This Weekly Bulletin focuses on public health emergencies occurring in the WHO African Region. The WHO Health Emergencies Programme is currently monitoring 72 events in the region. This week’s main articles cover key new and ongoing events, including:

- **Measles outbreak in Ethiopia**
- **Humanitarian crisis in North East Nigeria**
- **Ebola virus disease in Democratic Republic of the Congo**
- **Circulating vaccine-derived polio virus type 2 (cVDPV2) outbreak in Zambia.**

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

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

**Major issues and challenges include:**

- The humanitarian crisis in North East Nigeria remains of concern with those in IDP camps facing suboptimal living conditions, in particular restricted water and poor sanitation, which must be urgently addressed by authorities. The onset of the rainy season is of concern and surveillance for potential outbreaks should be improved to ensure vigilance is maintained for early warning signals of potential outbreaks.

- In Ethiopia over eight thousand people have now been affected by a measles outbreak, with more than 80% of cases not vaccinated or with an unknown vaccination status. Measles is endemic in the country and the cold chain system remains weak. Community education on the importance of vaccination together with supplemental immunization activities in areas with low vaccine coverage needs to occur to improve the vaccination rates in Ethiopia and reduce the incidence of cases.
EVENT DESCRIPTION

Ethiopia has been experiencing a measles outbreak since late December 2018. The outbreak was initially reported in Oromio region and later affected three additional regions: Afar, Amhara and Somali.

In week 41 (week ending 13 October 2019), 24 suspected cases with no deaths were reported. Between week 1 and week 41 in 2019, a total of 8 514 suspected measles cases including 57 deaths (case fatality ratio 0.67%), were reported. Of the 8 514 suspected cases, 180 samples were tested and 14 tested IgM-positive for measles virus infection at the Ethiopian Public Health Institute laboratory in Addis Ababa. The peak of the outbreak was reached in week 9 (week ending 3 March 2019) with 642 cases reported followed by a gradual decline in the number of cases to 24 cases reported in week 41.

A total of four regions have confirmed measles outbreaks, including 28 zones and 113 Woreda. Oromio region is the most affected, accounting for 58% of the total reported cases, followed by Solmali (28%), Amhara (8%) and Afar (6%) regions.

The majority of affected cases are children under 5 years old, comprising 50.4% of all cases followed by the age group 15-44 years (25.4%) and 5-14 years (23.3%). Upon investigation of the vaccination status of the cases, it was noted that 72.6% had never received a single measles dose.

PUBLIC HEALTH ACTIONS

- A National Coordination committee was set up at the Ethiopian Public Health Institute to coordinate the response to the measles outbreak as well as regional coordinating committees in each of the affected regions.
- Enhanced surveillance activities continue to enable the early detection of cases and prompt treatment.
- The Ethiopian government together with WHO, UNICEF and other partners supported a responsive vaccination campaign in Somali region.
- In early February 2019, Ethiopia launched a measles vaccine second dose (MCV2) vaccination into the routine immunization programme in the second year of life.
- Management of measles cases is ongoing at health care facilities in the affected regions.

SITUATION INTERPRETATION

Measles is endemic in Ethiopia with outbreaks reported annually. A quarter of the people affected during the current outbreak are 15 years and above and more than 82.6% of cases were either not vaccinated or their vaccination status was unknown. In addition, an effective cold chain system for storage and transport of the vaccine is lacking in a number of regions, especially Afar and Somali regions. The estimated measles vaccine first dose (MCV1) coverage by WHO and UNICEF in 2018 was 61%, and the administrative coverage for the same period was 88%. This is suboptimal to protect a community against an outbreak (to achieve herd immunity, usually 95% and above coverage is required).

There is a need to apply simple yet innovative approaches to address the health system challenges that impact the effective delivery of measles vaccines, and other vaccines, to the population, especially those located in the hard-to-reach areas of the country. Routine measles vaccination for children, combined supplemental immunization activities (SIAs) and strong community engagement are key public health strategies to reduce the incidence of the disease.
**EVENT DESCRIPTION**

The protracted humanitarian crisis in northeast Nigeria remains precarious with recent intensification of military operations against insurgents, mostly around the Lake Chad islands. In the last two months, the Nigerian Army and Air Force increased military activity with the aim of reducing the presence of Boko Haram in the region. This is occurring against a background of the displacement of over 1.8 million persons into informal camps and host communities in several parts of the region.

The cholera outbreak in Adamawa state continues to show a downward trend with a constant reduction in the number of cases reported weekly since the peak in week 31 (week ending 4 August 2019) when 72 cases were reported till week 41 (week ending 13 October 2019) when only 5 cases have been reported. As of 11 October 2019, a total of 787 suspected cholera cases and 4 associated deaths (case fatality ratio 0.5%) have been reported from Yola North, Song, Girei and Yola South LGAs. No cases have been reported from Song LGA since week 27 (week ending 7 July 2019). Of the 440 stool samples tested for Vibrio cholerae, 243 were positive using rapid diagnostic test (RDT) kits while 189 were culture positive for the organism.

In week 39 (week ending 28 September 2019), the leading cause of morbidity and mortality in the area was malaria, accounting for 44% of all reported cases and 45% of reported deaths. The number of malaria cases have been on the rise in the last 10 weeks following the start of the rainy season in the region in week 27 (week ending 7 July 2019). Weekly surveillance reports were submitted from 228 of 274 reporting sites, translating to the timeliness and completeness of reporting of 84% (target 80%). Fifty-four indicator-based alerts were generated; 91% of them were verified with none requiring any immediate public health response.

**PUBLIC HEALTH ACTIONS**

- WHO supported training on Infection Prevention and Control (IPC) in the four LGAs affected by the ongoing cholera outbreak in Adamawa state with over 200 health workers trained. Other response activities have been sustained with significant improvement in WASH conditions. Household and latrine disinfection, chlorination of water at points of collection, distribution of water purification kits and water quality testing have been intensified in the affected communities.

- The second round of the Oral Cholera Vaccine (OCV) campaign was conducted in Yobe state between 1 and 5 September 2019, targeting 128,520 persons aged one year and above in 11 wards in Damaturu LGA. The post campaign administrative coverage was 99%.

- The Mental Health and Psychosocial Support (MHPSS) State Working Group coordination meeting was held on 10 September 2019 in Maiduguri. A total of 48 participants from various organizations participated in the coordination meeting to plan activities for World Mental Health day.

- WHO supported hard-to-reach (H2R) teams continue to provide basic essential services in LGAs in the three most affected northeastern states of Adamawa, Borno and Yobe states treating persons with minor ailments, conducting antenatal care services for pregnant women including malaria chemoprophylaxis. The cholera outbreak in Adamawa state is also yet to be controlled. As the rains continue to increase, the potential for spread to unaffected areas remains a concern.

**ACCESSIBILITY MAP OF NORTHEAST NIGERIA 2019**

The humanitarian crisis in northeast Nigeria remains volatile as increased military action has been observed in recent weeks. The crisis continues to be characterized by mass population movement of persons to relatively secure areas in IDP camps and host communities as a result of armed conflict. The living conditions of these displaced persons is suboptimal in many of the camps with restricted access to water and sanitation. The rainy season has started in the region and has left several communities with limited access to humanitarian assistance due to poor vehicular access.

Likewise, certain communicable diseases are associated with increased rains including malaria, as has been observed in recent weeks. With malaria being the leading cause of mortality and morbidity, the government and partners are required to institute measures to reduce the burden of disease, including distribution of bed nets and malaria chemoprophylaxis. The cholera outbreak in Adamawa state is also yet to be controlled. As the rains continue to increase, the potential for spread to unaffected areas remains a concern.

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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 21 health areas reporting confirmed cases in the past 21 days (29 September to 19 October 2019). Since our last report on 13 October 2019 (Weekly Bulletin 41), there have been 19 new confirmed cases and 19 new deaths. The principle hot spots of the outbreak in the past 21 days are Mandima (53%; n=26 cases) and Mambasa (10%; n=5 cases). Five health zones, Beni, Mabalako, Mambasa, Mandima, and Oicha have reported new confirmed cases in the past seven days.

As of 19 October 2019, a total of 3,239 EVD cases, including 3,123 confirmed and 116 probable cases have been reported. To date, confirmed cases have been reported from 29 health zones: Ariwara (1), Bunia (4), Komanda (56), Loho (6), Mambasa (75), Mandima (322), Nyakunde (2), Rwamara (8) and Tchomia (2) in Ituri Province; Alimbongo (5), Beni (679), Biena (18), Butembo (283), Goma (1), Kalunguta (192), Katwa (651), Kayna (28), Kyondo (25), Lubero (31), Mabalako (375), Manguedjiga (18), Masereka (50), Musienene (84), Mutwanga (32), Nyiragongo (3), Oicha (62), Pinga (1) and Vuhovi (103) in North Kivu Province and Mwenga (6) in South Kivu Province.

As of 19 October 2019, a total of 2,169 deaths were recorded, including 2,053 among confirmed cases, resulting in a case fatality ratio among confirmed cases of 67% (2,040/3,133). The cumulative number of health workers is 162, which is 5% of the confirmed and probable cases to date.

Contact tracing is ongoing in 10 health zones. A total of 5,570 contacts are under follow-up as of 19 October 2019, of which 4,774 have been seen in the past 24 hours, comprising 86% of the contacts. Alerts in the affected provinces continue to be raised and investigated. Of 3,679 alerts processed (of which 3,616 were new) in reporting health zones on 19 October 2019, 3,564 were investigated and 420 (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 Emergency Committee (EC) for EVD. On 18 October the EC met again to review the situation. Following an in-depth analysis and review it determined that the event still constitutes a PHEIC under the IHR (2005).

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 19 October 2019, a cumulative total of 240,494 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 108 million screenings to date. A total of 107,112 (96%) PoE/PoC transmitted reports as of 19 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.
- Water, sanitation and hygiene (WASH) activities continue and during this week, 5 households in Mandima were equipped with infection prevention and control and WASH inputs.
- 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.
- Positive messages around the management of the transit centres (TC) and treatment centres were delivered during the official opening of the new Kahamba TC, Kalunguta Health Zone; a total of 296 people around four confirmed cases on 14 October 2019 benefited from response activities.

SITUATION INTERPRETATION

The number of new confirmed cases does seem to be declining, but previous experience shows that this trend needs to be interpreted with caution. Notwithstanding this, in areas where robust public health measures have succeeded, no new confirmed cases have been reported, showing that these approaches need to continue. Local and national authorities need to continue their input, along with partners and donors, to ensure that gains continue and ultimately bring the outbreak to a close.
**EVENT DESCRIPTION**

On 17 October 2019, WHO was notified by the Ministry of Health of Zambia of a confirmed case of circulating vaccine-derived polio virus type 2 (cVDPV2) in Chienge district, Luapula province on the border with Democratic Republic of the Congo. The case-patient is a two-year-old male child with onset of paralysis in the lower limbs on 16 July 2019. On 23 July 2019, the case-patient was taken to a health facility in Pweto district, Haut Katanga Province, Democratic Republic of the Congo to seek care. An initial diagnosis of acute flaccid paralysis (AFP) was made, followed by laboratory testing of stool samples which confirmed vaccine-derived polio virus type 2 (VDPV2). The isolated virus has nine nucleotide changes from Sabin 2.

WHO alerted the Zambian Ministry of Health of the results on 13 September 2019, following reports that the case-patient had travel back to Chienge district with his mother who is of Zambian nationality. During initial investigation by the Ministry of Health of Zambia, thirty-four (34) stool samples were collected from healthy contacts of the case-patient and sent to the University Teaching Hospital virology laboratory in Zambia for testing. Test results showed two samples positive for VDPV2. On 17 October 2019, results of further genetic sequencing conducted at the National Institute of Communicable Diseases (NICD) Laboratory in South Africa confirmed that the positive stool samples were genetically linked to the case-patient, thus confirming cVDPV2.

This is the first case of cVDPV2 reported from Zambia in 2019. No established links have so far been found with the ongoing outbreak of cVDPV2 in Democratic Republic of the Congo where 37 cases have been reported in 2019. Routine coverage of oral polio vaccine (OPV3) has been above national target in the affected area in the past two years. However, inactivated polio vaccine (IPV) coverage has been much lower. The last recorded case of indigenous polio in Zambia was in 1995, while between 2001 and 2002, five cases of wild polio virus were identified among Angolan refugees in the Western province of the country.

**PUBLIC HEALTH ACTIONS**

- The Ministry of Health, through the Zambia National Public Health Institute, has activated the Public Health Emergency Operations Centre and put in place an Incident Management System to coordinate response to the outbreak.
- Enhanced surveillance for polio including active search for AFP cases through record reviews at health facilities in the affected district are being conducted to identified potential cases of wild polio and vaccine-derived polio viruses.
- Field investigations of all AFP cases detected are being routinely implemented, followed by planning of appropriate response activities as needed.
- Supportive supervision has been intensified in all health facilities in the affected district. An integrated supportive supervision (ISS) tool is being used to assess health facilities and mentor clinical staff in areas where gaps have been identified.
- A vaccination coverage survey has been undertaken in catchment areas of two health facilities in the district. A total of 60 households from six clusters were administered questionnaires to assess vaccination coverage in under-five children.
- Routine immunization activities continue in the district, including outreach exercises aimed at increasing uptake and utilization of polio and other vaccines.
- Enhanced sensitization activities in communities, including visitation of priority sites, are being conducted.

**SITUATION INTERPRETATION**

The evolving cVDPV2 epidemiology across the African region is of concern with Zambia being the latest to confirm an outbreak. No established link has so far been found with the cVDPV2 outbreak in Democratic Republic of the Congo. However, given that the current outbreak has been confirmed in an area on the border with DRC with evidence of several cross-border movements of the case-patient, there is a potential for international spread across the border. Concerted efforts are required to bring this outbreak under control and prevent international spread of the virus. WHO continue to emphasize the need to maintain high levels of routine polio vaccination coverage to minimize the risk and consequences of any poliovirus circulation.
Major issues and challenges

- The humanitarian crisis in North East Nigeria remains concerning, with increased military action. The number of persons in IDP camps remains high with suboptimal living conditions, in particular restricted water and poor sanitation. The onset of the rainy season is also of concern given the association with diseases which can cause life threatening outbreaks including malaria and cholera.

- Over 8,000 people have now been affected by the measles outbreak in Ethiopia, with more than 80% of cases not vaccinated or with unknown vaccination status. Measles is endemic in the country with the vaccination coverage remaining lower than the 95% coverage required to prevent outbreaks. Additionally, the cold chain system remains poor impacting the effectiveness of vaccinations that do take place.

Proposed actions

- Surveillance for potential outbreaks in the areas affected by the humanitarian crises in North East Nigeria is ongoing, however timeliness and completeness should be improved to ensure vigilance is maintained for early warning signals of potential outbreaks. Additionally, the need for access to safe water and sanitation must be urgently addressed by authorities.

- The health system challenges that impact the effective delivery of measles vaccines, together with other vaccinations, particularly in hard-to-reach areas need to be reviewed and addressed by the public health authorities. Community education on the importance of vaccination together with supplemental immunization activities in areas with low vaccine coverage must occur to improve the vaccination rates in Ethiopia and reduce the incidence of cases.
**New 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>
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<tbody>
<tr>
<td>Chad</td>
<td>Poliomyelitis (cVDPV2)</td>
<td>G2</td>
<td>18- Oct-19</td>
<td>9- Sep-19</td>
<td>18- Oct-19</td>
<td>1</td>
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<td>0</td>
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On 18 October 2019, WHO was informed about cVDPV2 in Chad. A cVDPV2 was isolated from an 13-month-old case of acute flaccid paralysis (AFP), with onset of paralysis on 9 September 2019 in Chari Baguirmi province, bordering Cameroon. The isolated virus has 32 nucleotide changes from Sabin 2, and is genetically-linked to a cVDPV2 detected in Borno, Nigeria and is part of the Jigawa emergence. The Global Polio Eradication Initiative is working with regional and country teams to further investigate these events/detections, and plan response as appropriate. The last indigenous wild poliovirus case was reported in 2000 in Chad.

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

On 18 October 2019, WHO was informed about cVDPV2 in Togo. A cVDPV2 was isolated from a 39-month-old case of AFP with onset of paralysis on 13 September 2019 in Plateaux province, bordering Benin and Ghana. The isolated virus has 32 nucleotide changes from Sabin 2, and is genetically-linked to a cVDPV2 detected in Irewole state, Nigeria and is part of the Jigawa emergence as well. Global Polio Eradication Initiative is working with regional and country teams to further investigate and plan response as appropriate. The last indigenous wild poliovirus case was reported in 1999 in Togo.

| Zambia  | Poliomyelitis (cVDPV2) | G2    | 17- Oct-19          | 16- Jul-19                | 17- Oct-19              | 3          | 3              | 0      | 0.00% |

**Ongoing Events**

**Angola**

- **Measles**
  - Grade: Ungraded
  - Date notified to WHO: 4-May-19
  - Start of reporting period: 1-Jan-19
  - End of reporting period: 30-Jun-19
  - Total cases: 3 127
  - Cases Confirmed: 85
  - Deaths: 64
  - CFR: 2.00%

  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 Mexico provinces have reported 73% and 17% of cases respectively. A total of 85 laboratory-confirmed cases have been reported since week 1 of 2019.

**Benin**

- **Cholera**
  - Grade: Ungraded
  - Date notified to WHO: 5-Jul-19
  - Start of reporting period: 3-Jul-19
  - End of reporting period: 26-Sep-19
  - Total cases: 45
  - Cases Confirmed: 19
  - Deaths: 0
  - CFR: 0.00%

  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, Zé (3), Sô-Ava (2) and Abomey-Calavi (2) in Atlantique Department and Cotonou (12) in Littoral Department.

**Burkina Faso**

- **Humanitarian crisis**
  - Grade: Ungraded
  - Date notified to WHO: 1-Jan-19
  - Start of reporting period: 1-Jan-19
  - End of reporting period: 10-Oct-19
  - Total cases: -
  - Cases Confirmed: -
  - Deaths: -
  - CFR: -

  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 3600 internally displaced persons registered as of 8 October 2019 in all 13 regions in the country. The regions of North, Boucle 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.

**Burkina Faso**

- **Food poisoning**
  - Grade: Ungraded
  - Date notified to WHO: 19-Sep-19
  - Start of reporting period: 1-Sep-19
  - End of reporting period: 19-Sep-19
  - Total cases: 20
  - Cases Confirmed: 12
  - Deaths: 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 Didyr, province of Sangué, 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 Didyr, 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.

**Burundi**

- **Cholera**
  - Grade: Ungraded
  - Date notified to WHO: 5-Jun-19
  - Start of reporting period: 1-Jun-19
  - End of reporting period: 7-Sep-19
  - Total cases: 433
  - Cases Confirmed: 32
  - Deaths: 2
  - CFR: 0.50%

  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 Ndava CTC.
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<tr>
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<td>Malaria</td>
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<td>1-Jan-19</td>
<td>29-Sep-19</td>
<td>6 831 659</td>
<td>2 545</td>
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Since week 48 of 2018 (week ending 2 December 2018), there has been a progressive increase in the number of malaria cases reported across the 46 districts of Burundi, with the epidemic threshold surpassed in week 18 (week ending 5 May 2019). In week 39 (week ending 29 September 2019), 121 704 cases including 32 deaths have been reported. There is a 49% increase in the number of cases reported in week 39 of 2019 compared to the same period in 2018.

| Cameroon     | Humanitarian crisis (Far North, North, Adamawa & East) | Protracted 2 | 31-Dec-13 | 27-Jun-17 | 27-Sep-19 | - | - | - | - |

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.

| Cameroon     | Humanitarian crisis (NW & SW) | 62      | 1-Oct-16          | 27-Jun-18                 | 27-Sep-19               | - | - | - | - |

The humanitarian situation in the Northwest and Southwest (NW & SW) of Cameroon continues to deteriorate with serious protection incidents reported. Humanitarian access to persons in need continues to be a challenge with armed groups often blocking access as well as threatening humanitarian personnel. This unrest continues to affect access to basic services including healthcare, education, shelter, food security and WASH. As of 27 September 2019, the total number of internally displaced persons is estimated at 437 000 persons and the population in need of humanitarian assistance is estimated at 594 000 persons. An estimated 39 000 people have fled to the Littoral and Western regions, and 25 291 people (of which 80% are women and children) have crossed into neighbouring Nigeria.

| Cameroon     | Cholera                            | Ungraded | 1-Mar-19 | 1-Mar-19 | 10-Oct-19 | 667       | 98    | 32   | 4.80% |

The cholera outbreak in Cameroon is improving in the 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 (Bibémi, Figuil, Garoua I, Garoua II, Gashiga, Golombe, Ngomg, Pitoa, Tcholliré) and 6 out of 30 health districts (Kaélé, Kar Hay, Moutourwa, Guidiguis, Maroua 1 et Maroua 2) in the Far North.

| Cameroon     | Measles                            | Ungraded | 2-Apr-19 | 1-Jan-19 | 11-Aug-19 | 1 170     | 269   | 6    | 0.00% |

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, Gouffley, Makary, Kolofata, Koza, Ngaoundéré rural, Banqué, Guider, Figuil, Ngong, Mora, Maroua 3, Vélé, Pitoa, Maroua 1, Bourha, Touboro, Mogodé, Bibémi, Garoua 1, Garoua 2, Lagdo, Tcholliré, Guidiguis, Moutourwa, Mokolo, Cité verte, Djoungolo, Nkolondo, Limbé, Garoua Boulai, Ngaoundéré Urbain.

| Cameroon     | Monkeypox                          | Ungraded | 27-Sep-19 | 18-Sep-19 | 27-Sep-19 | 1 | 0 | 0 | 0.00% |

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.

| Cameroon     | Poliomyelitis (cVDPV2)             | G2      | 23-May-19 | 23-May-19 | 16-Oct-19 | - | - | - | - |

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 cVDPV2 in Cameroon, which is the first detection of this virus in Cameroon. The virus is a 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.

| Central African Republic | Poliomyelitis (cVDPV2) | G2 | 24-May-19 | 24-May-19 | 16-Oct-19 | 10 | 10 | 0 | 0.00% |

No new case of cVDPV2 was reported this week. There are 10 reported cases in 2019 from five different outbreaks of cVDPV2 in 2019.

| Central African Republic | Humanitarian crisis             | Protracted 2 | 11-Dec-13 | 11-Dec-13 | 22-Sep-19 | - | - | - | - |

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

| Central African Republic | Hepatitis E                     | Ungraded | 2-Oct-18 | 10-Sep-18 | 29-Sep-19 | 192 | 147 | 1 | 0.50% |

No new cases have been confirmed in the last 15 epidemiological weeks 25-39 (17 June - 29 September 2019). As of 29 September 2019, a total of 192 cases of acute jaundice syndrome, of which 147 were confirmed for viral hepatitis E, have been recorded from Bocaranga-Koui and Ngaoundaye. Ngaoundaye health district has reported seven cases of viral hepatitis E (6 confirmed and 1 probable) since the beginning of the epidemic. The last case was reported in week 24 (week ending 16 June 2019).

| Central African Republic | Measles                           | Ungraded | 15-Mar-19 | 11-Feb-19 | 22-Sep-19 | 1 424 | 30 | 1 | 0.10% |

In week 38 (week ending 22 September 2019), 36 new suspected measles cases were reported from Kaga Bandoro sub-prefecture (28 cases) and Bafango health district (8 cases). This is an increase in the reported number of cases since week 37 (week ending 15 September 2019). Since the January 2019, a total of 1424 measles cases and 1 death have been reported in four districts: Bafango, Kaga Bandoro, Nana-Gribizi and Paoua.

No new case of cVDPV2 was reported this week. There are 10 reported cases in 2019 from five different outbreaks of cVDPV2 in 2019.
# 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>Chad</td>
<td>Measles</td>
<td>Ungraded</td>
<td>24-May-18</td>
<td>1-Jan-19</td>
<td>13-Oct-19</td>
<td>25 077</td>
<td>178</td>
<td>242</td>
<td>1.00%</td>
</tr>
<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>4-Aug-19</td>
<td>11 282</td>
<td>148</td>
<td>0</td>
<td>-</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>
<tr>
<td>Democratic Republic of the Congo</td>
<td>Cholera</td>
<td>G3</td>
<td>20-Dec-16</td>
<td>17-Apr-17</td>
<td>23-Sep-19</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Democratic Republic of the Congo</td>
<td>Chikungunya</td>
<td>Ungraded</td>
<td>8-Feb-19</td>
<td>30-Sep-18</td>
<td>12-May-19</td>
<td>1 181</td>
<td>426</td>
<td>0</td>
<td>0.00%</td>
</tr>
<tr>
<td>Democratic Republic of the Congo</td>
<td>Chikungunya</td>
<td>G1</td>
<td>22-Jan-19</td>
<td>7-Jan-19</td>
<td>4-Aug-19</td>
<td>11 282</td>
<td>148</td>
<td>0</td>
<td>-</td>
</tr>
<tr>
<td>Democratic Republic of the Congo</td>
<td>Measles</td>
<td>G2</td>
<td>10-Jan-17</td>
<td>1-Jan-19</td>
<td>29-Sep-19</td>
<td>203 179</td>
<td>6 276</td>
<td>4 065</td>
<td>2.00%</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>13-Sep-19</td>
<td>3 969</td>
<td>-</td>
<td>68</td>
<td>1.70%</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>6-Oct-19</td>
<td>31</td>
<td>-</td>
<td>8</td>
<td>25.80%</td>
</tr>
</tbody>
</table>

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, Boussou 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), Mitsamiouli (6), Mbeni (3), Ichili (1) and Mitsoundjé (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. The number of cases reported declined from 37 in week 30 (week ending 28 July 2019) to 17 in week 31 (week ending 4 August 2019). Since the beginning of the outbreak, a total of 11 282 cases have been reported in 43 out of the 52 health districts of the country. The affected areas include densely populated zones such as Brazzaville and Pointe-Noire.

Since the peak in week 25 (week ending on 23 June 2019), there has been a gradual decline in the weekly number of cases. As of 24 September 2019, a total of 3 201 suspected cases including two deaths attributed to dengue fever have been reported. Of these, 162 cases have been confirmed with DENV 1 (125 samples) and DENV 2 (38 samples) as the main circulating serotypes. Forty-five out of 86 districts across the 16 health regions have reported at least one case. Cocoody Bingerville District in Abidjan remains the epicentre of the outbreak.

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, South-Kivu and Maniema. More than 14 600 voluntary returnees have arrived in the health zones of Luiza and Ramonia in Kasai central province between 20 and 31 August 2019, according to UNHCR. In Tanganyika province, the persistence of insecurity in Nyunzu and Kalemi territories continues to cause displacements of populations. In Ituri province, following the security campaign launched by the Congolese armed forces, more than 100 000 people have been displaced within the Djugu Territory.

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 Gombe, Mont Gafula, Mont Gafula 2, Massa and Matadi 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.

During week 38 (week ending 22 September 2019), a total of 925 suspected cases of cholera and 19 deaths were notified from 66 health zones in 9 provinces. Between week 1 and week 38 of 2019, a total of 20 773 cases including 374 deaths (CFR 1.8%) have been notified from 21 out of 26 provinces. Compared to the same period in 2018 (week 1-39), there is a decrease in the number of cases and deaths.

Since the peak in week 25 (week ending on 23 June 2019), there has been a gradual decline in the weekly number of cases. Since the beginning of the year, a total of 203 179 measles cases including 4 065 deaths (CFR 2.0%) have been reported. Overall, 51% of cases reported in 2019 have been notified from Tshopo, Lualaba, Kasai and Haut-Lomami provinces. The case fatality ratio is higher in the 519 health zones across 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. The number of cases reported declined from 37 in week 30 (week ending 28 July 2019) to 17 in week 31 (week ending 4 August 2019). Since the beginning of the outbreak, a total of 11 282 cases have been reported in 43 out of the 52 health districts of the country. The affected areas include densely populated zones such as Brazzaville and Pointe-Noire.

Since the beginning of the year, a total of 31 suspected 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 (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>Poliomyelitis (cVDPV2)</td>
<td>G2</td>
<td>15-Feb-18</td>
<td>1-Jan-18</td>
<td>18-Oct-19</td>
<td>57</td>
<td>57</td>
<td>0</td>
<td>0.00%</td>
</tr>
<tr>
<td>Ethiopia</td>
<td>Cholera</td>
<td>Ungraded</td>
<td>14-May-19</td>
<td>12-May-19</td>
<td>13-Oct-19</td>
<td>1 708</td>
<td>54</td>
<td>11</td>
<td>0.70%</td>
</tr>
<tr>
<td>Guinea</td>
<td>Measles</td>
<td>Ungraded</td>
<td>14-Jan-17</td>
<td>1-Jan-19</td>
<td>13-Oct-19</td>
<td>8 541</td>
<td>14</td>
<td>57</td>
<td>0.70%</td>
</tr>
<tr>
<td>Ghana</td>
<td>Poliomyelitis (cVDPV2)</td>
<td>Ungraded</td>
<td>24-Jun-19</td>
<td>20-May-19</td>
<td>16-Oct-19</td>
<td>2</td>
<td>2</td>
<td>0</td>
<td>0.00%</td>
</tr>
<tr>
<td>Kenya</td>
<td>Cholera</td>
<td>Ungraded</td>
<td>21-Jan-19</td>
<td>2-Jan-19</td>
<td>13-Oct-19</td>
<td>4 476</td>
<td>210</td>
<td>37</td>
<td>0.80%</td>
</tr>
<tr>
<td>Guinea</td>
<td>Leishmaniasis</td>
<td>Ungraded</td>
<td>31-Mar-19</td>
<td>1-Jan-19</td>
<td>13-Oct-19</td>
<td>2 732</td>
<td>1 155</td>
<td>34</td>
<td>1.20%</td>
</tr>
<tr>
<td>Mali</td>
<td>Humanitarian crisis</td>
<td>Protracted</td>
<td>n/a</td>
<td>n/a</td>
<td>10-Sep-19</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

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

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 9 374 households in 12 kebeles, leading to acute displacement of persons 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, SNPP, Amhara and Afar regions.

Chikungunya cases have reported from Ethiopia since week 31 (week ending 30 July 2019). In week 39 (week ending 29 September 2019), 2 541 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).

In week 41 (week ending 13 October 2019), 88 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 1 708 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.

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 écôle, and Matoto centre in Matoto Health District, Wândinara in Ratoma Health District and Maneah in Coyah Health District.

In week 41 (week ending 13 October 2019), 36 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.

In week 41 (week ending 13 October 2019), 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. Additionally, 10 cases including 6 laboratory-confirmed cases were reported from Garissa County in Dadaab Sub-County. This county has not reported new cases since 21 May 2019.

Two new confirmed cases (both deceased) have been reported from Bong and Grand Bassa counties. From 1 January to 8 September 2019, there have been a total of 106 Lassa fever cases including 22 deaths. Of samples tested from 97 of the suspected cases at the National Public Health Reference Laboratory of Liberia, 27 were confirmed by RT-PCR and 70 were discarded due to negative test results. The case fatality ratio among confirmed cases is 41% (11/27). A total of 122 contacts including 44 health workers have been identified and are under follow-up in the two counties.

In week 41 (week ending on 13 October 2019), 5 suspected cases were reported from 5 out of 15 counties across the country. Since the beginning of 2019, 1 426 cases have been reported across the country, of which 210 are laboratory-confirmed, 82 are epi-linked, and 738 are clinically confirmed.
### Mozambique

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

### Namibia

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.

### Namibia

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, Otjozondjupa, and Kunene regions.

### Niger

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

### Nigeria

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

During week 33 (week ending 18 August 2019), 6 suspected measles cases have been reported from the country. Maradi (3,543 cases including 8 deaths) and Tahoua (1,845 including 24 deaths) region reported the most cases, followed by Zinder (1,360 including 10 deaths), Niamey (1,269 with 1 death), Tillaberi (633 including 3 deaths), Agadez (490 including 3 death), Diffa (299 with no deaths) and Dosso (298 cases including 4 deaths). Since the peak of the outbreak in week 12, the case incidence has been on a continuous decline.

### Nigeria

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

The number of cases of cholera reported in Adamawa State has been on a declining trend. Five new cases were reported from Yola North (4) and Yola South (1) Local Government Areas between 4 to 11 October 2019. From 15 May to 11 October 2019, a cumulative total of 787 cases with four deaths have been reported from four LGAs: Yola North (481 cases with two deaths), Girei (193 cases with one death), Yola South (112 cases with one death), and Song (1 case with zero deaths). Of 440 stool specimens collected and analysed at the state specialist hospital, 189 cultured *Vibrio cholerae* as the causative agent.

### Nigeria

During week 40 (week ending 6 October 2019), seven new confirmed cases with one death were reported from Edo (5 cases with one death), Ondo (1 case with zero deaths), and Bauchi (1 case with zero deaths) states. Eighty-six Local Government Areas (LGAs) across 23 states have reported at least one confirmed case since the beginning of 2019. Nineteen (19) health care workers across 10 states have been infected since the beginning of 2019. A total of 396 contacts are currently being followed up.

### Nigeria

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 (191), Kano (308), Yobe (91), Elkoli (63), 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 55,476 suspected cases have been recorded from 734 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

No case of circulating vaccine-derived poliovirus type 2 (cVDPV2) was reported this week. There are 16 cVDPV2 cases reported in 2019. There were 34 cVDPV2 cases in 2018.
### Health Emergency Information and Risk Assessment

#### Dengue fever

- **Country:** Nigeria
- **Event:** Yellow fever
- **Grade:** Ungraded
- **Date notified to WHO:** 14-Sep-17
- **Start of reporting period:** 1-Jan-19
- **End of reporting period:** 30-Sep-19
- **Total cases:** 2,781
- **Cases Confirmed:** 72
- **Deaths:** 81
- **CFR:** 2.90%

In September 2019, 527 suspected cases including 25 presumptive positive cases were recorded. Institut Pasteur (IP) Dakar confirmed 8 cases from: Edo (5) and Ebonyi (3). Additional 27 cases were confirmed by PCR at the National Reference lab and Lagos University Teaching Hospital. Reported cases have been decreasing since week 36 (week ending on 8 September 2019). Since January 2019, all states including FCT have reported at least one suspected case.

#### Cholera

- **Country:** Rwanda
- **Event:** Measles
- **Grade:** Ungraded
- **Date notified to WHO:** 25-Jun-19
- **Start of reporting period:** 1-Jun-19
- **End of reporting period:** 2-Jul-19
- **Total cases:** 74
- **Cases Confirmed:** 12
- **Deaths:** 4
- **CFR:** 5.40%

From 1 June to 2 July 2019, 74 suspected measles cases were reported from Ngorongoro and Rutsiro districts, in the Western province of Rwanda. Among the 14 samples tested by the National reference Laboratory, 12 (85.7%) were IgM positive for measles. Four deaths (CFR 5.4%) have been reported. Ngorongoro district is the most affected with 90.5% (87) of cases, reported mainly from Souv sector (95.2%).

#### Senegal

- **Country:** Senegal
- **Event:** Crimean-Congo haemorrhagic fever (CCHF)
- **Grade:** Ungraded
- **Date notified to WHO:** 13-Sep-19
- **Start of reporting period:** 6-Sep-19
- **End of reporting period:** 13-Sep-19
- **Total cases:** 1
- **Cases Confirmed:** 1
- **Deaths:** 0
- **CFR:** 0.00%

A case of 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.

- **Country:** South Sudan
- **Event:** Humanitarian crisis
- **Grade:** Protracted 3
- **Date notified to WHO:** 15-Aug-16
- **Start of reporting period:** n/a
- **End of reporting period:** 5-Oct-19
- **Total cases:** -
- **Cases Confirmed:** -
- **Deaths:** -
- **CFR:** -

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 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, Jur River, Pibor and Yambio) and four protections of civilian (PoC) sites (Juba, Bentiu, Malakal and Wau).

- **Country:** Uganda
- **Event:** Humanitarian crisis - refugee
- **Grade:** Ungraded
- **Date notified to WHO:** 20-Jul-17
- **Start of reporting period:** n/a
- **End of reporting period:** 30-Sep-19
- **Total cases:** -
- **Cases Confirmed:** -
- **Deaths:** -
- **CFR:** -

Between 1 and 30 September 2019, a total of 8 700 new refugee arrivals crossed into Uganda from the Democratic Republic of the Congo (5 044), South Sudan (900) and Burundi (765). 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.

- **Country:** Zambia
- **Event:** Cholera
- **Grade:** Ungraded
- **Date notified to WHO:** 27-Jun-19
- **Start of reporting period:** 23-Jun-19
- **End of reporting period:** 11-Sep-19
- **Total cases:** 144
- **Cases Confirmed:** 9
- **Deaths:** 1
- **CFR:** 0.70%

A cumulative total of 110 cases have been reported from Nakivale refugee settlement, Insigiro district since the onset of the outbreak. The weekly number of cases is on a declining trend. Another district, Kyegegwa, has reported a cumulative of 34 cases from 11 July to 11 September 2019.

- **Country:** Zimbabwe
- **Event:** Diarrhoeal disease
- **Grade:** Ungraded
- **Date notified to WHO:** 13-Sep-19
- **Start of reporting period:** 2-Sep-19
- **End of reporting period:** 13-Sep-19
- **Total cases:** 294
- **Cases Confirmed:** 0
- **Deaths:** 0
- **CFR:** 0.00%

Zimbabwe has reported an outbreak of diarrhoeal disease whose aetiological 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.

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1 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.
Data sources

Data and information is provided by Member States through WHO Country Offices via regular situation reports, teleconferences and email exchanges. Situations are evolving and dynamic therefore numbers stated are subject to change.