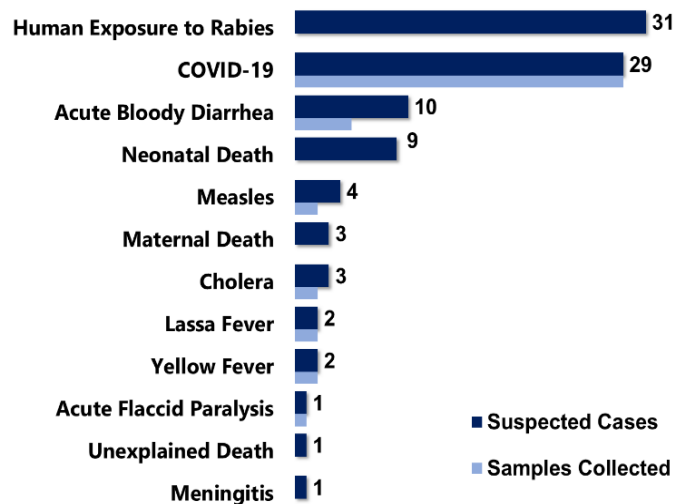


Highlights

Figure 1: Public Health Events Reported during this week



Keynotes and Events of Public Health Significance

- ♦ A total of **96** events of public health importance including **14** deaths were reported
- ♦ **Completeness and timeliness** of health facility reports were both **100%** and **99%**
- ♦ **Ongoing Lassa fever outbreak** in Grand Bassa and Bong Counties
- ♦ **Twenty-nine** new COVID-19 cases recorded from Montserrado, Margibi, Grand Bassa and Bong Counties

Reporting Coverage

Table 1: Health Facility Weekly DSR Reporting Coverage, Liberia, Epi week 4, 2021

| County | Expected Report from Health Facility | Reports Received | Received on Time | Completeness (%) | Timeliness (%) |
|------------------|--------------------------------------|------------------|------------------|------------------|----------------|
| Bomi | 26 | 26 | 26 | 100 | 100 |
| Bong | 57 | 57 | 53 | 100 | 93 |
| Gbarpolu | 16 | 16 | 15 | 100 | 94 |
| Grand Bassa | 36 | 36 | 36 | 100 | 100 |
| Grand Cape Mount | 34 | 34 | 34 | 100 | 100 |
| Grand Gedeh | 24 | 24 | 24 | 100 | 100 |
| Grand Kru | 19 | 19 | 19 | 100 | 100 |
| Lofa | 61 | 61 | 61 | 100 | 100 |
| Margibi | 55 | 55 | 55 | 100 | 100 |
| Maryland | 27 | 27 | 27 | 100 | 100 |
| Montserrado | 365 | 365 | 365 | 100 | 100 |
| Nimba | 91 | 91 | 91 | 100 | 100 |
| Rivercess | 20 | 20 | 20 | 100 | 100 |
| River Gee | 20 | 20 | 20 | 100 | 100 |
| Sinoe | 37 | 37 | 37 | 100 | 100 |
| Liberia | 888 | 888 | 884 | 100 | 99 |

888(100%)
Health facilities reported IDSR data

89 (95%)
Health districts reported IDSR data

884(99%)
Health facilities reported timely IDSR data

- ♦ The national target for weekly IDSR reporting is 80%. Health facility timeliness is monitored at health district level
- ♦ Nimba, Grand Kru, Bong, Sinoe, Rivercess, Margibi, and Montserrado Counties submitted their weekly IDSR report late to the national level

Legend: ≥80 <80

Vaccine Preventable Diseases

Measles

- ☞ Four (4) suspected cases were reported from Montserrado (1), River Gee (1), Grand Cape Mount (1), and Nimba (1) Counties
 - Two specimens collected and pending testing
- ☞ Vaccination status among suspected cases
 - Vaccinated 4 (100%)
- ☞ Age distribution among suspected cases
 - ≥5 years: 2 (50%)
 - <5 years: 2 (50%)
- ☞ Cumulatively, since Epi week one, fourteen (14) suspected cases have been reported
- ☞ Epi-classification is as follows: ten confirmed (10 clinically confirmed, 0 epi-linked, 0 lab confirmed), and 4 discarded (negative)

Acute Flaccid Paralysis

- ☞ One (1) case was reported from Maryland County
- ☞ Specimen was collected, shipped and pending testing
- ☞ Cumulatively, since Epi week one, four (4) cases have been reported

Influenza-Like Illnesses

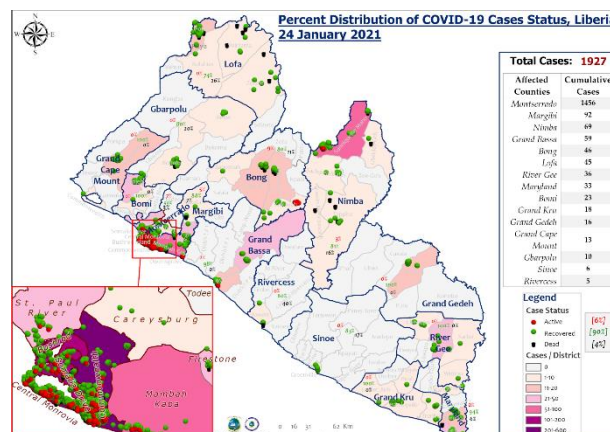
Coronavirus Disease (COVID-19)

Outbreak

- ☞ Twenty-nine (29) new confirmed cases were reported from Montserrado (24), Margibi (2), Nimba (2), and Grand Bassa (1) Counties with male accounting for 62%
- ☞ Since Epi week one, a total of one hundred seventeen (117) confirmed cases have been reported
- ☞ Cumulatively, one thousand nine hundred twenty-seven (1,927) confirmed cases recorded including 84 deaths

Public Health Actions

- ☞ Daily IMS coordination meeting on-going
- ☞ Surveillance activities including active case search, contact tracing and case investigation on-going in affected counties using WHO interim guidelines
- ☞ Reinforcing hand washing in all public areas (markets, health facilities, public offices, checkpoints etc.)
- ☞ Case management ongoing for confirmed cases
- ☞ Compulsory testing among outgoing and incoming travelers ongoing



Viral Hemorrhagic Diseases

Lassa fever

- ☞ Two (2) suspected cases were reported from Bong County
- ☞ Specimens were collected and tested negative
- ☞ Cumulatively, since Epi week one, seven (7) suspected cases have been reported including two (2) deaths
- ☞ Epi-classification is as follows: two (2) confirmed and five (5) not a case with zero (0) pending laboratory testing
 - Proportion of suspected cases with sample collected 100% (7/7)
 - Proportion of suspected cases with sample tested 80% (7/7)
 - Laboratory confirmed: 28.5% (2/7)

Outbreak

Suakoko District, Bong County

- No new confirmed case reported
- The case, a 39-year old male and resident of Phebe Airstrip had symptom onset of illness on January 10, 2021. Case visited the Phebe Hospital on January 11 2021 and was admitted, specimen collected and sent to the NPHRL on January 11, 2021. The case expired on January 12, 2021 and safe burial was conducted. On January 17., 2021, the case was tested positive for Lassa virus. 21 contacts including 18 health workers were identified and line-listed
- Outbreak began Jan 17, 2021
- A total of one (1) confirmed case recorded

Public Health Actions

- Daily contact follow-up ongoing
- Continue to conduct community engagement on the prevention of Lassa fever and rodents control measure

District #3A&B, Grand Bassa County

- No new confirmed case
- The recent case, a 25-year old female and resident of Biabia Camp, LAC Plantation had symptom onset of illness

on December 12, 2020 and admitted at the LAC Hospital on December 24, 2020 for malaria Based on the high index of suspicion for Lassa fever, the case was isolated, specimen collected and sent to the National Public Health Reference Laboratory (NPHRL) on December. 25, 2020. The case expired on December 27, 2020 at about 7:00 am and buried the same day under the supervision of the District Health Team. On December 29, 2020, the case was tested positive for Lassa virus. Six contacts were identified and line-listed including 4 high risks (1 health care worker)

- Outbreak began October 17, 2020
- A total of four (4) confirmed cases recorded with female accounting for 75%
 - Case fatality rate recorded is 75% (3/4)
- Twenty-nine contacts generated including 15 healthcare workers and 14 community members
- All contacts completed follow up

Public Health Actions

- Continue to conduct community engagement on the prevention of Lassa fever and rodents control measure

Yellow fever

- 👉 Two (2) suspected cases were reported from Lofa and Grand Cape Mount Counties
- 👉 Specimens were collected with one negative and one pending testing
- 👉 Cumulatively since Epi week one, five (5) suspected cases have been reported with 3 negative and 1 pending
 - Proportion of suspected case with sample collected 80% (4/5)
 - Proportion of suspected case with sample tested 60% (3/5)

Diarrheal Diseases

Acute Bloody Diarrhea (Suspected Shigellosis)

- 👉 Ten (10) cases were reported from Lofa (2), Grand Gedeh (2), Margibi (2), Maryland (1), and Bong (1) Counties
 - Five specimens were collected and pending testing
- 👉 Cumulatively, since Epi week one, twenty-seven (27) suspected shigellosis cases have been reported

Severe Acute Watery Diarrhea (Suspected Cholera)

- 👉 Three (3) suspected cases were reported from River Gee, Sinoe, and Rivercess Counties
 - Two specimens were collected
- 👉 Cumulatively, since Epi week one, eleven (11) suspected cholera cases have been reported

Other Reportable Diseases

Animal Bites (Human Exposure to Rabies)

- 👉 Thirty-one (31) animal bite cases were reported from Montserrado (7), Maryland (4), Grand Kru (4), Grand Gedeh (4), Margibi (3), Rivercess (3), Grand Bassa (2), Grand Cape Mount (1), Bong (1), Lofa (1) and Nimba (1) Counties
 - No prophylaxes were administered
- 👉 Cumulatively, since Epi week one, one hundred sixteen (116) animal bite cases have been reported

Meningitis

- One (1) suspected case (dead) reported from Bong County
- No specimen collected
- Cumulatively, since Epi week one, two (2) suspected cases have been reported

Events of Public Health Importance

Maternal Mortality

- Three (3) deaths were reported from Montserrado (2) and Bomi (1) Counties
- Causes of deaths: antepartum hemorrhage, sepsis, and ectopic pregnancy
- Reporting sites: Health facility 3 (100%)
- Cumulatively, since Epi week one, sixteen (16) deaths have been reported

Neonatal Mortality

- Nine (9) deaths were reported from Margibi (3), Maryland (1), Montserrado (1), Bomi (1), Grand Gedeh (1), Sinoe (1), and River Gee (1) Counties
- Causes of deaths: birth asphyxia (5) and sepsis (4)
- Reporting sites: Health facility 8 (89%) and Community 1 (11%)
- Cumulatively, since Epi week one, thirty-two (32) deaths have been reported

Unexplained Death

- One (1) death was reported from Lofa County
- No specimen collected
- Cumulatively, since Epi week one, one (1) death has been reported

Cross Border Surveillance Update

- A total of 2607 travelers recorded for the week with incoming travelers accounting for 48.3% and outgoing travelers 51.7%
- None of the travelers were reactive for COVID-19
- The airport accounted for the highest number of travelers for the week

Table 2: Cross border activity at the PoE for Incoming and Outgoing Travelers, Liberia, Epi week 4, 2021

| Type of PoE | Point of Entry | Weekly total | Arrival | Departure | Yellow Book Issued | Yellow Book Damaged | Card Replaced | Travelers Vaccinated | Alerts Verified | COVID-19 Reactive |
|-----------------|------------------------------|--------------|---------|-----------|--------------------|---------------------|---------------|----------------------|-----------------|-------------------|
| Airport | James S. Paynes | 32 | 15 | 17 | 0 | 0 | 0 | 0 | 0 | 0 |
| | Robert International Airport | 1614 | 710 | 904 | 10 | 10 | 0 | 0 | 0 | 0 |
| Seaport | Freeport of Monrovia | 234 | 117 | 117 | 0 | 0 | 0 | 0 | 0 | 0 |
| | Buchanan Port | 168 | 84 | 84 | 0 | 0 | 0 | 0 | 0 | 0 |
| Land Crossing | Bo Water Side | 559 | 310 | 249 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total travelers | | 2,607 | 1,236 | 1,371 | 10 | 10 | 0 | 0 | 0 | 0 |



Liberia IDSR Epidemiology Bulletin

2021 Epi-week 4 (January 18 – 24, 2021)



Public Health Measures

National level

- ☞ Providing technical, logistical and financial support to counties
 - Heighten surveillance in affected and surrounding communities
- ☞ Publishing situational reports to inform stakeholders

County level

- ☞ Publication of situational reports to inform stakeholders
- ☞ Active case search ongoing in affected and surrounding communities
- ☞ Contact tracing, health education, and community engagement ongoing in affected communities
- ☞ Case management ongoing for isolated cases

Appendix

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

| Counties | | | 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 |
|------------------------------------|---|---|------|------|----------|-------------|------------------|-------------|-----------|------|---------|----------|-------------|-------|-----------|-----------|-------|--------------|---------------------|--------------------------|
| No. of Expected Health District | | | 4 | 9 | 5 | 8 | 5 | 6 | 5 | 6 | 4 | 6 | 7 | 6 | 6 | 6 | 10 | 93 | | |
| No. of Health District Reported | | | 4 | 8 | 5 | 8 | 5 | 6 | 5 | 5 | 4 | 6 | 7 | 6 | 6 | 6 | 10 | 91 | | |
| Vaccine Preventable Diseases | Acute Flaccid Paralysis (Suspected Polio) | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 4 | 0 |
| | | D | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | Measles | A | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 1 | 0 | 4 | 14 | 0 |
| | | D | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | Neonatal Tetanus | 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 |
| | Yellow fever | A | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 5 | 0 |
| | | D | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Viral Hemorrhagic Fever | Dengue fever | 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 |
| | 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 | 0 | 0 | 0 | 0 | 2 | 5 | 0 |
| | | D | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 2 |
| Influenza-Like Illnesses | COVID-19 | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 24 | 2 | 0 | 0 | 0 | 28 | 117 | 117 |
| | | D | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Diarrheal Diseases | Acute Bloody Diarrhoea (Shigellosis) | A | 2 | 1 | 0 | 0 | 0 | 2 | 0 | 2 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 10 | 27 | 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 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 3 | 11 | 0 |
| | | D | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Events of Public Health Importance | Maternal Mortality | D | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 3 | 16 | |
| | Neonatal Mortality | D | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 3 | 1 | 1 | 0 | 1 | 0 | 1 | 9 | 32 | |
| | Adverse Events Following Immunization (AEFI) | A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 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 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 |
| Other Reportable Diseases | Monkeypox | 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 |
| | 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 Animal bites (Suspected Rabies) | A | 0 | 1 | 0 | 2 | 1 | 4 | 4 | 1 | 3 | 4 | 7 | 1 | 3 | 0 | 0 | 31 | 116 | 0 |
| | | D | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | Meningitis | A | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 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 | 0 | 0 |
| Neglected Tropical Diseases | Buruli Ulcer | 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 |
| | Yaws | 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 |
| TOTAL | | | 3 | 6 | 0 | 2 | 3 | 7 | 4 | 5 | 10 | 7 | 35 | 4 | 5 | 2 | 2 | 95 | 353 | 0 |

D = Dead A = Alive

Notes

- 👉 **Completeness** refers to the proportion of expected weekly IDSR reports received (target: $\geq 80\%$)
- 👉 **Timeliness** refers to the proportion of expected weekly IDSR reports received by the next level on time (target: $\geq 80\%$). Time requirement for weekly IDSR reports:
 - Health facility - required on or before 5:00pm every Saturday to the district level
 - Health district - required on or before 5:00pm every Sunday to the county level
 - County - required on or before 5:00pm 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: $\geq 2/100,000$)
- 👉 **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 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 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 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

National Public Health Institute of Liberia (NPHIL)

MISSION

To prevent and control public health threats by promoting healthy outcomes and serving as a source of knowledge

VISION

A center of excellence to create health outcomes for Liberians through a strong preventive health system and expertise

Epidemiological bulletin published with support of WHO and CDC

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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.