Overview

This Weekly Bulletin focuses on public health emergencies occurring in the WHO African Region. The WHO Health Emergencies Programme is currently monitoring 68 events in the region. This week’s main articles cover key new and ongoing events, including:

- Meningitis in Benin
- Measles in Democratic Republic of the Congo
- Ebola virus disease in Democratic Republic of the Congo

For each of these events, a brief description, followed by public health measures implemented and an interpretation of the situation is provided.

A table is provided at the end of the bulletin with information on all new and ongoing public health events currently being monitored in the region, as well as recent events that have largely been controlled and thus closed.

Major issues and challenges include:

- On 6 January 2020, a new outbreak of bacterial meningitis was notified to WHO by the Ministry of Health of Benin. The outbreak was initially detected in Banikoara Commune, Northern Benin. The proximity of the affected area to neighbouring Burkina Faso, Niger, and Nigeria is of concern and suggests the need for cross-border collaboration and strengthening of surveillance.

- The measles outbreak in Democratic Republic of the Congo is still ongoing. Although the case incidence showed a decreasing trend in the last four weeks of December 2019, the cumulative number of cases and deaths continues to increase, with over 6,000 deaths being reported during the year 2019. In order to successfully curb the outbreak, there is a need to extend vaccination to children over 5 years old and to strengthen other response activities beyond vaccination.
On 6 January 2019, the Ministry of Health of Benin notified WHO of an outbreak of meningitis in Banikoara Commune, Alibori Department, Northern Benin. The current outbreak reportedly began in week 50 (week ending 15 December 2019) when a cluster of four case-patients with signs and symptoms suggestive of meningitis were reported from Banikoara Commune. Of these, three were subsequently confirmed as having bacterial meningitis infection. In the following week, an additional 13 cases were reported from the same area, thus exceeding the epidemic threshold for the disease. The outbreak peaked in week 1 (week ending 5 January 2020), when 28 new cases were reported.

From 9 December 2019 to 8 January 2020, a cumulative total of 77 cases with 13 deaths (case fatality ratio 17%) have been reported Banikoara Commune. Of these, 16 cases with six deaths have been confirmed for bacterial meningitis infection. The predominant pathogen isolated is *Neisseria meningitides* serogroup C ($n=10$), followed by *N. meningitides* serogroup X ($n=4$), *Haemophilus influenzae* type B ($n=1$), and *Streptococcus pneumoniae* ($n=1$). The age group 5 – 14 years old are the most affected accounting for 71.4% ($n=55$) of the cumulative cases reported to date.

The epicentre of the current outbreak recently experienced two deaths attributed to meningitis among children attending the same primary school. The first case was an eight-year-old girl who presented to a local health facility on 20 October 2019 with signs and symptoms suggestive of meningitis and died on the same day while seeking care. The second case, a 12-year-old boy, also developed similar signs and symptoms on the same day as the first case. He was treated as an outpatient at a local facility but later died on the same day at home. It is unclear whether the current outbreak is related to these events in October 2019 as there were no cases reported in the six weeks immediately prior to the beginning of the current epidemic.

**PUBLIC HEALTH ACTIONS**

- A National Crisis Committee chaired by the Minister of Health with support from WHO and partners has been activated to coordinate response to the outbreak. A national level rapid response team was dispatched to support local teams in the Alibori Health Department and Banikoara Health Zone conduct field investigation and other response activities.

- Surveillance at healthcare facilities in the affected areas is being strengthened through provision of refresher training and mentorship to healthcare workers in the application of the case definition for detecting and reporting suspected cases of meningitis.

- Clinical management of cases according to the standard operational procedure for treatment of patients with meningitis is ongoing at health facilities in the affected areas. A total of 650 vials of ceftriaxone have been deployed to Banikoara Commune.

- A reactive vaccination campaign was held on 2 January 2019, in Déroubou, a village at the epicentre of the outbreak, during which a total of 893 people aged 1 – 29 years were vaccinated with Meningococcal ACWY vaccine.

**SITUATION INTERPRETATION**

Although Benin is not fully part of the meningitis belt in sub-Saharan Africa, the current outbreak is being reported at the time of the usual seasonal increase in cases of meningitis in sub-Saharan Africa. The high case fatality ratio associated with the current outbreak is of concern. Response measures need to be enhanced to ensure early detection and treatment of cases to prevent further mortality. Furthermore, there is a need to rapidly acquire additional doses of vaccines to extend the vaccination campaigns to neighbouring health zones. Finally, the proximity of the affected areas to neighbouring Burkina Faso, Niger, and Nigeria is another cause for concern pointing to the need for cross-border collaboration and strengthening of surveillance in these areas during this period of the year.
EVENT DESCRIPTION

The measles epidemic in the Democratic Republic of the Congo continues to evolve. Since our last report on 8 December 2019 (Weekly Bulletin 49), 42,392 additional suspected cases and 615 additional deaths have been reported across the country. While the overall disease incidence trend has started declining in the past weeks, the outbreak continues to expand, with nine additional affected health zones in the last four weeks (week 49 to 52) of 2019.

From week 49 to week 52 of 2019 (week ending 29 December 2019), the majority (71%) of cases were reported from Equateur (n=4272), Tshuapa (n=4218), Maisondome (n=2973), Bas-Uele (n=2969), Kongo Central (n=2352), Kwilu (n=2467) and Mongala (n=2237) provinces. The highest case fatality ratios were recorded in Tshopo (3.6%), Maisondome (3.2%), and Tshuapa (2%) provinces. In week 52 of 2019, 5792 suspected cases including 109 deaths were reported (case fatality ratio 1.9%), and two new health zones entered into epidemic phase, namely, Minova in South-Kivu province and Katuba in Haut-Katanga province.

Between 1 January and 29 December 2019, a cumulative total of 311,471 suspected measles cases with 6045 deaths (case fatality ratio 1.9%) have been recorded from 253 of 519 (48.7%) health zones across the 26 provinces of the Democratic Republic of the Congo. Of these 311,471 cases, 2,682 have been laboratory-confirmed (IgM-positive) for measles infection, of which 28% are aged 5 years and above and 63% are unvaccinated or have unknown vaccination status.

Cases of measles continue to be reported from Ituri, North-Kivu and South-Kivu provinces, which are concomittantly affected by the ongoing Ebola virus disease outbreak. Between 1 January and 29 December 2019, these provinces have reported 11,043 cases (case fatality ratio 0.6%), 7,488 cases (case fatality ratio 0.3%), and 3,537 cases (case fatality ratio 1.2%), respectively.

PUBLIC HEALTH ACTIONS

- The National Measles Coordination Committee continues to coordinate the response to the measles outbreak across the country, working with the various sub-committees and supported by WHO and partners.
- The revised measles response plan, that covers the period January to June 2020, has been validated on 7 January 2020 during the weekly meeting of the Measles Coordination Committee.
- A National Epidemiologic Data Analysis Cell has been put in place with the support of WHO, UNICEF and CDC and the Cell activities have been launched on 7 January 2020.
- To date, the vaccine response has been organized in 179/253 (71%) health zones and a total of 5,789,008 children aged 6 to 59 months have been vaccinated.
- WHO, Médecins Sans Frontières, Action Contre la Faim, Médecins du Monde and other partners continue to support case management.
- The revised Integrated Disease Surveillance and Response (IDSR) guideline has been approved by the Ministry of Public Health and partners. It includes, inter alia, additional information relating to community-based surveillance and a line list canvas that should be used during a measles outbreak.

SITUATION INTERPRETATION

The nationwide measles epidemic in the Democratic Republic of the Congo continues to evolve. Although the weekly case incidence has been on a decreasing trend following the implementation of vaccination campaigns in affected health zones, the total number of cases and deaths continue to increase with a cumulative total of over 6,000 deaths reported as of the last week of December 2019. The continuous emergence of cases is likely a result of persisting gaps in the vaccination coverage. Indeed, the majority of confirmed cases are unvaccinated and children aged five years and above have not been targeted during the reactive mass vaccination campaigns, although they represent more than 25% of the notified cases. This suggests that the ongoing response activities need to be scaled-up accordingly, with comprehensive coverage, to interrupt further propagation of the outbreak. Moreover, a funding gap of over US$ 40 million needs to be filled urgently, in order to extend the vaccination to children over 5 years old and to reinforce other outbreak response activities beyond vaccination.
EVENT DESCRIPTION

The Ebola virus disease (EVD) outbreak in North Kivu, South Kivu and Ituri provinces in Democratic Republic of the Congo continues, with seven health zones and 14 health areas reporting confirmed cases in the past 21 days (22 December 2019 to 11 January 2020). Since our last report on 5 January 2020 (Weekly Bulletin 1), there have been seven new confirmed cases and two new deaths. The principle hot spots of the outbreak in the past 21 days are Mabalako (38%; n=14 cases), Butembo (22%; n=8), Kalunguta (14%; n=5) and Mambasa (11%; n=4). Four health zones, Musienene, Beni, Mabalako and Mambasa have reported new confirmed cases in the past seven days. The new confirmed case in Beni is the first for 29 days, with the last confirmed case reported on 8 December 2019 and the new confirmed case in Musienene Health Zone was registered in Katolo health area, not previously affected by EVD. The last new confirmed case in Musienene Health Zone was detected on 31 August 2019.

As of 11 January 2019, a total of 3,395 EVD cases, including 3,277 confirmed and 118 probable cases have been reported. To date, confirmed cases have been reported from 29 health zones: Ariwara (1), Bunia (4), Komanda (56), Lolwa (6), Mambasa (82), Mandima (347), Nyakunde (2), Rwampara (8) and Tchomia (2) in Ituri Province; Alimbongo (5), Beni (698), Biena (19), Butembo (295), Goma (1), Kalunguta (198), Katwa (653), Kayna (28), Kyondo (25), Lubero (31), Mabalako (453), Manguredjipa (18), Masereka (50), Musienene (85), Mutwanga (10), Nyiragongo (3), Oicha (65), Pinga (1) and Vuhovi (103) in North Kivu Province and Mwenga (6) in South Kivu Province.

As of 11 January 2020, a total of 2,235 deaths were recorded, including 2,114 among confirmed cases, resulting in a case fatality ratio among confirmed cases of 65% (2,117/3,277). The cumulative number of health workers remains 169, which is 5% of the confirmed and probable cases to date.

Contact tracing is ongoing in 11 health zones. A total of 3,769 contacts are under follow-up as of 11 January 2020, of which 3,365 (89.3%) have been seen in the past 24 hours. Alerts in the affected provinces continue to be raised and investigated. Of 4,578 alerts processed (of which 4,448 were new) in reporting health zones on 11 January 2020, 4,481 were investigated and 460 (10.3%) were validated as suspected cases.

PUBLIC HEALTH ACTIONS

- Response and surveillance activities continue in all affected areas, with disruption to surveillance activities at the PoC at Mutsanga and Kyaghala in Katwa after a confrontation with National Police; there was an abrupt stop to vaccination activities in the Biakato Mines area after rumours of a probable attack on responders.
- As of 7 January 2020, a cumulative total of 264,682 people have been vaccinated since the start of the outbreak in August 2018.
- Point of Entry/Point of Control (PoE/PoC) screening continues, with over 138 million screenings to date. A total of 106/109 (99.7%) PoE/PoC transmitted reports as of 11 January 2020.
EVENT DESCRIPTION

The humanitarian crisis in Central African Republic continues, driven by insecurity and recent floods. As of 24 December 2019, there are an estimated 2.5 million people affected, with more than 600,000 internally displaced persons (IDPs) and 601,994 Central African refugees in neighbouring countries.

The security situation remains tense in vakaga Health District after clashes between rival armed groups in Amdafock and Bihera in the week of 16–22 December 2019. Ten wounded were treated at Birao Hospital, with one requiring evacuation to Bambari Hospital by the International Red Cross. Other wounded are reportedly still in the bush.

Médecins sans Frontières (MSF) reported the arrest of four members of staff by a Central African police unit on 14 December 2019, following police presence in the MSF hospital compound in Bangui. As a result, MSF activities at the hospital are minimal pending their release.

Flooding around the Oubangui River in October 2019 has receded, and people have started to return to their home areas. As of 24 December 2019, there were 77,275 people displaced by the floods, with 5,299 displaced in Bangui.

Epidemic-prone diseases continue, with measles being the main outbreak reported during week 51 (week ending 22 December 2019), affecting the health districts of Bocaranga-Koui, Batangafo-Kabo, Bambari and Nana-Gribizi. As of 24 December 2019, there was a cumulative total of 2,540 cases and 26 deaths (case fatality ratio 3.8%). Other reported outbreaks include hepatitis E, pertussis and vaccine-derived polio (cVDPV2). Certain health districts were unable to forward surveillance information as a result of communication difficulties.

PUBLIC HEALTH ACTIONS

- WHO participated in a rapid evaluation mission to Ouanda Djallé and provided 5 basic kits, 5 malaria kits and one supplementary kit to the secondary hospital in Ouanda Djallé.
- In response to the crisis in Vakaga, WHO have supplied medicines, malaria kits and renewables.
- In flood-affected areas, mobile clinics have provided services to affected populations.
- Medical management of measles cases continues after the reactive vaccination campaign in the most affected districts.
- Polio immunization campaigns have been conducted in response to cVDPV2 reports.

SITUATION INTERPRETATION

The constant insecurity continues to limit partner interventions in affected villages in the interior of the country and the suspension of MSF activities in Bangui is of particular concern. Poor data sharing around the measles outbreak, along with inadequate referral mechanisms for complicated cases, has weakened the response to this outbreak. Although WHO and partners, along with local authorities, have mounted responses, they require further support, both nationally and from outside agencies, to prevent this already protracted humanitarian crisis from continuing through 2020.
Summary of major issues, challenges and proposed actions

Major issues and challenges

- The current meningitis outbreak in Benin is concerning. The high case fatality ratio reported so far is likely associated with late patient presentation to health facilities and/or inadequate case management. The proximity of the affected areas to Burkina Faso, Niger, and Nigeria represents a risk for cross-border transmission, especially since this outbreak is occurring at the time of the usual seasonal increase in meningitis case incidence in this region.

- The measles outbreak in Democratic Republic of the Congo continues to persist as a result of low vaccination coverage among vulnerable groups, malnutrition, weak public health systems, limited access to healthcare by vulnerable populations and the insecurity context, which hampers outbreak response in some areas. Furthermore, the lack of funding remains a major impediment to successfully controlling the outbreak.

Proposed actions

- There is a need to enhance early detection and subsequent treatment of meningitis cases in Benin. Local authorities, with support from WHO and partners, should ensure that the appropriate antibiotic and vaccine are readily available and in sufficient quantity in the country. It is also essential to strengthen cross-border collaboration and surveillance between Benin and neighbouring countries which are part of the meningitis belt.

- The national authorities, WHO and partners must work together to mobilize the necessary financial and human resources in order to extend the vaccination to children between 6 and 14 years old and to reinforce other pillars of the outbreak response such as improving case management, providing health education, supporting community engagement, strengthening health systems as well as enhancing epidemiological surveillance and response coordination.
No case of circulating vaccine-derived poliovirus type 2 (cVDPV2) was reported this week. There are six cVDPV2 cases in 2019 linked to the Jigawa outbreak in Nigeria. Twelve new cases of circulating vaccine-derived poliovirus type 2 (cVDPV2) were reported this week from Benguela (4), Moxico (2), Cuanza Sul (1), Bie (1), Luanda (1), Bengo (1), Uige (1) and Huambo (1) provinces. The onsets of paralysis were between 10 September and 18 October 2019. There are 71 cVDPV2 cases from seven outbreaks reported in 2019. Two cVDPV2 positive environmental samples were reported from Luanda and Benguela provinces. The samples were collected on 25 October 2019. Between 10 May and 29 November 2019, a total of 26 suspected cases of dengue fever, including two deaths, were reported from Atlantique, Littoral, Ouémé and Couffo Departments. Cumulatively, fourteen cases from Atlantique Department (4 cases), Littoral Department (4 cases) and Ouémé Department (6 cases) were confirmed by serology and PCR at the Benin National VHF Laboratory. Two deaths, one of which occurred in a dengue haemorrhagic fever case, were notified among the confirmed cases (CFR 14%).

No case of circulating vaccine-derived poliovirus type 2 (cVDPV2) was reported this week. There are six cVDPV2 cases in 2019 linked to the Jigawa outbreak in Nigeria.

Since 2015, the security situation initially in the regions of the Sahel and later in the East of Burkina Faso has gradually deteriorated as a result of attacks by armed groups. This has resulted in mass displacement leading to a total of 486,360 internally displaced persons registered as of 8 October 2019 in all 13 regions in the country. The regions of North, Boucle du Mouhoun, East and Centre are the most affected. Health services are severely affected and as of 27 September 2019, Ministry of Health figures show that 69 health facilities in six regions have closed as a result of insecurity; 28% in the Sahel Region and 12% in North Central Region. Morbidity due to epidemic-prone diseases remains high.

From 1 June to 5 November 2019, a total of 1,064 cases with six deaths (CFR 0.6%) were reported from 11 health districts. The most affected health districts are Bujumbura (4 cases), Bujumbura Rural (3 cases), Bururi (2 cases) and Kirotshe (2 cases). The samples were collected on 5 November 2019.

Since week 48 of 2018 (week ending 2 December 2018), there has been a progressive increase in the number of malaria cases reported across the 46 districts of Burundi, with the epidemic threshold surpassed in week 18 of 2019 (week ending 5 May 2019). In week 51 (week ending 22 December 2019), 1,529,600 cases including 63 deaths have been reported. There is a 90% increase in the number of cases reported in week 51 of 2019 compared to the same period in 2018.

Cameroon continues to face a humanitarian crisis in the Far North Region linked to the terrorist attacks by Boko Haram group, with significant population displacement. In November 2019, 27 attacks of Boko Haram members have been registered and led to 5 missing people, 31 injuries and 11 deaths. This situation is hindering humanitarian access and limiting operations and has resulted in suspension of activities beyond Fotokol and Makary in Logone and Chari division. The Minawo camp continue to host Nigerian refugees, as of 31 September 2019, the total camp population was about 59,977 Nigerian refugees. The number of out-of-camp refugees has also grown to 46,784 refugees.

Two months after the Grand National Dialogue, the humanitarian situation in the Northwest and Southwest (NW & SW) of Cameroon continues to deteriorate with rising tensions between separatists and military forces. On 1 December 2019, a commercial plane landing in NW was shot at by the separatist Ambazonia Governing Council (AGC) and one day prior, on 30 November, an aid worker was abducted and killed by an armed group. This unrest continues to affect access to basic services including healthcare, education, shelter, food security and WASH. As of 30 October 2019, the total number of internally displaced persons is estimated at 536,107 persons.

The Cholera outbreak continues to improve in the 3 affected regions of Cameroon (North, Far North and South West). Since, the beginning of the year 2020, cholera cases are reported only from the 2 districts of the South West (Bakassi and Ekondo Titik). No new cases of Cholera were reported in North and Far North regions since epidemiological weeks 51 and 48 respectively. From January 2019 to date, a total of 1,307 cases of cholera, with 55 deaths were reported from the three affected regions and the majority of those cases (57%) were reported from the North region.
A measles outbreak is ongoing in Cameroon. Since the beginning of 2019, a total of 1 170 suspected cases have been reported. Of these, 382 were confirmed as IgM-positive. The outbreak is currently affecting 43 districts, namely, Kousseri, Mada, Boullay, Makary, Kolotata, Koza, Ngoundéré rural, Banqué, Guider, Figui, Ndjong., Mora, Maroua 3, Vélét, Pitôa, Maroua 1 Bourha, Touboro, Mogodé, Bibém, Garoua 1, Garoua 2, Lago, Tcholliré, Guidiguiss, Moutourva, Mokolo, Cité verte, Djamoupolo, Nkolndongo, Limbé, Garoua Bouai, Ngoundéré Uban, Ekondo Titi, Gazawa, Meiganga, New Bell, Deido, Bertoua, Biyem assi, Cité des palmiers, Logbaba, and Nylon district.

No case of monkeypox was confirmed in Ekondo-Titi health district in the South West region of Cameroon on the 18 of September 2019. All supportive measures for case management were put in place and community- based surveillance has been stepped up in this area.

No case of cVDPV2 was reported in the past week. On 23 May 2019, WHO received notification through the Global Polio Laboratory Network (GPLN) of the detection of circulating vaccine-derived poliovirus type 2 (cVDPV2) from an environmental sample collected on 20 April 2019 in the Northern Province of Cameroon which borders Borno State in Nigeria and Chad. There are no associated cases of paralysis detected so far.

The Central Africa Republic (CAR) has been hit by torrential rain since October 2019, which has caused significant damage. A total of 83 309 people was affected by the flood, including 15 331 in Bangui and Bimbo and 67 978 people outside Bangui. Currently, the situation is improving, and the internally displaced persons are returning to their places of origin. As of 24 December 2019, there were 77 275 people displaced by the floods, with 5 299 displaced in Bangui.

As of week 52 (week ending 29 December 2019), a total of 2 904 measles cases including 98 confirmed cases and 49 deaths have been reported in five districts: Alindao-Mingala, Bambangi, Batangafo-Kabo, Bocaranga-Koui, Nana-Grbitizi, Ngoundaye, Paoua and Vakanga. The outbreaks have been controlled in Paoua and Vakanga.

As of week 52 (week ending on 29 December 2019), a total of 11 434 cases have been reported in 44 out of the 52 health districts of the country. The affected areas include densely populated zones such as Brazzaville and Pointe-Noire.

In week 39 (from 23 to 29 September 2019), a total of 9 new chikungunya cases were reported across the country against 56 cases in week 38 and 15 cases in week 37. The hotspots are the departments of Plateaux and Bouenza, accounting for 64% and 14% of cases reported from week 37 to week 39, respectively. Since the beginning of the outbreak, a total of 11 434 cases have been reported in 44 out of the 52 health districts of the country. The affected areas include densely populated zones such as Brazzaville and Pointe-Noire.

### Table: Health Emergency Information and Risk Assessment

<table>
<thead>
<tr>
<th>Country</th>
<th>Event</th>
<th>Grade</th>
<th>Date notified to WHO</th>
<th>Start of reporting period</th>
<th>End of reporting period</th>
<th>Total cases</th>
<th>Cases Confirmed</th>
<th>Deaths</th>
<th>CFR</th>
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<tr>
<td>Cameroon</td>
<td>Measles</td>
<td>Ungraded</td>
<td>2-Apr-19</td>
<td>1-Jan-19</td>
<td>17-Nov-19</td>
<td>1 170</td>
<td>382</td>
<td>14</td>
<td>1.0%</td>
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</table>
No case of circulating vaccine-derived poliovirus type 2 (cVDPV2) was reported this week. So far, the only cVDPV2 isolated was from an environmental sample collected on 24 September 2019 in Abidjan. The isolated cVDPV2 is linked to a virus detected in Niger in 2018 that belongs to the Jigawa emergence group, which has previously also been detected in Cameroon, Chad, Niger, Benin, Ghana, and Togo.

Democratic Republic of the Congo

During week 43, the Lomami River, the Tshopo rivers and other tributaries of the Congo River have experienced a rise in water levels as a result of heavy rains. The provinces of South-Ubangi, North-Ubangi and Tshopo were particularly affected by major floods. Significant infrastructural damages were observed in affected health zones including: damage to fields (400), water sources (161), schools (15), toilets (990) and residential houses (4990). Approximately 123 491 people are homeless and lack basic necessities. From November 22 to 25, 2019, the overflowing of the Ulindi River and its tributaries caused floods in several localities of Shabunda territory, the most affected of which are those of Shabunda-Center, Mulungu, Kamulila and Katchungu. Overall, 500 homes, over 1 300 fish fields and ponds, 3 schools and 1 community training center were destroyed. At least 9 000 people were left homeless throughout the Shabunda Territory.

Democratic Republic of the Congo

The Democratic Republic of the Congo continues to experience a complex humanitarian crisis involving armed conflicts and inter-community tension resulting in large number of people in need of humanitarian assistance. Populations movement due to armed clashes continue to be reported in North-Kivu, Ituri and South-Kivu provinces. In Ituri, an estimated 227 000 internally displaced persons (IDPs) are living in 87 sites and 315 families have been repatriated from Uganda. In North-Kivu, more than 100 000 IDPs have been registered in Kamongo health zone in Beni territory and Mweso health zone in Masisi territory. In South-Kivu, clashes between armed groups, led to population displacement with an estimated 263 252 IDPs in Itombwe, Fizi, Nundu and Minembwe. In Kassai central, at least 790 people who were expelled from Angola (including 129 women and 73 children) were registered in Kamango between 6 and 12 October 2019.

Democratic Republic of the Congo

During week 50 (week ending 15 December 2019), a total of 585 suspected cases of cholera and 5 deaths (CFR 0.85%) were notified from 56 health zones in 13 provinces. The endemic provinces of North-Kivu, South-Kivu, Haut-Lomami, Haut-Katanga, Tshopo and Tanganika account for 91% of cases reported during week 50. Between week 1 and week 50 of 2019, a total of 29 087 cases including 501 deaths (CFR 1.7%) have been notified from 23 out of 26 provinces. Compared to the same period in 2018 (week 1-50), there is a 2.3 % decrease in the number of reported cases and a 39% decrease in the number of deaths.

Democratic Republic of the Congo

From week 1 to 50 of 2019, a total of 51 cases of bubonic plague including eight deaths have been reported in the country. Aru health zone in Ituri province accounts for 81% of reported cases. No new cases were reported in week 50. The first five cases were reported during week 10 of 2019 in the Aungba endemic health zone. Two other cases were reported during week 13 (Aru health zone) and 14 (Aungba health zone). The latest cluster of cases was reported between week 39 (7 cases and 3 deaths) and 40 (14 cases) from Aru health zone. The case incidence has been on a steep decline since week 40, following the implementation of response measures from the Ministry of Health and its partners.

Democratic Republic of the Congo

No new cases of cVDPV2 were reported this week. There are 64 cVDPV2 cases in 2019 reported from Sakuru (21), Haut Lomami (18), Kasai (8), Kwilu (8), Kwango (5), Haut Katanga (2), Tshuapa (1), and Kongo Central (1) provinces. There were 20 cases of cVDPV2 reported in 2018.

Democratic Republic of the Congo

Chikungunya cases have reported from Ethiopia since week 31 (week ending 30 July 2019). As of 8 December 2019, 54 908 suspected cases were reported from Dire Dawa City Administrative City (51 957), Araf (2 782) and Somali (169) regions.

Country | Event | Grade | Date notified to WHO | Start of reporting period | End of reporting period | Total cases | Cases Confirmed | Deaths | CFR
---|---|---|---|---|---|---|---|---|---
Democratic Republic of the Congo | Polioyelitis (cVDPV2) | Ungraded | 29-Oct-19 | 29-Oct-19 | 18-Dec-19 | - | - | - | -
Democratic Republic of the Congo | Flood | Ungraded | 17-Nov-19 | 28-Oct-19 | 8-Dec-19 | - | - | - | -
Democratic Republic of the Congo | Humanitarian crisis | Grade 3 | 20-Dec-16 | 17-Apr-17 | 18-Nov-19 | - | - | - | -
Democratic Republic of the Congo | Cholera | Grade 3 | 16-Jan-15 | 1-Jan-19 | 15-Dec-19 | 29 087 | - | 501 | 1.70%
Democratic Republic of the Congo | Ebola virus disease | Grade 3 | 31-Jul-18 | 11-May-18 | 11-Jan-19 | 3 395 | 3 277 | 2 235 | 66.00%
Democratic Republic of the Congo | Measles | Grade 2 | 10-Jan-17 | 1-Jan-19 | 29-Dec-19 | 311 471 | 6 304 | 6 045 | 1.90%
Democratic Republic of the Congo | Monkeypox | Ungraded | n/a | 1-Jan-19 | 15-Dec-19 | 5 117 | - | 104 | 2.00%
Democratic Republic of the Congo | Plague | Ungraded | 12-Mar-19 | 28-Feb-19 | 15-Dec-19 | 51 | - | 8 | 15.70%
Democratic Republic of the Congo | Poliomyelitis (cVDPV2) | Grade 2 | 15-Feb-18 | 1-Jan-18 | 3-Jan-20 | 84 | 84 | 0 | 0.00%
Ethiopia | Chikungunya | Ungraded | 25-Jul-19 | 27-May-19 | 8-Dec-19 | 54 908 | 29 | 0 | 0.00%
In week 48 (week ending 1 December 2019), 82 new suspected cases were reported in Afar and Oromia regions. As of 10 December 2019, a total of 2 898 suspected cases including 21 deaths have been reported from eight regions with Oromia (635 cases), Afar (329), Somali (292), Amhara (191 cases), and Addis Ababa city (157 cases) reporting the majority of cases. A total of 57 cases have been laboratory confirmed.

Between week 37 and week 49 in 2019, a total of 1 251 suspected cases and 6 confirmed cases of dengue fever were reported from Afar region. The peak of the outbreak was observed in week 38 when more than 300 suspected cases were reported.

As of week 49 (week ending 8 December 2019), the measles outbreak is still ongoing with a total of 9 672 suspected measles cases from Oromia (5 820), Somali (2 416), Amhara (703) and Afar (486) regions. Children aged less than five years are the most affected accounting for 50.14% of the total cases followed by age group 15-44 years (25.43%). Seventy percent of the reported measles cases were not previously vaccinated.

In week 50 (week ending 1 December 2019), 82 new suspected cases were reported in Afar and Oromia regions. As of 1 December 2019, a total of 2 089 suspected cases were reported in Ethiopia in 2019, four linked to the outbreak in neighbouring Somalia and the fifth case is part of a newly reported Ethiopian outbreak this week.

In week 51 (week ending 8 December 2019), 1 251 suspected cases were reported, 6 confirmed cases of circulating vaccine-derived poliovirus type 2 (cVDPV2) were reported in Ethiopia in 2019, with four linked to the outbreak in neighbouring Somalia and the fifth case is part of a newly reported Ethiopian outbreak this week.

As of week 44 (week ending 3 November 2019), 127 suspected cases of measles were reported. From week 1 to 44 (1 January – 3 November 2019), a total of 4 690 suspected cases including 18 deaths (CFR 0.4%) have been reported. Of the 4 690 suspected cases, 1 773 were sampled, of which 1 091 tested positive for measles by serology. Three localities in three health districts are in the epidemic phase, namely, Wanindara in Ratoma health district, Dounet in Mamou health district and Soumpoura in Tougue health district.

In week 50 (week ending 1 December 2019), 56 new suspected cases were reported. Since the beginning of the outbreak, suspected and confirmed cases of leishmaniasis have been reported from Mandera, Marsabit, Wajir and Garissa counties.

In week 52 (week ending 29 December 2019), 93 new suspected cases were reported from Wijir (42 cases), Garissa (31 cases) and Turkana (20 cases). Since January 2019, twelve of the 47 Counties of Kenya reported cholera cases, namely: Embu, Garissa, Kajiado, Kisumu, Machakos, Makuueni, Mandera, Mombasa, Nairobi, Narok, Turkana and Wajir Counties. The outbreak remains active in four counties: Garissa, Kirinyaga, Turkana and Wajir.

In week 50 (week ending 16 December 2019), 56 new cases were reported. Since the beginning of the outbreak, suspected and confirmed cases of leishmaniasis have been reported from Mandera, Marsabit, Wajir and Garissa counties.

A new outbreak of leishmaniasis has been reported from Pokot North sub county, Alale location. A total of 75 cases with 7 confirmed have been reported. The last measles cases were reported in Kajiado County. A total of 4 690 suspected cases, 1 773 were sampled, of which 1 091 tested positive for measles by serology. Three localities in three health districts are in the epidemic phase, namely, Wanindara in Ratoma health district, Dounet in Mamou health district and Soumpoura in Tougue health district.

The measles outbreak in Lesotho is ongoing in Qacha’s Nek district. As of 15 November 2019, a total of 59 suspected cases have been reported, 4 of which are laboratory confirmed. No associated deaths have been reported. The coverage of measles vaccine in the affected area is 65%. The outbreak has affected more females with a M:F ratio of 1:2.

During week 47 (week ending 8 December 2019), one new confirmed case of Lassa fever was reported. From 1 January - 8 December 2019, a total of 187 suspected cases have been reported across the country. Of samples tested from 153 of the suspected cases at the National Public Health Reference Laboratory of Liberia, 45 were confirmed by RT-PCR and 108 were discarded due to negative test results. The case fatality ratio among confirmed cases is 21% (15/45).

During week 47 (week ending 8 December 2019), 82 new suspected cases were reported in Afar and Oromia regions. As of 10 December 2019, a total of 2 898 suspected cases including 21 deaths have been reported from eight regions with Oromia (635 cases), Afar (329), Somali (292), Amhara (191 cases), and Addis Ababa city (157 cases) reporting the majority of cases. A total of 57 cases have been laboratory confirmed.

In week 51 (week ending 22 December 2019), 15 suspected cases were reported from 7 out of 15 counties across the country. Since the beginning of 2019, 1 692 cases have been reported across the country, of which 287 are laboratory-confirmed, 108 are epi-linked, and 827 are clinically confirmed.

The security situation continues to worsen as violence spreads from the north to the more populated central regions of the country. The number of internally displaced persons is increasing, and it was estimated at 199 585 in October 2019. This increase is associated with repeated violence in Moroi, Gai, Menaka and zones in the neighbourhould of Burkina Faso border. The country is also facing infectious diseases outbreaks which include yellow fever, measles, and dengue. Cases of malnutrition continue to be reported at the country level. In week 48, a total of 5 206 cases of acute malnutrition were reported.
### Health Emergency Information and Risk Assessment

As of week 52 (week ending on 29 December 2019), 1,215 suspected cases of measles have been reported from three regions in the country. Of these, 360 were confirmed IgM-positive.

As of 22 December 2019, a total of 41 cases have been reported including 33 suspected cases, 3 probable cases and 5 confirmed from two regions: Sikasso and Koulikoro. Five deaths have been reported including 2 among confirmed cases.

In weeks 49 and 50 (week ending 15 December 2019), 51 cases were reported from five regions of Namibia with the majority (35 cases) from Khomas region. There was a decrease in the number of cases reported in weeks 49 and 50 compared to weeks 47 and 48. As of 15 December 2019, a cumulative total of 1,704 laboratory-confirmed, 4,319 epidemiologically linked, and 951 suspected have been reported countrywide. A cumulative number of 59 deaths have been reported nationally (CFR 0.8%), of which 24 (41%) occurred in pregnant or post-partum women. Cases have been reported from 12 out of 14 regions of Namibia, namely, Khomas, Omusati, Erongo, Oshana, Oshikoto, Kavango, Ohangwena, Omaheke, Hardap, Karas, Otjozondjupa, and Kunene regions.

### Epidemiological Update

#### Nigeria

**Flood**

As of week 52 (week ending 29 December 2019), 10,207 suspected measles cases have been reported from eight regions in the country. The number of displaced people is increasing in Tillaberi, Maradi, Diffa. Since September 2019, more than 40,000 Nigerian refugees have crossed the border seeking safety in west Niger and the Burkina Faso border area has seen increasing attacks by jihadist armed groups against the local population and authorities, leading to states of emergency declared in several departments.

The security situation is hampering the humanitarian access and affecting the access to basic health and social services. A total of 48 health posts and 4 health centres have closed due to insecurity.

**Cholera**

As of week 52 (week ending 29 December 2019), 10,207 suspected measles cases have been reported from eight regions the country. The cases have been reported Maradi (3,981 including 8 deaths), Tahoua (1,932 including 25 deaths), Zinder (1,574 including 11 deaths), Niamey (1,271 including 3 deaths), Agadez (575 including 3 death), Diffa (314 with no deaths) and Dosso (324 cases including 4 deaths). During week 52, three cases and no death were reported from Tahoua (1) and Zinder (2). No health district crossed the epidemic threshold during week 52. Since the peak of the outbreak in week 12, and following a vaccination campaign in mid-September 2019, the case incidence has been on a continuous decline.

**Monkeypox**

The security situation continues to worsen in bordering areas of Burkina Faso, Mali and Nigeria following Boko Haram and Djihadistas attacks in the region. The number of displaced people is increasing in Tillaberi, Maradi, Diffa. Since September 2019, more than 40,000 Nigerian refugees have crossed the border seeking safety in west Niger and the Burkina Faso border area has seen increasing attacks by jihadist armed groups against the local population and authorities, leading to states of emergency declared in several departments. This security situation is hampering the humanitarian access and affecting the access to basic health and social services. A total of 48 health posts and 4 health centres have closed due to insecurity.

**Lassa fever**

As of week 48 (week ending 1 December 2019), eight new confirmed cases with two deaths were reported from Ondo (6 cases with two deaths), and Edo (2 cases with zero deaths) states. Eighty-six Local Government Areas (LGAs) across 23 states have reported at least one confirmed case since the beginning of 2019. Nineteen (19) healthcare workers across 10 states have been infected since the beginning of 2019. A total of 347 contacts are currently being followed.

### Event Log

<table>
<thead>
<tr>
<th>Country</th>
<th>Event</th>
<th>Grade</th>
<th>Date notified to WHO</th>
<th>Start of reporting period</th>
<th>End of reporting period</th>
<th>Total cases</th>
<th>Cases Confirmed</th>
<th>Deaths</th>
<th>CFR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mali</td>
<td>Measles</td>
<td>Ungraded</td>
<td>20-Feb-18</td>
<td>1-Jan-19</td>
<td>29-Dec-19</td>
<td>1,215</td>
<td>360</td>
<td>0</td>
<td>0.00%</td>
</tr>
<tr>
<td>Namibia</td>
<td>Hepatitis E</td>
<td>Protracted 1</td>
<td>18-Dec-17</td>
<td>8-Sep-17</td>
<td>15-Dec-19</td>
<td>6,974</td>
<td>1,704</td>
<td>59</td>
<td>0.80%</td>
</tr>
<tr>
<td>Niger</td>
<td>Flood</td>
<td>Ungraded</td>
<td>1-Jan-19</td>
<td>1-Jan-19</td>
<td>20-Dec-19</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Nigeria</td>
<td>Humanitarian crisis</td>
<td>Protracted 1</td>
<td>1-Feb-15</td>
<td>1-Feb-15</td>
<td>18-Dec-19</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Nigeria</td>
<td>Lassa fever</td>
<td>Ungraded</td>
<td>24-Mar-15</td>
<td>1-Jan-19</td>
<td>1-Dec-19</td>
<td>812</td>
<td>793</td>
<td>181</td>
<td>22.30%</td>
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<tr>
<td>Nigeria</td>
<td>Measles</td>
<td>Ungraded</td>
<td>25-Sep-17</td>
<td>1-Jan-19</td>
<td>30-Nov-19</td>
<td>58,916</td>
<td>2,767</td>
<td>289</td>
<td>0.50%</td>
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<tr>
<td>Nigeria</td>
<td>Monkeypox</td>
<td>Ungraded</td>
<td>26-Sep-17</td>
<td>24-Sep-17</td>
<td>30-Nov-19</td>
<td>336</td>
<td>181</td>
<td>7</td>
<td>2.10%</td>
</tr>
<tr>
<td>Nigeria</td>
<td>Poliomyelitis (cVDPV2)</td>
<td>Grade 2</td>
<td>1-Jan-18</td>
<td>1-Jan-18</td>
<td>18-Dec-19</td>
<td>52</td>
<td>52</td>
<td>0</td>
<td>0.00%</td>
</tr>
</tbody>
</table>

No case of circulating vaccine-derived poliovirus type 2 (cVDPV2) was reported this week. There are 18 cVDPV2 cases reported in 2019 and 34 cVDPV2 cases in 2018.
Data are taken from the most recently available situation reports sent to WHO AFRO. Numbers are subject to change as the situations are dynamic.

Nigeria: Yellow fever

From 1 January 2019 to 16 November 2019, a total of 3787 suspected yellow fever cases have been reported from 604 out of 774 LGAs across all the 36 states and the Federal capital territory. Of the samples taken, 166 have tested positive for yellow fever IgM in Nigerian network laboratories. Also, 129 samples from 18 states were confirmed positive using real time polymerase chain reaction (RT-PCR). There have been 192 deaths among suspected cases (CFR 5.1%) and 20 deaths among confirmed cases (CFR 15.5%). Four states Katsina, Bauchi, Edo and Ebonyi accounting for 62% of all the confirmed cases in 2019.

Sierra Leone: Lassa fever

No new confirmed cases have been reported since 24 November 2019 from Tonkolili district. From 30 October to 6 December, a total of five cases (three confirmed and two probable) with three deaths have been reported in Tonkolili district. Of the total 71 contacts identified, 38 have completed 21 days of monitoring while 33 are still being followed. In a separate cluster, two-laboratory confirmed cases with one death were reported from Kenema district from 27 to 28 November 2019. A total of 119 contacts of these cases are being followed.

South Sudan: Flood

On 29 October 2019, the president of South Sudan declared a state of emergency in 27 counties following the extreme destruction of livelihoods of nearly one million people due to the worst seasonal flooding in many years. Over 620,000 people needed immediate humanitarian assistance. The flood water in some locations have destroyed homes, displaced families, crops, rendered basic services and markets non-functional, particularly in Jonglei, Upper Nile, Unity, Warrap, Northern Bahr el Ghazal, Eastern Equatoria and parts of Central Equatoria. In the last two weeks there have been light showers but with no associated flash flooding. In Pibor and other locations that were worst affected the is a slight reduction in the level of flood waters. The roads are still not passable, and response relies on helicopters and boats.

South Sudan: Humanitarian crisis

The humanitarian situation has been largely calm but unpredictable in most of the states. The number of internally displaced people (IDPs) in South Sudan was estimated at 1.47 million. Malnutrition continues to be a problem in the country as more than 6.35 million people are reported to be severely food insecure in South Sudan. Communicable disease burden remains high with ten counties reporting malaria cases above their epidemic thresholds and measles cases being reported from 16 counties (Abiyel, Mayom, Melut, Aweil South, Aweil East, Tonj North, Juba, Wau, Awiel West, Gogrial West, Gogrial East, Renk, Tonj South, Jur River, Pibor and Yambio) and four protections of civilian (PoC) sites (Juba, Bentiu, Malakal and Wau).

South Sudan: Hepatitis E

The current outbreak in Bentiu PoC continues. In week 48 (week ending 1 December 2019), three new suspected cases of Hepatitis E were reported. As of reporting date, a total of 113 cases and two deaths have been recorded from Bentiu PoC and a total of 12 suspected cases including 4 confirmed cases in Lankien. The last cases in Lankien were reported in week 25 (week ending 23 June 2019).

South Sudan: Measles

Between week 1 to week 48 of 2019, a total of 3,963 suspected cases of measles which 169 laboratory-confirmed and 23 deaths (CFR 0.6%) have been reported. The outbreak has affected 16 counties and 4 Protection of Civilians Sites PoCs (Juba, Bentiu, Malakal and Wau). Measles cases continue to rise in 2019 with an average of 75 cases reported per week compared to 12 cases reported at the same period in 2018.

Togo: Poliomyelitis (cVDPV2)

One case of circulating vaccine-derived poliovirus type 2 (cVDPV2) was reported from Plateaux province this week. There are four cVDPV2 cases in 2019 in the country linked to Jigawa outbreak in Nigeria.

Uganda: Humanitarian crisis - refugee

Between 1 and 31 October 2019, a total of 6,623 new refugee arrivals crossed into Uganda from the Democratic Republic of the Congo (4,016), South Sudan (2,167) and Burundi (440). Uganda hosted 1,362,269 asylum seekers as of 31 October 2019, with 95% living in settlements in 11 of Uganda’s 128 districts and in Kampala. The majority of refugees are from South Sudan (62.9%), the Democratic Republic of the Congo (28.8%) and Burundi (3.5%). Most are women within the age group 18 - 59 years.

Uganda: Rift valley fever

On 5 December a second confirmed case of Rift Valley fever was reported from Ntoroko district, Uganda. This was a 25-year-old male from the Democratic Republic of Congo who was living and working in Kimara Village, Butungama sub-county in Mtoroko district, Uganda. Following the presentation of haemorrhagic symptoms on 5 December 2019, a safe and dignified burial was conducted on 17 December 2019. As of 19 December 2019, a total of 2 cases and 2 deaths have been reported from Ntoroko and Obongi Districts.

Zambia: Poliomyelitis (cVDPV2)

One new case of circulating vaccine-derived poliovirus type 2 (cVDPV2) has been reported this week. The onset of paralysis for the new case was on 13 November 2019 from Kalabo District, Western Province. There is a total of two cVDPV2 cases in 2019.

†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/efn/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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