# WEEKLY BULLETIN ON OUTBREAKS AND OTHER EMERGENCIES

Week 51: 16 - 22 December 2017 Data as reported by 17:00; 22 December 2017

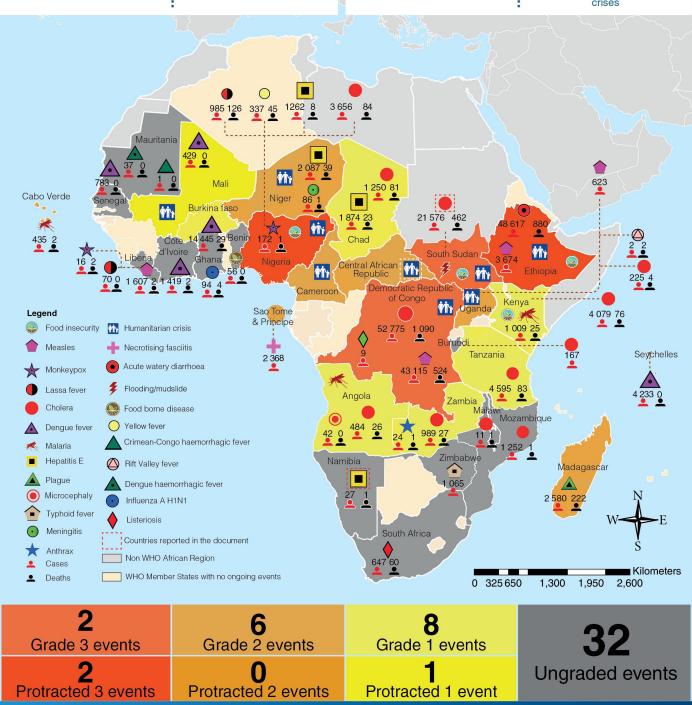


New events

49
Ongoing events

42
Outbreaks

9 Humanitarian crises



## **Overview**

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- This Weekly Bulletin focuses on selected acute public health emergencies occurring in the WHO African Region. The WHO Health Emergencies Programme is currently monitoring 51 events in the region. This week's edition covers key new and ongoing events, including:
  - Declaration of the control of cholera outbreak in Borno State,
     Nigeria
  - Hepatitis E in Namibia
  - Humanitarian crisis in Central African Republic
  - Cholera in South Sudan
- For each of these events, a brief description followed by public health measures implemented and an interpretation of the situation is provided.
- A table is provided at the end of the bulletin with information on all new and ongoing public health events currently being monitored in the region, as well as events that have recently been closed.

#### Major challenges include:

- The humanitarian crisis in Central African Republic continues to deteriorate in the central region of the country. The seasonal migration of people and livestock to new grazing grounds is expected to trigger increased violence in the centre and northeast regions of the country and with it, even greater need for humanitarian assistance. The insecurity in the region must be urgently addressed to facilitate an effective response by WHO and partners.
- The outbreak of cholera in South Sudan has markedly decreased as a result of concerted efforts by the national authorities and humanitarian actors. However, the humanitarian crisis in South Sudan continues to worsen, and the WASH situation remains poor, so authorities must remain vigilant to prevent a resurgence of cases.

**3** 

5 365 **Cases** 

61 Deaths

1.1% CFR

World Health Organization

#### **EVENT DESCRIPTION**

On 21 December 2017 the Borno State government declared the end of the cholera outbreak in the state. The declaration came after the state marked 14 days (the length of time *Vibrio cholerae* bacterium persists and can be shed by casepatients) with no new cholera cases reported. The last case was reported on 5 December 2017. As of the declaration of the end of the outbreak, a cumulative total of 5 365 cases including 61 deaths (case fatality rate: 1.1%) had been reported.

Initially detected in Maiduguri City, the first case was confirmed on August 23 and the majority of cases detected early in the outbreak were reported from Muna garage camp for internally displaced persons (IDP). By September, the outbreak had spread rapidly through several IDP camps and host communities with further reports of cases in Monguno (east of Maiduguri) and Dikwa (north of Maiduguri). In total, six local government areas (LGA) in Borno state were affected, including Jere, Maiduguri Metropolitan Council, Dikwa, Mungono, Mafa and Guzamala. The majority of cases occurred in the Muna corridor (50%) in Jere, Monguno (33%) and Dikwa (14%) LGAs located in the central and eastern parts of the state.

#### **PUBLIC HEALTH ACTIONS**

- On 21 December 2017, the Borno State Ministry of Health released a press statement to declare the end of the end of the cholera outbreak.
- On 22 December 2017, WHO issued a news release to note the major achievement that has been made towards cholera control in Borno State.
- WHO continues to support use of an early warning and surveillance system with dot mapping to pinpoint new cases, facilitating targeted cholera prevention and control interventions.
- Phase one of an oral cholera vaccination campaign was conducted during 9-13 December 2017, vaccinating a total of 560 267 people. Phase two of the vaccination campaign is ongoing in Dikwa and Monguno LGAs.

A borehole was completed in Guwaram in Guzamala LGA and latrines are under construction in Borno State.

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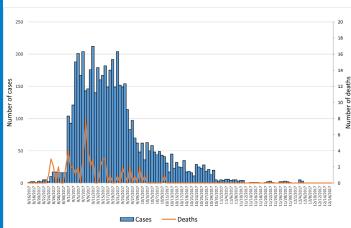
Geographical distribution of cholera cases in Borno State, Nigeria,

16 August - 15 December 2017

Epidemic curve of cholera cases and deaths in Borno State, Nigeria

OCV Vaccinated Areas

\* The data are the centroids of the admin



#### SITUATION INTERPRETATION

The public health authorities in Nigeria, with support of WHO and partners, have successfully contained the outbreak in Borno State, despite ongoing conflict and concurrent outbreaks in the area. The response to this outbreak demonstrates the importance of an early warning and surveillance system able to produce dot mapping of new cases to facilitate direct and timely multisectorial intervention to cholera hotspots. Use of this system slowed transmission in August and September 2017, which allowed for vaccination campaigns to begin, after which transmission came to a close. WHO and partners will continue to support cholera preparedness and prevention activities including implementation of improved sanitation facilities and oral cholera vaccination in Borno State.



## **New event**

Hepatitis E Namibia 27 1 3.7% Cases Death CFR

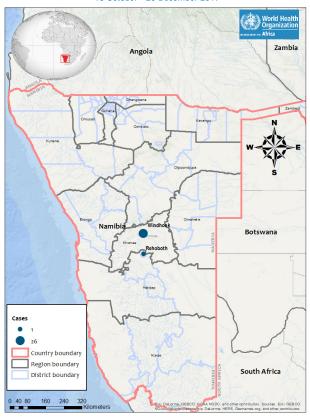
#### **EVENT DESCRIPTION**

On 18 December 2017, the Namibian Ministry of Health notified WHO of an outbreak of hepatitis E occurring in Windhoek, the capital and largest city. On 19 October 2017, a hospital in Windhoek began registering patients with signs of acute viral hepatitis who tested negative for hepatitis A, B, and C, which are commonly diagnosed at the local laboratory. Twenty-seven samples from these patients were sent to a private laboratory for hepatitis E testing. As of 20 December 2017, nine tested positive, five negative, twelve are pending, and one is missing. One death (case fatality rate 3.7%) has been reported; a woman who died four days after giving birth. Twenty-six patients (96%) were reported from six residential areas in Windhoek district; one was reported from Rehoboth district. Eight of the nine confirmed cases were residents of the Havana informal settlement in Windhoek.

#### **PUBLIC HEALTH ACTIONS**

- The regional and district health emergency teams in Khomas region were activated on 14 December 2017 and the government of the city of Windhoek was informed of the outbreak.
- Regional and national Health Emergency Management meetings were held on 19 and 20 December 2017 with the participation of WHO and partners to discuss the coordination, communication, and logistics needed to respond to the outbreak. Strengths and gaps in response activities were identified and more stakeholders have been invited to future Health Emergency Management meetings to assist in addressing current gaps.
- The minister of health held a media briefing on 20 December 2017 to educate the public about the outbreak with the participation of WHO and partners.
- An environmental health team from the Ministry of Health and Social Services and the City of Windhoek are currently conducting environmental investigations to identify exposures that led to the outbreak

Geographical distribution of hepatitis E cases in Namibia, 19 October - 20 December 2017



- WHO will deploy one senior epidemiologist from Nairobi Hub on 27 December 2017 to assist with multisector coordination, outbreak investigation and response as well as to build the national reference laboratory capacity for the diagnosis of hepatitis E.
- The Ministry of Health has drafted a multisectorial hepatitis E preparedness and response plan to guide immediate and long-term actions.
- A national radio campaign to sensitize the affected communities to the risk of hepatitis E is ongoing and regular briefings of the public regarding
  the outbreak are planned.
- An orientation is planned for 23 December 2017 to train Red Cross volunteers and community health workers to implement community sensitization and mobilization activities in areas at high risk of hepatitis E.

#### SITUATION INTERPRETATION

The majority of hepatitis E cases during the current outbreak have reported in informal settlements where water and sanitation are compromised. Hepatitis E is mainly transmitted through the faecal-oral route via faecal contamination of drinking water and as such, a comprehensive multisectoral approach, as addressed by the drafted national response plan, will be crucial to controlling the outbreak. Although hepatitis A and B are common in Namibia, hepatitis E is rarely diagnosed in the country. As a result, the country has limited capacity for Hepatitis E laboratory diagnostics. Samples so far have been tested in South Africa. WHO with the support of partners seeks to support the Ministry of Health in strengthening laboratory diagnosis during the current outbreak and as a preparedness measure for future outbreaks.

# **Ongoing events**

**Humanitarian crisis** 

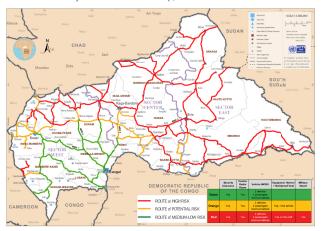
**Central African Republic** 

#### **EVENT DESCRIPTION**

The security situation in Central African Republic continues to deteriorate in the centre of the country. Following conflicts between rival armed groups on 11 December 2017 in Bangui, the situation in the city has been calm. Six people were wounded in violent incidents carried out by armed combatants in Kaga Bandoro on 9 December 2017; no new incidents of violence have since occurred. The security situation in the city of Ippy remains volatile following violent conflicts from 3 to 7 December 2017, when 36 people including 14 inpatients were reportedly killed in an attack at a private hospital in the area.

The Bakala sub-prefecture continues to receive internally displaced people (IDPs) escaping the armed conflict in Djoubissi, 45 km to the north. Approximately 1 000 IDPs are currently being sheltered in Bakala and 10 000 IDPs fleeing armed conflicts in Ippy, Bakala, and Ndassima have arrived to Bambari sub-prefecture. The influx of people to Bakala has severely strained the capacity of the health centres in the area. An incursion of an armed group on the village of Bolo (40 km from the city of Kouango) caused a massive displacement of the population, but the number of displaced people is still unknown.

#### Security road classification map, as of 20 December 2017



This insecurity has health implications for local populations. During weeks 45 to 50, a total of 18 cases of intestinal peritonitis, suspected to be the result of complications of typhoid fever, were reported among children under 15 years of age. The majority of cases were reported from the Pk3 displaced persons site in Bria.

#### **PUBLIC HEALTH ACTIONS**

- WHO and health cluster partners are working to organize a response to address the health needs of populations affected by the most recent waves of violence. Provision of support is planned as the security situation permits.
- WHO continues to support the NGO Community Humanitarian Emergency Board (COHEB) to provide health services, distribute long-lasting insecticide-impregnated bed nets, and support a measles vaccination campaign among children aged 6 months to 14 years in Bambari.
- WHO has provided a total of three interagency emergency health kits to the hospital in Kaga Bandoro and the village of Maloum to facilitate medical care for IDPs and the local population. These kits will enable the case management of at least 10 000 people for a 3 month period.
- International Medical Corps (IMC) continues to provide surgical services at the hospital in Bria, with the support of WHO, who provided two trauma kits in November.
- Health and WASH cluster partners continue to respond to the suspected cases of typhoid fever at the Pk3 IDP site in Bria. Hygiene promotion, construction of boreholes, case management, and support for laboratory confirmation of cases by Institut Pasteur is ongoing.
- The health cluster is working in coordination with the NGO Rescue Team with support of WHO to deploy mobile clinics to provide health services to the IDP population in Bakala and relieve the strain on the existing health centres.

#### **SITUATION INTERPRETATION**

The ongoing security situation in Central African Republic has made humanitarian assistance unavailable or severely limited for populations in the centre of the country where most of the recent violence has occurred. WHO and partners are currently unable to provide adequate needed assistance to many affected populations, including the IDP populations fleeing armed conflicts. With the start of the annual movement of livestock and people between grazing grounds, an intensification of violence by armed groups in the centre and northeast of the country is expected and could result in even greater need for humanitarian assistance. The insecurity in the region needs to be urgently addressed to facilitate an effective response by WHO and partners.

Cholera South Sudan 21 576 462 2.1% CFR

#### **EVENT DESCRIPTION**

Cholera transmission in South Sudan has declined significantly, with no new cases reported or confirmed in Budi and Juba counties in weeks 49 and 50 (week ending 9 December 2017 and 16 December 2017, respectively). The cumulative number of cases for Juba stands at 2 961, including 38 deaths (case fatality rate 1.3%). The recent transmission upsurge in New Bongo has been contained. A cumulative total of 857 cases including 83 deaths (case fatality rate 9.7%) have been reported in Budi since week 29, 2017. The outbreak in Budi started on 28 July 2017, with initial transmission occurring among gold miners in Ngauro. The high case fatality rate in this area is related to lack of access to healthcare, particularly at the onset of the outbreak.

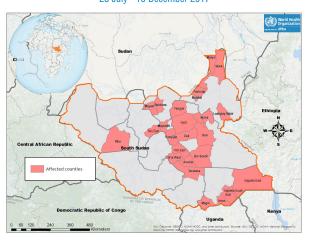
Since the start of the current cholera outbreak on 18 June 2016, a total of 21 576 cases, including 462 deaths (case fatality rate 2.1%) have been reported from 27 counties. The most affected counties include Ayod, Tonj East, Yirol East, Fashoda, Kapoeta East and Kapoeta South. The most affected populations in these areas are those living around landing sites and towns on the River Nile, cattle camp dwellers, populations living on islands with no services, and internally displaced people (IDPs) with no access to water, hygiene and sanitation (WASH) facilities. Case fatality rates were highest in counties with poor access to healthcare, particularly populations on islands and in cattle camps.

No new samples were tested in week 50, but 33 isolates have been shipped to Institute Pasteur, Paris for further characterization.

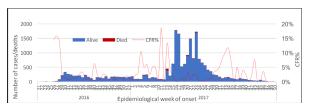
#### **PUBLIC HEALTH ACTIONS**

The overall cholera response is coordinated by a national taskforce that meets weekly in Juba and is chaired by the Ministry of Health, with support from WHO, UNICEF and partners (the Health and WASH clusters)

#### Geographical distribution of cholera cases in South Sudan, 28 July - 16 December 2017



Cholera epidemic curve for South Sudan, week 23, 2016 - week 50, 2017



- Preparations were made for the launch of the second round oral cholera vaccine campaigns in Tonj East, Kapoeta South and Kapoeta East in week 50 and UNICEF supported delivery of the vaccines to Kapoeta South and Tonj East from 10-11 December 2017.
- The Ministry of Health, the respective county health departments, WHO, and partners trained vaccination teams for Tonj East, Kapoeta South, and Kapoeta East from 10-14 December 2017.
- As part of the ongoing cholera response, cholera vaccines have been deployed to complement cholera response in several high-risk populations and locations. Out of the 2.2 million doses secured by WHO in 2017, a total of 1.1 million doses have been deployed, with 879 239 doses used during the first round and 254 340 doses used in second round campaigns in 16 cholera-affected and high-risk populations. In administrative areas where campaigns were implemented, 64 to 200% vaccine coverage was achieved.
- Social mobilization activities are ongoing in areas with outbreaks and hot spots, and trained volunteers and social mobilizers are educating the community on social and behaviour change interventions for integrated cholera control, prevention and immunization. Mass media interventions reach remote populations and include broadcasting key cholera messages regularly throughout the day in Dinka, English and Arabic.

#### SITUATION INTERPRETATION

Cholera cases have been confirmed in South Sudan every year since 2013. However, the 2016-2017 cholera outbreak is the longest and largest in magnitude and geographical extent, resulting largely from the protracted humanitarian crisis, the resulting population displacement, insecurity, and declining investment in WASH. This has resulted in declining access to safe water and sanitation facilities, which is estimated to be 60% and less than 10% respectively. In the light of this, the recent drop in new cholera cases is to be commended, showing that concerted efforts by the national authorities and humanitarian actors, including extensive oral cholera vaccination campaigns, have been effective. However, the humanitarian crisis in South Sudan continues to worsen, and the WASH situation is unlikely to improve significantly, so authorities must remain vigilant and ready to act swiftly in the event of an upsurge in cases.

# Summary of major challenges and proposed actions

#### **Challenges**

- The humanitarian crisis in the Central African Republic continues to deteriorate in the centre of the country. Armed conflicts and violence against civilians have occurred in recent weeks, causing massive population displacement on a scale that is still unknown. Continued conflict in the centre and north-eastern regions of the country is expected due to the seasonal movement of people and livestock to new grazing grounds, which would result in additional need for humanitarian action. WHO and partners currently lack access to many of the affected populations and this severely impedes the evaluation of needs and actions to address them.
- The incidence of cholera in South Sudan has decreased rapidly over the past several months thanks to the concerted national and international efforts to contain the outbreak. However, the humanitarian crisis in South Sudan continues to worsen and the WASH situation remains poor, which could favour an upsurge in the number of cases.

#### **Proposed actions**

- Greater effort by the international community is critical to address the situation of insecurity in the Central African Republic, which has seriously hampered humanitarian action. Partners in the humanitarian and health clusters are urged to scale up provision of assistance to IDPs and other affected populations in areas where the security situation allows.
- Response efforts to the cholera outbreak in South Sudan must be maintained to prevent a resurgence of cases. Additional efforts by humanitarian actors to improve the WASH situation, particularly to IDPs and other vulnerable populations, are needed to reduce the risk of continued cholera transmission in the country.

# All events currently being monitored by WHO AFRO

Country	Event	Grade†	WHO notified	Start of reporting period	End of reporting period	Total cases	Confirmed cases	Deaths	CFR	Comments
New events										
Namibia	Hepatitis E	Ungraded	18-Dec-17	14-Dec-17	20-Dec-17	27	9	1	3.7%	Detailed update given above.
Niger	Meningitis	Ungraded	-	29-Sep-17	9-Dec-17	86	11	1	1.2%	On week 49, 2 districts in Niger's Zinder region have crossed the epidemic threshold: Mirriah and Magaria. Between week 39 (start of the epidemic season) and week 49, a cumulative total of 86 suspected and confirmed cases including 1 death (CFR: 1.2%), were reported. The main affected regions include: Mirriah (47 cases and 1 death), Magaria (12 cases), Tahoua (8 cases) and Madaoua (6 cases). Neisseria meningitidis sero-group C was confirmed by PCR in 11 isolates.
Ongoing events										
Angola	Cholera	G1	15-Dec-16	13-Dec-16	3-Dec-17	484	-	26	5.4%	From 13 December 2016 to 03 December 2017, cases have been reported from Cabinda (236), Zaire (227), Luanda (5) and Uige (16) provinces. A total of two new cases (from Uige) were reported in week 48 (week ending 03 December 2017).
Angola	Malaria	Ungraded	20-Nov-17	n/a	30-Sep-17	-	-	-	-	The outbreak is ongoing since the beginning of the year. In the province of Benguela, a total of 311 661 malaria cases were reported from January to September 2017 as compared to 244 381 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 to better understand the outbreak 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	Foodborne disease	Ungraded	29-Nov-17	27-Nov-17	1-Dec-17	56	-	0	0.0%	56 individuals residing in Sissèkpa be- came immediately ill with symptoms of vomiting after consuming a root vege- table locally known as "Léfé". Animals that were exposed to the vomit have reportedly died. The root vegetable has been collected for further analysis. Cases are currently under follow-up.
Burkina Faso	Dengue	G1	4-Oct-17	1-Jan-17	10-Dec-17	14 445	-	29	0.2%	Weekly case counts have continued to decrease since week 44. The majority (62%) of cases were reported in the central region, notably in Ouagadougou (the capital). Dengue virus serotypes 1, 2, and 3 are circulating, with serotype 2 predominating (72%).

Country	Event	Grade†	WHO notified	Start of reporting period	End of reporting period	Total cases	Confirmed cases	Deaths	CFR	Comments
Burundi	Cholera	Ungraded	20-Aug-17	15-Aug-17	6-Dec-17	167	14	0	0.0%	As of 06 December 2017, a cumulative total of 167 cases and no deaths were reported from 6 districts; DS Nyanza lac 30 cases, DS Mpanda 31 cases, DS Cibitoke 35 cases, DS Isare 33 cases, DS Bubanza 31 cases, and DS B M Nord 6 cases.
Cameroon	Humanitarian crisis	G2	31-Dec-13	27-Jun-17	3-Nov-17	-	-	-	-	In the beginning of November 2017, the general security situation in the Far North Region became worse. Terrorist attacks and suicide bombings are continuing and causing continuous 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 around 238 000 Internally Displaced People have been registered.
Cape Verde	Malaria	G2	26-Jul-17	1-Jan-17	26-Nov-17	435		2	0.5%	As of 19 November 2017, a total of 435 cases have been reported including 419 indigenous and 18 imported cases. Overall there were two deaths (1 in an indigenous case and 1 in an imported case). The outbreak has been contained to the city of Praia. Cases reported from other areas/islands likely acquired the infection during travel to Praia or overseas, and there is currently no evidence of indigenous transmission outside of Praia.
Central African Republic	Humanitarian crisis	G2	11-Dec-13	11-Dec-13	20-Dec-17	-	-	-	-	Detailed update given above.
Chad	Hepatitis E	G1	20-Dec-16	1-Aug-16	3-Dec-17	1 874	98	23	1.2%	Outbreaks are ongoing in the Salamat Region predominantly affecting North and South Am Timan, Amsinéné, Mouraye, Foulonga and Aboudeia. The number of cases is decreasing since week 39. Of the 64 cases in pregnant women, five died (CFR: 7.8%) and 20 were hospitalized. Water chlorination activities were stopped by end of September due to lack of partners and financial means. Monitoring and case management are continuing.
Chad	Cholera	G1	19-Aug-17	14-Aug-17	10-Dec-17	1 250	9	81	6.5%	The case incidence has been decreasing since week 43. In week 49, no new cases were reported. A total of 817 cases and 29 deaths were reported in the Salamat region from 11 September 2017 to 10 December 2017. No new cases have been reported in the Sila Region since 22 October 2017.
Cote d'Ivoire	Dengue fever	Ungraded	3-May-17	22-Apr-17	26-Nov-17	1 419	322	2	0.1%	Abidjan city remains the epicentre of this outbreak, accounting for 95% of the total reported cases. Of the 272 confirmed cases with available information on serotypes, 181 were dengue virus serotype 2 (DENV-2), 78 were DENV-3 and 13 were DENV-1. In addition, 50 samples were confirmed IgM positive by serology.



Country	Event	Grade†	WHO notified	Start of reporting period	End of reporting period	Total cases	Confirmed cases	Deaths	CFR	Comments
Democratic Republic of the Congo	Humanitarian crisis		20-Dec-16	17-Apr-17	16-Dec-17	-	-	-	-	The humanitarian and security situations are still fragile in the DR Congo. An estimate 8.5 million people are in need of emergency aid assistance, including around 4.1 million Internally Displaced Persons (IDPs), and 552 000 refugees. More than 74% of the country's total IDPs are from Kasai region and, North and South Kivu. Since the beginning of the year, the Kasai region recorded the largest movement of returns, with a total of 631 000 people, accounting for more than half of those initially displaced.
Democratic Republic of the Congo	Cholera	G3	16-Jan-15	1-Jan-17	3-Dec-17	52 775	841	1 090	2.1%	The trend of the outbreak is improving. During week 48, a total of 1 137 suspected cases and 29 deaths (CFR: 2.6%) were reported, compared to 1 647 suspected cases and 47 deaths(CFR: 2.9%) during week 47. This week, the provinces of Ituri, Lualaba and Maniema experienced an increase in the number of cases compared to week 47.
Democratic Republic of the Congo	Measles		10-Jan-17	2-Jan-17	10-Dec-17	43 115	624	524	1.2%	The trend of the outbreak has increased this week. During week 49, a total of 692 cases and 4 deaths (CFR: 0.6%) were reported compared to 545 cases and two deaths in week 48 (CFR: 0.4%). Most of the cases this week were reported from South Kivu, South Ubangi, Lomami and Upper Lomami provinces.
Ethiopia	Humanitarian crisis	Protracted 3	15-Nov-15	n/a	3-Dec-17	-	,	-	-	This complex emergency includes outbreaks (acute watery diarrhoea, measles, and acute jaundice syndrome), severe drought across northern, eastern, and central Ethiopia, and high levels of food insecurity and malnutrition. An estimated of 8.5 million people are food-insecure and in need of humanitarian assistance. 6.3 million people are in need of health assistance and 0.4 million children are severely malnourished. Internally displaced persons are estimated to be between 660 000 and 900 000 and refugees are estimated to be over 889 071.
Ethiopia	Acute watery diarrhoea (AWD)		15-Nov-15	1-Jan-17	3-Dec-17	48 617	ı	880	1.8%	The outbreak is showing a downward trend. Only 11 new cases have been reported this week from 4 regions: Amhara, Somali, Diri Dawa and B.Gumuz regions. As of now, 9 regions in Ethiopia have been affected, and 73.6% of the total cases are from Somali region.
Ethiopia	Measles		14-Jan-17	1-Jan-17	24-Nov-17	3 674	-	-	-	The outbreak of measles is still ongoing but continues to improve. During week 47, 37 cases were reported from Dollo zone and Jijiga City. Oromia Region remains the most affected region with approximately 46% of the total reported cases, followed by Amhara (21%), Addis Ababa (16%) and Somali (20%).

Country	Event	Grade†	WHO notified	Start of reporting period	End of reporting period	Total cases	Confirmed cases	Deaths	CFR	Comments
Ghana	Influenza A H1N1	Ungraded	6-Dec-17	30-Nov-17	14-Dec-17	94	0	4	4.2%	On 6 December 2017, the Ministry of Health notified WHO of a focal outbreak of influenza A H1N1 in a school in Kumasi City, Ashanti Region. As of 14 December 2017, 94 cases with four deaths (CFR: 4.2%) have been reported. Thus far, the disease is still localized in the school as no cases have been reported among community members.
Kenya	Cholera	G1	6-Mar-17	1-Jan-17	7-Dec-17	4 079	724	76	1.9%	The outbreak is still ongoing and 7 counties are actively reporting cases: Nairobi, Garissa, Mombasa, Wajir,Kwale, Embu, and Kirinyaga counties. Approximately 60% of the cases have been reported from Nairobi county.
Kenya	Malaria	Ungraded	-	25-Sep-17	26-Oct-17	1 009	604	25	2.5%	The outbreak is affecting 3 wards in Marsabit, namely Durkana (598 cases), North Horr (236 cases) and Loiyan- galani (175 cases) wards.
Liberia	Suspected Monkeypox	Ungraded	14-Dec-17	1-Nov-16	14-Dec-17	16	0	2	12.5%	During weeks 48 and 49 of 2017, three suspected cases of monkeypox were reported from Maryland and Rivercess counties. Since November 2016, a cumulative of 16 suspected cases and two deaths have been reported in Grand Cape Mount(4), Rivercress(11) and Maryland(1). No cases have been confirmed to date and laboratory confirmation is ongoing.
Liberia	Measles	Ungraded	24-Sep-17	6-Sep-17	3-Dec-17	1 607	255	2	0.1%	From week 1 to week 48, 1 607 cases were reported from 15 counties, including 225 laboratory confirmed, 336 clinically compatible and 199 epi-linked. Nimba county has had the greatest cumulative number of cases to date (235). Children between 1-4 years accounted for 49% of the cases.
Liberia	Lassa fever	Ungraded	14-Nov-17	3-Nov-17	24-Nov-17	70	28	-	-	On 10 November 2017, four suspected cases of Lassa fever were reported from Phebe Hospital in Suakoko district, Bong County. One of the cases tested positive by RT-PCR and the other three tested negative. Since the beginning of 2017, a total of 70 suspected Lassa fever cases including 21 deaths (CFR: 30%) have been reported from nine counties in Liberia.
Madagascar	Plague	G2	13-Sep-17	13-Sep-17	17-Dec-17	2 580	521	222	8.6%	Cases include pneumonic (1 989, 77%), bubonic (381, 15%), septicemic (1) and unspecified (209, 8%) forms of disease. Of the 1 989 clinical cases of pneu- monic plague, 395 (20%) have been confirmed, 629 (32%) are probable and 965 (49%) remain suspected.
Malawi	Cholera	Ungraded	28-Nov-17	20-Nov-17	11-Dec-17	11	2	1	9.1%	During week 47, an outbreak of cholera was detected in Karonga district which borders Tanzania's Kyela district. The index case was reported on 24 November 2017 at Iponga Health Center. Tanzania is also experiencing a cholera outbreak.
Mali	Dengue fever	Ungraded	4-Sep-17	1-Aug-17	10-Dec-17	429	33	0	0.0%	In week 49, no suspected cases were reported. No confirmed cases have been reported since week 41. All cases have been reported from Bamako and the Kati health district northwest of Bamako.

Country	Event	Grade†	WHO notified	Start of reporting period	End of reporting period	Total cases	Confirmed cases	Deaths	CFR	Comments
Mali	Humanitarian crisis	Protracted 1	n/a	n/a	19-Nov-17			-	-	The security situation remains volatile in the north and centre of the country. At the last update, incidents of violence had been perpetrated against civilians, humanitarian workers, and political-administrative authorities.
Mauritania	Crimean- Congo haemorrhagic fever (CCHF)	Ungraded	20-Nov-17	11-Nov-17	5-Dec-17	1	1	0	0.0%	On 20 November 2017 a confirmed case of crimean-congo heamorragic fever (CCHF) was reported in Nouakchott. The case, a 48 year-old man, developed symptoms on 11 November 2017 and was hospitalized on 15 November 2017. A collected sample tested positive by PCR. Twenty contacts are currently listed for follow-up.
Mauritania	Dengue haemorrhagic fever	Ungraded	30-Nov-17	16-Nov-17	13-Dec-17	37	37	1	-	On 30 November 2017, the MoH notified 3 cases of dengue fever including one hemorragic case (Dengue virus type 2) with history of Dengue virus type 1 infection in 2016. Out of 100 samples collected at the Teyarett health centre, 83 cases tested positive for dengue on RDT. On 12 December 2017, the national reference laboratory confirmed the diagnosis of 37 out of 49 RDT positive samples collected between 16 November and 11 December 2017.
Mozambique	Cholera	Ungraded	27-Oct-17	12-Aug-17	15-Dec-17	1 252	,	1	0.1%	The cholera outbreak is ongoing. Cases have been reported from three districts (Memba, Erati, and Nacaroa) in Namapula province. The outbreak started in mid-August 2017 from Memba district. Erati district started reporting cases from week 41 and Nacoroa started reporting cases from week 42.
Niger	Humanitarian crisis	G2	1-Feb-15	1-Feb-15	11-Aug-17	-		-	·	The security situation remains precarious and unpredictable. On 28 June 2017, 16 000 people were displaced after a suicide attack on an internally displaced persons camp in Kablewa. In another attack on 2 July 2017, 39 people from Ngalewa village, many of them children, were abducted. The onset of the rainy season is impeding the movements of armed forces around the region.
Niger	Hepatitis E	Ungraded	2-Apr-17	2-Jan-17	19-Nov-17	2 078	439	39	1.9%	The outbreak continues to improve. The majority of cases have been reported from Diffa, N'Guigmi, and Bosso health districts. Case incidence continues to decline, 11 suspected cases have been reported in week 46. There are no cases reported since week 46 of 2017.
Nigeria	Humanitarian crisis	Protracted 3	10-Oct-16	n/a	17-Dec-17	-	-	-	-	The protracted conflict has resulted in widespread population displacement, restricted access to basic social services, including healthcare and protection needs, and a deepening humanitarian crisis. An estimated 8.5 million people have been affected and are in need of life-saving assistance, including 1.7 million IDPs.

Country	Event	Grade†	WHO notified	Start of reporting period	End of reporting period	Total cases	Confirmed cases	Deaths	CFR	Comments
Nigeria	Cholera (nation wide)	Ungraded	7-Jun-17	1-Jan-17	24-Nov-17	3 656	42	84	2.3%	Between weeks 1 and 44, 3 656 cases were reported from 19 states compared to 714 suspected cases from 12 states during the same period in 2016. The cumulative total of cases and deaths in 2017 surpasses that observed during the same period in 2016 (560 suspected cases, 25 deaths).
Nigeria	Lassa fever	Ungraded	24-Mar-15	1-Dec-16	1-Dec-17	985	294	126	12.8%	The outbreak is currently active in five states: Ondo, Edo, Plateau, Bauchi, and Kaduna. In Week 48, eight new confirmed cases were reported from Edo (5), Ondo (2) and Bauchi (1) states.
Nigeria	Hepatitis E	Ungraded	18-Jun-17	1-May-17	16-Nov-17	1 262	182	8	0.6%	Since the peak of the outbreak in Borno state in week 25 the number of cases has been re-increasing from week 42 to week 46, mainly due to the spread of the outbreak in Rann, Kala Balge. No case of acute jaundice was reported in Mobbar since week 35.
Nigeria	Yellow fever	Ungraded	14-Sep-17	7-Sep-17	5-Dec-17	337	30	45	13.4%	A total of 337 suspected cases have been reported from sixteen states: Abia, Borno, Kogi, Kwara, Kebbi, Plateau, Zamfara, Enugu, Oyo, Anambra, Edo, Lagos, Kano, Nasarawa, Katsina, and Niger States. Thirty cases have been laboratory-confirmed at IP Dakar (from Kano State, Kogi State, Kwara State and Zamfara State).
Nigeria	Monkeypox	Ungraded	26-Sep-17	24-Sep-17	9-Dec-17	172	61	1	0.6%	Suspected cases are geographically spread across 22 states and the Federal Capital Territory (FCT). Sixty-one 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).
São Tomé and Principé	Necrotising cellulitis/ fasciitis	G2	10-Jan-17	25-Sep-16	8-Dec-17	2 368	0	0	0.0%	Over the past 10 weeks the incidence of new cases remained stable with an average of 30 cases per week. In week 49, the number of reported cases dropped to 17 cases reported across five of the seven districts: Me-zochi (6), Agua Grande (5), Lobata (1), Cantagalo (4), Caue (1). Currently, 18 cases are receiving care in hospital and no deaths have been directly attributed to the infection.
Senegal	Dengue fever	Ungraded	30-10-2017	28-09-2017	17-Dec-17	783	136	0	-	Since 28 September, the date of confirmation of the first cases of dengue fever in the Louga region, 136 cases were confirmed from the Louga region (128), Fatick (2), Mbour (1), and Dakar (5). Analyses by Institut Pasteur Dakar have shown that Dengue virus type 1 (DENV-1) is the only serotype circulating. As of 17 December 2017, no severe cases and no deaths have been reported.
Seychelles	Dengue fever	Ungraded	20-Jul-17	18-Dec-15	28-Nov-17	4 233	1 429	-	-	As of 28 November, 4 233 cases have been reported from all regions of the three main islands (Mahé, Praslin and La Digue). The trend in the number of cases has been decreasing since week 23.

Country	Event	Grade†	WHO notified	Start of reporting period	End of reporting period	Total cases	Confirmed cases	Deaths	CFR	Comments
South Africa	Listeriosis	G1	6-Dec-16	4-Dec-16	19-Dec-17	647	647	60	9.3%	As of 19 December 2017, a total of 647 laboratory-confirmed listeriosis cases have been reported from all provinces across the country since 1 January 2017. Most cases have been reported from Gauteng Province (62%), followed by Western Cape (13%) and KwaZulu-Natal (7%) provinces.
South Sudan	Humanitarian crisis	G3	15-Aug-16	n/a	15-Dec-17	•	-	-	-	The situation remains volatile, fighting is ongoing on multiple fronts and displacement continues. The starting of the dry season is expected to improve humanitarian access to the most vulnerable population but at the same time communal conflicts are expected to be more frequent with subsequent injuries and deaths. Severe acute malnutrition, malaria, measles, kala-azar, and cholera are the top ranking public health risks affecting the already distressed populations.
South Sudan	Cholera	Ungraded	25-Aug-16	18-Jun-17	15-Dec-17	21 576	1 585	462	2.1%	Detailed update given above.
Tanzania	Cholera	GI	20-Aug-15	1-Jan-17	17-Dec-17	4 595	-	83	1.8%	In week 50, a total of 70 new cases with 1 death (CFR: 2.0%) have been reported compared to 217 cases with 5 deaths (2.3%) in week 49. The most affected regions in week 50 were: Songwe (29), Ruvuma (16) and Dodoma (13). Two new districts have reported cases for the first time: Nyasa (Ruvuma region) and Sumbawanga (Rukwa region).
Uganda	Humanitarian crisis - refugee	Ungraded	20-Jul-17	n/a	1-Dec-17	-	-	-	-	The influx of refugees to Uganda has continued as the security situation in the neighbouring countries remains fragile. According to UNHCR, the total number of registered refugee and asylum seekers in Uganda stands at 1 398 991, as of 1 December 2017. More than 75% of the refugees are from South Sudan and 16.6% are from DR Congo.
Uganda	Measles	Ungraded	8-Aug-17	24-Apr-17	3-Oct-17	623	34	-	-	The outbreak is occuring in two urban districts: Kampala (310 cases) and Wakiso (313 cases).
Uganda	Cholera	Ungraded	28-Sep-17	25-Sep-17	29-Nov-17	225	17	4	1.8%	The outbreak in Kasese District is still ongoing. The number of sub-counties affected by this outbreak has continued to rise and has now reached twelve sub-counties. Nyakiyumbu sub County remains the most affected in the district. Another outbreak was identified in Kisoro district. So far, three cases were hospitalized, including 1 confirmed case.
Uganda	Rift Valley fever (RVF)	Ungraded	22-Nov-17	14-Nov-17	14-Dec-17	2	2	2	100.0%	On 21 November 2017, the Uganda Virus Research Institute (UVRI) alerted the MoH of a confirmed and fatal case of Rift Valley Fever (RVF) in Kiboga district. On 23 November 2017, a second confirmed and fatal case of RVF was reported in Mityana district. Prior to falling ill, both cases had contact sick animals that died in previous weeks. As of 14 December 2017 no additional cases have been detected through ongoing enhanced surveillance.

Country	Event	Grade†	WHO notified	Start of reporting period	End of reporting period	Total cases	Confirmed cases	Deaths	CFR	Comments
Zambia	Cholera	G1	4-Oct-17	4-Oct-17	19-Dec-17	989	238	27	2.7%	On 19 December 2017, 67 new cases including two community deaths were reported in Lusaka district, with the Chipata area accounting for 55% (N=37) of the case load. Since the beginning of the outbreak, Lusaka district reported a total of 976 cases with 26 deaths (CFR: 2.7%). An additional 13 cases with 1 death were reported from other districts in the province: Chongwe (5), Kapiri Mposhi (3), Ndola (2), Shibuyunji (2) and Rufunsa (1).
Zambia	Anthrax	Ungraded	22-Nov-17	29-Sep-17	22-Nov-17	24	,	1	4.2%	On 22 November the WHO was notified of an outbreak of cutaneous anthrax in the Western province of Zambia. The index case was detected on 29 September at the Nasilimwe Health Centre in Nalolo. As of 17 November 2017, 24 cases had been reported from Nalolo (15), Shangombo (7) and Sioma (2) districts. One community death attributed to anthrax was reported in Nalolo. Samples collected from six cases were positive for <i>Bacillus anthracis</i> .
Zimbabwe	Typhoid fever	Ungraded	-	1-Oct-17	19-Nov-17	1 065	82	-	-	On 17 October, a confirmed case of typhoid fever was reported from Matapi area of Mbare in Harare. As of 19 November, the outbreak has spread from its epicentre in Matapi to other suburbs in Harare and areas outside of Harare.
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Nigeria	Cholera (Borno State)	Ungraded	20-Aug-17	14-Aug-17	21-Dec-17	5 365	354	61	1.1%	Detailed update given above.

<sup>†</sup>Grading is an internal WHO process, based on the Emergency Response Framework. For further information, please see the Emergency Response Framework: http://www.who.int/hac/about/erf/en/.

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



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#### Data sources

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