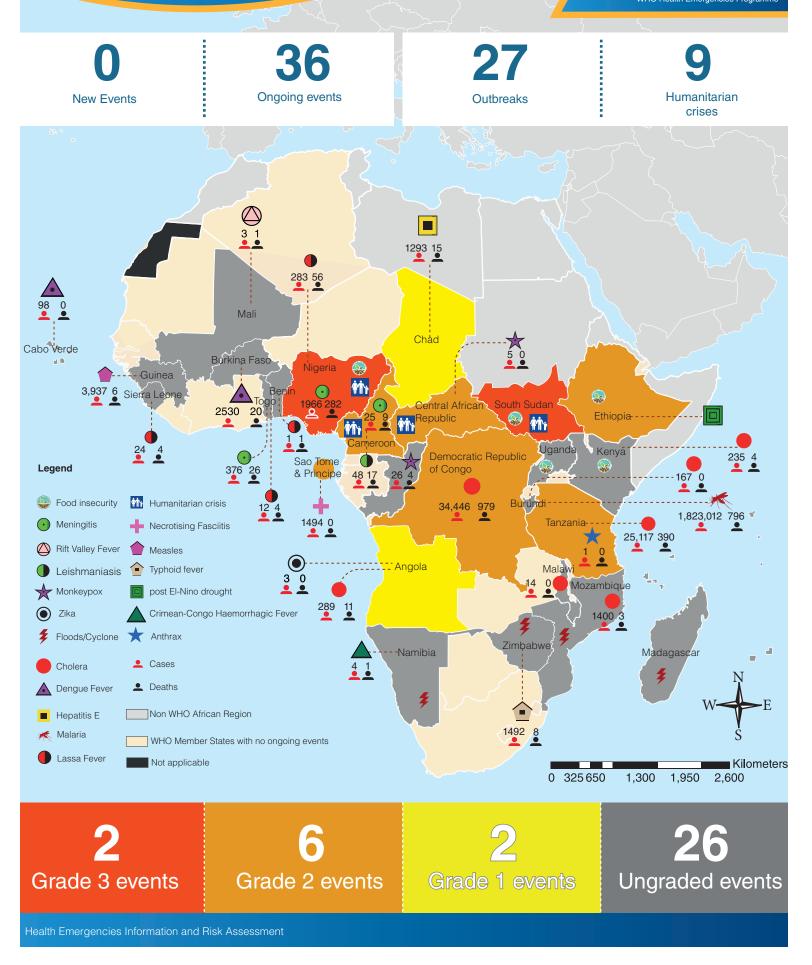
WEEKLY UPDATE ON OUTBREAKS AND OTHER EMERGENCIES

Week 13: 25 – 31 March 2017 Data as reported by 17:00 31 March





Overview

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- This weekly update focuses on selected acute public health emergencies occurring in the WHO African region. WHO AFRO is currently monitoring 36 events, two Grade 3, six Grade 2, two Grade 1, and 26 ungraded events.
- The update focuses on key ongoing events in the region, including the two grade 3 humanitarian crises in Nigeria and South Sudan, the grade 2 Necrotising Cellulitis/Fasciitis outbreak in Sao Tome and Principe, the grade 1 Hepatitis E outbreak in Chad, as well as outbreaks of Monkeypox in Congo, Leishmaniasis in Cameroon, Measles in Guinea, Cholera in Mozambique, Crimean-Congo Haemorrhagic Fever in Namibia, and the food insecurity situation affecting Ethiopia, South Sudan, Kenya and Uganda.
- 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.
- Major challenges to be addressed include:
 - Delay in notifying acute public health events leading to late initiation of a response and therefore greater public health impacts including increased morbidity, mortality and socio-economic consequences.
 - Inadequate information on public health events being provided by countries, limiting the ability to monitor and determine effectiveness of implemented control strategies.
 - The need for cross border collaboration in preparedness activities to enable effective cross border response as required.

Ongoing events

Leishmaniasis Cameroon	481735.4%CasesDeathsCFR
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Event description

On 19 February 2017, the Ministry of Public Health (MOPH) of Cameroon notified WHO of cases of acute fever and rash syndrome of unknown aetiology being reported from the Far North and North regions of the country. The major clinical manifestations of the illness included skin rash, persistent fever, malnutrition, anaemia, hepato-splenomegaly and adenopathy. Laboratory results released on 17 March 2017 by the Centre Pasteur of Cameroon in Yaoundé revealed that two out of five samples obtained between 21 and 24 February 2017 from acute incidence cases tested positive for cutaneous leishmaniasis.

Retrospective investigation indicated that 48 cases with similar clinical features including 17 deaths (case fatality rate of 35.4%) had been registered between January 2016 and 24 March 2017. These cases originated from six health districts (Bourha, Mokolo, Mogode, Hina, Maroua 3 and Soulede Roua) in the Far North region of Cameroon, and Mayo-Oulo district in the North region, the same areas where humanitarian crisis is occurring. Thirty six of the 48 cases investigated had no established epidemiological links, negating contact contagion as a mode of transmission. Six cases are currently hospitalized in Mokolo district hospital.

Public health actions

- The Ministry of Public Health is leading the response to the outbreak, supported by Partners including IMC, ALIMA, CDC, CAFETP, UNICEF, MSF, CRF, CRC, and Epicenter.
- The outbreak management committee has developed a response plan that is being used to mobilize additional resources.
- The surveillance case definition for this outbreak and standard operating procedures for surveillance and case management have been adopted and being implemented since 20 March 2017.

Situation interpretation

Leishmaniasis is caused by the protozoan Leishmania parasites that are transmitted through the bites of infected female sandflies. The disease is associated with malnutrition, population displacement, poor housing, a weak immune system, and poverty. These factors are prevalent in the Far North and North regions of the country, in addition to availability of the vectors.

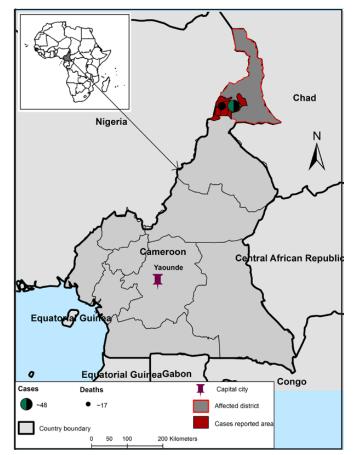
Cutaneous leishmaniasis was first described in Cameroon in 1930, with the first case reported from Mokolo in 1972. Between January 2007 and June 2009, 147 cases were reported from Mokolo, 60% of the affected people were under 15 years of age. Visceral leishmaniasis has also been reported in the north of the country, with the first case confirmed in 1986. Under reporting of the disease is thought to be substantial in the country.

The outbreak of leishmaniasis in the far north and north of Cameroon has been going on insidiously since January 2017 or beyond. Detection and confirmation of the outbreak took several weeks due to a number of factors, including weak surveillance system especially for a neglected tropical diseases like leishmaniasis, inadequate laboratory diagnostic capacity and functional specimen transportation system, shortage of essential medicines and supplies for case management, limited numbers of trained health workers, etc. Some parts of the affected areas are also experiencing insecurity, with poor communication network to the rest of the country and limited coverage and accessibility to health services.

The Ministry of Public Health has rallied several partners to mount an effective response to this outbreak. In the bid to address some of the existing challenges, WHO is shipping pentavalent antimonials, paromomycin, rapid diagnostic tests and supplies for leishmaniasis testing and case management from its emergency stocks to Cameroon. A neglected tropical diseases (NTD) case management expert will be deployed from WHO headquarters to work closely with the Ministry of Public Health.

There is an urgent need to accelerate implementation of response activities including building local capacity. The support from partners will be pivotal in attaining this. In the medium to long term, enhancing the operational capacity of the national leishmaniasis control programme to run effectively is critical.





The monkeypox outbreak declared by the Government of Congo on 13 March 2017 remains active. During reporting week 13 (week ending 31 March 2017), 6 new cases were reported from three districts, distributed equally (2 cases each) among Betou, Dongou and Impfondo. As of 28 March 2017, a cumulative of 26 suspected cases including 4 deaths (case fatality rate of 15%) have been reported since onset of the outbreak on 21 January 2017. The outbreak has so far been localised to Likouala Province where four districts have been affected: Betou (6 cases, no death), Dongou (13 cases, 2 deaths), Enyelle (4 cases and 1 death) and Impfondo (3 cases, 1 death). Four specimens collected and shipped to the Institut National de la Recherche Biomédicale de Kinshasa (INRB) tested positive for monkeypox by PCR.

Public health actions

- The Ministry of Health and Population, with technical and financial support from WHO, conducted initial outbreak investigation between 15 and 22 February 2017, leading to the confirmation of the outbreak in Likouala.
- The Ministry of Health (Department of Epidemiology and Disease Control), UNCHR, CDC, Fonds International pour la Conservation et l'Education (INCEF), and WHO carried out a joint mission from 22 – 29 March in Likouala to support local response to the outbreak. During this mission:

6 new cases were identified, investigated and clinically managed,
 CDC and WHO donated assorted medicines, personal protective equipment (PPE) and specimen collection kits,

- A regional outbreak coordination committee was established including local partners,
- 52 health workers were trained on basic facts about monkeypox (clinical features, modes of transmission, case management), infection prevention and control practices, and epidemiological surveillance,
- Advocacy meeting was held with community leaders to promote acceptance and generate local support.
 Community sensitization activities including film screening and community dialogue were undertaken by INCEF in Impfondo, Dongou, and Ganganian bush. Similar activities are planned for Manfouété, Enyelle and Betou

Main city

Affected regio

Districts

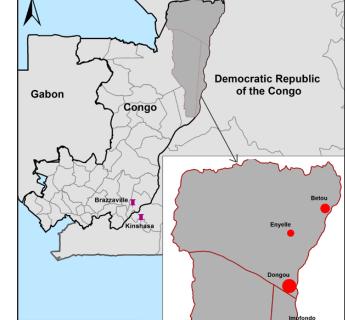
Country I

A WHO consultant has been deployed to Likouala to support the local health department in outbreak management and strengthening surveillance.

Situation interpretation

The index case in this outbreak was found to have originated from Manfouété town, Dongou district. Manfouété is an isolated town with limited communication network (telephones and internet access), road transport, lack of electricity, inadequate numbers of trained health workers, and low health service coverage. In addition, the high population movement between Congo, the Democratic Republic of Congo and Central African Republic, including influx of refugees from these countries and others like Chad, poses a high risk of propagation of the outbreak to other provinces of Congo and the neighbouring countries.

Efforts by the Ministry of Health to strengthen case management, supported by WHO and other partners, reduced the number of deaths in the health centres. The training of health workers equally improved provision of care to the patients and strengthening of disease surveillance. Sustaining effective interventions to contain this outbreak requires continued support from both the government and partners. To date, the response has largely been funded by partners (WHO, UNHCR and CDC).



Geographical distribution of Monkeypox cases in Congo,

21 January - 28 March 2017.

Central African

Republic

Measles Guinea	3,937	6	0.15%
	Cases	Deaths	CFR

The measles outbreak in Guinea has continued to show increasing trend in the past weeks. There has been an exponential rise in the caseload between week 5 (week ending 5 February) and week 12 (week ending 26 March 2017). During week 12 (week ending 26 March 2017), 488 new cases and one death (case fatality of 0.2%) were reported from 32 districts. As of 26 March, a cumulative of 3,937 cases including 6 deaths (case fatality rate of 0.15%) were reported from 38 districts across the country. Six samples tested positive for measles virus at the Guinea National Laboratory for Haemorrhagic Fever; while 450 cases had established epidemiological linkage. This measles outbreak that was officially declared on 8 February 2017 emerged during week one of 2017 (week ending 7 January 2017) when N'zerekore and Conakry attained epidemic threshold.

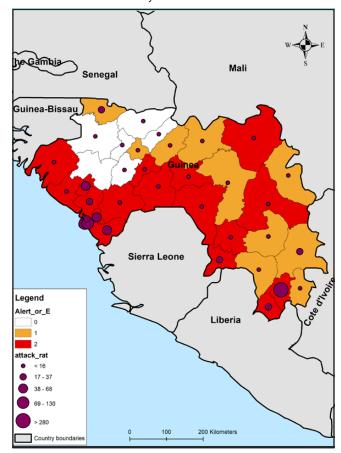
Public health actions

- The National Agency for Health Security is coordinating response to the outbreak, with support from WHO and other partners.
- Mass measles vaccination campaign was conducted in N'zerekore, targeting children between 6 months to 10 years. A total of 148,344 children were vaccinated, more than the targeted population of 142,270 persons, thus giving an administrative coverage of 104%. The campaign was integrated with administration of supplementary vitamin A and anti-helminths. The operational activities were funded by Alliance for International Medical Action (ALIMA), while WHO supported supervision and monitoring.
- WHO deployed 76 national consultants to 38 health districts to support response and micro-planning. A team of experts is supporting the country to conduct risk assessment to inform the overall response strategy.
- Laboratory confirmation is continuing at the National Laboratory where WHO provided reagents for measles and rubella testing
- Request for funding has been submitted to the Measles and Rubella Initiative (MRI) requesting support for vaccination in the other health districts.

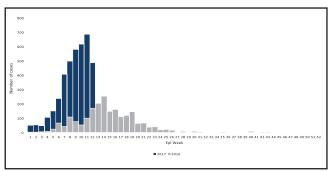
Situation interpretation

The rapid spread of measles infection being seen across the country indicates high potential of transmission as a result of increased number of unprotected population. This has been mainly attributed to the low measles vaccination coverage, which according to WHO and UNICEF estimates, ranges from 52% to 62% between 2011 and 2015. In concurrence, the national administrative data puts the coverage for 2016 at 63%. The rapidly spreading measles outbreak is posing increasing risk of propagation within the country and beyond. The risk of cross border transmission of infection to the neighbouring countries such as Guinea Bissau, Liberia, Sierra Leone, Ivory Coast, and Mali remains moderate, given the fact that some of these countries have similar predisposing factors, namely pooled number of un-protected children.

Geographical distribution of Measles cases in Guinea, 7 January - 26 March 2017.



Trend of Measles cases in Guinea, 2016 - 2017



Effective containment of this outbreak is being challenged by the inability to swiftly conduct reactive vaccination campaign, comprehensively covering the country. The MRI request submitted will not meet 50% of the operational costs required and does not include vaccination for the age group of 5-10 years. Twenty two health districts have been prioritized for a mass vaccination campaign, targeting children between 6 and 59 months. The campaign, planned for April 2017, will begin with 5 health districts of Conakry. This phased approached of reactive vaccination, dictated by limited vaccines and operational funds, will likely contribute to prolonging the outbreak. As such, there is need for continued partners' support to ensure that sufficient vaccines are secured to mitigate transmission in Guinea and to the other neighbouring countries.

Sao Tome and Príncipe

1494 0 0% Cases Deaths CFR

Event description

This is an update on the ongoing outbreak of necrotising cellulitis/ fasciitis in SãoTome and Principe, which was first reported in September 2016. In epidemiological week 12 (week ending 26 March 2017), 16 new cases were reported, substantially lower than the 108 cases reported at the height of the outbreak in week 50 of 2016 (week ending 11 December 2016). As of 26 March 2017, 1,494 cases have been reported with no deaths directly attributable to the disease. Cases have been reported from across the country, with Caue (South) health district having the highest attack rate of 21.9 per 1000 population while the Island of Principe is the least affected at 2.6/1000 population.

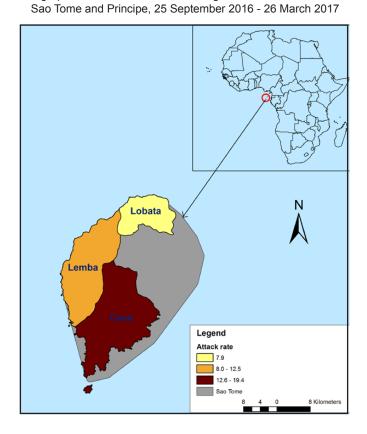
The technical mission by laboratory experts from the University of Cambridge and University of Birmingham concluded on 21 March 2017. The mission aimed to provide molecular testing capability and rapid in-country genetic sequencing in order to determine the aetiology of the outbreak. Tests for multiple potential causative organisms were conducted in spite of limited number of samples available. Majority of the samples tested were positive for Staphylococcus aureus by PCR and/or culture. Cases of Streptococcus pyogene with co-infection were also seen.

Public health actions

- Data collection for the case-control study to determine the risk factors and mode of transmission of the outbreak commenced on 23 March 2017. It is expected to continue for 14 days in Sao Tome and a further 7-14 days on the island of Principe. The main exposure risk factors being investigated include environmental, occupational, contact with animals and other potential vectors, care structures and traditional medicine, the type of injury, contact with other cases, and potential places where infection occurred.
- In order to improve on the quality of care provided, terms of reference have been developed for training of health care providers; case definitions have been disseminated; and protocols for follow up of patients after discharge are being developed.
- Daily meetings of the Incident Management System pillars are held as well as regular coordination meetings with the Ministry of Health to validate control strategies prior to implementation.

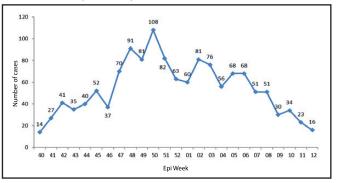
Situation interpretation

It is being hypothesized that the aetiology of this outbreak is community acquired Staphylococcus aureus and/or Streptococcus pyogene, possibly exacerbated by co-infection with community or hospital-acquired opportunistic infections of the lesions. The possibility of



Geographical distribution of necrotizing cellulitis/fasciitis cases in

Trend of necrotizing cellulitis/fasciitis cases in Sao Tome and Principe, 25 September 2016 - 26 March 2017



poly-microbial infection has also not been ruled out. This hypothesis needs to be proven by further analysis of more samples and the results of the case-control study.

While the outbreak is gradually coming down since the beginning of 2017, the trend has been quite slow. Given the protracted nature of the outbreak, the complex aetiology, and the current response capacity on the ground, the risk of further propagation of this disease remains high. The Government and its responsible national authorities are urged to make serious commitment towards containing this outbreak outright. Due attention should be given to this outbreak by both the Government and Partners, through allocating adequate financial and logistic resources to support operational activities and continue deploying experts to support the various components of the response.

The pathogens identified so far can be easily treated with antibiotics as long as strict adherence to treatment protocols is observed. On-site training in microbiology has been recommended and is due to be undertaken together with off-site training in molecular methods. There is a need to improve quality of patients' care through recruiting, training and deploying national physicians. Further, access to care and treatment is being impeded by financial barrier since health care in Sao Tome and Principe is not completely free of charge. All these issues need to be addressed holistically to ensure that this outbreak is finally brought an end.

Mozambique

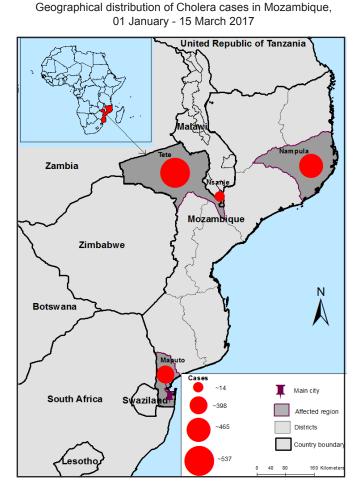
140030.2%CasesDeathsCFR

Event description

Mozambique has been experiencing an outbreak of cholera since January 2017. The Ministry of Health (MOH) notified WHO on 16 February 2017 of the occurrence of this outbreak. As of 15 March 2017, 1,400 cases including 3 deaths (case fatality rate of 0.2%) have been reported; 398 in Maputo city and province, 296 in Nampula and 537 in Tete province. The outbreak has been reported to be decreasing in the last two weeks. Thirty seven out of 63 samples tested at the National Institute for Health were positive for Vibrio cholerae by culture.

Public health actions

- The Ministry of Health is coordinating the response with support from several partners (WHO, MSF, UNICEF, OXFAM and Mozambique Red Cross)
- A national cholera strategic response plan has been developed and being implemented.
- WHO has provided chlorine, inter-agency diarrhoeal disease kits and disinfecting spray pumps; in addition to providing materials for sensitization.
- Cholera treatment centres (CTCs) have been set up in Maputo city, Matola, Tete, and Nampula province; and are functioning well.
- Community education and sensitisation are being conducted in affected areas together with house to house distribution of chlorine solution.
- An oral cholera vaccination campaign is planned in Tete.
- The cross-border response group in Tete will be activated by the Provincial Direction of Health to enable the sharing of information on cross border cases



A WHO rapid risk assessment was conducted this week which graded the overall risk as moderate based on the impact on human health, the risk of the event spreading and the risk of insufficient control capacities.

Situation interpretation

Cholera outbreaks occur regularly in Mozambique, with outbreaks nearly reported annually. In 2017, the rainy season has been characterized by less frequent but heavier rains including the recent tropical cyclone, Dineo. Response to the cyclone together with other emergencies as well as a financial crisis has led to a dearth of human resources for response. Risk factors fueling transmission include shortage of potable water, contamination of house water in cyclone-affected areas, and recurrent risk of flooding in high density populated areas leading to poor sanitation and hygiene, particularly in the most deprived areas. There is an urgent need to scale up water and sanitation improvement activities.

Based on the fact that Zimbabwe and Malawi are also having active cholera outbreaks, WHO has proposed a cross border meeting to improve sharing of information and harmonize response strategies among the countries in the sub-region. There is also need to strengthen surveillance activities to ensure all suspected cases are reported. Close monitoring of the situation, including the sharing of information with WHO is paramount.

Hepatitis E	Chad	1293 Cases	15 Deaths	1.2% CFR

The outbreak of hepatitis E in Salamat region of Chad, formally declared on 14 February 2017, has been steadily declining since week 8 (week ending 26 February 2017). During reporting week 12 (week ending 26 March 2017), 25 new cases of acute jaundice syndrome and no death were reported. About 85% of these cases (21/25) originated from Amtiman North district, the most affected. As of 26 March 2017, a total of 1,293 suspected/confirmed cases including 15 deaths (case fatality rate of 1.2%) have been reported from three districts, namely Amtiman, Aboudeia and Haraza-Menguelgne. Active transmission is mainly taking place in Amtiman.

Public health actions

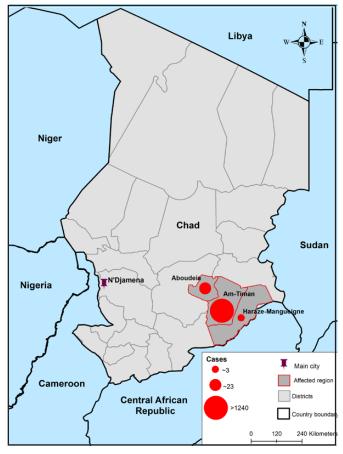
- Coordination meetings within the framework of epidemic management committee, involving government authorities and partners (UNICEF, MSF and local Agencies) are taking place under the leadership of the Salamat Regional Health Delegate with the support of WHO.
- The national authority and partners continued with water, sanitation, and hygiene (WASH) interventions including distribution of chlorine at water collection points in Amtiman. During the week ending 26 March 2017, 72 water points were chlorinated in Amtiman, with over 3 million litres of water treated.
- Risk communication, social mobilization and media awareness campaign targeting nomadic communities have been going on.
- Active surveillance including case search is being conducted in collaboration with community structures. The surveillance team, supported by WHO and MSF, are conducting analysis of hepatitis E data to guide the response.

Situation interpretation

The outbreak of hepatitis E in Chad is progressively declining as a result of the concerted multi-partner and multi-sector response activities.

particularly provision of safe water, sensitization of communities and effective coordination of the response. Given the prolonged incubation period (average of 5 - 6 weeks) of hepatitis E virus, sustaining the ongoing control interventions is critical. Relenting these efforts could reverse the positive trend being observed in the evolution of the outbreak. Risk factors for transmission of hepatitis E are still prevailing in the communities, especially among the nomadic groups. These include inadequate access to portable water, poor sanitation and hygiene practices. Targeting the communities at risk with appropriate interventions remains a task at hand. The national and regional health authorities, with support from partners, should continue strengthening epidemiological surveillance, intensify social mobilization, communication and awareness creation in the population in relation to water, sanitation and hygiene practices. Provision of safe portable water is necessary in the final effort to contain this outbreak.

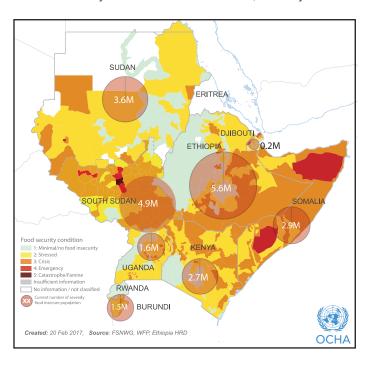
Geographical distribution of Hepatitis E cases in Chad, 1 September 2016 - 26 March 2017



Four countries in the Horn of Africa [Ethiopia, Kenya, South Sudan, and Uganda] continue to experience drought and famine crisis. A report by OCHA, titled 'Regional Outlook for the Horn of Africa, January - March 2017', shows that extensive crop failures and record low vegetation, together with significant livestock deaths, are currently observed across Somalia, southern and eastern Ethiopia, and northern and coastal Kenya. Meanwhile, western Kenya, parts of south-western Ethiopia, parts of southern Sudan and the central and eastern part of Uganda are moderately affected. The report asserts that the number of severely food insecure people across the Greater Horn of Africa has increased to 22.9 million by February 2017; and this could rise even further. Pasture and water resources for human and livestock consumption are at critically low levels across wide strips of the region, particularly between Somaliland and southern Ethiopia. Populations from Somalia are moving into north eastern Kenya and south of Ethiopia in search of food and water for their consumption and for their animals. Similarly, populations from South Sudan are moving mainly to Uganda. Conflict has been the major cause of displacement across borders and a threat to peoples' security. According to UNHCR, as of January 2017, there were 4 million refugees and asylum seekers in the region. The incessant conflict in South Sudan and Somalia continues to hamper humanitarian actions and service provision.

Prediction by the regional climate centre indicates increased precipitation in the month of April and reduced rainfall in May and June 2017. The forecasted rainfall will still be below normal average for the April-June season, therefore, the food crisis is expected to worsen in affected areas in the coming months.

Food security situation in the Horn of Africa, February 2017



Public health actions

- Following the WHO food insecurity in the Horn of Africa regional planning meeting in Nairobi from 14 16 March 2017, an emergency response team comprising of two technical staff from the WHO Regional Office for Africa and an Information Management Officer from WHO Headquarter have been deployed in Nairobi. The emergency response team has started engaging partners to establish and strengthen multi-sectoral response to the crisis. An emergency public health specialist will join the team in the first week of April.
- WHO has shared its monitoring and evaluation framework with other UN agencies in an effort to track health indicators to avert the crisis. The emergency response team also participated in the Horn of Africa drought outlook meeting convened jointly by OCHA and the Inter-Governmental Authority on Development (IGAD) and contributed to the message to be communicated to the IGAD Heads of State summit in Nairobi on 24-25 March 2017.
- > The emergency response team is currently engaged in an experts meeting to review the drought situation in order to enhance preparedness, response and recovery. The recommendations from this meeting will be shared at the IGAD Ministerial meeting of Member States on 31 March 2017.

Interaction between the WHO emergency response team and other agencies (UNICEF, IOM, OCHA, and UNAIDS) has revealed, among other things, the need for a joint platform for risk and needs analysis at sub-regional level to ensure a holistic response to the crisis.

Situation interpretation

The forecasted below-average rainfall for April-June season foretells a worsening drought and famine situation in the Horn of Africa. Famine has already been declared in parts of Unity State, South Sudan, while the humanitarian crisis in Somalia and Ethiopia is rapidly deteriorating. The food crisis, water shortage and population movement across countries are being complicated by outbreaks of communicable diseases such as cholera and measles.

The focus in the response to this crisis is to support nationally-led efforts and country-level response through technical support, advocacy, resource mobilization, country-level interagency coordination, and local non-governmental organizations support. This is in recognition that, while the situation is alarming, governments and partners at the national level have made great strides in the last few years to enhance preparedness capacities, set up nationally-led coordination mechanisms, and strengthened their systems to address the effects of droughts. The WHO emergency response team set up in Nairobi will be instrumental in supporting the countries in the Horn of Africa in delivering the needed humanitarian assistance.

Humanitarian crisis

South Sudan

Event description

The major events this week are the ongoing cholera and measles outbreaks, the famine in Greater Unity state and opening of a humanitarian corridor from Sudan to facilitate humanitarian aid into the famine-affected counties of Greater Unity state.

The ongoing cholera outbreak continues on a downtrend. Nineteen new cases were reported between 27 and 29 March 2017. Twenty-seven suspected cholera cases have been reported from a new site, Ayod. Between 12 June 2016 and 29 March 2017, the number of reported cholera cases reached 5,856 with 144 deaths (case fatality rate of 2.46%).

Six humanitarian workers (3 national and 3 international) working for a local NGO CREDO have been killed in an ambush in Jonglei state while attempting to reach one of the inaccessible areas with humanitarian support.

The findings of a yellow yever risk assessment undertaken in South Sudan by the Ministry of Health (MoH), with the support of the World Health Organization (WHO), Institute Pasteur of Dakar, and CDC in 2014 were released last week. The assessment showed evidence of naturally acquired yellow fever antibodies in the counties (of Torit, Nimule, Narus, and Kapoeta) bordering Uganda – where a yellow fever outbreak was reported in 2010, affecting the border districts of Lamwo, Agago, Abim, and Kitgum.

Public health actions

As part of continued prevention and control of ongoing outbreak of cholera:

- Oral cholera vaccines have been airlifted to Bor, Bentiu and Minkaman for the mass campaign to be launched by 3 April.
- WHO and MoH have trained and deployed teams to Ayod in Jonglei to investigate the suspected cholera cases reported.

The second round of polio national immunization days in the country will take place from 3 April 2017.

As part of prepositioning and support to partners in the states:

- Rumbek/Lake: WHO provided 10 cartons of ringer lactate (IVF), 3 cartons of diarrheal kits to Medici con L'Africa (CUAMM) in Yirol East to support the ongoing cholera outbreak in the county
- Yambio/Western Equitoria: Confirmed receipt of emergency supplies: trauma Kits and basic life-saving drugs as well as maternity complex medical and none medical supplies
- Yambio/Western Equitoria: WHO donated 2 basic Emergency kits to Catholic Medical Mission Board (CMMB) and World Vision International to enhance mobile clinic outreach to the internally displaced persons.
- Torit: WHO donated 10 emergency kits to Generation Initiatives South Sudan to support payam-to-payam mobile medical teams.
- Wau/Western Bahrel Ghazal: Drugs supplies from Juba arrived. These include 56 cartons of emergency supplies (interagency emergency health kits) and 63 cartons of drug supplies for Wau Teaching Hospital.

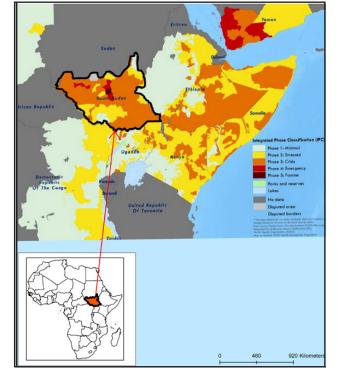
A stakeholders' meeting to review the yellow fever risk assessment findings and agree on a strategy and roadmap for yellow fever control in South Sudan has been scheduled for 13 April 2017.

The 3rd National Health summit themed "Harnessing strong partnerships for a resilience health system towards attainment of Universal Health Coverage" commenced in Juba 27-31 March, 2017. Participants are from all levels of Ministry of Health, UN agencies, International and national NGOs, Donor and civil society organizations.

Situation interpretation

The protracted conflict compounded by measles outbreaks as well as malnutrition, constitute competing priorities for cholera outbreak control. Consequently, there is a need to proactively target additional high risk areas for mass oral cholera vaccination in addition to strengthening primary health care services to the community. The ongoing prepositioning of essential supplies and drugs in various states/areas will go a long way in mitigating threats arising from epidemic and pandemic prone diseases. More detailed operational data on each area will be required or is required to assess the impact of these interventions

The opening of the humanitarian corridor by the neighbouring country Sudan to areas which are currently facing famine is a positive development to improve accessibility to populations in need. However, the killing of 6 aid workers demonstrates how the access has been impeded by the protracted conflict in the country.



Classification of food insecurity in South Sudan,

as of 29 March 2017

9

Humanitarian crisis

Nigeria

Event description

The eight-year conflict in north-east Nigeria has created a deepening humanitarian crisis, with some 6.9 million people in the worst-affected Borno, Adamawa and Yobe states in need of urgent assistance. Almost 1.8 million people, more than half are children, have fled their homes. The crisis engulfed the larger Lake Chad Basin (north-eastern Nigeria, northern Cameroon, western Chad and south-east Niger), affecting some 17 million people. Nineteen health sector partners are seeking to reach 5.9 million out of the estimated 6.9 million people in need across Adamawa, Borno and Yobe states. As of 21 March 2017, only 19% (US\$ 17.4 million out of US\$ 93.8 million) of the funds required for the 2017 health sector humanitarian response plan has been received.

During reporting week 11 of 2017 (week ending 19 March 2017), 79 out of 149 reporting sites (including 20 internally displaced persons camps) in 13 local government areas (LGAs) submitted their weekly reports. This reflects a completeness of reporting rate of 53%, as oppose to the minimum target of 80%. This is an indication that the surveillance system, based on the early warning and alert response system (EWARS), is performing sub-optimally. Twenty-one indicator-based alerts were received and 68% of them verified. Malaria accounts for 19% of overall morbidity in all reporting sites. Between week 34 of 2016 (week ending 21 August 2016) and week 11 of 2017 (week ending 19 March 2017), a total of 175,315 suspected cases and 104,385 confirmed cases of malaria were reported. In epidemiological week 11 (week ending 19 March 2017), 1049 cases of acute watery diarrhea were reported with no deaths. During the same reporting week (week 11), 74 suspected cases of measles were reported with 85% of the cases occurring in children below 5 years. Between weeks 34 of 2016 and week 11 of 2017, a total of 2,657 suspected cases of measles were reported from EWARS reporting sites in 13 LGAs.

The outbreak meningitis continues to spread in three states, namely Zamfara, Sokoto and Katsina; while the situation has stabilized in Kebbi and Niger states. As at 28 March 2017, a total of 1,966 suspected cases with 282 deaths (case fatality rate of 14.3%) have been reported from the five states.

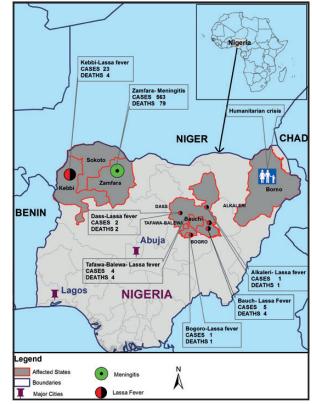
Public health actions

- UNDP and WHO are developing a joint proposal to the European Union, amounting to 7 million Euros to support health system revitalization up to the end of 2018. This proposal is in line with the transition strategy from emergency to recovery.
- WHO has recruited and trained additional 11 hard-to-reach teams to provide minimum primary health care (PHC) services in difficult to access communities in Borno state. With this, 35 hard-to-reach teams are currently providing integrated PHC services in 26 LGAs across Borno state. As at the end of February, the hard to reach teams provided more than 100,000 consultations.
- Another batch of volunteers on community based case management will complete training by the week ending 31 March 2017, bringing the total number of volunteers trained and deployed by WHO to 500 by April 2017. An in-depth evaluation of the activities of the community volunteers is being planned for April 2017.
- WHO, MSF and ALIMA are deploying 100,000 doses of meningitis A vaccine to vaccinate returnees aged 09 months 29 years in 4 local government areas of Borno state, namely Monguno, Benisheik, Dikwa, and Ngala.
- > The viral hemorrhagic fever isolation facility in Maiduguri will be completed by the week ending 31 March 2017. Health workers have been identified and will be trained on infection prevention and control and case management between 03 and 05 April 2017.
- Safe and Secure Approaches in Field Environments (SSAFE) training for all WHO staff deployed to north east Nigeria is on-going. All the relevant individuals are expected to have undergone the training by April 2017.

NHO procured and delivered 10 armoured vehicles to Maiduguri to enable field operations in a UN security level 5 environment,

Situation interpretation

The security situation in north east Nigeria remains precarious. Access to health services is still being affected by security concerns and inadequate number of health partners. Basic package of health services are not yet being fully delivered in majority of the functional health facilities. Sixty percent of health facilities are either partially or completely destroyed in Borno state. The risk of propagation of meningitis outbreak at the national level is moderate. There is need to strengthen some components of the response such as surveillance and case management. Despite the security challenge, there is an opportunity to start revitalizing some of the health facilities in Borno state. As the security situation evolves, funding for the overall humanitarian response and transition to early recovery in the health sector will remain the major factor. WHO will continue leading the sector in mobilizing resources to address the huge public health gaps consequence to the eight-year conflict. Assistance will include early recovery and livelihood interventions to help people out of the crisis and back on the path to development.



Geographical distribution of events in Nigeria,

as of 5 March 2017

Summary of major challenges and proposed actions

Challenges

- The delay in notifying public health events, as required under the International Health Regulations, leads to a delay in getting the appropriate expertise in country as well as financial and logistical assistance to support the outbreak or emergency. This impacts on initiation of appropriate interventions needed to reduce transmission and control an outbreak, increasing the number of people affected. This in turn can have a negative impact on economies of countries particularly on tourism and trade.
- A lack of detailed information of cases, through the line listing of all those suspected of having the disease of interest, together with detailed information on operational aspects of a response, for example when, where and in what population particular interventions are implemented, leads to challenges in the monitoring of an outbreak response. This limits the ability to target response activities in the most needed areas and to the most vulnerable population, as well as to determine the evolution of the outbreak and the effectiveness of those interventions.
- There are currently a number of outbreaks and emergencies which span international borders, for example cholera in Mozambique, Malawi and Zimbabwe and the food insecurity in the Horn of Africa. Cross border collaboration between countries is an integral part of preparedness planning and initiation of cross-border relationships for public health purposes should not wait until a public health event occurs.

Proposed actions

Effective response to acute public health events requires following a systematic stepwise approach which includes proper documentation of response activities, as well as archiving all materials generated by responders. To improve the coordination of outbreak documentation, an outbreak checklist has been developed by the regional office to aid countries. The aims of this are to improve timeliness and accessibility of information, streamline communication and management, better document the decision making process involved in event management, ensure findings are integrated into decision making, enhance transparency and accountability of event management.

All events currently being monitored by WHO AFRO

Event	Country	Grade	Date of notification to WHO	No. of cases / sus- pected (confirmed)	No. of deaths	CFR (suspected) / %	Comments	Date of last sitrep
Outbreak								
Cholera	DRC	2	1 Jan 2015	34,446	979	2.8	Detailed update given above	17/03/2017
Cholera	Tanzania	2	04 April 2015	25,117	390	1.6	14 cases and 1 death reported in epi week 12. National task force meeting with hotspot districts and President's Of- fice – Regional Administration and Local Government	27/03/2017
Necrotising cellulitis/ fas- ciitis	Sao Tome & Principe	2	10 Jan 2017	1494	0	0	Detailed update given above	29/03/2017
Hepatitis E	Chad	1	1 Sept 2016	1293 (5)	15	1.2	Detailed update given above	19/03/2017
Cholera	Angola	1	4 Jan 2017	289	11	3.8	AFRO & HQ risk assessment to review grading and implement Oral Cholera Vac- cine (OCV) package	26/02/2017
Cholera	Burundi	-	28 July 2016	167 (5)	0	0	No reported cases since 25 February 2017, outbreak appears to be under control, heightened surveillance needs to be maintained.	25/02/2017
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	2530	20	0.8	Two epidemiologists conducting retrospec- tive hospital-based record review Reagents required for the diagnosis of dengue and arbovirus and training of lab technicians.	23/03/2017
Typhoid fever	Zimbabwe	-	21 Nov 2016	1492 (75)	8	0.4	No update available	20/03/2017
Lassa fever	Nigeria	-	Dec 2016	283 (99)	56	19.8	Outbreak in 13 states	17/03/2017
Dengue fever	Cabo Verde	-	4 Jan 2017	98 (19)	0	0	Investigations by the deployed entomo- logist and virologist from IPD determined the recent circulation of the virus and the presence of Aedes aegypti as the vector.	09/03/2017
Rift Valley fever	Mali	-	01 Feb 2017	3 (3)	1	33.3	No update available	
Monkeypox	Congo		1 Feb 2017	26	4	15	Detailed update given above	
Meningitis	Тодо	-	03 Feb 2017	376 (28)	26	6.9	No update given	19/03/2017
Monkeypox	Central African	-	09 Feb 2017	5	0	0	No new cases this week	13/03/2017
Measles	Republic Guinea		08 Feb 2017	3,937	6	0.15	Detailed update given above	29/03/2017
Cholera	Mozambique	-	16 Feb 2017	1400	3	0.2	Detailed update given above	13/03/2017
Meningitis	Nigeria	-	20 Feb 2017	1966 (10)	282	14.3	Five states are currently affected	30/03/2017
Leishmaniasis	Cameroon	-	20 Feb 2017	48	17	35.4	Detailed update given above	24/03/2017
Lassa fever	Benin	-	21 Feb 2017	1 (1)	1	100	No new cases reported	20/03/2017
Cri- mean-Congo Haemorrhagic Fever	Namibia		23 Feb 2017	4 (2)	1	25 (50)	Detailed update given above	25/03/2017
Lassa fever	Тодо	-	24 Feb 2017	12 (7)	4	57	No update available	19/03/2017
Meningitis	Cameroon		9 Mar 2017	25	9	36	No new cases this week	26/03/2017
Lassa fever	Sierra Leone	-		24 (4)	4	16.7 (100)	No update received	12/03/2017
Anthrax	Tanzania	-	11 Mar 2017	1	0	-	Investigation undertaken by district team. Laboratory confirmation awaited. 36 contacts developed symptoms	-
Malaria	Burundi		13 Mar 2017	1,823,012	796	0.04	No update given	05/03/2017
Cholera	Malawi	-	15 Mar 2017	14	0	0	No new case since 19 March 2017	19/03/2017
EMERGENCIE	S				1			
Humanitarian crisis	South Sudan	3					Detailed update given above	31/03/2017
Humanitarian crisis	Nigeria	3					Detailed update given above	17/03/2017
Post El-Nino drought	Ethiopia	2					Food insecurity, malnutrition and outbreak of cholera remain a problem.	20/03/2017
Humanitarian	Cameroon	2					No update available	
Humanitarian crisis	Central African Republic	2					No update available	
Cyclone	Mozambique	-	16 Feb 2017				No major public health needs have been reported following the cyclone. The WCO and AFRO continue to monitor the situation	13/03/2017
Food inse- curity	South Sudan, Kenya, Uganda, Ethiopia, NE Nigeria	-	23 Feb 2017				OCHA and IGAD estimate up to 22.9 mil- lion people are food insecure in the Horn of Africa. Update given above	
Floods	Zimbabwe	-	02 Mar 2017				No update available	
Cyclone	Madagascar	-	07 Mar 2017				No update available	

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. 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.