WEEKLY BULLETIN ON OUTBREAKS AND OTHER EMERGENCIES

Week 43: 21 - 27 October 2019
Data as reported by: 17:00; 27 October 2019

0 New events
68 Ongoing events
57 Outbreaks
11 Humanitarian crises

Legend

- Measles
- Mony铍ox
- Lassa fever
- Cholera
- cVDPV2
- Anthrax
- Malaria
- Measles
- Rubella
- Cases
- Deaths

Humanitarian crisis
Hepatitis E
Yellow fever
Dengue fever
Ebola virus disease
Chikungunya
Leishmaniasis
Plague
Crimean-Congo haemorrhagic fever
Countries reported in the document
Non WHO African Region
WHO Member States with no reported events

Graded events †

Grade 3 events
3

Grade 2 events
15

Grade 1 events
2

Protracted 3 events
2

Protracted 2 events
2

Protracted 1 events
2

Ungraded events
42
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:

- Humanitarian crisis in Democratic Republic of the Congo
- Malaria outbreak in Burundi
- Humanitarian crisis in South Sudan
- 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:**

- While humanitarian access in South Sudan is improving, more than 6 million people are classified as in crisis or worse for acute food insecurity. There is therefore an urgency to scale up the response to this in particular to provide case management for acute malnutrition alongside interventions that will have a longer-term impact to improve the livelihood of affected populations.

- In Burundi more than 7 million people have now been affected by malaria this year, with nearly 140 000 cases in the last week. To address this, additional resources need to be mobilised to scale up the current response strategies. Community acceptance of key vector control activities such as bed net distribution, indoor insecticide spraying and removal of potential breeding sites will be key to see the incidence decrease.
Health Emergency Information and Risk Assessment

Specific cholera response activities are continuing in affected health zones, with the WHO, with the support of UN Agencies and NGO partners on behalf of the Health Emergency Information and Risk Assessment. The plague response is ongoing with sensitization of the population and supply of two plague sample collection kits by MSF and Malteser International. Independent evaluation of the cVDPV2 outbreaks was undertaken from 16 September to 7 October 2019.

Population movements, both through returns and displacements, characterize the crisis. In Ituri Province, a total of 5 080 people has returned to the Linga area since the beginning of September 2019, with internally displaced persons (IDPs) returning to Mambanga, Jina and Risasi, Iga Barrière, as well as to Kunda, Tondabo and Babukela, Bunia. Clashes in the Bwito chiefdom in Rutshuru territory in North Kivu in early October 2019 resulted in displacement of around 6 500 people to Mweso and Muhongosi, Masisi territory. A total of 4 020 IDPs have been reported in Kisu, fleeing clashes between the FARDC and armed groups. In South Kivu, the deterioration of the security situation in the highlands of Minembwe and Itombwe resulted in displacement of 45 000 people, and Médicines Sans Frontières (MSF)-Spain has pulled out of Itombwe Health Zone. Tanganyika Province is still experiencing an unpredictable and volatile security situation, with five of the 264 health areas in the province non-functional as a result of inter-ethnic violence.

Since the beginning of 2019, there have been 22 314 suspected cholera cases across the country, with 390 deaths (case fatality ratio 1.7%) notified in 159 health zones in 21 provinces. During week 40 (week ending 5 October 2019) there were 714 cases reported in 59 health zones in 11 provinces. Four provinces (North Kivu, South Kivu, Tanganyika and Haut Lomami) reported 91.5% (653/714) of suspected cases. There is a 12.2% increase in the number of suspected cases compared with week 39. Endemic provinces reported 93% of this week’s cases. The hot spots are Haut-Lomami (173 cases), South Kivu (211 cases), North Kivu (127 cases) and Tanganyika (142 cases).

From January 2019 to 6 October 2019 there have been 209 211 cases of measles, with 4 149 deaths (case fatality ratio 2.0%). During week 40 a total of 4 606 suspected cases were reported, including 76 deaths, in 242 health zones across the country, with 390 deaths (case fatality ratio 1.7%) notified in 159 health zones. All 26 provinces are affected by the outbreak, while 217 out of 519 health zones have laboratory confirmed outbreaks. The five provinces with the most cases in week 40 were Kwilu (745), Kasai Central (533), South Kivu (503) and Ecuador (442). The case fatality ratio is highest in Sankuru (10.1%), followed by Bas-Uele (7.7%), Haut Lomami (3.8%) and Kasai Central (3.6%).

The main causes of morbidity during week 40 were malaria (276 038 cases), acute respiratory infections (93 036 cases) and typhoid fever (22 238 cases). Since the beginning of 2019 there have been over 14 million suspected and confirmed malaria cases, with 14 717 deaths, an 85% increase over the same period in 2018. Other outbreaks include vaccine-derived polioviruses, monkey pox, bubonic plague, rabies and the ongoing Ebola virus disease outbreak.

**PUBLIC HEALTH ACTIONS**

- Responses to the humanitarian needs of displaced people, both IDPs and returnees, include educational interventions, health interventions and WASH activities, as well as emergency assistance to survivors of gender-based violence.
- WHO, with the support of UN Agencies and NGO partners on behalf of the national government, is updating mapping of IDP sites in Ituri Province; supervising health centres in IDP areas in Bunia as well as carrying out active case search for epidemic-prone diseases; and is strengthening water, sanitation and hygiene interventions along with partners in the same area.

**SITUATION INTERPRETATION**

This complex and long-standing humanitarian crisis continues, with continuing armed insurgency and inter-communal disputes, resulting in regular population displacement. Access to humanitarian aid is frequently hampered by insecurity. The ongoing outbreaks of Ebola virus disease and the massive measles outbreak further complicate the situation. Local authorities and partners are providing robust interventions where they can but require more commitment from donor agencies to ensure the necessary technical and financial support. All actors need to work together to alleviate this crisis.
**EVENT DESCRIPTION**

The outbreak of malaria in Burundi is ongoing, with a persistent high incidence of cases across the country. Since our last report on 11 August 2019 (Weekly bulletin 32), more than 1,500,856 new cases with 836 deaths have been reported. In week 42 (week ending 20 October 2019), 136,047 new malaria cases, including 36 deaths, were reported across the country. Compared to the same period in 2018, this represents a 64.6% increase in the number of cases and 13% increase in number of deaths. Kirundo health district reported more than 7,000 cases followed by Buhiga, Buye, Kiremba, Muyinga, Giteranyi, Vumbi and Kinyinya health districts with more than 5,000 each.

From 1 January to 20 October 2019, a cumulative total of 7,233,138 malaria cases with 2,691 deaths (case fatality ratio 0.03%) have been reported across the country. A total of 23 (49%) out of the 47 health districts of Burundi have surpassed the epidemic threshold, while ten (21.4%) have reached the alert threshold. The eastern region of the country is more affected with a total of 14 districts impacted, namely Butezi, Cankuzo, Gashoho, Gihofi, Gitega, Kibuye, Kinyinya, Kirundo, Mukenke, Murore, Mutaho, Nyabikere, Ruyigi and Busoni health districts reporting a malaria prevalence of more than 90% among the tested patients since the beginning of the outbreak.

Malaria is endemic in most parts of Burundi with an increase in cases usually observed from April to May and from November to December. However, in 2019 the usual decrease observed after May has not been seen. The last malaria epidemic in Burundi was recorded in 2017. It affected all districts of the country and resulted in 6,218,058 cases and 2,752 deaths (case fatality ratio 0.04%) being recorded from January to October 2017. There was no major malaria outbreak reported in 2018. According to investigations by the Ministry of Public Health and AIDS and supported by WHO, the drivers of the 2019 malaria outbreak include climate change, the permanent presence of breeding sites, the extension of rice cultivation, the change in vector behaviour, the low coverage of prevention interventions, and vulnerability factors within the population. Additionally, there is probably a decrease in the effectiveness of treatment, which is still under investigation.

**PUBLIC HEALTH ACTIONS**

- Malaria vector control with indoor residual sprays campaign preparation in 4 health districts (Kiremba, Buye, Gashoho, Muyinga) is ongoing through the pre-positioning of materials, cascade trainings and social mobilization. The campaign will take place from 22 October to 7 November 2019, with logistical support from the World Fund and technical support from WHO and USAID.

- Preparations for a national long-lasting insecticidal nets (LLIN) distribution campaign, scheduled for 9 to 13 December 2019 are ongoing, in particular through the prepositioning of LLINs in regional warehouses, cascade trainings and social mobilization.

- Communication campaigns, which include awareness raising messages, continue to be conveyed through various channels, including churches, media, awareness workshops and community health workers.

- The government of Burundi is in the process of ordering new malaria medicines (artemether-lumefantrine to replace the artemether-lumefantrine (ASAQ)) and a clinical guideline for mobile clinics is under development.

- WHO deployed a team of two experts to Burundi (1 epidemiologist and 1 case management specialist) on 17 September 2019 to support the Ministry of Public Health and fighting AIDS on outbreak investigations in four districts, namely Mpanda, Kinyinya, Muyinga, and Mutaho districts.

**SITUATION INTERPRETATION**

Burundi continues to experience a high malaria burden with a high proportion of districts reaching the epidemic threshold and an increasing number of districts in alert phase since May 2019. The number of deaths recorded remains a concern with an average of 60 deaths reported every week in the year 2019. A multisectoral approach is needed to refine the current response strategy putting a special emphasis on the implementation and strengthening of prevention activities such as LLIN distribution and indoor residual spraying campaigns in target district, as well as community mobilization and involvement in the fight against malaria (including appropriate maintenance of the LLINs, environmental sanitation measures, appropriate hygiene and vector control).

The national authorities, local and international partners need to mobilise additional funds and resources in order to reinforce and sustain control interventions.
EVENT DESCRIPTION

The protracted humanitarian crisis in South Sudan remains critical as challenges with food insecurity, communicable disease outbreaks and population displacements continue despite the improved security situation observed recently in the country.

The food insecurity situation in South Sudan remains critical with an estimated 6 300 000 people (54% of the population) classified in crisis (Integrated Food Security Phase classification (IPC) Phase 3) or worse acute food insecurity according to the IPC analysis. This includes 1.7 million people faced with emergency acute food insecurity (Phase 4), and over 10 000 facing catastrophic conditions (Phase 5). The majority of people estimated to be in crisis or worse acute food insecurity reside in the former states of Jonglei and Upper Nile with 1 250 000 and 845 000 people respectively. A total of 28 counties are classified in emergency acute food insecurity as of August 2019 and those facing catastrophic conditions are in Yirol East of the former Lakes State. The food insecurity has consequently led to an estimated 1 300 000 children being acutely malnourished.

Flooding continues to be experienced in many parts of the country affecting an estimated 234 800 people mainly in the former states of Eastern Equatorial, Jonglei, Northern Bahr el Ghazal, Unity and Warrap. Jonglei state is the most affected accounting for 56% of affected persons.

In week 39 (week ending 28 September 2019), the leading cause of morbidity and mortality was malaria, accounting for 68% of all reported cases and 35% of reported deaths. Eleven counties reported cases, surpassing the set epidemic thresholds for malaria, namely Juba hub (Juba), Kwajok hub (Abuye) Wau hub (Wau), Bor hub (Twich East and Bor), Bentiu hub (Rubkona), Torit hub (Budi and Kajo-Keji South), Rumbek (Rumbek Centre) and Malakal hub (Maban, Renk). Completeness and timeliness for Early Warning, Alert and Response Network (EWARN) reporting from internally displaced persons (IDP) health facilities were both 57%. Ninety-three indicator-based alerts were generated from weekly reports, of which 78% were verified, with none requiring an immediate public health response.

A measles outbreak is ongoing in several areas of the country. A total of 3 500 cases with 23 associated deaths (case fatality ratio 0.7%) have been reported from 16 counties (Abuye, Mayom, Melut, Aweil South, Aweil East, Tonj North, Juba, Wau, Aweil 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) in 2019.

PUBLIC HEALTH ACTIONS

- Humanitarian organizations are currently responding to the increased needs of displaced people, returnees and host communities in many parts of the country.

- An assessment was conducted in Kajo-Keji and surrounding areas following the increased humanitarian needs of recently displaced persons. The major findings included poor health service provision with a large number of non-functional health facilities and a lack of basic medical supplies including antimalarial therapy.

A reactive measles vaccination campaign led by State Ministry of Health (SMoH) and the WHO emergency mobile medical team is ongoing in Labarab and Maruwa Bomas in Pibor County.

SMoH with support from WHO conducted a training of health workers on the inpatient Management of Severe Acute Malnutrition (SAM) with medical complications in Renk County and Boma in Pibor County.

A consultative meeting with partners and MOH, with support from WHO, was conducted to develop the Health Systems Stabilization and Recovery Plan (HSSRP) for the country.

SITUATION INTERPRETATION

The food insecurity situation in South Sudan is grave, given the large number of people who remain in critical or worse acute food insecurity, with about 10 000 in the most critical level of famine. This is further complicated by large scale displacement due to floods, with many of the displaced also affected by food insecurity. With the decrease in incidents of armed conflict in the country, access to those in need of humanitarian support has improved in recent weeks. The government and partners should therefore scale up humanitarian response to affected areas, mainly with provision of immediate case management for acute malnutrition in addition to treatment of complications, alongside interventions that will have a long-term impact to improve the livelihood of affected populations.
EVENT DESCRIPTION

The Ebola virus disease (EVD) outbreak in North Kivu, South Kivu and Ituri provinces in Democratic Republic of the Congo continues, with nine health zones and 20 health areas reporting confirmed cases in the past 21 days (6 to 26 October 2019). Since our last report on 20 October 2019 (Weekly Bulletin 42), there have been 23 new confirmed cases and 11 new deaths. The principle hot spots of the outbreak in the past 21 days are Mandima (54%; n=30 cases) and Mabalako (16%; n=9 cases). Five health zones, Mandima, Butembo, Katunguta, Mabalako and Mambasa have reported new confirmed cases in the past seven days.

As of 26 October 2019, a total of 3,263 EVD cases, including 3,146 confirmed and 117 probable cases, have been reported. To date, confirmed cases have been reported from 29 health zones: Arirara (1), Bunia (4), Komanda (56), Lotha (6), Mambasa (77), Mandima (333), Nyakunde (2), Rwamara (8) and Tchomia (2) in Ituri Province; Alimbongo (5), Beni (679), Biéna (18), Butembo (285), Goma (1), Katunguta (135), Katwa (631), Kayna (28), Kyondo (25), Lubero (31), Mabalako (382), Manguerejia (18), Masereka (50), Musienene (84), Muvunga (32), Nyanzongo (3), Oicha (62), Pinga (1) and Vuhovi (103) in North Kivu Province and Mwenga (6) in South Kivu Province.

As of 27 October 2019, a total of 2,180 deaths were recorded, including 2,060 among confirmed cases, resulting in a case fatality rate among confirmed cases of 66% (2,063/3,146). The cumulative number of health workers is 163, which is 5% of the confirmed and probable cases to date.

Contact tracing is ongoing in ten health zones. A total of 4,437 contacts are under follow-up as of 26 October 2019, of which 3,572 have been seen in the past 24 hours, comprising 81% of the contacts. Alerts in the affected provinces continue to be raised and investigated. Of 3,182 alerts processed (of which 3,081 were new) in reporting health zones on 26 October 2019, 3,041 were investigated and 357 (12%) were validated as suspected cases.

On 17 July 2019, the WHO Director-General, Dr Tedros Ghebreyesus declared the EVD outbreak in Democratic Republic of the Congo a Public Health Emergency of International Concern (PHEIC), following a meeting of the International Health Regulations Committee for EVD. On 18 October, the Director-General reconvened the EC to review progress in the implementation of the Temporary Recommendations issued by the Director-General on 17 July 2019 and it was the view of the EC that this event still constitutes a PHEIC.

PUBLIC HEALTH ACTIONS

- Surveillance activities continue, including case investigations, active case finding in health facilities and communities, and identification and listing of contacts around the latest confirmed cases. Cross-border collaboration continues, particularly with Uganda and Rwanda.

- As of 26 October 2019, a cumulative total of 243,322 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 109 million screenings to date. A total of 108,112 (96%) PoE/PoC transmitted reports as of 26 October 2019.

- There are continued community reintegration and psychosocial activities for patients discharged from ETCs, along with psychoeducation sessions to strengthen community engagement and collaboration in the response.

SITUATION INTERPRETATION

Improvements in response indicators in the past week are encouraging and testament to the resilience of response teams. However, substantive rates of transmission remain in Mandima Health Zone, with smaller clusters elsewhere, which require a concerted effort from all response teams and international partners to control. It is critical that all areas of the response remain effective, engaged and fully resourced, with response activities continuing to be scaled and adapted to the evolving local context.
Major issues and challenges

Access to those in need of humanitarian support has improved in recent weeks in South Sudan. However, the crisis remains concerning with more than 6 million people classified as in crisis or worse for acute food insecurity. Additionally, flooding is affecting nearly a quarter of a million people, including those suffering from food shortages.

More than 7 million people have now been affected by the malaria outbreak in Burundi since the start of the year, with a 65% increase in number of cases in the last week compared to the same period of 2018. The high number of deaths is of particular concern.

Proposed actions

In South Sudan, there is an urgent need therefore to provide case management for acute malnutrition alongside interventions that will have a longer term impact to improve the livelihood of affected populations.

In Burundi there is a need to mobilise additional resources to scale up the current response strategy. A focus on vector control activities such as bed net distribution, indoor insecticide spraying and removal of potential breeding sites needs urgent action. Community engagement in these activities will be key to their success.
All events currently being monitored by WHO AFRO

<table>
<thead>
<tr>
<th>Country</th>
<th>Event</th>
<th>Grade</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>Angola</td>
<td>Measles</td>
<td>Ungraded</td>
<td>4-May-19</td>
<td>1-Jan-19</td>
<td>3,127</td>
<td>85</td>
<td>64</td>
<td>2.00%</td>
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<tr>
<td>Benin</td>
<td>Cholera</td>
<td>Ungraded</td>
<td>5-Jul-19</td>
<td>3-Jul-19</td>
<td>45</td>
<td>19</td>
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<td>Benin</td>
<td>Dengue fever</td>
<td>G2</td>
<td>8-Aug-9</td>
<td>8-Aug-9</td>
<td>2</td>
<td>2</td>
<td>0</td>
<td>0.00%</td>
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<tr>
<td>Burkina Faso</td>
<td>Humanitarian crisis</td>
<td>G2</td>
<td>1-Jan-19</td>
<td>1-Jan-19</td>
<td>-</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>433</td>
<td>32</td>
<td>2</td>
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<tr>
<td>Burundi</td>
<td>Malaria</td>
<td>G2</td>
<td>1-Jan-19</td>
<td>20-Oct-19</td>
<td>7,233,138</td>
<td>2,691</td>
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<td>Cameroon</td>
<td>Humanitarian crisis (Far North, North, Adamawa &amp; East)</td>
<td>Protracted 2</td>
<td>31-Dec-13</td>
<td>27-Jun-17</td>
<td>-</td>
<td>-</td>
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<tr>
<td>Cameroon</td>
<td>Humanitarian crisis (NW &amp; SW)</td>
<td>G2</td>
<td>1-Oct-16</td>
<td>27-Jun-18</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
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<tr>
<td>Cameroon</td>
<td>Cholera</td>
<td>Ungraded</td>
<td>1-Mar-19</td>
<td>1-Mar-19</td>
<td>667</td>
<td>98</td>
<td>32</td>
<td>4.80%</td>
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</table>

In week 26 (week ending 30 June 2019), nine suspected measles cases were reported. From week 1 to 26 of 2019, a cumulative total of 3,127 suspected cases including 64 deaths were reported from 18 provinces across Angola. Lunda Sul and Moxico provinces have reported 73% and 17% of cases respectively. A total of 85 laboratory-confirmed cases have been reported since week 1 of 2019.

From 3 July to 26 September 2019, a total of 45 suspected cholera cases with zero deaths have been reported from Atlantique and Littoral Departments of Benin. Of the 45 suspected cases, 19 cultured *Vibrio cholerae* serotype O1 at the National Public Health Laboratory. Confirmed cases are from four communes, namely, Zè (3), Sô-Ava (2) and Abomey-Calavi (2) in Atlantique Department and Cotonou (12) in Littoral Department.

Between 10 May and 25 August 2019, a total of 13 suspected cases of dengue fever, including two deaths, were reported from Atlantique, Littoral, Ouémé and Couffo Departments. Cumulatively, nine cases from Atlantique Department (3 cases), Littoral Department (4 cases) and Ouémé Department (2 cases) were confirmed by serology and PCR at the Benin National VHF Laboratory. The last dengue fever case was confirmed on 22 August 2019 in Littoral Department. Two deaths, one of which occurred in a dengue haemorrhagic fever case, were notified (confirmed cases CFR 22%).

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, Boulé du Mouhon, 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 7 September 2019, a total of 433 cases with two deaths (CFR 0.5%) were reported from Bujumbura Mairie (297) and Cibitoke health district (136). The three health districts of Bujumbura Mairie have been affected with 40% (118) of cases reported from Bujumbura North health district. Of 46 samples tested, 32 (69.5%) were positive for *Vibrio cholerae* Ogawa. The most affected age-group is 19 to 50 years representing 52% (154) in Bujumbura Mairie and 42% (57) in Cibitoke health district. Males account for 55% (162) and 55% (52) of cases admitted in Prince Regent Charles hospital and Rugombo CTC respectively, and females account for 67% (28) of cases admitted in Ndana CTC.

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. Since the beginning of September 2019, there have been 23 attacks, including pure criminal activity, with 22 deaths and 17 injuries reported. Population displacement is ongoing, with spontaneous arrival of Nigerian refugees 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 431,000 and the population in need of humanitarian assistance is estimated at 594,000. 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 improving in the Far North and Far North region. As of 10 October 2019, 667 cases and 32 deaths were recorded (CFR 4.8%) in North and Far North region. To date, 9 out of 15 health districts are affected in the North (Bibemü, Fquist, Garoua I, Garoua II, Gashiga, Golombe, Nong, Pitao, Tchollire) and 6 out of 30 health districts (Kalé, Kar Hay, Moutouroua, Guiddigu, Maroua 1 et Maroua 2) in the Far North.
<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>11-Aug-19</td>
<td>1,170</td>
<td>269</td>
<td>6</td>
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<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>
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<tr>
<td>Central African Republic</td>
<td>Humanitarian crisis</td>
<td>Protracted 2</td>
<td>23-May-19</td>
<td>11-Dec-13</td>
<td>22-Sep-19</td>
<td>-</td>
<td>-</td>
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<td>-</td>
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<tr>
<td>Central African Republic</td>
<td>Hepatitis E</td>
<td>Ungraded</td>
<td>2-Oct-18</td>
<td>10-Sep-18</td>
<td>29-Sep-19</td>
<td>192</td>
<td>147</td>
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<tr>
<td>Central African Republic</td>
<td>Measles</td>
<td>Ungraded</td>
<td>15-Mar-19</td>
<td>11-Feb-19</td>
<td>22-Sep-19</td>
<td>1,841</td>
<td>88</td>
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<tr>
<td>Chad</td>
<td>Measles</td>
<td>Ungraded</td>
<td>24-May-19</td>
<td>24-May-19</td>
<td>23-Oct-19</td>
<td>10</td>
<td>10</td>
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<tr>
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<td>Monkeypox</td>
<td>Ungraded</td>
<td>18-Oct-19</td>
<td>9-Sep-19</td>
<td>23-Oct-19</td>
<td>1</td>
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<tr>
<td>Comoros</td>
<td>Measles</td>
<td>Ungraded</td>
<td>26-May-19</td>
<td>20-May-19</td>
<td>11-Aug-19</td>
<td>132</td>
<td>56</td>
<td>0</td>
<td>0.00%</td>
</tr>
<tr>
<td>Congo</td>
<td>Chikungunya</td>
<td>G1</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>
<tr>
<td>Côte d'Ivoire</td>
<td>Dengue fever</td>
<td>Ungraded</td>
<td>15-Feb-19</td>
<td>1-Jan-19</td>
<td>24-Sep-19</td>
<td>3,201</td>
<td>281</td>
<td>2</td>
<td>0.10%</td>
</tr>
</tbody>
</table>

A measles outbreak is ongoing in Cameroon. Since the beginning of 2019, a total of 1,170 suspected cases have been reported. Of these, 269 were confirmed as IgM-positive. The outbreak is currently affecting 33 districts, namely, Kousseri, Mada, Gouley, Makary, Kolotata, Koza, Ngaoundéré rural, Bangué, Guider, Fiquel, Ngong, Mora, Maroua 3, Vélé, Pitou, Maroua 1, Bourha, Touboro, Mogodé, Bibémè, Garoua 1, Garoua 2, Lagdo, Tcholliri, Guidiguiss, Moutouroua, Mokolo, Cité verte, Djouroupol, Nkolondong, Limbé, Garoua Boulai, Ngaoundéré Urbain. A 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.

In week 38 (week ending 22 September 2019), 36 new suspected measles cases were reported from Kaga Bandoro sub-prefecture (28 cases) and Bafang health district (8 cases). This is an increase in the reported number of cases since week 37 (week ending 15 September 2019). Since January 2019, a total of 1,841 measles cases and 14 deaths have been reported in four districts: Batalango, Yakaga, Nana-Gribizi and Paoua. The outbreaks have been controlled in Paoua and Yakanga.

In week 41 (week ending 13 October 2019), 166 suspected cases were reported. 16 districts were in the epidemic phase in week 41. Since the beginning of the year, a total of 25,077 suspected cases and 242 deaths (CFR 1.0%) have been reported with Am Timan, N’Djamena East, N’Djamena South, Bongor, Moundou, Bousso and N’Djamena Centre districts all exceeding 1,000 suspected cases. Among the 1,716 cases investigated, 178 were IgM-positive, 81% were not vaccinated, and 47% were aged between 1 and 4 years old.

As of 1 September 2019, a total of 134 suspected cases with zero deaths have been reported from health facilities in Grande Comore Island. Of these, 57 cases have been confirmed (38 laboratory-confirmed and 19 by epidemiological link). IgM-positive cases were reported in five districts of Grande Comore, namely, Moroni (27), Mutsamuni (6), Mbeni (3), Ochili (1) and Mitsoudjé (1). The 19 epi-linked cases are from Moroni district.

There is a continuing declining trend in the weekly incidence of chikungunya in all affected areas. In week 38 (from 16 to 22 September), a total of 56 chikungunya new cases were reported across the country and the majority of them was from Plateaux departments (49 cases). 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.

There is a continuing declining trend in the weekly incidence of chikungunya in all affected areas. In week 38 (from 16 to 22 September), a total of 56 chikungunya new cases were reported across the country and the majority of them was from Plateaux departments (49 cases). 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>
<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>Democratic Republic of Congo</td>
<td>Humanitarian crisis</td>
<td>G3</td>
<td>20-Dec-16</td>
<td>17-Apr-17</td>
<td>6-Oct-19</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Detailed update given above.

| Democratic Republic of Congo | Chikungunya            | Ungraded | 8-Feb-19 | 30-Sep-18 | 12-May-19 | 1,181 | 426 | 0 | 0.00% |

From week 49 of 2018 to week 19 of 2019 (week ending 12 May 2019), a total of 1,181 suspected cases of chikungunya were reported from 25 health zones of Kinshasa and 8 health zones of Kongo provinces. Around 65% of cases have been reported from Kinshasa, Mont Gahula, 1, Mont Gahula 2, Massa and Matat health zones. A total of 778 samples collected among the 1,181 cases were tested at the National Institute of Biomedical Research in Kinshasa. Of the 778 samples tested, 426 (54.7%) were confirmed by RT-PCR. Females are more affected than males with a male to female sex ratio of 0.5.

| Democratic Republic of Congo | Cholera                | G3    | 16-Jan-15           | 1-Jan-19                  | 6-Oct-19                | 22,314     | -   | 390 | 1.70% |

During week 40 (week ending 6 October 2019), a total of 714 suspected cases of cholera and 5 deaths were notified from 59 health zones in 11 provinces. Between week 1 and week 40 of 2019, a total of 22,314 cases including 570 deaths (CFR 1.7%) have been notified from 21 out of 26 provinces. Compared to the same period in 2018 (week 1-40), there is a decrease in the number of cases and deaths.


Detailed update given above.

| Democratic Republic of Congo | Measles                | G2    | 10-Jan-17           | 1-Jan-19                  | 6-Oct-19                | 209,211    | 6,276 | 4,189 | -     |

In week 40 (week ending 6 October 2019), 4,606 measles cases including 76 deaths were reported from 26 of the 26 provinces of the country. In total, 217 (41.8%) of the 519 health zones across the country have reported a confirmed measles outbreak. Since the beginning of 2019, 203,211 measles cases including 4,189 deaths (CFR 2.0%) have been recorded. Overall, 51% of cases reported in 2019 have been notified from Tsho, Kasai, Haut Lomami, Kwilu and South Kivu provinces. The case fatality rate is higher in the provinces of Sankuru (10.1%), Bas-Uele (7.7%), Haut Lomami (3.8%) and central Kasai (3.6%).

| Democratic Republic of Congo | Monkeypox              | Ungraded | n/a              | 1-Jan-19                  | 13-Sep-19               | 3,969      | -   | 68   | 1.70% |

Since the beginning of 2019, a cumulative total of 3,969 monkeypox cases, including 68 deaths (CFR 1.8%) were reported from 111 health zones in 16 provinces. In week 35 (week ending September 2018), 113 cases and four deaths were reported nationally and majority of cases were reported from the Kole Health zone in Sankuru province.

| Democratic Republic of Congo | Plague                 | Ungraded | n/a              | 12-Mar-15                 | 28-Feb-19               | 31         | -   | 8    | 25.80% |

Since the beginning of the year, a total of 31 cases of bubonic plague including eight deaths have been reported in the province of Ituri. The first five cases were reported during week 10 in the Aungba endemic health zone. Two other cases were reported during week 13 (Aungba 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) were reported from the Aru health zone in Ituri Province.

| Democratic Republic of Congo | Poliomyelitis (cVDPV2) | G2     | 15-Feb-18         | 1-Jan-18                  | 25-Oct-19               | 57         | 57   | 0    | 0.00% |

No new case of cVDPV2 was reported this week. There were 37 cVDPV2 cases in 2019 and 20 in 2018.

<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>Ethiopia</td>
<td>Humanitarian crisis</td>
<td>Ungraded</td>
<td>15-Nov-15</td>
<td>n/a</td>
<td>30-Sep-19</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

The complex and protracted humanitarian emergency in Ethiopia continues, complicated by incidents of inter-communal clashes and adverse climatic conditions. Flooding was reported in Dolo Ado woreda of Liban zone, affecting 9374 households in 12 kebeles, leading to acute displacement of people in addition to destruction of livestock, crops and property. 1,683 suspected cases of cholera have been reported since April 2019. The outbreak is active in Oromia, Somali, SNNP, Amhara and Afar regions.

| Ethiopia                       | Chikungunya            | Ungraded | 25-Jul-19         | 27-May-19                 | 20-Oct-19               | 51,957      | 16   | 0    | 0.00% |

Chikungunya cases have reported from Ethiopia since week 31 (week ending 30 July 2019). In week 42 (week ending 20 October 2019), 237 new suspected cases were reported from nine urban kebeles in Dire Dawa City Administration. There has been a declining trend observed since the peak of the outbreak in week 36 (week ending 8 September 2019).

| Ethiopia                       | Cholera                | Ungraded | 14-May-19         | 12-May-19                 | 20-Oct-19               | 1,747       | 54   | 11   | 0.60% |

In week 42 (week ending 20 October 2019), 99 new suspected cases were reported in Oromia. The number of suspected cases being reported has been on the decline over the last two weeks. As of 13 October 2019, a total of 1,747 suspected cases including 11 deaths have been reported from eight regions with Oromia (718 cases), Amhara (202 cases), Somali (168) and Addis Ababa city (157 cases) reporting the majority of cases. A total of 54 cases have been laboratory confirmed.

| Ethiopia                       | Measles                | Ungraded | 14-Jan-17         | 1-Jan-19                  | 20-Oct-19               | 8,514       | 59   | -    | -     |

As of week 42 (week ending 20 October 2019), the measles outbreak is still ongoing with a total of 8,541 suspected measles cases reported from Oromia (4,923), Somali (2,340), Amhara (703) and Afar (548) regions. Children aged less than five years are the most affected accounting for 50.4% of the total cases followed by age group 15-44 years (25.3%). Seventy-three percent of the reported measles cases were not previously vaccinated.
Health Emergency Information and Risk Assessment

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### 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>
</tr>
</thead>
<tbody>
<tr>
<td>Ethiopia</td>
<td>Poliomyelitis (cVDPV2)</td>
<td>Ungraded</td>
<td>24-Jun-19</td>
<td>20-May-19</td>
<td>23-Oct-19</td>
<td>3</td>
<td>3</td>
<td>0</td>
<td>0.00%</td>
</tr>
</tbody>
</table>

One case of circulating vaccine-derived poliovirus type 2 (cVDPV2) was reported from Warder in the Somali province of Ethiopia. The onset of paralysis was 8 August 2019. There are three cVDPV2 cases reported in 2019, all linked to the outbreak in neighbouring Somalia.

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### Guinea

<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>Guinea</td>
<td>Measles</td>
<td>Ungraded</td>
<td>9-May-18</td>
<td>1-Jan-19</td>
<td>11-Aug-19</td>
<td>4 573</td>
<td>969</td>
<td>13</td>
<td>0.30%</td>
</tr>
</tbody>
</table>

During week 32 (week ending on 11 August 2019), 63 suspected cases of measles were reported. From week 1 to 32 (1 January – 11 August 2019), a total of 4 573 suspected cases including 13 deaths (CFR 0.3%) have been reported. Of the 4 573 suspected cases, 1 595 were sampled, of which 969 tested positive for measles by serology. Five localities in three health districts are in the epidemic phase, namely, Tombolia centre, Yimbayah école, and Matoto centre in Matoto Health District, Wanindara in Ratoma Health District and Maneah in Coyah Health District.

---

### Kenya

<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>Kenya</td>
<td>Leishmaniasis</td>
<td>Ungraded</td>
<td>31-Mar-19</td>
<td>1-Jan-19</td>
<td>20-Oct-19</td>
<td>2 756</td>
<td>1 164</td>
<td>34</td>
<td>1.20%</td>
</tr>
</tbody>
</table>

In week 42 (week ending 20 October 2019), 24 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.

---

### Liberia

<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>Liberia</td>
<td>Lassa fever</td>
<td>Ungraded</td>
<td>23-Jan-19</td>
<td>1-Jan-19</td>
<td>20-Oct-19</td>
<td>59</td>
<td>33</td>
<td>11</td>
<td>18.60%</td>
</tr>
</tbody>
</table>

One new confirmed case was reported during week 42 (week ending 20 October 2019). From 1 January - 20 October 2019, a total of 121 suspected cases have been reported across the country. Of samples tested from 95 of the suspected cases at the National Public Health Reference Laboratory of Liberia, 33 were confirmed by RT-PCR and 62 were discarded due to negative test results. The case fatality ratio among confirmed cases is 33% (11/33).

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### Mali

<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>Humanitarian crisis</td>
<td>Protracted</td>
<td>n/a</td>
<td>10-Sep-19</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

The security situation continues to worsen as violence spreads from the north to the more populated central regions of the country. Since the end of August, seasonal rainfall has intensified, causing widespread flooding across large parts of the country. Central and northern Mali have been the most affected areas, particularly northern Segou, Mopti, southern Timbuktu, and Gao.

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### Mozambique

<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>Mozambique</td>
<td>Poliomyelitis (cVDPV2)</td>
<td>G2</td>
<td>7-Dec-18</td>
<td>7-Dec-18</td>
<td>23-Oct-19</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0.00%</td>
</tr>
</tbody>
</table>

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

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### Namibia

<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>Namibia</td>
<td>Crimean-Congo haemorrhagic fever (CCHF)</td>
<td>Ungraded</td>
<td>13-Sep-19</td>
<td>1-Sep-19</td>
<td>19-Sep-19</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0.00%</td>
</tr>
</tbody>
</table>

One confirmed case of CCHF was reported from Outapi District Hospital in Omusati region in Namibia on 13 September 2019. The case-patient is from the Cunene province in Angola and is under care at Outapi hospital in Omusati region, Namibia. She is in a stable condition. A total of 35 contacts including 23 healthcare workers have been identified and are being followed-up.

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### Namibia

<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>Namibia</td>
<td>Hepatitis E</td>
<td>G1</td>
<td>18-Dec-17</td>
<td>8-Sep-17</td>
<td>6-Oct-19</td>
<td>6 527</td>
<td>1 585</td>
<td>55</td>
<td>0.80%</td>
</tr>
</tbody>
</table>

In weeks 39 and 40 (week ending 6 October 2019), 45 cases were reported from nine regions of Namibia with the majority (19 cases) from Khomas region. There was a decrease in the number of cases reported in the last two weeks compared to weeks 37 and 38. As of 6 October 2019, a cumulative total of 1 585 laboratory-confirmed, 4 101 epidemiologically-linked, and 841 suspected have been reported countrywide. A cumulative number of 55 deaths have been reported nationally (CFR 0.8%), of which 23 (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.

---

### Nigeria

<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>Niger</td>
<td>Humanitarian crisis</td>
<td>Protracted</td>
<td>1-Feb-15</td>
<td>1-Feb-15</td>
<td>14-Sep-19</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

The security situation continues to worsen in Niger following Boko Haram attacks in the region. A total of 70 000 people is displaced in Tabileri, 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 Tabileri, 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) Tabileri and Maradi have been particularly badly affected, with attacks on humanitarian vehicles near Tabileri. In Maradi, more than 35 000 refugees from Sokoto, Zamfara and Katsina states have arrived, 70% of whom are under the age of 15 and more than 50% are women.
### Health Emergency Information and Risk Assessment

#### Deaths

<table>
<thead>
<tr>
<th>Event</th>
<th>Date notified</th>
<th>Grade</th>
<th>Start of reporting period</th>
<th>End of reporting period</th>
<th>Total cases</th>
<th>Cases Confirmed</th>
<th>CFR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Measles</td>
<td>10-Mar-19</td>
<td>Ungraded</td>
<td>1-Jan-19</td>
<td>18-Aug-19</td>
<td>9,741</td>
<td>53</td>
<td>0.50%</td>
</tr>
<tr>
<td>Poliomyelitis (cVDPV2)</td>
<td>2-Oct-16</td>
<td>G2</td>
<td>n/a</td>
<td>30-Sep-19</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Yellow fever</td>
<td>24-Mar-15</td>
<td>Ungraded</td>
<td>1-Jan-19</td>
<td>13-Oct-19</td>
<td>745</td>
<td>726</td>
<td>23.20%</td>
</tr>
<tr>
<td>Measles</td>
<td>25-Sep-19</td>
<td>G2</td>
<td>1-Jan-19</td>
<td>23-Oct-19</td>
<td>50</td>
<td>50</td>
<td>0.00%</td>
</tr>
<tr>
<td>Yellow fever</td>
<td>14-Sep-17</td>
<td>Ungraded</td>
<td>1-Jan-19</td>
<td>30-Sep-19</td>
<td>2,781</td>
<td>72</td>
<td>2.90%</td>
</tr>
<tr>
<td>Measles</td>
<td>25-Jun-19</td>
<td>Ungraded</td>
<td>1-Jan-19</td>
<td>2-Jul-19</td>
<td>74</td>
<td>12</td>
<td>5.40%</td>
</tr>
<tr>
<td>Crimean-Congo haemorrhagic fever (CCHF)</td>
<td>13-Sep-19</td>
<td>Ungraded</td>
<td>6-Sep-19</td>
<td>13-Sep-19</td>
<td>1</td>
<td>1</td>
<td>0.00%</td>
</tr>
<tr>
<td>Dengue fever</td>
<td>17-Sep-19</td>
<td>Ungraded</td>
<td>15-Aug-19</td>
<td>13-Sep-19</td>
<td>1</td>
<td>1</td>
<td>0.00%</td>
</tr>
<tr>
<td>Humanitarian crisis</td>
<td>Protracted 3</td>
<td>15-Aug-16</td>
<td>n/a</td>
<td>5-Oct-19</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Hepatitis E</td>
<td>-</td>
<td>Ungraded</td>
<td>3-Jan-18</td>
<td>29-Sep-19</td>
<td>95</td>
<td>60</td>
<td>2.10%</td>
</tr>
</tbody>
</table>

#### Cases

<table>
<thead>
<tr>
<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>Measles</td>
<td>Ungraded</td>
<td>10-May-19</td>
<td>1-Jan-19</td>
<td>18-Aug-19</td>
<td>9,741</td>
<td>53</td>
<td>0.50%</td>
<td></td>
</tr>
<tr>
<td>Poliomyelitis (cVDPV2)</td>
<td>G2</td>
<td>8-Jul-18</td>
<td>8-Jul-18</td>
<td>23-Oct-19</td>
<td>11</td>
<td>11</td>
<td>1</td>
<td>9.10%</td>
</tr>
<tr>
<td>Measles</td>
<td>Ungraded</td>
<td>19-Jun-19</td>
<td>15-May-19</td>
<td>11-Oct-19</td>
<td>787</td>
<td>189</td>
<td>4</td>
<td>0.50%</td>
</tr>
<tr>
<td>Poliomyelitis (cVDPV2)</td>
<td>G2</td>
<td>1-Oct-16</td>
<td>n/a</td>
<td>30-Sep-19</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Lassa fever</td>
<td>Ungraded</td>
<td>24-Mar-15</td>
<td>1-Jan-19</td>
<td>13-Oct-19</td>
<td>745</td>
<td>726</td>
<td>173</td>
<td>23.20%</td>
</tr>
<tr>
<td>Measles</td>
<td>G2</td>
<td>1-Jan-18</td>
<td>1-Jan-18</td>
<td>23-Oct-19</td>
<td>50</td>
<td>50</td>
<td>0</td>
<td>0.00%</td>
</tr>
<tr>
<td>Yellow fever</td>
<td>Ungraded</td>
<td>14-Sep-17</td>
<td>1-Jan-19</td>
<td>30-Sep-19</td>
<td>2,781</td>
<td>72</td>
<td>81</td>
<td>2.90%</td>
</tr>
<tr>
<td>Measles</td>
<td>Ungraded</td>
<td>25-Jun-19</td>
<td>1-Jan-19</td>
<td>2-Jul-19</td>
<td>74</td>
<td>12</td>
<td>4</td>
<td>5.40%</td>
</tr>
<tr>
<td>Measles</td>
<td>Ungraded</td>
<td>13-Sep-19</td>
<td>6-Sep-19</td>
<td>13-Sep-19</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0.00%</td>
</tr>
<tr>
<td>Dengue fever</td>
<td>Ungraded</td>
<td>17-Sep-19</td>
<td>15-Aug-19</td>
<td>13-Sep-19</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0.00%</td>
</tr>
<tr>
<td>Measles</td>
<td>Ungraded</td>
<td>25-Jun-19</td>
<td>1-Jan-19</td>
<td>2-Jul-19</td>
<td>74</td>
<td>12</td>
<td>4</td>
<td>5.40%</td>
</tr>
<tr>
<td>Measles</td>
<td>Ungraded</td>
<td>13-Sep-19</td>
<td>6-Sep-19</td>
<td>13-Sep-19</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0.00%</td>
</tr>
</tbody>
</table>

### Event Description

- **Senegal**
  - Crimean-Congo haemorrhagic fever confirmed by PCR at Institut Pasteur Dakar has been reported from Bokidiawé Site, Matam Region, Northern Senegal on the border with Mauritania.
  - Dengue fever confirmed by PCR at Institut Pasteur Dakar on 13 September 2019.

- **South Sudan**
  - Humanitarian crisis
  - Hepatitis E

- **Nigeria**
  - Measles
  - Poliomyelitis (cVDPV2)
  - Lassa fever
  - Yellow fever
  - Cholera
  - Measles
  - Poliomyelitis (cVDPV2)

- **Senegal**
  - Crimean-Congo haemorrhagic fever confirmed by PCR at Institut Pasteur Dakar from Bokidiawé Site, Matam Region, Northern Senegal on the border with Mauritania.

- **South Sudan**
  - Humanitarian crisis

The current outbreak in Bentiu POC continues. In week 39 (week ending 29 September 2019), two new suspected cases of Hepatitis E were reported. As of reporting date, a total of 63 suspected cases including 56 PCR-confirmed cases and two deaths have been recorded from Bentiu POC and a total of 12 suspected cases including 4 confirmed cases in Lankein. The last cases in Lankein were reported in week 25 (week ending 23 June 2019).
Between 1 January to 30 September 2019, a total of 2 849 suspected cases of measles which 242 laboratory-confirmed and 27 deaths (CFR 1%) have been reported. The outbreak has affected 18 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.

Tanzania, United Republic of

Dengue fever
Ungraded
31-Jan-19
1-Aug-18
20-Oct-19
6 917
6 917
13
0.20%

In week 42 (week ending on 20 October 2019), no new dengue cases were reported. The total confirmed cases reported since the beginning of the outbreak was 6 917 cases including 13 deaths. Since the beginning of the outbreak, 11 Regions have been affected: Arusha, Dar es salaam, Dodoma, Kagera, Kilimanjaro, Lindi, Morogoro, Pwani, Ruvuma, Singida and Tanga.

Togo
Poliomyelitis (cVDPV2)
G2
18-Oct-19
13-Sep-19
23-Oct-19
1
1
0
0.00%

No new case of circulating vaccine-derived poliovirus type 2 (cVDPV2) was reported this week. One case was reported in the past week from Est-Mono in Plateaux province.

The onset of paralysis was 13 September 2019. This is the first cVDPV2 case in the country and is linked to Jigawa outbreak in Nigeria.

Uganda
Humanitarian crisis - refugee
Ungraded
20-Jul-17
n/a
30-Sep-19
- - - -

Between 1 and 30 September 2019, a total of 6 700 new refugee arrivals crossed into Uganda from the Democratic Republic of the Congo (5 044), South Sudan (900) and Burundi (756). Uganda hosted 1 347 360 asylum seekers as of 30 September 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.

Since the beginning of 2019, 1 584 suspected cases reported across the country, of which 529 are laboratory-confirmed, 204 are epi-linked, and 62 are clinically confirmed.

Zambia
Cholera
Ungraded
1-Sep-19
30-Aug-19
30-Aug-19
13
7
0
0.00%

The index case was a 25-year-old pregnant woman from Kambamba village who presented to Nsumbu Rural Health Centre with acute watery and bloody diarrhoea and vomiting on 16th August 2019. Response is being coordinated at provincial and district levels, with activation of the district IMS. On 30th August 2019, a cumulative number of 13 cases have been reported, 7 of which were laboratory confirmed for Vibri cholerae (Inaba sub type). No associated deaths have been reported so far.

Zambia
Poliomyelitis (cVDPV2)
G2
17-Oct-19
16-Jul-19
23-Oct-19
1
1
0
0.00%

No new case of cVDPV2 was reported this week. One case of circulating vaccine-derived poliovirus type 2 (cVDPV2) was reported in the past week from Chiengi in Luapula province. The onset of paralysis was 16 July 2019. This is the first cVDPV2 outbreak in the country.

Closed Events

Burkina Faso
Food poisoning
Ungraded
19-Sep-19
1-Sep-19
19-Sep-19
20
12
60.00%

The Burkina Faso Ministry of Health has been alerted of an unexplained death in a concession in Lapio, a town located in the municipality of Dédougou, province of Sanguiné, West Central Region on 1 September 2019. This case was followed by the presentation of 20 patients from the same concession who consulted at the Health and Social Promotion Center (CSPS) of Dédougou, located 6 km from Lapio town. During the epidemiological investigation, a total of 20 persons from the same family, including 12 deaths that occurred the same day were noted. The investigation showed that all affected persons were exposed to food products that were contaminated with pesticides during a festive event that took place on 24 August 2019. In addition to this event, there is another event of food poisoning under investigation in Kourittenga province, centre East of the country. The event is closed because no further information was provided after september 2019.

Kenya
Measles
Ungraded
6-May-19
20-Mar-19
20-Oct-19
435
10
1
0.20%

No new suspected cases were reported. As of the reporting date, Kajiado County, Kajiado West Sub-County has been affected, with 425 cases and 1 death reported, of which four were laboratory-confirmed. The last cases were reported on 8 September 2019. Additionally, 10 cases including 6 laboratory-confirmed cases were reported from Garissa County in Dabaab Sub-County. This county has not reported new cases since 21 May 2019.

Uganda
Cholera
Ungraded
27-Jun-19
23-Jun-19
24-Sep-19
231
19
2
0.90%

No new case of cholera has been reported from Nakivale Refugee Settlement in Insingiro district since 24 September 2019. From 7 August to 24 September 2019, a total of 135 cases with one death was reported from Insingiro district. Stool samples from four of the cases cultured Vibri cholerae serotype 01 Ogawa. Other districts that have reported outbreaks of cholera include Bududa (62 cases with one death from 23 June to 5 August 2019) and Kyegyaga (34 cases from 11 July to 11 September 2019).

Zimbabwe
Diarrhoeal disease
Ungraded
13-Sep-19
2-Sep-19
13-Sep-19
294
0
0.00%

Zimbabwe has reported an outbreak of diarrhoeal disease whose etiological agent has not yet been established. A total of 294 cases with zero deaths have been reported between 2 to 12 September 2019 from suburbs of Harare City, with Dzivarasekwa being the epicentre. No pathogen was identified from eight stool samples cultured and analysed at the laboratory (name of laboratory not specified). Potentially contaminated water obtained from boreholes, which serve as the main water source for the population has been reported as the possible exposure factor.

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

Data are taken from the most recently available situation reports sent to WHO AFRO. Numbers are subject to change as the situations are dynamic.
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Data sources
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Health Emergency Information and Risk Assessment