



# Liberia IDSR Epidemiology Bulletin

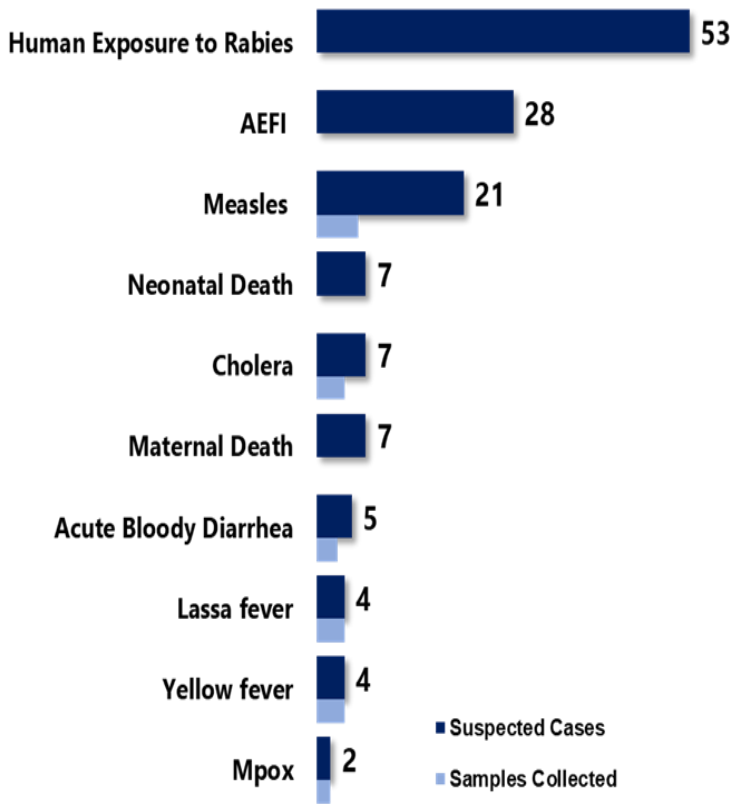
Epi-week 49 (Dec 4-10, 2023)

Country Population: 5,104,413 | Volume 19 Issue 49 | Dec 4-10, 2023

Data Source: CSOs from 15 Counties and Laboratory

## Highlights

Figure 1: Public Health Events Reported



## Keynotes and Events of Public Health Significance

- ◆ A total of 138 events of public health importance including 15 deaths reported
- ◆ Completeness and timeliness of health facility reports were both 97%
- ◆ Ongoing Lassa fever outbreak in 3 Counties
- ◆ Ongoing Measles outbreak in 3 Counties
- ◆ Ongoing Mpox outbreak in 2 Counties

Adverse Events Following Immunization/Adverse Drug Reaction (AEFI)

## Reporting Coverage

Table 1: Health Facility Weekly IDSR Reporting Coverage, Liberia, Epi-week 49, 2023

| County           | Expected Reports From HF* | Reports Received | Received on Time | Completeness (%) | Timeliness (%) |
|------------------|---------------------------|------------------|------------------|------------------|----------------|
| Bomi             | 28                        | 28               | 28               | 100              | 100            |
| Bong             | 67                        | 67               | 67               | 100              | 100            |
| Gbarpolu         | 18                        | 18               | 18               | 100              | 100            |
| Grand Bassa      | 37                        | 37               | 37               | 100              | 100            |
| Grand Cape Mount | 34                        | 34               | 34               | 100              | 100            |
| Grand Gedeh      | 24                        | 24               | 24               | 100              | 100            |
| Grand Kru        | 24                        | 24               | 24               | 100              | 100            |
| Lofa             | 60                        | 60               | 60               | 100              | 100            |
| Margibi          | 66                        | 63               | 63               | 95               | 95             |
| Maryland         | 28                        | 25               | 25               | 89               | 89             |
| Montserrado      | 418                       | 393              | 390              | 94               | 93             |
| Nimba            | 92                        | 92               | 92               | 99               | 100            |
| Rivercess        | 21                        | 21               | 21               | 100              | 100            |
| River Gee        | 20                        | 20               | 20               | 100              | 100            |
| Sinoe            | 41                        | 41               | 41               | 100              | 100            |
| <b>Liberia</b>   | <b>978</b>                | <b>947</b>       | <b>944</b>       | <b>97</b>        | <b>97</b>      |

947 (97%)  
Health facilities reported IDSR data

98 (100%)  
Health districts reported IDSR data

944 (97%)  
Health facilities reported timely IDSR data

- ◆ The national target for weekly IDSR reporting is 80%. Health facility timeliness is monitored at the health district level
- ◆ All counties reported on time to the national level

Legend:



## Vaccine-Preventable Diseases

### Measles

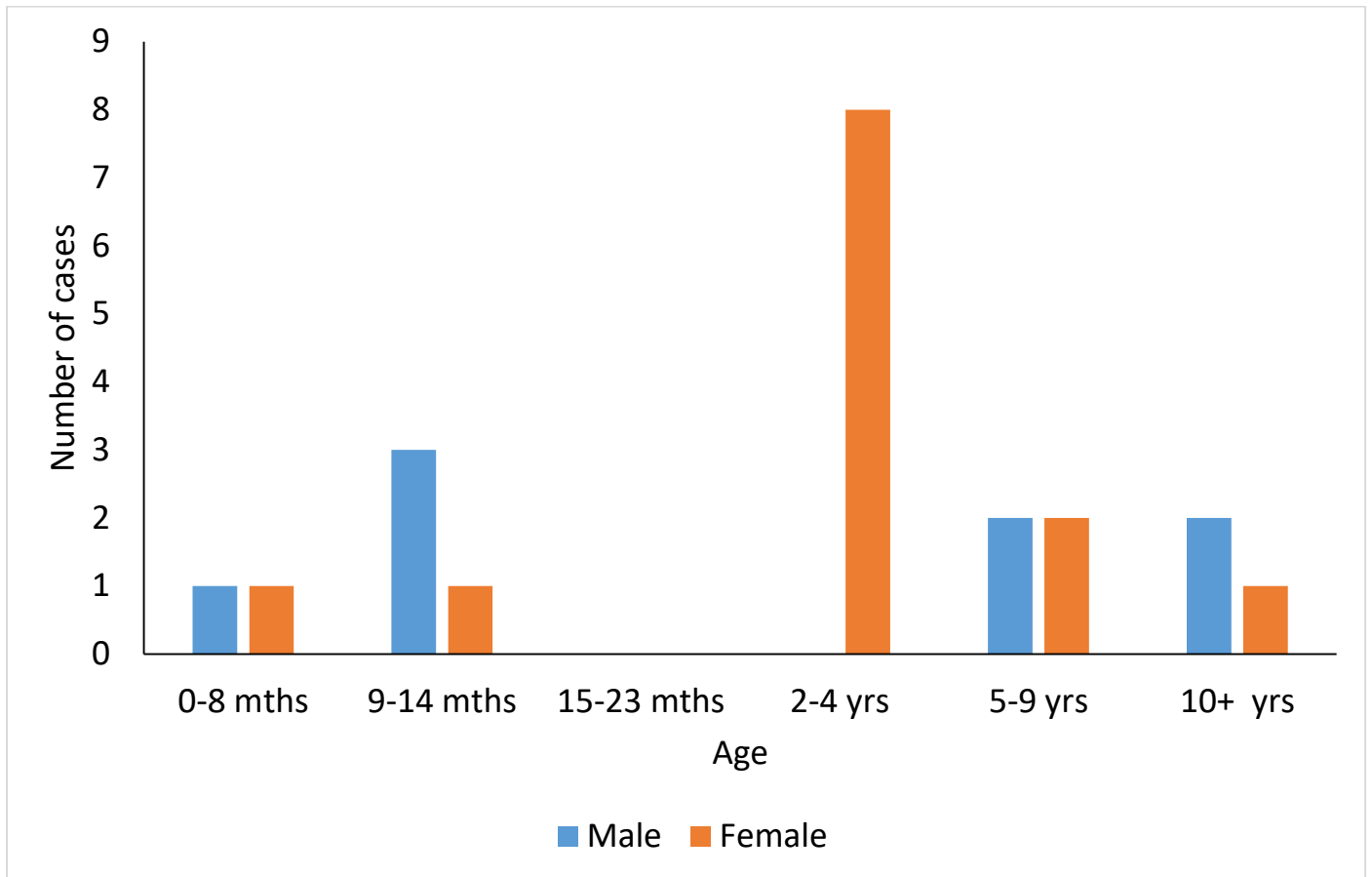
- ☞ Twenty-one (21) suspected cases were reported from 8 counties
- ☞ Six (6) specimens were collected and pending testing
- ☞ Fourteen (14) persons were vaccinated

**Table 2: Distribution of Measles cases per county and epi-classification, Liberia, Epi week 1-49, 2023**

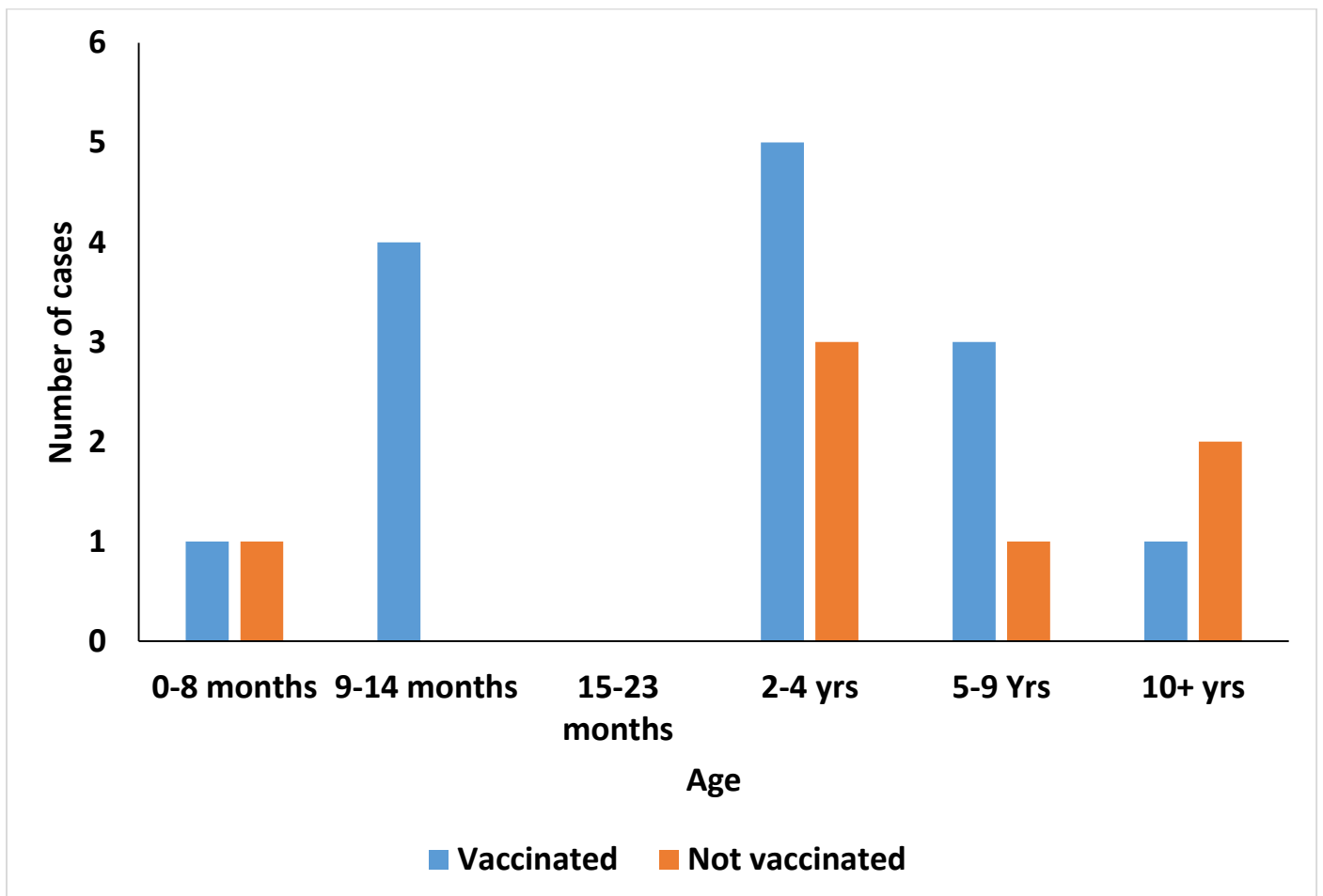
| COUNTY           | CUMULATIVE # SUSPECTED CASES | CUMULATIVE # CONFIRMED CASES | CLASSIFICATION OF CONFIRMED CASES |            |                       | DEATHS | CFR (%) | # CONFIRMED CASES WEEK 48 | # CONFIRMED CASES WEEK 49 | % CHANGE |
|------------------|------------------------------|------------------------------|-----------------------------------|------------|-----------------------|--------|---------|---------------------------|---------------------------|----------|
|                  |                              |                              | Lab confirmed                     | Epi Linked | Clinically Compatible |        |         |                           |                           |          |
| Bomi             | 80                           | 68                           | 2                                 | 13         | 53                    | 0      | 0.0     | 0                         | 0                         | 0        |
| Bong             | 210                          | 210                          | 3                                 | 6          | 201                   | 1      | 0.5     | 0                         | 0                         | 0        |
| Gbarpolu         | 43                           | 42                           | 0                                 | 0          | 42                    | 0      | 0.0     | 0                         | 1                         | 0        |
| Grand Bassa      | 183                          | 180                          | 0                                 | 0          | 180                   | 0      | 0.0     | 1                         | 4                         | 300      |
| Grand Cape Mount | 77                           | 69                           | 1                                 | 2          | 66                    | 0      | 0.0     | 0                         | 0                         | 0        |
| Grand Gedeh      | 444                          | 400                          | 6                                 | 27         | 367                   | 0      | 0.0     | 3                         | 3                         | 0        |
| Grand Kru        | 747                          | 741                          | 10                                | 72         | 659                   | 2      | 0.3     | 1                         | 0                         | -100     |
| Lofa             | 142                          | 134                          | 0                                 | 0          | 134                   | 0      | 0.0     | 1                         | 0                         | -100     |
| Margibi          | 201                          | 199                          | 1                                 | 8          | 190                   | 0      | 0.0     | 0                         | 0                         | 0        |
| Maryland         | 781                          | 779                          | 0                                 | 0          | 779                   | 0      | 0.0     | 9                         | 6                         | -33      |
| Montserrado      | 1108                         | 1100                         | 4                                 | 53         | 1043                  | 2      | 0.2     | 0                         | 2                         | 0        |
| Nimba            | 378                          | 368                          | 2                                 | 33         | 333                   | 3      | 0.8     | 0                         | 1                         | 0        |
| River Gee        | 147                          | 121                          | 1                                 | 0          | 120                   | 0      | 0.0     | 1                         | 1                         | 0        |
| Rivercess        | 37                           | 32                           | 1                                 | 0          | 31                    | 0      | 0.0     | 0                         | 0                         | 0        |
| Sinoe            | 163                          | 143                          | 6                                 | 11         | 126                   | 0      | 0.0     | 8                         | 3                         | -63      |

**Table 3: Vaccination Status of Measles Cases, Liberia, Epi-week 49, 2023**

| County           | Vaccinated | Number of Doses Received |           |                     |
|------------------|------------|--------------------------|-----------|---------------------|
|                  |            | One Dose                 | Two Doses | Doses Not Indicated |
| Bomi             | 0          | 0                        | 0         | 0                   |
| Bong             | 0          | 0                        | 0         | 0                   |
| Gbarpolu         | 1          | 0                        | 0         | 1                   |
| Grand Bassa      | 3          | 1                        | 1         | 1                   |
| Grand Cape Mount | 0          | 0                        | 0         | 0                   |
| Grand Gedeh      | 2          | 2                        | 0         | 0                   |
| Grand Kru        | 0          | 0                        | 0         | 0                   |
| Lofa             | 0          | 0                        | 0         | 0                   |
| Margibi          | 0          | 0                        | 0         | 0                   |
| Maryland         | 2          | 1                        | 0         | 1                   |
| Montserrado      | 1          | 1                        | 0         | 0                   |
| Nimba            | 1          | 0                        | 0         | 1                   |
| River Gee        | 1          | 1                        | 0         | 0                   |
| Rivercess        | 0          | 0                        | 0         | 0                   |
| Sinoe            | 3          | 3                        | 0         | 0                   |
| <b>National</b>  | <b>14</b>  | <b>9</b>                 | <b>1</b>  | <b>4</b>            |



**Figure 2: Distribution of Measles Cases by Age Group and Sex, Liberia Epi Week 49, 2023**



**Figure 3: Vaccination Status of Suspected Measles Cases by Age Group, Liberia, Epi-Week 49, 2023**

**Table 4: Status of Confirmed Measles Cases by County, Liberia, December 13, 2021 – December 10, 2023**

| County           | Total Cases   | Active   | Recovery       | Deaths    | # of Districts |
|------------------|---------------|----------|----------------|-----------|----------------|
| Montserrado      | 5,373         | 2        | 5,302          | 69        | 3/7            |
| Nimba            | 1,110         | 0        | 1,106          | 4         | 3/6            |
| Grand Bassa      | 924           | 0        | 917            | 7         | 0/8            |
| Margibi          | 803           | 0        | 802            | 1         | 0/4            |
| Bong             | 578           | 0        | 575            | 3         | 0/9            |
| Maryland         | 1108          | 3        | 1105           | 0         | 2/6            |
| Lofa             | 284           | 0        | 284            | 0         | 0/6            |
| Grand Kru        | 965           | 0        | 963            | 2         | 0/5            |
| Grand Cape Mount | 187           | 0        | 184            | 3         | 0/5            |
| Bomi             | 147           | 0        | 142            | 5         | 0/4            |
| Rivercess        | 84            | 0        | 83             | 1         | 0/6            |
| Gbarpolu         | 46            | 0        | 46             | 0         | 0/5            |
| Grand Gedeh      | 508           | 0        | 508            | 0         | 0/6            |
| River Gee        | 79            | 0        | 79             | 0         | 0/6            |
| Sinoe            | 231           | 0        | 231            | 0         | 0/10           |
| <b>Total</b>     | <b>12,427</b> | <b>5</b> | <b>12, 327</b> | <b>95</b> | <b>8/98</b>    |

**Table 5: Cumulative Distribution of Measles Cases and Deaths, December 13, 2021 – December 10, 2023**

| COUNTY       | CUMULATIVE SUSPECTED CASES | CUMULATIVE CONFIRMED CASES | CLASSIFICATION OF CONFIRMED CASES |              |                       | CLASSIFICATION OF CONFIRMED DEATHS |            |                       | CUMULATIVE DEATHS | CFR (%)    | # CONFIRMED CASES WEEK 48 | # CONFIRMED CASES WEEK 49 | % CHANG E | Outbreak Status |
|--------------|----------------------------|----------------------------|-----------------------------------|--------------|-----------------------|------------------------------------|------------|-----------------------|-------------------|------------|---------------------------|---------------------------|-----------|-----------------|
|              |                            |                            | Lab confirmed                     | Epi Linked   | Clinically Compatible | Lab confirmed                      | Epi Linked | Clinically Compatible |                   |            |                           |                           |           |                 |
| Montserrado  | 5,456                      | 5,373                      | 145                               | 1658         | 3,570                 | 3                                  | 61         | 5                     | 69                | 1.3        | 0                         | 2                         | -         | Ongoing         |
| Nimba        | 1,137                      | 1110                       | 37                                | 187          | 886                   | 0                                  | 1          | 3                     | 4                 | 0.4        | 0                         | 0                         | -         | Ongoing         |
| Margibi      | 827                        | 803                        | 34                                | 136          | 633                   | 0                                  | 0          | 1                     | 1                 | 0.1        | 0                         | 0                         | -         | Ended           |
| Grand Bassa  | 962                        | 924                        | 40                                | 212          | 672                   | 1                                  | 0          | 6                     | 7                 | 0.9        | 0                         | 0                         | -         | Ended           |
| Lofa         | 353                        | 284                        | 32                                | 66           | 186                   | 0                                  | 0          | 0                     | 0                 | 0          | 0                         | 0                         | -         | Ended           |
| Bong         | 603                        | 578                        | 22                                | 21           | 535                   | 0                                  | 1          | 2                     | 3                 | 0.5        | 0                         | 0                         | -         | Ended           |
| Maryland     | 1128                       | 1108                       | 24                                | 308          | 776                   | 0                                  | 0          | 0                     | 0                 | 0          | 5                         | 3                         | -0.4      | Ongoing         |
| Grand Gedeh  | 652                        | 508                        | 34                                | 48           | 426                   | 0                                  | 0          | 0                     | 0                 | 0          | 0                         | 0                         | -         | Ended           |
| Sinoe        | 284                        | 231                        | 36                                | 84           | 111                   | 0                                  | 0          | 0                     | 0                 | 0          | 0                         | 0                         | -         | Ended           |
| Bomi         | 183                        | 147                        | 34                                | 27           | 86                    | 1                                  | 2          | 2                     | 5                 | 3          | 0                         | 0                         | -         | Ended           |
| Grd Cape Mt  | 215                        | 187                        | 17                                | 18           | 152                   | 0                                  | 2          | 1                     | 3                 | 1.6        | 0                         | 0                         | -         | Ended           |
| Grand Kru    | 994                        | 965                        | 22                                | 106          | 837                   | 0                                  | 0          | 2                     | 2                 | 0.2        | 0                         | 0                         | -         | Ended           |
| Gbarpolu     | 67                         | 46                         | 4                                 | 2            | 40                    | 0                                  | 0          | 0                     | 0                 | 0          | 0                         | 0                         | -         | Ended           |
| Rivercess    | 112                        | 84                         | 23                                | 54           | 7                     | 0                                  | 1          | 0                     | 1                 | 1.1        | 0                         | 0                         | -         | Ended           |
| River Gee    | 103                        | 79                         | 0                                 | 0            | 79                    | 0                                  | 0          | 0                     | 0                 | 0          | 0                         | 0                         | -         | Ended           |
| <b>Total</b> | <b>13,077</b>              | <b>12,427</b>              | <b>504</b>                        | <b>2,927</b> | <b>8,997</b>          | <b>5</b>                           | <b>68</b>  | <b>22</b>             | <b>95</b>         | <b>7.8</b> | <b>5</b>                  | <b>5</b>                  |           |                 |

## Public Health Response

### I. Coordination

- ☞ IMS meetings are being held for coordination and mobilization of resources in response counties

### II. Epidemiological Surveillance

- ☞ Active case search and contact tracing ongoing in Grand Kru County

### III. Case management

- ☞ Case management ongoing in affected counties

### IV. Immunization

- ☞ 67% of the cases reported were vaccinated
- ☞ Routine immunization ongoing in all 15 counties

### V. Laboratory

- ☞ Five hundred seven (507) cases have been confirmed by the National Public Health Reference Laboratory from December 13, 2021 – November 15, 2023

### VI. Risk Communication and Community Engagement

- ☞ Community engagement health education ongoing

### VII. Challenges

- ☞ Limited support for response in affected counties

## Acute Flaccid Paralysis (AFP)

- ☞ Zero cases were reported
- ☞ Cumulatively, sixty-six (66) cases were reported
  - Thirty-six (36) tested negative
  - Thirty (30) pending

## Neonatal Tetanus

- ☞ Zero cases were reported
- ☞ Cumulatively, fifty-two (52) cases including 7 deaths reported

## Influenza-Like Illnesses

### Coronavirus Disease (COVID-19)

- ☞ Zero suspected cases were reported
- ☞ Cumulatively, Ninety-five (95) cases have been reported

## Influenza

- ☞ Six (6) suspected cases were reported from Montserrado
- ☞ Six specimens were collected and tested negative
- ☞ Cumulatively, one hundred sixty (160) suspected cases reported
  - Proportion cases with sample collected (155/160) 97%
  - Proportion of cases with sample tested (64/149) 43% and all negative

## Viral Hemorrhagic Diseases

### Lassa fever

- ☞ Four (4) suspected cases were reported from Bong (2), Nimba (1), and Montserrado (1 dead) Counties
- ☞ Specimens were collected; 3 tested negative and 1 pending
- ☞ Cumulatively, two hundred twenty-eight (228) suspected cases reported

- Proportion of suspected cases with a sample collected (212/228) 93%
- Proportion of suspected cases with sample tested (209/212) 98% (confirmed 63, negative 146)
- Death in Confirmed cases 20 (CFR=31.7%)

## Current Outbreak

- ☞ No new confirmed case reported
- ☞ A total of 175 contacts under follow up
- ☞ Cumulative Case Fatality Rate (CFR): 30% (32/107)
- ☞ Three counties currently in outbreak (Bong, Nimba, Montserrado)

**Table 6: Summary of Lassa fever Outbreak, Liberia, January 6, 2022- December 14, 2023**

| County       | Outbreak Districts | Outbreak Start Date | Total suspected cases | Total confirmed cases | Deaths in HCWs | Total Deaths | CFR %      | Total Contacts | # HCW contacts | Contacts became cases | HCW became confirmed case | Contacts under follow up | Contacts completed | Days in countdown | Outbreak Status |
|--------------|--------------------|---------------------|-----------------------|-----------------------|----------------|--------------|------------|----------------|----------------|-----------------------|---------------------------|--------------------------|--------------------|-------------------|-----------------|
| Montserrado  | Bushrod            | 13-Feb-23           | 15                    | 2                     | 0              | 1            | 50%        | 29             | 21             | 0                     | 0                         | 0                        | 29                 | Completed         | Over            |
|              | Central Monrovia   | 3-Mar-23            | 29                    | 1                     | 0              | 1            | 100%       | 28             | 27             | 0                     | 0                         | 0                        | 28                 | Completed         | Over            |
| Bong         | Suakoko            | 21-Apr-23           | 155                   | 45                    | 2              | 9            | 20%        | 473            | 191            | 6                     | 18                        | 44                       | 366                | Active            | Ongoing         |
|              | Sanoyea            | 19-Sep-23           | 2                     | 2                     | 0              | 1            | 50%        | 36             | 18             | 0                     | 0                         | 0                        | 37                 | Active            | Ongoing         |
|              | Kokoya             | 3-Oct-23            | 1                     | 1                     | 0              | 0            | 0%         | 5              | 0              | 0                     | 0                         | 5                        | 0                  | Active            | Ongoing         |
|              | Jorquelleh         | 15-Oct-23           | 12                    | 13                    | 1              | 3            | 23%        | 121            | 86             | 3                     | 3                         | 41                       | 128                | Active            | Ongoing         |
| Grand Bassa  | District 3A&B      | 21-Aug-23           | 86                    | 32                    | 0              | 9            | 28%        | 177            | 40             | 40                    | 0                         | 0                        | 159                | Completed         | Over            |
|              | Buchanan           | 11-Aug-23           | 2                     | 1                     | 0              | 1            | 100%       | 4              | 2              | 0                     | 0                         | 0                        | 0                  | Completed         | Over            |
| Nimba        | Sanniquellie-Mah   | 6-Feb-23            | 42                    | 2                     | 0              | 0            | 0%         | 43             | 35             | 8                     | 0                         | 0                        | 43                 | Completed         | Over            |
|              | Tappita            | 20-Nov-23           | 14                    | 3                     | 0              | 3            | 100%       | 58             | 29             | 4                     | 0                         | 22                       | 36                 | Active            | Ongoing         |
|              | Yarwin Mehnonnoh   | 5-Dec-23            | 1                     | 1                     | 0              | 1            | 100%       | 14             |                | 0                     | 0                         | 14                       | 0                  | Active            | Ongoing         |
|              | Bain-Garr          | 1-Jun-23            | 10                    | 3                     | 0              | 3            | 100%       | 61             | 25             | 0                     | 0                         | 0                        | 31                 | Completed         | Over            |
| Montserrado  | Central Monrovia   | 27-Nov-23           | 1                     | 1                     | 0              | 0            | 0%         | 49             | 0              | 0                     | 0                         | 49                       | 0                  | Active            | Ongoing         |
| <b>Total</b> |                    |                     | <b>370</b>            | <b>107</b>            | <b>3</b>       | <b>32</b>    | <b>30%</b> | <b>1098</b>    | <b>474</b>     | <b>61</b>             | <b>21</b>                 | <b>175</b>               | <b>857</b>         |                   |                 |

## Public Health Measures

- ☞ The National Public Health Institute of Liberia (NPHIL) and the Ministry of Health (MOH) are Providing technical support to the surveillance (i. e. guidance on case investigation, contact tracing, sitrep development, etc.)

### I. Surveillance:

- Active case search and contact tracing ongoing in affected communities and districts
- Development and dissemination of weekly sit-reps by affected counties

### II. Laboratory

- The National Public Health Reference Laboratory continues testing of Lassa fever samples
- A total of 96 Lassa fever cases have been confirmed since this outbreak

### III. Case management and IPC

- Cases isolated and managed at designated facilities
- Ribavirin supply in country are being distributed for treatment of Lf cases to affected counties

## Environmental and Vector Control

- Clean-up campaigns and rodent control measures is ongoing Bong County

## Risk Communication and Community Engagement

- Risk communication and community engagement ongoing in affected and surrounding communities

## Yellow fever

- ☞ Four (4) suspected cases were reported from River Gee (1), Lofa (1), Grand Cape Mount (1), and Maryland (1) Counties
- ☞ Specimens were collected and pending testing
- ☞ Cumulatively one hundred nine (109) suspected cases were reported
  - Three (3) samples (3/91) 3% not transported (Epi week 5 from Grand Gedeh, River Gee, and Grand Kru Counties)

- Proportion of suspected cases with samples collected (91/109) 83%
- The proportion of samples tested is (71/91) 78%
- The proportion of samples pending testing is (17/91) 19%

#### Dengue Fever

- ☞ One (1) suspected case was reported from Maryland County
- ☞ Specimen was collected and pending testing
- ☞ Cumulatively, three (3) suspected cases were reported

#### Ebola Virus Disease

- ☞ Zero cases were reported

#### Diarrheal Diseases

##### Acute Bloody Diarrhea (Suspected Shigellosis)

- ☞ Five (5) cases were reported from Sinoe (3), Rivercess (1), and Nimba (1) Counties
- ☞ Three (3) specimens were collected and pending testing
- ☞ Cumulatively, seven hundred four (704) cases reported
  - Two hundred seventy-five (275) specimens were collected
    - 161 tested negative
    - 3 Confirmed
    - 26 specimens rejected by NPHRL
    - 85 not tested

##### Severe Acute Watery Diarrhea (Suspected Cholera)

- ☞ Seven (7) suspected cases were reported from River Gee (2), Sinoe (2), Nimba (1), Lofa (1), and Maryland (1) Counties
- ☞ Four (4) specimen was collected and pending testing
- ☞ Cumulatively, eight hundred seventy-seven (877) cases reported
  - Two hundred ninety (290) specimens were collected
    - 116 tested negative
    - 12 specimens rejected by NPHRL
    - 162 not tested

#### Other Reportable Diseases

##### Animal bite (Human Exposure to Rabies)

- ☞ Fifty-three (53) animal bites were reported

**Table 7: Distribution of Animal Bite Cases and PEP Administration per County, Liberia, Epi week 49, 2023**

| Counties         | Cases     | Person receiving PEP | PEP doses administered | Cumulative cases (Wk 1-49) | Cumulative PEP administered (Wk 1-49) |
|------------------|-----------|----------------------|------------------------|----------------------------|---------------------------------------|
| Bomi             | 0         | 0                    | 0                      | 65                         | 33                                    |
| Bong             | 3         | 0                    | 0                      | 214                        | 90                                    |
| Gbarpolu         | 1         | 0                    | 0                      | 35                         | 1                                     |
| Grand Bassa      | 7         | 0                    | 0                      | 278                        | 30                                    |
| Grand Cape Mount | 2         | 0                    | 0                      | 73                         | 42                                    |
| Grand Gedeh      | 3         | 1                    | 1                      | 117                        | 15                                    |
| Grand Kru        | 2         | 0                    | 0                      | 267                        | 15                                    |
| Lofa             | 3         | 1                    | 1                      | 231                        | 90                                    |
| Margibi          | 2         | 1                    | 1                      | 198                        | 83                                    |
| Maryland         | 4         | 2                    | 2                      | 204                        | 76                                    |
| Montserrado      | 5         | 0                    | 0                      | 989                        | 254                                   |
| Nimba            | 11        | 2                    | 2                      | 611                        | 164                                   |
| Rivercess        | 5         | 1                    | 1                      | 132                        | 64                                    |
| River Gee        | 0         | 0                    | 0                      | 49                         | 0                                     |
| Sinoe            | 5         | 0                    | 0                      | 148                        | 6                                     |
| <b>Total</b>     | <b>53</b> | <b>8</b>             | <b>8</b>               | <b>3611</b>                | <b>963</b>                            |

## Public Health Actions

- ☞ Ongoing monitoring and follow-up of cases

### Meningitis

- ☞ Zero suspected cases were reported
- ☞ Cumulatively, thirty-nine (39) suspected cases reported
  - Proportion of suspected cases with samples collected (32/39) 82%
  - Proportion of sample tested (28/32) 88%
  - 24 negative and 4 positive (Streptococcal-3 & Hemophilus Influenza)

### Mpox

- ☞ Two (2) suspected cases reported from River Gee County
- ☞ Two (2) specimens were collected and pending testing
- ☞ Cumulatively, one hundred fifty-eight (158) suspected cases reported
  - Twenty-one (21) confirmed

### Unexplained cluster of deaths

- ☞ Zero cases reported

## Events of Public Health Importance

### Maternal Mortality

- ☞ Seven (7) deaths were reported from Montserrado (3), Nimba (3), and Grand Bassa (1) Counties
- ☞ Reported causes: PPH (3), Acute respiratory distressed (2), Obstructed labor (1), and Anemia (1)
- ☞ Reporting Site:
  - Health Facility (7) 100%
- ☞ Cumulatively, two hundred ninety- three (293) deaths reported
  - Proportion of death reviewed (74/293) 25%
  - Proportion of community death (32/74) 43%

### Neonatal Mortality

- ☞ Seven (7) deaths were reported from Montserrado (5), and Margibi (2) Counties
- ☞ Reported causes: Birth Asphyxia (3), Prematurity (2), and Sepsis (2)
- ☞ Reporting site:
  - Health facility: (7) 100%
- ☞ Cumulatively, seven hundred twenty-eight (728) deaths reported

### Adverse Events Following Immunization (AEFI)/Adverse Drug Reaction (ADR)

- ☞ Twenty-eight (28) cases were reported: Montserrado (7), Grand Cape Mount (6), Bomi (5), Sinoe (4), River Gee (3), Maryland (2), and Margibi (1) Counties
- ☞ All reported cases were classified as non-serious
- ☞ Related vaccine:
  - Penta (9/28) 32%
  - Measles (7/28) 25%
  - Others (12/28) 43%
- ☞ Cumulatively, one thousand-eight (1008) events were reported and COVID-19 accounted for (242/1008) 24%

## Neglected Tropical Diseases

### YAWS

- ☞ Zero cases were reported
- ☞ Cumulatively, two hundred fifty-six (256) cases have been reported

### Buruli Ulcer

- ☞ Zero cases were reported
- ☞ Cumulatively, one hundred seventy-one (171) cases have been reported



## Border Surveillance Update

A total of 5606 travelers were recorded for the week with incoming travelers accounting for 52% (2912/5606)

**Table 7: Border activity at the PoE for incoming and outgoing travelers, Liberia, Epi week 49, 2023**

| Type of Ports | Point of Entry       | Weekly total | Arrival      | Departure    | Total travelers with YB | Yellow Book Damage | Card Replaced | Travelers Vaccinated against YF & Issued book | Alerts detected/ Verified | COVID-19 Reactive | Evidence of COVID-19 vaccination card/certificate |
|---------------|----------------------|--------------|--------------|--------------|-------------------------|--------------------|---------------|---|---------------------------|-------------------|---|
| Airport       | James S. Paynes      | 177          | 69           | 108          | 20                      | 0                  | 0             | 0   | 0                         | 0                 | 15  |
|               | Robert Int'l Airport | 4225         | 2229         | 1996         | 4207                    | 18                 | 0             | 8   | 0                         | 0                 | 4183  |
| Seaport       | Freeport of Monrovia | 240          | 120          | 120          | 240                     | 0                  | 0             | 0   | 0                         | 0                 | 240   |
|               | Buchanan Port        | 44           | 22           | 22           | 44                      | 0                  | 0             | 0   | 0                         | 0                 | 44  |
| Land Crossing | Bo Water Side        | 650          | 315          | 335          | 626                     | 4                  | 0             | 20  | 0                         | 0                 | 605   |
|               | Ganta                | 120          | 67           | 53           | 79                      | 10                 | 31            | 7   | 0                         | 0                 | 0   |
|               | Yekepa               | 80           | 47           | 33           | 70                      | 0                  | 0             | 0   | 0                         | 0                 | 6   |
|               | Loguatu              | 70           | 43           | 27           | 29                      | 0                  | 0             | 0   | 0                         | 0                 | 38  |
| <b>Total</b>  |                      | <b>5606</b>  | <b>2,912</b> | <b>2,694</b> | <b>5,315</b>            | <b>32</b>          | <b>31</b>     | <b>35</b>                                     | <b>0</b>                  | <b>0</b>          | <b>5,131</b>                                      |

*Note: Yellow book issue for both arrival and departure; Vaccination coverage for both arrival and departure*

## Public Health Measures

### National level

- ☞ Continue to distribute surveillance weekly ledgers and triplicate Lab alert and submission forms to the counties
- ☞ Providing remote technical and operational support to counties
- ☞ Produced and disseminated situation reports (Lassa fever, Measles, and Mpox outbreaks)

### County-level

#### ☞ Surveillance

- Publication of situational reports
- Active case search ongoing in affected and surrounding communities

#### ☞ Case Management

- Administration of PEP
- Management of measles and Lassa fever cases ongoing in affected counties

**Appendix**

**Summary of Immediately Reportable Diseases, Conditions, and Events by County**

|  |  | Bomi     | Bong     | Gbarpolu | Grand Bassa | Grand Cape Mount | Grand Gedeh | Grand Kru | Lofa     | Margibi  | Maryland  | Montserrado | Nimba     | Rivercess | River Gee | Sinoe     | Total Weekly | Cumulative Reported | Cumulative Lab-confirmed |    |
|--|--|----------|----------|----------|-------------|------------------|-------------|-----------|----------|----------|-----------|-------------|-----------|-----------|-----------|-----------|--------------|---------------------|--------------------------|----|
| <b>No. of Expected Health District</b> |  | 4        | 9        | 5        | 8           | 5                | 6           | 5         | 6        | 4        | 6         | 7           | 11        | 6         | 6         | 10        | 98           |                     |                          |    |
| <b>No. of Health District Reported</b> |  | 4        | 9        | 5        | 8           | 5                | 6           | 5         | 6        | 4        | 6         | 7           | 11        | 6         | 6         | 10        | 98           |                     |                          |    |
| <b>Vaccine Preventable Disease</b>     | Acute Flaccid Paralysis (Suspected Polio)    | A        | 0        | 0        | 0           | 0                | 0           | 0         | 0        | 0        | 0         | 0           | 0         | 0         | 0         | 0         | 0            | 0                   | 30                       | 0  |
|  |  | D        | 0        | 0        | 0           | 0                | 0           | 0         | 0        | 0        | 0         | 0           | 0         | 0         | 0         | 0         | 0            | 0                   | 0                        | 0  |
|  | Measles                                      | A        | 0        | 0        | 1           | 4                | 0           | 3         | 0        | 0        | 0         | 6           | 2         | 1         |           | 1         | 3            | 21                  | 4,741                    | 37 |
|  |  | D        | 0        | 0        | 0           | 0                | 0           | 0         | 0        | 0        | 0         | 0           | 0         | 0         | 0         | 0         | 0            | 0                   | 8                        | 2  |
|  | Neonatal Tetanus                             | A        | 0        | 0        | 0           | 0                | 0           | 0         | 0        | 0        | 0         | 0           | 0         | 0         | 0         | 0         | 0            | 0                   | 52                       | 0  |
|  |  | D        | 0        | 0        | 0           | 0                | 0           | 0         | 0        | 0        | 0         | 0           | 0         | 0         | 0         | 0         | 0            | 0                   | 6                        | 0  |
|  | Yellow fever                                 | A        | 0        | 0        | 0           | 0                | 1           | 0         | 0        | 1        | 0         | 1           | 0         | 0         | 0         | 1         | 0            | 4                   | 109                      | 0  |
|  |  | D        | 0        | 0        | 0           | 0                | 0           | 0         | 0        | 0        | 0         | 0           | 0         | 0         | 0         | 0         | 0            | 0                   | 0                        | 0  |
| <b>Viral Hemorrhagic</b>               | Dengue fever                                 | A        | 0        | 0        | 0           | 0                | 0           | 0         | 0        | 0        | 0         | 0           | 0         | 0         | 0         | 0         | 0            | 0                   | 2                        | 0  |
|  |  | D        | 0        | 0        | 0           | 0                | 0           | 0         | 0        | 0        | 0         | 0           | 0         | 0         | 0         | 0         | 0            | 0                   | 0                        | 0  |
|  | Ebola Virus Disease                          | A        | 0        | 0        | 0           | 0                | 0           | 0         | 0        | 0        | 0         | 0           | 0         | 0         | 0         | 0         | 0            | 0                   | 0                        | 0  |
|  |  | D        | 0        | 0        | 0           | 0                | 0           | 0         | 0        | 0        | 0         | 0           | 0         | 0         | 0         | 0         | 0            | 0                   | 0                        | 0  |
|  | Lassa fever                                  | A        | 0        | 2        | 0           | 0                | 0           | 0         | 0        | 0        | 0         | 0           | 0         | 1         | 0         | 0         | 0            | 3                   | 189                      | 43 |
|  |  | D        | 0        | 0        | 0           | 0                | 0           | 0         | 0        | 0        | 0         | 0           | 1         | 0         | 0         | 0         | 0            | 1                   | 39                       | 19 |
| <b>Influenza-Like</b>                  | COVID-19                                     | A        | 0        | 0        | 0           | 0                | 0           | 0         | 0        | 0        | 0         | 0           | 0         | 0         | 0         | 0         | 0            | 0                   | 11                       | 0  |
|  |  | D        | 0        | 0        | 0           | 0                | 0           | 0         | 0        | 0        | 0         | 0           | 0         | 0         | 0         | 0         | 0            | 0                   | 0                        | 0  |
|  | Influenza Like Illnesses                     | A        | 0        | 0        | 0           | 0                | 0           | 0         | 0        | 0        | 0         | 0           | 0         | 0         | 0         | 0         | 0            | 0                   | 154                      | 0  |
|  |  | D        | 0        | 0        | 0           | 0                | 0           | 0         | 0        | 0        | 0         | 0           | 0         | 0         | 0         | 0         | 0            | 0                   | 0                        | 0  |
| <b>Diarrheal Disease</b>               | Acute Bloody Diarrhoea (Shigellosis)         | A        | 0        | 0        | 0           | 0                | 0           | 0         | 0        | 0        | 0         | 0           | 1         | 1         | 0         | 3         | 5            | 874                 | 0                        |    |
|  |  | D        | 0        | 0        | 0           | 0                | 0           | 0         | 0        | 0        | 0         | 0           | 0         | 0         | 0         | 0         | 0            | 0                   | 0                        | 0  |
|  | Severe Acute Watery Diarrhoea (Cholera)      | A        | 0        | 0        | 0           | 0                | 0           | 0         | 0        | 1        | 0         | 1           | 0         | 1         | 0         | 2         | 2            | 7                   | 877                      | 0  |
|  |  | D        | 0        | 0        | 0           | 0                | 0           | 0         | 0        | 0        | 0         | 0           | 0         | 0         | 0         | 0         | 0            | 0                   | 0                        | 0  |
| <b>Events of Public Health</b>         | Maternal Mortality                           | D        | 0        | 0        | 0           | 1                | 0           | 0         | 0        | 0        | 1         | 0           | 3         | 2         | 0         | 0         | 0            | 7                   | 293                      |    |
|  |  | D        | 0        | 0        | 0           | 0                | 0           | 0         | 0        | 0        | 2         | 0           | 5         | 0         | 0         | 0         | 0            | 7                   | 728                      |    |
|  | AEFI   | A        | 5        | 0        | 0           | 0                | 6           | 0         | 0        | 0        | 1         | 2           | 7         | 0         | 0         | 3         | 4            | 28                  | 1009                     | 0  |
|  |  | D        | 0        | 0        | 0           | 0                | 0           | 0         | 0        | 0        | 0         | 0           | 0         | 0         | 0         | 0         | 0            | 0                   | 0                        | 0  |
|  | Unexplained Cluster of Health Events/Disease | A        | 0        | 0        | 0           | 0                | 0           | 0         | 0        | 0        | 0         | 0           | 0         | 0         | 0         | 0         | 0            | 0                   | 0                        | 0  |
| D                                      |  | 0        | 0        | 0        | 0           | 0                | 0           | 0         | 0        | 0        | 0         | 0           | 0         | 0         | 0         | 0         | 0            | 0                   | 0                        |    |
| <b>Other Reportable Diseases</b>       | Mpox   | A        | 0        | 0        | 0           | 0                | 0           | 0         | 0        | 0        | 0         | 0           | 0         | 0         | 2         | 0         | 2            | 158                 | 14                       |    |
|  |  | D        | 0        | 0        | 0           | 0                | 0           | 0         | 0        | 0        | 0         | 0           | 0         | 0         | 0         | 0         | 0            | 0                   | 0                        | 0  |
|  | Tuberculosis                                 | A        | 0        | 0        | 0           | 0                | 0           | 0         | 0        | 0        | 0         | 0           | 0         | 0         | 0         | 0         | 0            | 0                   | 0                        | 0  |
|  |  | D        | 0        | 0        | 0           | 0                | 0           | 0         | 0        | 0        | 0         | 0           | 0         | 0         | 0         | 0         | 0            | 0                   | 0                        | 0  |
|  | Human Exposure to Rabies (Suspected Human)   | A        | 0        | 3        | 1           | 7                | 2           | 3         | 2        | 3        | 2         | 4           | 5         | 11        | 5         | 0         | 5            | 53                  | 3,611                    | 0  |
|  |  | D        | 0        | 0        | 0           | 0                | 0           | 0         | 0        | 0        | 0         | 0           | 0         | 0         | 0         | 0         | 0            | 0                   | 0                        | 0  |
|  | Meningitis                                   | A        | 0        | 0        | 0           | 0                | 0           | 0         | 0        | 0        | 0         | 0           | 0         | 0         | 0         | 0         | 0            | 0                   | 39                       | 0  |
|  |  | D        | 0        | 0        | 0           | 0                | 0           | 0         | 0        | 0        | 0         | 0           | 0         | 0         | 0         | 0         | 0            | 0                   | 0                        | 0  |
| Unexplained Cluster of deaths          | A  | 0        | 0        | 0        | 0           | 0                | 0           | 0         | 0        | 0        | 0         | 0           | 0         | 0         | 0         | 0         | 0            | 0                   | 0                        |    |
|  | D  | 0        | 0        | 0        | 0           | 0                | 0           | 0         | 0        | 0        | 0         | 0           | 0         | 0         | 0         | 0         | 0            | 1                   | 0                        |    |
| <b>Neglected Tr</b>                    | Buruli Ulcer                                 | A        | 0        | 0        | 0           | 0                | 0           | 0         | 0        | 0        | 0         | 0           | 0         | 0         | 0         | 0         | 0            | 0                   | 119                      | 0  |
|  |  | D        | 0        | 0        | 0           | 0                | 0           | 0         | 0        | 0        | 0         | 0           | 0         | 0         | 0         | 0         | 0            | 0                   | 0                        | 0  |
|  | Yaws   | A        | 0        | 0        | 0           | 0                | 0           | 0         | 0        | 0        | 0         | 0           | 0         | 0         | 0         | 0         | 0            | 0                   | 241                      | 4  |
|  |  | D        | 0        | 0        | 0           | 0                | 0           | 0         | 0        | 0        | 0         | 0           | 0         | 0         | 0         | 0         | 0            | 0                   | 0                        | 0  |
| <b>TOTAL</b>                           |  | <b>5</b> | <b>5</b> | <b>2</b> | <b>12</b>   | <b>0</b>         | <b>6</b>    | <b>0</b>  | <b>5</b> | <b>0</b> | <b>14</b> | <b>0</b>    | <b>17</b> | <b>0</b>  | <b>9</b>  | <b>17</b> | <b>138</b>   | <b>13291</b>        | <b>80</b>                |    |

**D** = Dead **A** = Alive

## Notes

- ☞ **Completeness** refers to the proportion of expected weekly IDSR reports received (target: ≥80%)
- ☞ **Timeliness** refers to the proportion of expected weekly IDSR reports received by the next level on time (target: ≥80%). The time requirement for weekly IDSR reports:
  - Health facility - required on or before 5:00 pm every Saturday to the district level
  - Health district - required on or before 5:00 pm every Sunday to the county level
  - County - required on or before 5:00 pm every Monday to the national level
- ☞ **Non-polio AFP rate** is the proportion of non-polio AFP cases per 100,000 among the estimated population under 15 years of age in 2017 (annual target: ≥2/100,000)
- ☞ **Non-measles febrile rash illness rate** refers to the proportion of Negative measles cases per 100,000 population
- ☞ **Annualized maternal mortality rate** refers to the maternal mortality rate of a given period of less than one year and it is the number of maternal deaths per 100,000 live births
- ☞ **Annualized neonatal mortality rate** refers to the neonatal mortality ratio of a given period of less than one year and it is the number of neonatal deaths per 1,000 live births
- ☞ **Epi-linked** refers to any suspected case that has not had a specimen taken for serologic confirmation but is linked to a laboratory-confirmed case
- ☞ **Confirmed case** refers to a case whose specimen has been tested positive or reactive upon laboratory testing, or has been classified as confirmed by either epidemiologic linkage with a confirmed case or clinical compatibility with the disease or condition

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### Data sources

Data and information is provided by the fifteen County Surveillance Officers and National Public Health Reference Laboratory via regular weekly reports, telephone calls and email exchanges. Situations are evolving and dynamic therefore numbers stated are subject to change.