

WEEKLY BULLETIN ON OUTBREAKS AND OTHER EMERGENCIES

Week 22: 27 May - 2 June 2019
Data as reported by 17:00; 2 June 2019

3

New events

72

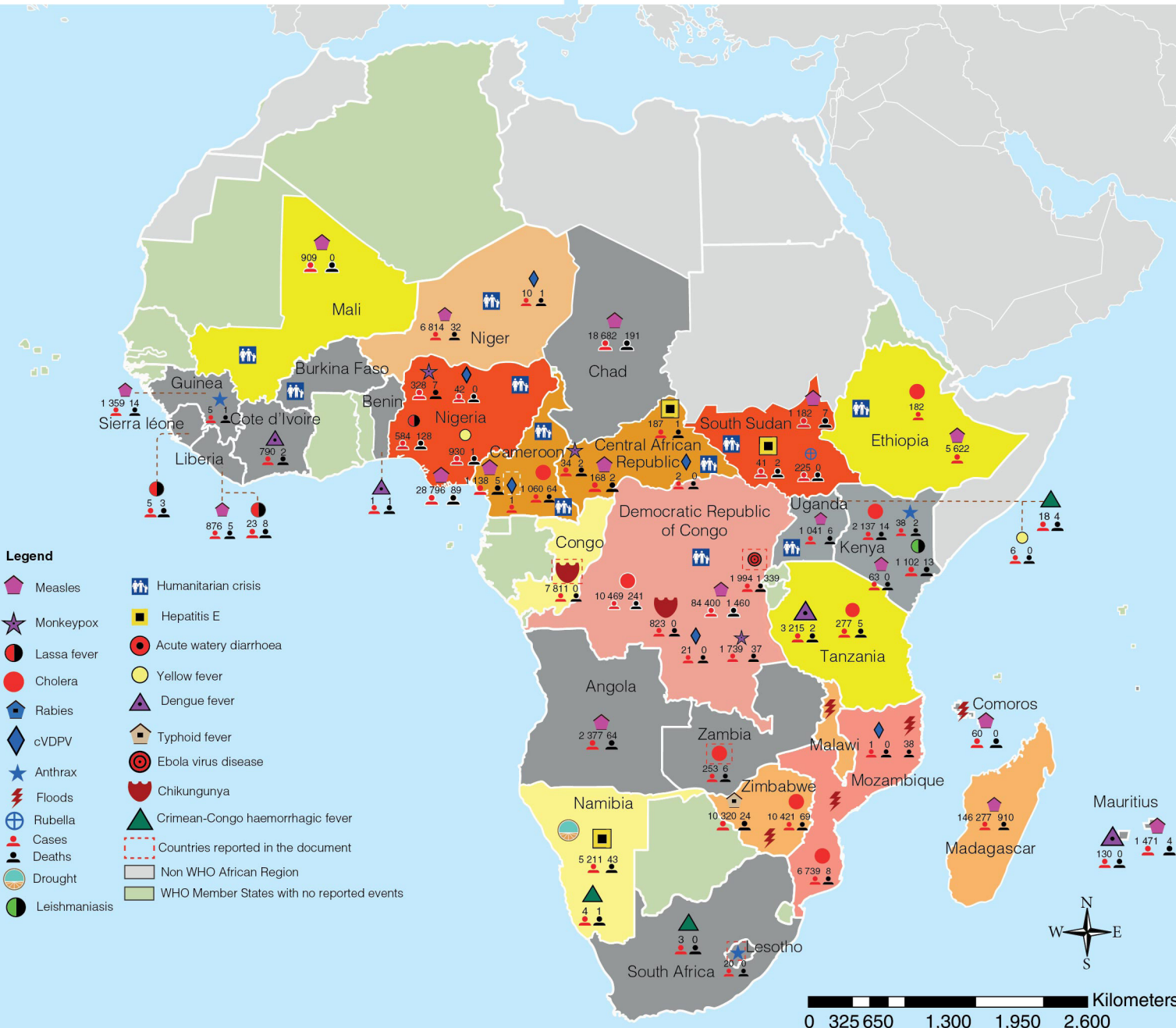
Ongoing events

58

Outbreaks

17

Humanitarian crises



Graded events †

4

Grade 3 events

9

Grade 2 events

3

Grade 1 events

2

Protracted 3 events

2

Protracted 2 events

3

Protracted 1 events

52

Ungraded events

Overview

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This Weekly Bulletin focuses on selected acute 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 edition covers key new and ongoing events, including:

- Anthrax (probable) in Lesotho
- Vaccine derived poliovirus type 2 (environmental sample) in Cameroon
- Ebola virus disease in Democratic Republic of the Congo
- Cholera in Zambia
- Chikungunya in Congo.

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

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

Major issues and challenges include:

- The Ministry of Health in Lesotho has reported a probable outbreak of anthrax in the outskirts of Maseru, the capital city, following an epizootic confirmed by the veterinary authorities. This event has quickly raised concerns in the sub-region, including potential implications for trade. The responsible authorities in Lesotho need to act swiftly to contain this outbreak while the neighbouring countries need to improve preparedness and readiness measures, and act judiciously in response to the event, in line with provisions of the International Health Regulations (2005) and the Terrestrial Animal Health Code.
- A circulating vaccine derived poliovirus type 2 (cVDPV2) has been isolated in an environment sample in Mada health district, Far North Province, Cameroon. The isolated virus has been linked to the ongoing cVDPV2 strain circulating in neighbouring Nigeria, which originated in Jigawa State. This event is important in view of the fact that poliovirus, targeted for global eradication, spreads easily and across large distances. To that effect, all countries, particularly those in the Lake Chad Basin, are urged to step up acute flaccid paralysis surveillance and should maintain a high immunization coverage to minimize introduction of any new virus.

EVENT DESCRIPTION

The Ministry of Health in Lesotho has reported a probable outbreak of anthrax in humans in the outskirts of Maseru, the capital city. The event was initially detected on 14 May 2019 through an event-based surveillance system that reported unusual animal deaths in Ha Tseka village, followed by human cases. Preliminary epidemiologic investigations conducted from 15 - 23 May 2019 identified 72 people in four villages who were exposed to carcasses of, and/or sick cattle. Of the 72 people, 20 reportedly developed signs and symptoms that include blisters on the hands and arms, swelling of the arms, diarrhoea and abdominal pain, headache, chest pains and poor appetite. No deaths have been reported to date. Of three samples obtained from the initial cases, one identified a bacillus bacterium, which was susceptible to only one out of nine commonly used antibiotics in Lesotho. However, no confirmatory test was performed due to inadequacies in diagnostic capacity.

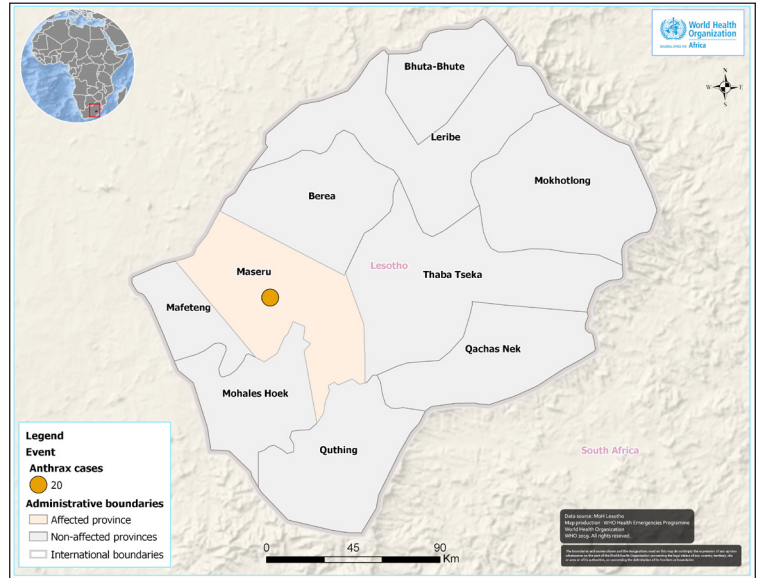
At the same time, animal health investigations carried out by the veterinary authorities indicated that the outbreak in animals started on 28 April 2019 when the first cow died in Ha Tseka, and the carcass was reportedly consumed. A total of 28 cattle has been confirmed dead in four villages, namely Ha Tseka, Ha Teko, Ha Au and Ha Motheo. Four carcasses were found in the community. The animals reportedly manifested the following symptoms and signs: failure to stand, bloated abdomen, swelling of the legs, bleeding from openings (nose, mouth and anus), enlarge spleen and lungs, etc. Specimens obtained from two of the 28 animals confirmed *Bacillus anthracis* as the causative agent. Accordingly, the Ministry of Agriculture and Food Security declared an outbreak of anthrax in animals on 18 May 2019.

Further investigations (both public and animal health) are ongoing and updates will be provided as more information comes in.

PUBLIC HEALTH ACTIONS

- A joint response operation is being undertaken by the Ministry of Agriculture and Food Security (Livestock Department) and the Ministry of Health, in collaboration with the District Disaster Management Team, under the leadership of the District Administrator. Two coordination meetings have been held to date.
- Active surveillance has been heightened in all health facilities to ensure early detection of suspected human cases. Active case search is ongoing in the affected communities, including informal reporting by the media, community leaders, village health workers and the general public.
- The WHO Country Office is in the process of procuring the required laboratory reagents to support confirmation of suspected cases. WHO is also providing medicines, decontamination materials, communication materials, logistical support, and operational funds for the response.
- Post-exposure prophylaxis using amoxicillin has been administered to the people exposed to the dead/sick animals while those with signs and symptoms being treated with antibiotics (cotrimoxazole) based on the laboratory susceptibility test. Personal protective equipment has been provided to health workers to prevent exposure to the disease while supervising disposal of dead animals.

Geographical distribution of anthrax cases in Lesotho, 28 April - 23 May 2019



- Preparations are ongoing to carry out mass animal vaccination against anthrax within a 10-km radius, beginning 3 June 2019. FAO donated the anthrax vaccines (Blanthrax).
- Public awareness and community engagement activities are ongoing, including press conference, radio and TV programmes. Information about the outbreak has been shared with neighbouring South Africa through the cross-border disease surveillance committees.
- The World Bank-funded Southern Africa TB Health Systems Strengthening project also provided transport to support the response.

SITUATION INTERPRETATION

Health authorities in Lesotho have reported a probable outbreak of human anthrax in the outskirts of Maseru, following an epizootic declared by the animal health authorities. The affected areas lie within a known and well defined “anthrax belt” that covers a small portion of Bera, Maseru and Mafeteng districts. Lesotho experienced its most serious anthrax outbreak in 2008, where nearly 2 000 animals died, with one human death and more than 30 human cases. In the past five years, smaller anthrax outbreaks have occurred in animals, with no human cases detected.

Some of the major challenges being experienced in response to the current outbreak include effective and safe disposal of dead animals and decontamination of the sites, dissuasion of communities from handling and consuming sick and dead animals, as well as appropriate public health laboratory diagnostic capacity. These areas are being collectively addressed by the national authorities and partners.

EVENT DESCRIPTION

On 23 May 2019, the Global Polio Laboratory Network (GPLN) notified WHO of a confirmed circulating vaccine-derived poliovirus type 2 (cVDPV2) in an environmental sample collected from Mada health district in the Far North Province of Cameroon, at the border with Borno State in Nigeria and Chad. The environmental sample was collected on 20 April 2019 from Mada Hospital surveillance sample collection site and confirmed at the National Institute for Communicable Disease (NICD) regional reference laboratory in South Africa. Genetic sequencing showed that the strain is closely related to the cVDPV2 strain circulating in neighbouring Nigeria, which originated in Jigawa State and spread to other parts of the country, as well as to the Republic of Niger in 2018. There have been no associated human cases of acute flaccid paralysis (AFP) in Cameroon. However, the identification of the pathogen in the environment is extremely significant as poliovirus spreads easily and across large distances. Poliovirus is slated for global eradication.

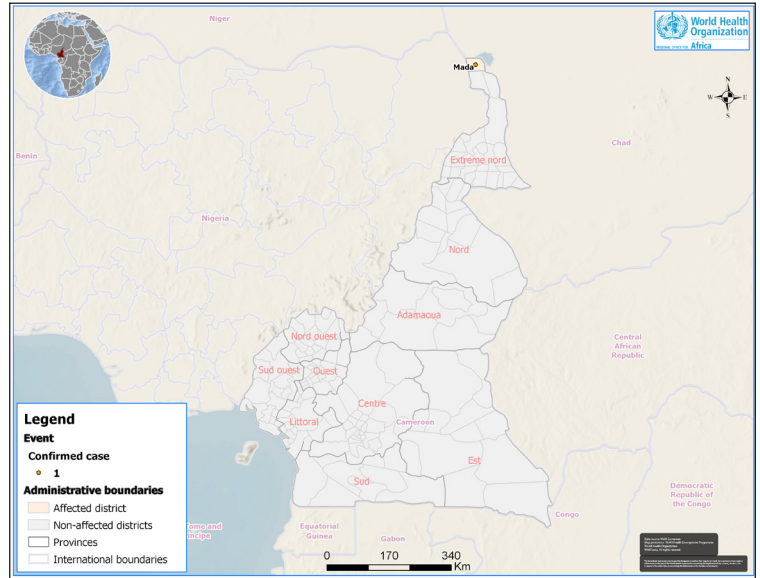
Cameroon reported the last autochthonous polio case in 1999 while the last imported case was reported in 2014, in the district of Kette located in the eastern region of Cameroon. The case was confirmed in child who developed acute flaccid paralysis in a refugee community. The province shares borders with Chad and Borno State in Nigeria, the state which reported the last wild polio virus (WPV) outbreak in the African region in 2016.

Cameroon introduced the inactivated poliovirus vaccine (IPV) into the national routine immunization schedule in 2015. However, the IPV1 national immunization coverage for 2018 has been suboptimal at 78%. The coverage for oral polio vaccine 3 is also suboptimal at 78%.

PUBLIC HEALTH ACTIONS

- ▶ The Ministry of Health and local health authorities in Cameroon, with support from partners of the Global Polio Eradication Initiative (GPEI), are conducting a detailed investigation, including assessing the extent of circulation of this strain, identifying sub-national immunity gaps and supporting efforts to strengthen sub-national surveillance sensitivity.

Geographical distribution of circulating vaccine derived polio virus outbreak cases in Lesotho, 28 April - 23 May 2019



SITUATION INTERPRETATION

The confirmation of poliovirus in an environmental sample in Cameroon highlights the threat of spread of both wild and vaccine derived polio viruses in the African region, especially as many countries are struggling to attain optimal immunization coverage. The virus, which originated in Nigeria, has been detected in Chad, Niger and now Cameroon. Accordingly, a sub-regional response focusing on the countries in the Lake Chad Region has been adopted.

It is important that all countries, particularly those reporting frequent travel to polio-affected countries and areas, strengthen surveillance of AFP cases in order to rapidly detect imported cases and facilitate a rapid response. All countries should maintain a high routine immunization coverage at the district level to minimize the impact of any new virus introduction.

Ongoing events

Ebola virus disease

Democratic Republic of the Congo

**1 994
Cases**

**1 339
Deaths**

**67%
CFR**

EVENT DESCRIPTION

The Ebola virus disease (EVD) outbreak in North Kivu and Ituri provinces in the Democratic Republic of the Congo continues. Since the last report on 26 May 2019 (*Weekly Bulletin 21*), 82 new confirmed EVD cases have been reported, with an additional 62 deaths, a slight decrease on the 90 new confirmed cases reported in the previous week.

As of 1 June 2019, a total of 1 994 EVD cases, including 1 900 confirmed and 94 probable cases have been reported. To date, confirmed cases have been reported from 22 health zones: Alimbongo (1), Beni (314), Biena (5), Butembo (228), Kalunguta (105), Katwa (585), Kayna (8), Kyondo (19), Lubero (11), Mabalako (214), Manguredjipa (12), Masereka (38), Musienene (58), Mutwanga (5), Oicha (41) and Vuhovi (85) in North Kivu Province; and Bunia (1), Komanda (28), Rwampara (1), Mandima (135), Nyankunde (1), and Tchomia (2) in Ituri Province. As of 1 June 2019, 15 health zones have reported at least one confirmed case in the last 21 days (12 May to 1 June 2019).

A total of 1 339 deaths were recorded, including 1 245 among confirmed cases, resulting in a case fatality ratio among confirmed cases of 66% (1 245/1 900). The cumulative number of health workers affected has risen to 110, 6% of the total number of confirmed and probable cases.

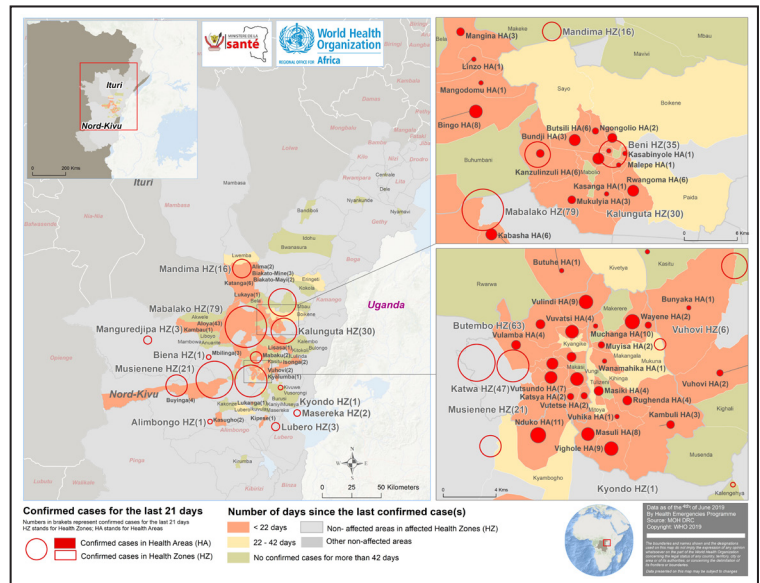
Mabalako, Butembo and Katwa remain the main areas of active transmission, reporting 26% (79/308), 20% (63/308) and 15% (47/308) of confirmed cases in the past 21 days respectively. Nine health zones, Mabalako, Beni, Butembo, Katwa, Manguredjipa, Kalunguta, Musienene, Mandima and Vuhovi have reported new confirmed cases in the past three days and remain points of attention.

Contact tracing is ongoing in 17 health zones. A total of 19 465 contacts were recorded as of 1 June 2019, of which 17 478 have been seen in the past 24 hours (90%; varies between 50-100% among reporting zones), with zero contacts followed-up in Komanda Health Zone in the reporting period. Alerts in two affected provinces continued to be raised and investigated. Of 1 369 alerts processed (of which 1 247 were new) in reporting health zones on 1 June 2019, 1 251 were investigated and 316 (25%) were validated as suspected cases.

PUBLIC HEALTH ACTIONS

- A strengthened coordination mechanism has been established in Butembo. 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. Collaboration between health authorities in the Democratic Republic of the Congo and Uganda continues around monitoring displaced contacts.
- As of 1 June 2019, a cumulative total of 129 001 people has been vaccinated since the start of the outbreak in August 2018. Six new rings (2 in Butembo and 2 in Katwa) have opened around eight out of the 12 confirmed cases from 1 June 2019.
- Point of Entry/Point of Control (PoE/PoC) screening continues, with over 62 million screenings to date. A total of 74/78 (95%) PoE/PoC were operational as of 1 June 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; two cured patients were reintegrated into the community in Butembo and Beni.
- Water, sanitation and hygiene (WASH) activities continue where possible, but continue to be disrupted in some areas, with part of the Hodari dispensary, Rwangoma, Beni, set on fire by unknown individuals; two health centres and 12 households were decontaminated in Beni, Katwa, Butembo and Kalunguta health zones.

Geographical distribution of confirmed and probable Ebola virus disease cases reported from 1 May 2018 to 1 June 2019, North Kivu and Ituri provinces, Democratic Republic of the Congo.



- Community awareness and mobilization sessions are being strengthened, with exchange between political and administrative authorities in Beni and representatives of civil society organizations to strengthen community engagement and community incident management; two city mayors from Goma and Kindu were involved in preparing the population of Goma in EVD response, during a security meeting; a community dialogue was held with local leaders of the Vurondo health area and in Beni the community reintegration of a cured patient from Beni ETC was used as an opportunity to reinforce the messages around patient management.

SITUATION INTERPRETATION

New EVD cases in North Kivu and Ituri continue to be reported, although with a small declining trend. This should be treated with cautious optimism in the light of similar apparent declines observed earlier in the outbreak, which have then been reversed. However, the new measures introduced in the past week, along with continued strong reinforcing of community messages, and intense application of proven public health measures, should confine the outbreak to the two provinces currently affected and bring the outbreak to a close.

EVENT DESCRIPTION

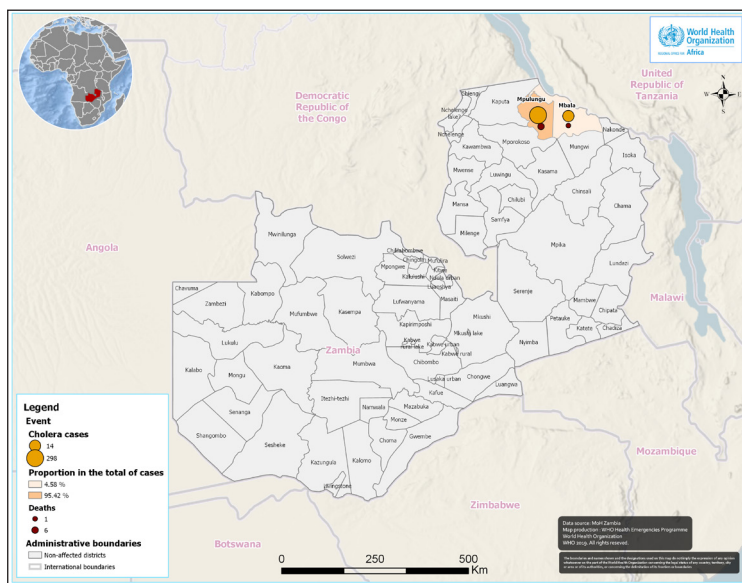
On 14 May 2019, the Zambian Ministry of Health notified WHO of an outbreak of cholera in Mpulungu District, Northern Province, situated on the shores of Lake Tanganyika. The outbreak started in early-April 2019, with the first case – a three-year-old girl – presenting with acute watery diarrhoea, vomiting and dehydration to the local health facility in Kapembwa on 3 April 2019. Preliminary laboratory investigation was positive for cholera on rapid diagnostic test. Further laboratory analysis done at Kasama General Hospital isolated *Vibrio cholerae* O1 Ogawa by culture on 13 May 2019. More cases of acute watery diarrhoea subsequently occurred in other parts of the district and the disease has now spread to the neighbouring Mbala District.

As of 31 May 2019, a total of 312 suspected cholera cases, including seven deaths (case fatality ratio 2.2%) have been reported from two districts: Mpulungu (298 cases, 6 deaths) and Mbala (14 cases, 1 death). On 31 May 2019, five new suspected cholera cases were reported in Mpulungu (4) and Mbala (1), indicating an overall decline in the disease trend. A total of 64 cases (60 in Mpulungu and 4 in Mbala) have been laboratory confirmed by culture.

PUBLIC HEALTH ACTIONS

- Coordination structures have been established at the national and district levels. At the national level, the Zambia National Public Health Institute (ZNPHI), the Ministry of Health, WHO and other partners are holding daily coordination meetings to review the evolution of the outbreak and provide guidance to the district response teams. The affected districts have activated their respective incident management systems and are holding daily meetings to plan, implement and review response interventions.
- Laboratory specimens are being collected from all new suspected cases and tested to accurately determine the end of the outbreak. Chlorine levels in domestic water are being routinely monitored, with about 60% of the domestic water samples tested having adequate chlorine, as of 30 May 2019.
- Two cholera treatment centres have been opened in Mbala district to address the case management needs in the newly affected areas.
- UNICEF has donated liquid and granular chlorine to the Ministry of Health for distribution and use. So far over 4 000 bottles of liquid chlorine have been distributed to households in the affected communities. Over 1 600 pit latrines have so far been disinfected.
- The Disaster Mitigation and Management Unit is supporting provision of safe domestic water. Mobile tanks are being put in place to supply water in the most affected areas. Water trucking is also ongoing with feasibility assessment for sinking boreholes to provide a longer-term solution to the safe water supply needs of the affected areas.
- WHO is supporting deployment of oral cholera vaccine (OCV) in Mpulungu District, targeting 130 743 people who are above the age of one year. The two rounds of OCV campaign commenced on 22 May 2019.

Geographical distribution of cholera cases and deaths in Zambia, 3 April - 31 May 2019



SITUATION INTERPRETATION

Zambia has had recurrent cholera outbreaks in recent years. In 2017 and 2018, the country experienced a large cholera outbreak that affected several districts, including the capital city, Lusaka, resulting in about 6 000 cases and 114 deaths. Additionally, there were two smaller outbreaks in the first quarter of 2019 in Lusaka and Nsama districts.

Zambia recently launched a national cholera elimination plan, which identifies key interventions to control and eliminate cholera by 2025. Over the years, the country has developed capacity to respond and mitigate the risks associated such events. For instance, rapid response teams have been trained in hotspot districts to promptly investigate and respond to cholera outbreaks. Despite minor challenges being encountered, the current outbreak is being contained effectively. However, there is a need to further improve access to potable water and sanitation infrastructure, as well as improved hygiene and food safety practices in affected communities. Key public health communication messages should be provided to modify behavioural practices like hand washing.

EVENT DESCRIPTION

The outbreak of chikungunya in the Republic of Congo continues, with increasing incidence and wider geographical spread. Since our last report on 21 April 2019 (*Weekly Bulletin 16*), an additional 2 539 cases have been registered. In week 18 (week ending 5 May 2019), 685 new suspected chikungunya cases were reported from eight health districts: Bouenza (255), Niri (213), Pointe-Noir (103), Leoumou (71), Kouilou (16), Brazzaville (15), Plateau (10), and Pool (2). This is an increase over the 459 suspected cases reported in the previous week (week 17). Three health districts, namely Nkayi (Leoumou department), Talangai (Brazzaville department) and Zanaga (Lekoumou department) have notified cases for the first time during the reporting week 18. Eight out of the 12 departments in the Republic of Congo have so far been affected.

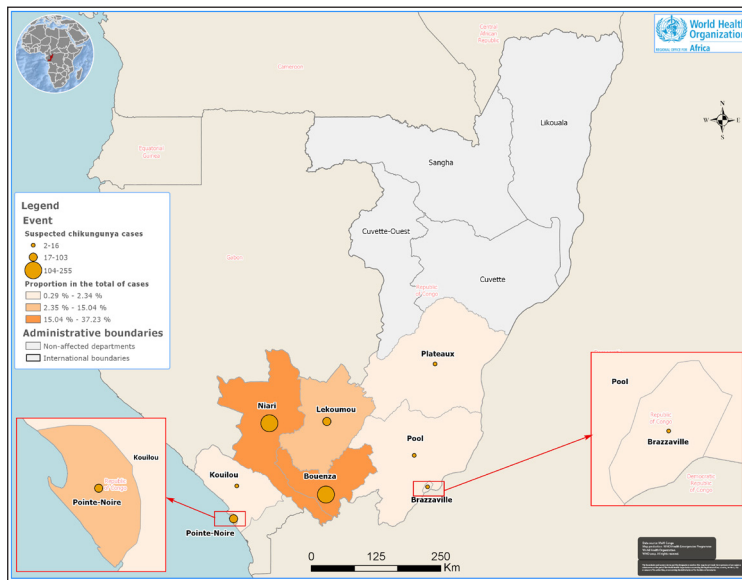
Since the onset of the outbreak on 9 January 2019, a total of 7 811 suspected cases have been reported, with no deaths, and the number of health districts reporting suspected cases of chikungunya among the eight affected departments is 27. The Department of Kouilou remains the most affected, with 2 698 of the cases, followed by Niri, with 1 388 cases. The number of cases reported weekly has fluctuated since January 2019, reaching a peak of 868 cases in week 15 (week ending 14 April 2019), and has remained high since then.

The outbreak of chikungunya started in Kouilou and Pool health districts in early-February 2019 and was formally declared by the Ministry of Health on 9 February 2019. The vector has been identified as the *Aedes albopictus* mosquito.

PUBLIC HEALTH ACTIONS

- The Ministry of Health continues to coordinate response activities and is conducting supervisory missions to the affected departments with the support of WHO.
- Surveillance is being strengthened, including collecting information at district level, while the Early Warning and Alert System is strengthening data compilation from four departments.
- Fumigation and insecticide spraying was carried out in Diosso, Loango, Kakamoeka, Makola (Kouilou), Kimongo and Dolisie (Niri).
- Regular health promotion messages continue to be transmitted on local radio and television channels.

Geographical distribution of chikungunya cases in Republic of Congo, 9 February - 21 April 2019



SITUATION INTERPRETATION

The outbreak of chikungunya in the Republic of Congo continues, with high numbers of cases reported in several health departments. Challenges remain around effective coordination, with a lack of a single framework for planning and monitoring multi-sectoral response activities, along with a lack of a comprehensive operational response plan and inadequate funding. In the absence of a sensitive surveillance system to clearly characterize the outbreak, it is a big challenge to identify effective public health actions to control the epidemic. All these challenges need to be addressed to allow local authorities and partners to mount a robust response to this outbreak and bring it to a close.

Reduction of the number of natural and artificial breeding sites for mosquitoes has a significant impact on the prevention and control of chikungunya outbreaks. This requires affected communities to be mobilized to institute control measures, including covering water collection containers, proper waste disposal and improved environmental sanitation.

Summary of major issues, challenges and proposed actions

Major issues and challenges

- ▶ Lesotho has confirmed an outbreak of anthrax in animals (specifically cattle), with a few suspected cases reported in humans. Further investigations are ongoing, in both public and animal health sectors, to establish the extent of the event. Additionally, the responsible authorities have instituted response measures to control the outbreak, including informing the neighbouring countries of the event. There are reports that some countries in the sub-region have imposed trade restrictions on animal products from Lesotho.
- ▶ The GPLN has confirmed a cVDPV2 in an environment sample in Mada health district, Far North Province, Cameroon. The virus strain is related to the ongoing cVDPV2 that originated in Jigawa State, Nigeria, and subsequently spread to Niger and Chad. WHO has classified this event as Grade 2 emergency given the potential impact. A sub-regional response of all the countries in the Lake Chad Basin is being undertaken.

Proposed actions

- ▶ Public health and veterinary authorities and partners in Lesotho need to step up implementation of outbreak containment measures. While countries in the sub-region are urged to strengthen preparedness and readiness measures, they are advised to act judiciously, in line with provisions of the International Health Regulations (2005) and the Terrestrial Animal Health Code.
- ▶ All countries in the African region, and particularly those in the Lake Chad Basin need to step up acute flaccid paralysis surveillance and improve their routine and supplemental immunization coverage.

All events currently being monitored by WHO AFRO

Country	Event	Grade	Date notified to WHO	Start of reporting period	End of reporting period	Total cases	Cases Confirmed	Deaths	CFR	Comments
News Events										
Cameroon	Poliomyelitis(cVDPV2)	G2	23-May-19	23-May-19	28-May-19	-	-	-	-	Detailed update given above.
Comoros	Measles	Ungraded	31-May-19	01-Jan-19	26-May-19	60	10	0	-	From week 1 to week 20 of 2019, a cumulative total of five measles cases (IgM positive) were reported from three districts of Grande Comore island, namely, Moroni (2), Oichili (1), and Mitsoudje (2). An outbreak was confirmed in week 21 of 2019 (week ending 26 May 2019) when five measles IgM-positive cases were reported in a week from two districts of the Grande Comore island. Four samples (throat) were sent to UVRI in Uganda for further virus typing. Active case search and investigations are ongoing in the affected areas.
Lesotho	Suspected Anthrax	Ungraded	16-May-19	11-May-19	30-May-19	20	0	0	0.00%	Detailed update given above.
Ongoing Events										
Angola	Measles	Ungraded	04-May-19	01-Jan-19	06-May-19	2 377	49	64	2.70%	Suspected measles cases continued to be reported from Lunda Sul and Moxico provinces in Angola since the beginning of the year. In week 19 (week ending on 12 May 2019), 108 suspected cases were reported. A total of 759 cases have been confirmed so far in 2019, according to WHO Global Measles and Rubella monthly update.
Benin	Dengue fever	Ungraded	13-May-19	07-May-19	15-May-19	1	1	1	100.00%	A case of dengue haemorrhagic fever was confirmed on 13 May 2019 in Benin. The case-patient is a 32-year-old male teacher from Tankpè neighborhood in Godomey arrondissement, Abomey-Calavi Commune of Atlantique Department, with a history of stomach ulcer. He began to experience symptoms of vomiting blood, 'Coca-cola' coloured urine and fever on 7 May 2019 after taking Quinine. Blood specimen tested for Lassa fever and dengue fever at the diagnostic laboratory for haemorrhagic fever in Benin came back positive for dengue fever by serology and PCR on 13 May 2019. Close family members and co-workers are being followed-up. The patient died on 12 May 2019. Further investigations are ongoing.

Country	Event	Grade	Date notified to WHO	Start of reporting period	End of reporting period	Total cases	Cases Confirmed	Deaths	CFR	Comments
Burkina Faso	Humanitarian crisis	Ungraded	01-Jan-19	01-Jan-19	26-Apr-19	-	-	-	-	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 135 589 internally displaced persons registered as of 2 April 2019, of which more than half were registered since the beginning of 2019.
Cameroon	Humanitarian crisis (Far North, North, Adamawa & East)	Protracted 2	31-Dec-13	27-Jun-17	15-May-19	-	-	-	-	Cameroon continues to face a humanitarian crisis in the Far North region linked to the terrorist attacks by Boko Haram group with significant displacement of the traumatized population. The Minao camp is currently accommodating 57 094 refugees, which is above its capacity. Several attacks targeting both public facilities, such as schools and health facilities, and private goods continue to be registered at the border between Cameroon and Nigeria. The Far North region is currently having measles outbreaks in five districts (Kousseri, Mada, Makary, Goulfey and Koza).
Cameroon	Humanitarian crisis (NW & SW)	G2	01-Oct-16	27-Jun-18	15-May-19	-	-	-	-	The Northwest and Southwest regions' crisis which started in 2016 still remains a concern. Sporadic armed attacks between alleged separatist groups and the military continue to be reported. Attacks on health facilities have been reported in many locations. This unrest continues to affect access to amenities including healthcare services. Since the beginning of 2019, less than 30% of health facilities in both regions have been able to transmit epidemiological surveillance data.
Cameroon	Cholera	G1	24-May-18	18-May-18	15-May-19	1 060	97	64	6.00%	Seven new suspected cases including one death were notified by Pitoa, Garoua 1 and Garoua 2 health districts from 1 to 15 May 2019. In March 2019, additional five new confirmed cases were notified by Institut Pasteur Laboratory in Cameroon. As of 15 May 2019, a total of 1 060 suspected cases were reported.
Cameroon	Measles	Ungraded	02-Apr-19	01-Jan-19	12-May-19	1 138	168	5	0%	During epidemiological week 19 (ending on 12 May 2019), 41 suspected cases were reported. A decline in the weekly number of cases has been noted. Since the beginning of 2019, a total of 1 138 suspected cases of which 168 were confirmed as IgM-positive have been reported. The outbreak is currently affecting twenty-four districts, namely Kousseri, Mada, Goulfey, Makary, Kolofata, Koza, Ngaoundéré rural, Bangué, Guider, Figuil, Ngong, Mora, Maroua 3, Vélé, Pitoa, Maroua 1, Bourha, Touboro, Mogodé, Bibémi, Garoua 1, Garoua 2, Lagdo and Tcholliré.

Country	Event	Grade	Date notified to WHO	Start of reporting period	End of reporting period	Total cases	Cases Confirmed	Deaths	CFR	Comments
Central African Republic	Humanitarian crisis	Protracted 2	11-Dec-13	11-Dec-13	19-May-19	-	-	-	-	Insecurity in most parts of the Central Africa Republic including major cities leading to a complex humanitarian situation remains of concern. There was a resumption of the free crossing of the Mbomou River at Zemio following authorization from the local leader of an armed group for seven days beginning 23 May 2019. This would facilitate the return of refugees to Zappai in the DRC.
Central African Republic	Hepatitis E	Ungraded	02-Oct-18	10-Sep-18	19-May-19	187	142	1	0.50%	No new confirmed cases have been reported among suspected cases of hepatitis E since epidemiological week 20 (week ending on 19 May 2019). As of 19 May 2019, a total of 187 cases of acute jaundice syndrome of which 142 were confirmed for viral hepatitis E have been recorded.
Central African Republic	Measles	Ungraded	15-Mar-19	11-Feb-19	05-May-19	168	19	2	1.20%	The measles outbreak is ongoing in the Central Africa Republic in Paoua district. A total of 29 new suspected cases of measles were notified in epidemiological week 18 (week ending on 5 May 2019). From epidemiological week 5 to 18 (28 January - 5 May 2019), a total of 168 suspected measles cases, of which 19 were confirmed have been notified. About 80% of cases are under 5 years of age with a high proportion of males.
Central African Republic	Monkeypox	Ungraded	20-Mar-18	02-Mar-18	03-Mar-19	34	25	2	5.90%	Three cases, including one confirmed, were reported in Ippy in week 9 (week ending on 3 March 2019). Since 2 October 2018, clusters of cases have been identified across three health districts, namely Mbaiki district with nine cases including eight confirmed, Bangassou district with five cases including three confirmed, and Bossembele district with four cases including three confirmed. Two deaths have been reported so far.
Central African Republic	Polio-myelitis (VDPV2)	Ungraded	24-May-19	24-May-19	25-May-19	2	2	0	0.00%	Two cases of vaccine-derived poliovirus were reported from Bambari health district. The index case presented with acute flaccid paralysis while the second case was an asymptomatic contact of the index case. There is a high risk of transmission of the virus as both cases were among internally displaced person with an estimated population of eight thousand. The two cases had no previous history of vaccination for polio. Vaccination coverage in the affected district is 50% with insecurity being one of the main obstacles to access.

Country	Event	Grade	Date notified to WHO	Start of reporting period	End of reporting period	Total cases	Cases Confirmed	Deaths	CFR	Comments
Chad	Measles	Ungraded	24-May-18	01-Jan-19	26-May-19	18 682	80	191	1.00%	In week 21 (week ending on 26 May 2019), 1 374 suspected cases of measles have been reported including 23 deaths. During week 21, 69 districts were in the epidemic phase, two less affected district than the previous week. Since the beginning of the year, 18 682 suspected cases of measles have been reported from 117 out of 126 districts (93%) in the country. Among them, 191 deaths (CFR 1%) have been registered from 42 districts.
Comoros	Cyclone Kenneth	Ungraded	23-Apr-19	24-Apr-19	10-May-19	-	-	-	-	The Union of Comoros faced a tropical cyclone – Kenneth- which landed on 24 April 2019, at 21:00 (GMT+3) in northern Ngazidja Island. The cyclone resulted in fallen trees and destruction of houses resulting in deaths and making many homeless, including children. Some small fishing boats were pushed against the landing stages, causing their destruction. As of 10 May 2019, 19 372 persons were internally displaced, 182 injured and 7 had died.
Congo	Chikungunya	G1	22-Jan-19	07-Jan-19	05-May-19	7 811	61	0	0.00%	Detailed update given above.
Côte d'Ivoire	Dengue fever	Ungraded	15-Feb-19	01-Jan-19	26-May-19	790	130	2	0.30%	As of week 21 (week ending on 26 May 2019), 790 suspected cases of dengue fever have been reported, of which 130 were confirmed. Cases are mainly reported from Abidjan and other surrounding areas. Dengue serotype 1 accounted for 73% (95) of total confirmed cases, followed by serotype 3 (25 cases).
Democratic Republic of the Congo	Humanitarian crisis	G3	20-Dec-16	17-Apr-17	26-May-19	-	-	-	-	The Democratic Republic of the Congo continues to experience a complex humanitarian crisis involving armed conflicts and inter-community tension exacerbating the numbers of those in need of humanitarian assistance. Populations movements due to armed clashes have been reported in North-Kivu, Ituri, and South-Kivu. In Tanganyika, clashes between interethnic militia have led to closing of health centres in eight health areas in Kalemie and Nyunzu.
Democratic Republic of the Congo	Chikungunya	Ungraded	08-Feb-19	30-Sep-18	17-Apr-19	823	254	0	0.00%	From 1 January to 17 April 2019, a total of 823 suspected cases, of which 254 were confirmed by RT-PCR have been reported. Among them, 108 were male and 146 were female. Majority of cases were reported from Kinshasa and the Central Congo province which is bordering the Republic of the Congo. In Kinshasa, ten health zones have reported confirmed cases, while in Central Congo province, confirmed cases have reported from six health zones.

Country	Event	Grade	Date notified to WHO	Start of reporting period	End of reporting period	Total cases	Cases Confirmed	Deaths	CFR	Comments
Democratic Republic of the Congo	Cholera	G3	16-Jan-15	01-Jan-19	12-May-19	10 469	-	241	2.30%	During week 19 (week ending on 12 May 2019), a total of 402 suspected cases of cholera including 9 deaths (CFR 2.2%) have been notified from 45 health zones in 10 provinces. Since the beginning of 2019, a total of 10 469 cases including 241 deaths (CFR 2.3%) have been notified from 19 out of 26 provinces. The endemic provinces in the East (Haut-Katanga, Haut-Lomami, Nord-Kivu, Sud-Kivu and Tanganyika) have reported 91% of the cumulative cases and 87% of the cumulative deaths.
Democratic Republic of the Congo	Ebola virus disease	G3	31-Jul-18	11-May-18	01-Jun-19	1 994	1 900	1 339	67.20%	Detailed update given above.
Democratic Republic of the Congo	Measles	Ungraded	10-Jan-17	01-Jan-19	12-May-19	84 400	-	1 460	1.80%	In week 19 (week ending 12 May 2019), 2 306 measles cases including 40 deaths have been reported. In total, 60 health zones across the country have reported confirmed measles outbreaks. Since the beginning of 2019, 84 400 measles cases including 1 460 deaths (CFR 1.8%) have been recorded. Among them, 64% have been notified from Tshopo, Lualaba, Kasai and Haut-Lomami provinces.
Democratic Republic of the Congo	Monkey-pox	Ungraded	n/a	01-Jan-19	05-May-19	1 739	-	37	2.10%	Since the beginning of 2019, a cumulative total of 1 739 monkey-pox cases, including 37 deaths (CFR 2.1%) were reported. The most affected provinces are Sankuru (56%), Tshuapa (10%) and Ecuador (10%). Forty-eight percent of cases have been reported from three health zones of Sankuru province, namely, Bena Dibebe (35%), Kole (9%) and Tschumbe (5%).
Democratic Republic of the Congo	Polio-myelitis (cVDPV2)	G2	15-Feb-18	n/a	31-May-19	21	21	0	0.00%	No case of circulating vaccine-derived poliovirus type 2 (cVDPV2) has been reported this week in the Democratic Republic of the Congo (DRC). So far, one cVDPV case has been reported in DRC in 2019. The total number of cVDPV2 cases reported in 2018 is 20. A reactive vaccination campaign has been conducted in Kamonia health zone, in Kasai province from 9 to 11 May 2019.
Ethiopia	Humanitarian crisis	G2	15-Nov-15	n/a	05-May-19	-	-	-	-	The humanitarian crisis in Ethiopia continues with growing and cyclical waves of humanitarian emergencies. In mid-March 2019, a rapidly evolving situation involving IDPs was reported in West Guji and Gedeo zones of Oromia and SNNP respectively. 2 716 610 IDPs are living across 1 289 temporary sites in these affected areas, 776 856 of whom are returnees.
Ethiopia	Cholera	Ungraded	14-May-19	12-May-19	24-May-19	182	1	12	6.60%	An outbreak of cholera was reported in Amhara region. A total of 182 suspected cases have been reported so far with 12 associated deaths (CFR 6.6%). One culture positive result was reported. The affected woredas are Telemte, Abergele and Beyeda.

Country	Event	Grade	Date notified to WHO	Start of reporting period	End of reporting period	Total cases	Cases Confirmed	Deaths	CFR	Comments
Ethiopia	Measles	Protracted 1	14-Jan-17	01-Jan-19	05-May-19	5 622	59	-	-	A measles outbreak is ongoing in Oromia, Amhara and Solami regions. Vaccination campaign is being planned to target 6.7 million children aged 6 months to 14 years. Targeted populations are internally displaced populations and host communities.
Guinea	Anthrax	Ungraded	17-May-19	02-May-19	15-May-19	5	1	1	20.00%	Five cases including one death were reported out of 52 people who were exposed to a dead animal with a history compatible with the case definition of anthrax. The cases are found in a single family in Koubia prefecture, in the Labe region. The first symptoms appeared between 5 and 12 days after the date of handling or consumption of the meat. The predominant signs and symptoms are fever (100%), blackish crusts (60%) and oedema (40%). The age group 9 years and below (60%) was the most affected with a male predominance (80%). Of the total cases reported, one case was confirmed by PCR at the National Institute of Public Health in Conakry.
Guinea	Measles	Ungraded	09-May-18	01-Jan-19	12-May-19	1 359	593	14	1.00%	During week 18 (week ending on 12 May 2019), 152 suspected cases of measles were reported. From week 1 to 19 (1 January - 12 May 2019), a total of 1 359 suspected cases have been reported. Of these, 974 cases were sampled, of which 593 tested positive for measles. Twelve areas are in the epidemic phase : urban areas of Coyah, Dixinn, Dubréka, Labé, Matoto, Ratoma as well as the sub-prefectures of Manéah (health district of Coyah), Maferinya (Forécariah), Kégnéko (Mamou) Kamsar and Sangaredi (Boké), Lelouma (CU and Sagalé), Telimele (CU). A total of 14 deaths has been recorded since the beginning of 2019.
Kenya	Anthrax	Ungraded	29-Apr-19	14-Apr-19	19-May-19	38	-	2	5.30%	A total of 38 suspected cases of cutaneous anthrax with 2 deaths (CFR 5.3%) have been reported from Muthara ward, Tigania East Sub-county, Meru County. Consumption of meat suspected to have been infected with anthrax is believed to be the source of infection. No new case has been reported since 7 May 2019.
Kenya	Cholera	Ungraded	21-Jan-19	02-Jan-19	19-May-19	2 137	116	14	0.70%	Since January 2019, nine of the 47 Counties of Kenya reported cholera cases, namely: Kajiado, Nairobi, Garissa, Machakos, Mandera, Embu, Narok, Wajir, and Mombasa Counties. The outbreak remains active in six Counties: Nairobi, Garissa, Kajiado, Mandera, Wajir and Mombasa. From January to 19 May 2019, a total of 2 137 cases including 14 deaths (CFR 0.7%) have been reported, of which 116 cases have been laboratory-confirmed.

Country	Event	Grade	Date notified to WHO	Start of reporting period	End of reporting period	Total cases	Cases Confirmed	Deaths	CFR	Comments
Kenya	Leishmaniasis	Ungraded	31-Mar-19	01-Jan-19	19-May-19	1 102	235	13	1.20%	Since the beginning of January 2019, a total of 1 102 cases of leishmaniasis have been reported from Marsabit and Wajir counties. The last peak was observed in week 20 (week ending 19 May 2019). Marsabit county has reported 910 suspected cases with seven deaths (CFR 1.1%), of which 208 tested positive by the rapid diagnostic test (RDT). Wajir county has reported 192 suspected cases with six deaths (CFR 4%), of which 27 tested positive by RDT.
Kenya	Measles	Ungraded	06-May-19	20-Mar-19	19-May-19	63	10	0	0.00%	A new outbreak has been reported in Garissa and Kajiado counties. As of 19 May 2019, eight cases have been reported from Garissa County in Dagahaley refugee camp in Dadaab Sub-County. Six of these eight cases have been laboratory confirmed. In Kajiado County, Mosiro Ward in Kajiado West Sub-County has been affected with 57 cases reported of which four were laboratory-confirmed. No death has been reported in both counties.
Liberia	Lassa fever	Ungraded	23-Jan-19	01-Jan-19	12-May-19	23	22	8	34.80%	During week 19 (week ending on 12 May 2019), one case tested positive for Lassa fever in Grand Bassa County. Of 62 cases suspected year-to-date, 22 have tested positive by RT-PCR while 39 were discarded due to negative test results. Sample from one of the cases is pending testing. A total of eight deaths (case fatality ratio 36.4%) have been reported among confirmed cases.
Liberia	Measles	Ungraded	24-Sep-17	01-Jan-19	12-May-19	876	65	5	0.60%	In week 19 (week ending on 12 May 2019), 26 suspected cases were reported from 9 out of 15 counties across the country. Since the beginning of 2019, 876 cases have been reported across the country, of which 65 are laboratory-confirmed, 69 are epi-linked, and 514 are clinically confirmed. Fuamah District, Bong County, Firestone District, Margibi County and Kolahun and Voinjama Districts, Lofa County are currently in outbreak phase.
Madagascar	Measles	Ungraded	26-Oct-18	03-Sep-18	26 May 2019	146 277	1 394	910	0.60%	A decreasing trend in incidence of suspected cases of measles continues to be observed since week 7 (week ending 17 February 2019), following the series of reactive vaccination campaign that have been recently conducted in the country. Between 3 September 2018 and 26 May 2019, 146 277 cases have been registered, among which 19 708 had symptoms of complications and 910 had deceased (CFR 0.62%). Out of the 146 277 cases, 1 394 have been laboratory confirmed by serology (IgM Positive).

Country	Event	Grade	Date notified to WHO	Start of reporting period	End of reporting period	Total cases	Cases Confirmed	Deaths	CFR	Comments
Malawi	Flood	G2	09-Mar-19	05-Mar-19	05-May-19	-	-	-	-	Tropical cyclone formed in the Mozambique Channel drifted to Malawi on 5 March 2019, causing heavy and persistent rainfalls accompanied by strong wind leading to heavy flooding in southern Malawi. A total of 15 districts and two cities were affected. Cholera surveillance is ongoing and intensified especially in Mwanza and Nsanje districts. In Mwanza, six cholera cases have been confirmed in chikolosa, and one case in Tengani, Nsanje District. Vaccination campaign against measles and rubella completed in the 9 targeted flood affected districts with 51% coverage.
Mali	Humanitarian crisis	Protracted 1	n/a	n/a	24-May-19	-	-	-	-	The crisis which began in 2012 has led to the displacement of nearly half a million people. As of 30 April 2019, 106 164 internally displaced persons were recorded. The Mopti Region is the most affected with the districts of Bandiagara, Bankass and Koro having the bulk of internally displaced persons. Food insecurity has worsened as a result of the crisis.
Mali	Measles	Ungraded	20-Feb-18	01-Jan-19	26-May-19	909	261	0	0.00%	During the week 21 (week ending on 26 May 2019), 8 suspected cases of measles have been reported from Sikasso (4), Segou (2), Koulikoro (1), Bamako (1) and Kidal (2). 26 blood samples were sent to INRSP for analysis which brings the total number of pending samples to be analyzed to 407 due to the issue with the reagent. A national vaccination campaign targeting children between 6-59 months has been ongoing.
Mauritius	Dengue fever	Ungraded	26-Feb-19	26-Feb-19	17-May-19	130	130	0	0.00%	The dengue fever outbreak is ongoing in Mauritius. From 26 February 2019 to 17 May 2019, a total of 130 cases including 7 imported cases have been reported. The district of Port Louis recorded the highest number of locally transmitted cases of dengue (115) followed by Plaines Wilhems (5), Pamplemousses (2) and Savanne (1). A peak was observed in week 17 (22-28 April 2019) when 30 indigenous cases were confirmed, followed by a decreasing trend in case incidence in week 18 and week 19. Two circulating serotypes have been identified. The serotype 1 has been found in most confirmed cases and the serotype 2 has been found in three imported cases from Reunion and two locally transmitted cases.

Country	Event	Grade	Date notified to WHO	Start of reporting period	End of reporting period	Total cases	Cases Confirmed	Deaths	CFR	Comments
Mauritius	Measles	Ungraded	23-May-18	19-Mar-18	26-May-19	1 471	1 471	4	0.30%	During week 21 (week ending on 26 May 2019), zero new confirmed cases were reported across the country. From 21 March 2018 to 5 May 2019, a total of 1 471 laboratory-confirmed cases were reported. Among 17 throat swabs analyzed, the genotype D8 was detected in 13 samples. Zero cases have been reported in the last 3 consecutive weeks. The most affected districts are Port Louis and Black River.
Mozambique	Cholera	Ungraded	27-Mar-19	27-Mar-19	05-May-19	6 739	-	8	0.10%	The cholera outbreak is showing a downward trend following the effective cholera vaccination campaign that reached 98.6% of the population in the last two weeks. Since the declaration of the cholera outbreak on 27 March 2019 until 5 May 2019, 6 739 cases and eight deaths have been reported (CFR 0.1%). All cases were reported from the four districts (Beira, Buzi, Dondo and Nhamatanda) of Sofala Province.
Mozambique	Cyclone Kenneth	Ungraded	25-Apr-19	25-Apr-19	30-Apr-19			38		Between 25 and 29 April 2019, at least 38 deaths and 347 cases of illness, including malaria (35), diarrhoea (24), and acute respiratory diseases (95) have been reported from cyclone Kenneth-affected areas in northern Mozambique. According to the National Disaster Management Institute (INGC), 32 034 houses have been partially destroyed, among which 2 930 were completely destroyed, affecting 21 717 students and at least 14 health facilities. About 20 720 internally displaced people are currently accommodated across 30 sites.
Mozambique	Flood/cyclone Idai	G3	15-Mar-19	15-Mar-19	25-Apr-19	-	-	-	-	The number of internally displaced people continues to decrease. As of 25 April 2019, the number of internally displaced people living in accommodation centres decreased from 160 927 to 72 793 people across 65 sites. At least 177 000 people are estimated to be in more than 50 communities that are hard-to-reach or inaccessible by road.
Mozambique	Polio-myelitis (cVDPV2)	G2	07-Dec-18	07-Dec-18	22-May-19	1	1	0	0.00%	No new case of circulating vaccine-derived poliovirus type 2 (cVDPV2) has been reported this week. One circulating vaccine-derived poliovirus type 2 (cVDPV2) isolate was detected, from an acute flaccid paralysis (AFP) case (with onset of paralysis on 21 October 2018, in a six-year old girl with no history of vaccination, from Molumbo district, Zambezia province), and two isolated from a community contact of the case reported on 10 and 17 December 2018. (source: GPEI)

Country	Event	Grade	Date notified to WHO	Start of reporting period	End of reporting period	Total cases	Cases Confirmed	Deaths	CFR	Comments
Namibia	Crimean-Congo haemorrhagic fever (CCHF)	Ungraded	30-Apr-19	19-Apr-19	31-May-19	4	1	1	25.00%	Four suspected Crimean Congo haemorrhagic fever cases were reported from Oshikoto (3) and Omusati (1) regions between 26 April and 21 May 2019. One case was confirmed by serology (IgM positive). The three other cases tested negative for CCHF. The confirmed case has fully recovered. All the 66 contacts identified have been followed up for 14 days. None of them developed symptoms. The outbreak is under control.
Namibia	Drought	Ungraded	06-May-19	06-May-19	13-May-19	-	-	-	-	On 6 May 2019, the President of the Republic of Namibia officially declared the prevailing drought situation a state of emergency in the fourteen regions of Namibia. Grazing conditions are deteriorating in most parts of the country, especially in the central, southern, north central and north western regions where livestock deaths have been reported as a result of malnutrition. Based on a country five-year average vulnerability assessment and analysis, approximately 556 000 people, close to one in five Namibians, will be affected by the current drought condition. The country is also facing concurrent health emergencies such as a Hepatitis E outbreak that has affected eight of the fourteen regions of Namibia since October 2017 and a Crimean-Congo Hemorrhagic fever reported in four regions since May 2019. Drought mitigation measures are being undertaken by the Government of Namibia and a budget of N\$442 700 000 for comprehensive drought relief interventions has been approved by the Cabinet of the Republic of Namibia to assist affected communities for the period 1 April 2019-31 March 2020.
Namibia	Hepatitis E	G1	18-Dec-17	08-Sep-17	19-May-19	5 211	953	43	0.80%	As of 19 May 2019, a cumulative total of 5 211 cases of acute jaundice syndrome (AJS) have been reported nationally since September 2017, including 953 laboratory-confirmed, 3 538 epidemiologically-linked, and 660 suspected. A cumulative total number of 43 deaths have been reported nationally (CFR 0.8%), of which 19 (45%) occurred in pregnant or post-partum women. More than 90% of cases have been reported from eight out of 14 regions of Namibia, namely, Khomas, Omusati, Erongo, Oshana, Oshikoto, Kavango, Ohangwena, and Omaheke regions. Cases reported across the country are mainly from informal settlements with limited access to clean water and sanitation services.

Country	Event	Grade	Date notified to WHO	Start of reporting period	End of reporting period	Total cases	Cases Confirmed	Deaths	CFR	Comments
Niger	Humanitarian crisis	Protracted 1	01-Feb-15	01-Feb-15	04-Apr-19	-	-	-	-	The security situation in Diffa continues to worsen following Boko Haram attacks in the region. A total of 15 000 people from the villages of Gueskerou and Chetimari were newly displaced in Diffa region due to the increasing number of attacks against civilians by Boko Haram. In March 2019, 20 attacks were registered leading to the death of at least 90 civilians. Humanitarian needs in the affected area include shelter, food, health and protection.
Niger	Circulating vaccine-derived polio virus type 2 (cVDPV2)	G2	08-Jul-18	08-Jul-18	22-May-19	10	10	1	10.00%	No case of cVDPV2 have been reported in the past week. The most recent isolated case in the country was in Magaria district, Zinder region with an onset of paralysis on 5 December 2018. A total of ten cVDPV2 cases were reported in 2018 in Niger, which are genetically linked to a cVDPV2 case in Jigawa and Katsina states, Nigeria. (source: GPEI)
Niger	Measles	Ungraded	10-May-19	01-Jan-19	05-May-19	6 814		32	0.50%	During the week 18 (week ending on 5 May 2019), 394 suspected measles cases including 2 deaths have been reported from the country. This brings the cumulative total of 2019 to 6 814 suspected cases including 32 deaths (CFR 0.5%). Maradi (2712 cases including 5 deaths) and Tahoua (1 456 including 16 deaths) region reported the most number of cases, followed by Zinder (922 including 6 deaths), Niamey (721 with no death), Tilaberi (354 including 2 deaths), Agadez (220 including 1 death), Diffa (215 with no death) and Dosso (214 cases including 2 deaths). In 2019, significantly more cases have been reported than the previous two years. However, after the peak in week 14 (week ending on 7 April 2019), reported case numbers have been decreasing, which is similar to the same trend observed in past two years, corresponding to the early phase of the end of high transmission season.
Nigeria	Humanitarian crisis	Protracted 3	10-Oct-16	n/a	30-Apr-19	-	-	-	-	The humanitarian crisis in the Northeastern part of Nigeria persists with continued population displacement from security-compromised areas characterized by overcrowded population in many camps in the region. The number of measles cases being reported also remains high. A vaccination campaign was conducted in February 2019 to respond to the increased number of cases of measles reported over the recent months.

Country	Event	Grade	Date notified to WHO	Start of reporting period	End of reporting period	Total cases	Cases Confirmed	Deaths	CFR	Comments
Nigeria	Lassa fever	Ungraded	24-Mar-15	01-Jan-19	12-May-19	584	569	128	21.90%	In reporting week 19 (week ending on 12 May 2019), four new confirmed cases were reported from three states - Edo (2), Ebonyi (1) and Taraba (1) with no new death. There was a slight increase in the trend of cases in week 18 after which the case count dropped in week 19. No new health worker infection was reported in week 19. Eight patients are currently on admission in the various treatment sites across the country. The emergency phase of the outbreak was declared over.
Nigeria	Measles	Ungraded	25-Sep-17	01-Jan-19	18-May-19	28 796	1 423	89	0.30%	In epi week 19 (week ending on 12 May 2019), a total of 2 029 suspected cases of measles were reported from 36 states including 2 deaths (CFR, 0.1%). Borno (989), Yobe (372), and Katsina (301) account for 79.7% of all the cases reported in week 19 of 2019. Between epi week 1 and 19 (1 Jan - 8 May 2019), a total of 28 796 suspected cases have been recorded from 660 LGAs in 36 states and FCT with 89 deaths (CFR 0.31%). Of the 5 976 samples tested, 1 423 were IgM positive for measles.
Nigeria	Monkey-pox	Ungraded	26-Sep-17	24-Sep-17	10-May-19	328	132	7	2.10%	On 9 May 2019, the Ministry of Health (MoH) in Singapore notified one laboratory-confirmed case of monkeypox linked to Nigeria. The patient is a 38-year-old Nigerian male who arrived in Singapore on 28 April 2019 who had worked in the Delta state in Nigeria, and had attended a wedding on 21 April 2019 in a village in Asikpo South, Ebonyi State, Nigeria, where he may have consumed bush meat. The Nigerian national focal point has been notified, and details of the contact were provided for follow up actions, as necessary. Potential common source exposure and possible epidemiological links within Nigeria are currently being investigated. The outbreak is ongoing in the country with five new cases reported in week 14 (week ending on 7 April 2019). In total, 23 suspected cases have been reported in 2019 from 13 LGAs across 9 states. Ten cases were laboratory-confirmed from 5 LGAs in 4 states.
Nigeria	Polio-myelitis (cVDPV2)	Ungraded	01-Jun-18	01-Jan-18	22-May-19	42	42	0	0.00%	No new cases of circulating vaccine-derived poliovirus type 2 have been reported in the past week. There are eight cVDPV2 cases reported in 2019 so far. The total number of cVDPV2 cases in 2018 remains 34. The country is now affected by three separate cVDPV2 outbreaks, the first centered in Jigawa State with subsequent spread to other states as well as to neighbouring Republic of Niger, the second in Sokoto State and the third one in Bauchi State.

Country	Event	Grade	Date notified to WHO	Start of reporting period	End of reporting period	Total cases	Cases Confirmed	Deaths	CFR	Comments
Nigeria	Yellow fever	Ungraded	14-Sep-17	01-Jan-19	30-Apr-19	930	12	1	0.10%	In April 2019, 332 suspected cases were recorded with 3 new presumptive positive cases and 3 cases from Edo state were confirmed from IP Dakar. Reported cases have been decreasing gradually since week 9 (week ending on 3 February) in 2019. Since January 2019, 930 suspected cases have been reported from 447 (57.8%) LGAs. Four states have reported the confirmed cases, these include: Edo (7), Ondo (2), Imo (1) and Osun (1)
Sierra Leone	Lassa fever	Ungraded	06-Mar-19	15-Feb-19	21-Apr-19	5	5	3	60.00%	As of week 16 (week ending on 21 April 2019), the confirmed cases still remain at five. Last cases were reported during week 14 (week ending on 7 April 2019), when six suspected cases were reported from Kenema district, of which two tested positive. Since the beginning of 2019, 63 suspected cases have been reported across the country, of which five have tested positive. All confirmed cases are from Kenema district.
South Africa	Crimean-Congo haemorrhagic fever (CCHF)	Ungraded	13-May-19	01-Jan-19	15-May-19	3		0	0.00%	Three cases of Crimean-Congo haemorrhagic fever (CCHF) have been confirmed in the country this year. First case was a veterinarian from the Free State province. Second is a 58-year-old man from Kimberly, Northern Cape province. He was bitten by ticks and developed onset a day after. CCHF was confirmed on March 2019 by National Institute for Communicable Diseases (NICD). The most recent case is a 54-year-old man in North West. He was admitted to the Klerksorp hospital with history of visiting the farm on 26 April 2019, and symptoms of headache, redness on skin and fever. Blood sample was collected on 1 May 2019, and he was transferred to ICU on 3 May 2019. NICD later confirmed CCHF.
South Sudan	Humanitarian crisis	Protracted 3	15-Aug-16	n/a	12-May-19	-	-	-	-	The humanitarian crisis is ongoing in South Sudan with 7.1 million people estimated to be in need of humanitarian assistance, 1.87 million of which are internally displaced and over 2.3 million living in neighbouring countries. Measles continues to be a major public health concern in South Sudan with outbreaks confirmed in 11 counties and three PoC sites since the beginning of 2019.

Country	Event	Grade	Date notified to WHO	Start of reporting period	End of reporting period	Total cases	Cases Confirmed	Deaths	CFR	Comments
South Sudan	Hepatitis E	Ungraded	-	03-Jan-18	14-May-19	41	13	2	4.90%	The current outbreak in Benitu PoC continues. Between 7-14 May 2019, two new suspected cases of Hepatitis E were reported from Benitu PoC. To date, in 2019, total 41 cases including 13 PCR-confirmed cases and two deaths have been reported. More than half the of cases reported in 2019 were male (51.3%), and the age group 15-44 years accounted for 34.1% of the total cases (14). Among 20 female cases reported, 6 were between 15 and 44 years-old, exposed to the risk of adverse outcomes when infected in the 3rd trimester of pregnancy. Use of unsafe drinking water is a likely source of infection. Since the beginning of the outbreak in January 2018, total 200 cases have been recorded in the country.
South Sudan	Measles	Ungraded	24-Nov-18	24-Nov-18	14-May-19	1 182	69	7	0.60%	As of 14 May 2019, 9 counties are experiencing measles outbreak, namely Juba, Pibor, Gogrial West, Aweil South, Melut, Tonj North, Gogrial East, Aweil West and Aweil East. Since the last reporting date (7 May 2019), 22 new cases including 21 suspected and 1 confirmed have been reported from Pibor (12), Aweil West (7), Aweil East (2), and Benitu PoC(1). Since January 2019, Measles outbreaks were confirmed in 11 counties and three Protection of Civilian (PoC) sites (Juba, Bentiu, and Malakal). Cumulatively a total of 1182 cases have been reported with 69 laboratory-confirmed cases and seven (CFR=0.7%) deaths.
South Sudan	Rubella	Ungraded	27-Oct-18	27-Oct-18	14-May-19	225	52	0	0.00%	Between 8-14 May 2019, no new cases of rubella from current outbreak areas have been reported. Since 25 October 2018 until 21 April 2019, there are a total of 225 suspected rubella including 41 confirmed rubella cases have been reported from Malakal (178 cases including 41 lab confirmed cases), Aweil (35 cases), Bor South (4 cases), Gogrial west (5 cases) and Yirol east (3 cases).
Tanzania, United Republic of	Cholera	Ungraded	07-Feb-19	26-Jan-19	26-May-19	277	10	5	1.80%	During week 21, 33 new cholera cases were reported from Dar es salaam Region (19 cases and 2 deaths) and Tanga region (14 cases). In the past four weeks all cases were reported from Tanga region. Ten out of 195 districts in the country have reported at least one confirmed case this year.

Country	Event	Grade	Date notified to WHO	Start of reporting period	End of reporting period	Total cases	Cases Confirmed	Deaths	CFR	Comments
Tanzania, United Republic of	Dengue fever	Ungraded	31-Jan-19	01-Aug-18	26-May-19	3 215	3 215	2	0.10%	As of 26 May 2019, 361 new dengue cases were reported from Dar es salaam region (324 cases), Tanga region (24 cases), Pwani (12 cases) and Morogoro (1 case). The total dengue confirmed cases reported since the beginning of the outbreak was 3215 cases including two deaths.
Uganda	Humanitarian crisis - refugee	Ungraded	20-Jul-17	n/a	08-May-19	-	-	-	-	Thousands of refugees have continued to arrive in Uganda this year despite some positive political developments in the neighbouring Democratic Republic of Congo (DRC) and South Sudan. As of 30 April, 2019, 1 230 113 refugees and 26 616 asylum seekers remain in the country. Refugees from DRC (4 561), South Sudan (4 307) and Burundi (271) account for the majority of displaced persons in Uganda.
Uganda	Crimean-Congo haemorrhagic fever (CCHF)	Ungraded	17-Apr-19	24-May-18	14-May-19	18	14	4	22.20%	A new confirmed case of Crimean-Congo haemorrhagic fever (CCHF) has been reported from Uganda. The case-patient is a 10-year-old male resident of in Kikube district. He was admitted to Rweyawawa health centre with a history of fever, diarrhoea, vomiting, fatigue and sore throat. Two days later, he started passing blood in his stool and bleeding from his mouth and nose. Laboratory testing of blood samples tested positive for CCHF on PCR
Uganda	Measles	Ungraded	08-Aug-17	01-Jan-19	07-May-19	1 041	525	6	0.60%	Between 24 April 2019 and 7 May 2019, 144 new additional suspected cases of measles have been reported, among which 81 were confirmed either by laboratory test results or via epidemiological link. Two additional deaths were reported among confirmed cases, which brings the total deceased to six for this year. In total, 1 041 cases including 525 confirmed (329 lab-confirmed and 196 epi-link confirmed) have been reported in 2019 as of 7 May. Among confirmed cases, all except for one case were from rural areas of Uganda, and 56% (293) were unvaccinated. Children under age 5 accounted for 64% (334) of all confirmed cases.
Uganda	Yellow fever	Ungraded	08-May-19	01-Mar-19	26-May-19	6	2	0	0.00%	On 8 May 2019, WHO received results of two confirmed yellow fever cases who tested positive by IgM and PRNT from Masaka and Koboko. Both cases presented with symptoms of fever, malaise and joint pain since the beginning of March 2019. One case had bleeding symptoms with no jaundice. An investigation in the affected district found four additional suspected cases from Masaka district, results are still pending.
Zambia	Cholera	Ungraded	14-May-19	03-Apr-19	17-May-19	253	31	6	2.40%	Detailed update given above.

Country	Event	Grade	Date notified to WHO	Start of reporting period	End of reporting period	Total cases	Cases Confirmed	Deaths	CFR	Comments
Zimbabwe	Cholera	G2	06-Sep-18	06-Sep-18	28-Apr-19	10 421	312	69	0.70%	No suspected cases of cholera and deaths were reported during week 17 (week ending on 28 April 2019). The last case reported from the country was from Shamva district on 12 March 2019. A second round of oral cholera vaccine was concluded in March. The cumulative figures for cholera are 10 421 cases and 69 deaths.
Zimbabwe	Floods/land slides	G2	15-Mar-19	15-Mar-19	30-May-19	-	-	-	-	The tropical cyclone Idai hit 3 provinces neighboring Mozambique namely Manicaland, Masvingo and Mashonaland East, on 15 March 2019. The Government has reported that around 270 000 people are affected by the floods and cyclone, and 299 deaths, with 186 injuries have occurred. Sixty-one percent (181) of deaths and 98% (183) of people injured were reported from Chimanimani and Chipinge districts in Manicaland province. The risk of diarrhoeal disease remains high in affected districts as a result of interruption of water and hygiene infrastructure.
Zimbabwe	Typhoid fever	Ungraded	-	01-Oct-17	28-Apr-19	10 320	427	24	0.20%	During week 17 (week ending on 28 April 2019), 54 new suspected typhoid cases and no deaths have been reported. The reported cases were from North Western (21), West South West (14), Harare Central Hospital (1), South Western (8), Parirenyatwa Group of Hospitals (7) and Mpilo Central Hospital (2) respectively. The cumulative figures for typhoid fever in 2019 are 5 161 suspected cases, among which 165 were confirmed and nine died (CFR 0.17%).
Closed Events										
São Tomé and Príncipe	Necrotising cellulitis	Ungraded	10-Jan-17	25-Sep-16	26-May-19	3 257	-	0	0.00%	A steady decrease in the number of reported cases has been observed since the beginning of the year 2019. During week 21 (week ending 26 May 2019), 3 suspected cases have been notified from two districts out of 7 districts affected by the outbreak, this is a 57% decrease in the number of new suspected cases compared to week 20. Between the week 40 of 2018 (week ending 7 October 2018) and the week 21 of 2019, a total of 3 257 cases of Necrotising Cellulitis with no fatality were recorded. Laboratory test performed on 21 patients revealed that more than 50% of them had <i>S. aureus</i> and <i>S. pyogenes</i> .

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

Data are taken from the most recently available situation reports sent to WHO AFRO. Numbers are subject to change as the situations are dynamic.

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