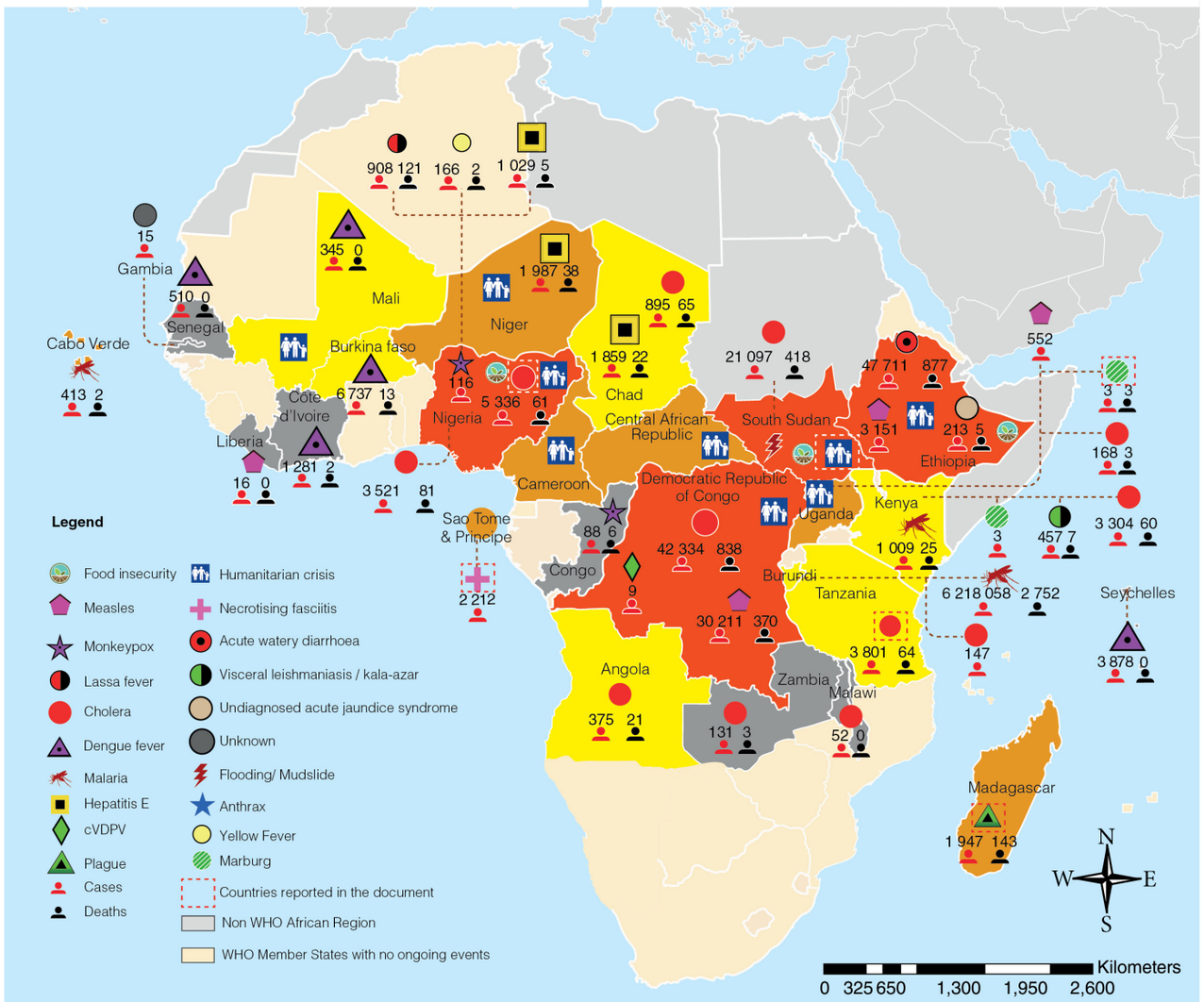
WEEKLY BULLETIN ON OUTBREAKS AND OTHER EMERGENCIES

Week 45: 04 - 10 November 2017
Data as reported by 17:00; 10 November 2017

World Health Organization
REGIONAL OFFICE FOR Africa
WHO Health Emergencies Programme

1	45	35	11
New event	Ongoing events	Outbreaks	Humanitarian crises



2	7	9	25
Grade 3 events	Grade 2 events	Grade 1 events	Ungraded events
2	0	1	
Protracted 3 events	Protracted 2 events	Protracted 1 event	

Health Emergency Information and Risk Assessment

Overview

Contents

- This Weekly Bulletin focuses on selected acute public health emergencies occurring in the WHO African Region. The WHO Health Emergencies Programme is currently monitoring 46 events in the region. This week's edition covers key ongoing events, including:

  - Plague in Madagascar
  - Marburg virus disease in Uganda
  - Cholera in Tanzania
  - Cholera in north-east Nigeria
  - Necrotizing cellulitis/fasciitis in São Tomé and Príncipe
  - 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:**

  - While progress has been made to control the outbreak of plague in Madagascar, the possibility of future flare-ups cannot be ruled out. Sustaining ongoing response operations remains critical, calling for additional funding support.

  - The continuous propagation of cholera in Tanzania mainland, going on for over two years, remains a concern. This cholera outbreak needs to be brought to a halt.

Ongoing events

Plague | **Madagascar** | 2 034 **Cases** | 165 **Deaths** | 8% **CFR**

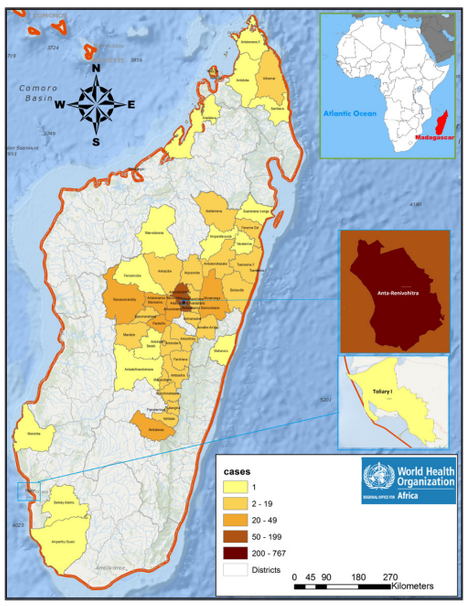
EVENT DESCRIPTION

WHO continues to support the Ministry of Public Health and other national authorities in Madagascar to monitor and respond to the outbreak of plague. Since mid-October 2017, there has been a decline in the overall incidence of the disease and the number of patients hospitalized due to plague infection across the country. From 7 - 8 November 2017, no new suspected cases of pulmonary plague and no new deaths have been reported in Madagascar.

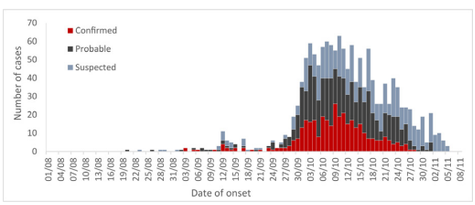
From 1 August to 8 November 2017, a total of 2 034 confirmed, probable and suspected cases of plague, including 165 deaths (case fatality rate 8%), have been reported from 55 of the 114 districts in the country. Of these, 1 565 (77%) were clinically classified as pulmonary plague, 297 (15%) were bubonic plague, one was septicaemic, and 171 were not yet classified (further classification of cases is in process). Since the beginning of the outbreak, 82 healthcare workers (with no deaths) have been affected. Of the 1 565 clinical cases of pneumonic plague, 371 (24%) have been confirmed, 581 (37%) are probable and 613 (39%) remain suspected (additional laboratory results are in process). Twenty-three strains of *Yersinia pestis* have been isolated and are sensitive to antibiotics recommended by the National Program for the Control of Plague.

Overall, 14 of the 22 (64%) regions in Madagascar have been affected. Analamanga Region has been the most affected, with 71% of all recorded cases. About 95% (6 729) of 7 122 contacts identified thus far have completed their 7-day follow up and a course of prophylactic antibiotics. Only nine contacts became suspected cases. On 8 November 2017, 316 out of 343 (92%) contacts under follow-up were reached and provided with prophylactic antibiotics.

Geographical distribution of plague cases in Madagascar, 1 August - 8 November 2017



Distribution of pulmonary plague cases reported in Madagascar, 1 August - 08 November 2017.



PUBLIC HEALTH ACTIONS

- A stakeholder's meeting is scheduled for 10 November 2017 to develop a short to medium-term strategic plan in response to the plague outbreak.
- Active surveillance, including active case finding, is being strengthened in the 3rd and 5th districts of the city of Tana, from where the majority of cases originated in the last 2 weeks.
- There is an ongoing exercise to classify unspecified cases in the database, aimed to provide a clear epidemiological picture of the outbreak.
- A new sample transportation system has been established to facilitate timely delivery of samples to IPM and provide rapid feedback of results to the health facilities.
- The case management committee validated a new patient's screening guideline, which was disseminated to all triage and plague treatment centres.
- All schools were disinfected and a watch committee set up in each school prior to reopening of public primary and secondary schools on 6 November 2017.
- A total of 8 000 community leaders have been trained to conduct community-based surveillance, counter rumours and fears and respond to information needs related to the plague in the communities.
- In preparation for the national polio vaccination campaign set to begin on 22 November 2017, preventive messages for plague have been integrated with the polio vaccination messages.
- Public health information and preventive messages are being developed, targeting anticipated resumption of major sporting events in the country.

SITUATION INTERPRETATION

While progress has been made to control the outbreak of plague in Madagascar, the possibility of future flare-ups cannot be ruled out. All stakeholders are urged to sustain the ongoing response operations until the end of the usual plague season in April 2018. WHO is appreciative of all partners and donors for their vital support to the plague response in Madagascar and for the contributions to the Contingency Fund for Emergencies, which facilitated efficient and timely joint response to the outbreak.

Notwithstanding the financial support and contributions from partners, WHO urgently requires an additional US$ 4 million to sustain response operations in the next 3 months of the plague outbreak in Madagascar. The funding is needed to interrupt ongoing transmission, provide care for those affected by the disease, reduce the risk of international spread, and provide effective coordination and operations support.

Marburg virus disease | Uganda

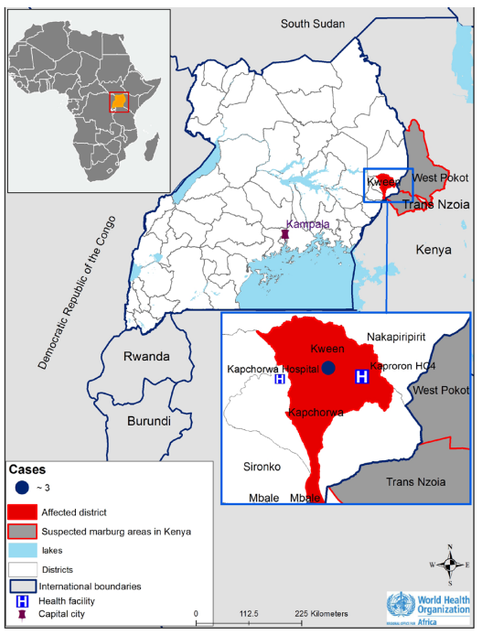
3 **Cases** | 3 **Deaths** | 100% **CFR**

EVENT DESCRIPTION

The outbreak of Marburg virus disease (MVD) in Uganda remains stable, with no new cases reported. As of 8 November 2017, the number of reported cases has remained three (two confirmed and one probable), all of whom have died, resulting in an overall case-fatality rate of 100%. All three cases were epidemiologically linked and come from one family. All previously reported suspected cases have tested negative for Marburg virus disease. By 8 November 2017, 101 contacts were under follow-up in Kween District while no contacts were being followed in Kapchorwa District. A total of 212 contacts (85 in Kapchorwa and 127 in Kween) have either completed the 21-day follow-up or have been dropped from the contact list when their supposed-exposure cases were declared as non-cases.

In Kenya, all high-risk contacts who were potentially exposed to the second confirmed case from Uganda who had travelled to Trans Nzoia and West Pokot Counties prior to his death were asymptomatic by 5 November 2017. As of 5 November 2017, 21 contacts were being followed up in Trans Nzoia and West Pokot.

Geographical distribution of Marburg virus disease cases in Uganda, 3 October - 8 November 2017



PUBLIC HEALTH ACTIONS

- The Ugandan Ministry of Health continues to respond to the outbreak, with support from WHO and partners.
- Follow up of contacts and active case finding is continuing in Uganda and Kenya.
- On 7 November 2017, a cross border meeting was held to coordinate surveillance and response activities in both countries. The meeting was attended by district political and civic leaders, health managers and surveillance officers from nine districts in Uganda bordering Kenya, political and health leadership as well as surveillance officers from Trans Nzoia and West Pokot Counties in Kenya, and partners including WHO, UNICEF, CDC, MSF and Uganda Red Cross.
- WHO Headquarters, in collaboration with US CDC and European Mobile Consortium, is coordinating the deployment of a mobile laboratory to Kapchorwa, Uganda to follow up with a clinical trial on compassionate use of antivirals (Favipiravir and Gilead GS5734) for treatment and post-exposure prophylaxis, on the agreement by the Uganda Ministry of Health.
- A training needs assessment conducted in Kenya identified the need to reorient healthcare workers on viral haemorrhagic fever case management, infection prevention and control and surveillance to enhance the preparedness for the future outbreaks.

SITUATION INTERPRETATION

The outbreak of Marburg in Uganda has remained stable as no more new cases have been reported. Outbreak control interventions, including contact tracing and follow-up activities, are on-going in both countries. In the current situation, the 21-day contact follow-up period will end on 17 November 2017. This will be followed by another 21 days of enhanced surveillance for possible undetected chains of transmission or re-introduction of infection from bats. It is therefore critical that all key stakeholders, from the community to the response teams, should maintain vigilance and sustain ongoing intervention. The recent industrial action by doctors in Uganda needs to be monitored closely in order to avoid reversing the ongoing efforts in the response measures.

Cholera | **Tanzania** | 3 348 **Cases** | 52 **Death** | 1.5% **CFR**

EVENT DESCRIPTION

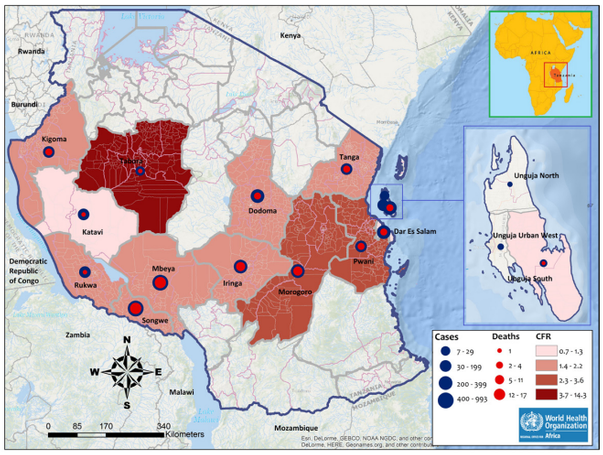
The cholera outbreak in Tanzania continues, with a marginal indication of ending soon. In week 44 (week ending 5 November 2017), 82 new suspected cases and two deaths (case fatality rate 2.4%) were reported in Tanzania mainland, compared to 150 cases and seven deaths (case fatality rate 4.7%) in week 43. Mbeya (35 cases with two deaths) and Songwe (40 cases) Regions have remained the major hotspots for cholera transmission, accounting for 92% of the caseload in the reporting week. The other affected regions were Dodoma (six cases) and Morogoro (one case). Zanzibar Island has continued to report zero cholera cases and deaths for the past 16 weeks, with the last case reported on 11 July 2017.

Between weeks 1 and 44 of 2017, the cumulative number of cases and deaths reported in Tanzania mainland is 3 801, with 64 deaths (case fatality rate 1.7%). In 2017, Zanzibar Island reported 358 cases and four deaths (case fatality rate 1.1%).

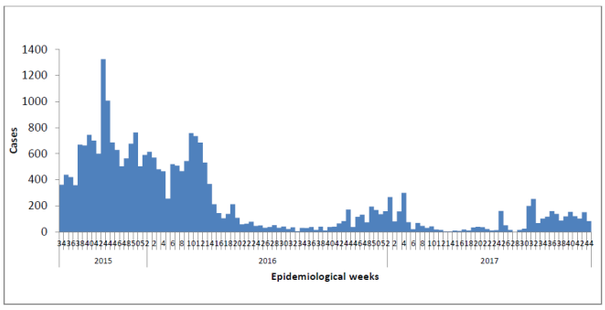
PUBLIC HEALTH ACTIONS

- Health authorities in Songwe and Mbeya DC held a joint meeting during the reporting week, aimed to strengthen cholera response between the two health areas.
- Health authorities in Kilosa District activated cholera sub-committees and deployed a response team to Gongoni village to sensitize village leaders and the community on cholera prevention and control.
- WHO, with partners (UNICEF, CDC), continues to support the Ministry of Health (MOH) in the implementation of cholera control activities.
- Advocacy for household water treatment at the point of use and community sensitization and awareness through local radio, television and social media continues, along with distribution of chlorine tablets (Aqua tabs) to affected communities.
- There is continued follow-up of the regions to ensure prompt reporting of all suspected cholera cases and laboratory results.

Geographical distribution of cholera case in Tanzania, W1 - W44, 2017



Weekly trend of cholera cases in Tanzania mainland, 15 August 2015 – 5 November 2017



SITUATION INTERPRETATION

Active cholera transmission has persisted in Tanzania mainland, with Mbeya and Songwe Regions being the most active. The continuous propagation of cholera in Tanzania mainland remains a concern and could result in another upsurge affecting the whole country. Having mapped the cholera hotspots and identified the potential risk factors for continued transmission, the national and district authorities, in collaboration with partners, ought to design appropriate and targeted outbreak control strategies and interventions. This protracted outbreak of cholera requires re-commitment of the national authorities and in-country partners.

Cholera | **Nigeria (Borno State)** | 5 336 **Cases** | 61 **Deaths** | 1.1% **CFR**

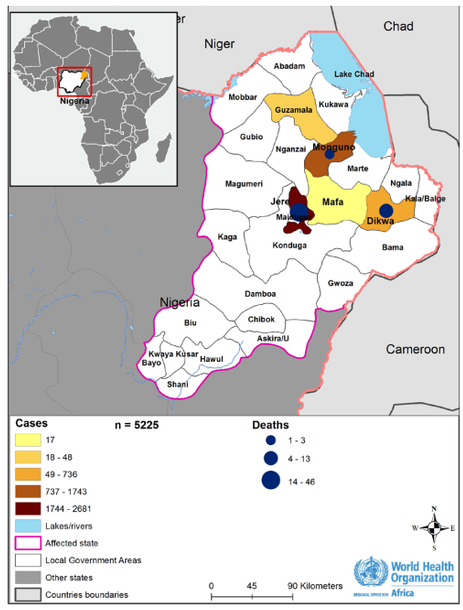
EVENT DESCRIPTION

The incidence of cholera cases in Borno State, north-east Nigeria, has fallen considerably. During week 45 (week ending 12 November 2017), a total of 25 new suspected cases with no deaths were reported, compared to 48 cases in week 44. The new cases were reported in Jere, Monguno and Guzamala Local Government Areas (LGAs); with Jere accounting for 72% of all cases seen. For the fourth week, no new cases were reported from Dikwa, Mafa, and MMC LGAs. The number of cases in Jere – a known cholera hotspot – has declined by 38%, compared with week 44. No suspected cholera cases were reported in Borno State on 12 November 2017.

Cumulatively, there are a total of 5 336 cases (confirmed and suspected), with 61 deaths (case fatality rate 1.1%). Six out of 25 accessible LGAs in Borno State have been affected. The majority of cases originated from Muna corridor in Jere LGA (2 682 cases and 43 deaths), with the rest in Monguno (1 758 cases and 3 deaths), Dikwa (736 cases and 13 deaths), Guzamala (82 cases), MMC (58 cases and 2 deaths), and Mafa (20 cases). Out of the 431 samples that were tested using rapid diagnostic tests (RDTs), 354 (82%) were positive, while 175 (46%) samples were culture positive.

The cholera outbreak in Borno State was declared on 16 August 2017 and has been ongoing for over 3 months.

Geographical distribution of cholera cases in Borno State, Nigeria, 16 August - 29 October 2017



PUBLIC HEALTH ACTIONS

- The State rapid response teams, including WHO Hard-to-Reach mobile health teams, intensified active case search in identified cholera hotspots and high-risk areas of Jere LGA.
- Current response measures are directed towards strengthening water, sanitation and hygiene (WASH) capacity and risk communication activities in identified locations.
- There are three fully functional cholera treatment centres and four oral rehydration points across the state.
- An oral cholera vaccine (OVC) campaign will be used in affected LGAs, with the second round of the OVC campaign conducted in December, targeting the same areas covered in the first round, aiming to reach 896 919 people.

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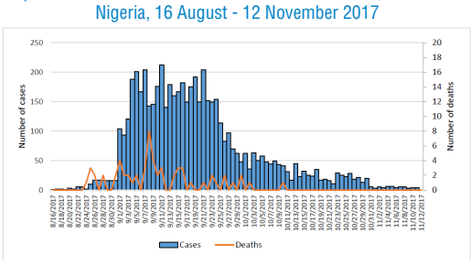
Epidemic curve for cholera outbreak in Borno State, north-east Nigeria, 16 August - 12 November 2017



SITUATION INTERPRETATION

While the incidence of cholera in Borno State has markedly declined in the past weeks, pockets of ongoing transmission still exist. Despite the ongoing efforts, there are still gaps in the availability of adequate safe water and latrines in some internally displaced person's camps affected by the outbreak. Accordingly, the WASH partners need to continue targeted actions in hotspots. There are also widespread negative rumours around the planned vaccinations, which need to be addressed by well-planned risk communication activities involving all stakeholders. Current efforts in active case management, risk communication and environmental health should continue in order to arrest further transmission in hot spot areas.

Necrotizing cellulitis/fasciitis | **São Tomé and Príncipe** | 2 241 **Cases** | 0 **Deaths** | 0% **CFR**

EVENT DESCRIPTION

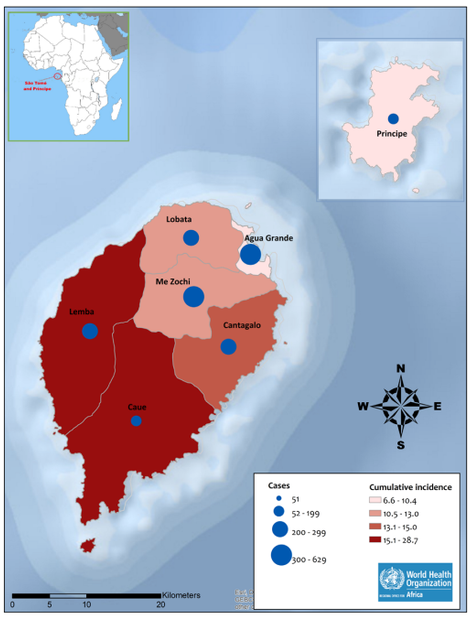
The outbreak of necrotizing cellulitis/fasciitis in São Tomé and Príncipe continues, with a slight increase in incidence observed in the past weeks. The increase in the number of new cases was noticeable in week 35 when 39 cases were reported, down from 18 cases in week 34. During week 44 (week ending 5 November 2017), 29 new cases were reported, compared to 36 cases in week 43. By 5 November 2017, twenty-three cases were hospitalized.

Since the beginning of the outbreak in September 2016, a total of 2 241 cases with no associated deaths have been reported, as of 5 November 2017. Over 50% of the cases are aged 35 years and above, while men account for 57%. While all districts in the country have been affected, with an overall attack rate of 11.6 per 1 000 inhabitants, the most affected districts are Caue (attack rate of 28.7 per 1 000 inhabitants), Lemba (15.5 per 1,000) and Cantagalo (14.4). The least affected districts are Príncipe Island and Agua Grande, with attack rates of 6.6 and 7.8 per 1 000 inhabitants, respectively.

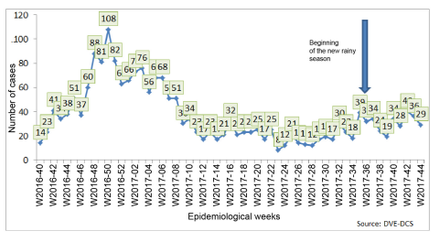
PUBLIC HEALTH ACTIONS

- The Ministry of Health continues to coordinate the response, with the support of WHO and partners.
- Surveillance is being strengthened through support to the Data Processing Department, along with strengthening of ongoing monitoring processes.
- There is further preparation of the protocol for the implementation of the case-control study on the island of Príncipe to complement the analytical study already carried out to investigate risk factors.
- More than 30 cases have been identified as requiring skin grafting, although the dermatome expected by the Ministry of Health has not yet arrived.
- Over 90 specimens have been collected and analyzed, with the support of partner laboratories.
- An order for medicines has been placed.
- Training of supervisors and clinicians on epidemiological data management, including the use of electronic data transmission technologies, has been conducted.
- A budget for human resources and finance, based on activities for the next 2 months, has been shared with WHO AFRO and US$ 30 000 have been made available for priority activities. This facilitated the recruitment of two national consultants to support monitoring of activities, investigation and management of cases.

Geographical distribution of necrotizing cellulitis/fasciitis cases in São Tomé and Príncipe, September 2016 - 5 November 2017



Weekly trend of necrotizing cellulitis/fasciitis cases in São Tomé and Príncipe, week 38, 2016 – 44, 2017



SITUATION INTERPRETATION

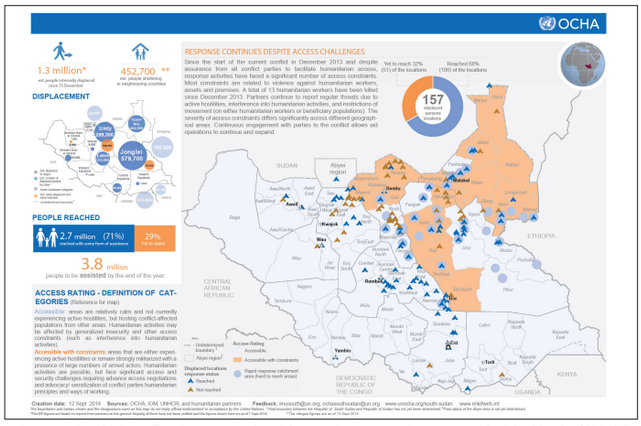
The Ministry of Health, with the support of WHO and other partners, has made significant progress in controlling the outbreak necrotizing cellulitis/fasciitis in São Tomé and Príncipe. Enhanced surveillance systems, and improved clinical and surgical management of patients have seen a reversal in the trend and a large reduction in the incidence of the disease. However, the recent increase in new cases, corresponding with the onset of the rainy season, needs to be investigated. The influence of environmental factors in the propagation of the disease needs to be explored. There is a need to continued support to the country in terms of technical and financial assistance, as well as conducting research. Ongoing efforts from all actors are required to prevent further cases of this potentially devastating infection.

EVENT DESCRIPTION

South Sudan has experienced constant conflicts, poverty and socio-economic deprivation, which have hugely impacted on the social wellbeing and health of the population. According to UNDP, more than 50% of the population lives below the poverty line, especially those in the rural areas. It is estimated that 7.5 million are in need of humanitarian assistance, including 1.9 million internally displaced persons (IDPs) and 2.1 million refugees in neighbouring countries.

In the last week, a major security stand-off has been reported in the capital, Juba, causing panic and social unrest. In addition, there was a flare-up of armed conflict in Maiwut County in Upper Nile, KajoKeji County in Jubec State and some parts of Wat Nyirol, and inter-tribal clashes in Akobo, Jonglei State.

Humanitarian snapshot in South Sudan, as of 12 September 2017



Access by aid workers to the population in need remains one of the major challenges due to insecurity, besides bureaucratic impediments. The majority of the counties have inadequate, limited or no health services due to destruction or closure of health facilities, lack of trained medical personnel, and disruption in supply chains. For instance, health services remain suspended in Koch, Nhialdiu and Kaljak in Unity State following evacuation of aid workers due to continued insecurity.

Communicable diseases continue to be the primary cause of morbidity and mortality, especially in children under-5, with malaria, diarrhoea and respiratory tract infections the leading causes. The high burden of diarrhoea and other waterborne diseases is mainly due to poor hygiene, since less than 50% of the population have access to improved sources of drinking water and more than 50% have no access to a toilet.

Although the general trend of cholera is on the decline, active transmission was reported in three counties (Juba, Budi and Kapoeta East) in the last 4 weeks. In week 43 (week ending 29 October 2017), 40 new cholera cases and three deaths (case fatality rate 7.5%) were reported. The cumulative total of cholera cases since the start of the current outbreak on 18 June 2016 is 21 419 cases and 441 deaths (overall case fatality rate 2%).

On 23 October 2017, a new measles outbreak was confirmed in Panyijiar after five samples tested positive for measles IgM. Since early July 2017, 144 cases and three deaths (case fatality rate 2.1%) have been reported. Seventy-eight percent (110) of the cases are below 5 years of age. Thirteen payams have reported cases.

PUBLIC HEALTH ACTIONS

- WHO supplied medical kits, which included antimalarial kits to Aweil East, Aweil West and Aweil North Counties.
- WHO is working with Universal Intervention and Development Organization (UNIDO) – a local non-governmental organization – to improve access to healthcare services to IDPs and host communities in the Islands of Leer and Mayendit Counties. The activities being implemented include establishing emergency medical mobile teams for Tuochriak and Meer Islands, training on clinical case management of malaria and diarrhoeal diseases as well as community-based surveillance. There have been over 4 000 consultations.
- WHO supported the Ministry of Health to implement the 3rd round of national immunization days from 24 October 2017, targeting over 3 million children below 59 months.
- From 16 - 20 October 2017, WHO and the Ministry of Health conducted a joint supervisory visit to the Regional Blood Transfusion Service in Wau, in former Great Bahr El Ghazal State. During this visit, nine staff members were trained on standard operating procedures for blood quality and safety. This was a follow up visit since the facility was launched on 25 August 2017 by the Minister of Health and the Japanese Ambassador.
- With funding from USAID, WHO supported the Ministry of Health to train 40 healthcare workers and rapid response teams from various institutions as central and state facilitators for Integrated Disease Surveillance and Response (IDSR). This enabled expansion of the pool of central and state level facilitators to scale up IDSR training at state and county level.
- WHO supported deployment of six Public Health Officers to Budi in Kapoeta (where there is an ongoing active transmission of cholera) to support case management and infection prevention and control activities.
- Measles follow-up campaign was conducted in Maban Melut from 24 - 29 October 2017.

SITUATION INTERPRETATION

The humanitarian crisis in South Sudan has remained unchanged due to the prevailing security situation. Limited access to the population in need has remained a major hindrance to provision of humanitarian aid. The continuous lack of healthcare services is concerning. At the moment, critical gaps in health services delivery could be filled through scaling up of outreach services and mobile response teams, in addition to strengthening community interventions and harnessing the community networks.

Summary of major challenges and proposed actions

Challenges

- While progress has been made to control the outbreak of plague in Madagascar, potential flare-up of cases cannot be ruled out until the typical plague season ends in April 2018. Sustaining ongoing response operations, therefore, remains critical. In addition, medium to longer-term planning and implementation of activities to rebuild the response gaps identified during this outbreak, as well as overall health system strengthening, need to begin. WHO urgently requires an additional US$ 4 million to sustain response operations in the next 3 months of the plague outbreak in Madagascar.

- The continuous propagation of cholera in Tanzania mainland, going on for over two years, remains a concern. Unlike the other protracted cholera outbreaks occurring in complex humanitarian setting, this outbreak is in a normal societal setting. The cholera outbreak in Tanzania mainland needs to be brought to a halt.

Proposed actions

- WHO appeals to the partners and donor communities to provide the additional funding and resources. The funding is needed to interrupt ongoing transmission, provide care for those affected by the disease, reduce the risk of international spread, and provide effective coordination and operations support.

- The outbreak of cholera in Tanzania has reached a critical stage where interruption of the low-level transmissions requires precise high-impact and targeted interventions, guided by good epidemiological analysis and clear understanding of the dynamics. Public health authorities and partners in Tanzania need to scale up key interventions to address the observed stagnation in progress and avoid any likely upsurge, as well as prevent potential spread of the disease to new (unaffected) areas.

All events currently being monitored by WHO AFRO

Country	Event	Grade†	WHO notified	Start of reporting period	End of reporting period	Total cases	Confirmed cases	Deaths	CFR	Comments
New events										
Gambia	Event of unknown etiology	Ungraded	11-Jul-17	n/a	n/a	15	-	-	-	An unknown public health event is being investigated in North Bank East Region after admission of a child with fever and severe arthralgia. The illness is said to be self-limiting and nearly all recoved within 7-10 days of onset with no mortality reported. Blood samples have been taken and are under investigation.
Ongoing events										
Angola	Cholera	G1	15-Dec-16	1-Jan-17	22-Oct-17	375	-	21	5.6%	The outbreak began during December 2016. From week 1-42 of 2017, cases have been reported from Cabinda (219), Zaire (151), Luanda (3) and Maquela de Zombo (2). Only one new case (from Maquela de Zombo) was reported in week 42. No new cases have been reported in Luanda since week 4, in Soyo Zaire since week 26, and in Cabinda since week 28.
Burkina Faso	Dengue	G1	4-Oct-17	1-Jan-17	29-Oct-17	6 737	141	13	0.2%	Weekly case counts have continued to increase since week 32. An additional 1 250 cases were reported during week 42. The majority (64.5%) of cases were reported in the central region, notably in Ouagadougou (the capital). Of the 241 samples tested, 141 cases were laboratory confirmed. Serotyping analyses detected the presence of dengue virus serotype 2 (58 cases), serotype 3 (12 cases) and serotype 1(2 cases).
Burundi	Malaria	G1	22-Mar-17	1-Jan-17	30-Oct-17	6 449 927	-	2 836	0.0%	Weekly case counts are below the epidemiologic threshold but have increased since week 41. In week 42, 117 917 cases and 42 deaths were reported. The most affected health districts (DS) are: Kirundo (5 094), Muyinga (5 450) and Giteranyi (5 295).
Burundi	Cholera	Ungraded	20-Aug-17	15-Aug-17	30-Oct-17	147	-	0	0.0%	During week 43, 9 suspected cases were reported in the health zones of Cibitoke (6) et Isare (3). As of 30 October a cumulative total of 147 cases and no deaths were reported. Seven districts have reported suspected cases to date.

Country	Event	Grade†	WHO notified	Start of reporting period	End of reporting period	Total cases	Confirmed cases	Deaths	CFR	Comments
Cameroon	Humanitarian crisis	G2	31-Dec-13	27-Jun-17	3-Nov-17	-	-	-	-	In the beginning of November, the general security situation in the Far North Region becomes worse. Terrorist attack and suicide bombings are continuing and causing continuous displacement. 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. To date, more than 58 838 refugees, from Nigeria, are present in Minawao Camp, and more than 21 000 other refugees have been identified out camp. In addition around 238 000 Internally Displaced People have been registered.
Cape Verde	Malaria	G2	26-Jul-17	1-Jan-17	8-Nov-17	413	388	2	0.5%	The incidence of new cases declined since peaking in week 35 (early September), but increased again in weeks 42 (40 new cases reported) and 43 (47 new cases reported). The outbreak has been contained to the city of Praia. Cases reported from other areas/islands all likely all acquired the infection during travel to Praia or overseas, and there is currently no evidence of indigenous transmission outside of Praia. Two deaths have been reported (1 in an indigenous case and 1 in an imported case).
Central African Republic	Humanitarian crisis	G2	11-Dec-13	11-Dec-13	31-Oct-17	-	-	-	-	The security situation in the Central African Republic has deteriorated in recent weeks, marked by widespread armed clashes across the country. Over 10 communities have been attacked in the past weeks, reportedly resulting in over 100 deaths, mostly civilians. These security incidents continue to cause new internal displacements.

Country	Event	Grade†	WHO notified	Start of reporting period	End of reporting period	Total cases	Confirmed cases	Deaths	CFR	Comments
Chad	Hepatitis E	G1	20-Dec-16	1-Aug-16	15-Oct-17	1 859	98	22	1.2%	Outbreaks are ongoing in the Salamat Region predominantly affecting North and South Am Timan, Amsinéné, South Am Timan, Mouraye, Foulonga and Aboudeia. Of the 64 cases occurring in pregnant women, five died (case fatality rate 7.8%) and 20 were hospitalized. Chlorination of water sources ended at the end of September 2017 because of a lack of partners and funding.
Chad	Cholera	G1	19-Aug-17	14-Aug-17	22-Oct-17	895	6	65	7.3%	Incidence is rapidly increasing the Amtimam Health District, with 235 new cases have been reported during week 42. Overall, cases have been reported from Koukou (290) and Goz Beida (71) health districts in the Sila Region, as well as from Am Timan Health District (529) and Amdjoudoul (5) in the Salamat Region.
Congo (Republic of)	Monkeypox	Ungraded	1-Feb-17	18-Jan-17	30-Sep-17	88	8	6	6.8%	Since January 2017, the Republic of Congo has been going through an outbreak of monkeypox. 88 cases with 6 deaths have been reported since the beginning.
Cote d'Ivoire	Dengue fever	Ungraded	3-May-17	22-Apr-17	23-Oct-17	1 281	311	2	0.2%	Abidjan city remains the epicentre of this outbreak, accounting for 95% of the total reported cases. The main health districts affected include Cocody, Abobo, Bingerville and Yopougon. Of the 272 confirmed cases with available information on serotypes, 181 were dengue virus serotype 2 (DENV-2), 78 were DENV-3 and 13 were DENV-1. In addition, 39 samples were confirmed IgM positive by serology.
Democratic Republic of the Congo	Humanitarian crisis	G3	20-Dec-16	17-Apr-17	27-Oct-17	-	-	-	-	There has been a relative lull in fighting in the Kasai region. The numbers of internally displaced persons (IDPs) and returnees are estimated at 1.4 million and 271 687, respectively.
Democratic Republic of the Congo	Cholera		16-Jan-15	1-Jan-17	3-Nov-17	42 334	-	838	2.0%	During week 43, 1 906 new suspected cases and 44 deaths were reported; these numbers have remained stable from week 42 (2 039 suspected cases, 67 deaths). The majority of cases this week were reported from North Kivu, South Kivu, Tanganyika, Haut Lomami, and Kongo Central.

Country	Event	Grade†	WHO notified	Start of reporting period	End of reporting period	Total cases	Confirmed cases	Deaths	CFR	Comments
Democratic Republic of the Congo	Circulating vaccine-derived polio virus type 2 (cVDPV2)		17-May-17	20-Feb-17	4-Oct-17	9	9	0	0.0%	One new case of cVDPV2 reported in a 17-month-old child from Lwamba, Haut Lomami. Ongoing transmission is occurring in two separate outbreaks in Haut Lomami Province (7 cases, most recent case onset was 27 July 2017), and Maniema Province (2 cases with onset on 26 March and 18 April 2017, and an additional isolate detected in a sample collected 2 May 2017 from a healthy individual).
Democratic Republic of the Congo	Measles		10-Jan-17	2-Jan-17	22-Aug-17	30 211	449	370	1.2%	The incidence of new cases has declined since the current outbreak peaked in early 2017.
Ethiopia	Humanitarian crisis	Protracted 3	15-Nov-15	n/a	26-Sep-17	-	-	-	-	This complex emergency includes outbreaks of acute watery diarrhoea, measles and acute jaundice syndrome (reported separately below) and El Niño-related drought and food insecurity affecting the Horn of Africa. The estimated internally displaced population stands at 1 099 776 as of 26 September 2017. Heavy rainfall causing floods have affected over 18 600 households and displaced some 93 000 people. Addis Ababa, Jima, and south-east and south-west Shewa were worst affected.
Ethiopia	Acute watery diarrhoea (AWD)		15-Nov-15	1-Jan-17	24-Oct-17	47 711	-	877	1.8%	325 new cases reported in week 42. As of 24 October 2017, a cumulative total of 47 711 cases were reported. Seven regions had active transmission and one reported over 100 cases during the week under review.
Ethiopia	Measles		14-Jan-17	1-Jan-17	3-Oct-17	3 151	-	-	-	382 new cases were reported in week 39.
Ethiopia	Acute jaundice syndrome (AJS) - hepatitis A suspected		23-Aug-17	23-Aug-17	29-Sep-17	213	11	5	2.3%	Twenty-three blood samples were sent to IP Dakar. Laboratory results show that 11/23 samples were positive on hepatitis A RT-PCR, and one sample was IgM positive (PCR negative) for dengue virus. All other tests performed as part of the differiential diagnosis were negative.

Country	Event	Grade†	WHO notified	Start of reporting period	End of reporting period	Total cases	Confirmed cases	Deaths	CFR	Comments
Kenya	Cholera	G1	6-Mar-17	1-Jan-17	26-Oct-17	3 304	596	60	1.8%	Nationally, case numbers continue to decrease. Three counties are currently reporting active outbreaks: Nairobi, Garissa, Kajiado, and a newly reported county, Embu county; with approximately 60% of the cases coming from Nairobi county.
Kenya	Leishmaniasis, visceral (kala-azar)	Ungraded	7-Jun-17	4-Jan-17	26-Aug-17	457	362	7	1.5%	Marsabit (338) and Wajir (119) counties have been affected by outbreaks since early 2017. The outbreak remains active in Marsabit, where the last reported case was reported on 26 August 2017. The outbreak has been controlled in Wajir, where the last reported case was reported on 17 June 2017. No new cases were reported in the past week.
Kenya		G1	10-Feb-17	n/a	24-Aug-17	-	-	-	-	As of 24 August, SMART surveys estimated the (low-medium-high) prevalence of global acute malnutrition (GAM in Kenya at 2.6-22.9-32.8, and SAM at 0.2-4.0-9.8%).
Kenya	Malaria	Ungraded	-	25-Sep-17	26-Oct-17	1 009	604	25	2.5%	The suspected outbreak is affecting 3 wards in Marasbit which are Durkana (598 cases), North Horr (236 cases) and Loiyangalani (175 cases) wards.
Kenya	Marburg	Ungraded	28-10-2017	28-10-2017	28-10-2017	3	-	-	-	Three suspected cases of Marburg have been reported in Kenya. The cases include the wife, son and traditional healer of a confirmed Marburg case from Uganda who had travelled to the Kitale district in Kenya to seek alternative treatment after falling ill, and died on 26 October. These three high-risk contacts are already exhibiting symptoms. Uganda is currently experiencing a Marburg outbreak that is occuring on the border with Kenya. Cross-border surveillance activities (including contact tracing) have been initiated between the two countries.

Country	Event	Grade†	WHO notified	Start of reporting period	End of reporting period	Total cases	Confirmed cases	Deaths	CFR	Comments
Liberia	Measles	Ungraded	24-Sep-17	6-Sep-17	29-Oct-17	1 488	189	2	0.1%	In week 43, 20 suspected cases were reported from 8 counties and 7 confirmed cases were reported from Bong, Nimba, Montserrado, and Grand Bassa counties.
Madagascar	Plague	G2	13-Sep-17	13-Sep-17	8-Nov-17	2 034	371	165	8.1%	Detailed update given above.
Madagascar	Food insecurity	Ungraded	23-Feb-17	n/a	15-Jul-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.
Malawi	Cholera	Ungraded	n/a	23-Jul-17	22-Oct-17	52	3	0	0.0%	A relatively small outbreak of cholera was detected in week 30 in Chikwawa District, with low rates of illness maintained in subsequent weeks. Three new cases were reported during the past week.
Mali	Dengue fever	Ungraded	4-Sep-17	1-Aug-17	15-Oct-17	345	26	0	0.0%	Active case search activities completed following detection of a case during a study has identified a total of 26 confirmed cases from 345 suspected cases tested as of 15 October 2017.
Mali	Humanitarian crisis	Protracted 1	n/a	n/a	3-May-17	-	-	-	-	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.
Niger	Hepatitis E	Ungraded	2-Apr-17	2-Jan-17	12-Oct-17	1 987	441	38	1.9%	The majority of cases have been reported from the Diffa (1408), N'Guigmi (306) and Bosso (250) health districts. Case incidence continues to decline.
Niger	Humanitarian crisis	G2	1-Feb-15	1-Feb-15	11-Aug-17	-	-	-	-	The security situation remains precarious and unpredictable. On 28 June 2017, 16 000 people were displaced after a suicide attack on an internally displaced persons (IDP) camp in Kablewa. In another attack on 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.

Country	Event	Grade†	WHO notified	Start of reporting period	End of reporting period	Total cases	Confirmed cases	Deaths	CFR	Comments
Nigeria	Lassa Fever	Ungraded	24-Mar-15	1-Dec-16	27-Oct-17	908	273	121	13.3%	The outbreak is currently active in five states: Ondo, Edo, Lagos, Plateau, and Bauchi. During week 39, 3 new confirmed cases were reported from Edo (1), Ondo (1), and Bauchi (1) states. Since the resurgence of the current wave of Lassa fever outbreak in December 2016 (week 49), a total of 908 suspected cases including 121 deaths (case fatality rate 13.3%) were reported. as of 27 October 2017. Of these, 287 cases have been classified: 273 cases were confirmed and 14 cases are considered probable. There were 89 deaths among the confirmed and probable case groups, collectively giving a case fatality rate of 31.0% in this group. Edo and Ondo States have accounted for over half of the confirmed and probable cases.
Nigeria	Humanitarian crisis	Protracted 3	10-Oct-16	n/a	1-Oct-17	-	-	-	-	An estimated 8.5 million people are in need in Borno State, including 1.8 million IDPs. Aside from the cholera outbreak (see below), malaria remains the leading cause of morbidity with over 6 800 suspected cases reported through IDSR in week 39.
Nigeria	Cholera (Borno State)		20-Aug-17	14-Aug-17	12-Nov-17	5 336	354	61	1.1%	Detailed update given above.
Nigeria	Cholera (nation wide)	Ungraded	7-Jun-17	1-Jan-17	21-Oct-17	3 521	41	81	2.3%	Between weeks 1 and 42, suspected cases hae been reported from 19 states. The number of suspected cases and deaths in 2017 surpasses that observed during the same period in 2016 (560 suspected cases, 25 deaths).

Country	Event	Grade†	WHO notified	Start of reporting period	End of reporting period	Total cases	Confirmed cases	Deaths	CFR	Comments
Nigeria	Hepatitis E	Ungraded	18-Jun-17	1-May-17	24-Sep-17	1 029	-	5	0.5%	The outbreak is concentrated in Borno State, with incidence steadily declining after peaking in week 26. The majority of cases have been reported in Ngala (810), Mobbar (99) and Monguno (66) LGAs.
Nigeria	Yellow fever	Ungraded	14-Sep-17	7-Sep-17	26-Oct-17	166	3	2	1.2%	166 suspected cases have been reported and 3 cases have been laboratory-confirmed at IP Dakar (1 in Ifelodun LGA in Kwara State and 2 in Kogi State). Sixteen samples tested PCR positive at LUTH from five states: Kwara (10), Kogi (2), Plateau (2) Borno (1), and Abia (1). One sample from Kwara State had an inconclusive result at LUTH. Positive and inconclusive samples have been referred to IP Dakar for confirmatory testing: 3 were positive, 4 were negative, 9 are pending, and 1 is missing. Two of the confirmed cases have died. A reactive vaccination campaign was conducted in high risk areas in Kwara and Kogi states from 13 to 20 October 2017. Preemptive vaccination campaigns are scheduled to start in December in Kwara, Kogi, Abia, and Plateau states.
Nigeria	Monkeypox	Ungraded	26-Sep-17	24-Sep-17	2-Nov-17	116	36	0	0.0%	Suspected cases are geographically spread across 20 States and the Federal Capital Territory (FCT). 38 laboratory-confirmed cases have been reported from 8 states (Akwa Ibom, Bayelsa, Delta, Edo, Ekiti, Enugu, Lagos, and Rivers) and the FCT.
São Tomé and Principé	Necrotising cellulitis/fasciitis	G2	10-Jan-17	25-Sep-16	29-Oct-17	2 212	0	0	0.0%	Detailed update given above.
Senegal	Dengue fever	Ungraded	30-10-2017	28-09-2017	6-Nov-17	510	79	0	-	Since 28 September, the date of confirmation of the first cases of dengue fever in the Louga region, a total of 510 suspected cases have been reported and 79 cases confirmed. Analyses of by IPD have shown that DEN-1 is the only serotype circulating. 70 confirmed cases have been reported from Louga district, 6 from Dahra district (86km from Louga), 2 from Coki district (30km from Louga), and 1 from Keur Momar Sarr district. As of 6 November 2017, no severe cases and no deaths had been reported.

Country	Event	Grade†	WHO notified	Start of reporting period	End of reporting period	Total cases	Confirmed cases	Deaths	CFR	Comments
Seychelles	Dengue fever	Ungraded	20-Jul-17	18-Dec-15	23-Oct-17	4 068	1 413	-	-	As of 23 October, 4 068 cases have been reported from all regions of the three main islands (Mahé, Praslin and La Digue).
Seychelles, ex Madagascar	Plague	Ungraded	10-Oct-17	9-Oct-17	20-Oct-17	0	0	0	-	A public health response was mounted following detection of a single rapid diagnostic test (RDT)-positive traveller returning from Madagscar. Ten laboratory specimens collected from the case, his contacts and two suspected cases tested negative at IP Paris. Overall, 1 223 contacts were registered and followed-up, of which 833 were given prophylactic antibiotics.
South Sudan	Humanitarian crisis	G3	15-Aug-16	n/a	31-Oct-17	-	-	-	-	Detailed update given above.
South Sudan	Cholera	Ungraded	25-Aug-16	18-Jun-17	15-Oct-17	21 097	1 585	418	2.0%	Cholera transmission has continued to decline nationally and continues in only three counties (Juba, Budi and Fangak). Thirty-seven new cases including one death (CFR 2.7%) were reported in week 40 as compared to over 1 700 cases per week at the height of the most recent wave of the epidemic in week 23. There have been a total of 21 097 and 418 deaths (CFR 2%) since the start of the outbreak on 23 June 2017.
Tanzania	Cholera	G1	20-Aug-15	1-Jan-17	5-Nov-17	3 801	-	64	1.7%	Detailed update given above.
Uganda	Humanitarian crisis - refugee	Ungraded	20-Jul-17	n/a	30-Aug-17	-	-	-	-	The influx of refugees to Uganda has continued as the security situation in the neighbouring countries remains fragile. According to UNHCR, the total number of registered refugee and asylum seekers in Uganda stands at 1 326 750, as of 1 August 2017. More than 75% of the refugees are from South Sudan. Detailed update given in the week 35 bulletin.
Uganda	Measles	Ungraded	8-Aug-17	24-Apr-17	18-Sep-17	552	-	-	-	The outbreak is in the two urban districts of Kamala (309 cases) and Wakiso (243 cases).

Country	Event	Grade†	WHO notified	Start of reporting period	End of reporting period	Total cases	Confirmed cases	Deaths	CFR	Comments
Uganda	Drought/food insecurity	G1	1-Jul-17	n/a	24-Aug-17	-	-	-	-	This event forms part of a larger food insecurity crisis in the Horn of Africa. The northern and eastern regions are predominantly affected.
Uganda	Cholera	Ungraded	28-Sep-17	25-Sep-17	17-Oct-17	168	15	3	1.8%	The outbreak remains confined to Kasese District but has spread from 5 sub-counties (Nyakiyumbu, Munkunyu, Bwera, Isango, and MLTC) to include Ihandiro, Karambi, and Kyondo sub-counties; however, the daily incidence of new cases remains low.
Uganda	Marburg	G2	17-Oct-17	20-Sep-17	8-Nov-17	3	2	3	100.0%	Detailed update given above.
Zambia	Cholera	Ungraded	4-Oct-17	4-Oct-17	9-Nov-17	135	95	3	2.2%	No new case has been reported on 09 November 2017. In total, 135 cases, including 95 confirmed cases, have been reported since start of the outbreak; 15 townships of Lusaka district have been affected.
Recently closed events										
Namibia/Botswana	Anthrax	Ungraded	10-Oct-17	10-Oct-17	12-Oct-17	0	0	0	-	Mass death of wildlife (hippos and buffalo) in Bwabwata National Park. Dead hippos were also detected downriver in Kavango River in Botswana. Public health authorities are responding. No known human infections to date.
Sierra Leone	Flooding/ mudslide	G1	14-Aug-17	14-Aug-17	28-Sep-17	-	-	-	-	Recovery efforts continue a month since mudslides and flash floods devastated parts of Freetown, Sierra Leone. Burial of 502 corpses and 139 body parts was completed. Search for dead bodies has been stopped, and 500 individuals declared missing. 1 247 households were affected in 6 communities with 5 905 persons displaced.

†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
Data is provided by Member States through WHO Country Offices via regular situation reports, teleconferences and email exchanges. Situations are evolving and dynamic therefore numbers stated are subject to change.

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