Overview

This Weekly Bulletin focuses on public health emergencies occurring in the WHO African Region. The WHO Health Emergencies Programme is currently monitoring 62 events in the region. This week’s main articles cover key new and ongoing events, including:

- Circulating vaccine-derived poliovirus type 2 in Ghana
- Ebola virus disease in Democratic Republic of the Congo
- Floods in Congo
- Humanitarian crisis in Democratic Republic of the Congo.

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

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

**Major issues and challenges include:**

- The response to the Ebola virus disease (EVD) outbreak in Democratic Republic of the Congo suffered a major setback in the past week, with the attacks and killing of responders in Biakato Mines and Mangina. These attacks and the ensuing civil unrest have severely impacted on Ebola response activities, with most operations in the security-affected areas temporarily suspended. These security incidents only serve to facilitate deeper penetration of Ebola infections in the community, and the resultant resurgence of the outbreak. WHO and all the partners remain committed and dedicated to seeing the end of the EVD outbreak, however, this requires access to the affected communities and safety of the responders.

- Ghana reported four confirmed paralytic cases of circulating vaccine-derived poliovirus type 2 (cVDPV2) during the reporting week, in addition to isolating cVDPV2 in two environmental samples. In similar events in the African region, paralytic cases of cVDPV2 were reported in Democratic Republic of the Congo (5), Benin (4) and Togo (2). Outbreaks of cVDPV2 appear to be gaining a foothold in the African region, with the events spreading from conflict-affected countries (initial hotspots) to relatively stable countries. Health authorities in the African region need to take bold and decisive measures to address this situation at this early stage before it becomes worse and thus a major public health problem.
EVENT DESCRIPTION

The Ministry of Health in Ghana reported four new confirmed paralytic cases of circulating vaccine-derived poliovirus type 2 (cVDPV2), one each from Savelugu District in Northern Region, Jaman North in Bono Region, Nkwanta North in Oti Region and Gonja Central District in Savannah Region. The dates of onset of paralysis in the reported cases ranged between 8 and 23 October 2019.

In a related event, two environmental samples collected from Ayawaso East Municipal, Greater Accra Region tested positive for cVDPV2. The samples were collected on 23 October 2019.

Since 8 July 2019, when cVDPV2 was first isolated in an environmental sample collected from Tamale Municipal in Northern Region, a total of nine paralytic cases of cVDPV2 have been confirmed in Ghana. The other districts that previously confirmed cVDPV2 are Chereponi in North East Region; Saboba, Kumbungu and Tamale in Northern Region; and Gonja Central in Savannah Region. Additionally, cVDPV2 had previously been isolated from an environmental sample collected from Agbobloshie and Nima Free Town in Greater Accra Region and Nyanshegu in Northern Region. The strain of the vaccine-derived poliovirus type 2 circulating in Ghana is linked to the Jigawa outbreak in Nigeria, which is circulating in many other countries.

Further investigations and risk assessment into the events are ongoing and an update will be provided as new information comes available.

PUBLIC HEALTH ACTIONS

- The National Technical Coordinating Committee continues to hold coordination meetings to strategize, plan, implement and monitor the response to the cVDPV2 outbreak in the country.
- On 20 August 2019, a national rapid response team comprising experts from MOH, WHO, CDC, Noguchi Polio Laboratory was deployed to conduct outbreak investigation, risk assessment and support local response by the regional and district teams.
- Multi-disciplinary rapid response teams from Ghana MOH, WHO, CDC and UNICEF have been deployed to the affected districts and regions to conduct detailed investigations and risk assessments, and support local response, including plan to carry out reactive vaccination campaigns in the newly affected and surrounding high risk districts.
- The Ministry of Health in Ghana, with the support of Gavi, UNICEF, WHO and other partners, plans to conduct a nationwide inactivated polio vaccine (IPV) catch-up campaign targeting about 2.4 million vulnerable children of birth cohorts between 2016 and February 2018 who missed IPV vaccination because of operations challenges.

SITUATION INTERPRETATION

Health authorities in Ghana reported four new paralytic cases of cVDPV2, scattered across the country. In addition, cVDPV2 has been isolated from two environmental samples collected from a sentinel site in Greater Accra Region. With these, the number of cVDPV2 events is rapidly growing in Ghana, signifying a much deeper diffusion of the pathogen in the community and thus increasing potential for wider spread. Response efforts are ongoing to control the outbreak, with four rounds of monovalent oral poliovirus type 2 (OPV2) vaccination carried out. Preparations are also ongoing to conduct a country-wide IPV vaccination exercise. It is important for Ghana and indeed all the countries in the region to step up efforts to improve their routine immunization coverage to a minimum of 95% in all districts to minimize the consequences of any new virus introduction. Attaining this target has not been easy in many countries for various reasons including fragile health systems, conflicts and social disruption, insecurity, etc. Additionally, all countries in the African region should strengthen AFP surveillance to rapidly detect any new virus importation and to facilitate a rapid response.
EVENT DESCRIPTION

The Ebola virus disease (EVD) outbreak in North Kivu, South Kivu and Ituri provinces in Democratic Republic of the Congo continues, with four health zones and 11 health areas reporting confirmed cases in the past 21 days (7-27 November 2019). Since our last report on 24 November 2019 (Weekly Bulletin 47), there have been 12 new confirmed cases and six new deaths. The principle hot spots of the outbreak in the past 21 days are Mabalako (54%; n=14 cases), Mandima (23%; n=6) and Beni (15%; n=4). Four health zones, Beni, Mabalako, Mandima and Oicha have reported new confirmed cases in the past seven days.

On the evening of 27 November 2019, there were two separate attacks, one on the responder’s camp in Biakato Mines and one on the Ebola coordination office in Mangina, in which four people have died (3 in Biakato Mines and 1 in Mandima), including a member of a vaccination team, two drivers and a police officer. WHO staff have been evacuated from Biakato Mines to Goma, while remaining in place in Mangina. In Oicha, a new incursion by rebels resulted in several civilian casualties and demonstrations have been reported in Goma. As of 2 December 2019, North Kivu Province has declared ‘ville mort’ and response activities have been suspended across the province.

As of 30 November 2019, a total of 3,313 EVD cases, including 3,195 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 (78), Mandima (345), Nyakunde (2), Rwamara (8) and Tchomia (2) in Ituri Province; Alimbongo (5), Beni (689), Biena (18), Butembo (285), Goma (1), Kalunguta (193), Katwa (651), Kayna (28), Kyondo (25), Lubero (31), Mabalako (406), Mangurudjipa (18), Masereka (50), Musienene (84), Mutwanga (32), Nyiragongo (3), Oicha (64), Pinga (1) and Vuhovi (103) in North Kivu Province and Mwenga (6) in South Kivu Province.

As of 30 November 2019, a total of 2,203 deaths were recorded, including 2,085 among confirmed cases, resulting in a case fatality ratio among confirmed cases of 65% (2,085/3,195). The cumulative number of health workers remains 163, which is 5% of the confirmed and probable cases to date.

Contact tracing is ongoing in three health zones. A total of 1,069 contacts are under follow-up as of 30 November 2019, of which 720 (67%) have been seen in the past 24 hours. Alerts in the affected provinces continue to be raised and investigated. Of 3,448 alerts processed (of which 3,295 were new) in reporting health zones on 30 November 2019, 3,208 were investigated and 349 (11%) were validated as suspected cases.

PUBLIC HEALTH ACTIONS

- Surveillance and response activities are currently compromised by a resurgence of insecurity in affected regions.
- As of 30 November 2019, a cumulative total of 255,441 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 121 million screenings to date. A total of 97,109 (89%) PoE/PoC transmitted reports as of 30 November 2019.

SITUATION INTERPRETATION

Although the decrease in new confirmed cases is continuing, the slowing and actual stopping of response activities in the Biakato Mines area and Mangina Health Zones are of major concern, as is the shutdown of all response activities in North Kivu Province for two days for the ‘ville mort’. Previous experience has shown that this will potentially have major adverse effects on surveillance, case finding and contact tracing, which could lead to a resurgence in transmission. It is critical that all areas of response remain effective, engaged and fully resourced.
EVENT DESCRIPTION
Since 3 October 2019, four departments in the Republic of Congo, namely Likouala, Cuvette, Plateaux and Shanga, have experienced worsening floods following a significant rise in the water levels of the Ubangui River due to heavy rains. Several localities on the banks of the Ubangui River have been affected by the flood, which caused severe damage to public infrastructure and important loss of livelihoods.

As of 22 November 2019, an estimated 112 175 people have been affected by the floods, including 60 000 in Likouala (53%), 33 933 in Cuvette (30%), 16 100 in Plateaux (14%) and 2 142 (2%) in Shanga. Refugees constitute one-quarter (26%, n=29 183) of the affected population.

The food security of the affected population is critical, with food reserves being depleted and the loss of unharvested crops. The lack of staple foods such as bananas, tubers and fish, has become apparent in the local markets. The flood has exacerbated already existing challenges in the community such as limited access to safe drinking water and inadequate sanitation infrastructure. Almost all the water points and latrines have been flooded, resulting in compromised environmental hygiene conditions that favor the spread of waterborne and vector-borne diseases, especially in places where displaced populations are concentrated.

Most of the affected population are living in the open, without adequate shelter, which exposes them to difficult weather conditions and disease-transmission vectors, including mosquitoes, ticks, and fleas. Furthermore, the deterioration of the road network by the rains has restricted the mobility of the populations and humanitarian workers. Some health centres have been flooded, including CSI Ikpengbele and Boyele port. This has affected the population’s access to medical care and to basic medical supplies.

The analysis of the evolution of the situation since the beginning of this flood shows that the floods will undeniably continue throughout the rainy season.

PUBLIC HEALTH ACTIONS
- Local authorities, in collaboration with humanitarian organizations, organized joint missions, in affected departments, to assess the extent of the damage. These missions were conducted on 23, 30 October and 4 November 2019.
- UN agencies (WFP-WHO-UNFPA) have provided 742 tons of food, non-food items, water purification kits, dignity kits, medicines, tarpaulins and other emergency items. These items arrived in Brazzaville on 22 November 2019.

In Likouala, food items were distributed to 10 000 people in need.

The Ministry of Health is working with partners on the ground to strengthen disease surveillance for early detection of disease outbreaks.

SITUATION INTERPRETATION
According to historical records, this is the worst flooding event experienced by the Republic of Congo in 20 years. There is a critical need to provide emergency assistance to local people, indigenous people and refugees to revive their livelihoods and prevent or reduce morbidity and mortality related to malnutrition, lack of food and waterborne diseases. Beyond emergency response, there is also a need to reinforce the resilience of the affected populations by implementing multi-sectoral interventions including health sector, water and sanitation, sustainable shelter and food security. Finally, the implementation of response activities needs to take in consideration the specific needs of affected populations and ensure that implementing partners guaranty an equitable provision of services by integrating minorities such as indigenous populations and refugees.
EVENT DESCRIPTION

The complex and protracted humanitarian crisis in the Democratic Republic of the Congo escalated in recent weeks, with a surge in armed attacks on civilians, complicated by heavy rains and flooding. Several civilians were killed in the recent spate of attacks, with many injured and thousands displaced. The attacks led to a reprisal protests by the community in Beni, denouncing the violence and criticizing the government and the United Nations Stabilization Mission, MONUSCO. On 25 November 2019, the protestors burnt down the Beni town hall and attacked one of the MONUSCO camps. Protests continued on Monday and as of 28 November at least seven deaths were confirmed. The violence and protests have brought a new dimension in the security situation.

Since October 2019, heavy rains in areas along the Uvungi River, the Congo River and their main tributaries have caused major flooding in seven provinces, namely North Uvungi, South Uvungi, Mongala, Bas-Uele, Haut-Uele, Maniema and Tshopo. North and South Uvungi and Mongala are among the most affected provinces. The rainy season continues into December and the situation could deteriorate with further heavy rains. These are the worst floods in 25 years. Initial estimates by local authorities, as of 10 November 2019, show that about 387,000 people are affected by the floods, including nearly 235,000 in South Uvungi, 146,000 in North Uvungi, nearly 6,000 in Mongala, 18,000 in Tshopo and Haut-Uele and 7,000 people in Maniema, with 13,000 already homeless as a result of floods in September in Kindu City. The floods have caused extensive damage, the extent of which is gradually being determined, including damage and destruction of homes, basic infrastructure (water points, schools, health centres), fields, loss of property, livelihoods and food stocks. In North and South Uvungi, nearly 32,000 homes were reportedly damaged or destroyed, 632 water points and 142 schools and health centres. Affected populations have been distributed among host families, schools and other places of safety. The damage to water points and latrines in flooded areas means that there is inadequate access to safe drinking water and poor hygiene conditions, predisposing to water-borne disease.

Epidemic-prone diseases continue. The main cause of illness during week 45 (week ending 10 November 2019) were malaria (324,650 suspected cases), acute respiratory infections (112,686 cases) and typhoid fever (25,399 cases). Since the start of 2019, there have been 15,480,114 cases of malaria, with 16,100 deaths (case fatality ratio 0.1%). This is an increase against 2018, when 13,400,014 cases were reported, with 14,724 deaths.

Since the start of 2019, the country’s epidemiological situation has been marked by outbreaks of Ebola virus disease, measles, cholera, monkey pox, bubonic plague and rabies. Prevention and response activities in response to the various outbreaks continue to be implemented by the Ministry of Public Health with technical and financial support from WHO and other partners.

PUBLIC HEALTH ACTIONS

- A crisis meeting in response to the flooding was held on 19 November 2019, chaired by the Prime Minister and an emergency response plan for the first phase of the humanitarian response in the flood-affected provinces of North and South Uvungi and Mongala has been developed by the Ministry of Humanitarian Action and National Solidarity in collaboration with humanitarian partners. During this first three-month response phase, the assistance will include: emergency humanitarian interventions (shelter, essential household items, food, access to water, sanitation, primary health care, emergency education).

- Crisis committees have been set up in each of the affected provinces and response actions are being implemented in the field with the support of partners, including sensitization of the population on hygiene measures, distribution of insecticide-treated mosquito nets, chlorination of drinking water and free case management.

- In Ituri FAO started distributing 1,300 agricultural kits from 4-10 November 2019 in the Mokambo chiefdom with the collaboration of the COOPI team.

WHO is providing epidemiological surveillance, active research on diseases with epidemic potential in health facilities handling PIDs in Bunia (ISP and HGR sites) and technical support to the health information office.

The Ministry of Health continues to implement prevention and response activities in cholera-affected areas, with the support of WHO and other partners, in a response plan developed jointly with PNECHOL-MD, covering September to December 2019, funded by WHO, who have also deployed experts to the field to provide households with inputs for case management, as well as laboratory facilities.

There are weekly coordination meetings for the measles response, as well as follow-up of vaccination campaigns and preparation for follow-up vaccination campaigns; partial results for the vaccination campaigns in seven provinces show that a total of 4,463,983 children aged 6 to 59 months were vaccinated out of a target of 4,424,166, a 100% coverage.

The Round 1 response to the cVDPV2 case in Sankuru Province took place between 14-16 November 2019 and there are preparations for a single round of response to the cVDPV2 case, targeting the health zones of Moba, Pweto, Kilwa and Kashobwe from 28-30 November 2019.

SITUATION INTERPRETATION

The continuation of the humanitarian crisis in Democratic Republic of the Congo is of serious concern, even more so with the current widespread and catastrophic flooding. Displaced populations face lack of adequate sanitation and safe water, loss of livelihood and shelter and poor access to healthcare, which also affect those displaced by insecurity elsewhere in the country. The risk of outbreaks of water-borne disease is high and will stretch already overburdened health systems and partner networks, who are dealing with major outbreaks such as Ebola virus disease and measles. Local authorities and partners need to respond quickly and effectively to the situation in order to prevent further disease outbreaks and mitigate the situation for affected populations.
Major issues and challenges

- There have been two separate attacks on Ebola response facilities in Biakato Mines and Mangina health zones, respectively, in Democratic Republic of the Congo. During the attacks, four people died (3 in Biakato Mine and 1 in Mangina). Additionally, six people were physically wounded and five others needed psychological care. The attacks were followed by civil protests by the community in Beni, which paralyzed normal activities. Since January 2019, prior to these attacks, WHO has documented 386 attacks on health-related targets in Democratic Republic of the Congo, which caused seven deaths and 77 injuries to health care workers and patients. These security incidents only serve to facilitate unchecked propagation of Ebola infections in the community, thus prolonging the outbreak. The current disruption of response interventions is likely to result in resurgence of the outbreak.

- The Ministry of Health in Ghana has reported four new confirmed human cases of cVDPV2 during the reporting week, in addition to isolating cVDPV2 in two environmental samples. Similar cVDPV2 events occurred in Democratic Republic of the Congo, Benin and Togo. Several other countries in the region have experienced cVDPV2 events in 2019, including Angola, Central African Republic, Chad, Ethiopia, Niger, Nigeria and Zambia. The outbreaks of cVDPV2 have been expanding from conflict-affected countries to relatively stable countries. cVDPV2 is becoming a serious public health problem in the region, calling for urgent interventions by the national authorities and partners.

Proposed actions

- The national authorities and partners in Democratic Republic of the Congo should continue to implement all aspects of Ebola outbreak control activities. The Government of the Democratic Republic of the Congo, the United Nations and all global stakeholders should enhance efforts to restore peace and security in the country.

- The Ministry of Health and other national authorities in the African region, in conjunction with local and global partners, need to undertake decisive measures in response to the cVDPV2 events, with the basis of the response being improving polio vaccination coverage to at least 95% in all districts and having a functional AFP surveillance system.
New Events

On 25 November 2019, a confirmed Rift Valley fever case was reported from Obongi district, Uganda. This was a 35-year-old male from South Sudan who was living in Palorinya Refugee camp in Obongi district, Uganda. The case had travel history to South Sudan between 12 and 19 November 2019 to harvest cassava. While in South Sudan he developed fever and headache on 15 November 2019 and was treated for malaria. Following further deterioration of his health, he returned back to the refugee camp in Uganda. On 20 November 2019, he developed severe headache, generalized body malaise, joint pain, feeling coldness, vomiting, passing black mucoid stool, and productive cough and was later referred to Moyo hospital where he was isolated as VHF was suspected. A sample was collected and sent to UVRI. The patient died later. A safe and dignified burial was performed on 22 November 2019. As of 24 November, a total of 19 contacts were recorded during the active case search including 10 healthcare workers. Further investigation is ongoing in Uganda.

Ongoing Events

In Cameroon, Police obtained a warrant to arrest a case previously reported in a dengue haemorrhagic fever case, which was not notified among the confirmed cases (CFR 14%).

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 Mounh, 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.

Burundi continues the security situation in the Minawao Camp, Mokolo Health District. As of 13 September 2019, the camp population was 59,456, mainly Nigerian refugees, with 356 new arrivals monthly, severely straining the camp infrastructure. Recently, the Nigerian government started repatriation of refugees, with around 400 people repatriated.

The humanitarian situation in the Northwest and Southwest (NW & SW) of Cameroon continues to deteriorate with serious protection incidents reported. Humanitarian access to persons in need continues to be a challenge with armed groups often blocking access as well as threatening humanitarian personnel. This unrest continues to affect access to basic services including healthcare, education, shelter, food security and WASH. As of 27 September 2019, the total number of internally displaced persons is estimated at 437,000 persons and the population in need of humanitarian assistance is estimated at 594,000 persons. An estimated 39,000 people have fled to the Littoral and Western regions, and 20,291 people (of which 80% women and children) have crossed into neighbouring Nigeria.

The cholera outbreak in Cameroon is ongoing in the North, Far North and South West regions. In week 47 (week ending 22 November 2019), 42 cases of suspected cholera were reported in the three regions. As of 21 November 2019, 934 cases and 44 deaths were recorded (CFR 4%).

### Table: All events currently being monitored by WHO AFRO

<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>Cameroon</td>
<td>Poliomyelitis (cVDPV2)</td>
<td>Grade 2</td>
<td>8-May-19</td>
<td>5-Apr-19</td>
<td>8-Aug-19</td>
<td>42</td>
<td>42</td>
<td>0</td>
<td>0.00%</td>
</tr>
<tr>
<td>Benin</td>
<td>Dengue fever</td>
<td>Ungraded</td>
<td>13-May-19</td>
<td>10-May-19</td>
<td>8-Aug-19</td>
<td>42</td>
<td>42</td>
<td>0</td>
<td>0.00%</td>
</tr>
<tr>
<td>Burkina Faso</td>
<td>Humanitarian crisis</td>
<td>Grade 2</td>
<td>1-Jan-19</td>
<td>1-Jan-19</td>
<td>1-Jan-19</td>
<td>24-Nov-19</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Burundi</td>
<td>Cholera</td>
<td>Ungraded</td>
<td>5-Jun-19</td>
<td>1-Jun-19</td>
<td>5-Nov-19</td>
<td>1,064</td>
<td>288</td>
<td>6</td>
<td>0.60%</td>
</tr>
<tr>
<td>Burundi</td>
<td>Malaria</td>
<td>Grade 2</td>
<td>1-Jan-19</td>
<td>27-Oct-19</td>
<td>1-Jan-19</td>
<td>7,392,429</td>
<td>2,823</td>
<td>-</td>
<td>0.00%</td>
</tr>
<tr>
<td>Cameroon</td>
<td>Humanitarian crisis (Far North, Adamawa &amp; East)</td>
<td>Protracted 2</td>
<td>31-Dec-13</td>
<td>27-Jun-17</td>
<td>27-Sep-19</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Cameroon</td>
<td>Humanitarian crisis (NW &amp; SW)</td>
<td>Grade 2</td>
<td>1-Oct-16</td>
<td>27-Jun-18</td>
<td>27-Sep-19</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Cameroon</td>
<td>Cholera</td>
<td>Ungraded</td>
<td>1-Mar-19</td>
<td>1-Mar-19</td>
<td>21-Nov-19</td>
<td>934</td>
<td>110</td>
<td>44</td>
<td>4.70%</td>
</tr>
</tbody>
</table>
### Health Emergency Information and Risk Assessment

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, Gouley, Makary, Kolotata, Koza, Ngaoundéré rural, Banoué, Guider, Figui, Ngong, Mora, Maroua 3, Vélét, Pitoa, Maroua 1, Bourha, Touboro, Mogodé, Bimbé, Garoua 1, Garoua 2, Lagdo, Tcholliré, Guidigui, Moutouroua, Mokolo, Cité verte, Djouroupolo, Nkolodungo, Limbé, Garoua Boulai, Ngaoundéré Urbain, Ekondo Titi, Gazawa, Meiganga, New Bell, Deido, Bertoua, Byeri assi, Cité des palmiers, Logbaba, and Nylon district.

No case of circulating vaccine-derived poliovirus type 2 (cVDPV2) was reported this week. There are 16 reported cases from six different outbreaks of cVDPV2 in 2019.

### Table: Health Emergencies

<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>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>0.00%</td>
</tr>
<tr>
<td>Cameroon</td>
<td>Monkeypox</td>
<td>Ungraded</td>
<td>27-Sep-19</td>
<td>18-Sep-19</td>
<td>27-Sep-19</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0.00%</td>
</tr>
<tr>
<td>Central African Republic</td>
<td>Measles</td>
<td>Ungraded</td>
<td>15-Mar-19</td>
<td>11-Feb-19</td>
<td>14-Oct-19</td>
<td>1,638</td>
<td>98</td>
<td>40</td>
<td>2.40%</td>
</tr>
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</table>

Civil unrest and food insecurity in most parts of the country including major cities are continuing to cause a complex humanitarian situation. The city of Bira has been relatively calm after the last clashes between the armed groups on 14 September 2019. The latest assessment according to MINUSCA reported 38 killed and 17 wounded in this latest wave of violence, bringing the total of deaths to 62 and injuries to 36 since the beginning of the violence. OCHA estimates the total of 23,000 IDPs in Bira since the beginning of the crisis.

### Table: Emergency Events

<table>
<thead>
<tr>
<th>Country</th>
<th>Event</th>
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</thead>
<tbody>
<tr>
<td>Central African Republic</td>
<td>Humanitarian crisis</td>
<td>Protracted 2</td>
<td>11-Dec-13</td>
<td>11-Dec-13</td>
<td>12-Nov-19</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
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</tbody>
</table>

As of week 41 (week ending on 13 October 2019), a total of 1,638 measles cases including 98 confirmed cases and 40 deaths have been reported in five districts: Batafango, Bocaranga-Koui, Nana-Gribizi, Paoua and Vakaga. The outbreaks have been controlled in Paoua and Vakaga.

### Table: Emergency Events

<table>
<thead>
<tr>
<th>Country</th>
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<th>CFR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chad</td>
<td>Measles</td>
<td>Ungraded</td>
<td>24-May-19</td>
<td>24-May-19</td>
<td>27-Nov-19</td>
<td>16</td>
<td>16</td>
<td>0</td>
<td>0.00%</td>
</tr>
</tbody>
</table>

In week 46 (week ending 17 November 2019), 132 suspected cases with 12 associated deaths were reported. 18 districts were in the epidemic phase in week 46. Since the beginning of the year, a total of 25,596 suspected cases and 255 deaths (CFR 1.0%) have been reported with Am Timan, N'Djamen East, N'Djamena South, Bongor, Moundou, Bousso and N'Djamena Centre districts all exceeding 1,000 suspected cases. Among the 1,770 cases investigated, 203 were IgM-positive, 79% were not vaccinated, and 47% were aged between 1 and 4 years old.

### Table: Emergency Events

<table>
<thead>
<tr>
<th>Country</th>
<th>Measles</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>Chad</td>
<td>Measles</td>
<td>Ungraded</td>
<td>26-May-19</td>
<td>20-May-19</td>
<td>20-Oct-19</td>
<td>144</td>
<td>58</td>
<td>0</td>
<td>0.00%</td>
</tr>
</tbody>
</table>

As of 20 October 2019, a total of 144 suspected cases with zero deaths have been reported from health facilities in Grande Comore Island. Of these, 58 cases have been confirmed (39 laboratory-confirmed and 19 by epidemiological link). IgM-positive cases were reported in five districts of Grande Comore, namely, Moroni (28), Mitsamiouli (6), Mbeni (3), Oichili (1) and Mitsoudjé (1). The 19 epi-linked cases are from Moroni district.

### Table: Emergency Events

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<tr>
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<th>Measles</th>
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<th>Deaths</th>
<th>CFR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comoros</td>
<td>Measles</td>
<td>Ungraded</td>
<td>22-Nov-19</td>
<td>3-Oct-19</td>
<td>22-Nov-19</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Detailed update given above.

### Table: Emergency Events

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<tr>
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<th>Total cases</th>
<th>Cases confirmed</th>
<th>Deaths</th>
<th>CFR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Congo</td>
<td>Measles</td>
<td>Ungraded</td>
<td>22-Jan-19</td>
<td>7-Jan-19</td>
<td>29-Sep-19</td>
<td>11,434</td>
<td>148</td>
<td>0</td>
<td>0.00%</td>
</tr>
</tbody>
</table>

In week 39 (from 23 to 29 September 2019), a total of 9 new chikungunya cases were reported across the country against 58 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: Emergency Events

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<th>Deaths</th>
<th>CFR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Democratic Republic of the Congo</td>
<td>Measles</td>
<td>Ungraded</td>
<td>20-Dec-16</td>
<td>17-Apr-17</td>
<td>18-Nov-19</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Detailed update given above.
During week 44 (week ending 3 November 2019), a total of 610 suspected cases of cholera and 7 deaths (CFR 1.1%) were notified from 59 health zones in 16 provinces. The endemic provinces of North-Kivu, South-Kivu, Haut-Lomami, Haut-Katanga and Tanganyika account for 94% of cases reported during week 44. Between week 1 and week 44 of 2019, a total of 25,001 cases including 445 deaths (CFR 1.8%) have been notified from 23 out of 26 provinces. Compared to the same period in 2018 (week 1-44), there is a 5.6% increase in the number of reported cases and a 49% decrease in the number of deaths.

During week 10 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 observed in week 38 when more than 300 suspected cases were reported.

Since the beginning of the year, a cumulative total of 4,614 monkeypox cases, including 95 deaths (CFR 1.8%) were reported from 16 provinces. In week 44 (week ending 3 November 2019), 104 cases and no deaths were reported nationally.

In week 46 (week ending 17 November 2019), 37 new suspected cases were reported in Afar region and Somali region. As of 10 November 2019, a total of 1,960 suspected cases including 60 deaths (CFR 3.1%) have been notified from 10 regions. No new cases were reported in week 44.

In week 46 (week ending 17 November 2019), 37 new suspected cases were reported in Afar and Somali regions. As of 10 November 2019, a total of 1,960 suspected cases including 60 deaths (CFR 3.1%) have been reported from eight regions with Oromia (756 cases), Afar (293), Somali (293), 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 47 in 2019, a total of 1,147 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 46 (week ending 17 November 2019), the measles outbreak is still ongoing with a total of 9,031 suspected measles cases reported from Oromia (5,382), Somali (2,340), Amhara (703) and Afar (548) 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-two percent of the reported measles cases were not previously vaccinated.

Detailed update given above.
Mozambique Poliomyelitis remains active in three counties: Garissa, Nairobi and Wajir. In week 47 (week ending 24 November 2019), 16 new suspected cases were reported from Wajir (10 cases) and Nairobi (6 cases). Since January 2019, 12 of the 47 Counties of Kenya reported cholera cases, namely: Embu, Garissa, Kajado, Kisumu, Machakos, Makueni, Mandera, Mombasa, Nairobi, Narok, Turkana and Wajir Counties. The outbreak remains active in three counties: Garissa, Nairobi and Wajir.

In week 47 (week ending 24 November 2019), no 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.

The measles outbreak in Lesotho is ongoing in Qacha’s Nek district. As of 15 November, 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 24 November 2019), 11 new suspected cases were reported across the country, of which four tested positive. From 1 January - 24 November 2019, a total of 173 suspected cases have been reported across the country. Of samples tested from 138 of the suspected cases at the National Public Health Reference Laboratory of Liberia, 44 were confirmed by RT-PCR and 94 were discarded due to negative test results. The case fatality ratio among confirmed cases is 31.8% (14/44).

In week 46 (week ending 17 November 2019), 43 suspected cases were reported from 7 out of 15 counties across the country. Since the beginning of 2019, 1,569 cases have been reported across the country, of which 237 are laboratory-confirmed, 109 are epi-linked, and 784 are clinically confirmed.

The security situation continues to worsen as violence spreads from the north to the more populated central regions of the country. A significant humanitarian funding gap continues to remain as only 49% of the required funding is available. As of 30 October 2019, the biggest threat is associated with food security where there exists a US$ 79.7 million gap.

As of week 46 (week ending 17 November 2019), 1,164 suspected cases of measles have been reported from 49 districts in the country. Of these, 338 were confirmed IgM-positive.

No case of circulating vaccine-derived poliovirus type 2 (cVDPV2) outbreak has been reported this week. There was one case reported in 2018.

In weeks 45 and 46 (week ending 17 November 2019), 79 cases were reported from nine regions of Namibia with the majority (44 cases) from Khomas region. There was a decrease in the number of cases reported in weeks 45 and 46 compared to weeks 43 and 44. As of 17 November 2019, a cumulative total of 1,569 laboratory-confirmed, 4,258 epidemiologically linked, and 844 suspected have been reported countrywide. A cumulative number of 56 deaths have been reported nationally (CFR 0.8%), of which 24 (43%) 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, Omacheke, Hardap, Karas, Otjozondjupa, and Kunene regions.

The security situation continues to worsen in Niger following Boko Haram attacks in the region. A total of 70,000 people is displaced in Tillaberi, Maradi and Tahoua and more than 150 civilians were killed following the upsurge of armed attacks in 2019. As of 12 September 2019, the security and humanitarian situations remain worrying in areas bordering Burkina Faso, Mali and Nigeria, where Tillaberi, Tahoua, Diffa and Maradi regions are targets of armed groups operating on both sides of the border, as well as of reprisals by jihadists after G5 Sahel operations. In weeks 36 and 37 (week ending 14 September 2019) Tillaberi and Maradi have been particularly badly affected, with attacks on humanitarian vehicles near Tillaberi. In Maradi, more than 35,000 refugees from Sokoto, Zamfara and Katsina states have arrived, 70% of whom are under the age of 18 and more than 50% are women.

As of week 45 (week ending 19 November 2019), 9,969 suspected measles cases have been reported from eight regions the country. The cases have been reported in Maradi (3,571 cases including 8 deaths), Tahoua (1,909 including 25 deaths), Zinder (1,644 including 10 deaths), Niamey (1,271 with 1 death), Tillaberi (635 including 3 deaths), Agadez (519 including 3 deaths), Diffa (311 with no deaths) and Dosso (324 cases including 4 deaths). Since the peak of the outbreak in week 12, the case incidence has been on a continuous decline.

No new cVDPV2 was reported in this week. Since the beginning of 2019 there has been one case reported from Bosso health district, Diffa region on 3 June 2019. A total of 10 cVDPV2 cases were reported in 2018 in Niger, which were genetically linked to a cVDPV2 case in Jigawa and Katsina states, Nigeria.

The humanitarian crisis in the North-eastern part of Nigeria persists with continued population displacement from security compromised areas characterized by overcrowded populations in many camps in the region. Due to shrinking humanitarian space health partners are facing challenges in delivery of timely and urgent life-saving assistance as access challenges are impacting movement of mobile medical teams, ambulances, immunization staff and medical cargo in many locations across Borno state. The cholera outbreak in Adamawa state is ongoing, though the number of cases being reported is showing a downward trend.
Eight new cases of cholera were reported in Adamawa State from 16 to 26 November 2019 from Yola North (5), Yola South (2), and Girei (1) Local Government Areas. From 15 May to 26 November 2019, a cumulative total of 836 suspected cases with four deaths have been reported from four LGAs: Yola North (511 cases with two deaths), Girei (200 cases with one death), Yola South (124 cases with one death), and Song (1 case with zero deaths). Of 532 stool specimens collected and analysed at the state specialist hospital, 200 cultured *Vibrio cholerae* as the causative agent.

During week 45 (week ending 10 November 2019), 10 new confirmed cases with two deaths were reported from Ondo (5 cases with zero deaths), Edo (2 cases with one death), Ebonyi (1 case with zero deaths), Bauchi (1 case with zero deaths), and Abia (1 case with 1 death) states. Eighty-six Local Government Areas (LGAs) across 23 states have reported at least one confirmed case since the beginning of 2019. Nineteen (19) health care workers across 10 states have been infected since the beginning of 2019. A total of 356 contacts are currently being followed.

No case of circulating vaccine-derived poliovirus type 2 (cVDPV2) was reported this week. There have been 18 cVDPV2 cases reported in 2019. There were 34 cVDPV2 cases in 2018.

In October 2019, between weeks 40 and 44, a total of 839 suspected cases were reported from all the 36 states and the FCT including 35 presumptive positive samples (IgM positive). Of these, 72 cases were confirmed positive for yellow fever by RT-PCR at two laboratories including the WHO reference laboratory, Institut Pasteur Dakar (IPD), (41 cases) and the NCDC National Reference Laboratory (NRL) in Abuja (31 cases). During this month, two new states (Plateau and Taraba) recorded confirmed cases of yellow fever.

A case of dengue fever from Kao lact, in the centre of the country, with symptom onset on 15 August 2019 was confirmed by PCR at Institut Pasteur Dakar on 13 September 2019.

As of 1 December 2019, no new confirmed cases have been reported. Since 30 October 2019, a total of five cases (3 confirmed, 2 probable) including three deaths have been reported in Tonkolili district. Out of the total number of contacts line listed 71 in country, 27 (38%) have completed 21 days follow up and 44 are currently under follow up.

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 10 counties reporting malaria cases above their epidemic thresholds and measles cases being reported from 16 counties (Abyei, Mayom, Melut, Aweil South, Aweil East, Tonj North, Juba, Wau, Aweil West, Gogrial West, Gogrial East, Renk, Tonj South, Jir River, Pibor and Yambio) and four protection of civilian (PoC) sites (Juba, Bentiu, Malakal and Wau). Eight new cases of cholera were reported in Adamawa State from 16 to 26 November 2019 from Yola North (5), Yola South (2), and Girei (1) Local Government Areas. From 15 May to 26 November 2019, a cumulative total of 836 suspected cases with four deaths have been reported from four LGAs: Yola North (511 cases with two deaths), Girei (200 cases with one death), Yola South (124 cases with one death), and Song (1 case with zero deaths). Of 532 stool specimens collected and analysed at the state specialist hospital, 200 cultured *Vibrio cholerae* as the causative agent.

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<tr>
<th>Country</th>
<th>Event</th>
<th>Grade</th>
<th>Date notified to WHO</th>
<th>Start of reporting period</th>
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<th>Total cases</th>
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<th>Deaths</th>
<th>CFR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nigeria</td>
<td>Cholera</td>
<td>Ungraded</td>
<td>19-Jun-19</td>
<td>15-May-19</td>
<td>26-Nov-19</td>
<td>836</td>
<td>200</td>
<td>4</td>
<td>0.50%</td>
</tr>
<tr>
<td>Nigeria</td>
<td>Lassa fever</td>
<td>Ungraded</td>
<td>25-Sep-17</td>
<td>1-Jan-19</td>
<td>30-Sep-19</td>
<td>55 476</td>
<td>2 150</td>
<td>275</td>
<td>0.50%</td>
</tr>
<tr>
<td>Nigeria</td>
<td>Poliomyelitis (cVDPV2)</td>
<td>Grade 2</td>
<td>1-Jun-18</td>
<td>1-Jan-18</td>
<td>27-Nov-19</td>
<td>52</td>
<td>52</td>
<td>0</td>
<td>0.00%</td>
</tr>
<tr>
<td>Nigeria</td>
<td>Yellow fever</td>
<td>Ungraded</td>
<td>14-Sep-17</td>
<td>1-Jan-19</td>
<td>31-Oct-19</td>
<td>3 620</td>
<td>72</td>
<td>150</td>
<td>4.10%</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>27-Nov-19</td>
<td>52</td>
<td>52</td>
<td>0</td>
<td>0.00%</td>
</tr>
<tr>
<td>Nigeria</td>
<td>Measles</td>
<td>Ungraded</td>
<td>19-May-18</td>
<td>1-Jan-19</td>
<td>30-Sep-19</td>
<td>55 476</td>
<td>2 150</td>
<td>275</td>
<td>0.50%</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>27-Nov-19</td>
<td>52</td>
<td>52</td>
<td>0</td>
<td>0.00%</td>
</tr>
<tr>
<td>Nigeria</td>
<td>Hepatitis E</td>
<td>Ungraded</td>
<td>3-Jan-18</td>
<td>3-Jan-18</td>
<td>17-Nov-19</td>
<td>118</td>
<td>41</td>
<td>2</td>
<td>1.70%</td>
</tr>
<tr>
<td>Nigeria</td>
<td>Measles</td>
<td>Ungraded</td>
<td>24-Nov-18</td>
<td>1-Jan-19</td>
<td>24-Nov-19</td>
<td>3 963</td>
<td>169</td>
<td>23</td>
<td>0.60%</td>
</tr>
<tr>
<td>Togo</td>
<td>Poliomyelitis (cVDPV2)</td>
<td>Grade 2</td>
<td>18-Oct-19</td>
<td>13-Sep-19</td>
<td>27-Nov-19</td>
<td>3</td>
<td>3</td>
<td>0</td>
<td>0.00%</td>
</tr>
</tbody>
</table>
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 (28.5%) and Burundi (3.3%). Most are women within the age group 18 - 59 years.

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<th>Deaths</th>
<th>CFR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Uganda</td>
<td>Humanitarian crisis - refugee</td>
<td>Ungraded</td>
<td>20-Jul-17</td>
<td>n/a</td>
<td>31-Oct-19</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Zambia</td>
<td>Poliomyelitis (cVDPV2)</td>
<td>Grade 2</td>
<td>17-Oct-19</td>
<td>16-Jul-19</td>
<td>27-Nov-19</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0.00%</td>
</tr>
</tbody>
</table>

No new case of cVDPV2 was reported this week. One case of circulating vaccine-derived poliovirus type 2 (cVDPV2) has been reported so far this year from Chiengi in Luapula province. The onset of paralysis was 16 July 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/erf/en/](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.
Health Emergency Information and Risk Assessment

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