WEEKLY BULLETIN ON OUTBREAKS AND OTHER EMERGENCIES

Week 49: 2 - 8 December 2019
Data as reported by: 17:00; 8 December 2019

1 New event
62 Ongoing events
51 Outbreaks
12 Humanitarian crises

Legend
- Measles
- Monkeypox
- Lassa fever
- Cholera
- Rift Valley Fever
- cVDPV2
- Malaria
- Floods
- Cases
- Deaths
- Humanitarian crisis
- Hepatitis E
- Yellow fever
- Dengue fever
- Ebola virus disease
- Chikungunya
- Leishmaniasis
- Plague
- Countries reported in the document
- Non WHO African Region
- WHO Member States with no reported events

Health Emergency Information and Risk Assessment
This Weekly Bulletin focuses on public health emergencies occurring in the WHO African Region. The WHO Health Emergencies Programme is currently monitoring 63 events in the region. This week’s main articles cover key new and ongoing events, including:

- Measles in Democratic Republic of the Congo
- Ebola virus disease in Democratic Republic of the Congo
- Lassa fever in Liberia
- Humanitarian crisis in Burkina Faso.

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 protracted measles outbreak in Democratic Republic of the Congo continues to expand, with high morbidity and mortality. Several other countries in the African region are also experiencing measles outbreaks, as well as many countries in other parts of the world. The underlying factor for the measles outbreaks in the African region is the inability of the vaccine-administration systems to reach vulnerable children, rather than low uptake of the vaccines by the recipients – an increasing phenomenon seen in the developed world. Some of the reasons for the low immunization coverage in the African region include inadequacies in healthcare systems and social dislocation due to armed conflicts, poverty, other disasters, etc. The current resurgence of measles is concerning. Health authorities in the African region and the global partners need to double efforts to improve the performance of national immunization programmes to attain the minimum required immunization coverage.

- The number of reported Ebola virus disease (EVD) cases in Democratic Republic of the Congo remains low during the reporting week, as most response activities have resumed following the heightened insecurity and civil unrest. While the operational performance indicators were drastically affected, the impact of the disruption in response interventions is not yet evident on the evolution of the outbreak. We remain cautiously optimistic as we continue to monitor the trends. It is commendable that all the Ebola responders from the national authorities, WHO and partners showed exceptional resilience and determination to continue with the response and see the end of the EVD outbreak.
EVENT DESCRIPTION

The protracted measles outbreak in Democratic Republic of the Congo continues to expand, with increasing trends in weekly incidence cases since week 27, when a short decline was observed over a period of 10 weeks. Since our last report on 11 November 2019 ([Weekly Bulletin 45]), 35 742 additional suspected measles cases and 707 additional deaths have been reported across the country, including in 53 new health zones with confirmed epidemics. In week 47 (week ending 24 November 2019), a total of 7 230 suspected measles cases, including 136 deaths (case fatality ratio 1.9%) were reported, compared to 8 660 cases with 152 deaths reported in week 46. Two new health zones in Haut-Uele province, Isiro and Niangara, attained epidemic threshold during the reporting week. The most affected provinces were Mai-Ndombe (n=1431), Equateur (n=982), Kwilu (n=919) and South-Kivu (n=714), which contributed to 56% of all cases reported during the week. Mortality was highest in the provinces of Mai-Ndombe (n=44, CFR: 3%), Equateur (n=33, CFR 3%) and Bas-Uele (n=30, CFR: 3%), accounting for about 80% of all deaths during the reporting week.

From 1 January to 2 December 2019, a total of 269 079 suspected measles cases, including 5 430 deaths (CFR 2%) have been reported from all 26 provinces in Democratic Republic of the Congo. The outbreak has been laboratory confirmed in 241 (46%) health zones. The provinces of Kasai (35 195), Tshopo (33 419), Kwili (21 366) and Mai-Ndombe (20 250) account for 41% of the cumulative cases reported since the beginning of 2019. Cases continue to be reported from Ituri and North-Kivu provinces, which are concomitantly affected by the ongoing Ebola outbreak, with 10 845 cases (CFR 0.6%) and 5 743 cases (CFR 0.3%) reported respectively, since the beginning of the year.

To date, vaccination campaigns have been conducted in 165 (31.8%) of the 519 health zones and a total of 5 277 827 children were vaccinated. A decreasing trend in the weekly case incidence has been observed in vaccinated areas.

PUBLIC HEALTH ACTIONS

- The National Steering Committee sat on 3 December 2019 to review, strategize and prepare for a vaccination campaign in other provinces.
- From 25 to 29 November 2019, WHO supported vaccination campaigns in 14 hotspot and priority areas in six provinces.
- Médecins Sans Frontières supported the vaccination of children aged 6-59 months in 14 hotspot and priority areas in six provinces.
- Médecins Sans Frontières supported case management for 1 847 simple cases of measles and 91 cases of measles with complications, in 9 out of 27 health areas in Koshibanda Health Zone. Overall 16 294 children were vaccinated, representing a vaccination coverage of 109%.
- The measles case management protocol has been disseminated to improve case management and reduce mortality.
- The Emergency Medical Team has been deployed to hotspot health zones since 27 December 2019 with support from WHO.
- WHO’s response interventions focusing on case management are carried out jointly with other partners including Médecins Sans Frontières, Actions Contre la Faim and Médecins du Monde.
- Risk communication and community mobilization using various channels such as religious fora, community radio stations, schools and Non-Governmental Organisations, have been strengthened to improve uptake of the vaccination campaigns.

SITUATION INTERPRETATION

The measles outbreak in Democratic Republic of the Congo has become the world’s largest and most severe measles epidemic. This outbreak has already caused more deaths compared to the ongoing EVD outbreak. Sub-optimal routine immunization coverages and high levels of malnutrition have contributed to the rapid expansion of the measles epidemic and its associated high mortality rates. Furthermore, the under-performance of case-based surveillance has impaired rapid detection of suspected measles cases, which is necessary to guide timely and effective outbreak response interventions. In order to put an end to this outbreak, there is a need to strengthen routine and reactive immunization activities, measles case-based surveillance and case management.
EVENT DESCRIPTION

The Ebola virus disease (EVD) outbreak in North Kivu, South Kivu and Ituri provinces in Democratic Republic of the Congo continues, with response operations cautiously being restored following the intense insecurity and civil unrest. Since our last report on 1 December 2019 (Weekly Bulletin 49), there have been seven new confirmed cases and six new deaths reported from four health zones, Beni, Mabalako, Mandima and Oicha. In the past 21 days (17 November to 7 December 2019), four health zones and 11 health areas reported confirmed cases, with the principle hot spots being Mabalako (43%; n=12 cases), Mandima (25%; n=7), Beni (21%; n=6) and Oicha (11%; n=3).

As of 7 December 2019, a total of 3 320 EVD cases, including 3 202 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), Lofwa (6), Mambasa (78), Mandima (346), Nyakunde (2), Rwampana (8) and Tchomia (2) in Ituri Province; Alimbongo (5), Beni (693), Biena (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 7 December 2019, a total of 2 209 deaths were recorded, including 2 091 among confirmed cases, resulting in a case fatality ratio among confirmed cases of 65% (2 091/3 202). The cumulative number of health workers remains 163, which is 5% of the confirmed and probable cases to date.

Contact tracing is ongoing in five health zones. A total of 2 907 contacts are under follow-up as of 7 December 2019, of which 2 318 (80%) have been seen in the past 24 hours. Alerts in the affected provinces continue to be raised and investigated. Of 4 128 alerts processed (of which 3 956 were new) in reporting health zones on 7 December 2019, 4 022 were investigated and 391 (10%) 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 7 December 2019, a cumulative total of 256 229 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 104/109 (95%) PoE/PoC transmitted reports as of 7 December 2019.

SITUATION INTERPRETATION

The general decline in reported new cases has continued, although with response activities compromised in Beni, Butembo and Mangina, it is possible that cases and community deaths have not been recorded. The trend, especially for this and the coming weeks, should be interpreted cautiously as we watch the impact of the disruption in response operations due to heightened insecurity and civil unrest. It is critical that all areas of response remain effective, engaged and fully resourced.

Water, sanitation and hygiene (WASH) activities continue, with IPC briefing session for 298 providers in six health zone (Mangina, Butembo, Musienene, Kalunguta, Mambasa and Bunia); a supply of 49 070 litres of water was provided for handwashing facilities in Mambasa and Bunia health zones.

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

Lassa fever remains a public health challenge in Liberia, with increasing number of new cases seen in recent weeks. In week 47 (week ending 24 November 2019), five new confirmed Lassa fever cases with two deaths were reported from two counties: Grand Bassa (4 cases, 1 death) and Nimba (1 case, 1 death). The case-patient from Nimba County was a 19-year-old pregnant female resident of Sanniquellie Mah district, an area known to be endemic for Lassa fever in Liberia. She presented to a local hospital on 19 November 2019, nine days after symptom onset. The diagnosis of Lassa fever was confirmed on 22 November 2019 when test results returned positive for Lassa virus infection by reverse transcriptase-polymerase chain reaction (RT-PCR) at the National Public Health Reference Laboratory of Liberia (NPHRL). She died while undergoing clinical care. The four cases from Grand Bassa County were residents of District #3A, another area known to be endemic for the disease, and were notified to the national authorities between 18 and 24 November 2019. The case-patients presented to a local hospital in the and were confirmed for Lassa virus infection by RT-PCR.

From 1 January to 24 November 2019, a cumulative total of 169 suspected Lassa fever cases were reported across the country. Of the 169 suspected cases, 120 were sampled and tested for Lassa fever by reverse transcriptase-polymerase chain reaction (RT-PCR) at the National Public Health Reference Laboratory of Liberia (NPHRL), with testing 46 positive and 74 negatives. Of the 46 confirmed cases, 14 died, giving a case fatality ratio of 30% among confirmed cases.

The confirmed cases originated from five counties, namely; Grand Bassa (17 cases, 3 deaths), Bong (14 cases, 6 deaths), Nimba (10 cases, 3 deaths), Montserrado (2 cases, 1 death), Grand Kru (2 cases, zero deaths), and Margibi (1 case, 1 death). The median age of the confirmed cases is 25.5 years (IQR 14 – 39). Females constitute 61% (n=28) of the confirmed cases. The case fatality ratio is 44.4% (8/18) among males and 21.4% (6/28) among females. A total of 179 contacts are currently being followed across four counties.

PUBLIC HEALTH ACTIONS

- Public health responses to Lassa fever events continue to be mounted at the sub-national level under the leadership of the respective County Health Teams (CHT). At the national level, the National Public Health Institute of Liberia (NPHIL), with support from WHO, US CDC, and other partners continue to monitor the situation and provide technical support in responding to these events.
- In the affected counties, enhanced surveillance including active case search, case investigation and contact tracing are ongoing. Outbreak case definitions as well as screening tools for triaging patients are being used at local health facilities for case identification.

SITUATION INTERPRETATION

The current increase in cases of Lassa fever in Liberia could be an indication of the start of the peak seasonal pattern, which usually begins at the onset of the dry season. Changes in ecological and environmental factors over the years, coupled with improve surveillance for Lassa fever, continue to lead to the yearly increasing trend of Lassa fever cases reported. The primary factors that expose people to infectious rodents remain in the community and need to be tackled. The national authorities and partners in Liberia need to strengthen surveillance for early detection and management of cases. Additionally, engagement with the communities and mainstreaming the One Health approach into preparedness and response activities are crucial to reducing Lassa fever morbidity and mortality.
**EVENT DESCRIPTION**

The humanitarian crisis in Burkina Faso continues, with insecurity, the main driver, affecting mainly the Sahel, Centre-North, North East and Boucle du Mouhoun provinces. Since the start of 2019, there have been more than 500 security incidents, causing 1,643 deaths, recorded in 34 out of 45 of the provinces in the country. Sahel and Centre-North have registered 63% of all incidents. According to OCHA, there are 486,360 internally displaced persons (IDP) in the 13 regions of the country, an increase of 68% on the figures released on 23 September 2019 (289,591). Most IDPs are women (35.7%) and children (48.7%) and are mainly located in the Centre-North (55.6%) and Sahel (33%). The humanitarian response in the Sahel and Centre-North provinces is compromised as certain areas are inaccessible.

Health workers are increasingly being attacked, with a head nurse killed in the Sahel region on 29 November 2019, while the chair of the management committee of a health promotion centre and the chair of a village development committee were kidnapped in the Sahel region two weeks ago. They are still unaccounted for. Seventy-three mobile phones from the Auto-Visual AFP Detection and Reporting group were stolen and destroyed by armed groups. At least 85 health facilities have closed, with 93 partially functional as of 3 December 2019. This leaves at least one million people without access to health care.

The nutritional situation in Sahel and Centre-North is worsening, according to the result of a SMART survey published on 27 November 2019. The prevalence of acute malnutrition is very high: global acute malnutrition is 11.6-19.7% and severe acute malnutrition is 1.5-7% among IDP children aged 6 to 59 months.

**PUBLIC HEALTH ACTIONS**

- Multidisciplinary mobile clinics continue to be deployed in Centre-North in collaboration with ALIMA, since 1 September 2019, with financial contributions from WHO; with mobile clinics established in Sahel in collaboration with Médicines du Monde (MDM), Spain, also supported by WHO.
- A preventative meningitis vaccination campaign reached 256,842/330,627 children aged 2-14 years in the Sahel, with vaccine provided by the ICG, in response to a request by WHO.
- WHO has supported the Central Emergency Response Operations Centre in organizing Incident Management Training in Kaya, Centre-North, as well as a workshop for the operational emergency medical team in the country.
- WHO continues to support implementation of the Health Resource Availability Mapping System, which will start in mid-December 2019, as well as the Surveillance System of Attacks on Healthcare for continued data collection.
- WHO continues to coordinate the humanitarian response by health partners, including bi-monthly meetings, participation in the needs analysis process and planning the humanitarian response for 2020.
- Health partners (ICRC, MSF, MDM, ALIMA, LVIA, ACF and UNFPA) continue to mobilize human resource, donate medicines and equipment, and establish medical posts.

**SITUATION INTERPRETATION**

The situation in Burkina Faso continues to be of grave concern, with ongoing insecurity resulting in large population movements, loss of health facilities and inadequate access by humanitarian partners. Challenges include lack of capacity for mass casualty management in affected areas and inadequate management of severe acute malnutrition in the most affected areas. While the insecurity and potentially lethal attacks on civilians and humanitarian responders continue, there will be little relief for the affected populations. WHO and partners are responding to the situation, but require support from the broader donor community, particularly for the 2020 humanitarian response plan, while local and national authorities need to address the underlying drivers of the insecurity.
Major issues and challenges

- The Democratic Republic of the Congo has been experiencing a large and protracted measles outbreak, recording high incidence of cases and deaths. Several other countries in the African region are also experiencing measles outbreaks. While the current resurgence of measles is global, the African region has borne the brunt of the problem. The main reason for the increasing occurrence of the disease in the region is inability of the system to administer the vaccines to the vulnerable population due to several factors, including weak healthcare systems, incessant conflicts, poverty and social deprivation, etc. The need to improve the performance of the national immunization programmes across the region is becoming increasingly urgent in order to control the rising number of vaccine-preventable diseases.

- The number of new EVD cases and deaths recorded in Democratic Republic of the Congo during the reporting week remains low. As efforts are ongoing to restore response activities in the wake of the heightened insecurity and civil unrest, the impact of the disruption of interventions on the evolution of the outbreak has not yet started showing. The operational performance indicators that were drastically affected have started to improve, including the number of alerts detected and investigated, proportion of contacts visited, etc.

Proposed actions

- The Ministry of Health and other national authorities in Democratic Republic of the Congo, in conjunction with local and global partners, need to step up efforts to administer the measles vaccines and related therapeutic commodities to the vulnerable population. Additionally, all countries in the African region need to strengthen the performance of the national immunization programmes to improve routine immunization coverage and disease surveillance.

- The national authorities and partners in Democratic Republic of the Congo should continue to implement all aspects of Ebola outbreak control activities. The Government of the Democratic Republic of the Congo, the United Nations and all global stakeholders need to restore peace and security in the country.
Sixteen new cases of circulating vaccine-derived poliovirus type 2 (cVDPV2) were reported this week from Huambo (5), Cuanza Sul (4), Moxico (2), Malanje (2), Benguela (1), Luanda (1), and Huila(1) provinces. The onsets of paralysis were between 24 August and 16 October 2019. There are 60 cVDPV2 cases from seven outbreaks reported in 2019. Four cVDPV2 positive environmental samples were reported; two each from Benguela and Luanda provinces. The samples were collected between 9 September and 4 November 2019.

On 3 December 2019, WHO was informed through internal communication of three yellow fever cases in Mali, including one death. Two of the cases are from Wogouna and Keregoura villages, Bougoni district, Sikasso region in the South of Mali and one from Nanakenieba village, Kati district, Koulikoro region in the south west of Mali. The reported cases are young adults (15-25 years), one female and two males, with onset of symptoms in early November. The cases tested yellow fever IgM and PCR positive at Institute Pasteur Dakar on 3 December 2019. The vaccination status of the cases is being investigated (2 of the cases reported vaccination in the past). The latest vaccination campaign in the country was performed in 2008 including the affected areas where the vaccination coverage was reported to be between 50 and 9% in 2008. The average national vaccination coverage for 2017 has been reported at 65% (Data from Imperial college). The YF routine vaccination in the country was introduced in 2002. A field investigation is ongoing. According to historical data, 10 cases were detected in Mali in 2015.

Between 10 May and 29 November 2019, a total of 26 suspected cases of dengue fever, including two deaths, were reported from Atlantique, Littoral, Ouémé and Couffo Departments. Cumulatively, fourteen cases from Atlantique Department (4 cases), Littoral Department (4 cases) and Ouémé Department (6 cases) were confirmed by serology and PCR at the Benin National VHF Laboratory. Two deaths, one of which occurred in a dengue haemorrhagic fever case, were notified among the confirmed cases (CFR 14%).

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

From 1 June to 5 November 2019, a total of 1,084 cases with six deaths (CFR 0.6%) were reported from 11 health districts. The most affected health districts are Bujumbura North (328 cases), Bujumbura Centre (144 cases) and Bujumbura South (125 cases) in Bujumbura Mairie, Isale (155 cases) in Bujumbura rural province, Cibitoke (194 cases) in Cibitoke province. Of 383 samples tested, 288 (75%) were positive for *Vibrio cholerae* Ogawa. The most affected age-group is 5 to 50 years representing more than 70% of cases. Males and females are equally affected with a male to female ratio of 1.

Since week 48 of 2018 (week ending 2 December 2018), there has been a progressive increase in the number of malaria cases reported across the 46 districts of Burundi, with the epidemic threshold surpassed in week 18 of 2019 (week ending 5 May 2019). In week 43 (week ending 27 October 2019), 150,083 cases including 66 deaths have been reported. There is a 54% increase in the number of cases reported in week 43 of 2019 compared to the same period in 2018.

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

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Two months after the Grand National Dialogue, the humanitarian situation in the Northwest and Southwest (NW & SW) of Cameroon continues to deteriorate with rising tensions between separatists and military forces. On 1 December 2019, a commercial plane landing in NW was shot at by the separatist Ambazonia Governing Council (AGC) and one day prior, on 30 November, an aid worker was abducted and killed by an armed group. This unrest continues to affect access to basic services including healthcare, education, shelter, food security and WASH. As of 30 October 2019, the total number of internally displaced persons is estimated at 536,167 persons.

The cholera outbreak in Cameroon is ongoing in the North, Far North and South West regions. In week 49 (week ending 5 December 2019), 29 cases of suspected cholera and 0 death were reported in the South west region (Bakassi health district). The far north and North regions did not report any suspected cholera case in week 49. As of 05 December 2019, 1,071 cases and 53 deaths were recorded (CFR 4.9%).
A measles outbreak is ongoing in Cameroon. Since the beginning of 2019, a total of 1,170 suspected cases have been reported. Of these, 382 were confirmed as IgM-positive. The outbreak is currently affecting 43 districts, namely, Kousseri, Mada, Goundey, Makary, Kokotata, Koza, Ngaoundéré rural, Bangui, Guider, Figui, N’gong, Mora, Maroua 3, Vélét, Pitoa, Maroua 1, Boubra, Touboro, Mogodé, Bibéni, Garoua 1, Garoua 2, Logdo, Tcholliré, Guidiguis, Moutourva, Mokolo, Cité verte, Djouroulo, Nkollodong, Limbé, Garoua Bouai, Ngaoundéré Urfain, Ekondo Titi, Gazawa, Meiganga, New Bell, Deido, Bertoua, Biyem assi, Cité des palmeries, Logbaba, and Nylon district.

Cameroon

Monkeys were confirmed in Ekondo-Titi health district in the South West region of Cameroon on the 18th 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.

Central African Republic

A case of monkeypox was confirmed in Ekondo-Titi health district in the South West region of Cameroon on the 18th of September 2019. All supportive measures for case management were put in place and community-based surveillance has been stepped up in this area.

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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 Bibao 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 Bibao since the beginning of the crisis.

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

Central African Republic

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

In week 48 (week ending 1 December 2019), 172 suspected cases were reported. 21 districts were in the epidemic phase in week 48. Since the beginning of the year, a total of 25,916 suspected cases and 255 deaths (CFR 1.0%) have been reported with Am Timan, N’Djamena East, N’Djamena South, Bongor, Moundou, Bousso and N’Djamena Centre districts all exceeding 1,000 suspected cases. Among the 1,855 cases investigated, 271 were IgM-positive, 79% were not vaccinated, and 47% were aged between 1 and 4 years old.

Chad

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.

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

Central African Republic

No new 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.

Comoros

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.

Congo

Since 3 October 2019, heavy rains resulted in floods in the northern part of the Republic of Congo, mainly affecting four departments, namely, Likouala, Cuvette, 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 causing a threat to food security. As of 26 November 2019, a total of 112,175 people has been affected with 60,000 (53%) in Likouala department, followed by Cuvette (33,933; 30%). Plateaux (16,100; 14%) and Sangha (21,423; 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.

Côte d’Ivoire

As of 12 November 2019, a total of 124 suspect cases with zero deaths have been reported from health facilities in Grande Comore Island. Of these, 53 cases have been confirmed (39 laboratory-confirmed and 14 by epidemiological link). IgM-positive cases were reported in 5 districts of Grande Comore, namely, Moroni, Mtsamiriouli, Mbeni, Ochilhi and Mitsoudjut. The 19 epi-linked cases are from Moroni district.

Congo

No case of circulating vaccine-derived poliovirus type 2 (cVDPV2) was reported this week. 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.
Since week 43, the Lomami River, the Tshopo rivers and other tributaries of the Congo River are experiencing a rise in water levels as a result of heavy rains. In Tshopo province an estimated 424 health areas (including 504 Villages) pertaining to 11 out of 23 health zones of the province were affected by major floods, while the remaining health zones were affected by minor floods. As of week 46, significant infrastructural damages were observed in health zones located downstream of the Congo River including: damage to fields (400), water sources (161), schools (15), toilets (990) and residential houses (4990). Approximately 123,491 people are homeless and lack basic necessities. An increased incidence of simple diarrhoea cases was observed in affected health areas. Therefore, the risk of spread of cholera outbreaks cannot be excluded.

### Table: Disease Outbreaks

<table>
<thead>
<tr>
<th>Country</th>
<th>Event</th>
<th>Grade</th>
<th>Date notified to WHO</th>
<th>Start of reporting period</th>
<th>End of reporting period</th>
<th>Total cases</th>
<th>Cases Confirmed</th>
<th>Deaths</th>
<th>CFR</th>
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<tbody>
<tr>
<td>Democratic Republic of the Congo</td>
<td>Flood</td>
<td>Ungraded</td>
<td>17-Nov-19</td>
<td>28-Oct-19</td>
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<td>Humanitarian crisis</td>
<td>Grade 3</td>
<td>20-Dec-16</td>
<td>17-Apr-17</td>
<td>18-Nov-19</td>
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<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>3-Nov-19</td>
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<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>7-Dec-19</td>
<td>3,320</td>
<td>2,020</td>
<td>2,090</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>3-Nov-19</td>
<td>269,058</td>
<td>6,304</td>
<td>5,430</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>17-Nov-19</td>
<td>4,761</td>
<td>95</td>
<td>2.00%</td>
<td></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>8</td>
<td>16.00%</td>
<td></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>6-Dec-19</td>
<td>76</td>
<td>76</td>
<td>0</td>
<td>0.00%</td>
</tr>
<tr>
<td>Ethiopia</td>
<td>Chikungunya</td>
<td>Ungraded</td>
<td>25-Jul-19</td>
<td>27-May-19</td>
<td>01-Dec-19</td>
<td>54,739</td>
<td>29</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>1-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>24-Nov-19</td>
<td>1,194</td>
<td>6</td>
<td>0</td>
<td>0.00%</td>
</tr>
</tbody>
</table>

Since the beginning of 2019, a cumulative total of 4,761 monkeypox cases, including 95 deaths (CFR 2%) were reported from 16 provinces. In week 46 (week ending 17 November 2019), 77 cases and no 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.

Two new cases of cVDPV2 was reported this week from Haut Lomami (1) and Kwango (1) provinces. There are 56 cVDPV2 cases in 2019 reported from Sakuru (19), Haut Lomami (17), Kasai (8), Kwilu (6), Kwango (3), Haut Katanga (1), Tshuapa (1), and Kasai Oriental (1) provinces. There were 20 cases of cVDPV2 reported in 2018.

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<table>
<thead>
<tr>
<th>Country</th>
<th>Event</th>
<th>Grade</th>
<th>Date notified to WHO</th>
<th>Start of reporting period</th>
<th>End of reporting period</th>
<th>Total cases</th>
<th>Cases Confirmed</th>
<th>Deaths</th>
<th>CFR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethiopia</td>
<td>Chikungunya</td>
<td>Ungraded</td>
<td>25-Jul-19</td>
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<td>6</td>
<td>0</td>
<td>0.00%</td>
</tr>
</tbody>
</table>

Between week 37 and week 48 in 2019, a total of 1,194 suspected cases and 6 confirmed cases of dengue fever were reported from Afar region. The peak of the outbreak was observed in week 38 when more than 300 suspected cases were reported.
As of week 48 (week ending 1 December 2019), the measles outbreak is still ongoing with a total of 9,437 suspected measles cases reported from Oromia (5,587), Somali (2,340), Amhara (703) and Afar (548) regions. Children aged less than five years are the most affected accounting for 50.14% of the total cases followed by age group 15-44 years (25.43%). Seventy-two percent of the reported measles cases were not previously vaccinated.

No case of circulating vaccine-derived poliovirus type 2 (cVDPV2) was reported this week. There are three cVDPV2 cases reported in Ethiopia in 2019, all linked to the outbreak in neighbouring Somalia.

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.

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

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

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As of week 45 (week ending 10 November 2019), 9,969 suspected measles cases have been reported from eight regions of 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), Tillaberi (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.

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.

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, ambulance, 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.

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.

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 (65), 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 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.

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.

From 1 January 2019 to 16 November 2019, a total of 3,787 suspected yellow fever vector cases have been reported from 604 out of 774 LGAs across all the 36 states and the Federal Capital Territory. Of the samples taken, 166 have tested positive for yellow fever IgM in Nigerian network laboratories. Also, 129 samples from 18 states were confirmed positive using real time polymerase chain reaction (RT-PCR). There have been 192 deaths among suspected cases (CFR 5.1%) and 20 deaths among confirmed cases (CFR 15.5%). Four states Katsina, Bauchi, Edo and Ebonyi accounting for 62% of all the confirmed cases in 2019.

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 on 11 December 2019. A total of 131 contacts of 72 cases are currently being followed.

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, Malut, 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).

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).

Between week 1 to week 40 of 2019, a total of 3,477 suspected cases of measles which 163 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 Humanitarian crisis - refugee Ungraded 20-Jul-17 n/a 30-Nov-19 - - - -

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 Ungraded 28-Nov-19 15-Nov-19 26-Nov-19 1 1 1 100.00%

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 to the refugee camp in Uganda. On 20 November 2019, he developed severe headache, generalized body malaise, joint pain, feeling cold, 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 the patient 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 healthcare workers. Further investigation is ongoing in Uganda.

Zambia Poliomyelitis (cVDPV2) Grade 2 17-Oct-19 16-Jul-19 4-Dec-19 1 1 0 0.00%

No new case of cVDPV2 was reported this week. One case of circulating vaccine-derived poliovirus type 2 (cVDPV2) has been reported so far this year from Chiengi in Luapula province. The onset of paralysis was 16 July 2019.
Health Emergency Information and Risk Assessment

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Africa

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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.

Health Emergency Information and Risk Assessment