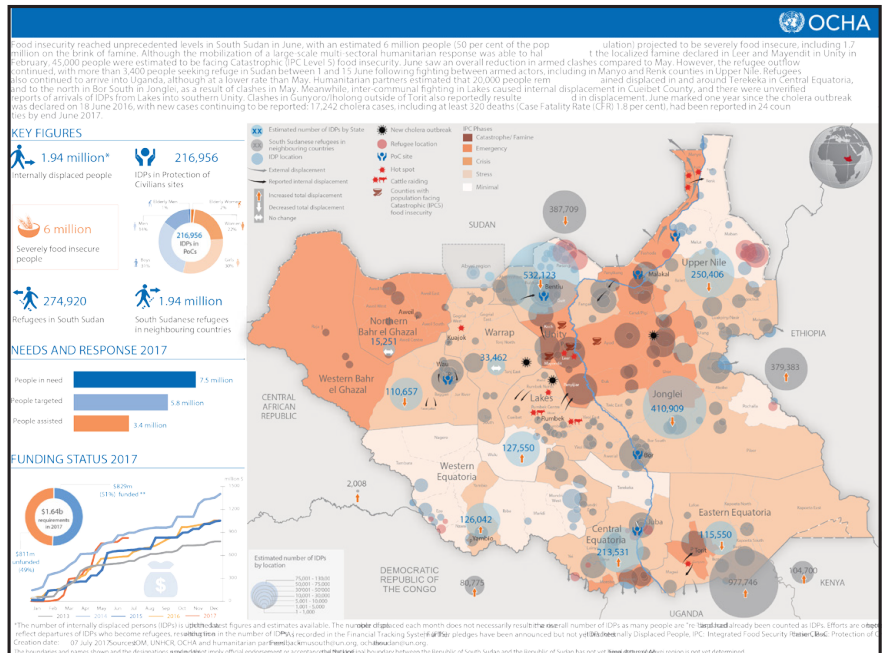
- On 12 July 2017, an interagency response team was deployed from Juba to Lainya to provide health; nutrition; water, sanitation and hygiene (WASH); non-food items (NFIs); food and agricultural assistance. Meanwhile, partners based in Lainya distributed WASH and NFIs from 7-8 July 2017, targeting 1,500 families, as well as health facilities and two schools in the area.
- From 29 June to 6 July 2017, an inter-cluster response mission to Pading in Uror County provided humanitarian services including nutrition screening and treatment, vaccination (polio, measles and tetanus), vegetable seeds, fishing tools, NFIs, WASH and borehole repair kits to 1,600 vulnerable households. A total of 3,896 children were reached with polio and measles vaccines.
- WHO and partners have secured an additional 500,000 doses of oral cholera vaccines (OCV). Preparation is ongoing to vaccinate 250,000 persons with two rounds of OCV in targeted high-risk locations including cattle camps, IDPs, periurban centres and islands.

Situation interpretation

The current humanitarian crisis in South Sudan, driven by internal strife, is expanding to newer areas as days go by. The situation has led to continued food insecurity as no tangible agricultural activities have taken place. The armed conflict has resulted in massive population displacement, disrupted people's livelihoods, trade and access to humanitarian assistance, which remains the main source of food and livelihood in the conflict areas. The situation is being compounded by the high food prices and economic meltdown, which has eroded household purchasing power.

High levels of severe acute malnutrition remain a serious public health concern across South Sudan, being driven by widespread fighting, displacement and poor access to services, disease outbreaks, extremely poor diet (in terms of both quality and quantity), low coverage of sanitation facilities, and poor hygiene practices. WHO and other aid agencies will continue providing humanitarian assistance to the populations in need.

Humanitarian snapshot in South Sudan, June 2017



Summary of major challenges and proposed actions

Challenges

- The recent upsurge of cholera in the populous cosmopolitan Nairobi city and refugee setting in the north-eastern part of Kenya remains a challenge. The resurgence is being driven by factors such as high population density in periurban and camp settings, mass gatherings, low access to safe water and proper sanitation, and mass population movements within the country and with neighbouring countries.
- On a broader perspective, the incessant outbreaks of cholera (and other water-borne diseases such as hepatitis E) remain a major public health problem in the African region. Cholera causes the highest morbidity and mortality of all the epidemic-prone diseases in the region. Paradoxically, funding for cholera prevention and control falls short of the optimum. The status of the water and sanitation situation in the region is not any better either. These factors, and many others, serve as major drivers of the prolonged outbreaks, with high morbidity and mortality; in addition to social and economic consequences.

Proposed actions

- All stakeholders in Kenya, both government and partners, are urged to scale up implementation of known evidence-based interventions to quickly control this cholera outbreak, especially the explosive common-source events in Nairobi.
- High level multisectoral engagements and advocacy to tackle the current wave of cholera outbreaks (and other waterborne diseases) in the region should be intensified. This should include provision of safe water and sanitation, as part of basic social services. In addition, funding for cholera prevention and control should be increased. Cholera ought to get the same attention as other epidemic-prone diseases on account of its cumulative public health, social and economic impact.

All events currently being monitored by WHO AFRO

Event	Country	Grade	Date of notification to WHO	No. of cases / suspected (confirmed)	No. of deaths	CFR (suspected) / %	Comments	Date of last sitrep
Newly reported events								
Cholera	Burundi	Ungraded	15-Jul-17	6(5)	0	2.1%	Detailed update given above.	15-Jul-17
Crimean-Congo haemorrhagic fever (CCHF)	Senegal	Ungraded	19-Jul-17	1 (1)	0	0.0%	Detailed update given above.	19-Jul-17
Ongoing events								
Humanitarian crisis	Nigeria	Protracted 3	-	-	-	-	A detailed update on this protracted event will be provided every second week. See also below an update on ongoing outbreaks.	20-Jul-17
Humanitarian crisis	South Sudan	G3 extension	-	-	-	-	A detailed update on this protracted event will be provided every second week. See also below an update on the ongoing cholera outbreak.	17-Jul-17
Humanitarian crisis/AWD	Ethiopia	Upgraded to G3	15-Nov-15	39,046*	801*	2.1%	This complex emergency includes outbreaks of AWD and measles (reported separately below). *Counts reported are AWD cases and deaths for 2017 YTD only. A detailed update on the protracted event will be provided every second week.	18-Jul-17
Humanitarian crisis	Cameroon	G2 extension	-	-	-	-	-	29-Jun-17
Humanitarian crisis	Central African Republic	Downgraded to G2	-	-	-	-	-	17-Jul-17
Humanitarian crisis	Niger	G2 extension	Beginning 2015	-	-	-	-	-
Cholera	Democratic Republic of Congo	G2	02-Jan-15	44,415	1,244	2.8%	-	02-Jul-17
Cholera	Tanzania	G2	04-Apr-15	30,231	473	1.6%	Detailed update given above.	16-Jul-17
Necrotising cellulitis/fasciitis	Sao Tome & Principe	G2	10-Jan-17	1,802	0	0.0%	Detailed update given above.	20-Jul-17
Drought/food insecurity	Kenya	G1	-	-	-	-	SMART surveys highlighted the rates of Global Acute Malnutrition rates increased across the country. An estimated 7.8 million population are in IPC3-5 during May/June 2017.	17-Jul-17
Drought/food insecurity	Uganda	G1	-	-	-	-	In 2017, 307,266 individuals are recorded as of 16 July. Daily arrivals are in the range of 500 – 1000 individuals. The places of origin for the refugees include South Sudan (74.7%), DRC (17.1%), Burundi (2.9%), Somalia (2.7%) and others (2.7%). The refugees are settled in 12 districts of Arua, Yumbe, Moyo, Koboko, Lamwo, Kiryandongo, Hoima, Kyegegwa, Kamwenge and Isingiro. There are others living in urban centres in Kampala and other districts. Crude mortality rates stand at 0.3, while under 5 mortality is 1.5 per 100,000 population. WASH indicators are above 15 L/person per day with wide disparities within households and individuals. Latrine access is at 36 persons/stand.	16-Jul-17
Humanitarian crisis	Mali	G1	-	-	-	-	-	-
Hepatitis E	Chad	G1	01-Sep-16	1,658 (98)	18	1.1%	Detailed update given above.	16-Jul-17
Cholera	Kenya	G1	10-Oct-16	1,216 (378)*	14*	1.2%	*Counts reported are for 2017 YTD only. Detailed update given above.	17-Jul-17
Cholera	Angola	G1	04-Jan-17	455	24	5.3%	Since early December 2016, cases have been detected in Cabinda (225), Soyo (225) and Luanda (5).	28-Jun-17
Malaria	Burundi	G1	01-Jan-17	4,376,804*	1,996*	0.05%	*Counts include cases notified during 2017 YTD only. Weekly case counts are exceeding 2016 rates and on the rise. During week 25, 173,355 cases, including 102 deaths were reported (22% above same period last year). A grading call on 6 July 2017 recommended the event be scaled up to Grade 1 to enhance response capacity in-country.	30-Jun-17
Dengue	Seychelles	Ungraded	20-Jul-17	3,551 (1,263)	-	-	Ongoing dengue epidemic since end of 2015 to date. For the past two weeks (10 July-16 July 2017), 106 suspected cases were reported. Generally there has been a downward trend in the number of suspected cases since week 24.	20-Jul-17
Lassa fever	Nigeria	Ungraded	01-Dec-16	549 (196)	109	19.9%	Since the onset of this current outbreak in December 2016, 17 out of 36 states in Nigeria have reported at least one confirmed case. Five states have reported confirmed Lassa fever cases in the last 21 days: Anambra, Rivers, Ondo, Edo and Plateau.	07-Jul-17
Measles	Ethiopia	Ungraded	14-Jan-17	2,342 (997)	-	-	96 new cases reported in week 27 of 2017, of which 56 were laboratory confirmed. Oromia region remains the most affected region with 31% of the reported cases and this is followed by Amhara (27%), Addis Ababa (19%) and SNNPR (11%).	09-Jul-17
Cholera	South Sudan	Ungraded	20-Feb-17	17,617 (1,912)*	320*	1.8%	*Counts reported in total suspected cholera cases reported on IDRS from weeks 1-27 (ending 9 July) of 2017 only. Cases continue to decline this past week.	17-Jul-17
Measles	Democratic Republic of Congo	Ungraded	10-Jan-17	20,898 (312)	241	1.2%	The incidence of new cases has declined since the current outbreak peaked in early 2017.	11-Jun-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
Eruptive fever	Cameroon	Ungraded	16-Feb-17	52 (7)	20	38.5%	The event was reclassified as eruptive fever following negative results for leishmaniasis.	23-May-17
Food insecurity	Madagascar	Ungraded	23-Feb-17	-	-	-	March-April marked the peak of the hunger gap (lean season) in the south of the country. As of May 2017, some 850,000 people were in need of humanitarian assistance, and 5,000 children were affected by SAM. Food assistance has been received by 685,160 people. A national IPC exercise will be conducted in June 2017.	31-May-17
Malaria	Zimbabwe	Ungraded	07-Mar-17	55,875	101	18.1%	Manicaland (n=31,111, 55%), Mashonaland East (n=8,822, 15.6%), Masvingo (n=8,062) and Mashonaland Central (n=5,739, 10.1%) provinces account for the vast majority of cases.	01-Mar-17

Event	Country	Grade	Date of notification to WHO	No. of cases / suspected (confirmed)	No. of deaths	CFR (suspected) / %	Comments	Date of last sitrep
Measles	Kenya	Ungraded	12-Mar-17	49 (12)	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 in Garissa since the last case was reported on 4 June 2017, where the outbreak remains controlled. The last probable case in Mandera County was reported on 5 July 2017.	17-Jul-17
Hepatitis E	Niger	Ungraded	06-Apr-17	1,096 (439)	34	3.1%	The outbreak appears to have peaked in week 19, with a staggered decline in the incidence of new cases since then. However, during week 25, 66 new suspected cases were reported. This reflects an increase in the number of cases, most especially in Diffa Region.	30-Jun-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
Typhoid fever	Zambia	Ungraded	22-Apr-17	162	1	0.6%	A suspected outbreak was declared in Mpika District, Muchinga province on 4 May 2017. Since then, 162 suspected cases were reported, the last detected on 17 July 2017. Salmonella sp. was isolated from 2 cases, but was not confirmed as S. Typhi/Paratyphi. There was not sufficient information to conclude typhoid was the cause; however, symptoms were attributed to consumption of contaminated water.	18-Jul-17
Visceral leishmaniasis / kala-azar	Kenya	Ungraded	05-May-17	319 (201)	7	2.2%	Two counties, Marsabit (n=200) and Wajir (n=119) have been affected by outbreaks since early 2017. Outbreaks remain active in both areas, with the last cases reported on 9 July and 17 June 2017 within the two counties, respectively.	17-Jul-17
Dengue	Cote d'Ivoire	Ungraded	06-May-17	623 (282)	2	0.3%	Three of the four dengue virus (DENV) subtypes have been identified: DENV-2 (127 cases), DENV-3 (55 cases) and DENV-1 (10 cases) and 90 samples are IgM positive only (incl. 68 cross reactions with yellow fever). During the week of 4-11 July 2017, 142 new suspected cases were reported; the majority of which were from Abidjan.	11-Jul-17
Dengue	Kenya	Ungraded	09-May-17	1,305 (706)	1	0.1%	The outbreak has been reported in Mombasa County (n=1,223) and Wajir County (n=82). The last cases reported on 7 July and 20 June 2017 within the two counties, respectively.	17-Jul-17
Circulating vaccine-derived polio virus (cVDPV)	Democratic Republic of Congo	Ungraded	02-Jun-17	5(5)	0	0.0%	This includes 3 separate events: 2 unrelated clusters of cVDPV2 (2 cases each) and a single case of cVFPV1. No new cases have been reported since the original cluster.	31-May-17
Cholera	Nigeria	Ungraded	07-Jun-17	1,558 (13)	11	0.7%	Since the onset of the outbreak on 1 May 2017, suspected cases have been reported from 5 LGAs in the Kwara State: Asa (18), Moro (50), Ilorin South (215), Ilorin East (450) and Ilorin West (780).	30-Jun-17
Hepatitis E	Nigeria	Ungraded	18-Jun-17	426 (42)	4	0.9%	Detailed update given above.	15-Jul-17
Dengue	Togo	Ungraded	18-Jun-17	9 (3)	0	0.0%	Out of a total of 9 suspected cases received since January 2017, 3 cases are confirmed (IgM positive), 2 cases are probable (RDT positive) and 4 cases were negative. No deaths were recorded. Cases ranged in age from 15-60 years, including 1 male and 8 females. Cases come from several districts of the Gulf prefecture: Sagbado, Tokoin hospital, Agoe Atchanvé, Sogbossito, Agoenyivé, with no cluster of cases.	06-Jul-17
Aflatoxicosis	Tanzania	Ungraded	28-Jun-17	8	4	50.0%	Detailed update given above.	19-Jul-17
Nodding disease	South Sudan	Ungraded	30-Jun-17	70	-	-	Authorities continue to investigate reports of nodding disease in among children in Maridi State, which first appeared in mid-2016. WHO will continue to track this event and provide updates as new information becomes available.	30-Jun-17
Rift Valley fever	Mali	Ungraded	07-Jul-17	1 (1)	-	-	Single confirmed case (IgM positive by ELISA, PCR negative) in a 10-year-old child, son of a farmer from Oulésébougou, illness onset 4 June 2017, results reported 6 July 2017. A Rapid Response Team deployed on 8 July; results pending for 19 blood samples collected from febrile community and family members, and more than 108 blood samples from animals.	17-Jul-17
Floods	Guinea	Ungraded	15-Jul-17	-	-	-	During the night of 3-4 July 2017, heavy rain caused the overflow of the waters of the river Tilè, and flooding in 14 of 22 neighbourhoods in N'zérékoré, Guinea. Nine neighbourhoods have suffered material and human damages. In 240 households surveyed, 2,377 people were affected by the flooding, including 1,217 women and 1,327 children and adolescents aged <18 years. Thirteen people were wounded, and one person with a medical history of tuberculosis died. Of 199 houses affected by the floods, 131 collapsed, 56 were fissured and are at risk of collapse, and 12 were dilapidated. A poultry farm was destroyed and 26 water points were damaged.	15-Jul-17

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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