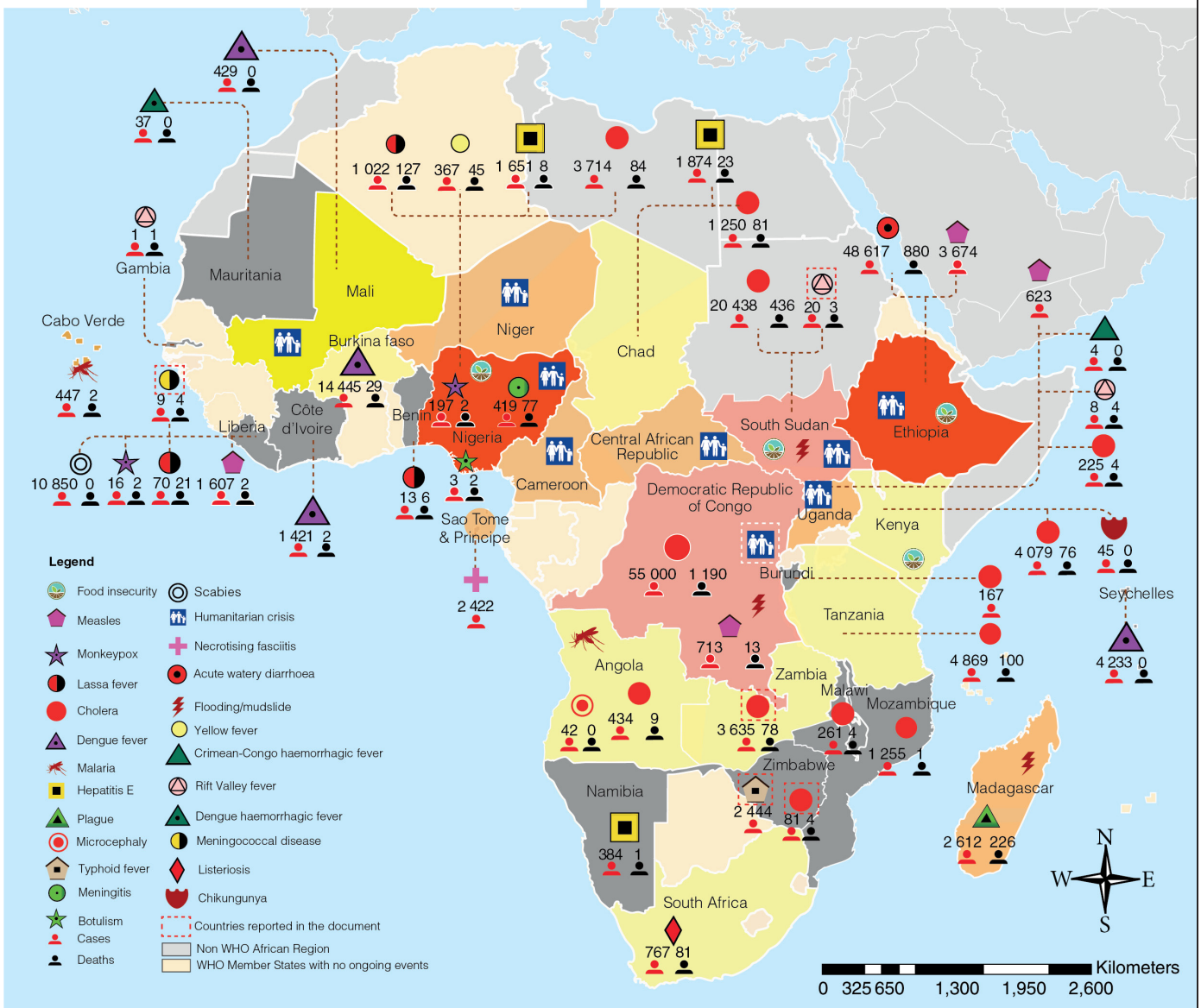
WEEKLY BULLETIN ON OUTBREAKS AND OTHER EMERGENCIES

Week 4: 20 - 26 January 2018
Data as reported by 17:00; 26 January 2018

World Health Organization
REGIONAL OFFICE FOR Africa
WHO Health Emergencies Programme

2	53	44	11
New events	Ongoing events	Outbreaks	Humanitarian crises



2 Grade 3 events	**6** Grade 2 events	**8** Grade 1 events	**36** Ungraded events
2 Protracted 3 events	**0** Protracted 2 events	**1** 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 55 events in the region. This week's edition covers key new and ongoing events, including:

  - Meningococcal disease in Liberia
  - Humanitarian crisis in Democratic Republic of the Congo
  - Typhoid fever in Zimbabwe
  - Cholera in Zimbabwe
  - Cholera in Zambia
  - Suspected Rift Valley fever 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. Since the beginning of the year, eight events have been closed including outbreaks of foodborne illness in Benin, influenza A H1N1 in Ghana, malaria in Kenya, Crimean-Congo haemorrhagic fever in Mauritania, meningitis and hepatitis E in Niger, dengue fever in Senegal, and anthrax in Zambia.

- **Major challenges include:**

  - The humanitarian situation in Democratic Republic of the Congo has continued to deteriorate, and the current level of assistance from national and international partners is insufficient to mount an adequate response. The recent upsurge in cholera cases in Kinshasa, with potential spread to other areas, is an additional concern, and response to this outbreak by national and international partners, including WHO, is ongoing.

  - The outbreak of meningococcal disease in Liberia near the borders of Guinea and Sierra Leone is of concern due to the evidence of spread within Liberia and potential for cross-border spread. Continued scale up of response activities in Liberia and preparedness in the other two countries, combined with regular information sharing, is needed to prevent new cases and control the outbreak.

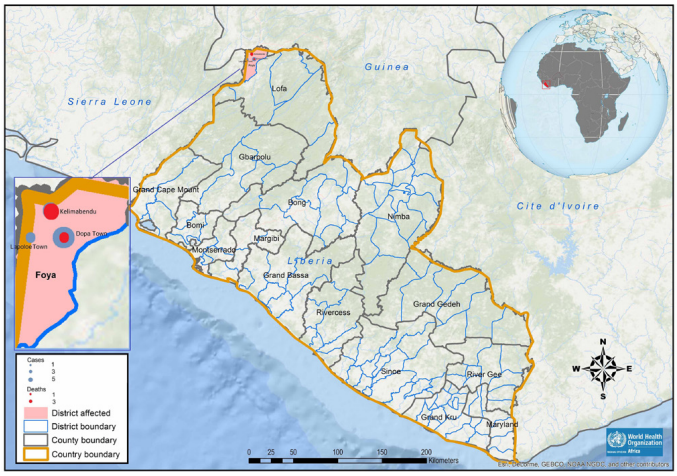
Ongoing events

Meningococcal disease | **Liberia** | 9 **Cases** | 4 **Deaths** | 44.4% **CFR**

EVENT DESCRIPTION

On 19 January 2018, the Lofa County Health team notified the National Public Health Institute of Liberia (NPHIL), the Ministry of Health (MOH), and WHO of a cluster of cases of unexplained illness and death from Foya district, Lofa County. As of 23 January 2018, a total of nine cases, including four deaths (case fatality rate: 44.4%) had been reported from three neighbouring villages. The cases presented with symptoms including headache, general body weakness, body pain, and, among children, uncontrollable crying. The purported index case was a 45 year-old male who fell ill on 23 December 2017 and died on 1 January 2018. A retrospective investigation found that three members of the same family (the index case and two of his children) were affected, as were six other individuals in Kelimabendu town and two other neighbouring towns. Six of the nine cases (66.7%) were male; the cases ranged in age from 3 to 85 years.

Geographic distribution of meningococcal disease cases in Lofa County, Liberia, 23 December 2017 – 23 January 2018



Laboratory samples were collected from three patients and *Neisseria meningitidis* serogroup W was identified in samples from one deceased case (oral swab and cardiac fluid) and one living case (oral swab) by RT-PCR. Testing of these samples for Ebola (RT-PCR), Lassa fever (RT-PCR), yellow fever (serology- IgM), and typhoid (WIDAL) at the National Reference Laboratory have yielded negative results. Samples collected from four other suspected cases have been shipped to the National Reference Laboratory for confirmatory testing and results are pending. A cumulative total of five cases have been hospitalized, and three are currently inpatients.

PUBLIC HEALTH ACTIONS

- The Lofa County Health team is coordinating the response to this event, with support from NPHIL, the MOH, WHO, and US CDC.
- NPHIL and the MOH have deployed two epidemiologists to support field investigation and response. A WHO medical epidemiologist is also supporting outbreak response activities.
- Community-based surveillance has been enhanced, and approximately 300 community members have been trained on a simplified case definition for meningogoccal disease.
- Community health volunteers have been mobilized to conduct active case finding and contact tracing in affected communities.
- Twenty-eight healthcare workers were provided with refresher training on the case management protocol for meningococcal disease.
- On 23 January 2018, the NPHIL/MOH issued a press release to inform the public about the outbreak and provide education regarding measures to prevent meningococcal infection.
- A mass public awareness campaign has been conducted via the Foya district radio station and community leaders and community development committees are leading risk communication and social mobilization activities in the affected area.
- Information sharing with health officials in neighboring communities in Sierra Leone and Guinea is ongoing.

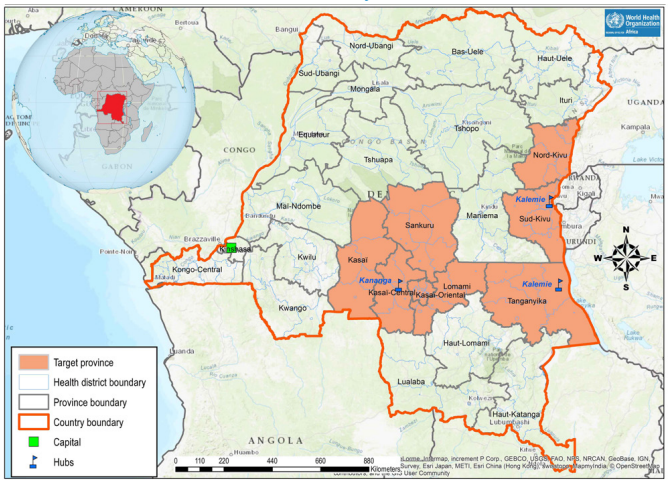
SITUATION INTERPRETATION

The timing and location of cases suggests disease transmission from Kelimabendu town to two others, and the proximity of these towns to neighbouring Guinea and Sierra Leone indicates that this outbreak may have cross-border implications given the porous border points in the area. Surveillance should be scaled up in the border areas in Guinea and Sierra Leone and regular information sharing among the three countries should continue in order to inform a coordinated response to the outbreak. Unlike two of its neighbouring countries (Guinea and Ivory Coast), Liberia is not considered as part of the meningitis belt, where the highest burden of meningococcal disease in the world occurs. However, in light of the present outbreak and a previous cluster of meningococcal septicaemia in southeast Liberia (Sinoe County) in April 2017, risk communication, improved case management, and laboratory preparedness activities should continue in Lofa County and be considered at the national level.

EVENT DESCRIPTION

The complex humanitarian crisis in Democratic Republic of the Congo continues to deteriorate, with further armed conflict in several parts of the country. In North Kivu there are renewed activities by armed groups and deterioration of the security situation in the Beni and Lubero territories. Due to a lack of funding, internally displaced people are still awaiting assistance in North and South Kivu and in other provinces. In South Kivu, there is an extension of fighting along the Lwama River, Kabambare Territory (Maniema), on the border of the provinces of Maniema, Tanganyika and South Kivu. Maniema has seen a major deterioration in the humanitarian situation since October 2017, particularly in the territories of Kabambare and Kasongo. According to the preliminary results of a comprehensive security survey of food (EFSA) conducted between December 2017 and January 2018 by the World Food Program (WFP) in collaboration with the National Institute of Statistics (INS), 85% of 4.5 million people covered by the nutrition survey (3.8 million) suffer from food insecurity and require emergency humanitarian assistance. A total of 37 000 people were displaced in Pweto territory in December 2017 as a result of insecurity and ongoing conflict in Tanganyika has resulted in the movement of 264 000 displaced people to the Malemba Nkulu-Pweto-Mitwaba triangle. In Kazumba territory, Kasaï Central Province, violence on 2 January 2018 led to several hundred households fleeing into the bush and on 14 January 2018 there were clashes between the Congolese army (FARDC) and militia at Kananga Airport. There was also significant population displacement in Kasaï Province in the areas of Mbawu, Mukwayi and Ntumba Mupoyi as a result of reprisals by FARDC against militia.

Humanitarian crisis in Democratic Republic of the Congo
as of 22 January 2018



There was a decrease in the number of suspected cases of cholera during week 2 of 2018, confirming the downward trend both nationally and in the Kasaï region. However, the city of Kinshasa continues to report new suspected cases. The cumulative number of suspected cholera cases since the beginning of 2018 is 1 785, including 33 deaths (case fatality rate 1.8%). Measles infections have shown a decreasing trend and the number of cases reported during week 2 of 2018 is five times lower than in the same period in 2017. The cumulative number of suspected cases since the start of 2018 is 713, with 13 deaths (case fatality rate 1.8%). In addition, suspected cases of acute flaccid paralysis (8), neonatal tetanus (6), yellow fever (8) and monkey pox (22) were reported during week 2 of 2018.

PUBLIC HEALTH ACTIONS

- A multidisciplinary WHO team (one field coordinator, five epidemiologists, one expert in risk communication/community engagement, one water, sanitation and hygiene expert and one logistician) have been deployed to the country office in Kinshasa to support the response to cholera in the city. WHO has repurposed 57 experts from other programmes to support the cholera response.
- WHO is also supporting the planning of a cholera vaccination campaign in Kinshasa. A measles vaccination campaign is scheduled for 30 January 2018 in Bukavu/ South Kivu, with support from UNICEF, WHO, and other partners.
- Teleconferences are being held between the WHO country office, regional office and headquarters to discuss security issues, the humanitarian crisis and the cholera situation. Coordinators are also participating in provincial meetings on these topics.
- WHO teams continue to participate in weekly meetings of the validation of integrated disease surveillance and response (IDSR) data at provincial level.
- The Kananga health sub-cluster participated in a multi-sectoral survey of humanitarian assistance needs conducted by OCHA in Kaoka.
- WHO has released an additional US$ 1.25 million from the Contingency Fund for Emergencies (CFE). Two financing proposals have been submitted – an ECHO proposal for Euros 1.8 million for a period of 9 months in the provinces of Kasaï, Kasaï Central and Kasaï Oriental, and a Central Emergency Response Fund (CERF) proposal for US$ 1.7 million in Kasaï, Kasaï Central, Upper Lomami and Lomami – to support response to the humanitarian crisis.

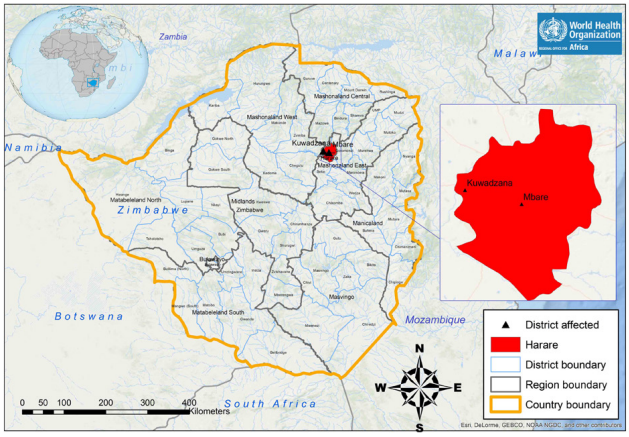
SITUATION INTERPRETATION

The security situation in the Democratic Republic of the Congo continues to deteriorate, further exacerbating the humanitarian crisis. The release of funds for emergency operations support is still not sufficient for an effective response. In addition, there is low engagement by key partners in the cholera response in Kinshasa, which is a concern as there is the potential for significant spread of the disease from this centre. WHO and partners are committed to continuing support for the cholera response in Kinshasa. At the national level, there is an urgent need for international authorities and aid organizations to scale up the response to the poor security situation in affected provinces.

EVENT DESCRIPTION

The outbreak of typhoid fever in Zimbabwe continues to evolve. The initial cases were reported from Mbare, the high-density, southern suburb of Harare, Zimbabwe, and presented with symptoms of fever, abdominal pain, diarrhoea, and headaches. The outbreak was confirmed on 13 October 2017 and, to date, a total of 2 444 cases including 160 confirmed cases, with no deaths have been reported. The outbreak is mainly in the western and southern districts of Harare, with Mbare and Kuwadzana being the areas most affected. The overall attack rate in Harare peaked at 15 cases per 100 000 population in the epidemiological week 45 of 2017 and has decreased to 5 cases per 100 000 population in week 3 of 2018. The attack rate in Mbare peaked in week 43 of 2017, with 169 cases reported per 100 000 population, which has decreased to 55 cases per 100 000 population in week 3 of 2018. In Kuwadzana, the attack rate peaked in week 46 of 2017 with 45 cases per 100 000 population, decreasing to 9 cases per 100 000 population in week 3 of 2018.

Geographic distribution of typhoid fever cases in Zimbabwe, week 45, 2017 – week 3, 2018



PUBLIC HEALTH ACTIONS

- A rapid response team was deployed to conduct initial investigations on 10 October 2017.
- Response teams were activated in affected districts and multisectoral response activities are ongoing in Mbare and Kuwadzana.
- Treatment camps have been established in Mbare and Kuwadzana
- Laboratory-based surveillance and sensitivity testing of samples from confirmed cases is ongoing.
- Environmental assessments are being conducted in the affected areas, including water quality and food testing.
- Social mobilization activities are being implemented by trained volunteers and social mobilizers. Road shows with interactive role play and mass media (radio and television) campaigns continue to communicate key messages for typhoid prevention.

SITUATION INTERPRETATION

The key drivers of this outbreak are the lack of safe drinking water, inadequate sanitation, and unhygienic conditions in the affected areas, and these factors need to be addressed in order to bring this outbreak under control. Specifically, the poor condition of water and sanitation infrastructure in Mbare and use of drinking water from contaminated boreholes require attention to prevent propagation of this outbreak. Although tanker trucks are being used to supply safe drinking water to the suburbs in Harare, people living at higher elevations within these areas remain severely affected given the greater difficulty of access. More widespread implementation of chlorinators on boreholes, and community educational activities are needed to effectively prevent future cases.

EVENT DESCRIPTION

On 22 January 2018, the Ministry of Health of Zimbabwe formally notified WHO of a cholera outbreak ongoing in Chegutu municipality in Mashonland West province of Zimbabwe, southwest of the capital city of Harare. The index case, reported on 8 January 2018, was an 80 year-old female who sought treatment at a private clinic for hypertension, diabetes, and watery diarrhoea. Cholera was not immediately suspected and the patient subsequently died at home. As of 26 January 2018, a total of 81 cases (4 confirmed, 3 probable, 74 suspected) and four deaths have been reported (case fatality rate: 4.9%). A cumulative total of 33 cases have been hospitalized since the beginning of the outbreak. The three further patients who died all attended the funeral of the index case and took part in preparing the body for burial. Of 18 stool samples collected from cases, four were confirmed positive as *Vibrio cholerae* Ogawa. Of the four deaths, three were reported from health facilities and one was reported from the community. All the contacts of the suspected and confirmed cases have been identified and followed up.

Geographical distribution of cholera cases in Zimbabwe, 8 – 26 January 2018

PUBLIC HEALTH ACTIONS

- The Ministry of Health is responding to the outbreak with support from WHO, UNICEF, Médecins Sans Frontières, Zimbabwe Red Cross, and other partners.
- The district civil protection committee has been activated and coordination meetings are being held daily and are chaired by the district administrator
- Together with UNICEF and WHO, the Provincial and National Rapid Response Teams are conducting field investigations and supporting the response activities.
- Active surveillance including contact tracing of persons who attended the funerals of the cholera deaths is ongoing in Harare and other areas, with support from WHO.
- A line list of cases and deaths is being updated daily.
- Sensitization on early detection of cholera cases has been carried out in all health facilities
- The cholera case definition and cholera control guidelines have been disseminated to clinicians.
- Laboratory testing for the suspected cases is ongoing. Out of the eight collected stool specimens, three were positive for *Vibrio cholerae* 01 Ogawa.
- A treatment centre has been set up close to the community where cases have been reported, and suspected cases identified at other health facilities in the area are being referred.
- WHO donated an interagency diarrhoeal disease kit (IDDK) to the Ministry of Health to support management of cholera cases.
- Water quality testing is ongoing in the affected areas, along with the provision of clean water in the affected areas, and distribution of Aquatabs, chlorine, soap, and jerry cans for water storage.
- Distribution of the information, education, and communication (IEC) materials is ongoing, coupled with household visits to educate and raise awareness about cholera in the affected areas. A total of 5 500 households have received health education.
- Social mobilization activities are ongoing in the area schools and all private clinics and pharmacies have been sensitized to the risk of cholera.

SITUATION INTERPRETATION

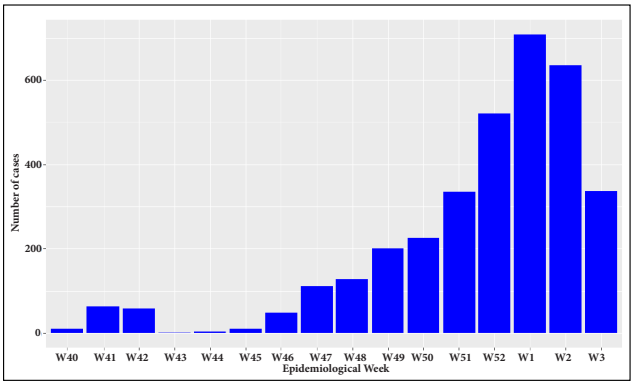
Large outbreaks of cholera have occurred in the past, and the current event is of particular concern, because lack of safe water supplies in the area could lead to further propagation of cases. Current efforts to conduct active case finding, case management, risk communication, and to implement WASH and other environmental health interventions should continue to decrease the risk of spread to other areas. Some neighbouring countries such as Malawi, Mozambique and Zambia, are also experiencing cholera outbreaks, and continued support from WHO and other national and international partners is needed to bring the disease under control both in Zimbabwe and in the region.

Cholera | **Zambia** | 3 635 **Cases** | 78 **Deaths** | 2.1% **CFR**

EVENT DESCRIPTION

The cholera outbreak in Lusaka District, Zambia, reached its peak in week 1 of 2018, with more than 650 cases per week. Since then, the weekly number of cases has decreased to 337 new cases with two deaths (case fatality rate 0.6%) reported from 14-20 January 2018 compared with 636 new cases with 13 deaths (case fatality rate 2.0%) in the previous week. As of 23 January 2018, a cumulative total of 3 635 cases with 78 deaths (case fatality rate 2.1%) have been reported. The majority (94%; 3 424) of cases and deaths (90%; 70) have been reported from the urban Lusaka district. The cases are concentrated in four sub-districts of Lusaka: Chipata (1 180 cases), Kanyama (1 092), Matero (483), and Chawama (353 cases). Cholera cases have also been reported from 23 other districts outside Lusaka, where 211 cases with eight deaths (case fatality rate 3.8%) have been reported. To date, 216 out of 702 stool samples have tested positive by culture for *Vibrio cholerae* O1 Ogawa, seven for *Salmonella* spp. and seven for *Shigella* spp.

Epidemic curve of cholera cases in Lusaka district, Zambia, week 40, 2017 - week 3, 2018



PUBLIC HEALTH ACTIONS

- The Ministry of Health continues to use a multi-sectoral and multi-disciplinary approach to lead response to the outbreak, with participation by WHO and other partners.
- The Zambian health authorities, with support from WHO, conducted an oral cholera vaccination campaign, with 1.3 million individuals vaccinated in Chawama, Kanyama, Matero, and Chipata sub-districts and inmates at Lusaka Central Prison.
- The initial six cholera treatment centres in the sub-districts have been converted to cholera treatment units and a cholera treatment hospital with a 500 bed capacity and room for expansion has been established.
- Water, sanitation and hygiene (WASH) interventions are ongoing in both affected and non-affected areas. Waste collection and inspection of public premises is ongoing in Lusaka to ensure standards for water, sanitation, and hygienic conditions are met.
- A total of 28 tanker trucks are being used to deliver drinking water to 12 locations across Lusaka.
- A call centre has been set up to receive complaints regarding sewer blockages.

SITUATION INTERPRETATION

The recent decrease in the weekly number of cholera cases in Zambia is encouraging, and demonstrates the effectiveness of prevention and control measures. However, contact tracing, environmental investigations, and health promotion activities need to be continued and implementation should be expanded to all affected areas. Continued WASH activities including installation of water access points and waste management are crucial to bringing this outbreak to a close.

Suspected Rift Valley fever	South Sudan	20 Cases	3 Deaths	15.0% CFR

EVENT DESCRIPTION

The outbreak of suspected Rift Valley fever (RVF) in Eastern Lakes State, South Sudan, continues to be closely monitored by WHO and partners. Since our last report on 19 January 2018 *(Weekly Bulletin 3 of 2018)*, seven new suspected cases have been reported from Yirol East County. As of 26 January 2018, two are still hospitalized at a treatment facility in Yirol East. A total of 20 cases have been reported, including three confirmed cases, three probable cases who died and had epidemiological links to the confirmed cases, four classified as non-cases following RVF laboratory testing, and ten cases for whom laboratory testing is pending at the Uganda Viral Research Institute (UVRI). This week, samples from six cases tested negative for Ebola, Marburg, Crimean-Congo haemorrhagic fever, RVF, and Sosuga viruses by PCR at UVRI. Serological testing is ongoing. A total of three deaths have been reported. Since one animal sample showed high RVF IgG titres indicative of previous RVF infection last week, no new results of animal sample testing have become available.

Geographical distribution of suspected Rift Valley fever cases in South Sudan, 7 December 2017 – 26 January 2018

On 28 December 2017, the Ministry of Health of South Sudan reported a cluster of three severe haemorrhagic cases, which were epidemiologically linked by place (all occurred in Thonabutkok village, Yirol East County) and time (onset of illness during epidemiological weeks 49 and 51). There was no close physical contact between the cases and no history of travel. Goats, sheep, and cattle in the area also showed evidence of zoonotic haemorrhagic illness. Wild bird die-offs were reported in association with the initial cluster of cases, and there have been continued reports of animal deaths in the outbreak area.

PUBLIC HEALTH ACTIONS

- The Ministry of Health continues to convene regular multi-sectoral and inter-agency meetings to coordinate investigation and response activities, with participation by the Ministry of Animal Health Resources and Fisheries, WHO, FAO, Health Cluster and partners. The state level taskforce holds daily coordination meetings in Yirol East County, with technical support from the national Ministry of Health, the Ministry of Livestock, WHO, and partners.
- On 19 January 2018, a joint Ministry of Health/WHO rapid response team arrived in Yirol East and have investigated the two most recent suspect cases, collected and shipped samples to UVRI for testing, and discussed the establishment of a mechanism for case investigation and sample collection with the State Minister of Health and partners. They also trained teams in active case finding and trained 15 local healthcare workers in RVF case management.
- The rapid response team also conducted a media sensitization meeting with local journalists to improve their understanding of the outbreak. Religious leaders have also been engaged to communicate messages about RVF control and prevention to their congregants. A radio jingle is being used to raise awareness about RVF in affected and at-risk areas.
- Dissemination of key messages on RVF prevention and control is ongoing.
- Community Health and Development Organization (CHADO), with support from UNICEF, has deployed 21 community mobilizers and seven supervisors to implement community education campaigns in Yirol East.
- The Ministry of Health and Ministry of Livestock and Fisheries continue to convene regular multisectoral and multi-agency meetings to coordinate investigation and response activities.
- There is no designated treatment centre for managing new suspected cases, but discussions are ongoing between the Ministry of Health and partners to establish one.

SITUATION INTERPRETATION

Close monitoring of the suspected RVF outbreak in South Sudan continues, and there is a continued need for support for investigations, specifically regarding animal deaths in Yirol East County. Surveillance in human and animal populations in the affected and at-risk areas should continue to be scaled up to rapidly detect new human and animal cases, and continued support from partners and international laboratories will be needed to support testing of animal and human cases and establish a treatment centre to clinically manage future cases. Investigational findings available to date indicate that Rift Valley fever is the etiological agent of this outbreak, but more substantial laboratory confirmation is needed.

Summary of major challenges and proposed actions

Challenges

- The need for assistance from international partners to improve security and address the major humanitarian needs in Democratic Republic of the Congo remains a challenge to effectively responding to the humanitarian crisis there. The recent cholera outbreak in Kinshasa will need to be addressed quickly in order to reduce the risk of exacerbation through spread to other parts of the country.
- The need for coordination of the response to the outbreak of meningococcal disease in Liberia with Guinea and Sierra Leone may represent an additional challenge to response, given the evidence of disease spread to new locations in the affected area and uncontrolled movement of people between the three countries.

Proposed actions

- International partners urgently need to scale up response measures to meet the major humanitarian needs in Democratic Republic of the Congo, particularly among internally displaced populations. Continued coordinated action by the Ministry of Health, WHO, and other partners to halt the cholera outbreak in Kinshasa is needed to reduce the possibility of exacerbation of the national humanitarian crisis through the spread of the outbreak to new areas.
- Current efforts to share information regarding the meningococcal disease outbreak should continue between Liberia, Guinea, and Sierra Leone, and scale up of response and preparedness activities in all three countries is needed to prevent spread of the outbreak to new locations and to facilitate rapid detection and response to new cases.

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										
Liberia	Meningococcal disease	Ungraded	19-Jan-18	23-Dec-17	23-Jan-18	9	2	4	44.4%	Detailed update given above.
Zimbabwe	Cholera	Ungraded	22-Jan-18	8-Jan-18	26-Jan-18	81	4	4	4.9%	Detailed update given above.
Ongoing events										
Angola	Cholera	G1	2-Jan-18	21-Dec-17	20-Jan-18	434	4	9	2.1%	On 21 December 2017, two suspected cholera cases were reported from Uige district, Uige province. Both of these cases had a history of travel to Kimpangu (DRC). On 29 December 2017, the National Public Health Laboratory confirmed *Vibrio cholerae* infection in samples collected from the initial two cases. The trend in the number of cases has decreased, with 46 cases and no deaths reported in Week 3 (ending 20 January 2018).
Angola	Malaria	Ungraded	20-Nov-17	n/a	30-Sep-17	-	-	-	-	The outbreak has been ongoing since the beginning of 2017. 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 in these two contiguous provinces.
Angola	Microcephaly - suspected Zika virus disease	Ungraded	10-Oct-17	End September 2017	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	Lassa fever	Ungraded	13-Jan-18	8-Jan-18	26-Jan-18	13	4	6	46.2%	Thirteen cases (4 confirmed, 1 probable and 8 suspected) including 4 deaths were reported. Seven cases were residents of Nigeria who subsequently travelled to Benin. To date, 323 contacts have been identified and are under follow-up.
Burkina Faso	Dengue fever	G1	4-Oct-17	1-Jan-17	10-Dec-17	14 445	-	29	0.2%	Weekly case counts have decreased since week 44. The majority (62%) of cases have been 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 6 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.

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 worsened. Terrorist attacks and suicide bombings are continuing and causing 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.
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	15-Jan-18	-	-	-	-	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, and the number of internally displaced persons has increased continuously since March 2017.
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 2017 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	Flood	Ungraded	20-Nov-17	20-Nov-17	25-Jan-18	-	-	-	-	From 4-7 January 2018, a flooding event occurred in Kinshasa. The flood resulted in 45 deaths, 5 100 flooded homes, 192 collapsed houses and 2 damaged cholera treatment centres (CTCs). A total of 659 cholera cases and 14 deaths (CFR: 2.1%) have been reported since the beginning of 2018.

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	Humanitarian crisis	G3	20-Dec-16	17-Apr-17	22-Jan-18	-	-	-	-	Detailed update given above.
Democratic Republic of the Congo	Cholera		16-Jan-15	1-Jan-17	7-Jan-18	55 000	841	1 190	2.2%	The trend of the outbreak continues to improve nationwide. During week 2 of 2018, a total of 763 suspected cases and 14 deaths (CFR: 1.8%) were reported, compared to 1 022 suspected cases and 19 deaths (CFR: 1.9%) during week 1 of 2018. Most of the cases are reported from during this week are reported from Kinshasa (189 cases), North Kivu (272) and South Kivu (117). From 4-7 January 2018, a flooding event affected areas of Kinshasa that are currently reporting cholera cases.
Democratic Republic of the Congo	Measles		10-Jan-17	1-Jan-18	14-Jan-18	713		13	1.8%	Over 43 000 cases were reported in 2017. In weeks 1 and 2 of 2018, 713 cases and 13 deaths were reported, with a stable weekly number of cases since week 52 of 2017.The trend of the outbreak has decreased this week. Most of the suspected cases this week were reported from South Kivu province.
Ethiopia	Humanitarian crisis	Protracted 3	15-Nov-15	n/a	3-Dec-17	-	-	-	-	This complex emergency includes outbreaks (acute watery diarrhoea, measles, and acute jaundice syndrome), the severe drought across northern, eastern, and central Ethiopia, and high levels of food insecurity and malnutrition. An estimated 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 %).
Gambia	Rift Valley fever (RVF)	Ungraded	3-Jan-17	25-Dec-17	3-Jan-18	1	1	1	100.0%	A 52 year-old man presenting with severe malaria was medically evacuated from the Gambia and hospitalized in Fann, Dakar. A blood sample collected from the case was positive for Rift Valley fever virus on IgM testing done at Institut Pasteur Dakar. The sample was negative for RVF and other arboviruses on PCR testing. An investigation is ongoing.
Kenya	Chikungunya	Ungraded	mid-December 2017	mid-December 2017	8-Jan-18	45	27	-	-	In Mid December 2017, Mombasa County received reports of increased cases of unknown febrile illness that presented with very high fever, joint pains and general body weakness. 45 suspected cases were reported across 6 sub-counties: Mvita, Kisauni, Nyali, Changamwe, Jomvu and Likoni. On 4 January 2018, 32 samples were shipped to the KEMRI laboratory and 27 tested positive for chikungunya on PCR.

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	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 are reported from Nairobi county.
Liberia	Suspected monkeypox	Ungraded	14-Dec-17	1-Nov-16	25-Jan-18	16	2	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), Rivercess(11) and Maryland(1). Two cases have been confirmed by PCR (from Maryland and Rivercess counties) and laboratory testing of samples from five other cases 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	1-Jan-17	24-Nov-17	70	28	21	30.0%	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. On 12 January 2018, a suspected case reported from Nimba County was confirmed by PCR. Contact tracing is ongoing.
Liberia	Scabies	Ungraded	11-Jan-18	11-Dec-17	18-Jan-18	10 850	17	0	0.0%	A total of 10 850 cases have been reported from five counties: Montserrado (9 647), Grand Bassa (687), Rivercess (315), Margibi (185), and Bong (16). All 17 confirmed cases have been reported from Montserrado county.
Madagascar	Cyclone	Ungraded	5-Jan-18	5-Jan-18	6-Jan-18	-	-	-	-	On 5 January 2018, tropical Cyclone AVA reached the East coast of Madagascar. The most affected regions were Analanjirofo, Atsinanana andVatovavy-Fitovinany. As of 6 January 2018, 1 009 people had been affected, including 695 displaced. Two dead and 21 injured were reported in the Atsinanana region.
Madagascar	Plague	G2	13-Sep-17	13-Sep-17	14-Jan-18	2 612	529	226	8.7%	Cases include pneumonic (2 008, 77%), bubonic (399, 15%), septicemic (1) and unspecified (204, 8%) forms of disease. Of the 2 008 clinical cases of pneumonic plague, 397 (20%) have been confirmed, 634 (32%) are probable and 977 (49%) remain suspected. The trend in the number of cases has been decreasing since 10 October 2017.
Malawi	Cholera	Ungraded	28-Nov-17	20-Nov-17	14-Jan-18	261	5	4	1.5%	During week 2 of 2018, 68 new cases were reported. As of 14th January 2018, a total of 261 cases including 4 deaths had been reported from 6 districts: Karonga, 194 cases (4 deaths); Nkhatabay, 18 cases (no death); Kasungu, 1 case (no death), Dowa, 4 cases (no death), Salima 9 cases (no death) and Lilongwe 35 cases (no death). No cases have been reported from the remaining districts in Malawi.
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.

Country	Event	Grade†	WHO notified	Start of reporting period	End of reporting period	Total cases	Confirmed cases	Deaths	CFR	Comments
Mali	Humanitarian crisis	Protracted 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	Dengue haemorrhagic fever	Ungraded	30-Nov-17	6-Dec-17	13-Dec-17	37	37	-	-	On 30 November 2017, 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 2017, the national reference laboratory 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	1 255	-	1	0.1%	The cholera outbreak is ongoing. Cases have been reported from three districts (Memba, Erati, and Nacaroa) 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	16-Jan-18	384	31	1	0.3%	A total of 384 cases have been seen at health facilities in Windhoek district. Thirty-nine percent of cases were reported from Havana informal settlement within the capital district. The trend in the number of cases is increasing.
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 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.
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).

Country	Event	Grade†	WHO notified	Start of reporting period	End of reporting period	Total cases	Confirmed cases	Deaths	CFR	Comments
Nigeria	Botulism	Ungraded	12-Jan-18	9-Jan-18	16-Jan-18	3	-	2	66.7%	On 9 January 2018, the NCDC was notified of two suspected cases of botulism involving a husband and his wife, both with symptoms onset on 7 January 2018. A third suspected case, their daughter, was admitted on 11 January with similar symptoms. The wife died on 8 January 2018, within 24 hours of being admitted to a private medical centre in Abuja. The father died on 15 January. The daughter is still admitted. Foodborne botulism was suspected based on the typical signs and symptoms such as cranial nerve paralysis. The diagnosis is yet to be confirmed by laboratory. So far, the source of infection has not been identified.
Nigeria	Lassa fever	Ungraded	24-Mar-15	1-Dec-16	24-Dec-17	1 022	308	127	12.4%	As of 21 January 2018, the outbreak was active in seven states: Benue, Ebonyi, Edo, Kogi, Lagos, Nasarawa, and Ondo. From 1-21 January 2018, a total of 107 cases and 14 deaths (CFR 13.1%) have been reported.
Nigeria	Hepatitis E	Ungraded	18-Jun-17	1-May-17	31-Dec-17	1 651	182	8	0.6%	The number of cases has been decreasing since week 51. Forty-three new cases were reported in Kala/Balge LGA in week 52 (ending 31 December 2017).
Nigeria	Yellow fever	Ungraded	14-Sep-17	7-Sep-17	10-Jan-18	367	33	45	12.3%	A total of 367 suspected cases have been reported from sixteen states: Abia, Anambra, Borno, Edo, Enugu, Kano, Katsina, Kebbi, Kogi, Kwara, Lagos, Nasarawa, Niger, Oyo, Plateau, and Zamfara. Thirty-three cases from seven states (Kano, Kebbi, Kogi, Kwara, Nasarawa, Niger, and Zamfara) have been laboratory-confirmed at IP Dakar.
Nigeria	Monkeypox	Ungraded	26-Sep-17	24-Sep-17	22-Dec-17	197	68	2	1.0%	Suspected cases are geographically spread across 22 states and the Federal Capital Territory (FCT). Sixty-eight 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).
Nigeria	Meningitis	Ungraded	26-Dec-17	1-Sep-18	18-Jan-18	419	74	77	18.4%	Cases have been reported from eight States; Zamfara (240), Katsina (72), Sokoto (22), Jigawa (24), Bauchi (17), Cross River (17), Kebbi (12), Yobe (9), Borno (3), Adamawa (2) and Kaduna (1). As of 18 January 2018, 74 of 155 (48%) samples tested were positive, including 46 (62%) positive for *Neisseria meningitidis* serogroup C (NmC).
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.
Seychelles	Dengue fever	Ungraded	20-Jul-17	18-Dec-15	28-Nov-17	4 233	1 429	-	-	As of 28 November 2017, 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.

Country	Event	Grade†	WHO notified	Start of reporting period	End of reporting period	Total cases	Confirmed cases	Deaths	CFR	Comments
South Africa	Listeriosis	G1	6-Dec-17	4-Dec-17	16-Jan-18	767	767	81	10.6%	Most cases have been reported from Gauteng Province (60%) followed by Western Cape (13%) and KwaZulu-Natal (7%) provinces. Cases have been diagnosed in both public (66%) and private (34%) healthcare sectors. Diagnosis was based most commonly on the isolation of *Listeria monocytogenes* in blood culture (71%), followed by CSF (24%). Ages range from birth to 93 years (median 26 years) and 41% are neonates aged ≤28 days. The source of the outbreak has not been identified and investigations are ongoing.
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 populations 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.
South Sudan	Cholera	Ungraded	25-Aug-16	18-Jun-16	29-Dec-18	20 438	512	436	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 reported during week 52, 2017. The last case in Budi was reported in week 47, 2017 and the last case reported from Juba was in week 50, 2017.
South Sudan	Suspected Rift Valley fever (RVF)	Ungraded	28-Dec-17	7-Dec-17	26-Jan-18	20	3	3	15.0%	Detailed update given above.
Tanzania	Cholera	G1	20-Aug-15	1-Jan-17	21-Jan-18	4 869	-	100	2.1%	From Weeks 1 to 3 of 2018, a total of 242 cases with 5 deaths (CFR: 2.1%) were reported. In week 3, cases have been reported from four regions: Rukwa (34 cases), Dodoma (23 cases), Songwe (5 cases), Ruvuma (4 cases). In 2015, 12619 cases including 199 deaths (CFR 1.6%) were reported; in 2016, 11360 cases including 172 deaths (CFR 1.5%) and in 2017, cumulative total of 4 627 cases including 95 (CFR: 2%) were reported in the United Republic of Tanzania.
Uganda	Humanitarian crisis - refugee	Ungraded	20-Jul-17	n/a	31-Dec-17	-	-	-	-	The influx of refugees to Uganda has continued as the security situation in the neighbouring countries remains fragile. According to UNHCR, between 1 - 4 January 2018, 207 refugees from South Sudan entered Uganda. The total number of registered refugees and asylum seekers in Uganda stands at 1 395 146, as of 31 December 2017. Aproximately 75% of the refugees are from South Sudan and 61% are children under 18.
Uganda	Measles	Ungraded	8-Aug-17	24-Apr-17	3-Oct-17	623	34	-	-	The outbreak is occuring 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.

Country	Event	Grade†	WHO notified	Start of reporting period	End of reporting period	Total cases	Confirmed cases	Deaths	CFR	Comments
Uganda	Rift Valley fever (RVF)	Ungraded	22-Nov-17	14-Nov-17	19-Jan-18	8	5	4	50.0%	As of 19 January 2018, three additional cases have been identified through enhanced surveillance. Five districts are affected: Kyankwanzi, Kiboga, Mityana, Kiruhura and Buikwe. They are all located within the cattle corridor.
Uganda	Crimean-Congo haemorrhagic Fever (CCHF)	Ungraded	27-Dec-17	23-Dec-17	6-Jan-18	4	1	-	-	As of January 6, 2018; 1 confirmed and 3 suspected cases had been identified. The confirmed case is a 9-year-old male (NE) from Luweero district and he was discharged on 5 January 2018 after being isolated at Kiwoko Hospital, Naseke district.
Zambia	Cholera	G1	4-Oct-17	4-Oct-17	23-Jan-18	3 635	67	78	2.1%	Detailed update given above.
Zimbabwe	Typhoid fever	Ungraded	-	1-Oct-17	21-Jan-18	2 444	160	-	-	Detailed update given above.
Recently closed events										
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. As of 23 January 2018, no cases have been reported since early December.
Ghana	Influenza A H1N1	Ungraded	6-Dec-17	30-Nov-17	14-Dec-17	95	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, 95 cases with four deaths (CFR: 4.2%), and since then no new cases were reported. The outbreak was localized in the school as no cases have been reported among community members. On 8 January 2017, MOH issued a statement declaring the end of the outbreak.
Senegal	Dengue fever	Ungraded	30-10-2017	28-Sep-17	15-Jan-18	806	138	0	-	Since 28 September, 138 cases have been confirmed from the Louga region (129), Fatick (2), Thies (2), and Dakar (5). Analyses by Institut Pasteur Dakar have shown that Dengue virus type 1 (DENV-1) is the only serotype circulating. No severe cases and no deaths have been reported, and on 15 January 2018, the Ministry of Health declared the end of the outbreak.

†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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