# WEEKLY BULLETIN ON OUTBREAKS AND OTHER EMERGENCIES

Week 12: 17 – 23 March 2018 Data as reported by 17:00; 23 March 2018

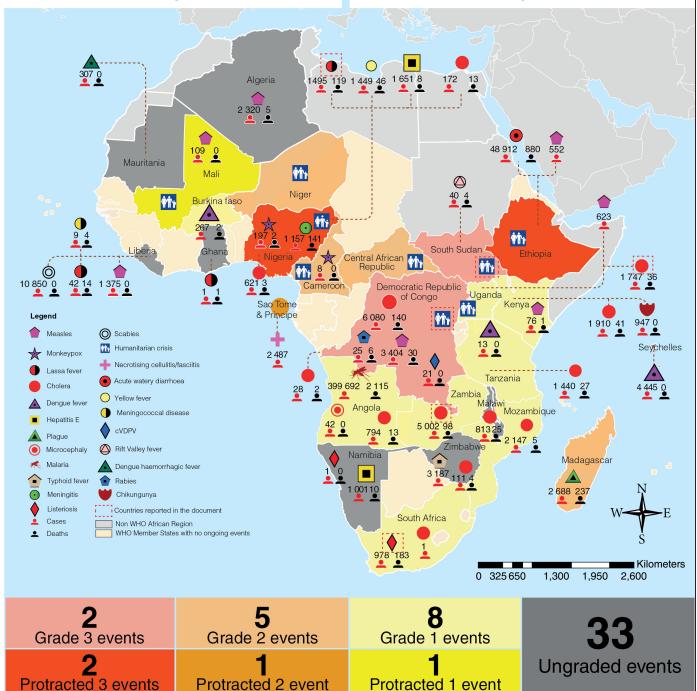


New events

50
Ongoing events

43
Outbreaks

9 Humanitarian crises



# **Overview**

# **Contents**

- 1 Overview
- 3 7 Ongoing events
- 8 Summary of major issues challenges and proposed actions
- 9 All events currently being monitored

- This Weekly Bulletin focuses on selected acute public health emergencies occurring in the WHO African Region. The WHO Health Emergencies Programme is currently monitoring 52 events in the region. This week's edition covers key ongoing events, including:
  - Listeriosis in South Africa
  - Lassa fever in Nigeria
  - Cholera in Zambia
  - Cholera in Uganda
  - Humanitarian crisis in South Sudan
  - Humanitarian crisis in the Democratic Republic of the Congo.
- For each of these events, a brief description followed by public health measures implemented and an interpretation of the situation is provided.
- A table is provided at the end of the bulletin with information on all public health events currently being monitored in the region, as well as events that have recently been closed.

#### Major issues and challenges include:

- The outbreak of listeriosis in South Africa continues to raise public health concerns in the region, evoking diverse public, economic and political reactions. Twelve countries have reportedly imposed trade import bans on South African meat products, with three countries extending the bans to dairy products, fruits and vegetables. While countries have to strengthen their national food safety and disease surveillance systems to protect the health of their populations, this should be done in line with provisions of the International Health Regulations and scientific principles.
- Zambia is experiencing an upsurge of cholera, particularly in the urban Lusaka District. The resurgence has been attributed to recent heavy rains and floods. This trend needs to be reversed as soon as possible and the outbreak ultimately brought to a halt.

# **Ongoing events**

Listeriosis South Africa 978 183 18.7% CFR

#### **EVENT DESCRIPTION**

The incidence of listeriosis cases in South Africa continues to decline. Since our last report on 9 March 2018 (Weekly Bulletin 10), 11 new confirmed cases were reported, with no additional deaths, as of 14 March 2018. Between 1 January 2017 and 14 March 2018, a total of 978 confirmed listeriosis cases, including 183 deaths (case fatality rate 18.7%), have been reported: 748 (76.5%) in 2017 and 230 (23.5%) in 2018. All the nine provinces in the country have been affected, with 80% of cases coming from three provinces, namely Gauteng (59%, 581), Western Cape (12%, 118) and KwaZulu-Natal (7%, 70). Females account for 56% (532) of the cases with known gender. For 946 cases with known age, the ages range from birth to 92 years, with a median of 19 years.

Of 674 cases with known hospitalization outcome, 183 have died, giving a case fatality rate of 27% in this group. This is comparable to the case fatality rate of other recorded listeriosis outbreaks worldwide. Most of the cases are in people with a higher risk for a severe disease outcome, including neonates, pregnant women, the elderly, and immunocompromised persons. Forty-two percent of cases in this outbreak occurred in newborn babies, who could have contracted infections during pregnancy or delivery. Of 310 cases with known data on race, 85% (262) were black, 8% (25) white, 7% coloured (22), and 1% Asian (1).

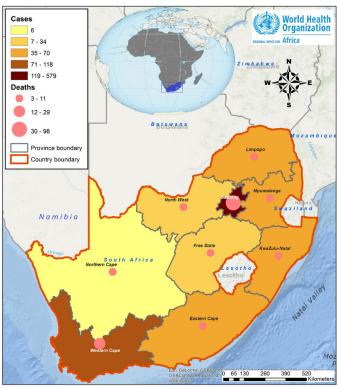
#### **PUBLIC HEALTH ACTIONS**

- On 15 March 2018, the Southern African Development Community (SADC) Health Ministers held an extra-ordinary strategic meeting in Johannesburg to share information and to enhance preparedness and response capacities for listeriosis in the region.
- Following identification of the source of infection, the national authorities have issued safety recall notices, compliance notices, and measures related to exportation of implicated products and risk communication for vulnerable groups.
- The Department of Health (DOH) and the National Institute for Communicable Diseases (NICD) have communicated to all health care workers to continue with vigilance for new cases as persons who have consumed implicated processed meat products over the past few weeks may continue to present with listeriosis.
- Due to cross-contamination of other ready to eat processed meat products, either at production, distribution or retail, the DOH has advised the public to avoid all processed meat products that are sold as ready to eat.
- WHO has started deploying a second team of experts through GOARN and INFOSAN mechanisms to support outbreak investigations and response.
- WHO is working with 16 African nations that imported the implicated meat products to enhance capacities for preparedness and readiness to potential listeriosis outbreak response.

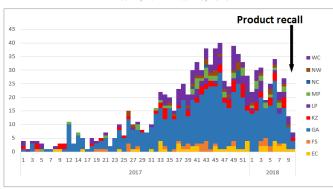
# SITUATION INTERPRETATION

South Africa continues to experience the world largest outbreak of invasive listeriosis ever reported. Even though the disease trend has been steadily declining, cases are likely to continue for weeks after the recall of the implicated meat products due to the long incubation period of the causative agent, *Listeria monocytogenes*, ranging from few days up to 90 days. The implicated foodstuffs in this outbreak, the ready-to-eat meat products, are commonly consumed in South Africa and in the region. The Enterprise-branded products accounted for 28.2% of processed meat sales in South Africa in 2017. The products have also been exported to 15 countries in the African region, namely: Angola, Botswana, Democratic Republic of the Congo, Ghana, Lesotho, Madagascar, Malawi, Mauritius, Mozambique, Namibia, Nigeria, Swaziland, Uganda, Zambia, and Zimbabwe. All the countries have recalled the implicated products. The current risk associated with the potentially contaminated products depends on the efficiency of the removal of these products from the markets in the region. The efficiency of the recall process, therefore, needs to be strictly monitored and enforced.





Weekly trend of listeriosis cases in South Africa, Week 1, 2017 - week 10, 2018



Lassa fever

1 495 Cases

119 Deaths 8.0% **CFR** 

#### **EVENT DESCRIPTION**

The Lassa fever outbreak in Nigeria has been steadily declining over the last four weeks and this trend is being closely monitored. In week 11 (week ending 18 March 2018), nine new confirmed cases and four deaths (case fatality rate 44.4%) were reported, compared to 12 confirmed cases and four deaths in week 10, and 35 confirmed cases and seven deaths in week 9. The new confirmed cases and deaths came from five states: Taraba (4 cases and 1 death), Edo (2 cases and 1 death), Ondo (2 cases and 1 death), Bauchi (1 case), and Ebony (1 death). As of 18 March 2018, 38 cases were under treatment across six states.

Nigeria

From 1 January to 18 March 2018, a total of 1 495 suspected cases, including 119 deaths (case fatality rate 7.9%), have been reported. Of the suspected cases, 376 were confirmed, nine have been classified as probable and 1 084 tested negative (noncases). Laboratory results for 26 cases are pending. Of the 119 deaths, 86 occurred in confirmed cases, nine in probable cases and 24 in negative cases. This gives a case fatality rate of 24.7% among the confirmed and probable cases.

A total of 56 local government areas (LGAs) in 19 states have recorded at least one confirmed case. The majority (83%) of all confirmed cases are from Edo (43%), Ondo (24%) and Ebonyi (16%) states. As of 19 March 2018, 10 states remain in active epidemic phase, having reported at least one confirmed case in the last 21 days or having contacts within 21 days post-exposure.

No new healthcare workers have been affected since week 9, when two staff were confirmed positive in Ebonyi State. Since the start of the outbreak, 17 health workers, including four deaths (case fatality rate 23.5%), have been affected in six states: Ebonyi (9 cases and 3 deaths), Edo (3 cases), Kogi (2 cases and 1 death), Nasarawa (1 case), Benue (1 case), and Ondo (1 case).

A total of 3 698 contacts have been identified from the 19 affected states. Of these, 835 are currently being followed up, 2 863 have completed 21-day follow up and 22 of the 55 symptomatic contacts have tested positive from three states; Edo (12), Ondo (7) and Ebonyi (3).

#### **PUBLIC HEALTH ACTIONS**

- There is an ongoing mid-term assessment of the Incident Action Plan (IAP) which was developed following the activation of the emergency operation centre (EOC).
- Coordination of the response operations has been strengthened through designation of leads for each of the five response pillars: epi-surveillance and contact tracing; case management, infection prevention and control and safe burial; communication and social mobilization; logistics and supplies; and coordination. Strategic coordination meetings are held every Monday and Friday, made up of all the pillar leads, key partners' representatives and the incident manager.
- Emergency Operations Centres (that mirror the response pillars at national level) have been activated in the three most affected states, with designated incident managers. Coordination meetings are also held at least three times a week at health facility level in the three major Lassa fever treatment centres. Weekly teleconferences are held between the State EOC's incident managers and the national EOC, with daily updates and summary data sent from the states to national
- An outbreak data management tool, SORMAS, has been deployed in Edo and Ondo States, expected to enhance real-time outbreak data management.
- WHO polio state officers are supporting coordination at the State and treatment centre levels.

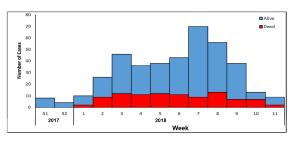
#### SITUATION INTERPRETATION

The number of confirmed Lassa fever cases in Nigeria has continued to decline since week 8 of 2018. However, this decline needs to be interpreted with caution since the current surveillance systems have challenges and the data may not be sufficient to draw such inference, at least in the short term. Additionally, surveillance data from previous outbreaks suggests that Lassa fever transmission peak season has not yet passed. Surveillance challenges being experienced include irregular reporting, particularly from non-hotspot states, incomplete furnishing of case investigation forms and delay in analysis. There is also inadequate funding to scale up active case search in the community. Stigmatization of contacts and discharged patients in the community is also being reported. All these challenges need to be addressed urgently, especially the funding to strengthen active surveillance and support other response interventions in the field.

#### Geographical distribution of Lassa fever cases in Nigeria, week 11, 2018



Weekly trend of Lassa fever cases in Nigeria, week 51, 2017 - week 11, 2018



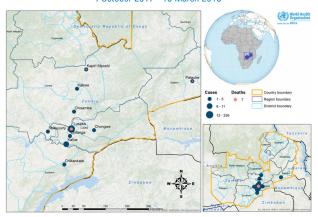
Cholera Zambia 5 002 98 2.0% Cases Deaths CFR

#### **EVENT DESCRIPTION**

Zambia is experiencing an upsurge in cholera cases, with the urban Lusaka District being the most affected. During week 11 (week ending 18 March 2018), a total of 291 new suspected cholera cases, including seven deaths (case fatality rate 2.4%), have been reported in the country. Of these, 256 cases came from Lusaka District, including all the seven deaths (compared to 175 cases and two deaths reported in week 10). Four of the deaths occurred in the community. Nine other districts collectively reported 35 new cases, namely Kafue (11), Chikankata (5), Shibuyunji (5), Chongwe (5), Patauke (3), Kabwe (3), Chilanga (1), Chisamba (1), and Kapiri Mposhi (1). By 19 March 2018, 66 patients (51 in Lusaka and 15 in five other districts) were admitted across 12 cholera treatment centres/units (CTC/CTU) in the country.

Since the beginning of the outbreak on 4 October 2017, a cumulative total of 5 002 cases, including 98 deaths (case fatality rate 2.0%), have been reported nationwide, as of 18 March 2018. The majority (92%, 4 587 cases) of cases and deaths (86%, 84 deaths) have been reported from the urban Lusaka district. The cases are concentrated in seven sub-districts of Lusaka, namely Kanyama, Chipata, Bauleni, Matero, Chawama, Chelston, and Heroes. Cholera cases have also been reported from 23 other districts outside Lusaka, where 415 cases with 14 deaths (case fatality rate 3.4%) have been reported.

#### Geographical distribution of cholera cases in Zambia, 4 October 2017 - 18 March 2018



Out of 1 177 stool samples collected and analysed in the laboratory, 441 (38%) cultured Vibrio cholerae 01 Ogawa and close to 60% (243) of the isolates were sensitive to five common antibiotics.

#### **PUBLIC HEALTH ACTIONS**

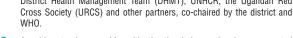
- The second round of the oral cholera vaccine (OCV) vaccination campaign was conducted in Chawama and Kanyama from 5 14 February 2018, with 711 704 people (148% of the target population) vaccinated. The vaccination campaign will be continued in other affected areas, and Chipata and Matero are scheduled to receive the vaccine pert
- There are two major CTCs and five CTUs in Lusaka District providing case management services to cholera patients. The largest CTC is set up at Heroes Stadium, with expandable bed capacity of up to 500. Training and mentorship of healthcare workers on case management and infection prevention and control practices are ongoing.
- Implementation of water, sanitation and hygiene (WASH) interventions is ongoing. Water trucking using 38 bowsers continues, with daily volume increased to over 3 million litres per day and distributed to communities and public institutions. Water quality surveillance is being conducted.
- There are 380 community based volunteers conducting field activities, including door-to-door campaigns, distribution of chlorine tablets and information, education and communication materials.
- The Ministry of Health continues to disseminate health education messages through various channels, including press briefings, public address systems, radio, brochures and posters.

#### **SITUATION INTERPRETATION**

The cholera outbreak in Zambia has worsened in the last two weeks following a steady decline in the disease trend to a minimum in the past few weeks. The upsurge is being attributed to the ongoing heavy rains and subsequent floods that occurred in Lusaka and other parts of the country. None-the-less, such circumstances should have been anticipated and adequate preparedness measures put in place. In addition, the case fatality rate in this outbreak is unnecessarily high, with four community deaths reported in the urban Lusaka district during the reporting week. This situation needs to be attended to more aggressively. All ongoing interventions need to be stepped up, with a particular focus on community mobilization and engagement, functional active surveillance and effective case management, including home-based management of dehydration. The WASH interventions should be targeting community, household and personal activities likely to result in ingestion of contaminated water and food.

Geographical distribution of cholera cases in Uganda, 15 February - 21 March 2018

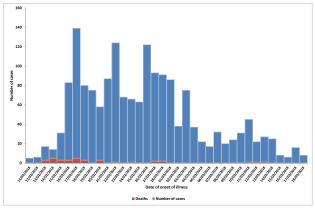
## **EVENT DESCRIPTION** The cholera outbreak in refugee settlements in Hoima District in western Uganda continues. While the outbreak initially improved greatly, the reduction in the incidence slowed down in the last two weeks, with a daily average of 20 new cases. Since our last report on 9 March 2018 (Weekly Bulletin 10), an additional 342 cases were reported, with one death. On 21 March 2018, 13 new suspected cholera cases were reported, bringing the number of patients admitted to the CTCs to 25 by then. Since the beginning of the outbreak on 15 February 2018, a cumulative total of 1 826 suspected cholera cases, with 36 deaths (case fatality rate 2.0%) were reported. The outbreak is still localised to three sub-counties, namely Kyangwali, Kabwoya and Buseruka. Most of the cases are newly arrived refugees from the Democratic Republic of the Congo. A total of 97 specimens have been collected and analysed, of which 21 cultured Vibrio cholerae, 72 were positive on cholera rapid diagnostic test and results of 13 samples are still pending. Previous culture results isolated V. cholerae O1 and 0139 strains. Ten stool samples were for bloody diarrhoea. **PUBLIC HEALTH ACTIONS** A district coordination meeting was held on 21 March 2018, involving the District Health Management Team (DHMT), UNHCR, the Ugandan Red



- A multi-sectoral proposal for mitigating the cholera outbreak was presented for discussion to the District Executive Council by the District Secretary for Health and Social Services.
- The surveillance team reviewed the case investigation form and WHO and Médecins sans Frontière (MSF) will print and distribute copies to cholera treatment centres and other health centres in affected areas.
- Active case search is ongoing by DHMT, URCS village health teams and UNHCR hygiene promotors in the resettlement camp. WHO is supporting surveillance with technical guidance and six vehicles for transporting field investigators and active case search teams.
- Chlorine tablets (Aqua tabs) delivered by UNICEF have been distributed in Buhuka and distribution is planned in Nkondo. Village health teams have been orientated in their use and community sanitation task forces are being formed and trained. Ten spray pumps donated by MSF were distributed for household disinfection.
- There were 121 household latrines constructed in Maratatu and hand washing was demonstrated to community members in Kiina and Kyakapere villages. UNICEF is supporting the water, sanitation and hygiene teams with technical guidance.
- Radio spots messages sponsored by UNICEF are ongoing on local FM radios and communities are receiving information, education and communication materials, with community meetings being held in the most affected communities in Kiina and Kyakapere villages.



Epidemic curve of cholera outbreak in Hoima District, Uganda, 11 February - 18 March 2018



# SITUATION INTERPRETATION

Although the trend of the cholera outbreak in Hoima District is still declining, the rate has slowed down in the last two weeks, pointing to some issues with the effectiveness of the ongoing response. The continuing inflow of refugees from the Democratic Republic of the Congo also enhances the potential for further transmission. This and the fact that the district has not received any significant funding for response activities since the start of the outbreak are of great concern.

The district requires urgent funding to implement effective response activities in the affected communities. Outbreak response interventions, especially WASH and social mobilization, need to be enhanced in order to prevent further transmission and the risk of geographical spread of the disease

#### South Sudan

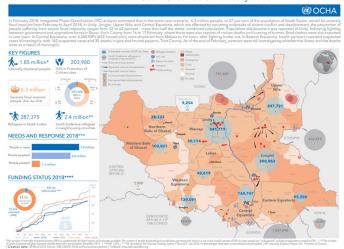
#### **EVENT DESCRIPTION**

The complex humanitarian crisis in South Sudan continues as the security situation remains volatile across the country, with persistent reports of intercommunal clashes, rape, and cattle raids. The situation is being exacerbated by the severe economic crisis facing the country, with high inflation making health emergency operations expensive. In February 2018, 110 humanitarian access incidents were reported, of which nearly half (48%) involved violence. Forty of these involved violence against humanitarian personnel, with the number of incidents involving operational interference more than tripling from 11 in January 2018 to 37 in February 2018. International aid agencies were most affected.

A high level delegation mission to Leer County, Unity State on 9 March 2018, one of two counties affected by famine in 2017, found that in spite of mitigation through intensive humanitarian intervention, the situation remains fragile, with around 85% of the population predicted to reach crisis and emergency food insecurity conditions by the end of April 2018.

In week 10 of 2018, measles and bloody diarrhoea were the most common infectious diseases reported. The top causes of illness among internally displaced people (IDPs) were acute respiratory infections (25.5%), malaria (16.2%), acute watery diarrhoea (8.4%) and injuries (4.03%). Overall, malaria remains the highest cause of morbidity in South Sudan, with a total of 372 309 cases with 58 deaths registered since week 1 of 2018.

#### Humanitarian crisis in South Sudan as of February 2018



Suspected meningitis cases in Torit County declined during week 11, with only three new suspected cases, including one death, reported. As of 17 March 2018, a total of 171 suspected meningitis cases including 31 deaths (case fatality rate 18.13%) have been reported from lyire and Imurok payams. While most deaths occurred in Imurok payam (22 deaths), the case fatality rates were highest in lyire payam (39.1%).

A measles outbreak was confirmed in Aweil East after four samples tested measles IgM positive, and a total of 21 measles cases have been line listed. At least 101 suspected measles cases have been reported since the start of 2018, with one death (case fatality rate 1.6%). Of the 68 samples collected, 14 were positive. Active transmission is currently in Aweil East and Aweil Centre in Northern Barh el Ghazal State.

Rift Valley fever continues to be transmitted, with a total of 40 suspected cases reported in Eastern Lakes between 7 December 2017 and 17 March 2018. Six human cases have been confirmed positive, along with nine animal samples found to be serologically positive.

#### **PUBLIC HEALTH ACTIONS**

- WHO supported the response to the suspected meningitis outbreak in Torit, providing technical support and case management supplies. A total of 10 technical officers were deployed to support the state and strengthen the response.
- On 6 March 2018, the Minister of Health led a mission comprising of officials from the Ministry of Livestock and Fisheries, FAO and WHO to conduct on-the-spot assessment of the Rift Valley fever outbreak in Yirol East. The mission reviewed the ongoing response and the status of prevention and preparedness activities in the surrounding at risk counties.
- Surveillance for Rift Valley fever has been heightened for both human cases and animal alerts, being done by community health workers and community animal health workers.
- WHO trained over 35 participants from 20 health cluster partners to enhance the capacity of front-line health cluster partners, particularly in the areas of infection prevention and control in primary healthcare facilities, targeting hygiene or oral medication dispensing and instituting proper waste segregation management and final treatment
- The WHO country team trained seven county immunization supervisors and four polio field supervisors from the ten former counties of Western Equatoria States on data management processes and techniques.
- The WHO Torit team, along with the state rapid response team and other partners, visited lyire Nyara and Khormus public healthcare units to facilitate the reopening of the facility in lyire, which has been closed for three years due to insecurity. Meningitis surveillance was strengthened by training 20 community based surveillance officers in case search.
- The first round of polio sub-national immunization days (sNIDs) in five former state hubs of Central Equatoria, Eastern Equatoria, Jonglei, Unity and Upper Nile targeting 1.78 million children under five years is ongoing, with a partial coverage of 450 507 (25.3%).
- A reactive measles campaign supported by WHO and partners targeting children 6 months to 59 months, is slated from 26 31 March 2018.
- In Cueibet, a reactive measles campaign was completed with an administrative coverage of 87%. In Aweil Centre, the reactive measles vaccination campaign has been completed. Coverage data is being analysed and the coverage survey is also being finalized.

#### SITUATION INTERPRETATION

Despite recent peace talks, there appears to be no end in sight to this protracted and complex humanitarian crisis. Access to hard-to-reach communities continues to be limited, particularly in areas affected by conflict. There is continued economic decline, and a rising cost of living, with inflation reaching 183% in Juba. Funding to support initial outbreak investigations and response is inadequate, with only US\$ 3.4 million of the US\$ 16.9 million required to fund the Humanitarian Response Plan provided so far. International political and humanitarian actors need to respond urgently to prevent further suffering to those affected by this crisis.



## **Humanitarian crisis**

#### **Democratic Republic of Congo**

#### **EVENT DESCRIPTION**

Armed conflicts and inter-community tensions have created one of the world's most complex and longstanding humanitarian crisis in the Democratic Republic of the Congo. Over 4.5 million people are internally displaced and more than 2 million children are suffering from severe acute malnutrition. Additionally, the country is host to more than 500 000 refugees from Central African Republic, South Sudan, Rwanda, and Burundi.

Fighting continues in several places. In Ituri region, inter-tribal clashes from 1 - 3 March 2018 caused the deaths of more than 30 people, with more than 130 000 internally displaced. More than 40 000 people from the region have sought refuge into neighbouring Uganda since the beginning of the year.

In addition to the worsening humanitarian crisis, the country is experiencing multiple disease outbreaks, including cholera, measles, monkeypox and rabies. In week 10 (week ending 11 March 2018), the weekly cholera incidence slightly increased to 626 suspected cases with 25 deaths (case fatality rate 4%), from 575 suspected cases and 17 deaths (case fatality rate 3.0%) reported in week 9. The increase was observed in Maindombe, Kasaï Oriental and North Kivu Provinces. Between 1 January 2017 to 11 March 2018, a cumulative total of 61 785 suspected cholera cases and 1 321 deaths (case fatality rate 2.1%) were reported in the country. The decline in cholera incidence in Kinshasa, observed since week 4 of 2018, continues, with 26 suspected cases reported in week 10 (compared to 221 cases at the peak of the outbreak in week 2 of 2018).

#### Humanitarian crisis in Democratic Repliblic of the Congo as of February 2018



The measles outbreak registered a slight reduction in incidence, with 491 suspected cases and 10 deaths (case fatality rate 2.0%) reported in week 10, against 542 cases and five deaths (case fatality rate 0.9%) in week 9. South Kivu Province is the most affected.

In week 10, 73 suspected cases of monkeypox, including five deaths (case fatality rate 6.9%) were reported, compared to 60 cases and one death (case fatality rate 1.7%) reported in week 9. The majority (53%, 39) of the monkeypox cases came from Grand Equateur Province.

#### **PUBLIC HEALTH ACTIONS**

- The Ministry of Health, with support from WHO and partners, is preparing to conduct an oral cholera vaccination campaign in the islands of Bolobo, Yumbi and Lukolela in Maindombe Province. Validation of population figures and delivery of logistics are ongoing.
- An assessment of WASH and infection prevention and control (IPC) conditions in health centres is ongoing in Kinshasa, Tanganyika, Kasaï, North Kivu, and Kasaï Oriental Provinces
- The Ministry of Health deployed a rapid response team (consisting of an epidemiologist, a biologist and a clinician) to Bena Dibele health zone to support the investigation, organization of case management and promotion of preventive measures for the monkeypox outbreak.
- The operational plan to support the response to the rabies outbreak in Goma has been funded by WHO and implementation is ongoing. WHO has ordered 900 doses of rabies vaccines and 300 doses of anti-rabies serum.
- The Ministry of Health, with support from WHO, conducted the Joint External Evaluation of the International Health Regulations to assess the country's capacity to prevent, detect and respond to public health risks that may occur spontaneously or due to deliberate or accidental events.
- A WHO team is carrying out an evaluation of the humanitarian situation in Ituri region in order to identify unmet health needs.
- WHO continues to support response to the measles outbreak in the Lubunga, Lubutu, and Haut Plateaux of Uvira health zones through case investigations and case management activities.
- WHO has deployed and facilitated training on the Early Warning, Alert and Response System (EWARS) in Bandundu and Goma. It is expected that the EWARS electronic reporting system will strengthen timely notification of cholera cases, rapid data analysis, interpretation and dissemination.

#### SITUATION INTERPRETATION

The complex humanitarian crisis in the Democratic Republic of the Congo remains a concern. The volatile security situation causes continued population movements, and violence has hampered humanitarian access to affected populations in some areas. The recent increase in the trend of cholera cases underscores the need to step up interventions in order to prevent a potential resurgence of the disease in Kinshasa and in areas along the Congo River. Focused attention of national and international partners on this crisis should continue, particularly to improve the security situation and prevent exacerbation of the humanitarian crisis and public health impact of the crisis. In addition, the financial resources, estimated at US\$ 1.68 billion, required to address the humanitarian needs is far from being realised, and this is a real limiting factor in the provision of humanitarian assistance to the people in need.



# Summary of major issues challenges, and proposed actions

# **Issues and Challenges**

- The outbreak of listeriosis in South Africa continues to raise public health concerns in the region, evoking diverse public, economic and political reactions. The ready-to-eat meat products identified as the source of this outbreak are widely consumed in South Africa and have been exported to 15 countries in the region. WHO is concerned that the wide distribution of the implicated products could result in more listeriosis cases in South Africa and in the other countries.
- While the implicated meat products have been recalled, listeriosis cases are likely to continue for weeks due to the long incubation period of L. monocytogenes. The efficiency of the recall process is also an important factor.
- Zambia is experiencing a resurgence of cholera outbreak, particularly in the urban Lusaka District. This resurgence is being attributed to ongoing heavy rains and the recent floods that occurred in Lusaka and other areas. The case fatality rate in this outbreak is unnecessarily high, standing at 2.0%, with four community deaths reported in the urban Lusaka district during the reporting week. This new trend being observed needs to be reversed henceforth and the outbreak ultimately brought to halt.

## **Proposed actions**

- WHO calls upon Member States to strengthen their national food safety policy and disease surveillance systems as a prerequisite to ensure a safe food supply for their populations and prevent future listeriosis outbreaks. In addition, countries are urged to pay more attention to common foodborne pathogens such as Salmonella species, Campylobacter jejuni, Escherichia coli and L. monocytogenes and to make listeriosis a notifiable disease, if it is not already.
  - Travelers are advised to follow regular precautions for food hygiene: avoid uncooked food, avoid food that has been kept at room temperature for several hours, and always wash hands thoroughly with soap and water before preparing or consuming food.
- The national authorities and partners in Zambia need to address this outbreak more aggressively. All ongoing interventions need to be stepped up, with a particular focus on community mobilization and engagement, functional active surveillance and effective case management, including home-based management of dehydration. The WASH interventions should be targeting community, household and personal activities likely to result in ingestion of contaminated water and food.

# 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  Central African Republic	Monkeypox	Ungraded	20-Mar-18	2-Mar-18	16-Mar-18	8	2	-	-	The outbreak was officially declared on 19 March 2018. As of 21 March 2018 eight cases including two confirmed cases have been reported.
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.
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	11-Mar-18	794	5	13	1.6%	On 21 December 2018, two suspected cholera cases were reported from Uige district, Uige province. Both of these cases had a history of travel to Kimpangu (DRC). The number of weekly cases had a decreasing trend from week 2 to week 8, with an increase in cases in week 10, with 40 cases.
Angola (Cabinda province)	Cholera	Ungraded	8-Mar-18	18-Feb-18	11-Mar-18	28	-	2	7.1%	A suspected case in Cabinda province was reported on 18 February 2018, which tested positive by a Rapid Diagnostic Test (RDT). Between 5 and 11 February 2018, 12 cases and one death (8.3%), were report- ed 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	Micro- cephaly - 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 been decreasing 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	Humanitari- an crisis	G2	31-Dec-13	27-Jun-17	3-Nov-17	-	-	,	,	At 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.
Central African Republic	Humanitari- an crisis	G2	11-Dec-13	11-Dec-13	28-Feb-18	-	-	-	-	The security situation remains tense and precarious in many places across the country. In recent weeks, humanitarian access to IDPs remains one of the major challenges. Currently, 2.5 million people are in need of humanitarian aid including 1.1 million people targeted for the health cluster partners. There are around 688 700 internally displaced persons across the country, in which 70% of them are living with host families.

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	Humanitari- an crisis		20-Dec-16	17-Apr-17	11-Mar-18	-	-	-	-	Detailed update given above.
Democratic Republic of the Congo	Cholera	G3	16-Jan-15	1-Jan-18	4-Mar-18	6 080	0	140	2.3%	This is part of an ongoing outbreak. From week 1 to 8 of 2018, a total of 6 080 cases including 140 deaths (CFR: 2.3%) were reported from DRC. In week 8, 571 new cases with 22 deaths have been reported, including 37 cases from Kinshasa. Fifty-four percent of the cases reported in week 8 from endemic areas (North Kivu, South Kivu, Tanganyika). Nationwide, a total of 60 492 cases including 1 288 deaths (CFR; 2.1%) have been reported since January 2017.
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	Poliomyeli- tis (cVD- PV2)	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 toward the end of October 2017 in Kibua health district, North Kivu province. During Week 6 of 2018, three cases were reported.

Country	Event	Grade†	WHO notified	Start of reporting period	End of reporting period	Total cases	Confirmed cases	Deaths	CFR	Comments
Ethiopia	Humanitari- an crisis		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)	Protract- ed 3	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	18-Feb-18	552	13	-	-	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 552 suspected cases including 191 confirmed cases, have been reported across the country. Most of the cases in 2018 have been reported from Somali region (28%), followed by Oromia (22%), SNNP (21%), and Addis Ababa (18%). Most affected groups are children under five years of age (32%) and children between 5 and 14 years old (43%).
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.

Country	Event	Grade†	WHO notified	Start of reporting period	End of reporting period	Total cases	Confirmed cases	Deaths	CFR	Comments
Kenya	Chikun- gunya	Ungraded	mid-De- cember 2017	mid-De- cember 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.
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	Menin- gococcal 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	3-Dec-17	1 375	69	-	-	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 8 of 2018, 1 375 cases have been reported.

Country	Event	Grade†	WHO notified	Start of reporting period	End of reporting period	Total cases	Confirmed cases	Deaths	CFR	Comments
Liberia	Lassa fever	Ungraded	14-Nov-17	1-Jan-18	12-Mar-18	42	7	14	33.3%	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 12 March 2018, seven confirmed cases have been reported from Nimba (4), Montserrado (2), 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 Mont- serrado county.
Madagascar	Plague	G2	13-Sep-17	13-Sep-17	18-Mar-18	2 688	556	237	8.8%	From 1 August 2017 to 18 March 2018, a total of 2 668 cases of plague were notified, including 556 confirmed, 828 probable and 1 284 suspected cases. Out of them 2 029 cases were of pulmonary, 432 were of bubonic, 1 was of septicemic form and 206 cases unspeci- fied.
Malawi	Cholera	Ungraded	28-Nov-17	20-Nov-17	20-Mar-18	813	84	25	3.1%	In week 11 (12-18 March 2018), a total of 55 cases with 2 deaths were reported from fpur districts: Karonga (7 cases), Rumphi (1 case), Dedza (1 case), Salima (3 cases), Lilongwe (42 cases, 2 deaths) compared to the previous week where 41 cases and 4 deaths had been reported. As of 20 March 2018, 813 cases and 25 deaths have been reported from 13 districts.
Mali	Humanitari- an crisis	Protract- ed 1	n/a	n/a	19-Nov-17	-	-	-	-	The security situation remains volatile in the north and centre of the country. At the last update, incidents of violence had been perpetrated against civilians, humanitarian workers, and political-administrative authorities.
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.

Country	Event	Grade†	WHO notified	Start of reporting period	End of reporting period	Total cases	Confirmed cases	Deaths	CFR	Comments
Mauritania	Dengue hae- morrhagic fever	Ungraded	30-Nov-17	6-Dec-17	22-Feb-18	307	165	1	-	In 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. 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	GI	27-Oct-17	12-Aug-17	15-Mar-18	2 147	-	5	0.2%	The cholera outbreak is ongoing. Cases have been reported from two provinces; Nampula (1 635 cases and one death) and Cabo Delgado (512 cases and 4 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 since the first week of January.
Namibia	Hepatitis E	Ungraded	18-Dec-17	8-Sep-17	20-Mar-18	1 001	100	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 547 (54%) of the total cases, followed by Goreagab settlements with 252 (25%) cases. The most affected age group is between 20 and 39 years old representing 73% 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 about a confirmed case of listeriosis in Windhoek. The index case; a 41 years 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 <i>Listeria monocytogenes</i> was isolated. The patient has no travel history outside Namibia. Investigations are ongoing to establish if there are any links between this case and the outbreak in South Africa.

Country	Event	Grade†	WHO notified	Start of reporting period	End of reporting period	Total cases	Confirmed cases	Deaths	CFR	Comments
Niger	Humanitari- an 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	Humanitari- an crisis	Protract- ed 3	10-Oct-16	n/a	31-Jan-18	-	-	-	-	Conflict and insecurity in the north east of Nigeria remain a concern and resulted in a large scale of displacement. Most affected areas recently 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.
Nigeria	Cholera (nation wide)	Ungraded	7-Jun-17	1-Jan-18	4-Feb-18	172	1	13	7.6%	The 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 2.53%), including 60 laboratory-confirmed were reported from 87 LGAs in 20 States. Between weeks 1 and 5 of 2018, 172 suspected cases including one laboratory-confirmed case and 13 deaths (CFR 7.56%), have been reported from 23 LGAs in 7 States.
Nigeria	Lassa fever	G2	24-Mar-15	1-Jan-18	18-Mar-18	1 495	376	119	8.0%	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. Forty-three new cases were reported in Kala/Balge LGA in week 52 (ending 31 December 2017).

Country	Event	Grade†	WHO notified	Start of reporting period	End of reporting period	Total cases	Confirmed cases	Deaths	CFR	Comments
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	22-Dec-17	197	68	2	1.0%	Suspected cases are geo- graphically 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	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).
Nigeria (Borno State)	Cholera	Ungraded	n/a	13-Feb-18	19-Mar-18	621	23	3	0.5%	A total of 621 cases have been reported from Borno State. Of the 77 samples tested using rapid diagnostic tests (RDTs), 69 (89%) were positive, while 23 of 50 (46%) samples were culture positive.
São Tomé and Principé	Necrotising cellulitis/ fasciitis	Protract- ed 2	10-Jan-17	25-Sep-16	10-Mar-18	2 487	0	0	0.0%	From week 40 in 2016 to week 10 in 2018, a total of 2 487 cases has been notified. In week 10, 16 cases were notified from six districts. The case rate of cellulite in Sao Tomé and Príncipe is 12.6 cases per 1 000 inhabitants.
Seychelles	Dengue fever	Ungraded	20-Jul-17	18-Dec-15	21-Jan-18	4 445	1 429	-	-	A total of 4 445 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	14-Mar-18	978	978	183	18.7%	This outbreak is ongoing since the beginning of 2017. A total of 748 laboratory-confirmed listeriosis cases were reported in 2017, and 230 cases in 2018. Around 80% of cases are reported from three provinces; Gauteng, Western Cape, and KwaZulu-Natal provinces. Following the source identification; the national authorities with support from WHO and other partners; have taken measures to limit further infections and associated mortality including but not limited to the issuance of safety recall notices, compliance notices, and measures related to exportation of implicated products, and risk communication with vulnerable groups.
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 cholerae 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	Humanitari- an crisis	G3	15-Aug-16	n/a	18-Mar-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), 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	18-Mar-18	1 440	-	27	1.9%	This is part of an ongoing outbreak. The trend of reported cholera cases shows a decrease to zero cases and deaths in week 11 from 18 cases and zero deaths in week 10. From week 1 to 11 of 2018, a total of 1 440 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 30 046 cases including 493 deaths (CFR 1.6%) and Zanzibar reported 4 688 cases including 72 deaths (CFR 1.5%). In total, 34 734 cases including 565 deaths (CFR 1.6%) were reported for the United Republic of Tanzania.
Uganda	Humani- tarian 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	17-Mar-18	1 747	18	36	2.1%	Detailed update given above.
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	19-Mar-18	5 002	67	98	2.0%	Detailed update given above.

Country	Event	Grade†	WHO notified	Start of reporting period	End of reporting period	Total cases	Confirmed cases	Deaths	CFR	Comments
Zimbabwe	Cholera	Ungraded	22-Jan-18	8-Jan-18	19-Mar-18	111	13	4	3.6%	The Cholera Chegutu Municipality in Mashonaland West Province was declared end in the first week of March, following zero reported cases since the last case on 10 February 2018. On 8 of March 2018, a 12-year-old female from the capital Harare; was tested positive for cholera. Following the investigation; 21 asymptomatic individuals had rectal swabs taken for culture, and of these, 3 were positive for cholera making the total of confirmed cases to 4 cases. No patients were admitted to the cholera treatment centre since 15 March 2018.
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.

<sup>†</sup>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.

#### © WHO Regional Office for Africa

This is not an official publication of the World Health Organization.

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

Requests for permission to reproduce or translate this publication – whether for sale or for non-commercial distribution – should be sent to the same address.

The designations employed and the presentation of the material in this publication do not imply the expression of any opinion whatsoever on the part of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted lines on maps represent approximate borderlines for which there may not yet be full agreement.

All reasonable precautions have been taken by the World Health Organization to verify the information contained in this publication. However, the published material is being distributed without warranty of any kind, either express or implied. The responsibility for the interpretation and use of the material lies with the reader. In no event shall the World Health Organization or its Regional Office for Africa be liable for damages arising from its use.

#### Contributors

M. Groepe (South Africa)

I. Okudo (Nigeria)

P. Kalubula (Zambia)

I. Komakech (Uganda)

G. Guyo (South Sudan)

G. Folefack (Democratic Republic of the Congo)

## 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

Mr. R. Ibrahim

Dr. P. Ndumbi

Dr. K. Heitzinger

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.

