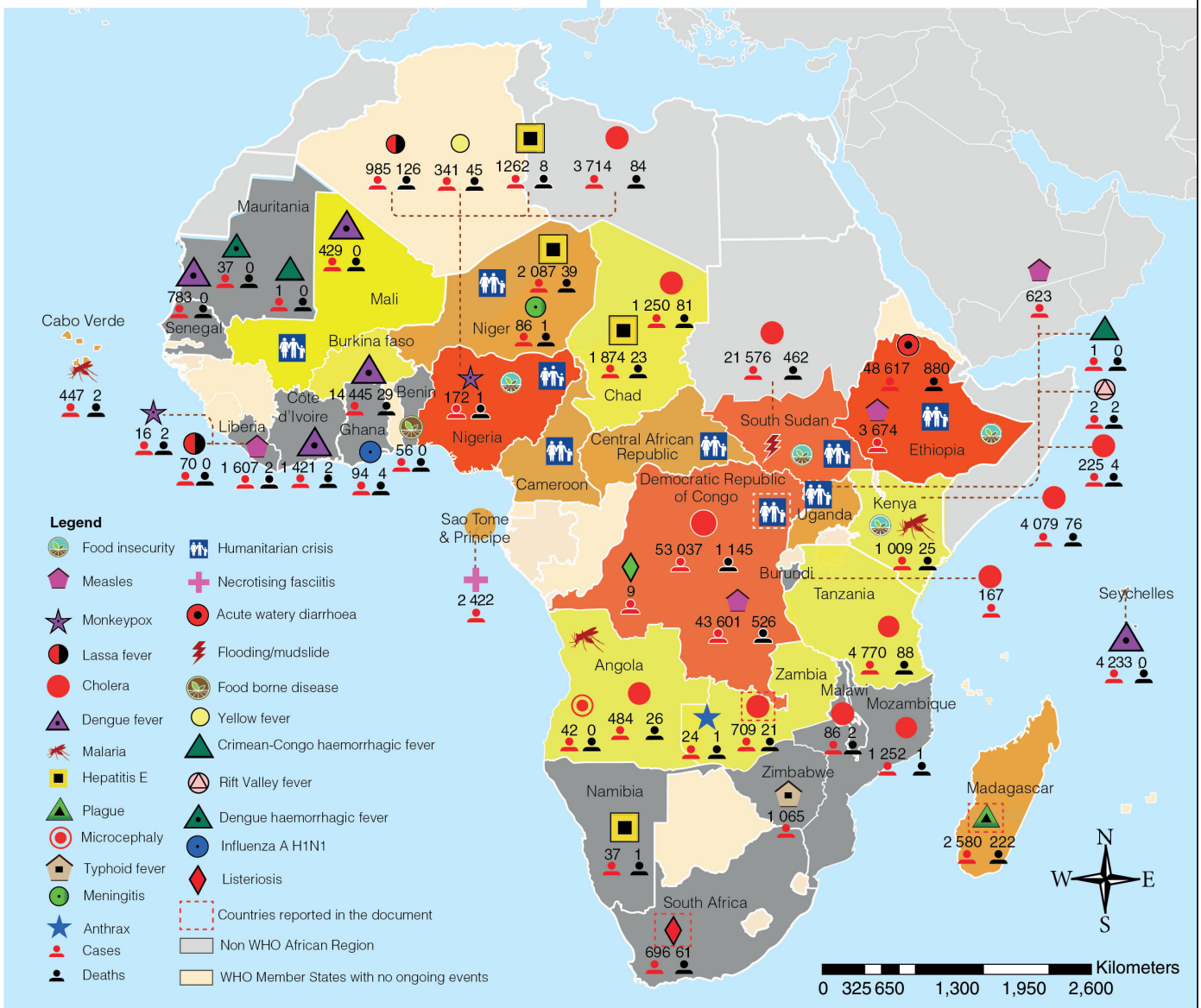
WEEKLY BULLETIN ON OUTBREAKS AND OTHER EMERGENCIES

Week 52: 23 - 29 December 2017
Data as reported by 17:00; 29 December 2017

World Health Organization
REGIONAL OFFICE FOR Africa
WHO Health Emergencies Programme

1	51	43	9
New events	Ongoing events	Outbreaks	Humanitarian crises



2 Grade 3 events	6 Grade 2 events	8 Grade 1 events	33 Ungraded events
2 Protracted 3 events	0 Protracted 2 events	1 Protracted 1 event	

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 52 events in the region. This week's edition covers key new and ongoing events, including:
  - Humanitarian crisis in the Democratic Republic of the Congo
  - Cholera in Zambia
  - Listeriosis in South Africa
- 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:**
  - The humanitarian crisis in the Democratic Republic of the Congo continues to deteriorate, and the neighbouring country of Uganda has experienced a major influx of people as a result of the crisis. A concerted effort by the international community is needed to address the root causes of the conflict and alleviate the suffering of the people.
  - The cholera outbreak in Zambia continues to be of major concern, particularly in light of the dense population and poor water and sanitation infrastructure in many affected areas. Targeted interventions involving relevant sectors need to be swiftly implemented to halt disease transmission and reduce the risk of mortality.

Ongoing events

Humanitarian crisis | **Democratic Republic of the Congo**

EVENT DESCRIPTION

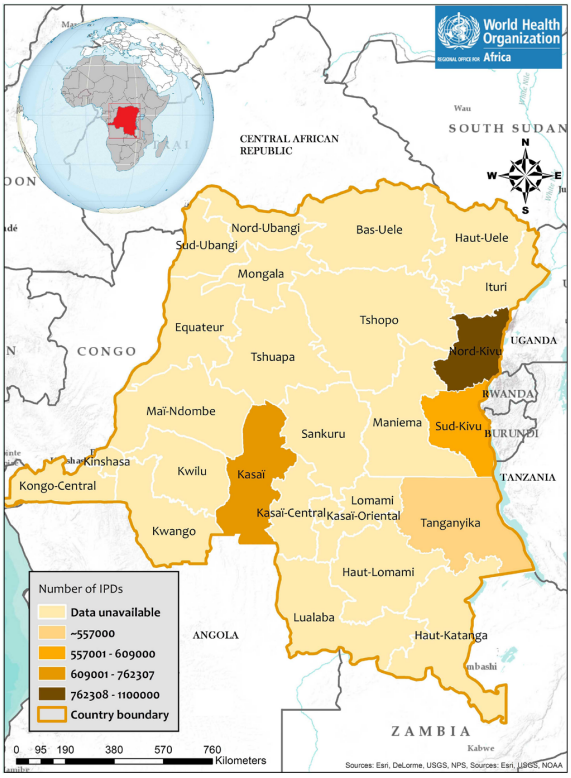
The complex humanitarian crisis in Democratic Republic of the Congo continues to deteriorate, with further armed conflicts and intercommunal tension in several parts of the country. The United Nations Office for the Coordination of Humanitarian Affairs (OCHA) reported movement of 1 800 people in the south of Shabunda territory as a result of fighting between armed groups and the Congolese army on 15 and 16 December 2017. This adds to already significant population displacement that has occurred in this area since October 2017. In North Kivu, northwest of Mweso in Msisi territory, there was an armed incursion on the night of 13-14 December, which left three dead and as many wounded. The attackers looted an excess of 100 homes.

People continue to return to Kasai region, in spite of incidents reported at the beginning of December on the Kamonia-Tshikapa road in the province. In the last 18 months, 710 451 people have returned to their areas of origin, reducing the numbers of IDPs from over 1.4 million to 762 307. The number of IDPs in South Kivu was estimated at 609 000, plus 39 481 Burundian refugees. The number of IDPs in North Kivu was estimated at 1.1 million, including 180 539 refugees. In Tanganyika province, the total number of IDPs and returnees is 557 000 and 106 000 respectively.

The neighboring country of Uganda continues to experience an influx of refugees as a result of the crisis in Democratic Republic of Congo. During 18-22 December, over 2 650 new refugee arrivals from Democratic Republic of the Congo crossed to Uganda, four times the average number of daily arrivals recorded between January and November 2017. As of 30 November 2017, a total of 229 957 refugees from Democratic Republic of the Congo had arrived in Uganda.

Overall, there have been 4.1 million people internally displaced since 2016. An estimated 7.7 million people are severely food insecure, and 13.1 million people are expected to need humanitarian help in 2018. The outbreak of cholera, although declining since week 41, has resulted in 52 826 suspected cases, with 1 130 deaths (case fatality rate 2.1%) since the beginning of 2017. The measles outbreak, declining since week 45, has resulted in a cumulative number of 43 500 suspected cases, with 527 deaths (case fatality rate 1.2%) since the beginning of 2017.

Humanitarian crisis in Democratic Republic of the Congo, 15 - 29 December 2017



PUBLIC HEALTH ACTIONS

- The Cluster Coordinator for the Kananga Hub Sub-cluster for Kasai region took office on 21 December 2017 and the first meeting was attended by 12 partners. Cluster members shared the 4Ws matrix and agreed to start preparation of a contingency plan for Kasai.
- WHO has finalised the questionnaire to assess the availability of Human Resources and Health Services to be used in the eight WHO-supported health zones in Kasai, which will be supported by other partners in the other health zones. The findings of this questionnaire are needed for WHE and other relevant clusters to effectively address critical Human Resources and Health Services gaps.
- The strategic response plan for emergencies in the Democratic Republic of Congo in 2018 has been finalized. WHO has initiated donor meetings for resource mobilization to fund this plan, meeting with the Central Emergency Response Fund (CERF) during the week of 18 to 23 December 2017 and with USAID during the week of 26 to 30 December 2017. The WHO team in Kasai has been strengthened with the deployment of an Assistant Administration/ Finance Officer and a Risk Communication Officer in Kananga and an Operations Manager in Tshikapa.
- WHO teams continue to participate in weekly Integrated Disease Surveillance and Response (IDSR) meetings at national and provincial levels and the call line to facilitate community-based surveillance in Central Kasai is now operational, but needs to be promoted more. Further effort is needed to improve the quality and timeliness of IDSR surveillance data.
- WHO continues to support the responses to the cholera and measles outbreaks by providing technical assistance on vaccination and implementation of other prevention and control interventions. Six health zones in South Kivu are preparing a measles vaccine campaign, targeting 255 513 children aged 6 months to 15 years.

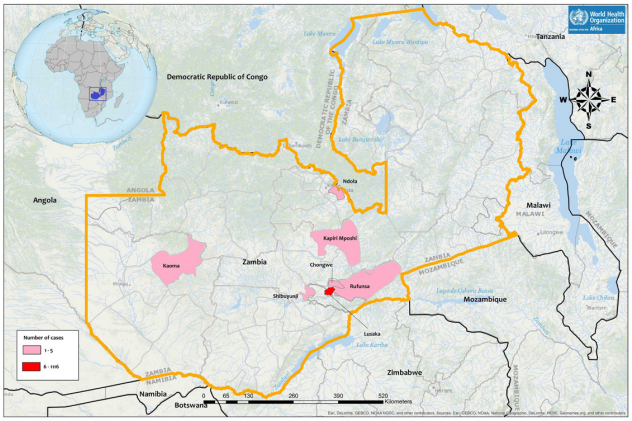
SITUATION INTERPRETATION

Despite ongoing aid and technical assistance, the humanitarian situation in the Democratic Republic of the Congo has not shown tangible improvement, as armed conflict continues to erupt across the country, resulting in continued forced population movement, including an influx of refugees into neighbouring Uganda, stretching their resources. The situation appears unlikely to improve in 2018, with an estimated 13 million people in need of humanitarian intervention at all levels. Funding is urgently required, and the donor and aid community need to commit now to avert an even greater crisis next year. Cholera control interventions need to be scaled up, in spite of the declining incidence of the disease, including improved access to case management facilities and strengthening response operations at the community level. Continued WHO technical assistance should support and enhance these activities.

EVENT DESCRIPTION

The high transmission intensity in Lusaka district continues as this cholera outbreak shows no signs of slowing. As of 26 December 2017, there were 53 new suspected cases and one death. This is an increase from the previous week (22 December 2017), when there were a further 44 new suspected cases and no deaths. In the 24 hours prior to 26 December 2017, the new suspected cases were from Chipata cholera treatment centre (CTC) (24), Kanyama CTC (19), Chawama CTC (6), Shibuynji CTC (4), Baulemi/Chilenje CTC (3), and Matero CTC (1). As of 26 December 2017, there were a total of 115 cases under treatment. The cumulative number of cases in Lusaka district since the onset of the outbreak on 4 October 2017 is 1 317, with 35 deaths, resulting in a high case fatality rate of 2.7%. The attack rate of the current outbreak is 54.3/100 000 population. Approximately 35% of these cases occurred in the age group of 15 to 44 years of age. In cases where sex was recorded, slightly more men (461) than women (400) have been affected.

Geographical distribution of cholera cases in Zambia, 20 - 26 December 2017



As of 20 December 2017, 395 specimens have been received by the University Teaching Hospital (UTH). Of these 93 were positive for *Vibrio cholerae* 01 Ogawa, four for *Salmonella* spp and six for *Shigella* spp. As of 23 December 2017, a total of 494 samples have been received by the Food and Drugs Laboratory, and 45 of these were positive for *Vibrio cholerae*. Results so far show that nearly 42% of water sources contain faecal contamination.

PUBLIC HEALTH ACTIONS

- The Ministry of Health is collaborating with WHO and partners to control the outbreak, with six local incident command posts currently operational in Chawama, Chipata, Kanyama, Matero, Chelstone and Chilenje, each lead by a public health specialist.
- The Zambia National Public Health Institute (ZNPHI) is leading investigations into circulating strains and patterns of transmission among patient clusters. They are also conducting knowledge, attitude and practice surveys and residual chlorine testing in Chipata and Kanyama, a mortality review, and a case-control study in Chipata.
- Additional clinical staff are to be assigned to CTCs to provide 24-hour staffing.
- Contact tracing is ongoing and contacts of 1 032 cases have been traced so far, and 14 patients have left CTCs against medical advice.
- Human resources (medical and environmental health students and environmental health technologists) are being deployed to support water, sanitation and hygiene (WASH) interventions in Chipata, Garden, and Kanyama.
- Lusaka City Council had collected 1703 tonnes of waste as of 18 December 2017, and emptied 79 septic tanks, emptied 24 of the targeted 1 000 pit latrines, and buried 88 out of a targeted total of 148 shallow wells. Inspection of premises is ongoing, along with disinfection of houses and toilets, and distribution of chlorine solution and soap.
- WHO has donated oral rehydration solution, intravenous fluids and giving sets, antibiotics, diagnostic kits, cadaver bags and gloves to the CTCs.
- There have been six press briefings and information was communicated through radio broadcasts from 11-16 December 2017. Educational outreach to the affected communities is ongoing.
- A call centre was activated on 11 December 2017 at the Disaster Management and Mitigation centre (DMMU) and radio transmission of Ministry of Health cholera prevention and control messages is ongoing.

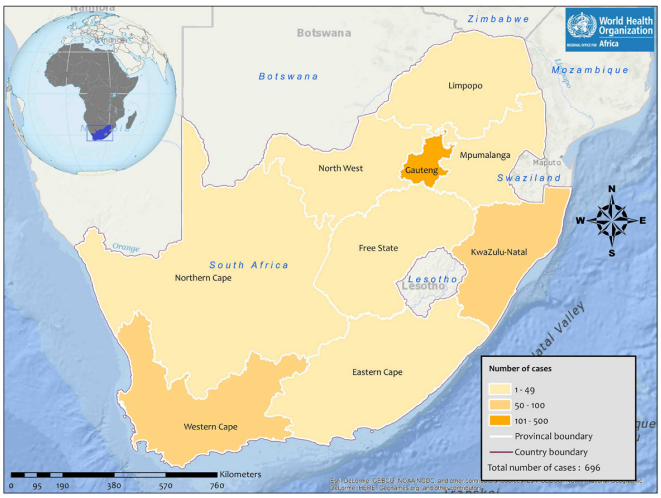
SITUATION INTERPRETATION

The continued transmission of cholera in Zambia, particularly in the suburbs of Lusaka District, remains a concern. Some risk factors for continuous propagation have been identified, including consumption of unsafe water from shallow wells. Communities are resisting capping of the shallow wells (which are deemed as sources of infection) because of a lack of alternative water supplies. The poor or absent water and sanitation infrastructure contributing to this outbreak needs to be addressed swiftly to break the transmission chain. The challenges of insufficient staff at the CTCs, particularly in Chipata, also need to be urgently addressed. The national authorities, with support from partners, need to mobilize the required resources and implement appropriate control measures to ensure that the outbreak is quickly brought to an end.

EVENT DESCRIPTION

The outbreak of listeriosis in South Africa continues to evolve. Between 1 January and 28 December 2017, a total of 696 confirmed cases have been reported across all nine provinces in South Africa. Of 134 (19%) cases with known outcome, 61 (45%) have died, yielding an overall case fatality rate of 8.8% (among confirmed cases). Gauteng Province remains the most affected, accounting for 61% (427) of the reported cases, followed by Western Cape (86, 12%) and KwaZulu-Natal (50, 7%). Where age was known (665 cases), the ages ranged from birth to 93 years, with a median of 26 years. Thirty-nine percent (260) of the cases are neonates aged 28 days and under; females account for 55% (373) of cases. Among the neonates, 96% (251) had early-onset disease (from birth to less than 6 days).

Geographical distribution of listeriosis cases in South Africa, 1 January - 28 December 2017



Diagnosis of the majority of cases (70%, 487) was based on isolation of *Listeria monocytogenes* in blood culture, followed by cerebrospinal fluid (24%, 168). To date, whole genome sequencing has been performed on 248 clinical *L. monocytogenes* isolates; 85% (170) are sequence type 6 (ST6). Isolates in this ST6 cluster are very closely related, representing a single strain of *L. monocytogenes*. This finding supports the hypothesis that the cause of the outbreak is a single widely available common food product or multiple food products produced at a single facility.

PUBLIC HEALTH ACTIONS

- A national multisectoral response team led by the Ministry of Health has been put in place to investigate and respond to the outbreak, with a focus on identifying the sources.
- The national authorities have made listeriosis a notifiable disease, requiring immediate reporting upon diagnosis by healthcare providers and private and public laboratories.
- Case investigation forms (CIFs) are being completed by healthcare workers in public and private facilities. The CIF is being revised to focus on the most commonly consumed food items based on currently available data.
- Environmental health practitioners are visiting homes of newly diagnosed cases to sample available food where possible. Food industry stakeholders have been requested to submit *Listeria*-positive food items, environmental swabs, and *Listeria* isolates to the NICD. Several stakeholders have provided information, but not all stakeholders have responded.
- The National Institute for Communicable Diseases (NICD) continues to operate a 24-hour hotline for clinicians.
- Clinicians caring for patients with suspected listeriosis but who have culture negative specimens (blood and CSF) can submit specimens for PCR testing at NICD.
- Public and private laboratories are submitting clinical isolates to the NICD Centre for Enteric Diseases (CED). Confirmatory testing is performed on all isolates of *L. monocytogenes* received at CED and stored.
- The NICD has made information available on its website regarding listeriosis and the National Department of Health has distributed information about the outbreak to food industry stakeholders.

SITUATION INTERPRETATION

Efforts are ongoing to identify the source of the listeriosis outbreak in South Africa. Limited epidemiological data are available on listeriosis in the country because it was not a notifiable medical condition prior to this outbreak. Outbreaks or clusters of listeriosis have historically been linked to a wide variety of commonly consumed food items, including dairy products, ready-to-eat meat and seafood products, and vegetables and fruit. No specific food item(s) or food consumption patterns have been identified in the current outbreak. Therefore, the contaminated food source(s) is likely still available and new cases are expected. At-risk groups including pregnant women, the elderly and immunocompromised people are advised to avoid high risk foods such as dairy products made from unpasteurized milk, soft cheeses, deli meat products (ready-to-eat meat cuts, pâtés, etc.), ice creams, raw vegetables, raw seafood, crustaceans, shellfish.

Summary of major challenges and proposed actions

Challenges

- The humanitarian crisis in the Democratic Republic of the Congo continues to deteriorate and has recently begun to stretch the resources of neighbouring Uganda. The great need for humanitarian assistance expected in 2018 underscores the need to address the situation of insecurity that limits the ability of aid actors to provide support to affected populations.
- Despite improved implementation of interventions, the incidence of cholera in Zambia continues to increase, particularly in areas of Lusaka District that lack access to clean water and sanitation services. The high case fatality rate (exceeding the 1% mark recommended by WHO) underscores the importance of specific attention to the provision of case management. Continued scale-up and maintenance of interventions is needed to bring the outbreak under control.

Proposed actions

- The humanitarian crisis in the Democratic Republic of the Congo requires the attention of the international community to address the ongoing situation of insecurity and provide needed humanitarian and health aid. Where possible, humanitarian partners are urged to continue implementation of greatly needed interventions to address the needs of affected populations in the Democratic Republic of the Congo and in Uganda.
- The national authorities in Zambia urgently need to scale up cholera prevention and control interventions in affected areas, with particular focus on improving access to safe water and sanitation services, hygienic conditions, and case management. Additional mobilization of resources is crucial to bringing this outbreak to a halt.

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										
Uganda	Crimean-Congo haemorrhagic Fever (CCHF)	Ungraded	27-Dec-17	23-Dec-17	27-Dec-17	1	1	-	-	A 9 year-old male presented to the hospital in Nakaseke District, Uganda with vomiting, nausea, diarrhoea, general weakness, anorexia, abdominal pain, and headache. He also reported having blood in stool and hematemesis. A whole blood sample was collected on 23 December and sent to Uganda Virus Research Institute (UVRI), and tested positive for CCHF on PCR. An epidemiological investigation is ongoing to identify contacts and similar cases.
Ongoing events										
Angola	Cholera	G1	15-Dec-16	13-Dec-16	3-Dec-17	484	-	26	5.4%	From 13 December 2016 to 03 December 2017, cases have been reported from Cabinda (236), Zaire (227), Luanda (5) and Uige (16) provinces. A total of two new cases (from Uige) were reported in week 48 (week ending 03 December 2017).
Angola	Malaria	Ungraded	20-Nov-17	n/a	30-Sep-17	-	-	-	-	The outbreak is ongoing since the beginning of the year. In the province of Benguela, a total of 311 661 malaria cases were reported from January to September 2017 as compared to 244 381 reported in all of 2016. In the province of Huambo, 155 311 malaria cases were reported from January to September 2017, as compared to 82 138 cases during the same period in 2016. Epidemiological investigations are ongoing to better understand the outbreak in these two contiguous provinces.
Angola	Microcephaly - suspected Zika virus disease	Ungraded	10-Oct-17	End September	29-Nov-17	42	-	-	-	A cluster of microcephaly cases was detected in Luanda in late September 2017 and reported on 10 October 2017 by the provincial surveillance system. Of the 42 cases, three were stillbirths and 39 were live births. Suspected cases have been reported from Luanda province (39), Zaire province (1), Moxico province (1), and Benguela province (1).
Benin	Foodborne disease	Ungraded	29-Nov-17	27-Nov-17	1-Dec-17	56	-	0	0.0%	56 individuals residing in Sissèkpa became immediately ill with symptoms of vomiting after consuming a root vegetable locally known as "Léfé". Animals that were exposed to the vomit have reportedly died. The root vegetable has been collected for further analysis. Cases are currently under follow-up.
Burkina Faso	Dengue	G1	4-Oct-17	1-Jan-17	10-Dec-17	14 445	-	29	0.2%	Weekly case counts have continued to decrease since week 44. The majority (62%) of cases were reported in the central region, notably in Ouagadougou (the capital). Dengue virus serotypes 1, 2, and 3 are circulating, with serotype 2 predominating (72%).
Burundi	Cholera	Ungraded	20-Aug-17	15-Aug-17	6-Dec-17	167	14	0	0.0%	As of 06 December 2017, a cumulative total of 167 cases and no deaths were reported from 6 districts; DS Nyanza lac 30 cases, DS Mpanda 31 cases, DS Cibitoke 35 cases, DS Isare 33 cases, DS Bubanza 31 cases, and DS B M Nord 6 cases.
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 worsened. Terrorist attacks 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 of the camp. In addition, approximately 238 000 Internally Displaced People have been registered.

Country	Event	Grade†	WHO notified	Start of reporting period	End of reporting period	Total cases	Confirmed cases	Deaths	CFR	Comments
Cape Verde	Malaria	G2	26-Jul-17	1-Jan-17	20-Dec-17	447	-	2	0.4%	As of 20 December, a total of 447 cases have been reported including 418 indigenous, 12 imported cases, and 17 reinfections/recurrences.Two deaths have been reported (1 in an indigenous case and 1 in an imported case). The outbreak has been contained to the city of Praia. Cases reported from other areas/ islands likely acquired the infection during travel to Praia or overseas, and there is currently no evidence of indigenous transmission outside of Praia.
Central African Republic	Humanitarian crisis	G2	11-Dec-13	11-Dec-13	11-Dec-17	-	-	-	-	The eastern part of the country currently has the greatest need for humanitarian assistance. There continue to be insecure zones that are left unserved by humanitarian actors and medical providers.
Chad	Hepatitis E	G1	20-Dec-16	1-Aug-16	3-Dec-17	1 874	98	23	1.2%	Outbreaks are ongoing in the Salamat Region predominantly affecting North and South Am Timan, Amsinéné, Mouraye, Foulonga and Aboudeia. The number of cases has been decreasing since week 39. Of the 64 cases in pregnant women, five died (CFR: 7.8%) and 20 were hospitalized. Water chlorination activities were stopped at the end of September due to a lack of partners and financial means. Monitoring and case management are continuing.
Chad	Cholera	G1	19-Aug-17	14-Aug-17	10-Dec-17	1 250	9	81	6.5%	The case incidence has been decreasing since week 43. In week 49, no new cases were reported. A total of 817 cases and 29 deaths were reported in the Salamat region from 11 September 2017 to 10 December 2017. No new cases have been reported in the Sila Region since 22 October 2017.
Cote d'Ivoire	Dengue fever	Ungraded	3-May-17	22-Apr-17	16-Dec-17	1 421	322	2	0.1%	The outbreak has been on a downward trend since week 35, with no cases being reported in weeks 49 and 50. This is likely due to the decrease in rainfall. Abidjan remains the epicentre of this outbreak, accounting for 95% of the total reported cases. 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, 50 samples were confirmed IgM positive by serology.
Democratic Republic of the Congo	Humanitarian crisis	G3	20-Dec-16	17-Apr-17	23-Dec-17	-	-	-	-	Detailed update given above.
Democratic Republic of the Congo	Cholera		16-Jan-15	1-Jan-17	23-Dec-17	53 037	841	1 145	2.2%	The trend of the outbreak is improving. During week 50, a total of 939 suspected cases and 16 deaths (CFR: 1.7 %) were reported, compared to 1129 suspected cases and 26 deaths (CFR: 2.3%) during week 49. This week, the provinces of South Kivu, Lualaba, Kasai, and central Kongo experienced an increase in the number of suspected cases compared to week 49.
Democratic Republic of the Congo	Measles		10-Jan-17	2-Jan-17	23-Dec-17	43 601	624	526	1.2%	The trend of the outbreak has decreased this week. During week 50, a total of 396 cases and 2 deaths (CFR: 0.5%) were reported, compared to 692 cases and 4 deaths (CFR: 0.6%) in week 49. Most of the suspected cases this week were reported from South Kivu province.

Country	Event	Grade†	WHO notified	Start of reporting period	End of reporting period	Total cases	Confirmed cases	Deaths	CFR	Comments
Ethiopia	Humanitarian crisis	Protracted 3	15-Nov-15	n/a	3-Dec-17	-	-	-	-	This complex emergency includes outbreaks (acute watery diarrhea, measles, and acute jaundice syndrome), the severe drought across northern, eastern, and central Ethiopia, and high levels of food insecurity and malnutrition. An estimate of 8.5 million people are food-insecure and in need of humanitarian assistance. 6.3 million people are in need of health assistance and 0.4 million children are severely malnourished. Estimates of the number of internally displaced people range from 660 000 to 900 000. Over 889 071 refugees have left Ethiopia as a result of this crisis.
Ethiopia	Acute watery diarrhoea (AWD)		15-Nov-15	1-Jan-17	3-Dec-17	48 617	-	880	1.8%	The outbreak is showing a downward trend. Only 11 new cases have been reported this week from 4 regions: Amhara, Somali, Diri Dawa and B.Gumuz regions. Nine regions in Ethiopia have been affected, and 73.6% of the total cases are from Somali region.
Ethiopia	Measles		14-Jan-17	1-Jan-17	24-Nov-17	3 674	-	-	-	The outbreak of measles continues to improve. During week 47, 37 cases were reported from Dollo zone and Jijiga City. Oromia Region remains the most affected region with approximately 46% of the total reported cases, followed by Amhara (21 %), Addis Ababa (16 %) and Somali (20 %).
Ghana	Influenza A H1N1	Ungraded	6-Dec-17	30-Nov-17	14-Dec-17	94	0	4	4.2%	On 6 December 2017, the Ministry of Health notified WHO of a focal outbreak of influenza A H1N1 in a school in Kumasi City, Ashanti Region. As of 14 December 2017, 94 cases with four deaths (CFR: 4.2%) have been the reported. Thus far, the disease is still localized in the school as no cases have been reported among community members.
Kenya	Cholera	G1	6-Mar-17	1-Jan-17	7-Dec-17	4 079	724	76	1.9%	The outbreak is still ongoing and 7 counties are actively reporting cases: Nairobi, Garissa, Mombasa, Wajir, Kwale, Embu, and Kirinyaga counties. Approximately 60% of the cases have been reported from Nairobi county.
Kenya	Malaria	Ungraded	-	25-Sep-17	26-Oct-17	1 009	604	25	2.5%	The outbreak is affecting 3 wards in Marsabit, namely Durkana (598 cases), North Horr (236 cases) and Loiyangalani (175 cases) wards.
Liberia	Suspected Monkeypox	Ungraded	14-Dec-17	1-Nov-16	14-Dec-17	16	0	2	12.5%	During weeks 48 and 49 of 2017, three suspected cases of Monkeypox were reported from Maryland and Rivercess Counties. Since November 2016, a cumulative of 16 suspected cases and two deaths have been reported in Grand Cape Mount(4), Rivercress(11), and Maryland(1). No cases have been confirmed to date and laboratory confirmation is ongoing.
Liberia	Measles	Ungraded	24-Sep-17	6-Sep-17	3-Dec-17	1 607	255	2	0.1%	From week 1 to week 48, 1 607 cases were reported from 15 counties, including 225 laboratory confirmed, 336 clinically compatible and 199 epi-linked. Nimba county has had the greatest cumulative number of cases to date (235). Children between 1-4 years accounted for 49% of the cases.
Liberia	Lassa Fever	Ungraded	14-Nov-17	3-Nov-17	24-Nov-17	70	28	-	-	On 10 November 2017, four suspected cases of Lassa fever were reported from Phebe Hospital in Suakoko district, Bong County. One of the cases tested positive by RT-PCR and the other three tested negative. Since the beginning of 2017, a total of 70 suspected Lassa fever cases including 21 deaths (CFR: 30%) have been reported from nine counties in Liberia.
Madagascar	Plague	G2	13-Sep-17	13-Sep-17	17-Dec-17	2 580	521	222	8.6%	Cases include pneumonic (1 989, 77%), bubonic (381, 15%), septicemic (1) and unspecified (209, 8%) forms of disease. Of the 1 989 clinical cases of pneumonic plague, 395 (20%) have been confirmed, 629 (32%) are probable and 965 (49%) remain suspected.
Malawi	Cholera	Ungraded	28-Nov-17	20-Nov-17	24-Dec-17	86	2	2	2.3%	Between week 50 and 51 an additional 76 cases with one death were reported from Karonga district (74) and Kasungu district (2). Kasungu district is the latest district to be affected by this cholera outbreak.

Country	Event	Grade†	WHO notified	Start of reporting period	End of reporting period	Total cases	Confirmed cases	Deaths	CFR	Comments
Mali	Dengue fever	Ungraded	4-Sep-17	1-Aug-17	10-Dec-17	429	33	0	0.0%	In week 49, no suspected cases were reported. No confirmed cases have been reported since week 41. All cases have been reported from Bamako and the Kati health district northwest of Bamako.
Mali	Humanitarian crisis	Protract-ed 1	n/a	n/a	19-Nov-17	-	-	-	-	The security situation remains volatile in the north and centre of the country. At the last update, incidents of violence had been perpetrated against civilians, humanitarian workers, and political-administrative authorities.
Mauritania	Crimean-Congo haemorrhagic fever (CCHF)	Ungraded	20-Nov-17	11-Nov-17	5-Dec-17	1	1	0	0.0%	On 20 November a confirmed case of crimean-congo haemorrhagic fever (CCHF) was reported in Nouak-chott. The case, a 48 year-old man, developed symp-toms on 11 November and was hospitalized on 15 November. A collected sample tested positive by PCR. Twenty contacts are currently listed for follow-up.
Mauritania	Dengue haemor-rhagic fever	Ungraded	30-Nov-17	6-Dec-17	13-Dec-17	37	37	-	-	On 30 November, the MoH notified 3 cases of dengue fever including one haemorrhagic case (Dengue virus type 2) with a history of Dengue virus type 1 infection in 2016. Out of 100 samples collected at the Teyarett health centre, 83 cases tested positive for dengue on RDT. On 12 December, the national reference labo-ratory confirmed the diagnosis of 37 out of 49 RDT positive samples collected between 16 November and 11 December 2017.
Mozambique	Cholera	Ungraded	27-Oct-17	12-Aug-17	15-Dec-17	1 252	-	1	0.1%	The cholera outbreak is ongoing. Cases have been reported from three districts (Memba, Erati, and Nac-aroa) in Namapula province. The outbreak started in mid-August 2017 from Memba district. Erati district started reporting cases from week 41 and Nacoroa started reporting cases from week 42.
Namibia	Hepatitis E	Ungraded	18-Dec-17	14-Dec-17	22-Dec-17	37	9	1	2.7%	Between 19 October 2017 and 22 December 2017, a total of 37 suspected cases were reported. As of 22 December 2017 a total of 27 laboratory samples tested negative for Hepatitis A, B, and C and were sent to a lab in South Africa for further testing, where 9 tested positive for Hepatitis E. Of the positive cases, 88.9% (8/9) are from Havana settlement which is an informal settlement within the capital district, Windhoek.
Niger	Humanitarian crisis	G2	1-Feb-15	1-Feb-15	11-Aug-17	-	-	-	-	The security situation remains precarious and unpre-dictable. On 28 June 2017, 16 000 people were dis-placed after a suicide attack on an internally displaced persons 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.
Niger	Meningitis	Ungraded	-	29-Sep-17	9-Dec-17	86	11	1	1.2%	In week 49, 2 districts in Niger's Zinder region have crossed the epidemic threshold: Mirriah and Magaria. Between week 39 (start of the epidemic season) and week 49, a cumulative total of 86 suspected and confirmed cases including 1 death (CFR: 1.2 %), were reported. The main affected regions include: Mirriah (47 cases and 1 death), Magaria (12 cases), Tahoua (8 cases) and Madaoua (6 cases). Neisseria meningitidis sero-group C was confirmed by PCR in 11 isolates.
Niger	Hepatitis E	Ungraded	2-Apr-17	2-Jan-17	19-Nov-17	2 078	439	39	1.9%	The outbreak continues to improve. The majority of cases have been reported from Diffa, N'Guigmi, and Bosso health districts. Case incidence continues to decline, 11 suspected cases have been reported in week 46. No cases have been reported since week 46 of 2017.

Country	Event	Grade†	WHO notified	Start of reporting period	End of reporting period	Total cases	Confirmed cases	Deaths	CFR	Comments
Nigeria	Humanitarian crisis	Protracted 3	10-Oct-16	n/a	17-Dec-17	-	-	-	-	The protracted conflict has resulted in widespread population displacement, restricted access to basic social services, including healthcare and protection needs, and a deepening humanitarian crisis. An estimated 8.5 million people have been affected and are in need of life-saving assistance, including 1.7 Million IDPs.
Nigeria	Cholera (nation wide)	Ungraded	7-Jun-17	1-Jan-17	10-Dec-17	3 714	43	84	2.3%	Between weeks 1 and 49, 3 714 cases were reported from 20 states compared to 727 suspected cases from 14 states during the same period in 2016. The cumulative total of cases and deaths in 2017 surpasses that observed during the same period in 2016 (727 suspected cases, 32 deaths).
Nigeria	Lassa Fever	Ungraded	24-Mar-15	1-Dec-16	1-Dec-17	985	294	126	12.8%	The outbreak is currently active in five states: Ondo, Edo, Plateau, Bauchi, and Kaduna. In Week 48, eight new confirmed cases were reported from Edo (5), Ondo (2) and Bauchi (1) states.
Nigeria	Hepatitis E	Ungraded	18-Jun-17	1-May-17	16-Nov-17	1 262	182	8	0.6%	Since the peak of the outbreak in Borno state in week 25 the number of cases has been re-increasing from week 42 to week 46, mainly due to the spread of the outbreak in Rann, Kala Balge. No case of acute jaundice has been reported in Mobbar since week 35.
Nigeria	Yellow fever	Ungraded	14-Sep-17	7-Sep-17	19-Dec-17	341	32	45	13.2%	A total of 341 suspected cases have been reported from sixteen states: Abia, Borno, Kogi, Kwara, Kebbi, Plateau, Zamfara, Enugu, Oyo, Anambra, Edo, Lagos, Kano, Nasarawa, Katsina, and Niger. Thirty-two cases from six states (Kano, Kebbi, Kogi, Kwara, Nasarawa, and Zamfara) have been laboratory-confirmed at IP Dakar.
Nigeria	Monkeypox	Ungraded	26-Sep-17	24-Sep-17	9-Dec-17	172	61	1	0.6%	Suspected cases are geographically spread across 22 states and the Federal Capital Territory (FCT). Sixty-one laboratory-confirmed cases have been reported from 14 states/territories (Akwa Ibom, Abia, Bayelsa, Benue, Cross River, Delta, Edo, Ekiti, Enugu, Lagos, Imo, Nasarawa, Rivers and FCT).
São Tomé and Principé	Necrotising cellulitis/fasciitis	G2	10-Jan-17	25-Sep-16	17-Dec-17	2 422	0	0	0.0%	Over past 11 weeks the incidence of new cases remained stable with an average of 32 cases per week. In week 50, 37 cases reported across six of the seven districts: Me-zochi (12), Agua Grande (9), Lobata (2), Cantagalo (12), Lembá (1) and Príncipe (1). Currently, 22 cases are receiving care in hospital and no deaths have been directly attributed to the infection.
Senegal	Dengue fever	Ungraded	30-10-2017	28-09-2017	17-Dec-17	783	136	0	-	Since 28 September, the date of confirmation of the first cases of dengue fever in the Louga region, 136 cases were confirmed from the Louga region (128), Fatick (2), Mbour (1), and Dakar (5). Analyses by Institut Pasteur Dakar have shown that Dengue virus type 1 (DENV-1) is the only serotype circulating. As of 17 December 2017, no severe cases and no deaths have been reported.
Seychelles	Dengue fever	Ungraded	20-Jul-17	18-Dec-15	28-Nov-17	4 233	1 429	-	-	As of 28 November, 4 233 cases have been reported from all regions of the three main islands (Mahé, Praslin, and La Digue). The trend in the number of cases has been decreasing since week 23.
South Africa	Listeriosis	G1	6-Dec-16	4-Dec-16	28-Dec-17	696	696	61	8.8%	Detailed update given above.
South Sudan	Humanitarian crisis	G3	15-Aug-16	n/a	15-Dec-17	-	-	-	-	The situation remains volatile, fighting is ongoing on multiple fronts and displacement continues. The start of the dry season is expected to improve humanitarian access to the most vulnerable population but at the same time, communal conflicts are expected to be more frequent with subsequent injuries and deaths. Severe acute malnutrition, malaria, measles, kala-azar, and cholera are the top ranking public health risks affecting the already distressed populations.

Country	Event	Grade†	WHO notified	Start of reporting period	End of reporting period	Total cases	Confirmed cases	Deaths	CFR	Comments
South Sudan	Cholera	Ungraded	25-Aug-16	18-Jun-17	15-Dec-17	21 576	510	462	2.2%	Cholera transmission continues to decline nationally. Since week 47, the outbreak has been localized in two counties (Juba and Budi), and no new cholera cases were reported in these two counties in week 49 and 50 of 2017.
Tanzania	Cholera	G1	20-Aug-15	1-Jan-17	24-Dec-17	4 770	-	88	1.8%	In week 51, a total of 175 new cases with 5 deaths (CFR: 2.9%) have been reported compared to 70 cases with 1 death (1.4%) in week 50. This week, cases have been reported from six regions; Rukwa (45 cases), Songwe (38 cases), Manyara (33 cases and two deaths), Dodoma (24 cases and two deaths), Kigoma (28 cases and one death) and Ruvuma (7 cases).
Uganda	Humanitarian crisis - refugee	Ungraded	20-Jul-17	n/a	1-Dec-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 1 398 991, as of 1 December 2017. More than 75% of the refugees are from South Sudan and 16.6% are from DR Congo.
Uganda	Measles	Ungraded	8-Aug-17	24-Apr-17	3-Oct-17	623	34	-	-	The outbreak is occurring in two urban districts: Kampala (310 cases) and Wakiso (313 cases).
Uganda	Cholera	Ungraded	28-Sep-17	25-Sep-17	29-Nov-17	225	17	4	1.8%	The outbreak in Kasese District is still ongoing. The number of sub-counties affected by this outbreak has continued to rise and has now reached twelve sub-counties. Nyakiyumbu sub-County remains the most affected in the district. Another outbreak was identified in Kisoro district. So far, three cases were admitted, including 1 confirmed.

†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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