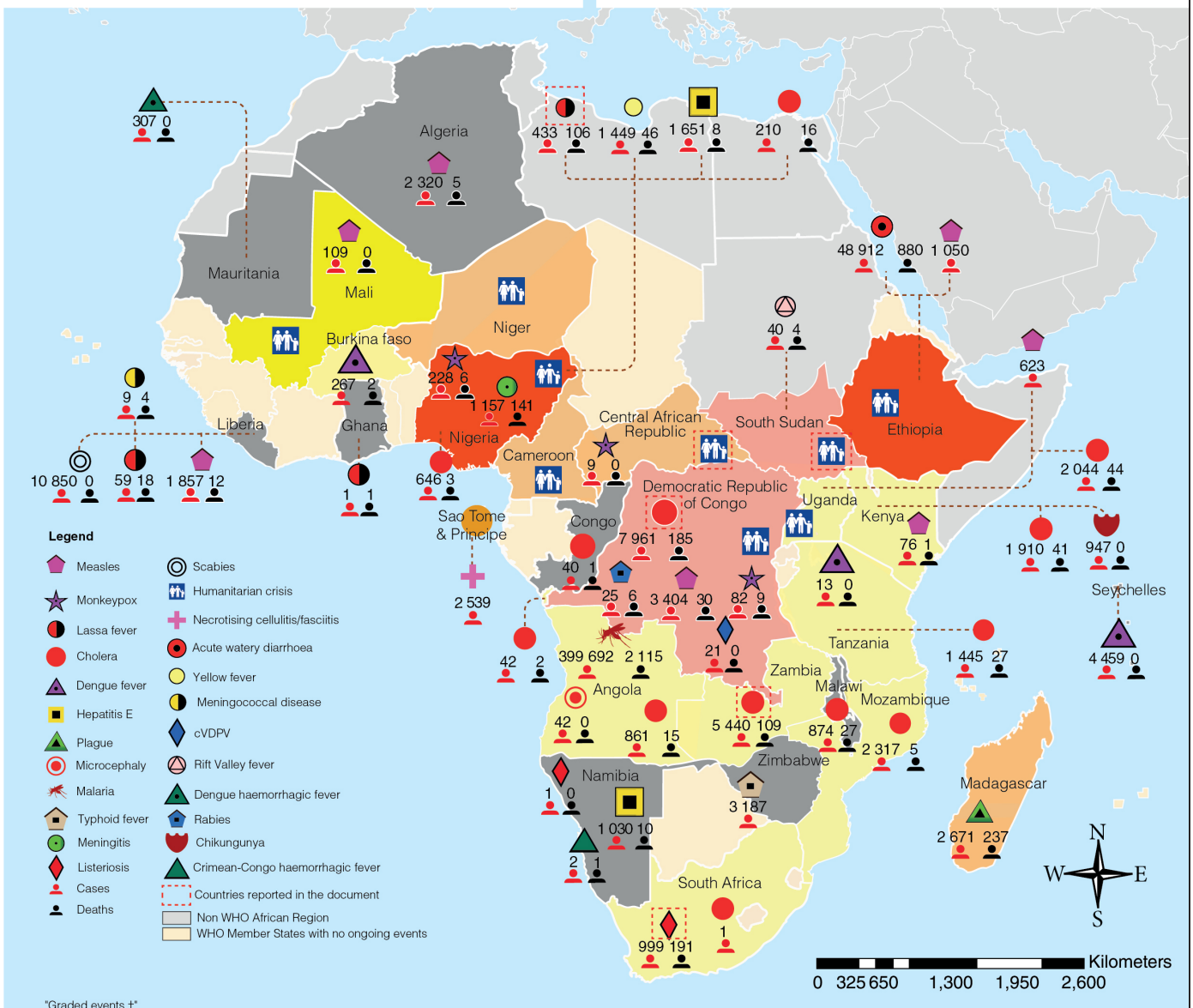
WEEKLY BULLETIN ON OUTBREAKS AND OTHER EMERGENCIES

Week 14: 31 March - 06 April 2018
Data as reported by 17:00; 06 April 2018

World Health Organization
REGIONAL OFFICE FOR Africa
WHO Health Emergencies Programme

1	57	49	9
New event	Ongoing events	Outbreaks	Humanitarian crises



"Graded events †"

2	5	8	35
Grade 3 events	Grade 2 events	Grade 1 events	Ungraded events
2	1	1	
Protracted 3 events	Protracted 2 event	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 58 events in the region. This week's edition covers key ongoing events, including:

  - Lassa fever in Nigeria
  - Listeriosis in South Africa
  - Cholera in Zambia
  - Cholera in Democratic Republic of the Congo
  - Humanitarian crisis in Central African Republic
  - Humanitarian crisis in South Sudan

- For each of these events, a brief description followed by public health measures implemented and an interpretation of the situation is provided.

- A table is provided at the end of the bulletin with information on all new and ongoing public health events currently being monitored in the region, as well as events that have recently been closed.

- **Major issues and challenges include:**

  - The outbreak of listeriosis in South Africa remains a key public health concern in the region; with significant economic and political repercussions. This outbreak highlights gaps in the food safety system which should be urgently addressed in order to protect consumers in the country and the region.

  - In Zambia and Democratic Republic of the Congo, the persistence of risk factors such as poor water, sanitation and hygiene conditions coupled with heavy rains and flooding during the rainy season are fuelling the upsurge of cholera cases.

Ongoing events

Lassa fever	Nigeria	433 Cases	106 Deaths	24.5% CFR

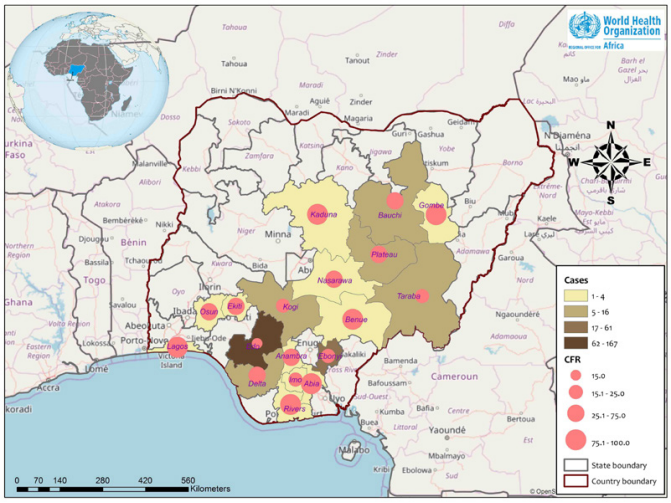
EVENT DESCRIPTION

The Lassa fever outbreak in Nigeria is ongoing. Following the peak of the outbreak in week 7 (week ending 17 February 2018), the weekly incidence has been gradually decreasing. During week 13, six new confirmed cases including two deaths (case fatality rate 33.3%) were reported from five states: Edo (2 cases), Ondo (1 case), Bauchi (1 case), Plateau (1 case) and Abia (1 case).

From 1 January through 1 April 2018, a total of 1 706 suspected cases including 142 deaths have been reported from 20 states. Among the cases reported during this period, 400 cases were classified as confirmed, nine cases as probable, 1 273 cases tested negative (non-cases) and 24 cases are pending laboratory results. Of the 142 deaths reported, 97 occurred in confirmed cases, nine in probable cases and 36 in negative cases. The case fatality rate among confirmed, probable and suspected cases is 24.5%.

The majority (81%) of all confirmed cases are from Edo (42%), Ondo (23%) and Ebonyi (16%) states. As of 1 April 2018, eight states (Nasarawa, Anambra, Benue, Imo, Lagos, Delta, Rivers and Ekiti) have exited the active phase of the outbreak while 12 states remain in the active epidemic phase, having reported at least one confirmed case in the last 21 days or having contacts within 21 days post-exposure.

Geographical distribution of Lassa fever cases in Nigeria, 1 January - 1 April 2018



In the reporting week, two healthcare workers were affected with one death. Since the start of the outbreak 25 healthcare workers have been affected from the following states: Ebonyi (15 cases and 3 deaths), Edo (3 cases), Kogi (2 cases and 1 death), Ondo (2 cases), Nasarawa (1 case), Benue (1 case) and Abia (1 case and 1 death). The case fatality rate among healthcare workers is 20%.

To date a total of 4 274 contacts have been identified from the affected states; of these 662 are currently under follow-up, 3 605 have completed the 21-day follow-up and 27 of the 67 symptomatic contacts have tested positive. Currently, 30 cases are under treatment across nine states.

PUBLIC HEALTH ACTIONS

- The National Lassa fever multi-partner multi-agency Emergency Operations Centre (EOC) continues to coordinate the response activities at all levels.
- Multi-disciplinary Rapid Response Teams (RRT) from the Nigeria Centre for Disease Control (NCDC) continues to support the outbreak response in Ebonyi, Edo Ondo, Plateau, Taraba and Bauchi.
- NCDC is collaborating with WHO, ALIMA and MSF in Edo, Ondo, Ebonyi, Anambra and Bauchi States regarding case management and infection, prevention and control (IPC) measures.
- Infection, prevention and control (IPC) training for healthcare workers and affected communities in Irrua, Edo and FETHA, Ebonyi States continues.
- Designated treatment centres continue with case management across the country.
- Rapid assessment of safe burial teams is being conducted.
- Based on findings from the field, a work plan has been developed for targeted risk communications activities in outbreak active States.
- Community-based interventions are ongoing in Bauchi and Taraba following the deployment of risk communications teams.

SITUATION INTERPRETATION

The decline in cases first evident in week 8 continues, although the peak transmission period is not yet over, so authorities should remain vigilant for new cases. However, challenges outlined previously remain with poor funding of contact tracing activities in some States, along with delayed submission of updated line lists and case information forms. In addition, poor sanitation conditions in high burden communities and multiple outbreak activities in some States are limiting commitment to the Lassa fever outbreak response. National and local authorities need to address these urgently to prevent resurgence of the disease during the usual transmission period.

EVENT DESCRIPTION

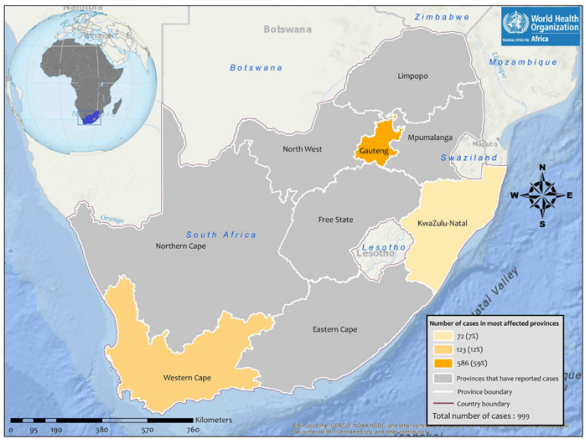
The incidence of listeriosis cases in South Africa continues to steadily decline following the recall of the implicated food source which was initiated on 4 March 2018. Since our last report from 23 March 2018 *(Weekly Bulletin 12)*, there have been 21 new laboratory-confirmed cases and eight additional deaths. Since the beginning of outbreak on 1 January 2017 as of 3 April 2018, a total of 999 laboratory-confirmed listeriosis cases have been reported to the National Institute for Communicable Diseases (NICD). To date, 748 (74.9%) cases were reported in 2017 and 251 (25.1%) cases in 2018.

All the nine provinces in the country have been affected; however the majority of cases (78%) have been reported from three provinces: Gauteng (59%, 586/999), Western Cape (12%, 123/999) and KwaZulu-Natal (7%, 72/999). Females and neonates are disproportionately affected in this outbreak, accounting for 56% (542/967) and 42% (412/973) of laboratory-confirmed cases, respectively. Elderly and immunocompromised individuals also represent a vulnerable population in this outbreak, as they are at risk for severe disease outcome. Of the 689 cases with known hospitalization outcome, 191 have died, giving a case fatality rate of 27.7% in this group. This is comparable to the case fatality rates of other recorded listeriosis outbreaks worldwide.

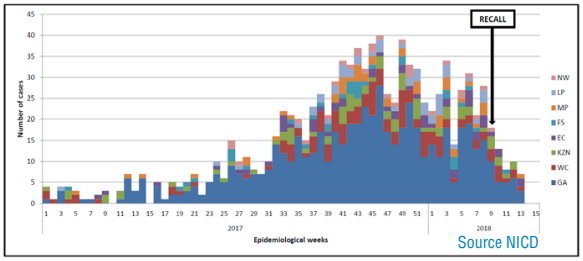
Since the recall of implicated food products, a total of 37 laboratory-confirmed cases have been reported. Of these 37 cases, 19 (51%) have been interviewed, 13 of whom reported consuming implicated meat products in the month prior to falling ill.

To date, a total of 547 clinical *Listeria monocytogenes* isolates have undergone whole genome sequencing. Of these, 92% (502/547) were compatible with the sequence type 6 (ST6) outbreak strain.

Geographical distribution of listeriosis cases in South Africa, 1 January 2017 - 3 April 2018



Epidemic curve of laboratory-confirmed listeriosis cases by epidemiological week and date of sample collection and province, South Africa, 1 January 2017 - 3 April 2018 (n=999)



Source NICD

PUBLIC HEALTH ACTIONS

- Following the identification of the source of the outbreak, the South Africa government has implemented measures to limit further infections and associated mortality. These include:
  - Recall and safe disposal of implicated meat products in South Africa and neighbouring countries.
  - Compliance notices in terms of the National Health Act issued to affected food production companies.
  - National Risk Communication activities are ongoing around the WHO five keys to safer food messages.
- WHO has deployed experts to support the response in the areas of food safety, emergency operations and risk communication.
- WHO is working with 16 African nations who have imported the implicated meat products to enhance capacities for preparedness and readiness for potential listeriosis outbreak response.
- The Southern African Development Community (SADC) Health Ministers held a meeting in Johannesburg on 15 March 2018, to share information and to enhance preparedness and response to listeriosis. Health Ministers were further reminded about their rights and obligations under the International Health Regulations (IHR) with regards to additional health measures with an impact on international travel and trade.
- The SADC Council of Ministers (Ministers of Foreign Affairs) also deliberated on the outbreak. Council urged Member States to harmonize prevention, detection and response procedures; strengthen the control of food industries in terms of compliance to food safety standards; and enforce policies that are aligned to international codes. Member States have also been urged to strengthen cross border collaboration in the importation of processed foods. .

SITUATION INTERPRETATION

The trend in listeriosis cases in South Africa continues to decline, but the occurrence of cases in neighbouring Namibia, to which South Africa exports ready-to-eat meat products, is of concern. Recent cases were exposed to the implicated meat products prior to the recall, which suggests that food safety measures are having an impact. Given the long incubation period of *Listeria monocytogenes* additional cases are not unexpected, which requires vigilance among healthcare workers and authorities. Risk communication around the source of the outbreak needs to be strengthened to allay public anxiety and to guide people on safe food preparation and consumption. Authorities should work urgently to improve food safety procedures and to ensure efficient removal and disposal of implicated meat products. It is also important to note that since 8% of genotyped samples did not match the outbreak strain, it is essential to strengthen sequencing capacity in order to closely monitor the outbreak.

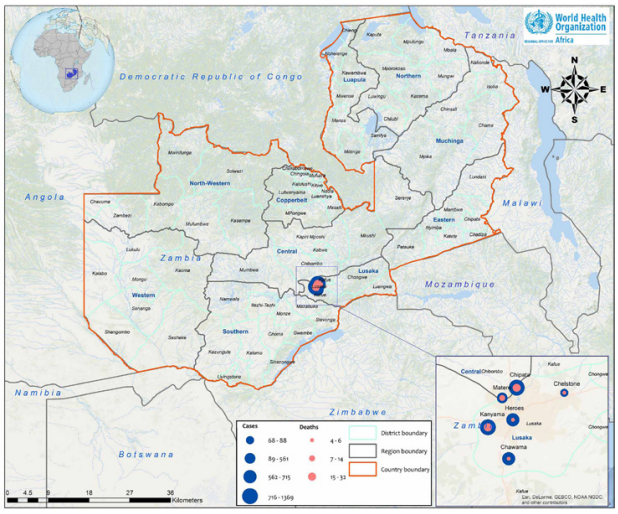
EVENT DESCRIPTION

The cholera outbreak in Zambia has been ongoing for 27 weeks since it was first declared on 4 October 2017 (week 40 of 2017). The outbreak reached its peak during week 1 of 2018, after which a steep decline in the weekly case incidence was noted. This decline is likely due to the first round of oral cholera vaccination campaign conducted during week 2 of 2018. However, a new upsurge in case incidence has been observed since week 10 of 2018 (week ending on 11 March 2018). During week 12 of 2018 (week ending 25 March 2018), 210 new suspected cases with four deaths (case fatality rate 1.9%) were reported. Three of the four reported deaths occurred in the community.

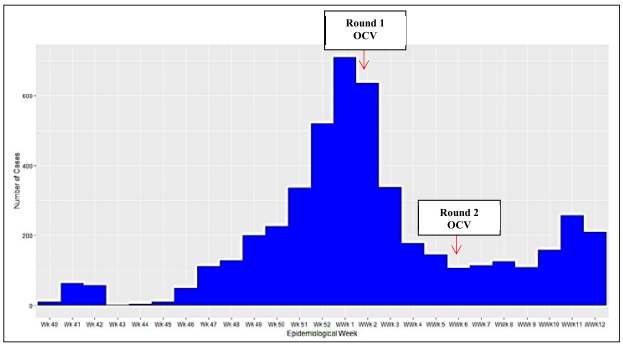
As of 4 April 2018, the Ministry of Health (MoH) reported a total of 5 440 suspected cases including 109 deaths since the beginning of the outbreak. The majority of cases are concentrated in Lusaka district, with 4 998 suspected cases including 93 deaths (case fatality rate 2%), while 442 suspected cases with 16 deaths were reported from outside Lusaka district (case fatality rate 3.6%). In Lusaka district, the hotspots of the outbreak are Kanyama and Chipata. Key risk factors in this outbreak include poor sanitation and hygiene due to interruption of water supply, use of unsafe water and improper targets for response activities.

Since the beginning of the outbreak, a total of 1 506 samples have been subject to laboratory testing; of these 565 (37.5%) were culture positive for *Vibrio cholerae* 01 Ogawa. Water quality testing revealed that 42% of water source samples were contaminated with faecal coliforms or *Escherichia coli*.

Geographical distribution of cholera cases in Zambia, 4 October 2017- 4 April 2018



Epidemic curve of cholera in Lusaka district by week of onset, week 40 of 2017 to week 12 of 2018.



PUBLIC HEALTH ACTIONS

- The MoH is collaborating with other governmental ministries and partners to manage the outbreak and coordinate water, sanitation, and resources.
- Case management is ongoing in affected districts. Due to the decrease in cases five cholera treatment centres (CTCs) (Kanyama, Chipata, Matero, Bauleni and Chelston) were converted into cholera treatment units (CTUs), while the Chawama CTC was closed. The cholera treatment hospital in Heroes remains opened.
- Water, sanitation and hygiene (WASH) interventions are ongoing. To date, 14 tanks have been erected in communities and public institutions.
- With partner support, 380 community based volunteers are conducting field activities including door-to-door campaigns and public outreach in churches, markets and schools.
- The MoH continues to disseminate health education messages through various channels, including press briefings, call centres, public address systems, radio, brochures and posters.
- Two rounds of the oral cholera vaccine (OCV) vaccination campaign have now been conducted. The first round was conducted between 10 to 20 January 2018 and covered 109% of the target population: Chawama (97% coverage), Kanyama (142% coverage), Chipata (122% coverage) and Matero (82% coverage). The second round was between 5 to 14 February 2018 and covered 148% of the target population: Chawama (126%) and Kanyama (169%).
- Street vending has been banned to mitigate the outbreak. A fishing ban was implemented, but has now been lifted as of 25 March 2018.

SITUATION INTERPRETATION

While the cholera situation has gradually improved since the beginning of 2018, the slight resurgence of cases in the past few weeks, notably in the Kanyama district, highlights the persistence of risk factors such as poor water and sanitation, which allow the disease to flourish. The recent heavy rains and flooding will likely exacerbate the situation. A combination of these challenges has inhibited progress in controlling the outbreak. The current interventions will need to meet all these challenges. Vaccination campaigns have thus far covered the most affected sub-districts, yet suspected cholera cases persist. This may be due to misdiagnosed suspected cases, and reinforces the need to strengthen laboratory confirmation in the tale-end of the outbreak. Furthermore, population movement in and out of Lusaka may lead to an influx of new susceptible individuals. With timely case management and treatment, the case fatality rate for cholera is usually less than 1%. In Zambia, case fatality rates have been above the acceptable threshold, especially in districts outside Lusaka. Therefore risk communication messages should stress the importance of timely presentation to a CTU or CTC.

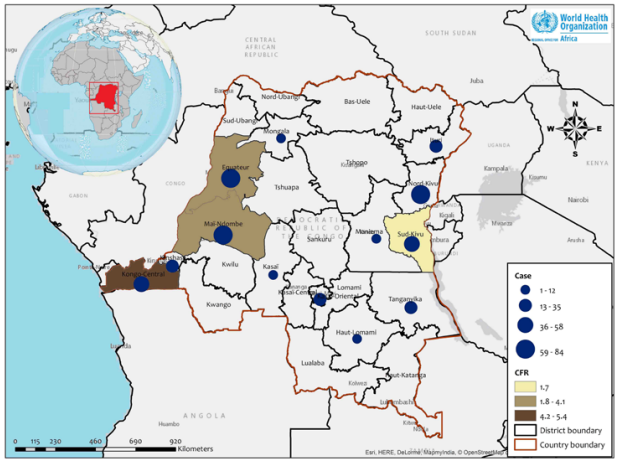
EVENT DESCRIPTION

The weekly incidence of cholera in the Democratic Republic of the Congo is continuing on a downward trend since the peak of the outbreak in week 39 of 2017. During week 12 of 2018 (week ending 25 March 2018), 497 new suspected cases with 10 deaths (case fatality rate 2%) were reported in 13 out of the country's 26 provinces. This was the second time since week 23 of 2017 that the weekly incidence was below 500 cases. The majority (70%) of new cases reported in week 12 came from five provinces: Maidombé (84 cases), North Kivu (77 cases), Equateur (73 cases), South Kivu (58 cases) and Kongo Central (56 cases).

Since the beginning of the outbreak in week 1 of 2017 as of week 12 of 2018, a total of 62 815 suspected cases with 1 357 deaths (case fatality rate 2.2%) were notified nation-wide. While the incidence of cases in endemic provinces (North Kivu, South Kivu, Haut-Lomami and Tanganyika) is decreasing, there has been a slight increase in cases reported from other provinces (Ituri, Kasaï, Kongo Central, Maniema and Tanganyika).

In the province of Kinshasa, the downward trend initiated in week 3 of 2018 continues with 12 new suspected cases and zero deaths reported during week 13 (week ending 1 April 2018), compared to 26 suspected cases and no deaths in week 12. Since the beginning of the outbreak in Kinshasa in week 47 of 2017, as of week 13 of 2018, a total of 1 191 suspected cases with 43 deaths (including 34 community deaths) were reported (case fatality rate 3.3%). In the province of Kasai Oriental, the trend of the cholera outbreak localized in the city of Mbuji-Mayi has been decreasing, with 20 new suspected cases during week 13 of 2018 compared to 110 cases at the peak of the outbreak in week 11 of 2018. From the beginning of the outbreak in week 7 as of week 13 of 2018, Mbuji-Mayi has reported 400 suspected cases with 23 deaths (case fatality rate 5.8%).

Geographical distribution of cholera cases in Democratic Republic of the Congo, week 12, 2018



PUBLIC HEALTH ACTIONS

- WHO continues to support case investigation, active case finding, data management and coordination in Kinshasa, and in newly affected areas along the Congo River and Mbuji-Mayi.
- Training sessions on the Early Warning and Response System (EWARS) were conducted by WHO from 12 to 18 March 2018 in Bandundu-ville (Kwilu) and in Goma (North Kivu); a total of 120 health staff were trained including 80 in Bandundu-ville and 40 in Goma.
- MSF sections (Belgium, Swiss and Spain) continue to support case management.
- WHO is providing support to cholera treatment centers (CTCs) and units (CTUs) in Kinshasa (1 CTC), Bolobo (1 CTU) and Mubji-Mayi (2 CTUs).
- WHO is supporting the MoH in the strengthening of water, sanitation and hygiene (WASH) at community level, and risk communication and community engagement activities through the implementation of the African Public Health Emergency Fund (APHEF). The fund is supporting activities in South Kivu, North Kivu, Kongo Central and in newly affected areas along the Congo River (Bolobo, Yumbi, Kuamuth and Lisala).
- In Mbuji-May, the International Committee of the Red Cross (ICRC) and the NGO Solidarité (supported by UNICEF) are supporting the implementation of WASH activities.
- A vaccination campaign is under preparation in the islets of Yumbi, located along the Congo River; 30 000 doses oral cholera vaccine (OCV) are currently available in the country, and a request for an additional 100 000 will be submitted to the International Coordinating Group (ICG) on Vaccine Provision.

SITUATION INTERPRETATION

The cholera outbreak in DRC has been ongoing since the end of 2015 and is considered as the worst cholera epidemic experienced by the country since 1994. In 2017, a total of 54 783 cases and 1 169 deaths (case fatality rate 2.1%) have been reported nationally. Although new cases are now significantly declining in the endemic areas as a result of the intensification of WASH activities at community level, the situation remains of concern in some localities along the Congo River, and requires sustained attention to prevent potential resurgence of the outbreak in the big city of Kinshasa. The cholera response in the province of Ituri, which is facing intercommunity tensions resulting in thousands of population displacements including refugees in neighbouring Uganda, needs to be strengthened urgently. The cholera vaccination campaign planned in some islets along the Congo River should be extended to the province of Ituri. Democratic Republic of the Congo is going through a long economic and political crisis that is fuelling a Level 3 complex humanitarian emergency, with more than 4 million internally displaced persons (IDPs) and 600 000 refugees. The country's resources and capacity to effectively respond to the current outbreak are limited.

EVENT DESCRIPTION

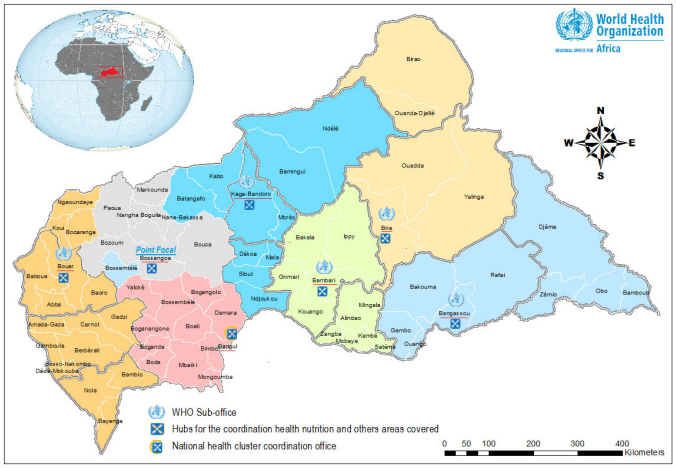
The security situation continues to deteriorate in Northwest Central African Republic, with hotspots in the prefectures of Ippy, Ouaka, Markounda, Kabo and Sido. The country currently has around 680 000 internally displaced people (IDPs).

Between 20 and 21 March 2018, there have been clashes between two rival armed groups in the localities of Tagbara, and Séko. The armed groups also attacked a temporary base of MINUSCA on 3 April 2018. This situation has led to the displacement of 5 000 people, with 48 dead and 10 wounded. Due to restricted humanitarian access to the area the wounded were referred to Bambari, with the help of MINUSCA forces. The villages of Andjou, Goubali, Binguipou, Kebouba, Keda and Zoumouhou were burnt, causing further population displacement. In Maloum, the head of the health centre was assaulted, forcing closure of the facility.

In the hotspots in Northwest Central African Republic, 7 400 IDPs in Markounda and 15 017 IDPs in Kabo and Sido are currently without humanitarian assistance following robbery of humanitarian actors on the roads leading to these areas.

The monkey pox outbreak, declared on 17 March 2018, continues. As of 4 April 2018, there have been nine suspected cases, with six confirmed, and no deaths.

WHO and Health Cluster presence in Central African Republic as of February 2018



PUBLIC HEALTH ACTIONS

- A joint mission of OCHA, UNDP, Bambari Health district and UNICEF, under MINUSCA escort, was conducted on 28 March 2018 to assess the humanitarian situation in Séko and Tagbara. WHO contributed sufficient emergency kits to Séko to cover 2 000 people for three months.
- A three-month response plan is being developed for 5 000 IDPs in collaboration with COHEB and the Ministry of Health.
- There are continued discussions around the support of 2 000 IDPs in the Lesser Seminary, Muslim area, with the support of WHO, through MVAD.
- Paoua Hospital has received drugs and consumables sufficient for 20 000 people for three months of care.
- A mass distribution of 46 000 insecticide-treated mosquito nets to 20 000 households in Paoua took place from 2-4 April 2018, through the Mentor Initiative NGO.
- WHO has resupplied 11 hospitals in conflict zones with sufficient drugs for the management of mental health and chronic diseases (hypertension and diabetes) for six months of average consumption.
- There is continued action to control the outbreak of monkey pox, declared on 17 March 2018 in Ippy. Water, sanitation and hygiene actors continue community sensitization, with 20 community members trained in outreach activities.

SITUATION INTERPRETATION

The ongoing lack of security in Central African Republic continues to hamper the delivery of humanitarian aid. Particular challenges include the withdrawal of Médecins sans Frontières from Ippy, and the suspension of humanitarian activities in Bangassou due to renewed violence specifically targeting humanitarian actors, and lack of implementation of planned measles vaccination campaigns; both as a result of security challenges and lack of funding. Even the temporary withdrawal of humanitarian aid will negatively impact affected populations, leading to long-term fragility in terms of health and nutrition. There is an urgent need for national and international intervention in the region to prevent further conflict and potential disease outbreaks.

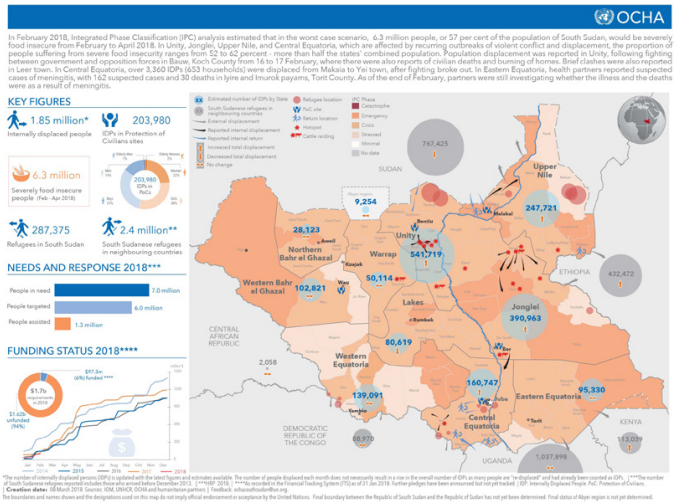
EVENT DESCRIPTION

The security situation in South Sudan remains volatile, with continuing reports of intercommunal fighting, mainly due to cattle raiding and revenge killings in various locations, hampering humanitarian service delivery. As of 25 March 2018, there were reports of clashes over cattle among the Mundari communities from Tali, Tijor and Terekeka Central, living in Kuda, which resulted in death and displacement with more than 1 000 people from 167 households affected. Humanitarian partners have down-scaled operations in opposition-held areas in Kajokeji due to an upsurge in insecurity.

South Sudan remains at increased risk of food insecurity and malnutrition, with an estimated 6.3 million people (57% of the population) in crisis (IPC Phase 3) and 50 000 in catastrophe (IPC Phase 5).

As of 1 April 2018, 16 health alerts were reported, of which 75% were verified; measles and malaria were the most frequent infectious diseases reported. The main causes of morbidity among internally displaced persons (IDPs) were malaria (49.5%), acute watery diarrhoea (16.2%) and bloody diarrhoea (2.2%). The meningitis outbreak in Torit is declining, with no new suspected cases reported in week 12. The measles outbreak in Aweil East and Aweil Centre, although ongoing, registered a decline in week 12. The Rift Valley fever outbreak in Eastern Lakes State is still ongoing, with a cumulative total of 43 suspected cases reported since 7 December 2017, of which six were confirmed positive. Out of 28 animal samples collected, nine have been confirmed positive.

Humanitarian crisis in South Sudan as of February 2018



PUBLIC HEALTH ACTIONS

- To respond to the Health Cluster's core pipeline deliverables, WHO conducted one day training for 24 Health Cluster partners on awareness of and access to WHO emergency health kits, in order to improve their use and also reporting by partners. A similar training is being planned for two more groups in subsequent weeks.
- In line with the Global Action Plan on the eradication of cholera by 2030, WHO trained 32 WASH Cluster frontline partners from 20 organizations (UN, international and national NGOs) in techniques and guidelines for water quality control and monitoring.
- The WHO Country Office, Regional Office and WHO Lyon, supported the Ministry of Health in harmonizing priority actions to strengthen the medical laboratory system for emergencies.
- A total of 1.14 million (63.6%) of children under the age of five years were vaccinated with polio vaccine in Central Equatoria, Eastern Equatoria, Jonglei, Unity and Upper Nile states during supplementary immunization activities. Campaigns are ongoing in conflict affected states. Preparations for African Vaccination Week are ongoing, with plans for radio broadcasts and immunization services in all States.

SITUATION INTERPRETATION

The ongoing insecurity and its effects on the health and welfare of the population of South Sudan are a major concern. Increasing crime targeting humanitarian workers is being attributed to a worsening economic situation, with continued economic decline and a massively increasing cost of living, with inflation in Juba reaching 183%. This, coupled with inadequate funding to support outbreak and response activities, threatens already seriously vulnerable populations. Without a major effort from national and international actors and sufficient funding for all humanitarian activities, South Sudan will remain in crisis.

Summary of major issues challenges, and proposed actions

Issues and challenges

- The outbreak of listeriosis in South Africa remains a key public health concern in the region; with significant economic and political repercussions. This outbreak highlights gaps in the food safety system which should be urgently addressed in order to protect consumers. The meat products identified as the source of this outbreak have been exported to 16 countries in the region. As listeriosis is not listed as a recommended IDSR priority disease, countries' capacity to detect and efficiently respond to a listeriosis outbreak is likely limited.
- Although the trend of the cholera outbreaks in Zambia and Democratic Republic of the Congo has been steadily decreasing, the persistence of risk factors such as poor water, sanitation and hygiene conditions coupled with heavy rains and flooding during the rainy season are fuelling an upsurge of cholera cases in districts that are particularly at risk. The case fatality rates in these outbreaks are above the acceptable threshold of 1%, and indicate a need to strengthen risk communication and community surveillance.

Proposed actions

- Members from the government, industry and academia should collaborate to establish a multisectoral national food safety framework that will result in improved food safety regulations. WHO should assist countries in strengthening their preparedness and readiness activities, in order to improve their capacity to efficiently respond to future listeriosis outbreaks. There is also a need to strengthen sequencing capacity, improve surveillance and enhance risk communication.
- The national authorities and partners in Zambia and Democratic Republic of the Congo need to enhance all ongoing response activities with a focus on WASH interventions targeted to the community. Oral cholera vaccination should also be considered for high-risk areas.

All events currently being monitored by WHO AFRO

Country	Event	Grade†	WHO notified	Start of reporting period	End of reporting period	Total cases	Confirmed cases	Deaths	CFR	Comments
New events										
Namibia	Crimean-Congo haemorrhagic fever	Ungraded	29-Mar-18	29-Mar-18	5-Apr-18	2	1	1	50.0%	A male subject from Keetmanshoop District became ill on 22 March 2018 after contact with a tick-infested cow. As of 28 March 2018 he was admitted to an isolation unit at Windhoek Central Hospital and PCR testing was confirmed positive on 31 March 2018. The patient died on 3 April 2018. An additional suspected case with a history of tick bite and vomiting has also been isolated as of 3 April 2018.
Ongoing events										
Algeria	Measles	Ungraded	13-Mar-18	25-Jan-18	11-Mar-18	2 320	-	5	0.2%	A total of 2 320 cases including 5 deaths have been reported from 13 wilayas: El Oued, Ouargla, Illizi, Tamanrasset, Biskra, Tebessa, Relizane, Tiaret, Constantine,-Tissemsilt, Medea, Alger, and El-Bayadh.
Angola	Cholera	G1	2-Jan-18	21-Dec-17	25-Mar-18	861	5	15	1.7%	On 21 December 2018, two suspected cholera cases were reported from Uíge district, Uíge province. Both of these cases had a history of travel to Kimpangu (DRC). Cases are being reported from two districts of Uíge province (Uíge the seat of the provinces and the rural district of Son-go). There is an increase of cases from week 12 to week 13 and no deaths reported in the same period.
Angola (Cabinda province)	Cholera	Ungraded	8-Mar-18	18-Feb-18	25-Mar-18	42	-	2	4.8%	A suspected case in Cabinda province was reported on 18 February 2018, which tested positive by a rapid diagnostic Test (RDT). Between 19 and 25 March 2018, 7 cases and 0 deaths were reported from the province.
Angola	Malaria	Ungraded	20-Nov-17	1-Jan-17	30-Sep-17	399 692	-	2 115	0.5%	The outbreak has been ongoing since the beginning of 2017. In the province of Benguela, a total of 244 381 malaria cases were reported from January to September 2017 as compared to 311 661 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.

Country	Event	Grade†	WHO notified	Start of reporting period	End of reporting period	Total cases	Confirmed cases	Deaths	CFR	Comments
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).
Burkina Faso	Dengue	G1	4-Oct-17	31-Dec-17	13-Jan-18	267	-	2	0.7%	From week 1 to week 52 of 2017, 15 096 cases and 30 deaths were reported. The trend in the number of cases has decreased since week 44 of 2017. The majority (79%) of cases reported in weeks 1 and 2 of 2018 have been reported in the central region, notably in Ouagadougou (the capital). Dengue virus serotypes 1, 2, and 3 are circulating.
Cameroon	Humanitarian crisis	G2	31-Dec-13	27-Jun-17	3-Nov-17	-	-	-	-	At the beginning of November 2017, the general security situation in the Far North Region worsened. Terrorist attacks and suicide bombings have continued and are 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 outside of the camp. In addition, approximately 238 000 internally displaced people (IDPs) have been registered.
Central African Republic	Humanitarian crisis	G2	11-Dec-13	11-Dec-13	4-Apr-18	-	-	-	-	Detailed update given above.
Central African Republic	Monkeypox	Ungraded	20-Mar-18	2-Mar-18	1-Apr-18	9	6	0	0.0%	The outbreak was officially declared on 17 March 2018 in the sub province of Ippy. As of 01 April nine cases including six confirmed cases have been reported from Bambari district.
Congo (Republic of)	Cholera	Ungraded	21-Mar-18	n/a	30-Mar-18	40	3	1	2.5%	As of 30 March 2018, 40 suspected cases of cholera including 1 death were reported in the departments of Plateaux (33 suspected) and Likouala (7 suspected) near the Congo River. The 3 confirmed cases were tested by RDT and/or culture.

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	1-Apr-18	-	-	-	-	The humanitarian and security situation remains very fragile in several provinces of the country, particularly in Ituri, North Kivu, South Kivu. A precarious calm is observed in the Kasaï region, thus favouring the return of the displaced. Displacement from these provinces continues and new IDPs are lacking basic services.
Democratic Republic of the Congo	Cholera		16-Jan-15	24-Jan-18	24-Mar-18	7 961	0	185	2.3%	Detailed update given above.
Democratic Republic of the Congo	Measles		10-Jan-17	1-Jan-18	4-Mar-18	3 404	-	30	0.9%	This outbreak is ongoing since the beginning of 2017. As of week 8 in 2018, a total of 48 326 cases including 563 deaths (CFR 1.2%) have been reported since the start of the outbreak. In 2018 only, 3 404 cases including 30 deaths (0.9%), were reported.
Democratic Republic of the Congo	Poliomyelitis (cVDPV2)	Ungraded	15-Feb-18	n/a	16-Feb-18	21	21	0	0.0%	On 13 February 2018, the Ministry of Health declared a public health emergency regarding 21 cases of vaccine-derived polio virus type 2. Three provinces have been affected, namely Haut-Lomami (8 cases), Maniema (2 cases) and Tanganyika (11 cases). The outbreak has been ongoing since February 2017 and the date of onset of paralysis in the last case was 3 December 2017.
Democratic Republic of Congo	Rabies	Ungraded	19-Feb-18	1-Jan-18	10-Feb-18	25	0	6	24.0%	This outbreak began towards the end of October 2017 in Kibua health district, North Kivu province. During Week 6 of 2018, three cases were reported.
Democratic Republic of Congo	Monkeypox	Ungraded	n/a	1-Jan-18	11-Feb-18	282	34	9	3.2%	From weeks 1-6 of 2018 there have been 282 suspected cases of monkeypox including 9 deaths. Of the suspected cases, 34 have been confirmed samples. Suspected cases have been detected in 14 provinces. Sankuru Province has had an exceptionally high number of cases this year (106 cases) compared to the same time period last year (44 cases).

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	28-Jan-18	-	-	-	-	The complex humanitarian crisis in Ethiopia continues into 2018. As of 28 January 2018, there were about 6.3 million people in need of health assistance, over 1.7 million people internally displaced, and over 900 000 refugees. Currently, Oromia region has 669 107 internally displaced people (IDPs) settled in various temporary sites and living with host communities in six zones over 43 woredas (districts).
Ethiopia	Acute watery diarrhoea (AWD)		15-Nov-15	1-Jan-17	21-Feb-18	48 912	-	880	1.8%	This is an ongoing outbreak since the beginning of 2017. Between January and December 2017, a cumulative total of 48 814 cases and 880 deaths (CFR 1.8%), have been reported from 9 regions. In 2018 only, a total of 98 cases have been reported from two regions, Somali and Dire Dawa regions.
Ethiopia	Measles		14-Jan-17	1-Jan-18	25-Mar-18	1 050	308	-	-	This is an ongoing outbreak since the beginning of 2017. Between January and December 2017, a cumulative total of 4 011 suspected measles cases have been reported across the country. In 2018 only, a total of 1 050 suspected cases including 308 confirmed cases, have been reported across the country. Most of the cases in 2018 have been reported from Somali region (21%), Oromia (20%), SNNP (23%), and Addis Ababa (21%). Most affected groups are children under five years of age (27%) and children between 5 and 14 years old (41%).
Ghana	Lassa fever	Ungraded	1-Mar-18	27-Feb-18	2-Mar-18	1	1	1	100.0%	On 1 March 2018, WHO was notified of a confirmed case of Lassa fever. The index case was a 26 year-old, male who presented at a public hospital in Accra on 23 February 2018 with symptoms of general weakness, severe headache, joint pains, and vomiting of blood. On 23 February 2018, a blood sample was sent to the lab for confirmation; tested PCR positive on 26 February 2018. He died on 28 February 2018. All contacts have been listed and they are currently monitored.
Kenya	Chikungunya	Ungraded	mid-December 2017	mid-December 2017	16-Mar-18	947	36	0	0.0%	As of 16 March 2018, a total of 861 cases including 32 confirmed cases, were reported from Mombasa county and 86 cases including 4 confirmed cases have been reported from Lamu county.

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-18	16-Mar-18	1 910	79	41	2.1%	The outbreak in Kenya is ongoing since 2017. Between 1 January 2017 and 07 December 2017, a cumulative total of 4 079 cases with have been reported from 21 counties (data until 31 December 2017 not available). In 2018, a total of 1 910 cases have been reported as since the first of January. Currently, the outbreak is active in 5 counties: Garissa, Turkana, West Pokot, Trans nzoia, and Tana River counties. The outbreak has been controlled in 7 counties; Mombasa, Kirinyaga, Siaya, Tharaka Nithi, Meru, Basia, and Muranga.
Kenya	Measles	Ungraded	19-Feb-18	19-Feb-18	16-Mar-18	76	11	1	1.3%	The outbreak is located in two counties, namely Wajir and Mandera Counties. As of 16 March, Wajor County has reported 35 cases with 7 confirmed cases, Mandera has reported 41 cases with 4 confirmed cases and one death.
Liberia	Meningococcal disease	Ungraded	19-Jan-18	23-Dec-17	29-Jan-18	9	2	4	44.4%	A cluster of undiagnosed illness and deaths were reported from Lofa county, northeastern Liberia. Samples taken from two suspected cases were positive for *Neisseria meningitidis* serogroup W. All seven samples collected as of 29 January were negative for Ebola and Lassa fever viruses by PCR, negative for yellow fever by serology (IgM), and negative for typhoid by WDAL. Additional testing is ongoing.
Liberia	Measles	Ungraded	24-Sep-17	1-Jan-18	25-Mar-18	1 857	180	12	0.6%	From week 1 to week 48 of 2017, 1 607 cases were reported from 15 counties, including 225 laboratory confirmed, 336 clinically compatible and 199 epi-linked. From week 1 to week 12 of 2018, 1 857 cases have been reported including 12 deaths. Cases are epidemiologically classified as follows: 180 laboratory confirmed, 916 epi-linked, 338 clinically compatible, 154 discarded, and 269 pending.
Liberia	Lassa fever	Ungraded	14-Nov-17	1-Jan-18	1-Apr-18	59	9	18	30.5%	From 1 January to 24 November 2017, a total of 70 suspected Lassa fever cases including 21 deaths (CFR: 30%) were reported from nine counties in Liberia. From 1 January to 1 April 2018, nine confirmed cases have been reported from Nimba (4), Montserrado (3), Grand Bassa (1), and Bong (1) counties.
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.

Country	Event	Grade†	WHO notified	Start of reporting period	End of reporting period	Total cases	Confirmed cases	Deaths	CFR	Comments
Madagascar	Plague	G2	13-Sep-17	13-Sep-17	25-Mar-18	2 671	556	237	8.9%	From 1 August 2017 to 25 March 2018, a total of 2 671 cases of plague were notified, including 556 confirmed, 828 probable and 1 287 suspected cases. Out of them 2 030 cases were of pulmonary, 434 were of bubonic, 1 was of septicaemic form and 206 cases unspecified.
Malawi	Cholera	Ungraded	28-Nov-17	20-Nov-17	1-Apr-18	874	78	27	3.1%	The number of cholera cases reported in week 13 (26 March -1 April 2018) is constant from the previous week, 31 cases and 1 death (epi week 12) and 30 cases and 1 death (this epi week 13). New cases were reported from two districts (compared to 3 districts last week); Salima 2 cases and Lilongwe 28 cases and 1 death (health facility).
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.
Mali	Measles	Ungraded	20-Feb-18	1-Jan-18	11-Feb-18	109	49	0	0.0%	A total of five health districts have reached the epidemic threshold (Ansongo, Bandiagara, Douentza, Kadiolo, and Yanfolila). Forty-nine samples were confirmed positive by serology (IgM) at the national reference laboratory INRSP.
Mauritania	Dengue haemorrhagic fever	Ungraded	30-Nov-17	6-Dec-17	22-Feb-18	307	165	-	-	In November 2017, the MoH notified 3 cases of dengue fever including one hemorragic case (Dengue virus type 2) with a history of Dengue virus type 1 infection in 2016. As of 10 February, the national reference laboratory confirmed the diagnosis of 165 out of 307 RDT positive samples. Dengue type 1 and type 2 are circulating in the country with a higher proportion of subtype 2 (104/165).
Mozambique	Cholera	G1	27-Oct-17	12-Aug-17	31-Mar-18	2 317	-	5	0.2%	The cholera outbreak is ongoing. From mid-August 2017 through 25 March 2018, cases have been reported from two provinces; Nampula (1 642 cases and one death) and Cabo Delgado (675 cases and 3 deaths) provinces. This outbreak started in mid-August 2017 from Memba district, Nampula Province and Cabo Delgado Province started reporting cases from week 1 of 2018. No cases have been reported from Erati and Nacrpoua districts for the last 12 weeks.

Country	Event	Grade†	WHO notified	Start of reporting period	End of reporting period	Total cases	Confirmed cases	Deaths	CFR	Comments
Namibia	Hepatitis E	Ungraded	18-Dec-17	8-Sep-17	25-Mar-18	1 030	112	10	1.0%	This is an ongoing outbreak since 2017. The majority of cases have been reported from informal settlements in the capital district Windhoek. The most affected settlement is Havana, accounting for about 573 (56%) of the total cases, followed by Goreagab settlements with 256 (25%) cases. The most affected age group is between 20 and 39 years old representing 75% of total cases.
Namibia	Listeriosis	Ungraded	13-Mar-18	12-Mar-18	13-Mar-18	1	1	0	0.0%	On 13 March 2018, WHO was notified of a confirmed case of listeria in Windhoek. The index case; a 41 year-old male, with chronic hepatitis B, developed liver cirrhosis and was admitted to the hospital on 5 March 2018. Bacterial culture was done in which *Listeria monocytogenes* were isolated. The patient had no travel history outside Namibia. Investigations are ongoing to establish if there are any links between this case and the outbreak in South Africa.
Niger	Humanitarian crisis	G2	1-Feb-15	1-Feb-15	16-Feb-18	-	-	-	-	The humanitarian situation in Niger remains complex. The state of emergency has been effective in Tillabéry and Tahoua Regions since 3 March 2017. Security incidents continue to be reported in the south-east and north-west part of the country. This has disrupted humanitarian access in several localities in the region, leading to the suspension of relief activities, including mobile clinics.
Nigeria	Humanitarian crisis	Protracted 3	10-Oct-16	n/a	31-Jan-18	-	-	-	-	Conflict and insecurity in the north east of Nigeria remain a concern and resulted mass displacement. Recentely affected areas are along the axis from Monguno to Maiduguri, namely in Gasarwa, Gajiram, Gajigana, Tungushe, and Tungushe Ngor towns. Initial estimates for the number of IDPs in recent months is between 20 000 and 36 000; many are in dire need of humanitarian services.

Country	Event	Grade†	WHO notified	Start of reporting period	End of reporting period	Total cases	Confirmed cases	Deaths	CFR	Comments
Nigeria	Cholera (nation wide)	Ungraded	7-Jun-17	1-Jan-18	3-Mar-18	210	2	16	7.6%	There is an ongoing outbreak since the beginning of 2017. Between 1 January and 31 December 2017, a cumulative total of 4 221 suspected cholera cases and 107 deaths (CFR 2.5%), including 60 laboratory-confirmed were reported from 87 LGAs in 20 states. Between weeks 1 and 9 of 2018, 210 suspected cases including two laboratory-confirmed case and 16 deaths (CFR 7.6%), have been reported from 28 LGAs in 9 states. Most recently, cases have also been reported from Yobe and Bauchi states. During 27 February 2018 to 31 March 2018, Bauchi State reported 673 cases including 11 deaths (CFR 1.6%). During 28 March to 4 April, Bade LGA in Yobe State reported 159 cases including 12 deaths (CFR 7.5%).
Nigeria	Lassa fever	G2	24-Mar-15	1-Jan-18	1-Apr-18	433	400	106	24.5%	Detailed update given above.
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 of 2017. 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	11-Mar-18	1 449	96	46	3.2%	A total of 1 449 cases have been reported from 30 states: Abia, Borno, Kogi, Kwara, Kebbi, Plateau, Zamfara, Enugu, Oyo, Anambra, Edo, Lagos, Kano, Nasarawa, Katsina, Niger, Bayelsa, Rivers, Cross Rivers, Kaduna, Sokoto, Jigawa Imo, Delta State, Akwa Ibom, Ebonyi, Ekiti, FCT Abuja, Ogun, Ondo and Osun State). Ninety-six cases from seven states (Kwara, Kogi, Kano, Zamfara, Kebbi, Nasarawa, and Niger) have been laboratory-confirmed at IP Dakar.
Nigeria	Monkeypox	Ungraded	26-Sep-17	24-Sep-17	25-Feb-18	228	89	6	2.6%	Suspected cases are geographically spread across 24 states and the Federal Capital Territory (FCT). Eighty-nine laboratory-confirmed cases have been reported from 15 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	6-Mar-18	1 157	128	141	12.2%	Cases have been reported from fifteen states: Zamfara (539), Katsina (245), Sokoto (129), Jigawa (51), Yobe (50), Niger (39), Cross River (25), Kebbi (25), Bauchi (20), Kano (21), Gombe (3), Plateau (4), Borno (3), Adamawa (2) and Kaduna (1). As of 6 March 2018, 128 (37.9%) of 337 samples tested were positive for bacterial meningitis, including 78 (60.9%) positive for *Neisseria meningitides* serogroup C (NmC).

Country	Event	Grade†	WHO notified	Start of reporting period	End of reporting period	Total cases	Confirmed cases	Deaths	CFR	Comments
Nigeria (Borno State)	Cholera	Ungraded	n/a	13-Feb-18	3-Apr-18	646	23	3	0.5%	A total of 646 cases have been reported from Borno State including 3 deaths. Of the 84 samples tested using rapid diagnostic tests (RDTs), 72 (85.7%) were positive, while 23 of 50 (41.8%) samples were culture positive.
São Tomé and Principé	Necrotising cellulitis/fasciitis	Protracted 2	10-Jan-17	25-Sep-16	24-Mar-18	2 539	0	0	0.0%	From week 40 in 2016 to week 12 in 2018, a total of 2 539 cases have been notified. In week 12, 32 cases were notified. The case rate of necrotising cellulitis in Sao Tome and Príncipe is 12.8 cases per 1 000 inhabitants.
Seychelles	Dengue fever	Ungraded	20-Jul-17	18-Dec-15	19-Feb-18	4 459	1 429	-	-	A total of 4 459 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-17	4-Dec-17	3-Apr-18	999	999	191	19.0%	Detailed update given above.
South Africa	Cholera	Ungraded	26-Feb-18	6-Mar-18	10-Mar-18	1	1	0	0.0%	The index case is a 37 year-old female from the border district of Umkhanyakude, in KwaZulu-Natal province. She presented at the clinic on 7 February 2018 with severe abdominal pains, diarrhoea, vomiting, and severe dehydration. *Vibrio Cholerare* 01 Ogawa was confirmed by the National Institute of Communicable Diseases (NICD), Centre for Enteric Diseases on 15 February 2018. The patient had no travel history. No other cases were reported.
South Sudan	Humanitarian crisis	G3	15-Aug-16	n/a	1-Apr-18	-	-	-	-	Detailed update given above.
South Sudan	Rift Valley fever (RVF)	Ungraded	28-Dec-17	7-Dec-17	9-Mar-18	40	6	4	10.0%	As of 9 March 2018, 40 suspected cases of Rift Valley fever have been reported from Yirol East (37) and Yirol West (3) counties of the Eastern Lakes State, including six confirmed human cases (one IgG and IgM positive and five IgG only positive), three cases who died and were classified as probable cases with epidemiological links to the three confirmed cases, 19 were classified as non-cases following negative laboratory results for RVF (PCR and serology), and samples from 12 suspected cases are pending complete laboratory testing. A total of four cases have died, including the three initial cases and one suspect case who tested positive for malaria (case fatality rate: 10.0%).

Country	Event	Grade†	WHO notified	Start of reporting period	End of reporting period	Total cases	Confirmed cases	Deaths	CFR	Comments
Tanzania	Cholera	G1	20-Aug-15	1-Jan-18	25-Mar-18	1 445	-	27	1.9%	This is part of an ongoing outbreak. The trend of reported cholera cases shows an increase to five cases and zero deaths from zero cases and deaths in week 11, 2018. From week 1 to 12 of 2018, a total of 1 445 cases with 27 deaths (CFR: 1.9%) were reported from Tanzania Mainland, no case was reported from Zanzibar. The last case reported from Zanzibar was on 11 July 2017. Since the start of the outbreak on 15 August 2015, Tanzania mainland reported 30 051 cases including 493 deaths (CFR 1.6%) and Zanzibar reported 4 688 cases including 72 deaths (CFR 1.5%). In total, 34 739 cases including 565 deaths (CFR 1.6%) were reported for the United Republic of Tanzania.
Tanzania	Dengue fever	Ungraded	19-Mar-18	n/a	21-Mar-18	13	11	-	-	An outbreak of Dengue fever is ongoing in Dar es Salaam. Limited information on this event is available.
Uganda	Humanitarian crisis - refugee	Ungraded	20-Jul-17	n/a	2-Mar-18	-	-	-	-	The influx of refugees to Uganda has continued as the security situation in the neighbouring countries remains fragile. Approximately 75% of the refugees are from South Sudan and 17% are from DRC. An increased trend of refugees coming from DRC was observed recently. Landing sites in Hoima district, particularly Sebarogo have been temporarily overcrowded. The number of new arrivals per day peaked at 3 875 people in mid-February 2018.
Uganda	Cholera	G1	15-Feb-18	12-Feb-18	5-Apr-18	2 044	18	44	2.2%	The outbreak of cholera in Hoima District continues to evolve. Ten new cases (10) admitted and 18 discharged in all CTCs on 4th April 2018.Three sub-counties in the district have been affected; Kabwoya, Buseruka, and Kyangwali. Most of the new cases are from new arrives refugees from DRC.
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).
Zambia	Cholera	G1	4-Oct-17	4-Oct-17	4-Apr-18	5 440	565	109	2.0%	Detailed update given above.
Zimbabwe	Typhoid fever	Ungraded	-	1-Oct-17	24-Feb-18	3 187	191	0	0.0%	Since the beginning of the outbreak in October 2017, a total of 3 187 cases including 191 confirmed cases have been reported. In 2018 alone, 1 094 cases were reported mainly from Mbare (438 cases) and Kuwadzana (205 cases). The outbreak has spread from its epicentre in Matapi to other areas such as Mbare and Nenyere.

†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.

Correspondence on this publication may be directed to:
Dr Benido Impouma
Programme Area Manager, Health Information & Risk Assessment
WHO Health Emergencies Programme
WHO Regional Office for Africa
P O Box. 06 Cité du Djoué, Brazzaville, Congo
Email: afrooutbreak@who.int

Contributors
S. Woldetsadik (Nigeria)
M. (South Africa)
S. O-Tipo (Zambia)
F. Mboussou (Democratic Republic of the Congo)
C. Itama (Central African Republic)
L. Luwaga (South Sudan)

Graphic design
Mr. A. Moussongo

Editorial Team
Dr. B. Impouma
Dr. C. Okot
Dr. E. Hamblion
Dr. B. Farham
Dr. V. Sodjinou
Ms. C. Machingaidze
Ms. V. Mize
Dr. P. Ndumbi
Dr. J. Kimeny
Dr. S. Funke

Production Team
Mr. A. Bukhari
Mr. T. Mlanda
Mr. C. Massidi
Mrs. C. Sounga
Mrs. M. Teklemariam

Editorial Advisory Group
Dr. I. Soce-Fall, *Regional Emergency Director*
Dr. B. Impouma
Dr. Z. Yoti
Dr. Y. Ali Ahmed
Dr. M. Yao
Dr. M. Djingarey

Data sources
Data and information 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.

Health Emergency Information and Risk Assessment

World Health Organization
Africa