WEEKLY BULLETIN ON OUTBREAKS AND OTHER EMERGENCIES
Week 50: 9 - 15 December 2019
Data as reported by: 17:00; 15 December 2019

0 New event
66 Ongoing events
54 Outbreaks
12 Humanitarian crises

Legend
- Measles
- Monkeypox
- Lassa fever
- Cholera
- Rift Valley Fever
cVDPV2
- Malaria
- Floods
- Deaths

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

Graded events †
3 Grade 3 events
15 Grade 2 events
2 Grade 1 events
40 Ungraded events
This Weekly Bulletin focuses on public health emergencies occurring in the WHO African Region. The WHO Health Emergencies Programme is currently monitoring 66 events in the region. This week’s main articles cover key new and ongoing events, including:

- Yellow fever in Mali
- Ebola virus disease in Democratic Republic of the Congo
- Floods in Democratic Republic of the Congo
- Humanitarian crisis in Cameroon.

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:**

- Several countries, especially those in east and central regions of Africa are currently experiencing severe floods following heavy rains, causing many casualties, displacing hundreds of thousands of people and ravaging physical infrastructure and livelihoods. Most of the affected populations are already vulnerable and deprived, either due to pre-existing humanitarian situation, poverty, food insecurity or limited access to social services. In addition to the immediate impact, the adverse weather condition is bound to predispose the affected communities to water- and vector-borne diseases, including cholera, typhoid fever, malaria, dengue fever, etc. While the national authorities and partners in the affected countries are responding to the urgent life-saving and immediate needs, it is important to put in place adequate preparedness and readiness measures for potential disease outbreaks, as well as early-recovery interventions to quickly restore the livelihoods of the affected communities.

- The Ebola virus disease (EVD) outbreak in Democratic Republic of the Congo continues, with the incidence of cases recorded during the reporting week sharply rising. The impact of the disruption of response operations at the peak of insecurity and unrest in the past weeks has started manifesting. With the security situation relatively normalizing (though remaining precarious), there is a need to restore and intensify outbreak response interventions in order to reverse this concerning trend.
EVENT DESCRIPTION

On 5 December 2019, the Ministry of Health in Mali declared a yellow fever outbreak after three cases were confirmed from Koulikoro (n=1) and Sikasso (n=2) regions. The index case in this outbreak is a 15-year-old unvaccinated girl from a village in Kati district, Koulikoro region, who presented, on 3 November 2019, with fever and jaundice to a health centre in Nana-Kénieba health area. She was initially diagnosed and treated for malaria following a positive malaria rapid diagnostic test. Due to poor response to treatment and subsequent consultations to other health facilities, a differential diagnosis of yellow fever was made and a sample was sent for testing.

During the same period, two additional case-patients, both Cote d’Ivoire nationals living in Mali, were confirmed with yellow fever in isolated events. One of the case-patient, a 25-year-old male from a village in Manankoro health area, Sikasso region presented with fever and jaundice to a local health facility on 1 November 2019 and later died on 8 November 2019 after developing haemorrhagic symptoms. The other case-patient was a 17-year-old male from Bouquimi district, Sikasso region who became ill on 4 November 2019, subsequently went into a coma and died on 11 November 2019 after poor response to treatment at a local health facility.

Blood samples from the three case-patients were sent to the yellow fever regional reference laboratory at the Institute Pasteur Dakar and tested positive on 2 December 2019 by immunoglobulin M (IgM) and polymerase chain reaction (PCR).

The index case was reportedly not vaccinated against yellow fever and she had no travel history outside the Nana-Keneba and Sirakoro axis in Kati District. Meanwhile, the vaccination status for the other two case-patients was unknown and they reportedly travelled back and forth between Mali and Cote d’Ivoire.

Following the notification of the three initial cases, further epidemiologic investigations identified 12 additional cases, including three deaths. Between 1 September and 8 December 2019, a total of 15 yellow fever cases (including three confirmed cases, twelve suspected cases) with five deaths were recorded. There were two deaths among the confirmed cases, resulting in a case fatality ratio of 67% among confirmed and 33% among all cases.

The age group of the cases was between 1 and 33 years and the male to female ratio is 2:1. Among the reported symptoms, fever, jaundice and vomiting were the most common. Samples have been collected for laboratory testing and the vaccination status for those suspected cases are still pending.

PUBLIC HEALTH ACTIONS

- On 5 December 2019, the Government of Mali officially declared a yellow fever outbreak in the two regions of Sikasso and Koulikoro.

- An Emergency Operations Centre for Public Health Coordination of the outbreak in the regions of Sikasso and Koulikoro and the affected districts was set up and activated in Bamako.

- A multidisciplinary rapid response team was deployed to conduct investigations in the affected districts of Sikasso and Koulikoro regions. A plan to conduct an in-depth entomological survey is underway.

- Enhanced epidemiological surveillance including active case finding in both affected districts has been strengthened through the dissemination of yellow fever case definitions.

- A comprehensive response plan is being developed with the specific objectives including preparation for an ICG request to conduct a yellow fever reactive mass vaccination campaign.

- Provision of risk communication capacity through involvement of relevant stakeholders. Public communication and awareness efforts on yellow fever (signs, symptoms and vaccinations) including prevention measures.

- A joint investigation team (WHO Country Office and MoH) was deployed on 3 December 2019 to characterize the risk and develop an intervention plan. Field investigations indicate vaccination coverage under 80% in Kati and 88% in Manakoro Districts.

SITUATION INTERPRETATION

Mali is among the West African countries at risk of yellow fever epidemics. Several efforts have been made in the fight against yellow fever through the introduction of yellow fever vaccine into routine immunisation in 2002, carrying out reactive mass vaccination campaigns between 2004 and 2007 as well as conducting preventive mass vaccination campaigns in 2008 in the southern part of country targeting about 5.8 million people. However, coverage for yellow fever vaccine remains suboptimal, with WHO-UNICEF estimating the national coverage for 2018 at 67%. Thus, pockets of unprotected population with low immunity may persist, leading to the potential of new cases. Koulikoro region borders the capital Bamako (an urban city with more than two million inhabitants), increasing the potential risk of the disease spread and escalation of the outbreak. As two of the confirmed cases are from neighbouring Cote d’Ivoire and live near the border, it is important to investigate the situation around the border with Mali.
EVENT DESCRIPTION

The Ebola virus disease (EVD) outbreak in North Kivu, South Kivu and Ituri provinces in Democratic Republic of the Congo continues, with an increase in the weekly incidence cases being observed. Since our last report on 8 December 2019 (Weekly Bulletin 49), there have been 23 new confirmed cases and seven new deaths from four health zones: Beni, Mabalako, Mandima and Biea. Four health zones and 11 health areas have reported confirmed cases in the past 21 days (21 November to 11 December 2019), with the principle hot spots being Mabalako (60%; n=27 cases), Mandima (18%; n=8) and Beni (16%; n=7).

As of 11 December 2019, a total of 3 343 EVD cases, including 3 225 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 (347), Nyakunde (2), Rwamara (8) and Tchomia (2) in Ituri Province; Alimbongo (5), Beni (633), Biea (18), Butembo (285), Goma (1), Kalunguta (193), Katwa (651), Kayna (28), Kyondo (25), Lubero (31), Mabalako (407), Manguredjipa (18), Masereka (50), Musienene (84), Mutwanga (32), Nyiragongo (3), Oicha (65), Pinga (1) and Vuhovi (103) in North Kivu Province and Mwenga (6) in South Kivu Province.

As of 11 December 2019, a total of 2 210 deaths were recorded, including 2 092 among confirmed cases, resulting in a case fatality ratio among confirmed cases of 66% (2 092/3 225). 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 2 857 contacts are under follow-up as of 11 December 2019, of which 2 498 (87.4%) have been seen in the past 24 hours. Alerts in the affected provinces continue to be raised and investigated. Of 4 680 alerts processed (of which 4 426 were new) in reporting health zones on 11 December 2019, 4 426 were investigated and 169 (11.8%) were validated as suspected cases.

PUBLIC HEALTH ACTIONS

- Response activities have cautiously restarted in Beni, Butembo and Mangina, but the security situation remains tense and response activities are still severely compromised.
- As of 11 December 2019, a cumulative total of 256 899 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 125 million screenings to date. A total of 102/109 (95%) PoE/PoC transmitted reports as of 11 December 2019.

SITUATION INTERPRETATION

There has been an increase in new confirmed cases in the past week, which is not unexpected with the disruption of activities in Beni, Butembo and Mangina. All areas of response must be upcaled as soon as possible in order to break this resurgence in transmission.

Water, sanitation and hygiene (WASH) activities continue, with decontamination of a health facility and five households around the last confirmed cases. Six households in Aloya in the Mabalako Health Zone were provided with IPC kits.

Community awareness and mobilization messages are being updated, revised and harmonized and have been pre-tested by the commission and will subsequently be shared in coordination and sub-coordination activities.
EVENT DESCRIPTION

Since mid-October 2019, several regions of the Democratic Republic of the Congo have been affected by flooding following heavy rains which caused a rise in the water levels of the Lomami River, the Tshopo River and other tributaries of the Congo River. This resulted in major floods in 10 provinces of Democratic Republic of the Congo, including North Ubangi, South Ubangi, Mongala, Bas-Uele, Haut-Uele, Maniema, Tshopo, Kasai, Equateur and Kinshasa. Severe damage to public infrastructure and important loss of livelihoods were observed in these provinces.

As of week 48 (week ending 1 December 2019), approximately 275,000 people were affected. The floods have caused substantial infrastructural damage, including the loss of 35,000 homes, the destruction of 100 schools and health centres and the flooding of 700 water points.

In Tshopo province, an estimated 424 health areas (including 504 villages) pertaining to 11 out of 23 health zones of the province were severely affected by the floods. Significant infrastructural damages were observed in health zones located downstream of the Congo River including: damage to 400 agricultural fields, 161 water sources, 15 schools, 990 latrines and 4990 residential houses. As of week 46, an estimated 123,491 people were homeless and in lack of basic necessities. An increased incidence of simple diarrhoea cases was observed in affected health areas.

The floods also affected coastal localities such as Mobayi Mbongo, Yakoma and Businga in North Ubangi province and several localities such as Libenge and Zongo in South Ubangi. The affected populations have taken refuge in the surrounding areas in host families, schools and makeshift shelters.

PUBLIC HEALTH ACTIONS

- The National and provincial authorities are coordinating the response to the floods at the national and provincial levels. A response plan has been developed by the Ministry of Humanitarian Action and National Solidarity, in collaboration with humanitarian partners.
- Crisis committees and sector groups have been established in Gbadolite, Zongo and Libenge, with the support of OCHA.
- WHO has provided a large package of drugs and other medical supplies (2.3 tons) to support patient care and early detection of epidemics.
- The Ministry of Humanitarian Action and National Solidarity with the support of its partners has carried out various multisectoral activities including:
  - In-depth health needs assessment and organization of free health care activities using mobile clinics.
  - Provision of cholera kits, mosquito nets and delivery kits to pregnant women
  - Distribution of drinking water supply and emergency kits
  - Distribution of emergency shelter kits, Support and technical supervision of households for the construction of shelters.

SITUATION INTERPRETATION

The current floods have affected many provinces that are already vulnerable to epidemics (e.g. measles, cholera and malaria) and/or have fragile food security situation. The inadequate environmental and hygiene conditions increase the risk of spread of waterborne and vector-borne diseases in these areas. The populations affected by this disaster have enormous needs for shelter, essential household items, access to health services and water, hygiene and sanitation (WASH). The provinces of Nord and Sud Ubangui, which are among the most affected provinces are also host to more than 130,000 Central African refugees who will also require emergency assistance.

The floods in Democratic Republic of the Congo is occurring against the background of an ongoing complex humanitarian crisis, increased vulnerability of the population and multiple occurrence of diseases outbreaks. The resilience of the communities as well as the response capacities of the national authorities and partners are already overburdened. The aid actors and the external communities are called upon to extend their support to the communities in need.
EVENT DESCRIPTION

Cameroon continues to suffer from two major complex humanitarian crises in the Far North and North West and South West (NW&SW) regions. The deteriorating security situation has affected socio-economic activities and the food security of the communities, as well as access to basic social services, including healthcare.

In the Far North region of Cameroon, the security situation remains volatile, with repeated attacks by armed insurgents. In November 2019, a total of 27 attacks were documented, causing a lot of damages including 33 deaths, 48 injuries, and five people missing. According to the International Organization for Migration (IOM) Displacement Tracking Matrix (DTM, Cycle 19, 28 March – 08 April 2019), this humanitarian crisis has resulted in internal displacement of about 428,289 people. In addition, Nigerian refugees continue to arrive in Minawao refugees camp, which is hosting about 59,977 Nigerian refugees (15,825 household) as of 31 September 2019. Nevertheless, the government of Nigeria has started voluntary repatriation of about 4,000 refugees. The number of out-of-camp refugees has also grown to 46,784 refugees (14,093 households). The affected population continue to suffer from serious psychological problems, malnutrition, low access to basic health services. The far north region continue to bear the burden of several diseases outbreaks, including cholera, leishmaniosis, yaws, measles and circulating vaccine-derived poliovirus type 2. The districts of Kousseri, Vele and Gouffey have also been affected by floods since mid-November 2019, escalating the situation.

The North West and South West regions continue to face the Anglophone-Francophone crisis, with an increasing tension between separatists and military forces. On 30 November 2019, an aid worker was abducted and killed by an armed group. This is the first time an aid worker has been killed in Anglophone regions. This crisis is impacting the health status of the population and exposing them to infectious diseases outbreak. An estimated 437,000 people have been internally displaced since late 2016 and the population in need is estimated at 594,000 people. In addition, cholera epidemic has been declared in the South West region, precisely in Bakassi and Eko-Titi health districts.

PUBLIC HEALTH ACTIONS

- Emergency immunization against poliomyelitis and measles as well as the pre-positioning of drugs and other emergency kits in affected health areas of the far North region continue to be provided by the MoH and health partners (UNICEF, WHO).
- MSF continues its support to Maroua regional hospital as reference care center for surgery and it is also present in areas where specific health assistance is needed including Makary, Kolofata and Kaélé districts.
- IMC is providing health assistance to refugees under the orientations of UNHCR present in Mokolo and Mada health districts. Furthermore, they are also present in Kaélé for response to cholera outbreak.
- French Red Cross in collaboration with Cameroon Red Cross provided health assistance to flooding affected people through Mobile clinics with support of WHO. They also provide support for community mobilization against cholera in affected areas.
- Plan Cameroon continues its program against malaria and it is supporting in cholera response activities.

SITUATION INTERPRETATION

The humanitarian crisis in the Far North region Cameroon continues to deteriorate, with increasing attacks by armed insurgents. Meanwhile, three months after the Grand National Dialogue, which sought solutions to the ongoing Anglophone crisis in NW&SW regions, the situation remains volatile and unpredictable. Massive population displacements continue to be reported and the displaced persons reportedly live under deplorable conditions and at times are unable to afford their basic needs. Access to healthcare and other basic services is remains a big challenge.

More efforts are still needed to end the two concurrent humanitarian crises which are costing life to a big number of Cameroon population. In addition, the need to mobilize fund for humanitarian response is key in order to save more life. There is an urgent need to provide more mental health and surgical assistance for physical trauma.
Major issues and challenges

A number of countries in the Africa region, including Democratic Republic of the Congo, Kenya, Republic of Congo, Uganda, South Sudan and Central African Republic are currently experiencing severe floods due to heavy rains. The floods have been punctuated by land/mudslides. Several people have died while thousands have been displaced and physical infrastructure, crops and livestock destroyed. Most of the affected populations are already living in vulnerable and underserved conditions, due to ongoing humanitarian crisis, poverty, food insecurity, limited access to social services. This adverse weather condition is likely to increase the burdens of communicable diseases, particularly water- and vector-borne diseases, including cholera, typhoid fever, malaria, dengue fever, etc.

The number of new confirmed EVD cases recorded in Democratic Republic of the Congo during the reporting week has increased. This surge is being attributed to the weeks of disruption of response operations at the height of insecurity and civil unrest. This new trend is concerning and needs to be halted through resumption of outbreak control interventions.

Proposed actions

The national authorities and partners in the flood-affected countries need to continue with provision of urgent life-saving interventions to the affected communities. In addition, there is a need to step up preparedness and readiness measures for potential outbreaks of water- and vector-borne diseases, as well as factoring in early-recovery activities in their response. The donor communities are called upon to extend support to the most vulnerable countries, especially Democratic Republic of the Congo.

The national authorities and partners in Democratic Republic of the Congo need to with the restoration of disrupted outbreak control activities. The Government of the Democratic Republic of the Congo, the United Nations and all global stakeholders to continue with efforts to restore peace and security in the country.
### All events currently being monitored by WHO AFRO

#### Ongoing Events

<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><strong>Angola</strong></td>
<td>Poliomyelitis (cVDPV2)</td>
<td>Grade 2</td>
<td>8-May-19</td>
<td>5-Apr-19</td>
<td>11-Dec-19</td>
<td>71</td>
<td>71</td>
<td>0</td>
<td>0.00%</td>
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<tr>
<td><strong>Benin</strong></td>
<td>Dengue fever</td>
<td>Ungraded</td>
<td>13-May-19</td>
<td>10-May-19</td>
<td>29-Nov-19</td>
<td>26</td>
<td>14</td>
<td>2</td>
<td>7.00%</td>
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<td><strong>Burkina Faso</strong></td>
<td>Humanitarian crisis</td>
<td>Grade 2</td>
<td>8-Aug-19</td>
<td>8-Aug-19</td>
<td>11-Dec-19</td>
<td>6</td>
<td>6</td>
<td>0</td>
<td>0.00%</td>
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<tr>
<td><strong>Burundi</strong></td>
<td>Cholera</td>
<td>Ungraded</td>
<td>1-Jun-19</td>
<td>1-Jun-19</td>
<td>1-Jun-19</td>
<td>1 064</td>
<td>288</td>
<td>6</td>
<td>0.60%</td>
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<tr>
<td><strong>Burundi</strong></td>
<td>Malaria</td>
<td>Grade 2</td>
<td>1-Jan-19</td>
<td>27-Oct-19</td>
<td></td>
<td>7 392 429</td>
<td>2 823</td>
<td></td>
<td></td>
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<tr>
<td><strong>Cameroon</strong></td>
<td>Humanitarian crisis</td>
<td>Protracted</td>
<td>31-Dec-13</td>
<td>27-Jun-17</td>
<td>5-Dec-19</td>
<td>-</td>
<td>-</td>
<td>-</td>
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<tr>
<td><strong>Cameroon</strong></td>
<td>Cholera</td>
<td>Ungraded</td>
<td>1-Mar-19</td>
<td>1-Mar-19</td>
<td>5-Dec-19</td>
<td>1 071</td>
<td>110</td>
<td>53</td>
<td>4.90%</td>
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<td><strong>Cameroon</strong></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>
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<td><strong>Cameroon</strong></td>
<td>Poliomyelitis (cVDPV2)</td>
<td>Grade 2</td>
<td>23-May-19</td>
<td>23-May-19</td>
<td>11-Dec-19</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
</tbody>
</table>

#### Detailed update given above.

- **Cameroon Measles**
  - 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, Goundey, Makary, Kolofata, Koza, Ngaoundéré rural, Bangui, Guider, Foubou, Mongou, Mor, Maroua 3, Vélét, Pitoa, Maroua 1, Boura, Toutou, Mogodé, Béni, Garoua 1, Garoua 2, Lagdo, Tcholliré, Goudigui, Mostourou, Mokolo, Cité verte, Djoungolo, Nkondongo, Limbé, Garoua, Bangui, Ngaoundéré Urban, Ekondi Tit, Gazawa, Meiganga, New Bell, Dido, Bertoua, Biiy assi, Cité des palmiers, Logbaba, and Nylon district.

- **Cameroon Monkeypox**
  - A case of monkeypox was confirmed in Ekonde-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.
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 Birao 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 Birao since the beginning of the crisis.

### Table: Health Emergency Information and Risk Assessment

<table>
<thead>
<tr>
<th>Country</th>
<th>Event</th>
<th>Grade</th>
<th>Date notified to WHO</th>
<th>Start of reporting period</th>
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<th>Deaths</th>
<th>CFR</th>
</tr>
</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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</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: Batafongo, Bocangara-Kou, Nana-Grizizi, Paoua and Yakaga. The outbreaks have been controlled in Paoua and Yakaga.

| Central African Republic | Poliomyelitis (cVDPV2) | Grade 2 | 24-May-19           | 24-May-19                 | 11-Dec-19               | 16           | 16             | 0      | 0.00% |

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.

| Chad                          | Measles                    | Ungraded | 24-May-18          | 1-Jan-19                 | 8-Dec-19               | 26 044       | 296            | 255    | 1.00% |

In week 49 (week ending 8 December 2019), 128 suspected cases were reported. 21 districts were reported in the epidemic phase in week 49. Since the beginning of the year, a total of 26 044 suspected cases and 255 deaths (CFR 1.0%) have been reported with Am Timan, N’Djamen East, N’Djamen South, Bongor, Moundou, Bousso and N’Djamen Centre districts all exceeding 1 000 suspected cases. Among the 1 895 cases investigated, 296 were IgM-positive, 79% were not vaccinated, and 47% were aged between 1 and 4 years old.

| Chad                          | Poliomyelitis (cVDPV2) | Grade 2 | 18-Oct-19          | 9-Sep-19                 | 11-Dec-19               | 1           | 1              | 0      | 0.00% |

No new case of circulating vaccine-derived poliovirus type 2 (cVDPV2) was reported this week. One case has been reported so far this year from Mandelia in Chari-Baguirmi province. The onset of paralysis was 9 September 2019. This is the first cVDPV2 case in the country and it is linked to the Jigawa outbreak in Nigeria.

| Comoros                       | Measles                    | Ungraded | 26-May-18          | 20-May-19                | 20-Oct-19               | 144          | 58             | 0      | 0.00% |

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), Mitsamouli (6), Mbieni (3), Oifulis (1) and Mitsoudji (1). The 19 epi-linked cases are from Moroni district.

| Congo                         | Floods                     | Ungraded | 22-Nov-19          | 3-Oct-19                 | 4-Nov-19               | -            | -              | -      | -    |

Since 3 October 2019, heavy rains resulted in floods in the northern part of the Republic of Congo, mainly affecting four departments, namely, Likouala, Cvette, Plateaux and Sangha. As a result of the floods, homes and public infrastructures (schools, health centres, water points, latrines, etc.) have been destroyed leaving the affected population in precarious living conditions and with limited access to health care. Furthermore, the floods have caused significant damage to the agricultural and farming sectors thus pausing a threat to food security. As of 26 November 2019, a total of 112 175 people have been affected with 60 000 (53%) in Likouala department, followed by Cuvette (33 933; 30%), Plateaux (16 100; 14%) and Sangha (2142; 2%) departments. Some of the displaced people have moved towards the Democratic Republic of the Congo. The Congolese government has declared a state of emergency in the affected areas.

| Congo                         | Chikungunya                | Grade 1 | 22-Jan-19          | 7-Jan-19                 | 29-Sep-19               | 11 434       | 148            | 0      | 0.00% |

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

| Côte d’Ivoire                 | Poliomyelitis (cVDPV2)     | Ungraded | 29-Oct-19          | 29-Oct-19                | 11-Dec-19               | -            | -              | -      | -    |

No case of circulating vaccine-derived poliovirus type 2 (cVDPV2) was reported this week. So far, the only cVDPV2 isolated was from an environmental sample collected on 24 September 2019 in Abidjan. The isolated cVDPV2 is linked to a virus detected in Niger in 2018 that belongs to the Jigawa emergence group, which has previously also been detected in Cameroon, Chad, Niger, Benin, Ghana, and Togo.

| Democratic Republic of the Congo | Flood | Ungraded | 17-Nov-19          | 28-Oct-19                | 17-Nov-19               | -            | -              | -      | -    |

| Democratic Republic of the Congo | Humanitarian crisis | Grade 3 | 20-Dec-16          | 17-Apr-17                | 18-Nov-19               | -            | -              | -      | -    |

The Democratic Republic of the Congo continues to experience a complex humanitarian crisis involving armed conflicts and inter-community tension resulting in large number of people in need of humanitarian assistance. Populations movement due to armed clashes continue to be reported in North-Kivu, Ituri and South-Kivu provinces. In Ituri, an estimated 227 000 internally displaced persons (IDPs) are living in 87 sites and 315 families have been repatriated from Uganda. In North-Kivu, more than 100 000 IDPs have been registered in Kamango health zone in Beni territory and Mweso health zone in Masisi territory. In South Kivu, clashes between armed groups, led to population displacement with an estimated 263 252 IDPs in Itombwe, Fizi, Nundu and Minembwe. In Kassai central, at least 790 people who were expelled from Angola (including 129 women and 73 children) were registered in Kamako between 6 and 12 October 2019.
During week 47 (week ending 24 November 2019), a total of 660 suspected cases of cholera and 7 deaths (CFR 1.1%) were notified from 55 health zones in 11 provinces. The endemic provinces of North-Kivu, South-Kivu, Haut-Lomami, Haut-Katanga and Tanganyika account for 85% of cases reported during week 46. In week 47, suspected cholera cases continue to be reported in the province of Tshopo, with 64 cases reported during week 47. Between week 1 and week 44 of 2019, a total of 27 169 cases including 472 deaths (CFR 1.8%) have been notified from 23 out of 26 provinces. Compared to the same period in 2018 (week 1-46), there is a 4.1 % decrease in the number of reported cases and a 49% decrease in the number of deaths.

Since the beginning of 2019, a cumulative total of 4 848 monkeypox cases, including 97 deaths (CFR 2%) were reported from 16 provinces. In week 47 (week ending 24 November 2019), 87 cases and two deaths were reported nationally.

Since the beginning of the year, a total of 50 cases of bubonic plague including eight deaths have been reported in the province of Ituri. Twelve new cases were reported in week 46. The first five cases were reported 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 reported between week 39 (7 cases and 3 deaths) and 40 (14 cases) were reported from Aru health zone in Ituri Province.

Eight new cases of cVDPV2 were reported this week from Sakuru (2), Kwili (2), Kwango (2), Haut Lomami (1), and Kongo Central (1) provinces. There are 64 cVDPV2 cases in 2019 reported from Sakuru (21), Haut Lomami (18), Kasai (8), Kwili (8), Kwango (5), Haut Katanga (2), Tshuapa (1), and Kongo Central (1) provinces. There were 20 cases of cVDPV2 reported in 2018.

In week 48 (week ending 1 December 2019), 82 new suspected cases were reported in Afar and Oromiya regions. As of 1 December 2019, 54 908 suspected cases were reported from Dire Dawa Administrative City (51 957), Araf (2 782) and Somali (169) regions.

In week 48 (week ending 1 December 2019), 9606 measles cases including 159 deaths (CFR 1.7%) were reported across the country, with five newly affected health zones. During this week, most cases were reported from the province of Mar-nondome (1459), Kwili (1198), Tshuapa (1152) et Equateur (982). Since the beginning of 2019, 280 677 measles cases including 8 604 deaths (CFR 2.0%) have been recorded. In total, 246 (47%) of the 519 health zones across the 26 provinces of the country have reported a confirmed measles outbreak.

Since the beginning of 2019, a cumulative total of 4 848 monkeypox cases, including 97 deaths (CFR 2%) were reported from 16 provinces. In week 47 (week ending 24 November 2019), 87 cases and two deaths were reported nationally.

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Since the beginning of the year, a total of 50 cases of bubonic plague including eight deaths have been reported in the province of Ituri. Twelve new cases were reported in week 46. The first five cases were reported 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 reported between week 39 (7 cases and 3 deaths) and 40 (14 cases) were reported from Aru health zone in Ituri Province.

<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 the Congo</td>
<td>Cholera</td>
<td>Grade 3</td>
<td>16-Jan-15</td>
<td>1-Jan-19</td>
<td>24-Nov-19</td>
<td>27 169</td>
<td>-</td>
<td>472</td>
<td>1.70%</td>
</tr>
<tr>
<td>Democratic Republic of the Congo</td>
<td>Ebola virus disease</td>
<td>Grade 3</td>
<td>31-Jul-18</td>
<td>11-May-18</td>
<td>23-Nov-19</td>
<td>3 301</td>
<td>3 183</td>
<td>2 198</td>
<td>66.60%</td>
</tr>
<tr>
<td>Democratic Republic of the Congo</td>
<td>Measles</td>
<td>Grade 2</td>
<td>10-Jan-17</td>
<td>1-Jan-19</td>
<td>10-Dec-19</td>
<td>280 677</td>
<td>6 304</td>
<td>5 604</td>
<td>-</td>
</tr>
<tr>
<td>Democratic Republic of the Congo</td>
<td>Monkeypox</td>
<td>Ungraded</td>
<td>n/a</td>
<td>1-Jan-19</td>
<td>24-Nov-19</td>
<td>4 848</td>
<td>-</td>
<td>97</td>
<td>2.00%</td>
</tr>
<tr>
<td>Democratic Republic of the Congo</td>
<td>Plague</td>
<td>Ungraded</td>
<td>12-Mar-19</td>
<td>28-Feb-19</td>
<td>17-Nov-19</td>
<td>50</td>
<td>-</td>
<td>8</td>
<td>16.00%</td>
</tr>
<tr>
<td>Democratic Republic of the Congo</td>
<td>Poliomyelitis (cVDPV2)</td>
<td>Grade 2</td>
<td>15-Feb-18</td>
<td>1-Jan-18</td>
<td>13-Dec-19</td>
<td>76</td>
<td>76</td>
<td>0</td>
<td>0.00%</td>
</tr>
<tr>
<td>Ethiopia</td>
<td>Cholera</td>
<td>Grade 3</td>
<td>14-May-19</td>
<td>12-May-19</td>
<td>8-Dec-19</td>
<td>2 089</td>
<td>60</td>
<td>21</td>
<td>1.00%</td>
</tr>
<tr>
<td>Ethiopia</td>
<td>Dengue</td>
<td>Ungraded</td>
<td>3-Nov-19</td>
<td>9-Sep-19</td>
<td>8-Dec-19</td>
<td>1 251</td>
<td>0</td>
<td>6</td>
<td>0.00%</td>
</tr>
<tr>
<td>Ethiopia</td>
<td>Measles</td>
<td>Grade 1</td>
<td>20-May-19</td>
<td>11-Dec-19</td>
<td>24-Jun-19</td>
<td>5</td>
<td>5</td>
<td>0</td>
<td>0.00%</td>
</tr>
<tr>
<td>Ghana</td>
<td>Poliomyelitis (cVDPV2)</td>
<td>Ungraded</td>
<td>9-Jul-19</td>
<td>8-Jul-19</td>
<td>11-Dec-19</td>
<td>9</td>
<td>9</td>
<td>0</td>
<td>0.00%</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Country</th>
<th>Event</th>
<th>Grade</th>
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<td>Poliomyelitis (cVDPV2)</td>
<td>Grade 2</td>
<td>15-Feb-18</td>
<td>1-Jan-18</td>
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<td>0</td>
<td>0.00%</td>
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<td>3-Nov-19</td>
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<tr>
<td>Ethiopia</td>
<td>Measles</td>
<td>Grade 1</td>
<td>20-May-19</td>
<td>11-Dec-19</td>
<td>24-Jun-19</td>
<td>5</td>
<td>5</td>
<td>0</td>
<td>0.00%</td>
</tr>
<tr>
<td>Ethiopia</td>
<td>Poliomyelitis (cVDPV2)</td>
<td>Ungraded</td>
<td>9-Jul-19</td>
<td>8-Jul-19</td>
<td>11-Dec-19</td>
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</tr>
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No case of circulating vaccine-derived poliovirus type 2 (cVDPV2) was reported this week. There are nine cVDPV2 cases in 2019 linked to the Jigawa outbreak in Nigeria.
**Health Emergency Information and Risk Assessment**

**Date notified to WHO** | **Start of reporting period** | **End of reporting period** | **Total cases** | **Cases Confirmed** | **Deaths** | **CFR**
--- | --- | --- | --- | --- | --- | ---
Kenya | Cholera | Ungraded | 21-Jan-19 | 2-Jan-19 | 8-Dec-19 | 4 886 | 251 | 37 | 0.80%
Kenya | Cholera | Ungraded | 31-Mar-19 | 1-Jan-19 | 8-Dec-19 | 2 822 | 1 628 | 34 | 1.20%
Kenya | Leishmaniasis | Ungraded | 6-May-19 | 20-Mar-19 | 8-Dec-19 | 459 | 15 | 1 | 0.02%
Lesotho | Measles | Ungraded | 26-Oct-19 | 25-Oct-19 | 16-Nov-19 | 59 | 4 | 0 | 0.00%
Liberia | Lassa fever | Ungraded | 23-Jan-19 | 1-Jan-19 | 8-Dec-19 | 79 | 45 | 20 | 25.30%
Mali | Humanitarian crisis | Protracted | n/a | n/a | 7-Dec-19 | - | - | - | -
Mali | Dengue | Ungraded | 1-Jan-19 | 7-Dec-19 | 20 | 9 | 0 | 0.00%
Mali | Measles | Ungraded | 20-Feb-19 | 1-Jan-19 | 8-Dec-19 | 1 194 | 349 | 0 | 0.00%
Namibia | Hepatitis E | Grade 1 | 18-Dec-17 | 8-Sep-17 | 17-Nov-19 | 6 746 | 1 644 | 56 | 0.80%
Niger | Humanitarian crisis | Protracted | 1-Feb-15 | 1-Feb-15 | 19-Nov-19 | - | - | - | -

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

**Namibia**

**Grade 1**

<table>
<thead>
<tr>
<th>Date notified to WHO</th>
<th>Start of reporting period</th>
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</tr>
</thead>
<tbody>
<tr>
<td>18-Dec-17</td>
<td>8-Sep-17</td>
<td>17-Nov-19</td>
<td>6 746</td>
<td>1 644</td>
<td>56</td>
<td>0.80%</td>
</tr>
</tbody>
</table>

**Niger**

**Humanitarian crisis**

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<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>Protracted</td>
<td>1-Feb-15</td>
<td>19-Nov-19</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. The number of internal displaced persons is increasing and it was estimated at 199,385 in October 2019. This increase is associated with repeated violations in Mopti, Gao, Menaka and zones in the neighborhood of Burkinafasso border. The country is as well facing infectious disease outbreaks which include yellow fever, measles, dengue in different regions. Cases of malnutrition continue to be reported at the country level. In week 48, a total of 5,206 cases of acute malnutrition were reported.**

**Namibia**

**Hepatitis E**

<table>
<thead>
<tr>
<th>Grade 1</th>
<th>Date notified to WHO</th>
<th>Start of reporting period</th>
<th>End of reporting period</th>
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<th>Cases Confirmed</th>
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<tbody>
<tr>
<td>18-Dec-17</td>
<td>8-Sep-17</td>
<td>17-Nov-19</td>
<td>6 746</td>
<td>1 644</td>
<td>56</td>
<td>0.80%</td>
<td></td>
</tr>
</tbody>
</table>

**In weeks 45 and 46 (week ending 17 November 2019), 79 cases were reported from nine regions of Namibia with the majority (54 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 1,644 laboratory-confirmed, 4,258 epidemiologically-linked, and 844 suspected have been reported countrywide. A cumulative number of 56 deaths have been reported nationally (CFR 8.8%), 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, Oshana, Oshikoto, Kavango, Oshana, Oshikoto, Kavango, Oshana, Oshikoto, Kavango, Oshana, Oshikoto, Kavango, Oshana, Oshikoto, Kavango, Oshana.**

**Nigeria**

**Humanitarian crisis**

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<tr>
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</thead>
<tbody>
<tr>
<td>Protracted</td>
<td>1-Feb-15</td>
<td>19-Nov-19</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

**The security situation continues to worsen in bordering areas of Burkinafaso, Mali and Nigeria following Boko Haram and Jihadist attacks in the region. The number of displaced people is increasing in Tillaberi, Maradi, Diffa. Since September 2019, more than 40,000 Nigerian refugees have crossed the border seeking safety in west Niger and the Burkinafaso border area has seen increasing attacks by jihadist armed groups against the local population and authorities, leading to states of emergency declared in several departments. This security situation is hampering the humanitarian access and affecting the access to basic health and social services. A total of 46 health posts and 4 health centers have closed due to insecurity.**
### Health Emergency Information and Risk Assessment

**South Sudan Measles**

<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>South Sudan</td>
<td>Measles</td>
<td>Ungraded</td>
<td>10-May-19</td>
<td>1-Jan-19</td>
<td>19-Nov-19</td>
<td>9,969</td>
<td>-</td>
<td>54</td>
<td>0.50%</td>
</tr>
</tbody>
</table>

As of week 45 (week ending 10 November 2019), 9,969 suspected measles cases have been reported from eight regions the country. The cases have been reported Maradi (3,571 cases including 8 deaths), Tahoua (1,909 including 25 deaths), Zinder (1,399 including 10 deaths), Niamey (1,271 with 1 death), Tahoua (635 including 3 deaths), Agadez (519 including 3 death), 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.

**Niger Poliomyelitis (cVDPV2)**

| Grade | Start of reporting period | End of reporting period | Total cases | Cases Confirmed | Deaths | CFR |
|-------|----------------------------|------------------------|-------------|----------------|--------|
| Grade 2 | 8-Jul-18 | 11-Dec-19 | 11 | 11 | 1 | 9.10% |

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 ten cVDPV2 cases were reported in 2018 in Niger, which were genetically linked to a cVDPV2 case in Jigawa and Katsina states, Nigeria.

**Nigeria Humanitarian crisis**

| Protracted | Start of reporting period | End of reporting period | Cases Confirmed | Deaths | CFR |
|-----------|--------------------------|------------------------|----------------|--------|
| 10-Oct-16 | n/a | 30-Nov-19 | - | - | - |

The humanitarian crisis in the North-eastern part of Nigeria persists with continued population displacement from security compromised areas characterized by overcrowded population 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.

**Nigeria Cholera**

<table>
<thead>
<tr>
<th>Event</th>
<th>Grade</th>
<th>Date notified to WHO</th>
<th>Start of reporting period</th>
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<th>Deaths</th>
<th>CFR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cholera</td>
<td>Ungraded</td>
<td>19-Jun-19</td>
<td>15-May-19</td>
<td>9-Dec-19</td>
<td>895</td>
<td>207</td>
<td>15</td>
<td>22.30%</td>
</tr>
</tbody>
</table>

Three new cases of cholera were reported in Adamawa State from 27 November to 6 December 2019 from Yola North (2) and Yola South (1) Local Government Areas. From 15 May to 6 December 2019, a cumulative total of 839 suspected cases with four deaths have been reported from four LGAs: Yola North (513 cases with two deaths), Girei (200 cases with one death), Yola South (125 cases with one death), and Song (1 case with zero deaths). Of 539 stool specimens collected and analysed at the state specialist hospital, 206 cultured *Vibrio cholerae* as the causative agent. An outbreak of cholera has also been reported in Andoni Local Government Area, Rivers State. From 27 November to 9 December 2019, a total of 56 cases with 11 deaths were reported from 15 communities in Andoni LGA.

**Nigeria Measles**

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<th>CFR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Measles</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>
</tbody>
</table>

Between epi weeks 35 - 39 (week ending 30 September 2019), a total of 1,544 suspected cases of measles were reported from 36 states including 3 deaths (CFR 0.2%). Katsina (309), Borno (219), Kano (309), Yobe (91), Ekiti (60), Lagos (65) and Sokoto (65) account for 59% of all the cases reported in the time period. Between epi week 1 and 39, a total of 554,764 suspected cases have been recorded from 754 LGAs in 36 states and FCT with 257 deaths (CFR 0.5%). Of the 10,236 samples tested, 2,150 were IgM positive for measles.

**Nigeria Poliomyelitis (cVDPV2)**

| Grade | Start of reporting period | End of reporting period | Total cases | Cases Confirmed | Deaths | CFR |
|-------|--------------------------|------------------------|-------------|----------------|--------|
| Grade 2 | 1-Jun-18 | 11-Dec-19 | 52 | 52 | 0 | 0.00% |

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

**Nigeria Yellow fever**

<table>
<thead>
<tr>
<th>Event</th>
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<th>Deaths</th>
<th>CFR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yellow fever</td>
<td>Ungraded</td>
<td>14-Sep-17</td>
<td>1-Jan-19</td>
<td>16-Nov-19</td>
<td>7,387</td>
<td>129</td>
<td>192</td>
<td>5.10%</td>
</tr>
</tbody>
</table>

From 1 January 2019 to 16 November 2019, a total of 3,787 suspected yellow fever cases have been reported from 604 out of 774 LGAs across all the 36 states and the Federal capital territory. Of the samples taken, 166 have tested positive for yellow fever IgM in Nigerian network laboratories. Also, 129 samples from 18 states were confirmed positive using real time polymerase chain reaction (RT-PCR). There have been 192 deaths among suspected cases (CFR 5.1%) and 20 deaths among confirmed cases (CFR 15.5%).

**Sierra Leone Lassa fever**

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<th>Cases Confirmed</th>
<th>Deaths</th>
<th>CFR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lassa fever</td>
<td>Ungraded</td>
<td>22-Nov-19</td>
<td>30-Oct-19</td>
<td>6-Dec-19</td>
<td>7</td>
<td>5</td>
<td>4</td>
<td>57.10%</td>
</tr>
</tbody>
</table>

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

**South Sudan Poliomyelitis (cVDPV2)**

| Grade | Start of reporting period | End of reporting period | Total cases | Cases Confirmed | Deaths | CFR |
|-------|--------------------------|------------------------|-------------|----------------|--------|
| Grade 3 | 15-Aug-16 | n/a | - | - | - | - |

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

**South Sudan Hepatitis E**

| Event          | Grade | Date notified to WHO | Start of reporting period | End of reporting period | Total cases | Cases Confirmed | Deaths | CFR |
|----------------|-------|----------------------|---------------------------|------------------------|-------------|----------------|--------|
| Hepatitis E    | Ungraded | 3-Jan-18 | 17-Nov | 118 | 41 | 2 | 1.70% |

The current outbreak in Bentiu PoC continues. In week 44 (week ending 17 November 2019), one new suspected cases of Hepatitis E was reported. As of reporting date, a total of 106 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 on 23 June 2019).

**South Sudan Measles**

| Event          | Grade | Date notified to WHO | Start of reporting period | End of reporting period | Total cases | Cases Confirmed | Deaths | CFR |
|----------------|-------|----------------------|---------------------------|------------------------|-------------|----------------|--------|
| Measles        | Ungraded | 24-Nov-18 | 1-Jan-19 | 17-Nov-19 | 3,963 | 169 | 23 | 0.60% |

Between week 1 to week 46 of 2019, a total of 3,963 suspected cases of measles which 169 laboratory-confirmed and 23 deaths (CFR 0.6%) have been reported. The outbreak has affected 16 counties and 4 Protection of Civilians Sites PoCs (Juba, Bentiu, Malakal and Wau). Measles cases continue to rise in 2019 with an average of 75 cases reported per week compared to 12 cases reported at the same period in 2018.
No case of circulating vaccine-derived poliovirus type 2 (cVDPV2) was reported this week. There are three cVDPV2 cases in 2019 in the country linked to Jigawa outbreak in Nigeria.

### Uganda

- **Uganda Humanitarian crisis - refugee**
  - Grade: Ungraded
  - Start of reporting period: 20-Jul-17
  - End of reporting period: n/a
  - Total cases: 0
  - Cases Confirmed: 0
  - Deaths: 0
  - CFR: 0.00%

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.

### Uganda Rift valley fever

- **Uganda Rift valley fever**
  - Grade: Ungraded
  - Start of reporting period: 28-Nov-19
  - End of reporting period: 15-Nov-19
  - Total cases: 1
  - Cases Confirmed: 1
  - Deaths: 1
  - CFR: 100.00%

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 the 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 and later on the case died. 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 health care workers. Further investigation is ongoing in Uganda.

### Zambia

- **Zambia Poliomyelitis (cVDPV2)**
  - Grade: Grade 2
  - Start of reporting period: 17-Oct-19
  - End of reporting period: 16-Dec-19
  - Total cases: 1
  - Cases Confirmed: 1
  - Deaths: 0
  - CFR: 0.00%

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.

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†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.
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Data sources
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