# WEEKLY BULLETIN ON OUTBREAKS AND OTHER EMERGENCIES

Week 16: 15 – 21 April 2017 Data as reported by 17:00 21 April 2017

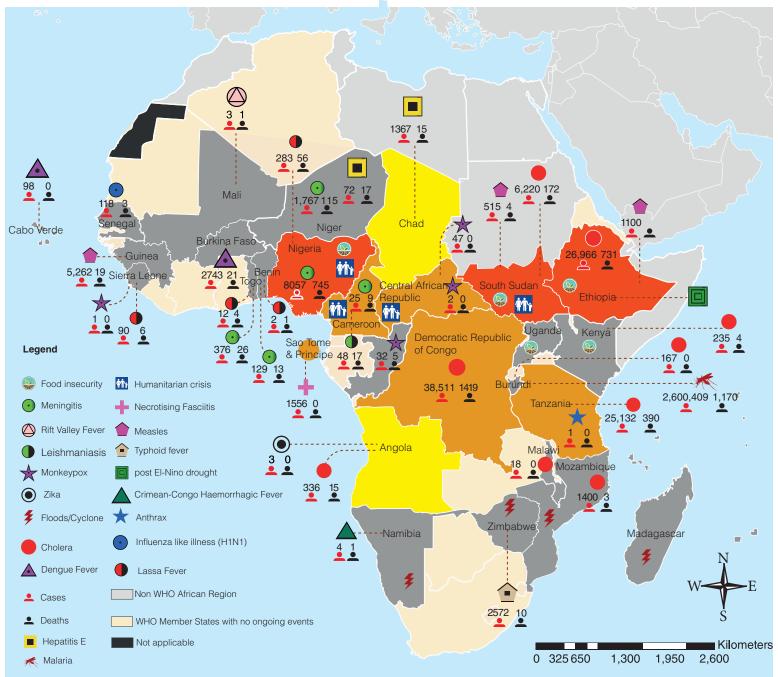


New Events

40
Ongoing events

34
Outbreaks

Humanitarian crises



Grade 3 events

6
Grade 2 events

Grade 1 events

31
Ungraded events

Health Emergency Information and Risk Assessment

## **Overview**

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- ▶ This weekly bulletin focuses on selected public health emergencies occurring in the WHO African region. WHO AFRO is currently monitoring 42 events: three Grade 3, six Grade 2, two Grade 1, and 31 ungraded events.
- ▶ This week, two new events have been reported: monkeypox outbreaks in Sierra Leone and Central African Republic. In addition, two events have been graded: the acute watery diarrhoea/cholera outbreak and the humanitarian crisis in Ethiopia have been elevated to grade 3 emergency while the meningitis outbreak in Nigeria has been graded as level 2 emergency. The bulletin also focuses on key ongoing events in the region, including the grade 3 humanitarian crisis in South Sudan, the grade 2 cholera outbreak in Democratic Republic of Congo and the meningitis outbreak in Niger.
- 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 report with information on all public health events currently being monitored in the region.
- Major challenges to be addressed include:
  - Timely laboratory confirmation of disease outbreaks in order to implement appropriate control measures.
  - The prompt availability of sufficient doses of vaccines in order to implement effective reactive vaccination campaigns.

### **New events**

**Monkeypox** 

Sierra Leone

1 Cases **0** Deaths

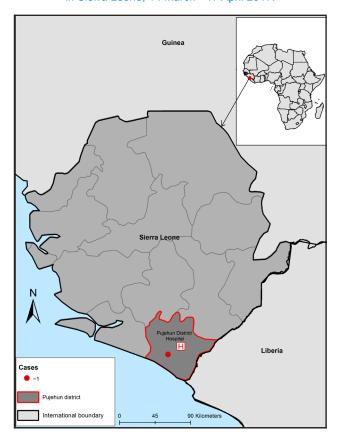
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#### **Event description**

A single case of monkeypox has been confirmed in Pujehun district in the southern region of Sierra Leone. The putative index case, a 35-year old peasant farmer from Kpaku village, Galliness Perri chiefdom, Pujehun district, developed ill-health on 14 March 2017. He presented to a local health facility on 16 March 2017 with fever, body pains, malaise, dysphagia, and enlarged cervical lymph nodes; and was presumptively treated for malaria and sore throat as an out-patient. On 17 March 2017, he developed generalized vesicular skin eruptions in addition to the initial constitutional clinical features. The case-patient was admitted to Pujehun district hospital on 25 March 2017. Biological samples including blood and vesicular swabs were collected on 28 March 2017 and shipped to the National Reference Laboratory in Freetown. The samples were then transported to the Institut National de Recherche Biomedicale (INRB) in Kinshasha, the Democratic Republic of Congo. Laboratory results from INRB relayed on 17 April 2017 to Sierra Leone indicated that the vesicular swab tested positive for Orthopox virus by polymerase chain reaction (PCR) assay and monkeypox virus by GeneXpert technique. Based on these results, the Sierra Leone Ministry of Health notified WHO on 17 April 2017 of the outbreak of monkeypox. Part of the samples have been shipped to the Centres for Diseases Control and Prevention (CDC) in Atlanta, United States for further analysis.

Thirteen close contacts to the index case were listed and are being followed up. None of them have developed any febrile illness and/or skin lesions in the first 21 days since the last exposure. The contacts are still being monitored for additional 21 days (twice the maximum incubation period of monkeypox). No other significant exposure risks have been identified except for the fact that the index case, being an occasional hunter, caught a squirrel (a known vector of the monkeypox virus) in the preceding days of his illness for domestic consumption.

## Geographical distribution of monkeypox case in Sierra Leone, 14 March - 17 April 2017.



#### **Public health actions**

- The case-patients received supportive treatment at Pujehun district hospital under barrier nursing and infection prevention and control measures. Psychosocial support was also provided to the case-patient, care givers and close contacts.
- Active surveillance including case search has been instituted in the affected community. No new case has been identified to date.
- Social mobilization has been intensified in the affected community to raise awareness on the disease and promote early health care seeking behaviour.

#### **Situation interpretation**

An isolated case of monkeypox has been confirmed in Pujehun district, Sierra Leone. This is the second sporadic occurrence of monkeypox in the country, with the first one reported in March 2014 in Bo district located in the southern region of the country. Monkeypox is a rare disease that occurs primarily in remote parts of Central and West Africa, near tropical rainforests. The disease is transmitted to people from various wild animals, including squirrels, Gambian rats, striped mice, dormice, and primates. The natural history of monkeypox virus, the exact reservoir and how it is maintained in nature call for further studies. Secondary spread of the virus through human-to-human transmission is usually limited.

This outbreak of monkeypox in Sierra Leone has again highlighted the need for continued strengthening of laboratory diagnostic capacity, particularly for priority infectious pathogens in the region. Similarly, systems for transporting laboratory specimens, both locally and internationally, needs to be strengthened. This is especially critical to reduce the lead time in confirming suspected outbreaks to trigger implementation of effective response measures. The manner in which the country responded to this isolated case of monkeypox demonstrated the gains from the post-Ebola health system recovery being implemented.

Although the potential for human-to-human transmission of the virus is deemed low, enhanced surveillance and vigilance should be maintained at health facility and community levels.

#### **Event description**

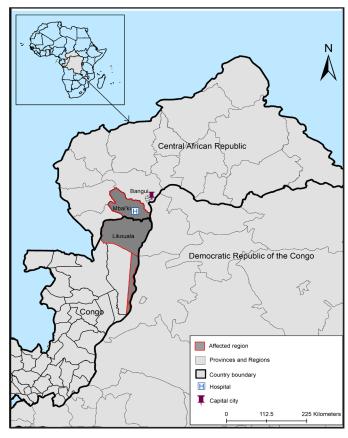
On 15 April 2017, the Ministry of Health of the Central African Republic (CAR) notified WHO of a new outbreak of monkeypox in M'baïki prefecture (district) located at the border with Congo. The initial case in this outbreak is a 15-year old boy from Café-Machado village who developed febrile illness on 12 April 2017. The case-patient presented to and was admitted in M'baïki district hospital on 14 April 2017 with fever, generalized pustular skin eruptions (initially in the palms and feet), and cervical and axillary lymphadenopathies. Biological samples including blood and pus swabs from the skin lesions were collected and transported to Pasteur Institute of Bangui. Laboratory results released on 15 April 2017 indicated that the samples were positive for monkeypox virus using gene amplification PCR technique.

Detailed outbreak investigation established that the index case in this outbreak is the elder brother of the initial case-patient who had developed similar illness in the preceding days but recovered without seeking medical care. More information on the activities of the index case is being obtained. Eight close contacts to the cases in Café-Machado village have been identified and are being followed up. Since 15 April 2017, no new cases with similar illness have been identified from among the contacts or in the village.

#### **Public health actions**

- A multi-disciplinary team from the Ministry of Health, Pasteur Institute of Bangui, M'baïki health district, and WHO conducted outbreak investigation from 14 April 2017. The team collected the biological samples that led to the confirmation of the outbreak.
- The monkeypox outbreak response plan has been updated taking into account the emergence of the disease in a new district.
- Active surveillance has been strengthened in the region including continued support for epidemiological investigation in the health districts.

## Geographical distribution of monkeypox cases in Central African Republic, 12 - 15 April 2017.



#### Situation interpretation

The Central African Republic has confirmed a new outbreak of monkeypox in M'baïki district at the borders with Likouala province in Congo. This is the second outbreak of monkeypox in the country since the beginning of 2017. Between January and March 2017, an outbreak monkeypox was confirmed in Ouango district, Central African Republic, during which 47 suspected and 5 confirmed cases were reported. Ouango district borders the Democratic Republic of Congo and far away from M'baïki. The monkeypox outbreak in Ouango was controlled by end of March 2017.

The current outbreak of monkeypox in M'baïki district is thought to have links with the ongoing outbreak in Likouala province in Congo, though the actual evidence has not been adduced. The communities on either sides of the borders in the two countries are homogeneous and have common social cultural activities that bring them together. It is also known that many people from the Central African Republic (including those from Cafe-Machado village) move to Congo for causal works in indigenous farms. Further investigation should be undertaken to establish any potential epidemiological linkage between the two outbreaks.

The continuing outbreak of monkeypox in Congo calls for strengthening cross-border surveillance and coordination between Central African Republic and Congo. The health workers and community structures especially along the borders require training in surveillance. Community sensitization about prevention and control of monkeypox should be enhanced.



## **Ongoing events**

Meningitis Nigeria 8,057 745 9.3% Cases Deaths CFR

#### **Event description**

The meningitis outbreak situation in Nigeria has quickly evolved in the last weeks with the number of new cases and deaths increasing exponentially. In response to this deteriorating situation, WHO raised the meningitis outbreak to grade 2, based on its Emergency Response Framework grading system. In the last 10 days (from 7 – 17 April 2017), the number of suspected meningitis cases increased by 170%, from 2,997 cases reported in week 14 (week ending 7 April 2017) to 8,057 cases by 17 April 2017. During the same period, mortality increased by 120%, from 338 to 745 deaths. The case fatality rate stands at 9.3%. Majority of the reported cases, 51%, were between the ages of 5 and 14 years

A total of 450 cerebro-spinal fluid samples were obtained from the suspected cases and analysed at the National Reference Laboratory. Bacterial pathogens were identified as the causative agents in 51% (230/450) of the samples. Neisseria meningitidis serotype C was predominantly isolated, accounting for 68% (157/230) of the bacterial pathogens.

During the last four weeks, a total of 23 local government areas (LGAs – equivalent to district) have surpassed meningitis epidemic threshold of 10 cases per 100,000 populations. Meanwhile 15 LGAs have attained the alert threshold of 3 cases per 100,000 populations. Six out of 36 states in Nigeria, namely Zamfara, Sokoto, Katsina, Kebbi, Niger, and Yobe, are currently the most affected.

#### **Public health actions**

- WHO held a 3-level (WHO Nigeria, AFRO and Headquarters) risk assessment and grading conference call on 20 April 2017.
- Based on the new grading, a leadership and management model has been established and is being reinforced to ensure effective coordination and response to the outbreak.
- Active surveillance is being strengthened including conducting daily analysis of surveillance data to identify states and LGAs in alert and epidemic phases.
- A schedule for distribution of additional medicine and other commodities including Ceftriaxone, rapid diagnostic test kits (Pastorex) and trans-isolate media is being finalized.
- A laboratory team from Medical Research Council (MRC) Gambia is being deployed over the weekend to strengthen the diagnostic capacity.
- Human resources needs and personnel deployment plans to the most affected areas have been developed. Immediate deployment to Zamfara, Sokoto and Katsina states have been effected.
- Reactive mass meningitis vaccination campaigns in Zamfara and Katsina states have been completed while reactive vaccination in Sokoto is scheduled for 24 28 April 2017.
- A national advocacy and communication meeting with various faith-based organizations (FBO) was conducted in Abuja to solicit local support.
- The Sultan of Sokoto in Kaduna state convened a meeting of the Northern Traditional Leaders Committee on Primary Health Care (NTLC-PHC) on the meningitis outbreak.
- Production and dissemination of Information, education and communication (IEC) materials has continued and radio jingles are continuously being aired on local radios.

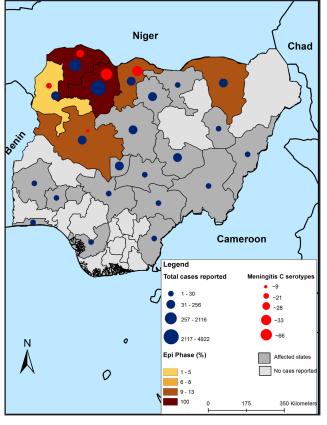
#### Situation interpretation

The meningitis outbreak in Nigeria has rapidly deteriorated in the last few weeks in spite of the country's past experiences in managing meningitis outbreaks. The current outbreak has overstretched the government's capacity to respond effectively, especially at the state and lower levels. The factors postulated for the rapid spread of the outbreak include high numbers of vulnerable population (unprotected) to the bacteria Neisseria meningitidis C, delay in conducting reactive vaccination and inadequate supply of medicines and laboratory commodities. The quantity of vaccines so far received in the country from the International Coordinating Group (ICG) is insufficient to control this outbreak while the approved vaccines and supplies take a while to arrive in the country. In addition, there is insufficient health care workforce to manage the outbreak, especially in the worst affected states.

The other critical challenges being experienced in the response include the low rate of sample collection and the limited laboratory confirmation required to satisfy the criteria for vaccines approval, weak coordination of response activities at state level and limited funding to support activities of the National Emergency Operations Centre.

Improving response to the outbreak requires strengthening coordination at the state and LGA levels, mobilizing additional resources (financial, technical and logistics), reinforcing active surveillance including case search in the communities and health facilities especially in the silent LGAs, improving reporting and data management to guide the response, building laboratory capacity to confirm cases at state and national levels, and above all, strengthening multi-sectoral collaboration.





Meningitis Niger 1767 Cases Deaths

#### **Event description**

This is an update on the meningitis outbreak in Niger that was reported in our bulletin of week 14 (dated 7 April 2017). Since our last report, 1 new district (Dioundiou) that was in alert phase crossed the epidemic threshold by the end of week 14 (week ending 9 April 2017). This increases the number of districts in epidemic phase from 2 to 3. During the same period, 5 new districts [Niamey 1, Niamey 3, Niamey 5, Dogon Doutchi, Birni Koni] crossed the alert threshold, increasing the number of districts in alert phase from 4 to 8. The other districts that remained in alert phase are Gaya, Kollo and Niamey 4.

In week 14 (week ending 9 April 2017), a total of 401 suspected meningitis cases including 26 deaths (case fatality rate of 6.5%) were reported across the country. Between 01 January and 9 April 2017, a total of 1,767 suspected meningitis cases including 115 deaths (case fatality rate of 6.5%) have been reported from 47 districts in 6 regions [Difa, Maradi, Niamey, Tahoua, Tillabéry, and Zinder].

The meningitis outbreak has been confirmed at the Centre de Recherche Médicale et Sanitaire (CERMES) laboratory in Niamey. Of the 1,331 cerebrospinal fluid samples collected, 570 tested positive for bacterial pathogens by PCR. Of the positive samples, Neisseria meningitidis C was the main serotype isolated accounting for 67% of the positive samples. The other pathogens were Streptococcus pneumoniae at 17%, Neisseria meningitidis X at 9% and Heamophillus influenzae at 4%.

#### **Public health actions**

- Outbreak control interventions previously reported including case management, active surveillance and community engagement are still ongoing.
- On 9 April 2017, the International Coordinating Group (ICG) approved 341,638 doses of bivalent AC meningitis vaccines for the country.
- Reactive mass vaccination campaigns using the AC meningitis vaccines started on 12 April 2017 in Alléla area in Konni district. The campaign was officially launched on 13 April in Niamey.
- Training of health workers in Dosso and Maradi regions on active surveillance was conducted based on the Integrated Disease Surveillance and Response (IDSR) strategy.
- 3-level weekly teleconferences are being held to provide guidance to the country as well as bi-weekly meeting of the national outbreak management committee.

#### **Situation interpretation**

The trend of the meningitis outbreak in Niger continues to increase with new districts reporting cases. Three districts have surpassed epidemic threshold while 9 others are in alert phase. In addition, 35 districts have reported meningitis cases below the alert threshold. The continued geographical expansion of the districts reporting meningitis remains a concern. This may be an indication of high susceptibility of the population to the disease.

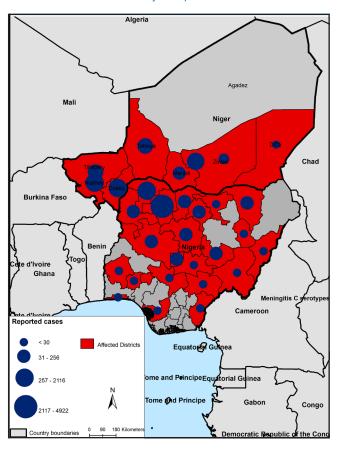
The ongoing vaccination campaign is critical to stop the spread of the outbreak. Unfortunately, the available vaccines at national level is not enough to cover all the high risk districts. The response team need to strengthen early detection of suspected cases, collection of quality sample and laboratory confirmation. This will enhance meeting the requirement to secure vaccines from the International Coordinating Group (ICG). Meanwhile community mobilization need to be reinforced to promote early health care seeking to reduce the case fatality rate. Resources mobilization and partnership are also critical.

The main challenges being faced in response to this outbreak include the increasing demand for vaccines and operational funds for reactive vaccination campaigns in the epidemic areas as well as the need for rapid diagnostic test kits (Pastorex) for laboratory confirmation. In the long term, mass preventive vaccination against the emerging pathogens such as Neisseria meningitidis C and other new serotypes needs to be explored.

#### Geographical distribution of meningitis cases in Niger, 1 January - 9 April 2017

6.5%

**CFR** 





#### Cholera

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

38,511 1,419 3.7% Cases Deaths CFR

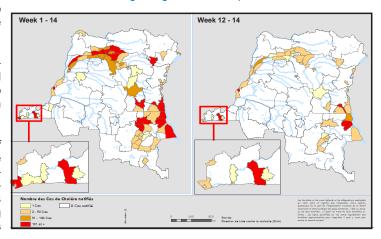
#### **Event description**

The protracted outbreak of cholera in the Democratic Republic of Congo (DRC) is still going on unabated. The current epidemic in the country started in August 2015. The situation has continued to worsen with numerous pockets of outbreaks occurring along the Congo River.

During week 14 (week ending 9 April 2017), 321 new cases including 10 deaths (case fatality rate of 3.1%) were reported across the country. This shows a minimum reduction compared to 469 cases and 18 deaths (case fatality rate of 4.05%) reported in week 13 (week ending 2 April 2017).

Since the beginning of the year up to 15 April 2017, a total of 9,160 cases including 315 deaths (case fatality rate of 3.4%) have been reported. Meanwhile in 2016, a total of 29,352 cases, including 817 deaths (case fatality rate of 2.8%) were notified nationwide. With these, the cumulative number of cases and deaths reported since onset of the outbreak is 38,511 cases including 1,419 deaths (case fatality rate of 3.68%). In 2017, the provinces of Tanganyika, South Kivu, Ecuador, Maindombe, Central Kongo, and Tshopo have been the most affected.

Geographical distribution of cholera cases in Democratic Republic of Congo, August 2015 - 9 April 2017



A total of 1,261 stool samples were analysed at the Institut National de Recherche Biomedicale (INRB) in Kinshasha, 253 of those were positive for *vibrio cholerae* O1.

#### **Public health actions**

- There is continued efforts to strengthen the multi-sectoral approach to the response to the cholera outbreak. Regular subcommittee coordination meetings are going on at different levels.
- Active surveillance is ongoing including investigation of cases and active case search in the affected communities.
- Several partners including ADRA, CARITAS, ALIMA, AGAPE ACTION, and MSF are in the affected provinces supporting case management and infection prevention and control measures.
- > Implementation of water, sanitation and hygiene (WASH) interventions are going on including chlorination at water points, disinfection of water storage vessels, household disinfection, installing handwashing facilities, etc.
- Ontinued provision of communication materials, press releases and articles in local newspapers.

#### Situation interpretation

The outbreak of cholera in DRC that started in August 2015 is not yet showing any sign of relenting despite the enormous response efforts. While being cognizant of the innumerable underlying factors, this may be an indication that the basic critical issues have not yet been addressed. There is need to revamp the entire strategies and interventions to this outbreak. This should come after an in-depth evaluation of the current outbreak response, followed by a new roadmap to contain the outbreak. Notwithstanding, the major challenges being reported currently include inadequacy of funding for operational activities and limited material and logistical resources to continue with control actions at the community level.



**26,966** Cases

**731** Deaths

**2.7%** CFR

#### **Event description**

The outbreak of acute watery diarrhoea (AWD)/cholera in Ethiopia, compounded by the humanitarian crisis consequent to the El Nino phenomena, remains serious. In week 15 (week ending 16 April 2017), a total of 2,388 suspected cases of AWD/cholera were reported in Afar, Amhara and Somali regions of the country. While some decline has been observed in the trend in the last weeks [4,200 cases in week 14; 4,104 cases in week 13; 4,358 cases in week 12], it is still premature to deduce overall improvement in the situation on the ground, especially with the weak surveillance system. Somali region remains the most affected, accounting for 99% of the new cases reported in the reporting week

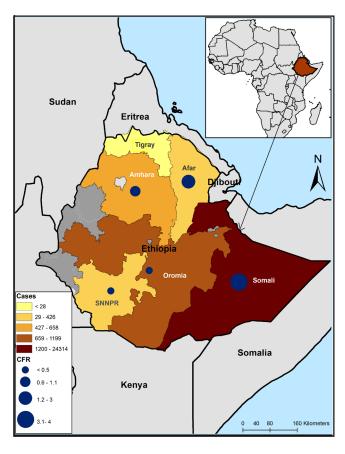
Since the beginning of the year up to 16 April 2017, a total of 26,966 cases including 731 deaths (case fatality rate of 2.71%) have been reported from six regions of the country, namely Amhara, Afar, Oromia, SNNP, Somali, and Tigray. Ninety eight percent of all the reported cases and 97% of all the deaths occurred in Somali region alone.

On 20 April 2017, WHO elevated the outbreak of AWD/cholera and the humanitarian crisis in Ethiopia to grade 3 emergency. This new grading enables the organization to leverage its global capacity and scale up the response to the outbreak and the humanitarian crisis.

#### **Public health actions**

- On 20 April 2017, WHO held a 3-level (WHO Ethiopia, AFRO and Headquarters) risk assessment and grading conference call and raised the AWD/cholera outbreak and the humanitarian crisis in Ethiopia to a grade 3 emergency.
- Based on the new grading, WHO Ethiopia has started repurposing the country office staff while surge capacities from the other levels of the organization are being mobilized.
- The WHO AFRO Regional Office has established the incident management structure for the new grade 3 emergency in Ethiopia.
- The government is working with partner to develop a 90-day plan of action for the event, taking into account prevention of further spread to non-affected areas.
- Various outbreak response interventions already initiated on the ground are ongoing.

Geographical distribution of Acute watery diarrhoea/cholera cases in Ethiopia, 1 January - 16 April 2017.



#### Situation interpretation

The rapid spread of AWD/ cholera in Ethiopia remains a major concern. This outbreak is occurring in the context of a major humanitarian crisis caused by the El-Nino phenomena. These underlying factors, in addition to the other political, security and economic dynamics, reflect the complexity of the current emergency in Ethiopia. The capacity of the health care system has been overstretched, impacting on the effectiveness of the ongoing response actions. The majority of the treatment centres do not meet the minimum standards and only 50% have access to water supply, thus health personnel and care givers are at risk of contracting the disease and spreading it further. Shortages of medical supplies including intravenous fluids have been reported thus leading to unexpected high case fatality in some woredas (district). Late arrival at treatment centres due to hard-to-reach nature of the predominantly pastoralist communities further increases the likelihood of community deaths.

The overall risk of the situation is considered to be very high at local, national and international levels. The health consequences of the AWD/ cholera outbreak in terms of mortality and morbidity on the population has been enormous.

Based on these circumstances, WHO upgraded the AWD/cholera and the humanitarian crisis in Ethiopia to grade 3 emergency. This grading will allow the organization to reinforce the incident management systems at both the national and regional levels. The necessary experts are being identified in line with the human resources plan and immediately deployed. Meanwhile the needed funding will be made available for operational interventions. WHO calls upon all stakeholders including the Government, local and international Aid Partners and the Donor communities to join hands and work together to reverse this deteriorating situation.



#### **Humanitarian crisis**

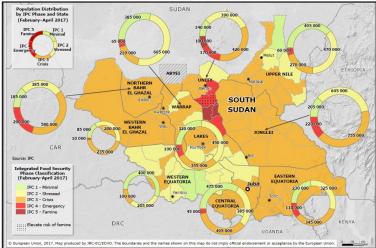
#### **South Sudan**

#### **Event description**

The security situation in South Sudan has remained fragile with ongoing armed clashes in many areas including Wau, former Upper Nile, parts of former Jonglei and parts of Unity state. This has led to increasing population displacements with 1.9 million people estimated to be internally displaced countrywide and nearly 50% of health facilities non-functional.

The Integrated Food Security Phase Classification (IPC) technical working group estimated that, by January 2017, 3.8 million people were in Crisis (IPC Phase 3), Emergency (IPC Phase 4) and Catastrophe (IPC Phase 5). Between February and April 2017, the number of people in need of humanitarian assistance (IPC phase 3 and above) increased to almost 5 million, out of which 100,000 were in famine conditions. The highest proportions of populations in Crisis, Emergency and Catastrophe are in Northern Bahr el Ghazal and Unity States. The people facing famine or at risk of famine are mainly located in Leer, Mayendit, Koch and Panyijar counties of Unity State. The internally displaced persons (IDPs) living in informal settlements and their host communities are the most affected by the ongoing conflict.

#### Classification of food insecurity in South Sudan, 21 Febuary 2017



In week 15 (week ending 16 April 2017), completeness of weekly reporting for routine surveillance and internally displaced persons (IDP) sites were 56% and 79% respectively. During the reporting week, malaria accounted for 26% of all consultations in the routine surveillance sites and 10% in the IDP sites. Malaria transmission remains within expected levels countrywide.

Cholera transmission has continued through the dry season. During week 15 (week ending 16 April 2017), 49 new cases and zero death were reported from 3 counties, namely Awerial and Yirol East in Eastern Lakes state and Fangak in Fangak state. As of 16 April 2017, a total of 6,265 cholera cases including 178 deaths (case fatality rate of 2.76%) have been reported across the country. A total of 15 counties from 9 states in the country have been affected since June 2016.

In week 15 (week ending 16 April 2017), 35 suspect measles cases were reported from 5 counties. Since January 2017, a total of 560 suspect measles cases including 4 deaths (case fatality rate of 0.71%) have been reported from 18 counties. Five counties confirmed measles outbreaks since the beginning of 2017.

#### Public health actions

- WHO worked with Partners to provide essential medicines and medical supplies to Jiech, Gorwai, Awerial, and Yirol East.
- WHO supported deployment of rapid response mobile team to Minkgkaman IDP site in Awerial county, which has no implementing partner on the ground.
- A total of 1,028,963 children under fifteen years have been vaccinated with polio vaccines in the ongoing polio campaign.
- In Mayendit town, the rapid response team vaccinated 783 children with measles vaccines, 737 with polio vaccines, 581 pregnant women with tetatus anti-toxoid, and 158 general consultation.

#### Situation interpretation

The food insecurity situation in South Sudan has been precipitated by protracted armed conflict, the worsening economic situation, and poor yields due to lower than expected rains. Acute malnutrition is a major public health emergency in the country. Evidence shows that, in the southern part of Unity State, one in three children is acutely malnourished. This represents an unprecedented situation requiring immediate actions, especially in Leer, Mayendit, Koch and Panyijar counties. Urgent action is also required for the other severely food insecure areas of the country to protect livelihoods, reduce food consumption gaps and reduce acute malnutrition. Response to the ongoing outbreaks of communicable diseases, especially cholera and measles need to be enforced in spite of the security challenges.



## Summary of major challenges and proposed actions

#### **Challenges**

- Timely laboratory confirmation of suspected infectious public health events is key to initiation of appropriate response measures. The low sample collection rates reported in the meningitis outbreaks in Nigeria and the problem of sample transportation, both locally and internationally, seen in the monkeypox outbreak in Sierra Leone are some of the examples. These key factors lead to delays in confirmation of suspected outbreaks and hence delay in triggering effective response measures.
- The importance of reactive mass vaccination campaigns as a key control tool is noted this week in the meningitis outbreaks in Nigeria and Niger. Vaccination campaigns are critical to stop the spread of vaccine preventable diseases, however, availability of vaccines in a timely manner has remained a challenge.

#### **Proposed actions**

- The Ministries of Health, with support from WHO and other Partners should invest in building laboratory diagnostic capacity for priority infectious pathogens in the African Region including functional sample transportation systems.
- WHO and the Partners through the International Coordinating Group (ICG) on Vaccine Provision for Epidemic Meningitis Control should continue to advocate for increased stockpiles of meningitis vaccines to halt ongoing outbreaks in a timely manner.

## All events currently being monitored by WHO AFRO

Event	Country	Grade	Date of notification to WHO	No. of cases / suspected (confirmed)	No. of deaths	CFR (suspected) / %	Comments	Date of last sitrep
OUTBREAK								
Cholera	DRC	2	1 Jan 2015	38,511	1419	3.7	Detailed update given above	15/04/2017
Cholera	Tanzania	2	04 April 2015	25,132	390	1.6	9 new cases reported in epi week 15. Temeke municipal council in Dar es Salaam region is the only district still reporting suspected cholera cases for the past two conse- cutive weeks.	18/04/2017
Necrotising cellulitis/ fasciitis	Sao Tome & Principe	2	10 Jan 2017	1556	0	0	21 new cases reported in week 15. The outbreak has still not been officially declared by the MOH. Data collection for the case-control study to determine potential risk factors has finished.	16/04/2017
Meningitis	Nigeria	2	20 Feb 2017	8057	745	9.3	WHO grading assessment undertaken this week, assigned grading level 2.	17/04/2017
AWD/Cholera	Ethiopia	3	Beginning 2017	26,966	731	2.7	Detailed update given above.	20/04/2017
Hepatitis E	Chad	1	1 Sept 2016	1367 (98)	15	1.1	Resumption of chlorination activities with the financial support of WHO. A WASH expert has been deployed to support activities.	16/04/2017
Cholera	Angola	1	4 Jan 2017	336	15	4.1	The overall trend shows a slow decrease at country level, however since Epi Week 13 (ending April 2) a sharp increase has been seen in Soyo	9/04/2017
Hepatitis E	Niger	-		72	17	24	Patients (mainly refugees) in Diffa presenting with conjunctival jaundice were confirmed Hepatitis E positive. Diffa borders with Tchad where there is an ongoing Hepatitis E outbreak. On 19 April the MOH declared an outbreak.	14/04/2017
Cholera	Kenya	-	10 Oct 2016	235 (36)	4	1.7	8 new cases reported during week 11 (week ending 16 March 2017).	16/03/2017
Dengue fever	Burkina Faso	-	29 Oct 2016	2743	21	0.8	Domestic spraying at 37 secondary and tertiary institu- tions is being undertaken in 60 health and social promo- tion centers in the city of Ouagadougou. Strengthening of surveillance has led to an improvement in detection of cases	12/04/2017
Typhoid fever	Zimbabwe	-	21 Nov 2016	2572 (95)	10	0.4	The situation is abated by the recurrent floods.	20/03/2017
Lassa fever	Nigeria	-	Dec 2016	283 (99)	56	19.8	Outbreak in 13 states	17/04/2017
Dengue fever	Cabo Verde	-	4 Jan 2017	98 (19)	0	0	Investigations by the deployed entomologist and virologist from IPD determined the recent circulation of the virus and the presence of Aedes aegypti as the vector.	09/03/2017
Cholera	South Sudan	-	Beginning 2017	6,220	13	10	11 new suspected cases between 13/03/2017 – 19/03/2017 from Malanville commune. A total of 40 specimens have been tested between 13 March and 12 April. 12 are positive for Neisseria meningitides C and 1 for Streptococcus	14/04/2017
Measles	South Sudan	-	Beginning 2017	515	4	0.78	Overall downtrend continues. 20 new suspected cases reported from Wau, Yambio, Tonj North, Jur River, Nzara and Gogrial West. Laboratory results include 46 measles IgM and 36 rubella IgM confirmations. A measles vaccination campaign is scheduled for 17 – 28 April 2017.	2/04/2017
Measles	Ethiopia	-	Beginning 2017	1100 (496)			Measles campaign targeting around 22.5 million children been conducted from February to current	02/04/2017
Monkeypox	Congo	-	1 Feb 2017	32 (4)	5	15.6	Surveillance in affected areas is weak. Training for health- care workers undertaken, however involvement of commu- nities in reporting cases is needed.	
Meningitis	Togo	-	03 Feb 2017	376 (28)	26	6.9		04/04/2017
Meningitis	Benin	-		129 (13)	13	10	11 new suspected cases between 13/03/2017 – 19/03/2017 from Malanville commune. A total of 40 specimens have been tested between 13 March and 12 April. 12 are positive for Neisseria meningitides C and 1 for Streptococcus	14/04/2017
Monkeypox	Central African Republic	-	09 Feb 2017	47 (5)	0	0	The situation is under control and is being closely monitored.	04/04/2017
Measles	Guinea	-	08 Feb 2017	5262 (3906)	19	0.4	Vaccination campaign in Conakry ended on 17 April 2017.  Preparation for a vaccination campaign in the remaining 21 health districts is ongoing.	19/04/2017
Cholera	Mozambique	-	16 Feb 2017	1400	3	0.2	The risk of cross-border transmission remains.	13/03/2017
Meningitis	Niger	-	19 Feb 2017	1767 (570)	115	6.5	A steady increase in cases has been seen since epi week 7. A vaccination campaign was launched by the MOH on 13 April 2017.	14/04/2017
Leishmaniasis	Cameroon	-	20 Feb 2017	48	17	35.4	Deployment of an expert to train people in managing cases and perform active screening in process	30/03/2017
Lassa fever	Togo	-	24 Feb 2017	12 (7)	4	57	Cases and perform active screening in process  No update available	19/03/2017
Lassa fever	Benin	-	21 Feb 2017	1 (1)	1	100	The Benin Minister of Health declared the end of Lassa fever outbreak in the country on 14 April 2017 in a joint press release with WHO Benin. Enhanced surveillance and community vigilance is being maintained. This event	21/04/2017
Meningitis	Cameroon		9 Mar 2017	25	9	36	will be closed accordingly.  No new cases this week	26/03/2017
Lassa fever	Sierra Leone	-		90 (7)	6	6.7 (86)	Late referral of cases from communities to health facilities resulting in high case fatality rate. Community sensitization ongoing. Health workers were sensitized on observing infection prevention and control while managing cases.	10/04/2017
Anthrax	Tanzania	-	11 Mar 2017	1	0	-	Investigation undertaken by district team. Laboratory confirmation awaited. 36 contacts developed symptoms	-
Malaria	Burundi	-	13 Mar 2017	2,600,409	1170	0.04	Outbreak declared by MOH	05/03/2017
Cholera	Malawi	-	15 Mar 2017	18	0	0	1 case reported in the last week, CTC set up to manage	19/03/2017
Influenza like illness (H1N1)	Senegal	-	28 Mar 2017	118	3	2.5	cases. Presence of the H1N1 influenza virus has been confirmed in 23/29 samples tested at IPD, Dakar. Surveillance is being strengthened	10/04/2017



Event	Country	Grade	Date of notification to WHO	No. of cases / suspected (confirmed)	No. of deaths	CFR (suspected) / %	Comments	Date of last sitrep
Monkeypox	Sierra Leone	-	17 April 2017	1 (1)	0	0	Detailed update given above	
Monkeypox	Central African Republic	-		1 (1)	0	0	New confirmed case reported in Mbaki district bordering Likouala province in Congo where an outbreak is ongoing. Previous 5 confirmed cases in February 2017 in Mbomou province	19/04/2017
EMERGENCIES								
Humanitarian crisis	South Sudan	3					Detailed update given above	09/04/2017
Humanitarian crisis	Nigeria	3					Detailed update given above	15/04/2017
Humanitarian crisis	Ethiopia	3					Ethiopia's on-going drought, acute water shortages, popu- lation movements(IDPs) and rising malnutrition, increasing the spread of AWD/cholera. The situation has been re- graded as an internal WHO level 3 on 20/04/17.	16/04/2017
Humanitarian crisis	Cameroon	2					The situation is linked to the Lake Chad Basin crisis.	
Humanitarian crisis	Central Afri- can Republic	2					The situation remains fragile due to the ongoing insurgency.	
Food insecurity	South Sudan, Kenya, Ugan- da, Ethiopia, NE Nigeria	-	23 Feb 2017				OCHA and IGAD estimate up to 22.9 million people are food insecure in the Horn of Africa.	
Floods	Zimbabwe	-	02 Mar 2017				The Government of Zimbabwe has declared the flooding situation affecting 36 districts in the country a national disaster, and has appealed for international assistance. They estimate 251 people killed and 128 others injured by various impacts of the floods. An estimated 100,000 people lack access to safe drinking water	
Cyclone	Madagascar	-	07 Mar 2017				Flooding is persisting in the district of Maroantsetra. WHO is strengthening district capacity for coordination of interventions and monitoring of epidemic-prone diseases. US \$1 million allocated by CERF to partners in the health sector for the response to cyclone Enawo.	11/04/2017

Data is taken from the most recently available situation reports sent to WHO AFRO. Numbers are subject to change as the situations are dynamic.

#### **Data sources**

Data is provided by Member States through WHO Country Offices via regular situation reports, teleconferences and email exchanges. Situations are evolving and dynamic therefore numbers stated are subject to change.

#### **Editor**

Dr. I. Socé Fall

#### **Editorial Board**

Dr. B. Impouma, Dr. Z. Yoti, Dr. Y. Ali Ahmed, Dr. F. Nguessan, Dr. M. Djingarey

#### Contributors

Dr. E. Hamblion, Dr. C. Okot,

Ms. C. Machingaidze, Dr. S. Dlamini,

Mr. A. Moussongo, Dr. A. Oke,

Dr. B. Bonkoungou, Dr. L. Omar,

Dr. E. Musa, Dr. N. Nsenga

Dr. S. Rajatonirina, Dr. V. Sodjinou,

Dr. A. Talisuna, Mr. E. Minkoulou, Mrs. E. Kalondo,

Mr. T. Mlanda, Mr. C. Massidi and Mr. S. Zielinski

Please contact Dr. B. Impouma (impoumab@who.int) for any clarifications.

