Africa Humanitarian Action

EPIDEMIOLOGY BULLETIN

WEEK 1_42

HAZARDS (EVENTS)
Monkey Pox Outbreak in Africa
Marburg Virus Outbreak in Rwanda
Cholera Outbreak in Africa
Measles Outbreak in Africa
Dengue Fever in Africa
Diphtheria in Africa
Yellow Fever
Polio Virus (Vaccine-Derived) in Africa
Lassa Fever in Africa

1. Monkey Pox Outbreaks in Africa as of October 27, 2024

Evolution of Monkey Pox outbreak from 1958-2024

- First Monkey Pox virus was isolated from a lesion in animal in Denmark: 1958.
- Monkey pox virus was identified as the causative agent of pox infection in Animal in 1959
- First Human case of mpox infection detected in DRC: 1970.
- Human mpox spread to 72 countries in 2022.
- Since late 2022, WHO has recommended using the name **"mpox" instead of monkey pox.**
- WHO declared first time mpox as a PHEIC in 2022.
- Human mpox case spread to 110 countries in 2023.
- Africa CDC declared mpox as a Public Health Emergency of Continental Security (PHECS) concern on 13 August 2024.

Mpox Situation since Jan October 27, 2024

- Between epidemiological weeks 1 and 42, a total of 45,674 cases of mpox, of which 9,298 have been confirmed, and 1,014 deaths [case fatality rate (CFR): 2.33%] have been reported from 19 African Union (AU) Member States (MS):
- Out of Africa continent, about **seven** confirmed mpox cases have been reported from Asia and Europe continents.
- Four (4) confirmed mpox Cases have been reported from two countries of **Asia** (Pakistan (2), Thailand (1), and **three** confirmed mpox Cases have been reported from **three** countries of Europe (Sweden (1), Germany (1) and United Kingdom (1).
- Clad 1b, cases detected in Europe: Sweden on 15_August 2024, German on 22 October and UK on 30 October 2024.

No	Region	Affected Countries (MS)	Suspected Cases	Confirmed Cases	Deaths	CFR
1	Africa	19	45,674	9,298	**1,014**	2.2%
2	Asia	3	0	4	0	0%
3	Europe	3	0	3	0	0%
4	Americas	0	0	0	0	0%
5	Middle East	0	0	0	0	0%
6	Oceania & Antarctica	0	0	0	0	0%
Total		**25**	**45,674**	**9,305**	**1,014**	**2.2%**

Table: 1 Global distribution of Mpox as of October 27, 2024

Situation of Mpox by AU Region from 2022 to 2024

- Africa remains hardest hit continent with reporting a huge numbers of mpox cases and associated deaths since January, 2024.
- The Mpox cases, deaths and geographical spread has been consistently increasing for the last three consecutive years (2022-2024).
- As it is shown in fig. 1, the number of reported suspected mpox cases were 8,376 in 2022, 14,954 in 2023 and 45,674 in 2024 (as of October 27) in Africa member state.
- The yearly trend shows that, the number of cases increased by 79% from 2022 to 2023 and by 500% from 2023 to 2024.

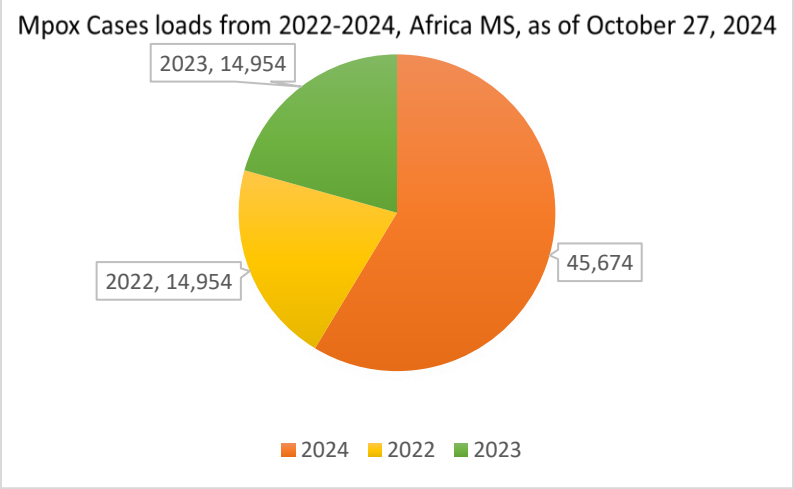


Fig. 1: Distribution of Mpox Case from 2022- 2024, AFRICA Union Member States (AU – MS).

Continental updates of Mpox as of October 27, 2024

- Since the beginning of January to 27 th of October 2024, 45, 674 suspected, 9,298 confirmed and 1,014 deaths with cases fatality rate (CFR: 2.33%) reported from 19 Africa union member state.
- Central Africa accounts for 85.7% of cases and 99.5% of all deaths reported.
- Five-member state (**Cameron, Gabon, Guinea, Rwanda, South Africa**) have not reported confirmed cases for the last 5 weeks.
- Continued increases in cases in **Liberia** and **Uganda.**

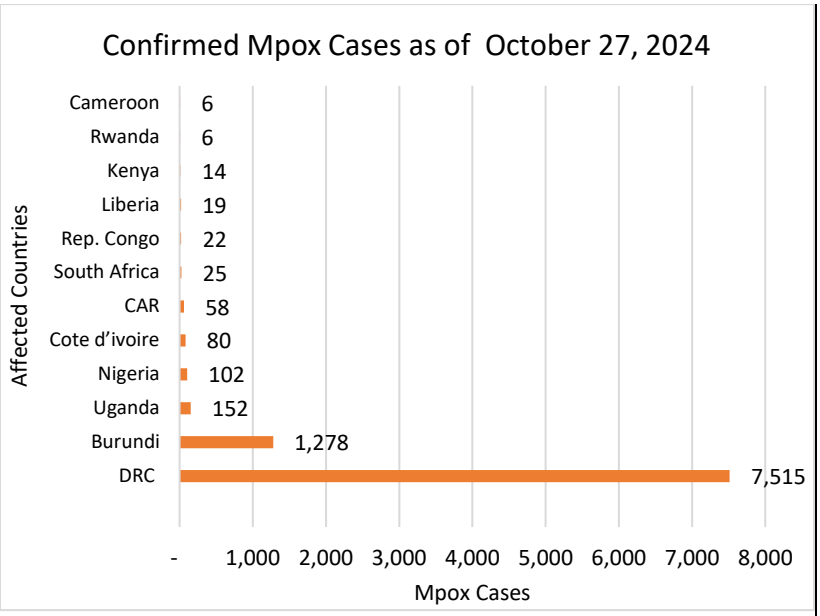


Fig. 2: Distribution of Mpox cases, as of October 27, 2024

Progression of Mpox outbreak from Jan – October 27, 2024

- As (table 3) shows that, devastating change has seen on the progression of Mpox outbreak in Africa, from January – April 2024 to January – October 27, 2024 in Africa Region.
- Number of notified mpox cases increased by 611% from 5,967 from January_ April to 45, 674-suspected cases as of October 27, 2024.
- Number of confirmed cases of mpox increased by over 11 folds from 708 reported confirmed cases from January-April to 9,298 confirmed cases as of October 27, 2024.
- Associated deaths of mpox also significantly increased by 230% or over 3 folds from 333 confirmed deaths from January - April, to 1,014 deaths as of October 27, 2024.

Progression of Mpox on Africa				
	Cases	Confirmed	Deaths	MS
Jan.-Apr. 2024	5,967	708	333	6
Jan.- Aug. 2024	23,622	5,116	617	13
Jan.- 15 Oct. 26 2024	45,674	9,298	1,014	19

Table 2: Progression of Mpox outbreak from Jan – Oct 27, 2024

Mpox cases in Africa at Epi weeks 42, 2024

- In a week about 2,766 new cases, of which 1,254 confirmed and 34 deaths with cases fatality rate (1.2%) reported.
- In the week, DRC, Notified 2,345 cases, of which, 1,068 confirmed cases and 34 deaths with cases fatality rate (1.45%).
- **DRC and Burundi** accounted 94% of all confirmed cases.
- **Uganda** cases increased over the last 4 weeks.
- Five-member state (**Cameron, Gabon, Guinea, Rwanda, South Africa**) have not reported confirmed cases for the last 5 weeks.
- Among all reported confirmed cases, male population accounts 53.5% and children < 15 years old accounts 38% of all cases, however there is disparities entire the continent.
- Of, confirmed cases, 63% and 52.8% of male population reported from Uganda and DRC respectively, while, 36.9% of children below their age 15 have been reported from DRC and 12.5% from Uganda.

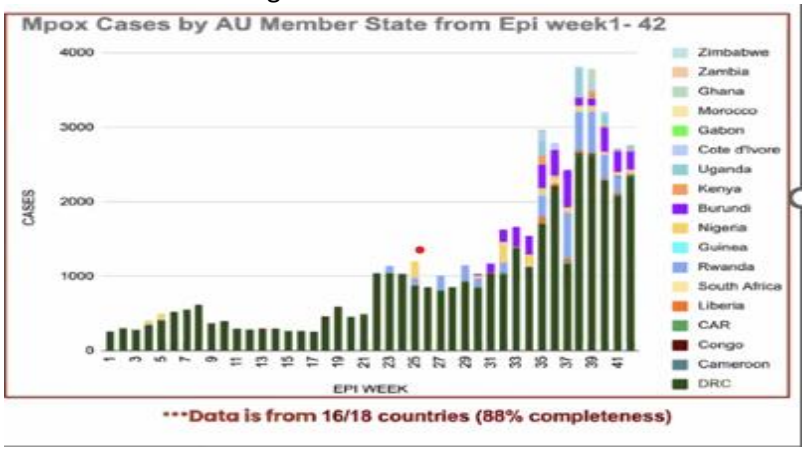


Fig. 3: Cases of Mpox outbreak by Africa Week 1_42, 2024

Mpox cases and Deaths at 'LEARN' Project countries, as of October 27, 2024

Between epidemiological weeks of 1_42, 2024

- From epidemiological weeks 1_42, a total of 7,623 confirmed cases and 1,007 deaths, with its' cases fatality rate 13% **(CFR calculated deaths from confirmed cases)** reported from three LEARN cohort I & II (DRC, Cameroon and Nigeria).
- Nearly, all deaths and 99% of cases reported from DRC
- No cases and deaths of mpox reported from Mali, Somalia and South Sudan countries.

Mpox Cases and Deaths at 'LEARN' Project Countries		
List of Countries	Confirmed Cases	Deaths
DRC	7,515	1,005
Nigeria	102	0
Cameroon	6	2
Mali	0	0
Somalia	0	0
South Sudan	0	0

Table 3: Mpox cases & Deaths at 'LEARN' Project Countries, October 27, 2024

Updates of Emergency vaccination (launched by WHO) as of, October 27, 2024

- Additional temporary recommendations from the Emergency committee meeting from August 14, 2024, Vaccina-

tion considered as Post Exposure Prophylaxis (PEP) for contact of cases and as Pre-Exposure Prophylaxis (PrEP) for certain high-risk groups.

- Based on the risks level of member state, Africa CDC supporting the resource mobilization and shipment of vaccine since early October.
- Targeted high-risk populations for vaccinations were, female sex workers, contacts of cases (sexual contacts), children, truck drivers, cross-border traders and health care workers
- 5.6Million dose of mpox vaccine allocated to 9 Africa countries by the access and Allocation Mechanism (AAM) as mpox cases surg.
- This roll out priorities for (DRC, Rwanda, Nigeria, CAR, South Africa, Cote d'Ivoire, Burundi…)
- It led by Africa CDC, WHO,UNICEF,Coalition for Epidemic Prepardeness Innovations (CEPI) and GAVI, the vaccine Alliance
- DRC vaccinated over the given target (103%), and Rwanda also vaccinated over 100% from the target.

Vaccination status in DRC, as of October 27, 2024

- High-risk district targeted: Sud Kivu, Nord Kivu, & Tshopo
- Vaccination campaign began on October 4, 2024,
- Campaign launched in **South Kivu and Sudu Kivu** provinces on October 5 and 6,2024
- However the vaccination coverage of the country is over 103% from the target, very low vaccination performances seen in the provinces of Sankuru(46%), Equateur (53.3%)

Start date	Health Zone	Completeness	Vaccinated People	Target (microplan)	Vaccine Covergae Wk 42	Vaccine Coverage Wk 41
05 Oct	Nord Kivu	97%	13,273	9,292	142.8%	138.5%
06 Oct	Sud Kivu	95%	22,918	18,935	121%	109%
07 Oct	Tshopo	100%	2,184	2,391	91.3%	91.7%
15 Oct	Sankuru	97%	1,331	2,892	46%	17%
17 Oct	Sud Ubangi	87%	3,819	4,901	77.9%	26.4%
17 Oct	Equateur	84%	4,022	7,545	53.3%	20.01%

Table 4: Vaccination status at DRC as of October 27, 2024

Key challenges and Risks

- Poor Active searching and Contract tracing
- High malnutrition rates (DRC), complicated the response
- Multiple outbreak (cholera, measles, Dengue fever, etc.)
- Extreme limitation of Infection Prevention and Control facilities, including handwashing station and case isolation (Challenge (Uganda prison)
- Reaching high –risk population (Mpox Vaccination).
- Vaccination of children (since it is not licensed for children).
- Cross border transmission
- Sexual contact and population mobility.
- New clusters becoming emergency concerns

Response by MS/partner/Africa CDC

The ministries of health in the affected MS continue to

- Intensify surveillance.
- Risk communication, and community engagement activities in the affected areas.
- Continental mpox incident management team (IMTs) continues to mobilize resources and provide guidance for mpox preparedness and response activities in line with the continental joint response plan.
- DRC and Rwanda have started vaccination of targeted population while Nigeria is planning for vaccine rollout.
- Additionally, the Director General of Africa CDC continues to provide weekly press briefing to the media on the mpox situation on the continent since August 27, 2024.

2. Marburg virus Outbreak in Rwanda, as of October 27, 2024

Epidemiological Situation of Marburg virus (As of October 27, 2024)

- Marburg Virus Disease (MVD) is a rare, severe, highly infectious and often fatal disease caused by the Marburg virus.
- Historically, Rwanda reported the first-ever Marburg virus disease outbreak.
- On September 27, 2024, Rwanda's MoH announced the first-ever outbreak of Marburg Virus Disease in the country, after detecting the infection in health facilities.
- By Sept 28, 2024, health officials had initiated scaled up their response, with 26 cases and 8 deaths.
- As of October 27, 2024, 65 Marburg confirmed cases and 15 deaths with cases fatality rate (CFR 23.1 %,) reported from Rwanda.
- Among the initial 65 confirmed cases according to available data, 70% were male, and 48% were aged between 30 to 39 years. Most of the cases have been reported from the three districts in Kigali city.
- Health workers from two health facilities in Kigali accounts for 82% of all confirmed cases.

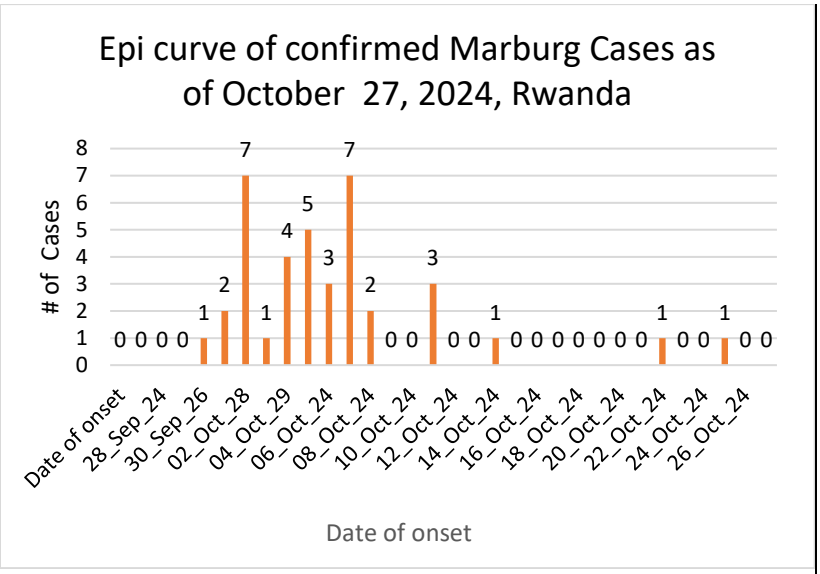


Fig. 4: Epi Curve of Marburg cases in Rwanda, Oct 27, 2024

- As the following graph, the highest number of new confirmed were reported in the first two epidemiological weeks of the outbreak with 26 cases reported in epidemiological week 39(23 to 29 September 2024) and 23 cases in week 40 (30 September to 6 October 2024).
- This was followed by a sharp decline in week 41 42, and 43 with 12, 1 and 3 cases reported respectively.

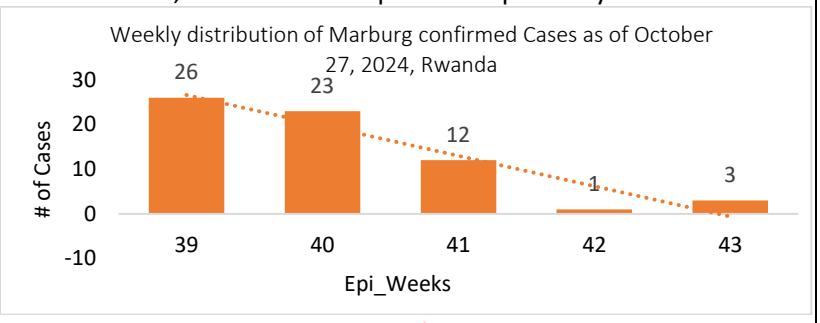


Fig. 5: Weekly distribution of Marburg virus in Rwanda, October 27, 2024

- After 10 days of no new cases, a health worker who has been caring for Marburg patients tested positive for the virus on Wednesday night [23 Oct 2024] (MoH)
- Since the announcement of the outbreak, all new confirmed cases and their contacts have been with in the hospital cluster in Kigali.
- Contact tracing is ongoing, with 1,146 contacts are under follow-up until they complete their 21-days, however, there was no information on which the type of contacts (Whether they are close family members or community contacts or health care workers.

Viral Diagnosis updates of Marburg October 27, 2024

- Over 5,000 test kit for Marburg test supplied from Africa CDC including neighboring countries
- Reverse transcriptase polymerase chain reaction (RT_ PCR) is the methods employed for confirmation of Marburg etiology in the country.
- Communication onboard with Japan for RDT test kit to address all risk groups a quick as possible.
- As of October 27, 2024, about 5,332 tests for Marburg virus have been conducted, with approximately 100_300 samples being tested daily at the Rwanda Biomedical Center (RBC), 65 cases reported as Marburg confirmed cases, which brought the national test positivity rate to 1.2%.

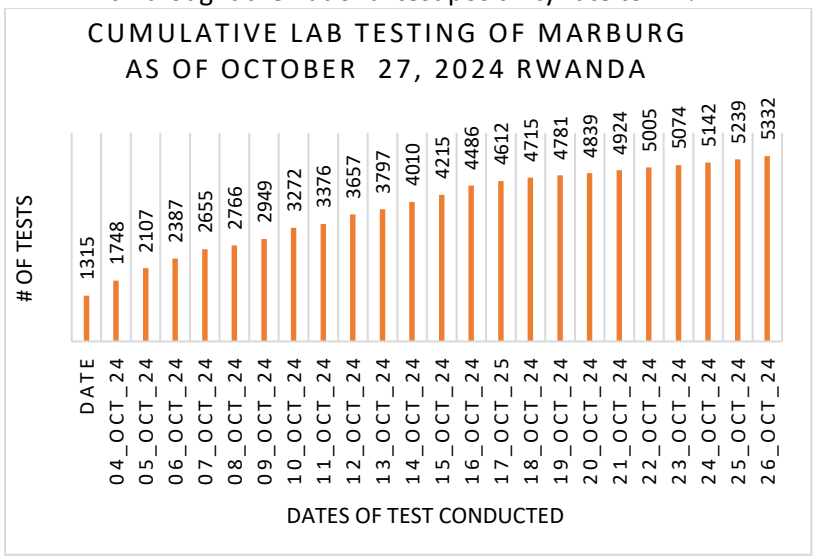


Fig. 6: Cumulative Laboratory testing of Marburg as of October 27, 2024 Rwanda

Marburg Vaccination Update as of October 27, 2024

- Since there is no specific treatment available, there is only an emergency vaccine for frontline workers available.
- Rwanda has secured Marburg Vaccine from Sabin vaccine institute (SVI).
- Kicks off Vaccination Campaign as death toll increases to 13 in the country.
- First batch of targeted 700 Marburg vaccines arrived on October 5, 2024, and commenced on October 07, 2024, for frontline responders ensuring their readiness and safety.
- Additional 1,000 dose of vaccine received from SVI on 12,2024, the Vaccine are primarily aimed for health care workers, and those in high –risk setting, which will be used to continue protecting those at the highest risk.
- Of received 1,700 dose vaccines, about 1,583 doses have already been administered to frontline workers and emergency responders as of October 27, 2024.
- WHO has classified this outbreak as a Grade 3 event, underscoring its complexity and the need for a coordinated, large-scale response(https://www.who.int/emergencies/grading)

Risk Assessment Level
Very High Risk at the national level,
High Risk at the regional level, and
Low risk at the global levels

Marburg in Rwanda
Level 4 - Avoid All Travel
Level 3 - Reconsider Nonessential Travel
Level 2 - Practice Enhanced Precautions
Level 1 - Practice Usual Precautions

Ongoing Public Health Response as of October 27, 2024

- National-level coordination meetings with the ministry of health and partners
- A health alert has been sent to all Regions, health facilities and teaching hospitals
- Contact tracing and active case search in communities and health facilities are ongoing.
- WHO is also working to enhance cross-border measures with neighboring countries to prevent further spread
- MoH, together with Africa CDC, activated PHEOC
- RRT deployed to conduct enhanced surveillance, case management, risk communication, and community engagement in the affected districts
- MoH of Rwanda, kick started exit screening at Point of Entry (PoE) to limit the risk of international spread.

3. Cholera outbreak in Africa as of October 27, 2024

- Cholera is a diarrheal disease caused by infection of the intestine with the gram-negative bacteria Vibrio cholera, type either O1 or O139.
- Both children and adults can be infected and it is one of the key indicators of social development.
- Since December 31, 2023, countries in the Africa being encountered with protracted cholera outbreak.
- Between epidemiological weeks 1 and 42, a total of 177,561 cases (24,537 confirmed; 13 probables; 153,011 suspected) and 3,048 deaths (CFR: 1.72%) of cholera have been reported from 19 AU MS

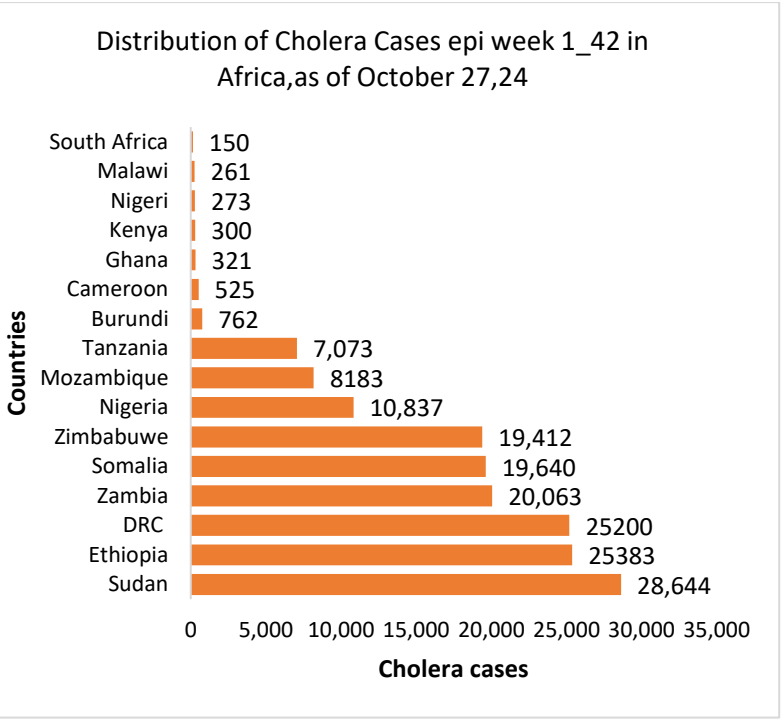


Fig. 7: Distribution of Cholera cases in Africa as of Oct 27, 2024

As shown on fig. 7, Sudan continued as the leading country reporting high number of cholera cases, it accounts 28,644(17%) of all reported cases. Following Sudan, Ethiopia, DRC, Zambia, Somalia and Zimbabwe ranked 1_5, reporting 25383(15%), 25200(15%), 20,063 (12%), 19,640 (12%), and 19,412(12%) respectively.



Fig. 8: Spot Map of Cholera cases in Africa as of October 27, 2024

According to the data of Africa CDC weekly epidemic intelligence report (https://africacdc.org/download/africa-cdc-weekly-event-based-surveillance-report-october-2024/), among 3,048 total deaths reported in a continent for the last 42 week, Sudan and Zambia , account 21% and 20% of all deaths, followed by, Zimbabwe, Nigeria, DRC and Ethiopia, reporting, 13%,12% and 11% of all reported deaths respectively.

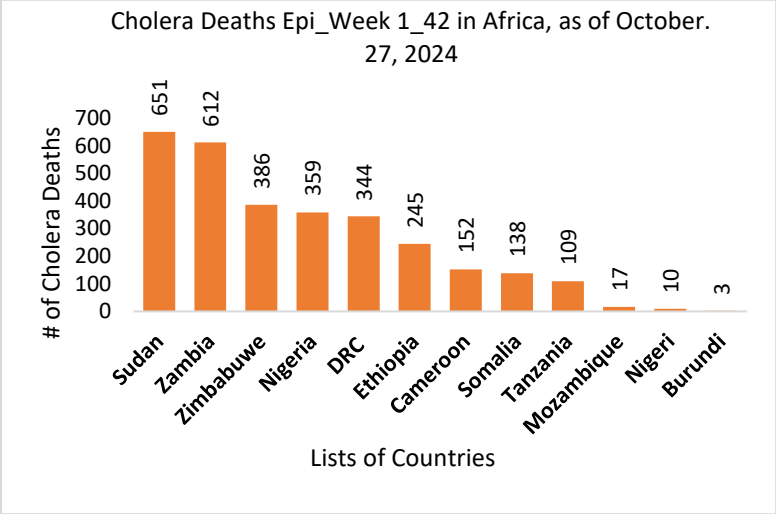


Fig. 9: Cholera Deaths in Africa as of October 27, 2024

Cholera situational update in Epi weeks 42, 2024

- In epidemiological week 42, about 3,604 new cases and 33 new deaths of cholera were reported from six AU MS: Comoros, Ethiopia, Ghana, Sudan, Tanzania, and Togo

1. **Comoros**: Since the last update (18 October 2024), the MoH reported 26 new confirmed cases and no new deaths of cholera from Ngazidja region.
2. **Ethiopia**: Since the last update (11 October 2024), the Ethiopian Public Health Institute (EPHI) reported 143 new suspected cases and five new deaths (CFR: 3.5%) of cholera from six regions
3. **Ghana**: Since the last update (18 October 2024), the Ghana Health Services reported 129 new and no new deaths of cholera from the Ada East and Ada West districts in Greater Accra region.
4. **Sudan**: Since the last update (18 October 2024), the MoH reported 2,028 new suspected cases and 16 new deaths (CFR: 2.3%) of cholera from 11 states.
5. **Tanzania**: Since the last update (27 September 2024), the MoH reported 1,275 new-suspected cases and 12 new deaths of cholera from nine regions.
6. **Togo:** Since the last update (18 October 2024), the MoH reported three new cases and no new deaths of cholera from Maritime region

- Cholera cases reported with in a continent in the current year is much lower than as compared with that of reported 638,942 cases and 6,453 deaths (CFR: 1.0%) during 2023.

Cholera cases and Deaths at 'LEARN' Project Countries Between epidemiological weeks 1- 42, 2024

- Between epidemiological weeks 1- 42, a total of 84,846 cholera cases and 1,644 deaths with cases fatality rate of 2% have been reported from four of six LEARN cohort countries.
- Of reported cases and deaths, DRC reported (25,200 cases, and 344 deaths), followed by, Somalia reported (19,640 cases and 138 deaths), Nigeria reported (10,837 cases and 359 deaths) and Cameroon reported (525 cases and 8 deaths) respectively.
- Fortunately, there was no cases and deaths reported from Mali and South Sudan for the last 1_42 epidemiological weeks, 2024.

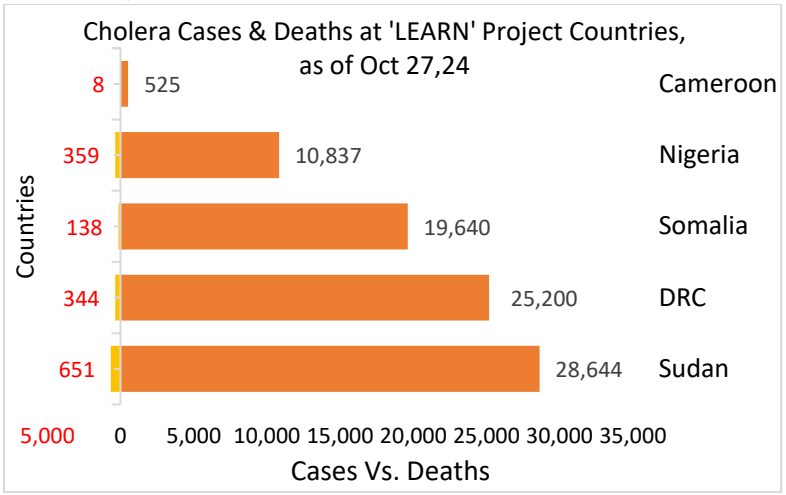


Fig. 10: Cholera cases Vs. Deaths in LEARN Countries, Oct 27, 2024

Response by MS/partner/Africa CDC

- Enhanced active case – search ad early detection
- Affected Member state continue to strengthen surveillance and case management.
- Implement water, hygiene, and sanitation interventions in the affected areas.

4. Measles Outbreak in Africa, October 27, 2024

- Measles is an acute and highly infectious disease caused by measles virus.
- The outbreaks of measles continued as common public health problems in many developing countries, particularly in Africa.
- From epidemiological weeks 1_42, 2024, 221,399 cases (20,048 confirmed; 201,351 suspected) and 3,008 deaths (CFR: 1.36%) of measles have been reported from 29 Africa union Member state.
- Among 201,351 measles cases reported from 29/55 of member state, DRC accounts over 39% of all cases. Following

DRC, the countries reported their measles cases over 10, 00 cases are, Ethiopia reported, Burundi, Morocco, Nigeria, Burkina Faso and Somalia the reported measles cases ranged between 27,718 cases in Ethiopia and 10,478 in Somalia.

Measles situational update in epidemiological week 42

- **In epidemiological week 42**, about 622 new cases and 4 new deaths of measles were reported from six Africa union member state: (**Cameroon, Congo, Liberia, Morocco, Sudan, and Somalia).**

1. **Cameroon**: Since the last update (11 October 2024), the MoH reported 44 new cases and no new deaths of measles from 15 districts.
2. **Congo**: Since the last update (4 October 2024), the MoH reported 20 new-suspected cases and no new deaths of measles from three departments.
3. **Liberia**: Since the last update (11 October 2024), the MoH reported 81 new cases and no new deaths from six counties.
4. **Morocco:** Since the last update (18 October 2024), the MoH reported 316 new cases and 3 new deaths (CFR: 0.9%) of measles from 10 regions.
5. **Sudan**: Since the last update (18 October 2024), the MoH reported 16 new-suspected cases and no new deaths of measles from 11 states.
6. **Somalia**: Since the last update (18 October 2024), the MoH reported 145 new cases and 1 new death (CFR: 0.7%) of measles from six states.

- In the last 1_ 42 weeks, in 2024, about 3,008 deaths of measles have been reported from 29 AU MS.
- Among deaths reported, DRC constitute over 68% of deaths, while, Ethiopia, Côte d'Ivoire, Burundi and Morocco ranked 2nd _5th reporting 7%, 6% 5%, and 3% respectively

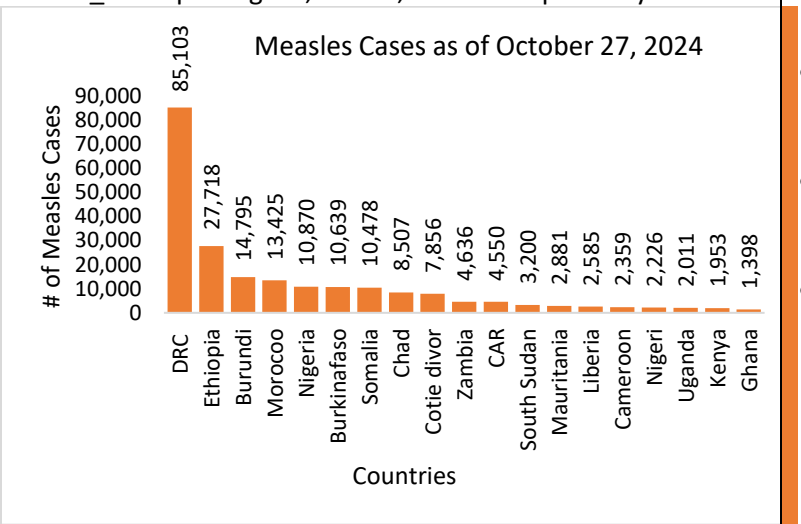


Fig. 11: Measles cases in Africa Epi week 1_42, 2024

Measles cases and Deaths at 'LEARN' Project Countries as of October 27, 2024

- From epidemiological week 1_42, 2024, a total of 112,620 measles cases and 2,167 measles associated deaths with its cases fatality rate of 2% reported from all six LEARN cohort countries (Cohort I, II).
- Of reported cases and deaths in a continent between weeks 1_42, 2024, LEAR countries constitute about 51% of all reported cases and 72% of all reported deaths.
- Measles cases and deaths reported with in LEARN Project countries, DRC took the leading position, reporting over 76% of cases and 95% of deaths of the cohort, followed by, Somalia, Nigeria, South Sudan, Cameroon and Mali ranked 2_5, reporting 10,870 cases, 10,478 case, 3,200 cases, 2,359 cases and 610 cases respectively.

Public Health Response

- MoH in the affected member state continue to strengthen
- Intensify measles surveillance
- Improve case management
- Supplementary immunization activities
- Social and community mobilization
- Resource mobilization**.**

5. Dengue Fever in Africa, as of October 27, 2024

- Dengue fever (break-bone fever) is a viral infection that spreads from mosquitoes to people.
- Between epidemiological weeks 1_42, 22024, a total of 99,383 cases and 101 deaths (CFR: 0.1%) reported from 15 Africa union member state.
- Over 73% of cases reported from Burkina Faso, while, Mauritius, Mali, and Ethiopia followed reporting 9%, 6%, and 3% of case respectively.
- As compared with the last year, the reported cases decreased from 280,218 in 2023 to 99,383 cases in 2024, while, deaths decreased, from 808 in 2023 to 101 deaths in 2024.
- Among LEARN Cohort countries, Mali reported over 6,381 dengue fever cases and 7 associated deaths with its cases fatality rate of 0.11%.
- As of October 27, 2024, there was no cases and deaths due to Dengue fever reported from DRC, Nigeria, Cameroon, South Sudan and Somalia

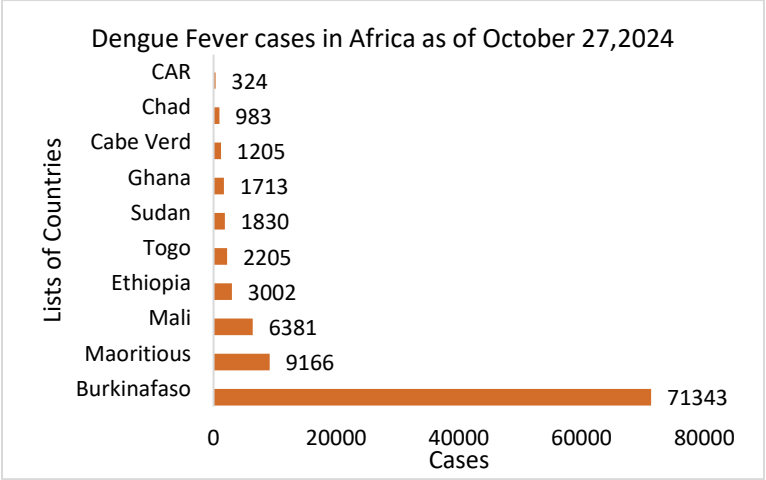


Fig. 12: Distribution of Dengue cases as of Oct 16, 2024

6. Diphtheria in Africa, October 27, 2024

- Between 1_42 epidemiological weeks, 17,309 and 412 deaths of diphtheria with cases fatality rate of 4.79% have been reported from five Africa union member state.
- Among cases and deaths reported, Nigeria constitutes over 71% of Diphtheria cases and 76% of all reported deaths.
- Guinea, Chad and Niger ranked 2nd, 3rd, and 4th, reporting 2,869, 1,307 and 746 diphtheria cases respectively.
- The number of reported cases decreased from 27,346 in 2023 to 17,309 2024 and deaths decreased from 794 in 2023 to 412 in 2024.

7. Yellow Fever Cases Deaths as of October 27, 2024

Between epidemiological weeks 1_42, 2024, a total of 703 cases and 6 deaths with cases fatality rate of 0.85% Yellow Fever reported from Seven Africa union member state.
South Sudan and Gabon accounts oved 73% of all reported cases, while, all deaths reported from South Sudan.

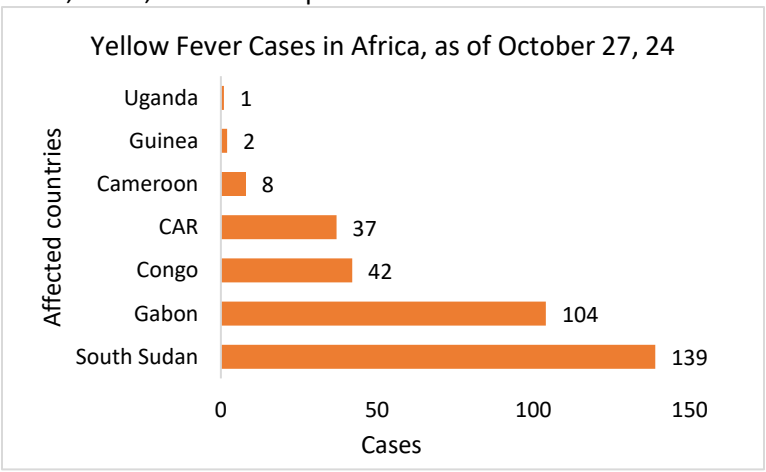


Fig. 13: Distribution of Yellow Fever Cases, as of October 27, 24

8. Polio Virus (Vaccine –Derived, I and II) in Africa, as of October 27, 2024

- From epidemiological weeks 1_42, 2024, Six confirmed cases with no deaths of circulating vaccine derived poliovirus type 1 (cVDPV 1) have been reported from DRC (5 cases) and Mozambique (1 Case).
- Additionally, 130 confirmed cases and no death of circulating vaccine derived poliovirus type 2 (cVDPV 2) reported from 14 Africa Union member state.
- In epidemiological week 42, one confirmed case of cVDPV 2 was reported from Ethiopia.
- The trend showed that, the number of reported confirmed cases of cVDPV1 significantly decreased from 133 in 2023 to 6 in 2024, and confirmed cVDPV 2 decreased from 378 in 2023 to 130 in 2024.

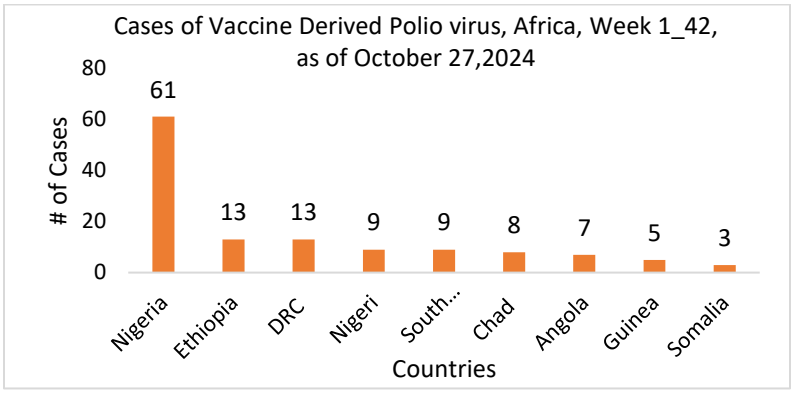


Fig. 14: Vaccine Derived Polio virus Cases as of Oct 27, 2024

9. Lassa fever in Africa, as of October 27, 2024

- Between epidemiological weeks 1_42, 2024, a total of 9,829 cases and 186 deaths with cases fatality rate of 17.34% Lassa fever reported from three Africa union member state (Nigeria, Guinea, and Liberia).
- Nigeria is the most affected country reporting about 98% of cases and 94% of all reported deaths in Africa union member state.
- In epidemiological week 42, about 42 new cases and no death reported from four state of Nigeria.

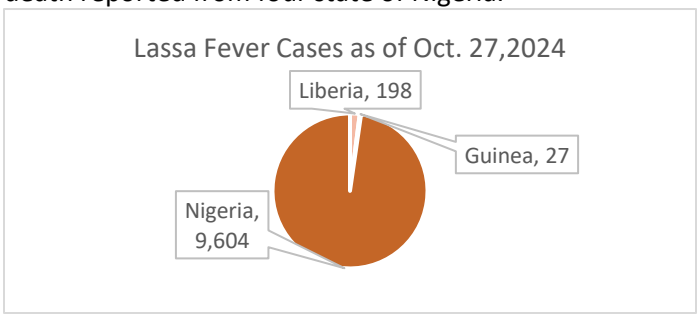


Fig. 15: Cases of Lassa fever Cases as of October 27, 2024

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Your comments will help improve our bulletin!

1. Marburg in Rwanda - Level 3, Turned from WHO (https://www.who.int/emergencies/grading)

2. Statement against Travel Restrictions in Response to Mpox and Marburg Virus Outbreaks (https://africacdc.org/news-item/statement-against-travel-restrictions-inresponse-to-mpox-and-marburg-virus-outbreaks/)

3. MARBURG Virus Information (https://rbc.gov.rw/marburg/)