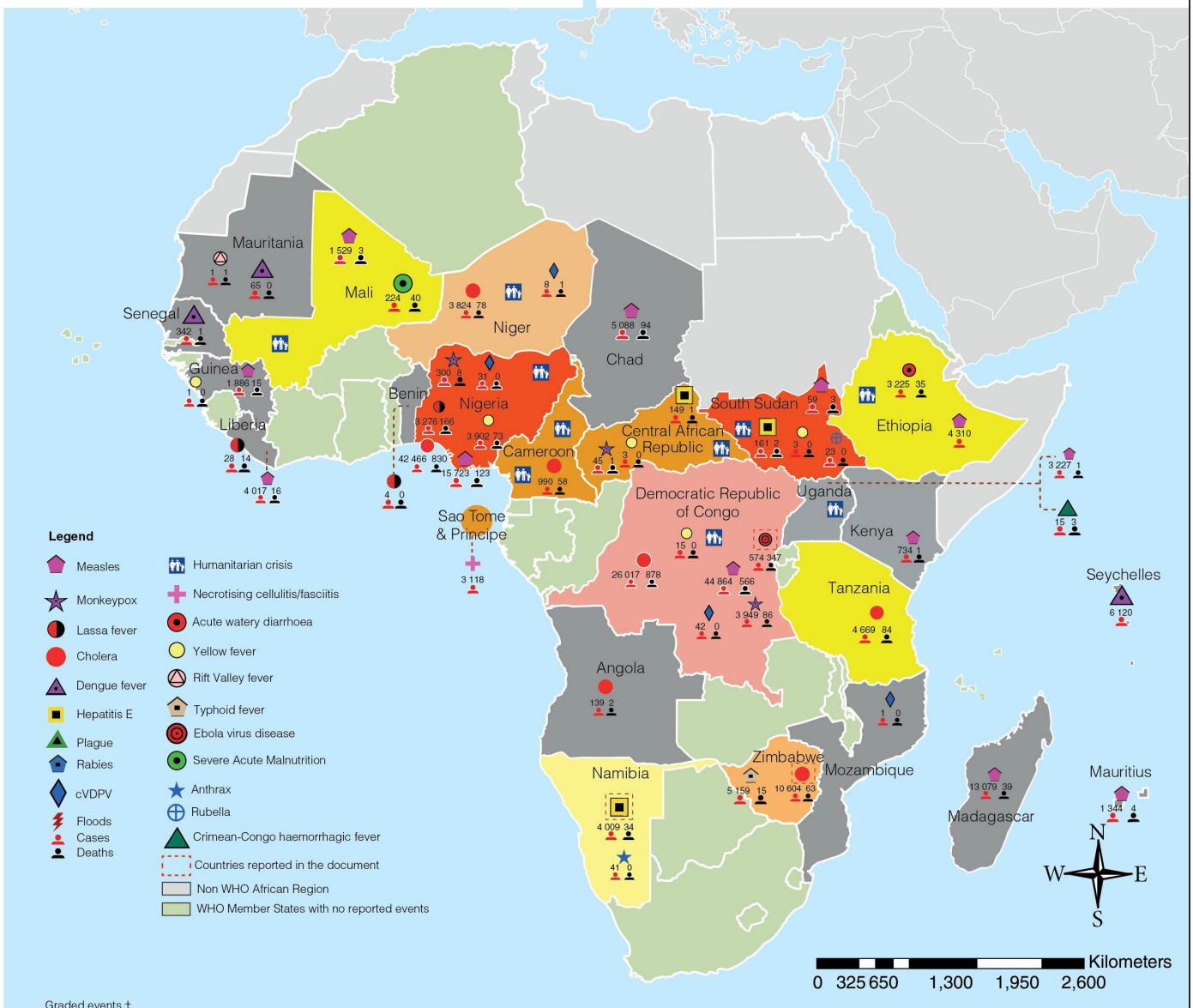
WEEKLY BULLETIN ON OUTBREAKS AND OTHER EMERGENCIES

Week 51: 15 – 21 December 2018
Data as reported by 17:00; 21 December 2018

World Health Organization
REGIONAL OFFICE FOR Africa
WHO Health Emergencies Programme

1	58	49	10
New event	Ongoing events	Outbreaks	Humanitarian crises



Graded events †

2 Grade 3 events	**7** Grade 2 events	**3** Grade 1 events	**38** Ungraded events
2 Protracted 3 events	**3** Protracted 2 events	**4** Protracted 1 events	

Health Emergency Information and Risk Assessment

Overview

Contents

- This Weekly Bulletin focuses on selected acute public health emergencies occurring in the WHO African Region. The WHO Health Emergencies Programme (WHE) is currently monitoring 59 events in the region. This week's edition covers key ongoing events, including:

  - Ebola virus disease outbreak in the Democratic Republic of the Congo
  - Hepatitis E in Namibia
  - Cholera in Zimbabwe.

- 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 events that have recently been closed.

- **Major issues and challenges include:**

  - The Ebola virus disease (EVD) outbreak in the Democratic Republic of the Congo (DRC) continues to evolve in an unforgiving context. Persisting conflict and inadequate engagement from communities continue to hamper response activities in some affected areas, and population mobility has resulted in the emergence of clusters in new areas and in reintroduction events in areas where the outbreak had previously been controlled. The continued decline in case incidence in Beni is a promising sign that proven control measures, alongside newer therapeutic tools, are working.

  - The cholera outbreak in Zimbabwe continues to improve, especially in Harare city where no cases have been reported since 11 December 2018. However, the recent outbreak which emerged in Mount Darwin District is ongoing and is characterized by a high case fatality ratio. It is therefore critical to strengthen strategic response measures in Mount Darwin District in order to ensure a prompt control of the outbreak.

Ongoing events

Ebola virus disease | **Democratic Republic of the Congo** | 574 **Cases** | 347 **Deaths** | 60% **CFR**

EVENT DESCRIPTION

The Ebola virus disease (EVD) outbreak in North Kivu and Ituri provinces, Democratic Republic of the Congo persists and continues to be closely monitored. Since our last report on 14 December 2018 *(Weekly Bulletin 50)*, 43 new confirmed EVD cases and 34 new deaths have been reported, a significant increase since the previous week. The total number of health workers affected remains at 53 (51 confirmed and two probable), with 18 deaths. On 22 December 2018, seven new confirmed cases were reported from Katwa (3), Kalunguta (2), Beni (1) and Musienene (1), five of which were known contacts. No death were reported among confirmed cases on 22 December 2018. A death in a confirmed case was reclassified from Komanda Health Zone to the newly affected health zone of Nyankunde.

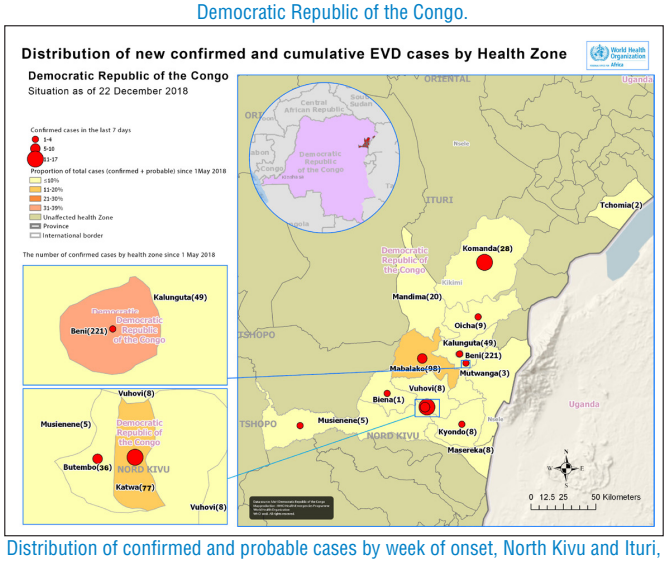
As of 22 December 2018, there have been a total of 574 EVD cases, including 526 confirmed and 48 probable cases. To date, confirmed cases have been reported from 16 health zones: Beni (212), Mabalako (82), Katwa (74), Kalunguta (37), Butembo (35), Masereka (7), Oicha (9), Vuhovi (8), Kyondo (6), Mutwanga (3), Musienene (4) and Biena (1) in North Kivu Province; and Komanda (29), Mandima (17), Tchomia (2) and Nyamkunde (1) in Ituri Province. Thirteen of the 16 affected health zones reported at least one new confirmed case in the previous 21 days (1 to 22 December 2018). A total of 347 deaths were recorded, including 299 among confirmed cases, resulting in a case fatality ratio among confirmed cases of 57% (299/529).

As of 22 December 2018, a total of 143 patients were hospitalized in ETCs and transit centres, of which 25 are confirmed cases. All confirmed cases are on compassionate therapy.

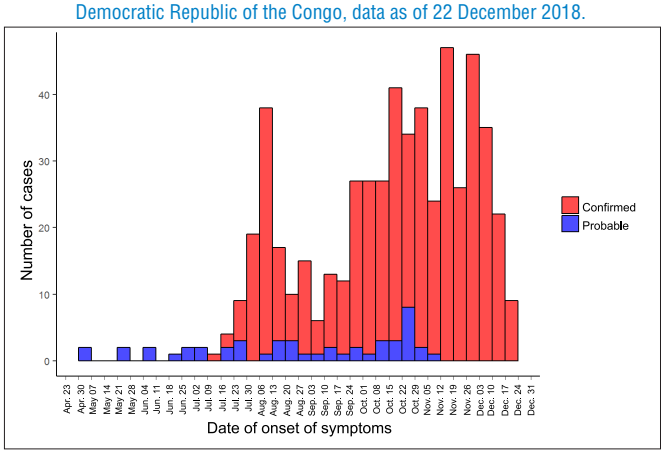
Katwa, Komanda, Beni, Butembo and Mabalako remain the main hot spots of the outbreak with, respectively, 25% (n=31), 20% (n=24), 15% (n=18), 12% (n=14) and 12% (n=14) of the 121 confirmed and probable cases reported in the previous 21 days (1 December - 22 December 2018).

Contact tracing is ongoing in 16 health zones; however, it remains a concern due to insecurity and continuing pockets of community reluctance. The number of contacts being followed as of 22 December 2018 was 8 422, of whom 7 405 (88%) had been seen in the previous 24 hours. The proportion of contacts seen varied between 77% (in Katwa) and 100%. An additional 600 contacts were registered on 22 December 2018.

Geographical distribution of confirmed and probable Ebola virus disease cases reported from 1 May to 22 December 2018, North Kivu and Ituri provinces, Democratic Republic of the Congo.



Distribution of confirmed and probable cases by week of onset, North Kivu and Ituri, Democratic Republic of the Congo, data as of 22 December 2018.



PUBLIC HEALTH ACTIONS

- All surveillance activities continue, including case investigations, active case finding in health facilities and in the communities, and identification and listing of contacts around the latest confirmed cases. There are continued efforts to strengthen surveillance in Komanda, with continuation of listing activities and contact follow-up in those health zones that reported the most recent confirmed cases.
- An Institut National de Recherche Biomédedicale team travelled to Komanda to identify the possibility of an installation of a laboratory at this site.
- As of 22 December 2018, a total of 222 807 travellers had been screened at Points of Entry/Points of Control (PoE/PoC) since the start of the outbreak.
- On 22 December 2018, a total of 733 new people was vaccinated in 14 rings, bringing the cumulative numbers vaccinated to 51 678. The current stock of vaccine in Beni is 11 070 doses. There is preparation for a vaccination ring in Kinshasa around a contact from Katwa Health Zone.
- There are continued community reintegration activities for patients discharged from ETCs, along with psychoeducation sessions to strengthen community engagement and collaboration in the response. Food kits have been distributed to contacts at Aloya.
- Infection prevention and control (IPC) and water, sanitation and hygiene (WASH) activities continue, with decontamination of households and health facilities; and distribution of personal protective equipment. Fifty-seven health agents and forty-two hygienists are being trained in basic IPC techniques in Komanda Health Zone.
- Training of community teams in safe and dignified burial techniques has been completed in Kyondo (Beni), Musienene, Alimbongo, Kipese, and Lubero Territory.
- Community awareness and mobilization sessions continue, with educational talks; continuing daily door-to-door outreach activities in households in affected areas with the involvement of community leaders and local media.

SITUATION INTERPRETATION

The EVD outbreak in Democratic Republic of the Congo continues to be of significant concern, with continuing insecurity and community reluctance. Particular challenges lie in investigating new confirmed cases without clear epidemiological links to other cases, strengthening contact monitoring in Beni and Komanda and intensifying community engagement in Katwa. Response activities need to be intensified in Nyakunde Health Zone, with the emergence of a new confirmed case in the area. In addition, the potential implication of the upcoming elections bringing large numbers of people together remains an issue. All response pillars require to be further strengthened in the field; and local and international authorities need to remain vigilant in the face of this ongoing outbreak.

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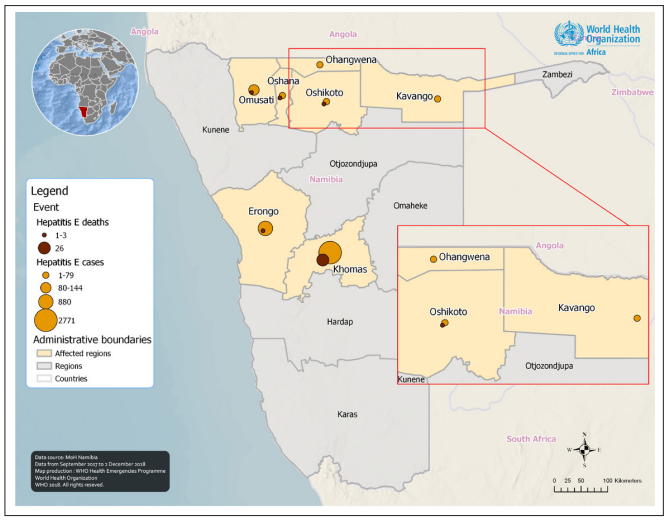
EVENT DESCRIPTION

The outbreak of hepatitis E virus (HEV) declared by the Ministry of Health and Social Services of Namibia on 14 December 2017, is ongoing. Since our last update in week 42 (week ending 21 October 2018) an additional 335 cases were reported and two new regions, namely Otjozo and Hardap, were affected. The declining trend in weekly incidence, observed since the peak of the outbreak in week 32, has been maintained but new cases continue to be reported weekly.

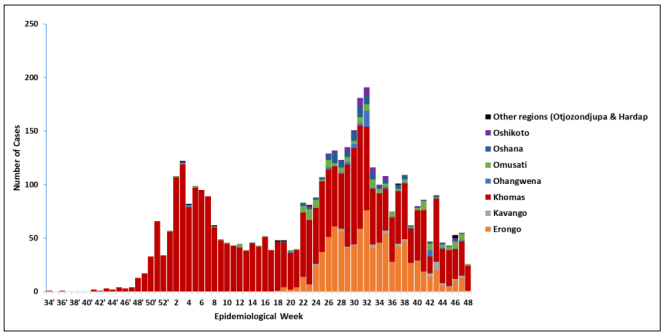
As of 2 December 2018 (week 48), a cumulative total of 4 009 cases of suspected HEV have been reported nationally since September 2017, of which 530 (13%) were laboratory-confirmed and 2 840 (71%) were epidemiologically-linked. Thirty-four deaths have been reported among HEV cases, leading to an overall case fatality ratio of 0.8%. Pregnant and post-partum women account for 5.7% (n=229) of all HEV cases (laboratory confirmed, epidemiologically-linked and suspected). Of the 34 deaths that have been reported, 16 (47%) were maternal deaths.

Cases were reported across nine regions, namely: Khomas, Erongo, Omusati, Oshana, Oshikoto, Ohangwen, Kavango, Otjozo and Hardap. Khomas and Erongo regions remain the main hotspots of the outbreak, with a total of 2 771 (69%) and 880 (22%) of cases, respectively. Most cases from less affected regions have a travel history to informal settlements in Windhoek (Khomas) or Swakopmund (Erongo), where access to safe water, sanitation and hygiene is limited.

Geographical distribution of hepatitis E cases and deaths in Namibia, 21 October - 14 December 2018



Number of reported hepatitis E cases by epidemiological week, Namibia, September 2017 – 2 December 2018 (n=4 009)



PUBLIC HEALTH ACTIONS

- An incident manager has been assigned by the National Health Emergency Management Committee (NHEMC) to lead and coordinate the outbreak response process, along with WHO and CDC technical support. Regional and district Health emergency committees have been activated in all the affected regions/districts.
- WHO and partners are providing support in several areas including coordination of response, surveillance, data analysis, report writing, risk communication and social mobilization. WHO has started training and supporting the deployment of multipurpose community volunteers who will conduct social mobilization, community surveillance, and WASH promotion in affected communities.
- Hepatitis E educational materials (including posters for patients, educational materials specifically for pregnant women and treatment algorithms for providers) were printed with the support of UNFPA and distributed to the affected regions. Community meetings are used as a platform to sensitize communities.
- Regular water testing by municipalities is being conducted in Khomas and Erongo (Swakopmund) informal settlements. Swakopmund municipality provided 11 water taps and 30 mobile toilets to the most affected informal settlement in Erongo region.
- Plans for a knowledge, attitudes and practices (KAP) survey in Windhoek are underway, which will be led by the Field Epidemiology and Laboratory Training Programme with assistance from US CDC.

SITUATION INTERPRETATION

Despite the ongoing public health response efforts implemented over the past year, the HEV outbreak in Namibia is still persisting. The outbreak has become protracted and has spread to other informal settlements and other regions in the country. The majority of cases have been reported from densely populated informal settlements where access to clean water, sanitation and hygiene is inadequate. High levels of stagnant and surface water during the ongoing rainy season increases the risk of further transmission of the disease. Ensuring access to safe water, sanitation, and hygiene therefore remains a key focus of the ongoing response efforts, besides the scale-up of hygiene and sanitation promotion campaigns. Furthermore, additional efforts should be made to ensure community understanding of disease transmission, to communicate the specific risk for pregnant women and post-partum mothers, and to encourage early health seeking behaviour for prompt case management.

EVENT DESCRIPTION

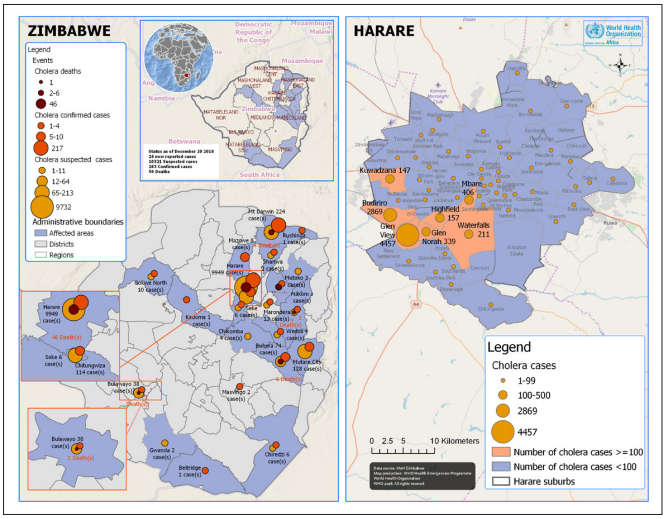
The cholera outbreak in Zimbabwe has continued to improve since its onset in week 36 (week ending 9 September 2018). The declining trend observed since the peak of the outbreak in week 38 continues to be maintained despite an upsurge in week 48 caused by the emergence of new cases in Mount Darwin District in Mashonaland Central province where the outbreak is ongoing. Harare city has not reported new cases since 11 December 2018. Since our last report on 30 November 2018 *(Weekly Bulletin 48)*, there have been 161 new cases of cholera with four deaths reported nationally.

As of 20 December 2018, a total of 10 604 suspected cholera cases, including 63 deaths (case fatality ratio 0.6%), have been reported in the country. Of these, 283 have been laboratory confirmed. Nine of the ten provinces in the country have been affected including 21 (out of 59) districts. The most affected age group is 20-29 years, accounting for 19% of cases, followed by 1-4 years (17%) and 30-39 years (15%). Men and women were equally affected, with men representing 50.3% of the total cases reported in this outbreak.

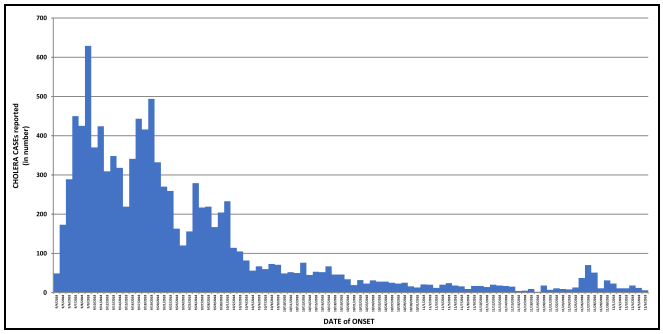
Two of the current hotspots in the outbreak include Mount Darwin and Murehwa District. In Mount Darwin District, 224 suspected cases with four deaths (case fatality ratio 1.8%) have been reported since the onset of the outbreak on 23 November 2018. No new cases were reported on 20 December 2018. In Murehwa District, 7 new cases were reported on 12 December 2018. As of 20 December 2018, a total of 14 suspected cases including three community deaths (case fatality ratio 21%) have been reported in this district.

Although Harare city was the initial outbreak hotspot, no new suspected cholera cases have been reported since 11 December 2018. As of 20 December 2018, a cumulative total of 9 949 cases with 46 deaths (case fatality ratio 0.5%) have been recorded. This accounts for 94% of all the cases and 73% of the deaths reported during this outbreak. Glen View and Budiriro suburbs of Harare city have been the most affected, accounting for 42% and 27% of all cases in the country, respectively.

Geographical distribution of cholera cases in Zimbabwe, 9 September - 20 December 2018



Number of reported cholera cases by date of onset, Zimbabwe, 4 September 2018 – 20 December 2018 (n=10 604)



PUBLIC HEALTH ACTIONS

- The national rapid response team has been deployed to Mount Darwin District to support response efforts after the outbreak investigation, including enhancing active surveillance, contact tracing, health education and water, sanitation and hygiene (WASH) measures. Emergency supplies were mobilized and provided to the district.
- The first phase of an oral cholera vaccination (OCV) campaign was completed in Harare city by October 2018, and an overall administrative coverage of 86% has been attained. The second OCV dose for the same suburbs needs to take place before April 2019.
- Social mobilization and public health education for cholera and typhoid conjugate vaccine (TCV) is underway.
- About 1 046 community health volunteers have been trained to conduct health and hygiene education. A total of 81 community health clubs have been set up to spearhead hygiene education.
- A total of 16 620 families have received kits, comprising of soap for handwashing, point-of-use water treatment and information, education and communication materials, through support from UNICEF, Higher life Foundation, Oxfam, WHH, Mercycorps, Christian Care, World Vision and ADRA.
- A total of 486 763 people was provided with safe water through water trucking by private companies, distribution of household water treatment chemicals by partners and borehole repairs in the affected areas.
- A series of interactive training sessions on cholera and typhoid fever case management (case definitions, signs and symptoms, related clinical algorithms) have been conducted for different participants in the health sector, facilitated by UNICEF.
- Cholera kits and other essential supplies have been provided to the Cholera Treatment Centres and Units in Mount Darwin District. The Russian Embassy donated 52 cholera kits.
- IDSR training-of-trainers with support from Africa CDC was conducted in Mazowe between 4 to 24 November 2018. A total of 200 healthcare workers from local authorities in major cities and towns participated.

SITUATION INTERPRETATION

The cholera outbreak in Zimbabwe has markedly improved since it began over three months ago due to coordinated interventions by the national authorities and partners. Several measures are being prioritized for long term prevention of water borne disease such as cholera and typhoid fever. It is important, however, not only to continue to strengthen early detection and treatment of cases but also to ensure increased access to clean water, sanitation and hygiene. Urgent and strategic response measures in Mount Darwin and Murehwa districts are of paramount importance to ensure a prompt control of the outbreak.

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Summary of major issues challenges, and proposed actions

Major issues and challenges

- The response to the Ebola virus disease (EVD) outbreak in the north-eastern part of the Democratic Republic of the Congo continues to face complex challenges. Insecurity, population mobility and community reluctance due to misinformation and rumours remain major concerns. One of the immediate challenges is the control of EVD transmission in emerging and re-emerging hotspots such as Butembo, Katwa, Komanda and Mabalako.
- While a lot of effort and resources have been invested in controlling the current cholera outbreak in Zimbawe, the persistence of risk factors for water-borne diseases in the country and the emergence of a new cluster of cases in Mount Darwin District could potentially lead to a new upsurge of cases in previously affected and unaffected areas. It is therefore important to rapidly contain the lingering cholera transmission and address key risk factors.

Proposed actions

- Together with the Ministry of Health (MoH) and partners, WHO is further scaling up its response to the developing situation of the EVD outbreak. WHO emphasizes particularly the need to continuously improve response strategies, judiciously deploy new tools and sustain international commitment to response efforts well into 2019.
- WHO will continue to support the national authorities and partners in Zimbabwe in order to intensify response to the cholera outbreak until it is brought completely under control. Furthermore, there is a critical need to mobilize resources for longer term measures such as improving the water and sanitation systems in Harare city and other vulnerable areas.

All events currently being monitored by WHO AFRO

Country	Event	Grade†	WHO notified	Start of reporting period	End of reporting period	Total cases	Confirmed cases	Deaths	CFR	Comments
New events										
Mozam-bique	Polio-myelitis (cVDPV2)	Ungraded	7-Dec-18	7-Dec-18	20-Dec-18	1	1	0	0.0%	A single vaccine-derived poliovirus type 2 (VDPV2) from an AFP case with onset of paralysis on 21 October 2018 was reported from Molumbo District, Zambezia province. The case is a six-year-old girl, with no history of vaccination. The isolated virus has been sequenced and the results indicated that it is cVDPV2 with 10 nucleotides change.
Ongoing events										
Angola	Cholera	Ungraded	20-Nov-18	9-Oct-18	12-Nov-18	139	-	2	1.4%	Two community deaths have been reported in this outbreak which began on 9 October 2018. The peak of the outbreak was on week 44 (week ending 4 November 2018) with 41 cases including one death reported. Since then, there has been a declining trend in the weekly number of cases. Papelao is the most affected area in Uige Province, reporting a total of 35 cases.
Benin	Lassa fever	Ungraded	7-Dec-18	7-Dec-18	20-Dec-18	4	3	0	0.0%	A case of Lassa fever was reported in Benin on 7 December 2018. The case (female, 22 years) is a Benin national, but resides in Taberou, Nigeria, near the border with Benin. She developed symptoms on 23 November 2018, and was first treated in Taberou (Nigeria) prior to being admitted to the CHUD Borgou-Alibori hospital (Parakou commune, Borgou department, Benin) on 29 November 2018. The case was confirmed by Benin's national VHF reference laboratory on 6 December 2018. As of 20 December 2018, three additional cases have been reported, two of which have been confirmed: the husband and 2-year-old son of the index case. The suspected case is also a child of the index case, who developed a fever but has tested negative for Lassa fever on two occassions. No deaths have been reported.

Cameroon (Far North, North, Adamawa & East)	Humanitarian crisis (Far North, North, Adamawa & East)	Protracted 2	31-Dec-13	27-Jun-17	23-Nov-18	-	-	-	-	The situation remains precarious with several regions of the country affected. In the Far North, the situation is marked by attacks linked to Boko Haram thus generating an influx of refugees from Nigeria including mass displacement of the local population. In other regions, similar trends are noted with a huge influx of refugees from the neighbouring Central African Republic. Humanitarian access also remains a challenge.
Cameroon (NW& SW)	Humanitarian crisis (NW & SW)	G2	1-Oct-16	27-Jun-18	7-Dec-18	-	-	-	-	The security situation in the North west and South West remain volatile. Clashes between secessionists and the army continue, triggering further displacement and disrupting the healthcare, education and livelihood systems, driving significant needs. This is impacting the health status of the population, and the possible occurrence of infectious disease outbreaks is a concern.
Cameroon	Cholera	G1	24-May-18	18-May-18	19-Dec-18	990	77	58	5.9%	The outbreak has affected 4 out of 10 regions in Cameroon, these include: North, Far North, Central and Littoral region. From 07 to 14 december 2018, no new suspected cases were reported at the country level. The Central and Littoral regions have not reported new cases since 27 August 2018 and 11 October 2018, respectively.
Central African Republic	Humanitarian crisis	Protracted 2	11-Dec-13	11-Dec-13	2-Dec-18	-	-	-	-	The security situation was calm but tense during the week (from 26 November to 2 December 2018). WHO and health sector partners continue to assist those affected who return to the ruins of the Catholic Church site and those who moved from Alindao to Datoko Village. There was a security tension in the Pk5 area of Bangui on 25 November 2018 between criminal groups and armed traders.

Central African Republic	Monkeypox	Ungraded	20-Mar-18	2-Mar-18	3-Dec-18	45	24	1	2.2%	Since 2 October 2018, three clusters of monkey-pox cases were reported from three health districts. Mbaiki district reported 9 cases, including 8 confirmed, from week 40 to week 46. Bangassou district reported 5 cases, including 3 confirmed, from week 46 to week 47. On week 48, two cases (both confirmed) were reported from Bossembele district. No deaths were reported. Most cases from each district are epidemiologically linked (same household). Previous clusters have occurred in three districts: Bangassou (weeks 9-11, nine cases including six confirmed), Bambari (weeks 13-16, 15 cases, including three confirmed) and Mbaïki (weeks 26-27, five cases, including two confirmed). One death had been reported among the previous confirmed cases.
Central African Republic	Hepatitis E	Ungraded	2-Oct-18	10-Sep-18	13-Dec-18	149	110	1	0.7%	As of 3 December 2018, a total of 149 cases were reported, including 110 confirmed and 39 probable. One death was reported among the cases.
Central African Republic	Yellow fever	Ungraded	20-Oct-18	12-Aug-18	26-Nov-18	3	3	0	0.0%	No new yellow fever case was detected between 18 October 2018 and 25 November 2018. Three cases were confirmed in 2018: one case from Bangui sampled in February 2018 but tested in October 2018, one case from Mboki sampled in August 2018 and one case from Bacaranga sampled in October 2018. Population immunity is high in the country. There were national mass vaccination campaigns with high coverage in 2009-2010 and the yellow fever vaccination is also provided to children through the routine immunization programme.
Chad	Measles	Ungraded	24-May-18	26-Apr-18	21-Dec-18	5 088	356	94	1.9%	As of 24 December 2018, the measles outbreak has been confirmed in 39 districts. The mean age of the affected population is nine and the investigation on 1 338 cases with information on vaccination shows that only 13% were vaccinated against measles. Currently vaccinations campaigns are ongoing and the outbreak is controlled in 29 districts.

Democratic Republic of the Congo	Humanitarian crisis	G3	20-Dec-16	17-Apr-17	20-Nov-18	-	-	-	-	The humanitarian crisis in the country remains volatile. Inter-communal conflicts and violence perpetrated by militias including the kidnapping of humanitarian staffs continue to contribute to mass population displacement and difficulty in access to humanitarian assistance in several localities in the east of the country. Since early October 2018, more than 308 000 displaced people have returned from Angola to the Kasai region and are in urgent need of humanitarian assistance. The response activities to Ebola outbreak are ongoing in North Kivu and Ituri, however disrupted by the insecurity in some areas. The ongoing cholera outbreak is affecting mainly Kassai Oriental, Sankuru, Lomami, Tanganyika, South Kivu and Haut Katanga.
Democratic Republic of the Congo	Cholera		16-Jan-15	1-Jan-18	11-Nov-18	26 017	-	878	3.4%	A total of 639 suspected cases of cholera including 18 deaths (CFR 2.8%) were reported during week 45 (ending on 11 November 2018). Ten out of 24 provinces have to date reported at least one case. The six most affected provinces (Kasai Oriental, Sankuru, Lomami, Tanganyika, Upper Katanga and South Kivu) reported 94% of cases and 89% of deaths during week 45.There is a decrease in the total number of cases reported in week 45 compared to the previous week.
Democratic Republic of the Congo	Ebola virus disease	G3	31-Jul-18	11-May-18	22-Dec-18	574	526	347	60%	Detailed update given above.
Democratic Republic of the Congo	Measles	Ungraded	10-Jan-17	1-Jan-18	11-Nov-18	44 864	842	566	1.3%	During week 45 (ending 11 November 2018), 2 551 suspected cases including 33 deaths (CFR 1.3%) were reported across the country. Nighty four percent (94%) of all cases were reported from nine provinces: Tshopo, Haut Katanga, Haut Lomami, Lualaba, South Kivu, Maniema, Ituri, Tanganyika and Kasai Oriental. Since week 23, there has been an increasing trend in the weekly number of cases.

Democratic Republic of Congo	Monkeypox	Ungraded	n/a	1-Jan-18	11-Nov-18	3 949	-	86	2.2%	During week 45 (ending 11 November 2018), 74 suspected cases with two deaths were reported across the country. Suspected cases have been detected in 14 provinces. Sankuru Province has had an exceptionally high number of suspected cases this year.
Democratic Republic of the Congo	Polio-myelitis (cVDPV2)	G2	15-Feb-18	n/a	21-Dec-18	42	42	0	0.0%	Two new genetically-linked circulating vaccine-derived poliovirus type 2 (cVDPV2) isolates were detected, from an acute flaccid paralysis (AFP) case (with onset of paralysis on 7 October 2018, in a 29-month old child), and a contact of a second AFP case (the case is an 11-year old child), from Haut-Katanga province (Mufunga-Sampwe district). The isolated viruses are a new emergence and unrelated to previously-detected cVDPV2s affecting the country.
Democratic Republic of Congo	Yellow fever	Ungraded	23-Jun-18	1-Jul-18	1-Dec-18	15	3	0	0.0%	Fifteen cases of yellow fever have been confirmed at the National Reference Laboratory (INRB) since the beginning of 2018. Of these, three cases were confirmed by IP Dakar from Yalifafu health zone in Tshuapa Province (2 cases) and Ango health zone in Bas Uele Province (1 case).
Ethiopia	Humanitarian crisis	G2	15-Nov-15	n/a	20-Dec-18	-	-	-	-	About 2.6 million IDPs and 905 000 refugees are in Ethiopia. Although conflict is the main cause of displacement, around 500 000 have been displaced due to climatic shocks and their impact on food production. Currently there are about 946 788 IDPs in the West Guji zone (Oromia region) and neighbouring Gedeo zone (SNNPR region). Renewed violence in Benishangul Gumuz has led to a surge in the internal displacement of about 121 528 displaced persons from 7 districts consisting of 21 643 households and number are expected to increase in both East and West Wollega zones of Oromia region. The protracted complex emergencies have overwhelmed the health system.
Ethiopia	Acute watery diarrhoea (AWD)	Protracted 1	15-Nov-15	1-Jan-18	20-Dec-18	3 225	-	35	1.1%	No new cases of AWD were reported at the Country level in the last four weeks. In total, 3 225 cases have been reported in 2018, from 4 regions of Afar: Oromia, Somali, Tigray and one city administration (Dire Dawa).

Ethiopia	Measles	Protracted 1	14-Jan-17	1-Jan-18	20-Dec-18	4 310	1 327	-	-	396 new suspected measles cases were reported in week 50. Of the 1 327 cumulative confirmed cases reported in 2018, 295 were lab-confirmed, 963 were epi-linked and 69 were clinically compatible. Majority of cases were reported from: Somali region (22%), Oromia(21%), Addis Ababa (20%), and Amhara (16%).
Guinea	Measles	Ungraded	9-May-18	1-Jan-18	23-Dec-18	1 886	476	15	0.8%	Cases have been reported in all parts of the country. Three localities are currently considered to be in active epidemic phase: Siguiri (since week 32), de Labé (week 43), Farmoriah (since week 47). As of 23 December, fifteen deaths have been reported amongst suspect cases.
Guinea	Yellow fever	Ungraded	10-Dec-18	10-Dec-18	21-Dec-18	1	1	0	0.0%	A case of yellow fever was confirmed by the Laboratory of the Institut Pasteur of Dakar on 10 December 2018. It is a 12-year-old female living in rurale de Cissela, village Bambafara. The onset of symptoms was on 15 October 2018, with sudden onset of fever, followed by vomiting and cough. The patient was treated in different health structures and seen by a traditional healer without success. On 20 October 2018, the patient was reffered to to CT-epi of Kankan regional hospital by the health center of Kelera, where the presumptive diagnosis of yellow fever was made and notification sent to ANSS by the DPS. The sample sent to the laboratory of Institut Pasteur Dakar was positive by seroneutralisation on 10 December 2018.
Kenya	Measles	Ungraded	19-Feb-18	19-Feb-18	17-Dec-18	734	66	1	0.1%	Since the beginning of the year, six counties were affected by the measles outbreak, namely Mandera, Wajir, Garissa, Nairobi, Kitui and Muranga. The outbreak is ongoing three counties: Wajir, Garissa and Kitui.

Liberia	Measles	Ungraded	24-Sep-17	1-Jan-18	2-Dec-18	4 017	3 637	16	0.4%	Thirty-one suspected cases (including two IgM-positive) with zero deaths were reported during week 48 (ending 2 December 2018) across the country. The cases were reported from seven counties: Sinoe (9), Grand Gedeh (5), Grand Bassa (4), Grand Kru (4), Montserrado (2), Margibi (2), River Gee (2), Bong (1), Lofa (1) and Rivercess (1). Of the 4 017 cumulative confirmed cases reported in 2018, 315 are laboratory-confirmed, 523 epidemiologically linked, and 2 799 are clinically confirmed.
Liberia	Lassa fever	Ungraded	14-Nov-17	1-Jan-18	9-Dec-18	28	21	14	50.0%	One new suspected Lassa fever case was reported from Grand Bassa in week 49 (ending 2 December 2018), but tested negative by RT-PCR. In 2018, a total of 191 suspected cases including 50 deaths have been reported. Of these, 21 cases have been confirmed by RT-PCR (Nimba-9, Bong-5, Montserrado-3, Margibi-2, and Grand Bassa-2); 155 tested negative, and 15 specimens were not tested due to poor quality (pending). The case fatality rate among confirmed cases is 66% (14 deaths in confirmed cases).
Madagascar	Measles	Ungraded	26-Oct-18	4-Oct-18	18-Dec-18	13 079	13 079	39	0.3%	As of 18 December 2018, a total 13 079 cases have been reported, of which 325 were laboratory-confirmed (IgM positive) and 12 754 were epidemiologically linked. A total of 55 districts in 20 regions have been reporting cases.
Mali	Humanitarian crisis	Protracted 1	n/a	n/a	20-Dec-18	-	-	-	-	Mali continues to suffer a complex political and security crisis since 2012. Northern and central Mali are facing an increasing number of incidents affecting the population. More than five million people are affected by the crisis and in need of humanitarian assistance at the national level, including 77 046 IDPs and 140 123 refugees in neighbouring countries such as Niger, Mauritania and Burkina Faso.n 77 000 from 14 000 households, mainly in Mopti, Gao, Menaka and Timbuktu.

Mali	Severe Acute Malnutrition	Ungraded	1-Aug-18	15-Mar-18	5-Aug-18	224	0	40	17.9%	Three villages (Douna, Niagassadiou and Tiguila) in the commune of Mondoro, Douentza district, Mopti Region, Central Mali are experiencing an epidemic of malnutrition following the inter-communal conflict that prevails in the locality. A dozen samples from patients analyzed at INRSP in Bamako showed iron deficiency anaemia.
Mali	Measles	Ungraded	20-Feb-18	1-Jan-18	4-Nov-18	1 529	374	3	0.2%	In week 44, 26 new suspected cases were reported from Bamako (9), Sikasso (8), Segou (5) and Mopti(1) regions. From Week 1 to 44 of 2018, a total of 1 064 blood samples that have been collected, 374 were confirmed (IgM-positive), 578 discarded (IgM-negative), and 112 are pending at the National Reference Laboratory (INRSP). Fourty five Health districts in the country have reported cases since the beginning of the outbreak.
Mauritania	Dengue fever	Ungraded	26-Oct-18	15-Sep-18	26-Oct-18	65	65	0	0.0%	WHO has been notified of 65 confirmed cases of dengue fever reported across six regions of the country since mid-september. Test results from the National Institute of Research and Public Health (INRSP) confirmed the cases for Dengue virus serotype II infection. Additional investigation is ongoing.
Mauritania	Rift Valley fever (RVF)	Ungraded	23-Nov-18	4-Nov-18	24-Nov-18	1	1	1	100.0%	On 16 November 2018, a 40-year-old male farmer form a village in Adel Bagrou commune, located 30 km away from the border with the Republic of Mali was confirmed by PCR with rift valley fever at INRSP. The case died after 11 days of symptom presentation following poor response to treatment. A safe and dignified burial was conducted and a total of 22 contacts including 12 health care workers have been listed for follow up.
Mauritius	Measles	Ungraded	23-May-18	19-Mar-18	9-Dec-18	1 344	1 344	4	0.3%	During week 49 (ending 9 December 2018), 20 new confirmed cases were reported across the country. As of 9 December 2018, a total of 1 344 laboratory confirmed cases were reported. Of 17 throat swab analyzed, the genotype D8 was detected in 13 samples. The trend is decreasing since the peak in week 37. The most affected districts are Port Louis and Black River.

Namibia	Anthrax (suspected)	Ungraded	2-Nov-18	30-Oct-18	2-Nov-18	41	-	0	0.0%	Fourty-one suspected human cases of anthrax including 6 cases of cutaneous anthrax and 35 cases of gastrointestinal anthrax have been reported from Sesfontein settlement, Opuwo district, Kunene region in north-western Namibia. Laboratory confirmation is pending.
Namibia	Hepatitis E	G1	18-Dec-17	8-Sep-17	2-Dec-18	4 009	530	34	0.8%	Detailed update given above.
Niger	Humanitarian crisis	G2	1-Feb-15	1-Feb-15	3-Oct-18	-	-	-	-	The country continues to face food insecurity, malnutrition, and health crises due to drought, floods, and epidemics. The insecurity instigated by the Boko Haram group persists in the country.
Niger	Cholera	G2	13-Jul-18	13-Jul-18	9-Dec-18	3 824	43	78	2.0%	No new suspected case of cholera has been reported since 19 November 2018. A total of 145 202 persons (males: 66 601 and female: 78 601) were vaccinated (Vaccination Coverage: 95.3 %) during the first round of the OCV campaign from 3 to 7 December 2018 in Aguie District.
Niger	Circulating vaccine-derived polio virus type 2 (cVDPV2)	G2	8-Jul-18	8-Jul-18	19-Dec-18	8	8	1	12.5%	A total of eight cVDPV2 cases have been reported in 2018 in Niger, which are genetically linked to a cVDPV2 case in Jigawa and Katsina states, Nigeria.
Nigeria	Humanitarian crisis	Protracted 3	10-Oct-16	n/a	18-Nov-18	-	-	-	-	Since the start of the conflict in 2009, more than 27 000 people have been killed in Borno, Adamawa, and Yobe states while thousands of girls and women abducted and children used as so-called "suicide" bombers. About 1.8 million people are internally displaced in these states, and 7.7 million people are in need of humanitarian assistance. More than 130 000 people have been displaced since October 2017.
Nigeria	Cholera	G1	7-Jun-17	1-Jan-18	28-Oct-18	42 466	47	830	2.0%	In week 43 (ending 28 October 2018), 173 new suspected cases with one death were reported from five states: Adamawa (92 cases with one death), Zamfara (37 cases), Borno (35 cases), Yobe (6 cases), and Katsina (4 cases). There is an overall downward trend in the number of cases across the country.

Nigeria	Lassa fever	Ungraded	24-Mar-15	1-Jan-18	9-Dec-18	3 276	588	166	5.1%	In week 49 (week ending 9 December 2018), seven new confirmed cases were reported from Edo (1 case), Ondo (2 cases), Bauchi (1 case), Plateau (1 case) and Kaduna (2 cases) states. Two new deaths were reported in Kaduna (1) and Ondo (1) states. No new cases were identified amongst healthcare workers. From 1 January 2018, a total of 3 276 suspected cases, 149 deaths in confirmed cases and 17 deaths in probable cases have been reported from 23 states. Of the suspected cases, 588 were confirmed positive, 17 probables and 2 672 negative (not a case). Twenty-three states have recorded at least one confirmed case in 2018. Five states are currently considered to be in active outbreak phase: Edo, Ondo, Plateau, Gombe and Kano.
Nigeria	Measles	Ungraded	25-Sep-17	1-Jan-18	11-Nov-18	15 723	1 110	123	0.8%	In week 45 (ending 11 November 2018), 205 suspected cases of measles were reported from 28 states across the country. Since the beginning of the year, 4 604 fewer cases were reported compared with the same period in 2017.
Nigeria	Monkeypox	Ungraded	26-Sep-17	24-Sep-17	13-Nov-18	300	126	8	2.7%	Nigeria continues to report sporadic cases of monkeypox since the beginning of the outbreak in September 2017. As of 13 November 2018, a total of 104 cases have been reported since the beginning of the year from 19 States (Rivers, Akwa-Ibom, Bayelsa, Cross River, Delta, Ebonyi, Edo, Enugu, Imo, Kebbi, Lagos, Nasarawa, Oyo, Abia, Anambra, Bauchi, Plateau, Adamawa and the FCT). Rivers state and Bayelsa state in South-south Nigeria remain the most affected states. The number of reported cases has been decreasing gradually in the last 4 epi weeks.
Nigeria	Polio-myelitis (cVDPV2)	Ungraded	1-Jun-18	1-Jan-18	19-Dec-18	31	31	0	0.0%	No new cases of circulating vaccine-derived poliovirus type 2 (cVDPV2) cases were reported this week. The country continues to be affected by two separate cVDPV2 outbreaks, the first centered in Jigawa state with subsequent spread to other states as well as to neighbouring Republic of Niger, and the second in Sokoto state.

Nigeria	Yellow fever	Ungraded	14-Sep-17	7-Sep-17	16-Dec-18	3 902	78	73	1.9%	Between September 2018 (Epi-Week 42) and December 2018 (Epi-Week 50), a total of 103 cases have been reported from 14 LGAs. Confirmed cases have been recorded from 14 states (Kwara, Kogi, Kano, Zamfara, Kebbi, Nasarawa, Niger, Katsina, Edo, Ekiti, Rivers, Anambra, FCT, and Benue States).
Senegal	Dengue fever	Ungraded	21-Sep-18	19-Sep-18	16-Dec-18	342	342	1	0.3%	In week 51 (ending on 16 december 2018), 4 new cases were confirmed with no severe cases or deaths. As of 16 December 2018, a total of 2 981 suspected cases including 342 confirmed cases have been reported from eight out of 14 regions across the country; Diourbel (205 cases), Fatick (37 cases), Saint-Louis (45 cases), Dakar (33 Cases), Thies (10 case), Louga (8 case), Matam (2) and Kaolack (2). A total of three dengue haemorrhagic fever cases were reported, one from Diourbel and two from Dakar.
São Tomé and Príncipé	Necrotising cellulitis/ fasciitis	Protracted 2	10-Jan-17	25-Sep-16	20-Dec-18	3 118	-	0	0.0%	During week 50 (ending on 20 December 2018), 8 new cases were notified from 3 districts Agua Grande (6) and Me-zochi (2). The national attack rate as of week 50 is 15.8 per 1000.
Seychelles	Dengue fever	Ungraded	20-Jul-17	18-Dec-15	21-Oct-18	6 120	1 511	-	-	Increasing trends were observed for the past four weeks. There was general decreasing trend between week 23 and week 35. Analyses on serotypes from week 35 showed circulation of DENV1, DENV2 and DENV3.
South Sudan	Humanitarian crisis	Protracted 3	15-Aug-16	n/a	2-Dec-18	-	-	-	-	The complex emergency has continued for five years, with multiple episodes of armed conflict, population displacement, disease outbreaks, malnutrition and flooding. Despite recent regional efforts and commitment by the government and opposition groups toward lasting peace, the humanitarian situation remains dire, and the needs are huge. On 29 November 2018, partners were able to access and assess the humanitarian situation in Rimenze and James Diko. Critical needs in water, sanitation and hygiene (WASH), health and food were noted.

South Sudan	Hepatitis E	Ungraded	-	3-Jan-18	9-Dec-18	161	19	2	1.2%	No new suspected case was reported in week 49 (week ending 09 December 2018). Of the cumulative cases reported in 2018, 147 are from Bentiu PoC and 13 from Old Fangak. In week 43, one new suspected death was reported from Old Fangak.
South Sudan	Measles	Ungraded	24-Nov-18	24-Nov-18	9-Dec-18	59	9	3	5.1%	Fifty nine cases of suspected measles were reported from Mabor Duang and Payam villages (Rumbek East) since 20 October 2018.A total of 9 samples tested measles IgM positive on 22 November 2018. Seventy one percent of all cases are children under five years old.
South sudan	Rubella	Ungraded	27-Oct-18	27-Oct-18	9-Dec-18	23	15	0	0.0%	Since 27 Oct 2018; a total of 23 suspected measles/ rubella cases (no deaths) have been reported in Malakal PoC . The majority of them (56.2%) are female with most cases (30.4%) with age between 5 to 9 years old. There are no cases reported in females of 10 to 14 years old and above 15 years old. Among the tested samples, a total of 15 samples tested measles IgM negative, but rubella IgM positive
South Sudan	Yellow fever	Ungraded	29-Nov-18	18-Nov-18	19-Dec-18	3	1	0	0.0%	As of 19 December 2018; only one confirmed yellow fever case and two presumptively yellow fever positive cases have been reported from Sakure payam, Nzara county, Gbudue state. Sakure payam is located at the border with Democratic Republic of Congo (DRC)
Tanzania	Cholera	Protracted 1	20-Aug-15	1-Jan-18	16-Dec-18	4 669	50	84	1.8%	During week 49 (ending 9 December 2018), 45 new cases with no deaths were reported from Momba district in Songwe region. The total number of cholera cases in the United Republic of Tanzania since 2015 is 33 214 cases including 550 deaths
Uganda	Humanitarian crisis - refugee	Ungraded	20-Jul-17	n/a	5-Dec-18	-	-	-	-	After the countrywide refugee-verification process was completed on 24 October 2018, 1 091 024 refugees and asylum-seekers were registered, representing 75% of the previously estimated target population of 1.4 million. South Sudanese refugees and asylum seekers make up the largest group seeking refuge in Uganda (770 667 people), followed by those originating from DR Congo (242 608 people). The influx of refugees have strained Uganda's public services, creating tensions between refugees and host communities.

Uganda	Crime-an-Congo haemor-rhagic fever (CCHF)	Ungraded	24-May-18	-	23-Oct-18	15	11	3	20.0%	Since May 2018, a total of 15 cases of Crimean-Congo haemorrhagic fever have been reported in Uganda. Eleven cases have been con-firmed. Three deaths have been recorded. The cases have been reported in the following districts: Kakumiro (5), Isingiro (3), Sembabule (1), Nakaseke (2), Kiryan-dongo (2), Kabalore (1) and Ibanda (1).
Uganda	Measles	Ungraded	8-Aug-17	1-Jan-17	20-Nov-18	3 227	843	1	0.0%	The majority of confirmed cases were under five years old (61.4%), not vaccinated (67%) or residents of rural areas (99%). In total, 116 confirmed cases (13.8%) were below 9 months of age which is the minimum age restriction for the vaccine. Cases have been confirmed either by epidemiological link or laboratory testing (IgM-positive) since the beginning of the year. Fifty-three districts in the country have reported mea-sles outbreaks.
Zimbabwe	Cholera	G2	6-Sep-18	6-Sep-18	20-Dec-18	10 604	283	63	0.6%	Detailed update given above.
Zimbabwe	Typhoid fever	Ungraded	-	1-Oct-17	11-Dec-18	5 159	262	15	0.3%	There has been a resurgence of typhoid fever in Harare, the capital city of Zimba-bwe, since mid-September 2018. The increase started in week 37 (week ending 16 September 2018) when 61 suspected typhoid fever cases were reported, compared to 10 cases (which lies within normal range) in week 36. The weekly incidence eventually peaked in week 41 (week ending 14 October 2018), with 130 cases and has since been declining gradual-ly. There were 34 suspected cases reported in week 49 (week ending 9 December 2018).
recently closed events										
Ethiopia	Yellow fever	Ungraded	4-Oct-18	21-Aug-18	25-Nov-18	35	5	10	28.6%	No new cases of yellow fever have been reported since week 42 (week ending on 21 October 2018). From 21 Au-gust, 35 cases were reported from Wolayita Zone in South Nation, Nationalities and Peoples (SNNP) region lo-cated in southwest Ethiopia. Five out of 21 samples sent to IP Dakar were confirmed for yellow fever using plaque reduction neutralization test (PRNT).

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

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