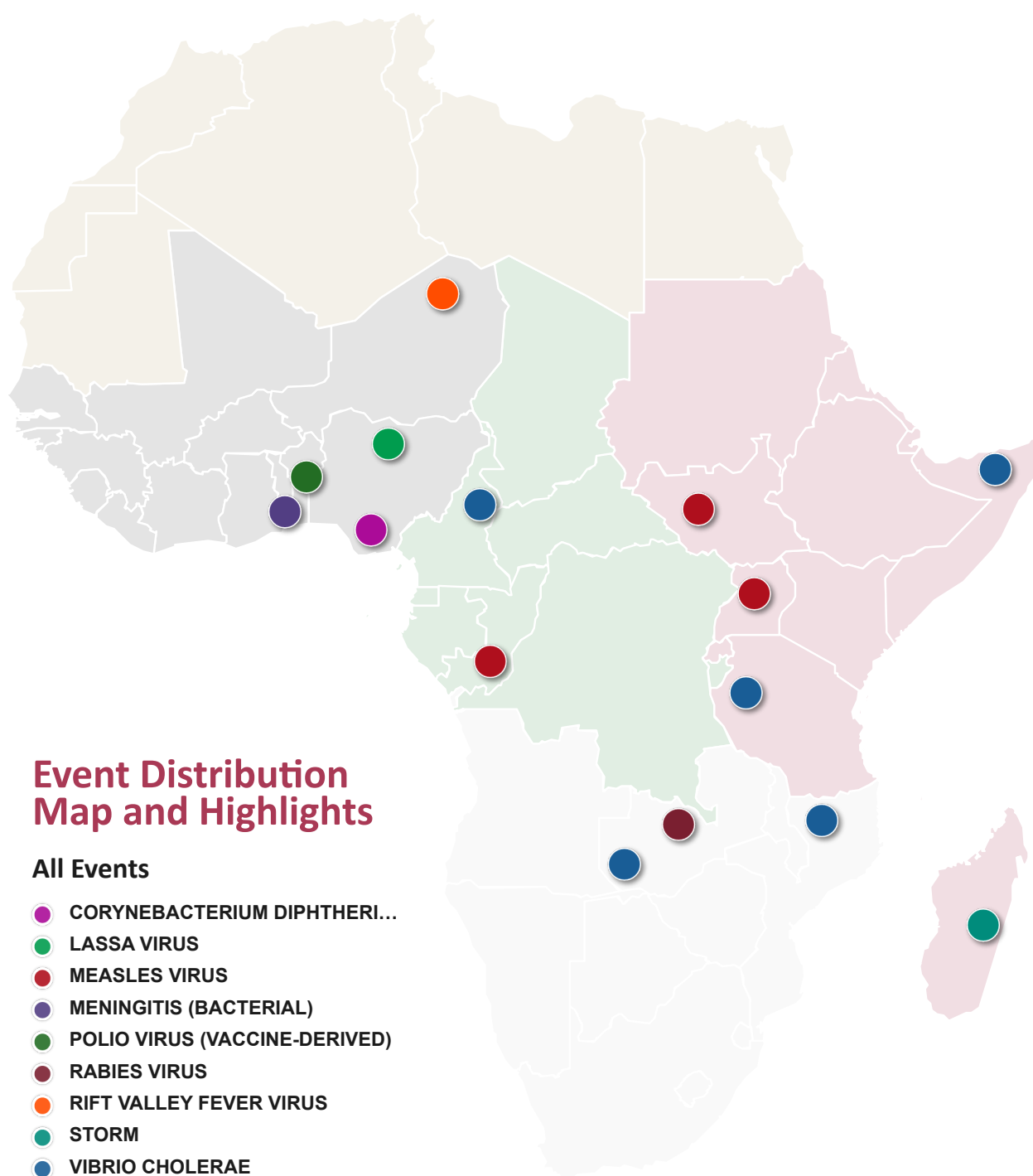


# Africa CDC Weekly Event Based Surveillance Report

18-Mar-2023



## Moderate Risk Events

### Rift Valley fever in Niger

**1** confirmed case(s)

**1** death(s) (**CFR: 100.0%**)

<b>Rift Valley Fever virus</b>	Agent/Pathogen	<b>16-Mar-2023</b>	First Reported by Africa CDC	<b>Initial Report</b>	Previous Africa CDC Report:
<b>02-Feb-2023</b>	First Occurred	<b>Niger</b>	Country	<b>Zinder region</b>	Location
<b>WHO</b>	Source	<b>LOW</b>	GeoScope	<b>MODERATE</b>	Risk Assessment

#### Description:

On 28 February 2023, the Niger Ministry of Health (MoH) reported one confirmed death (case fatality rate [CFR]: 100%) of Rift Valley fever (RVF) in Zinder region. The case was a 38-year-old male who presented at the Zangon Natsira health facility on 23 February 2023, with fever, vomiting and convulsion, and died the same day. A blood sample collected and tested at the Center for Medical and Health Research in Niamey tested positive for RVF by polymerase chain reaction (PCR).

RVF is a zoonotic disease that causes acute viral hemorrhagic fever with a CFR of 1%. The RVF virus can be transmitted to humans through contact with blood, body fluids, or tissues of infected animals, mainly livestock such as cattle, sheep, goats, buffalo, and camels. It can also be transmitted through bites from infected mosquitoes and rarely, from other biting insects. There is currently no treatment available for humans, but outbreaks of RVF can be prevented by vaccinating at-risk human and animal populations. The last reported case of RVF in humans in Niger was in 2016 with 399 suspected cases and 33 deaths (CFR: 8.3%).

#### Response:

The MoH with support from partners is conducting active case search and risk communication in the affected region.

# Bacterial Meningitis in Togo

**10** confirmed case(s)

**72** suspected case(s)

**7** death(s) (**CFR: 8.5%**)

<b>Meningitis (Bacterial)</b>	Agent/Pathogen	<b>14-Mar-2023</b>	First Reported by Africa CDC	<b>Initial Report</b>	Previous Africa CDC Report:
<b>12-Feb-2023</b>	First Occurred	<b>Togo</b>	Country	<b>Savana region</b>	Location
<b>WHO</b>	Source	<b>LOW</b>	GeoScope	<b>MODERATE</b>	Risk Assessment

## Description:

On 23 February 2023, the Togo MoH reported an outbreak of bacterial meningitis in Savana region. A total of 82 cases (10 confirmed; 72 suspected) and seven deaths (CFR: 8.5%) have been reported from Oti South district, Savana region. *Streptococcus pneumoniae* was confirmed as the cause of this outbreak. The testing laboratory and the confirmatory test was not specified. More than 80% of the cases were aged 10 years and above.

Meningitis is an infection that causes inflammation of the meninges (the thin lining that surrounds the brain and the spinal cord). Meningitis can present in bacterial, viral, fungal, parasitic, amoebic or non-infectious forms. Transmission is through droplets of respiratory secretions from infected persons. The most common symptoms include fever, headache and stiffness of the neck. Vaccines are available to prevent meningitis and are on the routine immunisation schedule in most Member States. The last outbreak of bacterial meningitis in Togo was reported in 2019 from the Savana region with 213 cases and no deaths.

## Response:

The MoH has strengthened community and health facility surveillance to detect and manage cases promptly. In addition, the MoH is carrying out risk communication in the affected and other neighboring districts to break the transmission chain.

## High Risk Events

### COVID-19 in Africa

**12,270,683** confirmed case(s)  
**256,948** death(s) (**CFR: 2.1%**)

<b>SARS-CoV-2</b>	Agent/Pathogen	<b>21-Feb-2020</b>	First Reported by Africa CDC	<b>10-Mar-2023</b>	Previous Africa CDC Report:
<b>14-Feb-2020</b>	First Occurred	<b>Africa Combo</b>	Country	<b>All 55 MS</b>	Location
<b>Ministry of Health</b>	Source	<b>VERY HIGH</b>	GeoScope	<b>HIGH</b>	Risk Assessment

#### Update to event:

As of 6 p.m. East African Time (EAT) 16 March 2023, a total of 12,270,683 COVID-19 cases and 256,948 deaths (case fatality ratio [CFR]: 2.1%) were reported by the 55 African Union (AU) Member States (MS). This represents 2% of all cases and 4% of all deaths reported globally. Forty-three (78%) AU MS are reporting case fatality rates (CFR) higher than the global CFR. Fifty-three MS have reported COVID-19 cases infected with the Alpha (50 MS), Beta (45), Delta (52), Gamma (3) and Omicron (51) variants of concern (VOC). Additionally, 32 MS have detected the Omicron BA.2 sub-variant, two MS reported the Omicron sublineage (XBB.1.5) and 11 Member States are now reporting the Omicron sublineage (BF.7 or BA.5.2.1.7).

Fifty-four (98%) MS are currently providing COVID-19 vaccination to the general population. Cumulatively, 978.5 million doses have been administered on the continent. Of these doses administered, 480.1 million people have been partially vaccinated, 415.4 million have been fully vaccinated, and 82.9 million have received a booster dose. Eritrea is the only AU MS yet to start COVID-19 vaccination roll out.

For Epi week 9 (6 - 12 March 2023), 1,637 new COVID-19 cases were reported, which is a 74% decrease in the number of new cases reported compared to the previous week (9). The Eastern region accounted for 46% of the new COVID-19 cases reported this week, followed by the Northern (18%), Southern (17%), Central (17%) and Western (2%) regions. Seychelles (399) had the highest number of new daily COVID-19 cases per million population among all MS.

Last week, 6 new COVID-19 deaths were reported in Africa, which is a 97% decrease in new deaths reported compared to the previous week (213 deaths). The Northern accounted for 67% of the new COVID-19 deaths reported this week followed by the Central (33%) region. This week, no deaths were reported in the Eastern, Southern, and Western regions.

More than 25 thousand tests were conducted during the past week, reflecting a 73% decrease in the number of tests compared to the previous week. The weekly % test positivity remains the same as the previous week (7%). Since February 2020, over 128.5 million COVID-19 tests have been conducted in Africa.

#### Response:

The emergency operations center (EOC) of the Africa Centres for Disease Control and Prevention (Africa CDC) has been activated for COVID-19 since 27 January 2020. For more information on Africa CDC's response efforts please refer to Africa CDC's website, [Hotspot dashboard](#), [PGI Dashboard](#), and [Vaccination Dashboard](#).

## Cholera in Africa

**47,778** confirmed case(s)  
**6,592** suspected case(s)  
**1,295** death(s) (**CFR: 2.4%**)

<b>Vibrio cholerae</b>	Agent/Pathogen	<b>06-Jan-2023</b>	First Reported by Africa CDC	<b>10-Mar-2023</b>	Previous Africa CDC Report:
<b>01-Jan-2023</b>	First Occurred	<b>Africa Combo</b>	Country	<b>14 MS</b>	Location
<b>Ministry of Health</b>	Source	<b>MODERATE</b>	GeoScope	<b>HIGH</b>	Risk Assessment

### Update to event:

Since the beginning of this year, 54,370 cases (47,778 confirmed; 6,592 suspected) and 1,295 deaths (CFR: 2.4%) of cholera were reported from 14 AU MS: Burundi (118 cases; 1 death), Cameroon (162; 4), DRC (1,218; 5), Ethiopia (245; 11), Kenya (3,085; 39), Malawi (37,839; 1,150), Mozambique (8,877; 54), Nigeria (429; 17), Somalia (1,845; 4), South Africa (6; 1), South Sudan (179; 1), Tanzania (72; 3), Zambia (228; 5) and Zimbabwe (67; 0). This week, 3,577 new cases and 50 new deaths of cholera were reported from seven AU MS: Cameroon, Malawi, Mozambique, Somalia, Tanzania, Zambia and Zimbabwe.

**Cameroon:** Since the last report (24 February 2023), the MoH reported 23 new confirmed cases and one new death (CFR: 4.3%) of cholera. This is a 44% decrease in the number of new cases compared to the last report. Cumulatively, 162 cases (36 confirmed; 126 suspected) and four deaths (CFR:11.1%) were reported from eight regions.

**Malawi:** Since the last report (10 March 2023), the MoH reported 1,758 new confirmed cases and 38 new deaths (CFR: 2.1%) of cholera from 25 districts. This is a 20% decrease in the number of new confirmed cases and a 14% increase in the number of new deaths compared to the last report. Cumulatively, 37,839 confirmed cases and 1,150 deaths (CFR: 3%) have been reported this year. Thirty percent of cases are in the age group of 20-39 years. Majority (58%) of the cases are males.

**Mozambique:** Since the last report (10 March 2023), the MoH reported 1,157 new confirmed cases and eight new deaths (CFR: 0.8%) of cholera. This is a 5% decrease in the number of new cases compared to the last report. Cumulatively, 8,877 confirmed cases and 54 deaths (CFR: 0.6%) have been reported from 33 districts.

**Somalia:** Since the last report (24 February 2023), the MoH reported 196 new suspected cases and no new deaths of cholera. This is a 10% decrease in the number of new cases reported compared to the last report. Cumulatively, 1,307 cases (4 confirmed; 1,303 suspected) and one death (CFR: 0.1%) were reported from 26 drought affected regions in the country. The main driver of this outbreak is lack of access to safe water in the drought affected districts. Majority (60%) of the cases are children under five years of age.

**Tanzania:** Since the last report (10 March 2023), the MoH reported 29 suspected cases and no new deaths of cholera. This is a 26% increase in the number of new cases compared to the previous report. Cumulatively, 72 cases (10 confirmed; 62 suspected) and three deaths (CFR: 4.1%) have been reported from Katavi (34 cases; 0 deaths), Kigoma (7; 0), Rukwa (18; 0) and Ruvuma (13; 3) regions. Fifty-eight percent of the cases are males and 36% are children under two years. The outbreak is linked to lack of access to clean drinking water in the affected regions.

**Zambia:** Since the last report (10 March 2023), the Zambia National Public Health Institute (ZNPPI) reported seven new suspected cases and no new deaths of cholera. This is an 84% decrease in the number of new cases compared to the last report. Cumulatively, 228 cases (76 confirmed; 152 suspected) and five deaths (CFR: 2.2%) have been reported from six districts.

**Zimbabwe:** Since the last report (24 February 2023), the MoH reported 65 new cases (3 confirmed; 62 suspected) and no new deaths of cholera. This is a 3,150% increase in the number of new cases compared to the last report. Cumulatively, 67 cases (5 confirmed; 62 suspected) and no deaths have been reported.

### Response:

**Cameroon:** The MoH continues to strengthen surveillance activities in high-risk regions.

**Malawi:** The MoH with support from partners continues to strengthen response efforts across the country.

**Mozambique:** The MoH is conducting oral cholera vaccination in eight high burden districts.

**Somalia:** The MoH continues to conduct enhanced surveillance and case management at the 11 designated cholera treatment centers.

**Tanzania:** The MoH and the regional health management teams deployed rapid response teams (RRTs) to conduct outbreak investigations. In addition, the RRTs continue to implement water sanitation and hygiene interventions in the affected communities.

**Zambia:** The ZNPHI continues to coordinate all response activities.

**Zimbabwe:** The MoH continues to enhance surveillance, coordination and risk communication activities. In addition, MoH prepositioned commodities to hot spot districts.

### **Africa CDC response**

The Africa CDC rapid response team is on ground providing technical support in surveillance, risk communication and community engagement. In addition, Africa CDC is supporting the government of Malawi to integrate COVID-19 vaccination campaigns and cholera interventions in the country.

## Measles in Africa

**1,176** confirmed case(s)  
**7,714** suspected case(s)  
**57** death(s) (**CFR: 0.6%**)

<b>Measles virus</b>	Agent/Pathogen	<b>06-Jan-2023</b>	First Reported by Africa CDC	<b>10-Mar-2023</b>	Previous Africa CDC Report:
<b>01-Jan-2023</b>	First Occurred	<b>Africa Combo</b>	Country	<b>11 MS</b>	Location
<b>Ministry of Health</b>	Source	<b>MODERATE</b>	GeoScope	<b>HIGH</b>	Risk Assessment

### Update to event:

Since the beginning of this year, 8,890 cases (1,176 confirmed; 7,714 suspected) and 57 deaths (CFR: 0.6%) of measles were reported from 11 AU MS: Cameroon (445 cases; 3 deaths), CAR (461; 0), Chad (1,303; 2), Congo (7; 0), DRC (3,379; 42), Ethiopia (907; 0), Kenya (9; 1), Libya (282; 0), Mauritania (128; 0), Senegal (53; 0), South Africa (362; 0), South Sudan (1,296; 8) and Uganda (258; 1). This week, a total of 1,576 cases and four new deaths were reported from 5 MS: Cameroon, Congo, Mauritania, South Sudan and Uganda.

**Cameroon:** Since the last report (20 January 2023), the MoH reported 371 new suspected cases and three new deaths (CFR: 0.8%) of measles. This is a 401% increase in the number of new cases compared to the last report (This increase could be a result of batch resporting). Cumulatively, 445 (74 confirmed; 371 suspected) and three deaths (CFR: 0.6%) of measles were reported from all ten regions.

**Congo:** On 12 February 2023, the MoH reported seven suspected cases and no deaths of measles from six districts. This is a protracted outbreak that started in March 2022.

**Mauritania (Initial report):** On 9 March 2023, the MoH reported an outbreak of measles in nine regions. Cumulatively, 128 confirmed cases and no deaths have been reported. The cases were confirmed by enzyme-linked immunosorbent assay (ELISA) in the National Public Health laboratory. The outbreak started in January in Ambra refugee camp close to the borders with Mali. The last measles outbreak reported from Mauritania was in 2010 during which 863 cases and nine deaths were reported from multiple locations.

**South Sudan:** Since the last report (10 February 2023), the MoH reported 956 new cases (2 confirmed; 954 suspected) and no new deaths of measles. This is a 224% increase in the number of new cases compared to the last report. Cumulatively, 1,296 cases (67 confirmed; 1,227 suspected) and eight deaths (CFR: 0.6%) of measles were reported from 39 counties across the country.

**Uganda:** Since the last update (24 February 2023), the MoH reported 114 new cases (3 confirmed; 111 suspected) and one new death (CFR: 0.8%) of measles. This is a 21% decrease in the number of new cases compared to the last report. Cumulatively, 258 cases (15 confirmed; 243 suspected) and one death (CFR: 0.4%) were reported from Kiryandongo district. Sixty-nine percent of the cases were identified among the refugee population in Kiryandongo refugee settlement.

**Note:** In 2022, 264,345 cases (34,491 confirmed; 229,854 suspected) and 2,860 deaths (CFR: 8%) of measles were reported from 24 MS in four AU regions: Cameroon (3,502 cases; 21 deaths), Central African Republic (CAR) (1,447; 3), Chad (2,956; 11), Congo (6,873; 132), Democratic Republic of Congo (DRC) (146,359; 1,846), Ethiopia (9,857; 102), Guinea (23,601; 33), Kenya (406; 2), Liberia (16,130; 86), Mali (2,745; 1), Mozambique (45; 0), Namibia (23; 0), Niger (19,524; 32), Nigeria (1,162; 0), Senegal (373; 1), Sierra Leone (814; 0), Somalia (16,624; 0), South Africa (365; 0), South Sudan (3,942; 38), Sudan (1,188; 13), Tanzania (223; 0), Togo (1,272; 0), Zambia (23; 3) and Zimbabwe (6,444; 698).

### Response:

**Cameroon:** The MoH continues to conduct active case search in affected districts. In addition, the MoH is strengthening risk communication for improved vaccine acceptance.

**Congo:** The MoH continues to conduct enhanced surveillance, nutritional screening, and case management.

**Mauritania:** The MoH deployed a rapid response team for investigation. In addition, the MoH continues to strengthen routine immunization and plan for a vaccination campaign in April 2023.

**South Sudan:** The MoH continues to strengthen routine immunization through mobile outreaches, provision of supportive case management and enhanced surveillance across the country.

**Uganda:** The MoH continues to conduct targeted vaccination, case management, community sensitisation, and enhanced surveillance in the affected communities.

## Lassa fever in Africa

**702** confirmed case(s)  
**3,276** suspected case(s)  
**115** death(s) (**CFR: 16.4%**)

<b>Lassa virus</b>	Agent/Pathogen	<b>27-Jan-2023</b>	First Reported by Africa CDC	<b>10-Mar-2023</b>	Previous Africa CDC Report:
<b>02-Jan-2023</b>	First Occurred	<b>Africa Combo</b>	Country	<b>5 MS</b>	Location
<b>Nigerian CDC</b>	Source	<b>MODERATE</b>	GeoScope	<b>HIGH</b>	Risk Assessment

### Update to event:

Since the beginning of this year, 3,978 cases (702 confirmed; 3,276 suspected) and 115 deaths (CFR: 16.4%) of Lassa fever were reported from five AU MS: Ghana (14 cases; 1 deaths), Guinea (2; 1), Liberia (8; 2), Nigeria (3,948; 109) and Sierra Leone (6; 2). This week, 334 new cases and five new deaths were reported from Nigeria.

**Nigeria:** Since the last report (10 March 2023), the Nigeria Centers for Disease Control (NCDC) reported 334 new cases (40 confirmed; 294 suspected) and five new deaths (CFR: 12.5%) of Lassa fever. One healthcare worker was among the new confirmed cases. This is a 32% decrease in the number of new cases and 50% decrease in the number of new deaths compared to the last report. Cumulatively, 3,948 cases (676 confirmed; 3,272 suspected) and 109 deaths (CFR: 16.1%) of Lassa fever were reported from 22 states in Nigeria. Healthcare workers account for 3.4% (23) of all confirmed cases reported this year.

### Response:

**Nigeria:** A national Lassa fever multi-partner, multi-sectoral EOC was activated in NCDC to coordinate all response activities; surveillance, case management, risk communication and laboratory diagnosis at all levels.

## Diphtheria in Nigeria

**382** confirmed case(s)  
**1,074** suspected case(s)  
**119** death(s) (**CFR: 31.2%**)

<b>Corynebacterium diphtheriae</b>	Agent/Pathogen	<b>25-Jan-2023</b>	First Reported by Africa CDC	<b>27-Jan-2023</b>	Previous Africa CDC Report:
<b>08-Dec-2022</b>	First Occurred	<b>Nigeria</b>	Country	<b>4 states</b>	Location
<b>Nigerian CDC</b>	Source	<b>HIGH</b>	GeoScope	<b>HIGH</b>	Risk Assessment

### Update to event:

Since the last report, the NCDC reported 717 new cases (166 confirmed; 551 suspected) and 79 new deaths (CFR: 47.5%) of diphtheria. This is a 78% increase in the number of new confirmed cases compared to last report. Cumulatively, 1,456 cases (382 confirmed cases; 1,074 suspected) and 119 deaths (CFR: 31.2%) of diphtheria have been reported from nine states. Among the confirmed cases, children aged 2-14 years (85%) were the most affected. Poor vaccination coverage remains a risk factor for infection. Majority (82%) of the total cases were not vaccinated with the diphtheria toxin-containing vaccine.

### Response:

The NCDC in collaboration with partner agencies plans to conduct two intensive routine immunization activities in March and April 2023 in the five most affected states and 14 other states at risk of the outbreak.



## Polio (vacc) in Africa

**8** confirmed case(s)

**0** death(s) (**CFR: 0%**)

<b>Polio virus (vaccine-</b>	Agent/Pathogen	<b>01-Jan-2023</b>	First Reported by Africa CDC	<b>10-Mar-2023</b>	Previous Africa CDC Report:
<b>01-Jan-2023</b>	First Occurred	<b>Africa Combo</b>	Country	<b>3 MS</b>	Location
<b>Global Polio Eradication</b>	Source	<b>MODERATE</b>	GeoScope	<b>MODERATE</b>	Risk Assessment

### Update to event:

Since the beginning of 2023, the continent has reported five cases of circulating vaccine-derived poliovirus type 1 (cVDPV1) from Madagascar and three cases of type 2 (cVDPV2) from three AU MS: Benin, Nigeria and Somalia. This week, one new case of cVDPV2 was reported from Benin.

**Benin:** On 16 March 2023, the MoH reported one confirmed case and no death of circulating vaccine derived poliovirus (cVDPV2) from Littoral province. This is the first confirmed case of cVDPV2 reported in 2023. The last case of cVDPV2 in Benin was reported in 2022, with a total of 10 confirmed cases and no deaths.

### Response:

**Benin:** The MoH continues to improve surveillance and risk communication in all regions.

# Animal Event Updates



## Rabies in Zambia

**6** confirmed case(s)

**6** death(s) (**CFR: 100.0%**)

<b>Rabies virus</b>	Agent/Pathogen	<b>17-Mar-2023</b>	First Reported by Africa CDC	<b>Initial Report</b>	Previous Africa CDC Report
<b>17-Mar-2023</b>	First Occurred	<b>Zambia</b>	Country	<b>3 districts</b>	Location
<b>Ministry of Agriculture</b>	Source	<b>LOW</b>	GeoScope	<b>HIGH</b>	Human Risk Assessment
<b>HIGH</b>	Animal Risk Assessment				

### Update to event:

On 17 March 2023, the Department of Veterinary Services of Northern province declared an outbreak of rabies in jackals. A total of six cases [among animals; jackal (3 cases) and goats (3)] and six deaths (CFR; 100%) were reported from three health districts. Laboratory confirmation was made at the Central Veterinary Institute.

Rabies is a vaccine-preventable, zoonotic, viral disease that infects the central nervous system. Rabies virus is transmitted through direct contact with saliva or brain/nervous system tissue of an infected person or animal. Rabies is vaccine preventable; however, is 100% fatal in humans once clinical symptoms appear. In up to 99% of cases, domestic dogs are responsible for rabies virus transmission to humans. Rabies can affect both domestic and wild animals. Animal rabies is endemic throughout Africa. The last outbreak of rabies in Zambia occurred in 2022 involving 13 cases (3 confirmed and 10 suspected) and 13 deaths (CFR: 100%) of rabies was reported in humans.

### Response:

The Department of Veterinary Services in collaboration with the provincial and district health authorities have intensified sensitization, surveillance activities, provision of post exposure prophylaxis and is mobilizing resources for vaccination of dogs.

# Other Event Updates



## Storm in Africa

**134,571** total persons displaced  
**252** death(s)

<b>Storm</b>	Agent/Pathogen	<b>03-Mar-2023</b>	First Reported by Africa CDC	<b>03-Mar-2023</b>	Previous Africa CDC Report
<b>21-Feb-2023</b>	First Occurred	<b>Africa Combo</b>	Country	<b>3 MS</b>	Location
<b>UN Agency</b>	Source	<b>MODERATE</b>	GeoScope	<b>MODERATE</b>	Human Risk Assessment

### Update to event:

Since 21 February 2023, the passage of cyclone Freddy has displaced 134,571 people and caused 252 deaths in three MS: Madagascar (40,800 displaced; 17 deaths), Malawi (83,871; 225) and Mozambique (9,900; 10). This week, 83,871 displaced persons and 231 deaths were reported from Madagascar (0 displaced; 6 deaths) and Malawi (83,871; 225).

**Madagascar:** Since the last report (10 March 2023), the National Bureau of Risk and Disaster Management (BNGRC) reported six new deaths from the south-western coast of Madagascar. This is a 50% increase in the number of new deaths compared to the previous report. Cumulatively, 40,800 displaced persons and 17 deaths have been reported. The recent deaths are linked to the second landfall of cyclone Freddy which occurred between 5 - 6 March 2023 and has caused localized flooding in Morombe and Toliara cities.

**Malawi:** On 13 March 2023, the Department of Climate Change and Meteorological Services (DCCMS) reported that Cyclone Freddy made landfall on 12 March 2023. As of 15 March 2023, a total of 83,871 displaced persons, 225 deaths, 707 injuries and 41 missing persons have been reported from five districts in the southern region bordering Mozambique.

### Response:

**Madagascar:** The BNGRC with support from partners continues to conduct community sensitisation on the expected rainfall from the storm and evacuation of persons from high-risk areas. In addition, BNGRC has provided 17,000 households with mosquito nets.

**Malawi:** The President of Malawi, H.E Mr. Lazarous Chakwera has declared two days of mourning for the lives lost during this disaster and has visited the areas most affected by the storm. The Department of Disaster Management Affairs (DoDMA) with support from partners has established 317 camps to provide shelter for displaced families. The injured persons are currently receiving treatment at Queen Elizabeth Central Hospital. The DoDMA has issued an advisory to the people to move to higher grounds immediately and follow evacuation orders when issued. Schools in the southern region have been temporarily suspended.

### Footnotes:

\* Cases in this report include confirmed, probable and suspected cases

\* Case fatality rates are calculated using confirmed cases and deaths only, except for the following:

- Bacterial meningitis, cholera and measles where CFR is calculated using all cases and deaths
- Marburg in Equatorial Guinea where CFR is calculated using confirmed, probable cases and deaths

\* The GeoScope level is determined by where the event is currently occurring on the continent. Low: event is limited to sub-national areas within one MS; Moderate: Event is affecting multiple countries within an AU region, or have been imported from/exported to 1-2 countries from another global region; High: Event is affecting several multinational AU regions, or have been imported from/exported to >2 countries from another global region; Very high: Event is considered a pandemic, affecting multiple continents or worldwide. The risk level is determined by evaluating the following criteria: morbidity and mortality of the disease, probability to spread within and to the other MSs, and availability of effective treatments, vaccines, or other control measures. An event risk level can be classified as low, moderate, high and very high depending on how they score on the above criteria.