WEEKLY BULLETIN ON OUTBREAKS AND OTHER EMERGENCIES

Week 42: 14 - 20 October 2019 Data as reported by: 17:00; 20 October 2019

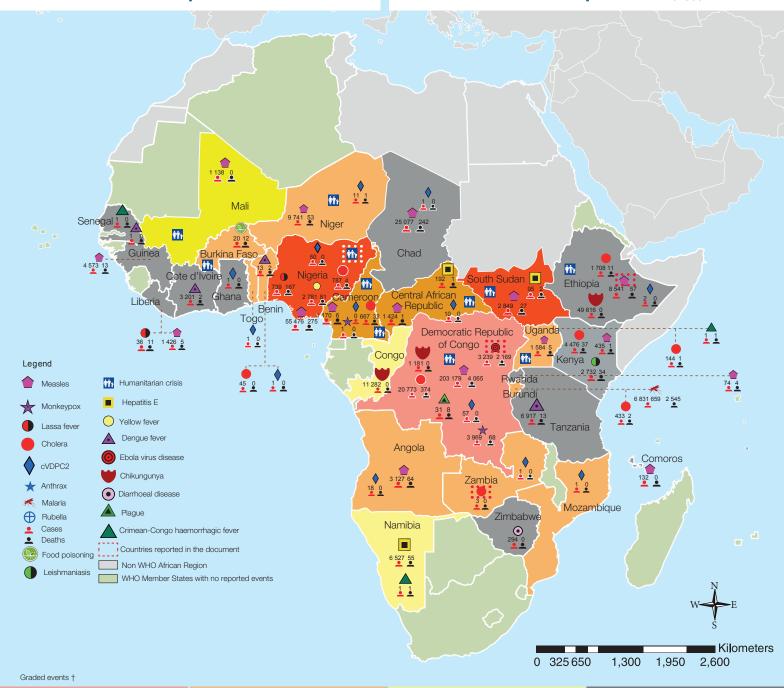


New events

69
Ongoing events

61
Outbreaks

Humanitarian crises



Grade 3 events

Protracted 3 events

Grade 2 events

2
Protracted 2 events

Grade 1 events

Protracted 1 events

46
Ungraded events

Overview

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

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

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

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

Major issues and challenges include:

- The humanitarian crisis in North East Nigeria remains of concern with those in IDP camps facing suboptimal living conditions, in particular restricted water and poor sanitation, which must be urgently addressed by authorities. The onset of the rainy season is of concern and surveillance for potential outbreaks should be improved to ensure vigilance is maintained for early warning signals of potential outbreaks.
- In Ethiopia over eight thousand people have now been affected by a measles outbreak, with more than 80% of cases not vaccinated or with an unknown vaccination status. Measles is endemic in the country and the cold chain system remains weak. Community education on the importance of vaccination together with supplemental immunization activities in areas with low vaccine coverage needs to occur to improve the vaccination rates in Ethiopia and reduce the incidence of cases.

Measles Ethiopia 8 514 57 0.67% Case Deaths CFR

EVENT DESCRIPTION

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

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

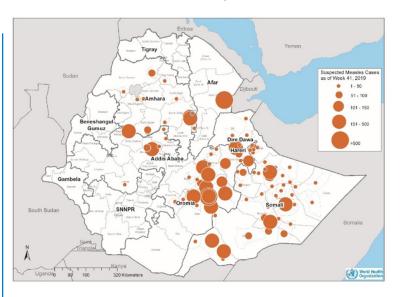
A total of four regions have confirmed measles outbreaks, including 28 zones and 113 Woreda. Oromio region is the most affected, accounting for 58% of the total reported cases, followed by Solmali (28%), Amhara (8%) and Afar (6%) regions.

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

PUBLIC HEALTH ACTIONS

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

Geographical distribution of measles outbreak cases in Ethiopia from week 1 to 41, 2019.



SITUATION INTERPRETATION

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

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

EVENT DESCRIPTION

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

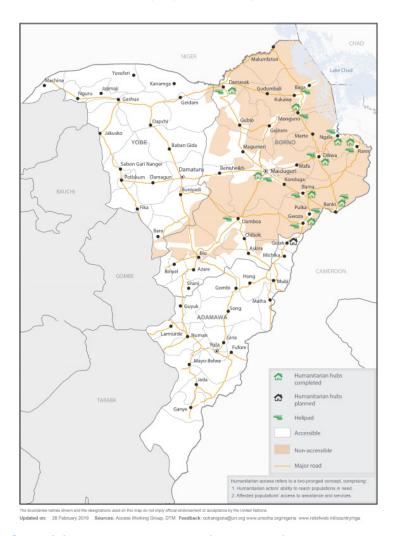
The cholera outbreak in Adamawa state continues to show a downward trend with a constant reduction in the number of cases reported weekly since the peak in week 31 (week ending 4 August 2019) when 72 cases were reported till week 41 (week ending 13 October 2019) when only 5 cases have been reported.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

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

PUBLIC HEALTH ACTIONS

- WHO supported training on Infection Prevention and Control (IPC) in the four LGAs affected by the ongoing cholera outbreak in Adamawa state with over 200 health workers trained. Other response activities have been sustained with significant improvement in WASH conditions. Household and latrine disinfection, chlorination of water at points of collection, distribution of water purification kits and water quality testing have been intensified in the affected communities.
- The second round of the Oral Cholera Vaccine (OCV) campaign was conducted in Yobe state between 1 and 5 September 2019, targeting 128 520 persons aged one year and above in 11 wards in Damaturu LGA. The post campaign administrative coverage was 99%.
- The Mental Health and Psychosocial Support (MHPSS) State Working Group coordination meeting was held on 10 September 2019 in Maiduguri. A total of 48 participants from various organizations participated in the coordination meeting to plan activities for World Mental Health day.
- WHO supported hard-to-reach (H2R) teams continue to provide basic essential services in LGAs in the three most affected northeastern states of Adamawa, Borno and Yobe states treating persons with minor ailments, conducting antenatal care services for pregnant women including malaria chemoprophylaxis.

Accessibility map of Northeast Nigeria 2019



WHO Community Resource Persons (CoRPs) in 14 LGAs in Adamawa state conducted mid-upper arm circumference (MUAC) screening for malnutrition. Among 2 264 children, 157 (6.9%) had moderate acute malnutrition (MAM) and were counselled on proper nutrition, while 9 (0.4%) of them had severe acute malnutrition (SAM) and were referred for proper management.

SITUATION INTERPRETATION

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

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



3 239 2 169 Cases Deaths 67% **CFR**

EVENT DESCRIPTION

The Ebola virus disease (EVD) outbreak in North Kivu, South Kivu and Ituri provinces in Democratic Republic of the Congo continues, with nine health zones and 21 health areas reporting confirmed cases in the past 21 days (29 September to 19 October 2019). Since our last report on 13 October 2019 (Weekly Bulletin 41), there have been 19 new confirmed cases and 19 new deaths. The principle hot spots of the outbreak in the past 21 days are Mandima (53%; *n*=26 cases) and Mambasa (10%; n=5 cases). Five health zones, Beni, Mabalako, Mambasa, Mandima, and Oicha have reported new confirmed cases in the past seven days.

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

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

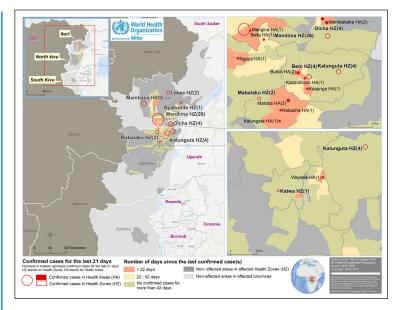
Contact tracing is ongoing in 10 health zones. A total of 5 570 contacts are under follow-up as of 19 October 2019, of which 4 774 have been seen in the past 24 hours, comprising 86% of the contacts. Alerts in the affected provinces continue to be raised and investigated. Of 3 679 alerts processed (of which 3 616 were new) in reporting health zones on 19 October 2019, 3 564 were investigated and 420 (12%) were validated as suspected cases.

On 17 July 2019, the WHO Director-General, Dr Tedros Ghebreyesus declared the EVD outbreak in Democratic Republic of the Congo a Public Health Emergency of International Concern (PHEIC), following a meeting of the International Health Regulations Emergency Committee (EC) for EVD. On 18 October the EC met again to review the situation. Following an in-depth analysis and review it determined that the event still constitutes a PHEIC under the IHR (2005).

PUBLIC HEALTH ACTIONS

- Surveillance activities continue, including case investigations, active case finding in health facilities and communities, and identification and listing of contacts around the latest confirmed cases. Cross-border collaboration continues, particularly with Uganda and Rwanda.
- As of 19 October 2019, a cumulative total of 240 494 people have been vaccinated since the start of the outbreak in August
- Point of Entry/Point of Control (PoE/PoC) screening continues, with over 108 million screenings to date. A total of 107/112 (96%) PoE/PoC transmitted reports as of 19 October 2019.

Geographical distribution of confirmed Ebola virus disease cases reported from 29 September to 19 October 2019, North Kivu, South Kivu and Ituri provinces, Democratic Republic of the Congo



- There are continued community reintegration and psychosocial activities for patients discharged from ETCs, along with psychoeducation sessions to strengthen community engagement and collaboration in the response.
- Water, sanitation and hygiene (WASH) activities continue and during this week, 5 households in Mandima were equipped with infection prevention and control and WASH inputs.
- Community awareness and mobilization messages are being updated, revised and harmonized and have been pre-tested by the commission and will subsequently be shared in coordination and sub-coordination activities.
- Positive messages around the management of the transit centres (TC) and treatment centres were delivered during the official opening of the new Kahamba TC. Kalunguta Health Zone: a total of 295 people around four confirmed cases on 14 October 2019 benefited from response activities.

SITUATION INTERPRETATION

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

EVENT DESCRIPTION

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

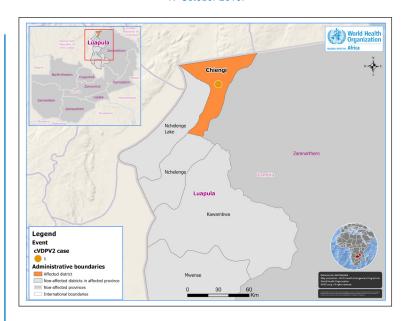
WHO alerted the Zambian Ministry of Health of the results on 13 September 2019, following reports that the case-patient had travel back to Chienge district with his mother who is of Zambian nationality. During initial investigation by the Ministry of Health of Zambia, thirty-four (34) stool samples were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

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

PUBLIC HEALTH ACTIONS

- The Ministry of Health, through the Zambia National Public Health Institute, has activated the Public Health Emergency Operations Centre and put in place an Incident Management System to coordinate response to the outbreak.
- Enhanced surveillance for polio including active search for AFP cases through record reviews at health facilities in the affected district are being conducted to identified potential cases of wild polio and vaccinederived polio viruses.

Geographical distribution of cVDPV2 cases in Zambia, 17 October 2019.



- Field investigations of all AFP cases detected are being routinely implemented, followed by planning of appropriate response activities as needed.
- Supportive supervision has been intensified in all health facilities in the affected district. An integrated supportive supervision (ISS) tool is being used to assess health facilities and mentor clinical staff in areas where gaps have been identified.
- A vaccination coverage survey has been undertaken in catchment areas of two health facilities in the district. A total of 60 households from six clusters were administered questionnaires to assess vaccination coverage in under-five children.
- Routine immunization activities continue in the district, including outreach exercises aimed at increasing uptake and utilization of polio and other vaccines.
- Enhanced sensitization activities in communities, including visitation of priority sites, are being conducted.

SITUATION INTERPRETATION

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

Go to map of the outbreaks

Summary of major issues, challenges and proposed actions

Major issues and challenges

- The humanitarian crisis in North East Nigeria remains concerning, with increased military action. The number of persons in IDP camps remains high with suboptimal living conditions, in particular restricted water and poor sanitation. The onset of the rainy season is also of concern given the association with diseases which can cause life threatening outbreaks including malaria and cholera.
- Over 8 000 people have now been affected by the measles outbreak in Ethiopia, with more than 80% of cases not vaccinated or with unknown vaccination status. Measles is endemic in the country with the vaccination coverage remaining lower than the 95% coverage required to prevent outbreaks. Additionally, the cold chain system remains poor impacting the effectiveness of vaccinations that do take place.

Proposed actions

- Surveillance for potential outbreaks in the areas affected by the humanitarian crises in North East Nigeria is ongoing, however timeliness and completeness should be improved to ensure vigilance is maintained for early warning signals of potential outbreaks. Additionally, the need for access to safe water and sanitation must be urgently addressed by authorities.
- The health system challenges that impact the effective delivery of measles vaccines, together with other vaccinations, particularly in hard-to-reach areas need to be reviewed and addressed by the public health authorities. Community education on the importance of vaccination together with supplemental immunization activities in areas with low vaccine coverage must occur to improve the vaccination rates in Ethiopia and reduce the incidence of cases.

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	
New Events										
Chad	Poliomyelitis (cVDPV2)	G2	18-Oct-19	9-Sep-19	18-Oct-19	1	1	0	0.00%	
on 9 Septemb detected in Bo	On 18 October 2019, WHO was informed about cVDPV2 in Chad. A cVDPV2 was isolated from an a 13-month-old case of acute flaccid paralysis (AFP), with onset of paralysis on 9 September 2019 in Chari Baguirmi province, bordering Cameroon. The isolated virus has 32 nucleotide changes from Sabin 2, and is genetically-linked to a cVDPV2 detected in Borno, Nigeria and is part of the Jigawa emergence. The Global Polio Eradication Initiative is working with regional and country teams to further investigate these emergences/detections, and plan response as appropriate. The last indigenous wild poliovirus case were reported in 2000 in Chad.									
Togo	Poliomyelitis (cVDPV2)	G2	18-Oct-19	13-Sep-19	18-Oct-19	1	1	0	0.00%	
Plateaux provi Nigeria and is	nce, bordering Benin	and Ghana. Th nergence as we	e isolated virus II. Global Polio	has 32 nucleot Eradication Initi	ide changes fro iative is working	m Sabin 2, and	l is genetically li	nked to a cVDP	lysis on 13 September 2019 in V2 detected in Irewole state, ovestigate and plan response as	
Zambia	Poliomyelitis (cVDPV2)	G2	17-0ct-19	16-Jul-19	17-0ct-19	3	3	0	0.00%	
Detailed updat	e given above.									
Ongoing Events										
Angola	Measles	Ungraded	4-May-19	1-Jan-19	30-Jun-19	3 127	85	64	2.00%	
deaths were re	eek ending 30 June 2 eported from 18 prov en reported since we	inces across Ai	pected measles ngola. Lunda Su	cases were rep Il and Moxico p	orted. From we rovinces have r	ek 1 to 26 of 20 eported 73% a	019, a cumulativ	ve total of 3 127 s respectively. A	7 suspected cases including 64 A total of 85 laboratory-confirmed	
Angola	Poliomyelitis (cVDPV2)	G2	8-May-19	5-Apr-19	16-0ct-19	18	18	0	0.00%	
No case of cV	DPV2 was reported t	his week. There	is a total of 18	cVDPV2 cases	from six outbre	aks reported in	2019.			
Benin	Cholera	Ungraded	5-Jul-19	3-Jul-19	26-Sep-19	45	19	0	0.00%	
suspected cas	26 September 2019 es, 19 cultured <i>Vibri</i> ri (2) in Atlantique De	<i>o cholerae</i> sero	type O1 at the N	lational Public I	Health Laborato	been reported to bry. Confirmed o	from Atlantique cases are from f	and Littoral De our communes	partments of Benin. Of the 45 , namely, Zè (3), Sô-Ava (2) and	
Benin	Dengue fever	Ungraded	13-May-19	10-May-19	25-Aug-19	13	9	2	15.40%	
Departments. PCR at the Be	Cumulatively, nine ca	ises from Atlan oratory. The las	tique Departme st dengue fever	nt (3 cases), Lit case was confir	toral Departme	nt (4 cases) and	d Ouémé Depart	tment (2 cases)	oral, Ouémé and Couffo were confirmed by serology and one of which occurred in a dengue	
Benin	Poliomyelitis (cVDPV2)	G2	8-Aug-19	8-Aug-19	16-0ct-19	1	1	0	0.00%	
No cases of c	/DPV2 were reported	I in the past we	ek. There is one	cVDPV2 case r	reported in 201	9 so far.				
Burkina Faso	Humanitarian crisis	G2	1-Jan-19	1-Jan-19	10-0ct-19	-	-	-	-	
This has resul of North, Bou	ted in mass displace cle du Mouhon, East	ment leading to and Centre are	a total of 486 3 the most affecte	600 internally o d. Health servi	displaced perso ces are severely	ns registered as affected and a	s of 8 October 2 s of 27 Septeml	019 in all 13 re ber 2019, Minis	It of attacks by armed groups. gions in the country. The regions try of Health figures show that ue to epidemic-prone diseases	
Burkina Faso	Food poisoning	Ungraded	19-Sep-19	1-Sep-19	19-Sep-19	20		12	60.00%	
Central Region Center (CSPS) the same day	n on 1 September 20 of Didyr, located 6 k were noted. The inve	19. This case w om from Lapio t stigation showe	as followed by too own. During the ed that all affect	the presentation e epidemiologic ed persons wer	n of 20 patients al investigation e exposed to fo	from the same , a total of 20 p ood products the	concession wh ersons from the at were contami	o consulted at t same family, in nated with pest	idyr, province of Sanguié, West the Health and Social Promotion ncluding 12 deaths that occurred ticides during a festive event that centre East of the country.	
Burundi	Cholera	Ungraded	5-Jun-19	1-Jun-19	7-Sep-19	433	32	2	0.50%	
health districts for <i>Vibrio cho</i>	s of Bujumbura Mairi <i>lerae</i> Ogawa.The mos	e have been aff st affected age-	ected with 40% group is 19 to 5	(118) of cases 0 years represe	reported from enting 52% (154	Bujumbura Nor 4) in Bujumbura	th health distric a Mairie and 42°	t. Of 46 sample % (57) in Cibito	health district (136). The three is tested, 32 (69.5%) were positive like health district. Males account % (28) of cases admitted in Ndava	

	,								
Country	Event	Grade	Date notified to WHO	Start of reporting period	End of reporting period	Total cases	Cases Confirmed	Deaths	CFR
Burundi	Malaria	G2		1-Jan-19	29-Sep-19	6 831 659		2 545	0.00%
with the epide		ssed in week 18	(week ending 5	May 2019). In	week 39 (week	ending 29 Sep	tember 2019),		ss the 46 districts of Burundi, including 32 deaths have been
Cameroon	Humanitarian crisis (Far North, North, Adamawa & East)	Protracted 2	31-Dec-13	27-Jun-17	27-Sep-19	-	-	-	-
the beginning with spontan	ı of September 2019, eous arrival of Nigeria	there have beer in refugees in th	n 23 attacks, inc ne Minawao Can	luding pure crii np, Mokolo Hea	minal activity, w Ilth District. As	rith 22 deaths a of 13 Septembe	nd 17 injuries r er 2019, the can	eported. Population v	t population displacement. Since ation displacement is ongoing, was 59 456, mainly Nigerian refugees, with around 400 people
Cameroon	Humanitarian crisis (NW & SW)	G2	1-0ct-16	27-Jun-18	27-Sep-19	-	-	-	-
to persons in to basic servi at 437 000 pe	need continues to be ces including healthc	a challenge wit are, education, ition in need of	h armed groups shelter, food sed humanitarian as	often blocking curity and WAS ssistance is esti	access as well H. As of 27 Sep mated at 594 0	as threatening tember 2019, t 00 persons. An	humanitarian p he total number	ersonnel. This r of internally d	ts reported. Humanitarian access unrest continues to affect access isplaced persons is estimated fled to the Littoral and Western
Cameroon	Cholera	Ungraded	1-Mar-19	1-Mar-19	10-0ct-19	667	98	32	4.80%
North region.		nealth districts a	are affected in th	ne North (Bibém	ni, Figuil, Garou				orded (CFR 4.8%) in North and Far oa, Tcholliré) and 6 out of 30 health
Cameroon	Measles	Ungraded	2-Apr-19	1-Jan-19	11-Aug-19	1 170	269	6	0.00%
The outbreak Vélé, Pitoa, N	is currently affecting	33 districts, na boro, Mogodé,	mely, Kousseri,	Mada, Goulfey,	Makary, Kolofa	ta, Koza, Ngaoi	undéré rural, Ba	ıngué, Guider, F) were confirmed as IgM-positive. Figuil, Ngong , Mora, Maroua 3, oungolo, Nkolndongo, Limbé,
Cameroon	Monkeypox	Ungraded	27-Sep-19	18-Sep-19	27-Sep-19	1	0	0	0.00%
	nkeypox was confirm were put in place and						e 18 of Septeml	ber 2019. All sı	upportive measures for case
Cameroon	Poliomyelitis (cVDPV2)	G2	23-May-19	23-May-19	16-Oct-19	-	-	-	-
circulating va		rus type 2 (cVD	PV2) from ån er	ıvironmental sa	mple collected				(GPLN) of the detection of Cameroon which borders Borno
Central African Republic	Humanitarian crisis	Protracted 2	11-Dec-13	11-Dec-13	22-Sep-19	-	-	-	-
relatively calr	n after the last clashe ve of violence, bringir	s between the a	rmed groups or	n 14 September	2019. The late	st assessment a	according to MI	NUSCA reporte	The city of Birao has been and 17 wounded in of 23 000 IDPs in Birao since the
Central African Republic	Hepatitis E	Ungraded	2-0ct-18	10-Sep-18	29-Sep-19	192	147	1	0.50%
syndrome, of		firmed for viral I	nepatitis E, have	been recorded	from Bocarang	a-Koui and Ng	aoundaye. Ngad	undaye health	otal of 192 cases of acute jaundice district has reported seven cases June 2019).
Central African Republic	Measles	Ungraded	15-Mar-19	11-Feb-19	22-Sep-19	1 424	30	1	0.10%
(8 cases). Th		e reported num	per of cases sin	ce week 37 (we	ek ending 15 S				ses) and Bafango health district otal of 1424 measles cases and 1
Central African Republic	Poliomyelitis (cVDPV2)	G2	24-May-19	24-May-19	16-0ct-19	10	10	0	0.00%
No new case	of cVDPV2 was repor	ted this week. 1	here are 10 rep	orted cases in 2	2019 from five	different outbre	aks of cVDPV2	in 2019.	

Country	Event	Grade	Date notified to WHO	Start of reporting period	End of reporting period	Total cases	Cases Confirmed	Deaths	CFR			
Chad	Measles	Ungraded	24-May-18	1-Jan-19	13-0ct-19	25 077	178	242	1.00%			
25 077 suspec												
Comoros	Measles	Ungraded	26-May-19	20-May-19	11-Aug-19	132	56	0	0.00%			
confirmed (38		d and 19 by ep	idemiological lir	nk). IgM-positiv	re cases were re				Of these, 57 cases have been nely, Moroni (27), Mitsamiouli (6),			
Congo	Chikungunya	G1	22-Jan-19	7-Jan-19	4-Aug-19	11 282	148	0	-			
July 2019) to		ending 4 Augus	t 2019). Since t	the beginning o	f the outbreak, a	a total of 11 28			37 in week 30 (week ending 28 43 out of the 52 health districts of			
Côte d'Ivoire	Dengue Fever	Ungraded	15-Feb-19	1-Jan-19	24-Sep-19	3 201	281	2	0.10%			
suspected cas samples) as the remains the ep	es including two dea	ths attributed t erotypes. Forty	o dengue fever l	have been repo	rted. Of these, 1	62 cases have	been confirmed	I with DENV 1 (per 2019, a total of 3 201 125 samples) and DENV 2 (38 Bingerville District in Abidjan			
Democratic Republic of the Congo	Humanitarian crisis	G3	20-Dec-16	17-Apr-17	23-Sep-19	-	-	-	-			
of people in no 600 voluntary province, the p	eed of humanitarian a returnees have arriv	assistance. Pop ed in the health rity in Nyunzu	ulations movem zones of Luiza and Kalemie terr	nent due to arm and Kamonia in itories continue	ed clashes cont n Kassai central es to cause disp	inue to be repo province betwe lacements of p	orted in North-K een 20 and 31 A opulations. In it	ivu, Ituri, South ugust 2019, ac	tension resulting in large number -Kivu and Maniema. More than 14 cording to UNHCR. In Tanganyika Ilowing the security campaign			
Democratic Republic of the Congo	Chikungunya	Ungraded	8-Feb-19	30-Sep-18	12-May-19	1 181	426	0	0.00%			
health zones o	of Kongo provinces. A	Around 65% of vere tested at th	cases have beer le National Instit	n reported from tute of Biomedi	Gombe, Mont	Gafula,1, Mont	Gafula 2, Mass	a and Matadi he	25 health zones of Kinshasa and 8 ealth zones. A total of 778 samples .7%) were confirmed by RT-PCR.			
Democratic Republic of the Congo	Cholera	G3	16-Jan-15	1-Jan-19	22-Sep-19	20 773	-	374	1.80%			
1 and week 38		0 773 cases in	cluding 374 dea						es in 9 provinces. Between week o the same period in 2018 (week			
Democratic Republic of the Congo	Ebola virus disease	G3	31-Jul-18	11-May-18	19-Oct-19	3 239	3 123	2 169	66.80%			
Detailed updat	te given above.											
Democratic Republic of the Congo	Measles	G2	10-Jan-17	1-Jan-19	29-Sep-19	203 179	6 276	4 065	2.00%			
the 519 health have been rec	zones across the co	untry have report	orted a confirme ed in 2019 have	ed measles outb been notified f	oreak. Since the rom Tshopo, Lu	beginning of 2 alaba, Kasai an	019, 203 179 m	neasles cases in	ountry. In total, 214 (41.2%) of cluding 4 065 deaths (CFR 2.0%) case fatality ratio is higher in the			
Democratic Republic of the Congo	Monkeypox	Ungraded	n/a	1-Jan-19	13-Sep-19	3 969	-	68	1.70%			
(week ending									ones in 16 provinces. In week 35 one in Sankuru province.			
Democratic Republic of the Congo	Plague	Ungraded	12-Mar-19	28-Feb-19	6-Oct-19	31	-	8	25.80%			
week 10 in the		alth zone. Two	other cases wer	e reported duri	ng week 13 (Ar	u health zone) a	and 14 (Aungba		rst five cases were reported during The latest cluster of cases was			

Country	Event	Grade	Date notified to WHO	Start of reporting period	End of reporting period	Total cases	Cases Confirmed	Deaths	CFR
Democratic Republic of the Congo	Poliomyelitis (cVDPV2)	G2	15-Feb-18	1-Jan-18	18-0ct-19	57	57	0	0.00%
No new case	of cVDPV2 was repo	rted this week.	There are 37 cV	DPV2 cases in	2019 and 20 in	2018.			
Ethiopia	Humanitarian crisis	Ungraded	15-Nov-15	n/a	30-Sep-19	-	-	-	-
reported in Do		oan zone, affect	ing 9 374 house	holds in 12 ket	eles, leading to	acute displace	ment of person	s in addition to	climatic conditions. Flooding was destruction of livestock, crops and Afar regions.
Ethiopia	Chikungunya	Ungraded	25-Jul-19	27-May-19	29-Sep-19	49 616	16	0	0.00%
	nine urban Kebeles i								541 new suspected cases were in week 36 (week ending 8
Ethiopia	Cholera	Ungraded	14-May-19	12-May-19	13-0ct-19	1 708	54	11	0.70%
last two week		019, a total of	1 708 suspected	cases includin	g 11 deaths hav	/e been reporte	d from eight req	jions with Oron	I has been on the decline over the nia (718 cases), Amhara (202
Ethiopia	Measles	Ungraded	14-Jan-17	1-Jan-19	13-0ct-19	8 541	14	57	0.70%
Detailed upda	te given above.								
Ethiopia	Poliomyelitis (cVDPV2)	Ungraded	24-Jun-19	20-May-19	16-Oct-19	2	2	0	0.00%
No case of cir	culating vaccine-deri	ved poliovirus t	ype 2 (cVDPV2)	was reported t	his week. There	are two report	ed cases of cVI	PV2 in Ethiopia	a, linked to Somalia in 2019.
Ghana	Poliomyelitis (cVDPV2)	Ungraded	9-Jul-19	8-Jul-19	16-Oct-19	1	1	0	0.00%
	ase was reported in th and the Northern pro						2-positive enviro	onmental sampl	es from Accra district, Greater
Guinea	Measles	Ungraded	9-May-18	1-Jan-19	11-Aug-19	4 573	969	13	0.30%
cases includir localities in th	ng 13 deaths (CFR 0.3 ree health districts ar laneah in Coyah Healt	3%) have been re in the epidem th District.	reported. Of the nic phase, name	4 573 suspecte ly, Tombolia cei	ed cases, 1 595 ntre, Yimbayah	were sampled, école, and Mato	of which 969 to oto centre in Ma	ested positive fo toto Health Dis	2019), a total of 4 573 suspected or measles by serology. Five trict, Wanindara in Ratoma Health
Kenya	Cholera	Ungraded	21-Jan-19	2-Jan-19	13-0ct-19	4 476	210	37	0.80%
January 2019		unties of Kenya	reported choler	a cases, namely	y: Embu, Gariss	a, Kajiado, Kisı	ımu, Machakos	, Makueni, Man	ases) and Mandera (1case). Since dera, Mombasa, Nairobi, Narok,
Kenya	Leishmaniasis	Ungraded	31-Mar-19	1-Jan-19	13-0ct-19	2 732	1 155	34	1.20%
	reek ending 13 Octob Mandera, Marsabit,			eported. Since t	he beginning o	the outbreak,	suspected and o	confirmed cases	s of leishmaniasis have been
Kenya	Measles	Ungraded	6-May-19	20-Mar-19	13-0ct-19	435	10	1	0.20%
425 cases and		which four we	re laboratory-co	nfirmed. Additi	onally, 10 cases				ub-County has been affected, with reported from Garissa County in
Liberia	Lassa fever	Ungraded	23-Jan-19	1-Jan-19	8-Sep-19	36	27	11	30.60%
fever cases in PCR and 70 w	cluding 22 deaths r. (Of samples test negative test r	ed from 97 of the sults. The case	ie suspected ca	ses at the Natio	nal Public Heal	th Reference La	boratory of Lib	here have been a total of 106 Lass eria, 27 were confirmed by RT- s including 44 health workers have
Liberia	Measles	Ungraded	24-Sep-17	1-Jan-19	13-0ct-19	1 426	210	5	0.40%
	reek ending on 13 Oc across the country,							Since the begin	nning of 2019, 1 426 cases have
Mali	Humanitarian crisis	Protracted 1	n/a	n/a	10-Sep-19	-	-	-	-
has intensified									end of August,seasonal rainfall articularly northern Segou, Mopti,

Country	Event	Grade	Date notified to WHO	Start of reporting period	End of reporting period	Total cases	Cases Confirmed	Deaths	CFR
Mali	Measles	Ungraded	20-Feb-18	1-Jan-19	13-0ct-19	1 138	321	0	0.00%
As of week 41 positive.	(week ending on 6 (October 2019),	1 138 suspected	d cases of meas	sles have been i	reported from 1	1 districts in th	e country. Of th	ese, 321 were confirmed IgM-
Mozambique	Poliomyelitis (cVDPV2)	G2	7-Dec-18	7-Dec-18	16-0ct-19	1	1	0	0.00%
No case of cir	culating vaccine-deri	ved poliovirus t	ype 2 (cVDPV2)	outbreak has l	been reported ti	his week. There	was one case i	reported in 201	8.
Namibia	Crimean-Congo haemorrhagic fever (CCHF)	Ungraded	13-Sep-19	1-Sep-19	19-Sep-19	1	1	0	0.00%
	under care at Outapi								nt is from the Cunene province in care workers have been identified
Namibia	Hepatitis E	G1	18-Dec-17	8-Sep-17	6-0ct-19	6 527	1 585	55	0.80%
decrease in the epidemiologic occurred in pro	e number of cases really-linked, and 841 s	eported in the la suspected have im women. Cas	ist two weeks co been reported o es have been re	ompared to wee countrywide. A ported from 12	eks 37 and 38. <i>i</i> cumulative nun	As of 6 October ober of 55 deatl	2019, a cumul hs have been re	ative total of 1 sported national	homas region. There was a 85 laboratory-confirmed, 4 101 ly (CFR 0.8%), of which 23 (41%) ungo, Oshana, Oshikoto, Kavango,
Niger	Humanitarian crisis	Protracted 1	1-Feb-15	1-Feb-15	14-Sep-19	-	-	-	-
bordering Bur reprisals by jil on humanitari	kina Faso, Mali and N hadists after G5 Sahe	ligeria, where 1 I operations. In	illaberi, Tahoua weeks 36 and 3	, Diffa and Mara 37 (week ending	adi regions are g 14 Septembe	targets of arme r 2019) Tillaberi	d groups opera i and Maradi ha	ting on both sic ve been particu	ons remain worrying in areas les of the border, as well as of larly badly affected, with attacks whom are under the age of 18 and
including 24 c	leaths) region reporte g 3 death), Diffa (299	ed the most cas	ses, followed by	Zinder (1 360 i	including 10 de	aths), Niamey (1 269 with 1 de	ath), Tilaberi (6	ing 8 deaths) and Tahoua (1 845 33 including 3 deaths), Agadez case incidence has been on a
Niger	Poliomyelitis (cVDPV2)	G2	8-Jul-18	8-Jul-18	16-0ct-19	11	11	1	9.10%
	V2 was reported in th s were reported in 20								gion on 3 June 2019. A total of ten
Nigeria	Humanitarian crisis	Protracted 3	10-0ct-16	n/a	30-Sep-19	-	-	-	-
Detailed upda	te given above.								
Nigeria	Cholera	Ungraded	19-Jun-19	15-May-19	11-0ct-19	787	189	4	0.50%
Government A North (481 ca	Areas between 4 to 1	October 2019 , Girei (193 cas	. From 15 May t es with one dea	o 11 October20 th), Yola South	019, a cumulativ (112 cases wit	ve total of 787 o h one death), ai	ases with four	deaths have be	and Yola South (1) Local en reported from four LGAs: Yola ths). Of 440 stool specimens
Nigeria	Lassa fever	Ungraded	24-Mar-15	1-Jan-19	6-0ct-19	739	721	172	23.30%
and Bauchi (1		ıs) states. Eight	y-six Local Gov	ernment Areas	(LGAs) across	23 states have ı	reported at leas	t one confirmed	Ondo (1 case with zero deaths), d case since the beginning of 2019. g followed.
Nigeria	Measles	Ungraded	25-Sep-17	1-Jan-19	30-Sep-19	55 476	2 150	275	0.50%
Between epi v Katsina (309)	, Borno (219), Kano (I of 55 476 suspected	(309), Yobe (91), Ekiti (65), Lag	jos (65) and Sc	okoto (65) acco	unt for 59% of	all the cases rep	ported in the tin	uding 3 deaths (CFR 0.2%). ne period. Between epi week 1 6 samples tested, 2 150 were IgM
Nigeria	Poliomyelitis (cVDPV2)	G2	1-Jun-18	1-Jan-18	16-Oct-19	50	50	0	0.00%
No case of cir	culating vaccine-deri	ved poliovirus t	ype 2 (cVDPV2)	was reported	this week. Ther	e are 16 cVDPV	2 cases reporte	d in 2019. The	re were 34 cVDPV2 cases in 2018.

Country	Event	Grade	Date notified to WHO	Start of reporting period	End of reporting period	Total cases	Cases Confirmed	Deaths	CFR
Nigeria	Yellow fever	Ungraded	14-Sep-17	1-Jan-19	30-Sep-19	2 781	72	81	2.90%
Additional 27		d by PCR at the	National Refere	ence lab and La	gos University	Teaching Hospit	tal. Reported ca		ses from: Edo (5) and Ebonyi (3). decreasing since week 36 (week
Rwanda	Measles	Ungraded	25-Jun-19	1-Jun-19	2-Jul-19	74	12	4	5.40%
tested by the	National reference La 57) of cases, reported	boratory, 12 (8	5.7%) were IgN	positive for m					anda. Among the 14 samples iro district is the most affected
Senegal	Crimean-Congo haemorrhagic fever (CCHF)	Ungraded	13-Sep-19	6-Sep-19	13-Sep-19	1	1	0	0.00%
A case of Crir border with N		hagic fever con	firmed by PCR a	at Institut Paste	eur Dakar has be	een reported fro	om Bokidiawé S	ite, Matam Reg	gion, Northern Senegal on the
Senegal	Dengue fever	Ungraded	17-Sep-19	15-Aug-19	13-Sep-19	1	1	0	0.00%
A case of den 2019.		ck, in the centre	of the country,	with symptom	onset on 15 Au	igust 2019 was	confirmed by F	PCR at Institut F	Pasteur Dakar on 13 September
South Sudan	Humanitarian crisis	Protracted 3	15-Aug-16	n/a	5-0ct-19	-	-	-	-
1.47 million. disease burde Melut, Aweil S	Malnutrition continue on remains high with	s to be a proble ten counties rep nj North, Juba, V	m in the countroorting malaria	y as more than cases above the	6.35 million pe eir epidemic thr	ople are reporte esholds and me	ed to be severel easles cases bei	y food insecure ng reported fro	South Sudan was estimated at e in South Sudan. Communicable om 16 counties (Abyei, Mayom, o) and four protections of civilian
South Sudan	Hepatitis E	Ungraded	-	3-Jan-18	29-Sep-19	95	60	2	2.10%
total of 83 su		ng 56 PCR-con	firmed cases an	d two deaths h	ave been record	led from Bentiu			eported. As of reporting date, a red cases including 4 confirmed
Between 1 Ja outbreak has	uary to 30 Septemb	er 2019, a total and 4 Protectio	of 2 849 suspection of Civilians Si	cted cases of m tes POCs (Juba	easles which 24	42 laboratory-c	i onfirmed and 2	to the contract of the contrac	1%) have been reported. The n 2019 with an average of 75 cases
Tanzania, United Republic of	Dengue fever	Ungraded	31-Jan-19	1-Aug-18	13-0ct-19	6 917	6 917	13	0.20%
including 13 (of the outbreak was 6 917 cases ro, Lindi, Morogoro, Pwani,
Uganda	Humanitarian crisis - refugee	Ungraded	20-Jul-17	n/a	30-Sep-19	-	-	-	-
Burundi (756)	. Uganda hosted 1 34	47 360 asylum	seekers as of 30	September 20	119, with 95% li	ving in settleme	ents in 11 of Ug	anda's 128 dist	044), South Sudan (900) and tricts and in Kampala. The majority age group 18 - 59 years.
Uganda	Cholera	Ungraded	27-Jun-19	23-Jun-19	11-Sep-19	144	9	1	0.70%
A cumulative declining tren	total of 110 cases ha d. Another district, K	ve been reporte yegegwa, has re	d from Nakivale eported a cumul	refugee settler ative of 34 cas	nent, Insigiro di es from 11 July	strict since the to 11 Septemb	onset of the ou er 2019.	tbreak. The we	ekly number of cases is on a
Uganda	Measles	Ungraded	8-Aug-17	1-Jan-19	24-Sep-19	1 584	795	5	0.30%
Since the beg	inning of 2019, 1 584	1 cases have be	en reported acro	oss the country	, of which 529 a	are laboratory-c	confirmed, 204	are epi-linked, a	and 62 are clinically confirmed.
Zambia	Cholera	Ungraded	1-Sep-19	30-Aug-19	30-Aug-19	13	7	0	0.00%
on 16th Augu		being coordina	ted at provincia	I and district le	vels, with activa	tion of the dist	rict IMS. On 30t	th August 2019	nd bloody diarrhoea and vomiting), a cumulative number of 13 cases ar.
Zimbabwe	Diarrhoeal disease	Ungraded	13-Sep-19	2-Sep-19	13-Sep-19	294		0	0.00%
between 2 to analysed at the	12 September 2019 f	rom suburbs of f laboratory no	f Harare City, wi specified). Pot	th Dzivarasekw	a being the epic	entre. No patho	gen was identif	fied from eight	or deaths have been reported stool samples cultured and ain water source for the population

†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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