

## **Overview**

## **Contents**

1 Overview

2 - 6 Ongoing events

7 Summary of major challenges and proposed actions

8 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 50 events in the region. This week's edition covers key new and ongoing events, including:
  - Listeriosis in South Africa
  - Rift Valley fever in South Sudan
  - Lassa fever in Nigeria
  - Cholera in Uganda
  - Humanitarian crisis in 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 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 recent identification of the source of the listeriosis outbreak in South Africa provides critical guidance for the implementation of prevention and control measures, but risk communication to the public regarding food recalls and implementation of mechanisms to ensure removal of all potentially contaminated products from stores and regular inspection of food processing plants are needed to control this outbreak and prevent future cases.
- The confirmation of additional animal cases of Rift Valley fever in South Sudan and detection of human cases in a new county underscore the importance of scaling up One Health interventions to contain the outbreak in livestock and reduce the risk of animal to human transmission in communities at risk.

## **Ongoing events**

Listeriosis

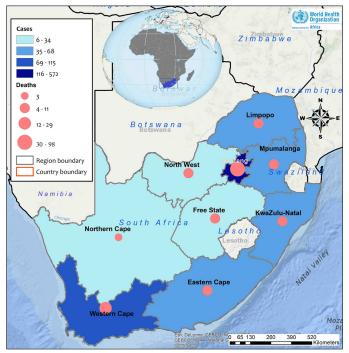
#### South Africa



#### **EVENT DESCRIPTION**

The outbreak of listeriosis in South Africa is ongoing, and the new development is that the source of the outbreak has been identified. As of 8 March 2018 there have been 967 laboratory-confirmed cases reported to the National Institute for Communicable Diseases (NICD) since 1 January 2017. Of these, 749 cases were reported in 2017 and 218 cases in 2018. Of the 669 confirmed cases for whom outcome data are available, 183 died, giving a case fatality rate of 27.4%. Gauteng Province has reported the most cases (59.1%; 572/967) followed by Western Cape (11.9%, 115/967) and KwaZulu-Natal (7.0%, 68/967).

The majority (85.3%; 93/109) of infected people interviewed by an NICD team reported eating ready-to-eat processed meat products, most commonly polony, followed by viennas/sausages and other 'cold meats'. On 12 January 2018, nine children under the age of 5 years from the same crèche presented to Chris Hani Baragwanath Hospital in Johannesburg with febrile gastroenteritis. A food-borne illness was suspected, with listeriosis as a possible cause. Environmental Health Practitioners (EHPs) visited the crèche and obtained samples from two unrelated brands of polony (Enterprise and Rainbow Chicken Limited (RCL)), which were submitted for testing. Listeria monocytogenes was isolated from the stool of one ill child and from both polony specimens. Whole genome sequencing and genomic analysis by the NICD Centre for Enteric Diseases confirmed the ST6 sequence type on all three isolates on 27 January 2018. Whole genome sequencing analysis was performed on environmental samples collected from the Enterprise factory, confirming the outbreak strain ST6, and showing the source of the outbreak to be the Enterprise food production facility in Polokwane, Limpopo Province.



Geographical distribution of listeriosis cases in South Africa,

1 January – 8 March 2018

#### **PUBLIC HEALTH ACTIONS**

- The National Consumer Commission immediately requested the recall of Enterprise's entire domestic and international distribution networks and issued a compliance notice in terms of the National Health Act.
- The Minister of Health held a press conference on 4 March 2018 to announce the source of the outbreak.
- The registration for exports by the respective processing or manufacturing plants, RCL and Enterprise, have been temporarily suspended.
- An investigation of the RCL Wolwehoek production facility is underway.
- Risk communication messages have been issued advising the public not to eat all processed meat products that are sold as ready-to-eat, and major food chains have recalled ready-to-eat meat products.

#### SITUATION INTERPRETATION

The identification of the source of this outbreak is an important milestone in the control of this event. Strong risk communication and information about potentially contaminated food products is required, as well as public information about what to do if they have eaten these products. The disease is now notifiable and a strong surveillance system is required for early reporting, case investigation and detection. Food safety and inspection mechanisms need to be strengthened by public health authorities.

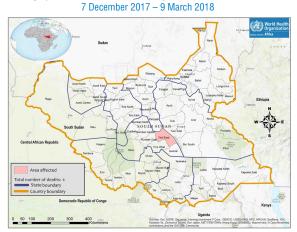


Rift Valley feverSouth Sudan40410.0%CasesDeathsCFR	Rift Valley fever	South Sudan				
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#### **EVENT DESCRIPTION**

The outbreak of Rift Valley fever (RVF) continues to evolve in Eastern Lakes State, South Sudan, with another county affected. As of 9 March 2018, a total of 40 cases and four deaths have been reported from Yirol East (37 cases, 4 deaths) and Yirol West (3 cases, no deaths) counties. Of these, a total of six confirmed, three probable, and 12 suspect RVF cases (with pending laboratory results) have been reported. Nineteen suspected cases were considered as non-cases following negative laboratory results for RVF. The majority of suspected cases have been women (57.1%), and individuals aged 20-39 years make up the majority (72.2%) of cases.

In week 10, eight new suspected human cases were reported in Yirol East (five cases) and Yirol West (three cases). Samples have been collected from these cases and seven were shipped to the Uganda Virus Research Institute (UVRI) on 7 March 2018 for laboratory testing. As of 9 March 2018, there were no cases hospitalized. During the week, one human sample tested RVF IgG positive, bringing the cumulative number of confirmed RVF cases to six (one RVF IgM and IgG positive and five IgG-only positive). Test results from 21 animal samples (from livestock) that were shipped to South Africa were released during the week; eight were RVF positive (three IgM-positive and five IgG-positive), six samples were classified as suspect RVF cases based on IgG and IgM serological titres, and seven samples were negative. Since the beginning of the positive (three IgM and six IgG), six classified as suspected RVF (based on IgG and



Geographical distribution of Rift Valley fever cases in South Sudan,

IgM serological titres), and 13 classified as RVF negative. Goats, sheep, and cattle in the area have shown evidence of zoonotic haemorrhagic illness and abortions in livestock, disease in cattle, and wild bird die-offs have been reported.

#### **PUBLIC HEALTH ACTIONS**

- In light of the confirmation of additional animal cases, a joint Ministry of Health and Ministry of Livestock and Fisheries press briefing is scheduled for 12 March 2018 to formally declare the outbreak in Yirol East county.
- Investigation and response activities continue to be coordinated by a multi-sectoral task force that meets weekly at the national and sub-national (Yirol East) level.
- On 6 March 2018, a high-level delegation led by the Minister of Health with participation of officials from the Ministry of Health, Ministry of Livestock and Fisheries, WHO, and the Food and Agriculture Organization of the United Nations (FAO) visited Yirol East. The delegation was briefed on the outbreak and status of prevention and response activities in Yirol East and other counties at risk.
- State rapid response teams continue to investigate all new suspected RVF cases and are supporting the collection of samples to enable confirmatory laboratory testing.
- Surveillance for human and animal cases by community health workers and community animal health workers is ongoing.
- Community mobilization, engagement, and sensitization activities are ongoing in Yirol East, Yirol West, and Awerial counties with support from the Yirol East county health department, the Eastern Lakes State Ministry of Health, UNICEF, and Community Health and Development Organization (CHADO).
- The development of a multisectoral RVF preparedness and response framework is ongoing.

#### SITUATION INTERPRETATION

The RVF outbreak in South Sudan continues to evolve, and the detection of suspected cases in a Yirol West county and confirmation of additional animal cases underscores the need to strengthen RVF preparedness, surveillance, and response capacity in human and animal populations at risk. Support from the Ministry of Health and Ministry of Livestock and Fisheries, in collaboration with WHO, FAO, and partners will be needed to implement the necessary One Health interventions aimed at containing the disease in livestock and reducing the risk of animal to human RVF transmission. Extended human and animal health and entomological investigations into the event, and the finalization of the multisectoral RVF preparedness and response framework are urgently needed to guide activities in this area. Technical support for the development of a long term RVF risk communication strategy is also needed, as such a strategy is a key component in reducing the risk of human RVF cases in this population.

Go to map of the outbreaks

#### Nigeria



#### **EVENT DESCRIPTION**

The Lassa fever outbreak in Nigeria is being closely monitored. In the reporting week ending 4 March 2018, 35 new confirmed cases were recorded from five states: Edo (19), Ebonyi (9), Ondo (5), Bauchi (1), and Plateau (1), with seven new deaths in confirmed cases from three states: Ebonyi (3), Edo (2), and Ondo (2).

From 1 January to 4 March 2018, a total of 1 121 suspected cases have been reported. Of these, 353 were confirmed positive, eight are probable, 723 are negative (non-cases) and 37 are pending laboratory results. There have been 110 deaths since the beginning of the year: 78 in confirmed cases, eight in probable cases and 24 in non-cases, giving a case fatality rate of 23.8% in confirmed and probable cases.

There are 18 active states (Anambra, Bauchi, Benue, Delta, Ebonyi, Edo, Ekiti, Gombe, Imo, Kogi, Lagos, Nasarawa, Ondo, Osun, Plateau, Rivers, Taraba, and the Federal Capital Territory). Most (85%) of all confirmed cases are from Edo (44%), Ondo (25%) and Ebonyi (16%) states. Cumulatively, 16 health workers have been affected in six states: Ebonyi (9), Edo (3), Benue (1), Kogi (1), Ondo (1) and Nasarawa (1), with four deaths in Ebonyi (3) and Kogi (1). Two health workers were confirmed positive this week (ending 4 March 2018) in Ebonyi State. People aged 21-40 years have been the main age group affected, with a median age of 34 years. The male to female ratio of confirmed cases is 2:1.

As of 4 March 2018, 35 cases were admitted in Irrua Specialist Hospital, 18 in Federal Medical Centre (FMC) Owo and 16 in Federal Teaching Hospital (FETH) Abakiliki, occupying all isolation beds in the treatment facilities. A total of 3 126 contacts have been identified from the 18 active states, of which 1 586 are currently being followed up, 1 485 have completed 21 days of follow up and 21 of the 47 symptomatic contacts have tested positive from three states (Edo (11), Ondo (7) and Ebonyi (3)).

#### **PUBLIC HEALTH ACTIONS**

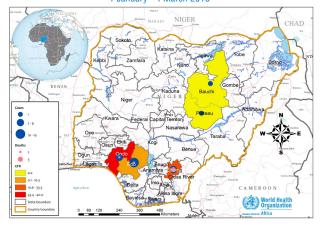
- The National Lassa Fever Emergency Operations Centre (EOC) continues to coordinate response to the outbreak, with support from WHO and other partners.
- A comprehensive incident action plan has been developed to guide \_\_\_\_\_\_' response activities and inform priority areas for collaboration with partners and resource mobilization.
- Multidisciplinary rapid response teams continue to support response efforts in Ebonyi, Edo, and Ondo States.
- WHO continues to scale up its support of the response at national and state levels.
- NCDC has distributed personal protective equipment, antiviral medication (ribavirin), beds, body bags and hand sanitizers to FMC Owo, FETH Abakiliki, Niger and Ekiti states.
- The Bernhard Nocht Institute for Tropical Medicine Germany is supporting Irrua Specialist Teaching Hospital (ISTH), National Reference Laboratory (NRL) in Abuja and Lagos Teaching Hospital (LUTH) laboratories with testing reagents.
- NCDC is collaborating with the Alliance for International Medical Action (ALIMA) and Médecins Sans Frontières (MSF) in Anambra, Edo, and Ondo states to support case management.
- O NCDC teams deployed to four Benin Republic border states (Kebbi, Kwara, Niger and Oyo) continue to enhance surveillance activities in those areas.
- Risk communication activities are being developed and shared as media content for press releases, radio broadcasts and social media posts. There are coordinated media appearances of influential leaders supporting the risk communication messages.

#### SITUATION INTERPRETATION

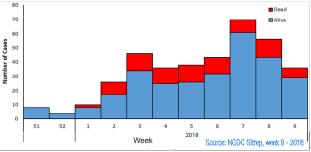
The high incidence of confirmed Lassa fever cases remains a concern, particularly in the light of overstretched treatment facilities in FMC Owo and ISTH Irrua, inadequate contact tracing activities due to a lack of funding, weak linkage between tertiary health facilities and state public health departments, delays in sending samples from states to diagnostic centres and delays in submission of updated line lists from affected states. The wide geographic spread of cases and the potential for further cross-border spread is also a significant concern. National and international authorities need to continue to scale up response activities as soon as possible, including resource mobilization, technical capacity building, infection prevention and control and case management capacity.



#### Geographical distribution of Lassa fever cases in Nigeria, 1 January - 4 March 2018



Weekly trend in confirmed and probable cases of Lassa fever in Nigeria, week 51, 2017 – week 9, 2018



#### **EVENT DESCRIPTION**

The outbreak of cholera in the refugee settlements of Hoima District, Uganda, continues to evolve. Since our last report on 2 March 2018 (*Weekly Bulletin 9*), a total of 333 cases and four deaths (case fatality rate 1.2%) were reported. As of 7 March 2018, 24 new cases were admitted to the cholera treatment centres (CTCs): Sebigoro (9 cases), Kasonga (9 cases), Buhuka health centre (4 cases), and Kyangwali health centre (2 cases); no deaths were reported from the CTCs. Three sub-counties in Hoima district have been affected, including Buseruka and Kyangwali, in addition to Kabwoya sub-county where the outbreak emerged. A case reported from Hoima regional referral hospital was from Kikonda, Kyanwazi district, which borders Hoima district.

Since the beginning of the outbreak on 15 February 2018 to 7 March 2018, a total of 1 484 cases, including 35 deaths (case fatality rate 2.4%), have been reported. The majority of the affected people are refugees from the Democratic Republic of the Congo. Ten stool samples were collected and analyzed, of which seven grew *Vibrio cholerae*. The strains isolated to date include *Vibrio cholerae* 01and *Vibrio cholerae* 0139. The outbreak was confirmed on 19 February 2018 and formally declared by the Ugandan Ministry of Health on 23 February 2018.

#### **PUBLIC HEALTH ACTIONS**

- Coordination structures have been established at the national and district levels. A district coordination meeting led by the district health team and Ministry of Health was held on 7 March 2018 with participation from WHO, UNICEF, MSF, MTI, and the Red Cross; interventions to improve sanitation and hygiene and an assessment of case management in Buhuka are planned.
- A Ministry of Health team has been deployed to Hoima District to coordinate outbreak response, with technical and financial support from WHO.
- Water, sanitation and hygiene (WASH) and communication specialists from UNICEF have also been deployed to Hoima District to provide technical support for response activities.
- The district health officer of Kyangwanzi district was notified about the case from his district and an investigation of this case is ongoing.
- Two CTCs have been set up at Kasonga HC III and Sebigoro HC III, both staffed by healthcare workers from Hoima District, MSF and MTI, with technical support from the Ministry of Health and WHO.

Geographical distribution of cholera cases in Uganda, 15 - 7 March 2018



- UNICEF is providing financial support to healthcare workers staffing the CTCs.
- Village health teams are conducting active case finding in Kyangwali refugee settlement, Nkondo parish, Buhuka, and Kaiso village.
- WHO is supporting surveillance and contact tracing in affected areas via technical guidance and transportation of teams.
- Implementation of WASH interventions including the distribution of aqua tabs, the construction of latrines and handwashing facilities, and deployment by UNICEF of 15 health assistants to supervise these activities is ongoing.
- The Uganda Red Cross Society (URCS) is planning to implement hygiene and sanitation improvements in both the host and refugee communities, with support from UNICEF. This plan includes 100 communal latrines, 40 hand washing facilities, 500 sanitation kits, 150 boxes of soap, safe water storage facilities, and distribution of 2 000 5-litre jerry cans.
- Cholera cases are being line-listed, and the dataset cleaned and analyzed daily to guide the response.
- Distribution of information, education, and communication materials to churches, schools, and trading centres is ongoing, and village health teams are conducting community sensitization activities on cholera prevention and control.

#### SITUATION INTERPRETATION

The number of new cases continues to decline, and transmission is still mainly localized in the new refugee settlements and fishing villages along Lake Albert. Results from a recent UNHCR WASH assessment indicated that around 25% of the refugees in Maratatu had no access to safe water, highlighting the need to address the underlying risk factors contributing to the outbreak in already affected areas and areas at risk. Considering the recent large influx of refugees from the Democratic Republic of the Congo, the risk for cholera transmission is likely to persist unless additional WASH interventions are implemented in refugee settlements and nearby host communities. WHO and partners should urgently scale up prevention and control interventions, including community sensitization and engagement activities, risk communication, case management, and cholera screening of refugees at entry points.

05 Go to overview

Go to map of the outbreaks

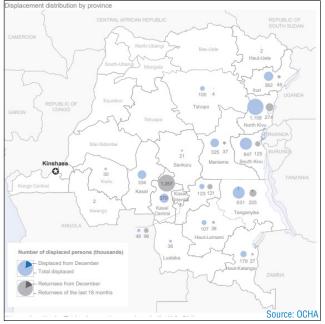
#### **EVENT DESCRIPTION**

The security situation in the Democratic Republic of the Congo remains fragile in the provinces of Haut-Katanga, Ituri, Maniema, North Kivu, South Kivu, and the Kasaï region. The United Nations Office for the Coordination of Humanitarian Affairs (OCHA) estimated that 4.5 million people had been internally displaced in the country as of the end of 2017, including 2.7 million children. In Ituri, intercommunity conflicts between the Lendu and Hema communities have occurred, with more than 30 people killed from 1-3 March 2018. It is estimated that 130 000 internally displaced persons (IDPs) have moved as a result of this conflict, and more than 40 000 people have sought refuge in neighbouring Uganda since the beginning of the year. In South Kivu, two international NGOs have suspended their activities in the Kabambare territory because of the increased insecurity in the area, resulting in 7 200 people lacking access to basic health services. In Sahbunda territory, the relative calm in the area has led to approximately 5 000 people returning to their villages, although only one of four health centres has reopened, and 21 000 people continue to lack basic health services.

In North Kivu, the activities of a number of humanitarian organizations continue to be suspended following the kidnapping of four members of the national NGO Hydraulique Sans Frontières (HYFRO) on 17 February 2018. Two of the kidnapped staff were killed, one escaped, and one was freed on 20 February 2018. In the Masisi territory, conflicts between armed groups on 17 and 18 February 2018 resulted in the displacement of 1 500 people to Butare. In Kasaï province, the return of refugees from Angola to Kamako health zone continues, following the expulsion of hundreds of Congolese refugees on 27 February 2018. As of the end of February 2018, 54 734 displaced people were living without any form of assistance in Kamako.

The cholera outbreak showed a slight increase in cases in week 8 (the most recent week for which data are available) at the national level and in non-





endemic areas. A total of 571 suspected cases and 22 deaths (case fatality rate 3.9%) were reported during week 8 (ending 25 February 2018), compared to 459 suspected cases and 13 deaths (case fatality rate 2.8%) in week 7 (ending 18 February 2018). The new cases were mainly reported from the provinces of South Kivu (113 cases), North Kivu (112 cases), Kasaï Oriental (88 cases) and Maindombe (76 cases). The decreasing trend in the number of cholera cases in the capital city, Kinshasa, slowed during week 8, with 41 suspected cases reported and no deaths. The measles outbreak continues, with 569 cases and ten deaths (case fatality rate 1.8%) reported in week 8. The majority (64%) of cases were reported from Maniema and South Kivu provinces. The cumulative number of suspected measles cases between week 1 and week 8 of 2018 is 3 404 with 30 deaths (case fatality rate 0.9%).

#### **PUBLIC HEALTH ACTIONS**

- WHO participated in the Humanitarian Advocacy Group meeting held on 2 March 2018, presenting its strategic emergency response plan for 2018.
- A total of 37 international experts have been deployed to assist with health emergency response efforts during week 9, including the addition of an epidemiologist deployed by GOARN. Seven other international experts are to be deployed by GOARN and other partners.
- A security officer deployed by the WHO African Regional Office is evaluating the security conditions in Kalemie in order to recommend security measures needed to establish a health emergency hub in this town.
- WHO is planning an evaluation of the humanitarian situation in Ituri in order to identify unmet health needs.
- A joint mission to evaluate the situation in the Kakenge health zone of Kasaï Central province is planned for 6 and 7 March 2018, with coordination by OCHA and participation by WHO and other UN agencies.
- The Ministry of Health organized a workshop to finalize the training guide for outbreak rapid response teams, with support from WHO.
- WHO continues to support cholera case investigations, construction of a cholera treatment unit, risk communication, and community-based WASH activities in the Kasai Oriental and other affected areas.
- WHO continues to support the response to the measles outbreak in the Lubunga, Lubutu, and Haut plateaux d'Uvira health zones via case investigations and case management activities.

#### SITUATION INTERPRETATION

The complex humanitarian crisis in the Democratic Republic of the Congo remains concerning. The volatile security situation causes continued population movements, and violence in some areas has hampered humanitarian access to affected populations. The recent increase in the trend of cholera cases underscores the need to prevent its resurgence 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 and public health impact of the crisis.



## Summary of major challenges and proposed actions

### **Challenges**

- Risk communication messaging regarding food recalls in South Africa is critical to reducing the risk of exposure to Listeria-contaminated products. Aside from educating the public regarding the risk, mechanisms to identify and ensure removal of all potentially contaminated products from the food supply are needed to bring this outbreak to a close.
- The detection of suspected human Rift Valley fever cases in a new county and the confirmation of additional animal cases in South Sudan indicate a continued risk of disease for both human and animal populations and highlight the urgent need to reduce the risk of animal to human transmission in the short term to bring the outbreak under control, and in the long term to prevent future recurrence of disease.

### **Proposed actions**

- The South African Ministry of Health and partners should continue to educate the public regarding measures to reduce the risk of consumption of *Listeria*-contaminated food products and establish clear procedures to ensure that the public can safely dispose of any potentially contaminated products. Investigation of and regular inspection of food processing plants should continue to ensure that all products implicated in this outbreak are identified and removed from the food supply. Establishment of measures to prevent future listeriosis outbreaks should also be considered.
- Continued support from national and international partners is needed to scale up One Health interventions in animal and human populations affected by or at risk for Rift Valley fever in South Sudan, including risk communication, expansion of human and animal surveillance, case investigations, and laboratory testing. The finalization of a multisectoral Rift Valley fever preparedness and response framework is critical to guiding the implementation of activities to control the current outbreak and reduce disease risk in the long term.

# 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
Angola (Cabinda province)	Cholera	Ungraded	8-Mar-18	18-Feb-18	4-Mar-18	6	-	0	0.0%	A suspected case in Cabinda province was reported on 18 February 2018, who was rapid diagnostic test (RDT) positive. A total of 6 suspected cases (5 of which were RDT positive) have been reported. The National Public Health Laboratory confirmed <i>Vibrio</i> <i>cholerae</i> 01 in samples taken last week. (The date of confirmation and number of confirmed samples are not currently available.)
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 Umkh- anyakude, in KwaZulu-Natal prov- ince. She presented at the clinic on 7 February 2018 with severe abdominal pains, diarrhoea, vomiting, and severe dehydration. <i>Vibrio Cholerae</i> 01 Ogawa was confirmed by the National Institute of Communicable Diseases (NICD), Centre for Enteric Diseases on 15 Feb- ruary 2018. The patient had no travel history.
Ongoing event	s									
Angola	Cholera	G1	2-Jan-18	21-Dec-17	4-Mar-18	696	5	13	1.9%	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 Kim- pangu (DRC). The number of weekly cases had a decreasing trend from week 2 to week 8, with an increase in cases in week 9, with 59 cases and 2 deaths reported.
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.
Angola	Microcephaly - suspected Zika virus disease	Ungraded	10-Oct-17	End September	29-Nov-17	42	-	-	-	A cluster of microcephaly cases was detected in Luanda in late September 2017 and reported on 10 October 2017 by the provincial surveillance system. Of the 42 cases, three were stillbirths and 39 were live births. Suspected cases have been reported from Luanda province (39), Zaire province (1), Moxico province (1), and Benguela province (1).
Benin	Lassa fever	Ungraded	13-Jan-18	8-Jan-18	5-Mar-18	24	5	9	37.5%	Twenty-four cases (5 confirmed, 3 probable and 16 suspected) including 9 deaths were reported from five depart- ments: Atacora(9), Bourgou(8), Collin- es(4), Alibori (2), and Couffo (1). Three confirmed cases had a history of travel to Nigeria.

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 re- ported in the central region, notably in Ouagadougou (the capital). Dengue vi-
Cameroon	Humanitarian crisis	G2	31-Dec-13	27-Jun-17	3-Nov-17	-	-	-	-	rus serotypes 1, 2, and 3 are circulating. At the beginning of November, the gen- eral 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 Dis- placed People have been registered.
Central African Republic	Humanitarian 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, humani- tarian 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.
Democratic Republic of the Congo	Humanitarian crisis		20-Dec-16	17-Apr-17	4-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 be- ginning 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 vac- cine-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 Decem- ber 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.												
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 assis- tance, 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)		Protracted 3	Protracted 3	Protracted 3	Protracted 3	Protracted 3	Protracted 3	Protracted 3	Protracted 3	Protracted 3	Protracted 3	Protracted 3	Protracted 3	15-Nov-15	1-Jan-17	21-Feb-18	48 912	-	880	1.8%	This is 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 Lassa fever case. 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 being monitored.												
Kenya	Chikungunya	Ungraded	mid December 2017	mid- December 2017	26-Feb-18	841	36	0	0.0%	As of 26 February 2018, a total of 782 cases including 32 confirmed cases, were reported from Mombasa county and 59 cases including 4 confirmed cases have been reported from Lamu county.												
Kenya	Cholera	G1	6-Mar-17	1-Jan-18	26-Feb-18	1 476	34	29	2.0%	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 De- cember 2017 not available). In 2018, a total of 1 476 cases have been reported as since the first of January. Currently, the outbreak is active in 6 counties: Garissa, Siaya, Tharaka Nithi, Meru, Tana River, and Turkana counties. The outbreak was recently controlled in Mombasa, Kirinyaga, and Siaya.												

Kenya	Measles	Ungraded	19-Feb-18	n/a	26-Feb-18	24	6	0	0.0%	The outbreak is located in Wajir County. Date of onset of the index case was on 15 December 2017. As of 26 February, the outbreak has spread to four villages in Wajir East. Most of the affected persons had unknown vaccination status (79%). The affected sub-county was not part of the response campaign conducted in 2017.
Liberia	Meningococ- cal 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 <i>Neisseria meningitidis</i> serogroup W. All seven samples collected as of 29 January were negative for Ebola and Lassa fever viruses by PCR, nega- tive 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.
Liberia	Lassa fever	Ungraded	14-Nov-17	1-Jan-18	5-Mar-18	24	7	12	50.0%	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 5 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 re- ported from five counties: Montserrado (9 647), Grand Bassa (687), Rivercess (315), Margibi (185), and Bong (16). All 17 confirmed cases have been reported from Montserrado county.
Madagascar	Plague	G2	13-Sep-17	13-Sep-17	22-Feb-18	2 655	552	237	8.9%	Cases include pneumonic (2 025, 76%), bubonic (424, 16%), septicemic (1) and unspecified (205, 8%) forms of disease. Of the 2 025 clinical cases of pneu- monic plague, 401 (20%) have been confirmed, 639 (32%) are probable and 985 (49%) remain suspected. The trend in the number of cases has been decreasing since 10 October 2017.
Malawi	Cholera	Ungraded	28-Nov-17	20-Nov-17	5-Mar-18	716	78	19	2.7%	The number of cases is still increasing. In epi-week 8 (19-29 February), a total of 101 cases including 4 deaths were reported from 5 districts: Karonga (29 cases, 1 death), Rumphi (2 cases), Dedza (17 cases), Salima (15 cases), Lilongwe (38 cases, 3 deaths) compared to the previous week where 91 cases and 4 deaths had been reported. As of 25 February 2018, 642 cases have been reported from 13 districts: Karonga (303 cases), Kasungu (1 case), Dowa (5 cases), Nkhatabay (20 cases), Lilongwe (201 cases), Salima (59 cases), Chikawa (1 case), Mulanje (4 cases), Ramphi (10 cases), Blantyre (1 case) and Dedza (18 case).

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 politi- cal-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 (An- songo, Bandiagara, Douentza, Kadiolo, and Yanfolila). Forty-nine samples were confirmed positive by serology (IgM) at the national reference labora- tory INRSP.
Mauritania	Dengue haem- orrhagic 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 Feb- ruary, 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 type 2 (104/165).
Mozambique	Cholera	G1	27-Oct-17	12-Aug-17	8-Mar-18	2 099	-	5	0.2%	The cholera outbreak is ongoing. Cases have been reported from two provinces and five districts. Affected districts in Nampula province are (Memba, Erati, Nacaroa, and Nampula city), and Pem- ba city in Cabo Delgado province. The outbreak started in mid-August 2017 from Memba district. Erati District started reporting cases from week 41, Nacoroa started reporting cases from week 42, 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	4-Mar-18	942	100	7	0.7%	This outbreak has been ongoing since 2017. The majority of cases have been reported from informal settlements in the capital district Windhoek. The most affected settlement is Havana, account- ing for about 515 (54%) of the total cases, followed by Goreagab settlements with 240 (25%) cases. The most affected age group is between 20 and 39 years old representing 75% of total cases.
Niger	Humanitarian crisis	G2	1-Feb-15	1-Feb-15	16-Feb-18	-	-	-	-	The humanitarian situation in Niger remains complex. The state of emergen- cy has been effective in Tillabéry and Tahoua Regions since 3 March 2017. Security incidents continue to be re- ported 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.

[ ]										Conflict and insecurity in the north
Nigeria	Humanitarian crisis	Protracted 3	10-Oct-16	n/a	31-Jan-18	-	-	-	-	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, Gajiga- na, Tungushe, and Tungushe Ngor towns. Initial estimates for the number of IDPs in recent months is between 20 000 and 36 000, many of whom 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	4-Mar-18	1 121	353	110	9.8%	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 decreas- ing since week 51. Forty-three new cases were reported in Kala/Balge LGA in week 52 (ending 31 December 2017).
Nigeria	Yellow fever	Ungraded	14-Sep-17	7-Sep-17	21-Feb-18	1 014	35	46	4.5%	A total of 1 014 cases have been re- ported from 24 states: Abia, Anambra, Bayelsa, Borno, Cross Rivers, Delta, Edo, Enugu, Imo, Jigawa, Kaduna, Kano, Katsina, Kebbi, Kogi, Kwara, Lagos, Nasarawa, Niger, Oyo, Plateau, Rivers, Sokoto, and Zamfara. Thir- ty-five cases from seven states (Kano, Kebbi, Kogi, Kwara, Nasarawa, Niger, and Zamfara) have been laborato- ry-confirmed at IP Dakar.
Nigeria	Monkeypox	Ungraded	26-Sep-17	24-Sep-17	22-Dec-17	197	68	2	1.0%	Suspected cases are geographically spread across 22 states and the Federal Capital Territory (FCT). Sixty-eight laboratory-confirmed cases have been reported from 14 states/territories (Akwa Ibom, Abia, Bayelsa, Benue, Cross River, Delta, Edo, Ekiti, Enugu, Lagos, Imo, Nasarawa, Rivers, and FCT).
Nigeria	Meningitis	Ungraded	26-Dec-17	1-Sep-18	2-Feb-18	536	87	82	15.3%	Cases have been reported from twelve States; Zamfara (272), Katsina (115), Sokoto (49), Jigawa (29), Bauchi (20), Cross River (17), Kebbi (12), Yobe (12), Kano (4), Borno (3), Adamawa (2) and Kaduna (1). As of 2 February 2018, 87 of 206 (42%) samples tested were positive, including 54 (62%) positive for <i>Neisseria meningitides</i> serogroup C (NmC).
São Tomé and Principé	Necrotising cellulitis/ fasciitis	Protracted 2	10-Jan-17	25-Sep-16	17-Feb-18	2 444	0	0	0.0%	From week 40 in 2016 to week 7 in 2018, a total of 2444 cases has been notified. In week 7, 16 cases were no- tified from five districts. The case rate of cellulite in Sao Tome and Príncipe is 12.4 cases per 1000 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 report- ed from all regions of the three main islands (Mahé, Praslin, and La Digue). The trend in the number of cases
ļ ļ								ļ		has been decreasing since week 23. Detailed update given above.

South Sudan	Humanitarian crisis	G3	15-Aug-16	n/a	4-Mar-18	-	-	-	-	The crisis in South Sudan is currently a Protracted 3 humanitarian emergency following the conflict in December 2013. Currently, about 4 million people have fled their homes for safety of which 1.9 million people are internally displaced; while an estimated 2.1 mil- lion are refugees in neighbouring coun- tries. The country is currently facing a severe economic crisis and high inflation making the health emergency operations quite expensive and hence difficulties in delivering humanitarian assistance.
South Sudan	Rift Valley fever (RVF)	Ungraded	28-Dec-17	7-Dec-17	9-Mar-18	40	6	4	10.0%	Detailed update given above.
Tanzania	Cholera	G1	20-Aug-15	1-Jan-18	4-Mar-18	1 422	-	27	1.9%	This is part of an ongoing outbreak. From week 1 to 9 of 2018, a total of 1 422 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. The trend of reported cholera cases from Tanzania Mainland this week decreased to 116 cases and no deaths compared to 321 cases and seven deaths in week 8. In week 9 cases have been reported from five regions: Dodoma (49 cases), Ruvuma (31 cases), Rukwa (17 cases), Iringa (12 cases) and Morogoro (7 cases). Since the start of the outbreak on 15 August 2015, Tanzania mainland reported 30 028 cases including 493 deaths (CFR 1.6%) and Zanzibar reported 4 688 cases including 72 deaths (CFR 1.5%). In total, 34 716 cases including 565 deaths (CFR 1.6%) were reported for the United Republic of Tanzania.
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 ob- served 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	7-Mar-18	1 484	7	35	2.4%	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).
Uganda	Rift Valley fever (RVF)	Ungraded	22-Nov-17	14-Nov-17	26-Feb-18	9	6	5	55.6%	No new cases have been confirmed since 29 January. The last confirmed case died on the same date. On 12 March 2018, 42 days will have passed since the death of the last confirmed case.
Uganda	Crimean- Congo haem- orrhagic Fever (CCHF)	Ungraded	27-Dec-17	23-Dec-17	26-Feb-18	2	2	0	0.0%	No new cases have been confirmed since 6 January 2018. The last con- firmed case was discharged on 28 January. On 11 March 2018, 42 days will have passed since the discharge of the last case.

Zambia	Cholera	G1	4-Oct-17	4-Oct-17	1-Mar-18	4 416	67	89	2.0%	On 1 March 2018, 21 new cases with no deaths were reported in Lusaka district. Four new cases were reported from other districts outside Lusaka, namely Kafue (2 cases) and Chikanta (2 cases). Since the start of the outbreak, Lusaka district reported a total of 4 076 cases with 75 deaths; the cumulative number of cases from other districts is 340 with 14 deaths.
Zimbabwe	Cholera	Ungraded	22-Jan-18	8-Jan-18	22-Feb-18	107	9	4	3.7%	Chegutu Municipality in Mashonaland West Province of Zimbabwe, southwest of the Capital City Harare remains the hotspot of this outbreak. As of 22 February 2018, a cumulative total of 107 cases and 4 deaths (CFR: 3.7%) have been reported. Of these, 94 cases are from Chegutu, 12 cases are from different peri-urban areas of Chegutu, and one case from Msengezi area. No new cases have been admitted to the cholera treatment centre since 14 February 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 in- cluding 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.



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#### Data sources

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