



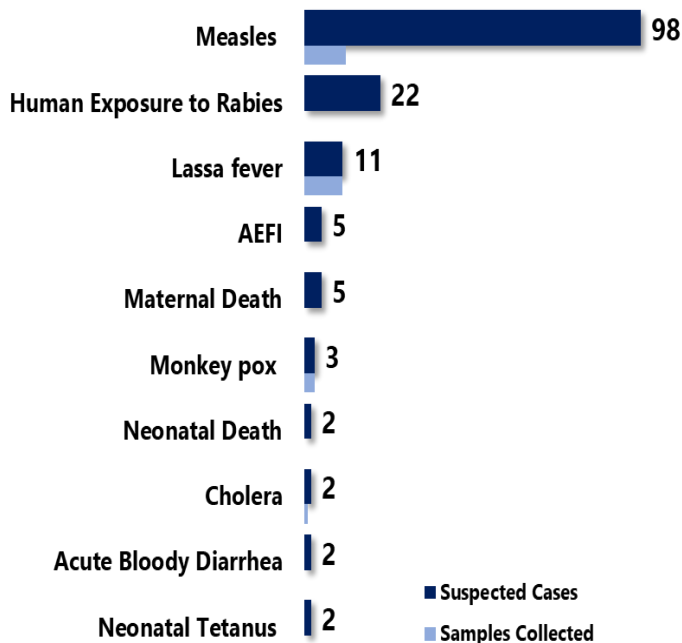
# Liberia IDSR Epidemiology Bulletin

Epi-week 51 (December 19- 25, 2022)

Country Population: 5,104,413 | Volume 17 Issue 51 || Dec 19– 25, 2022 || Data Source: CSOs from 15 Counties and Laboratory

## Highlights

Figure 1: Public Health Events Reported



## Keynotes and Events of Public Health Significance

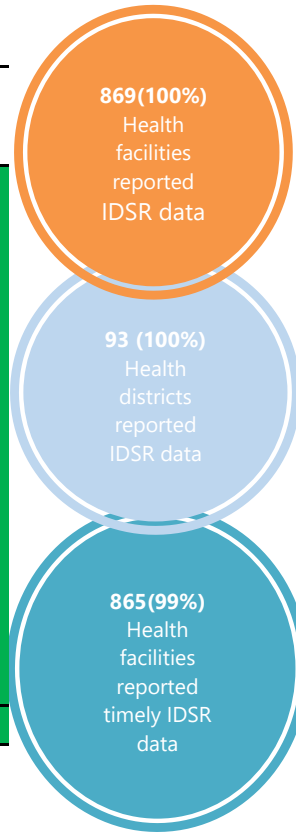
- ◆ A total of 152 events of public health importance including 8 deaths reported
- ◆ Completeness and timeliness of health facility reports were 100% & 99% respectively
- ◆ Ongoing Lassa fever outbreak in 4 Counties
- ◆ Ongoing Measles outbreak in 13 Counties
- ◆ Ongoing Monkeypox outbreak in Rivercess and Lofa Counties

## Adverse Events Following Immunization/Adverse Drug Reaction

## Reporting Coverage

Table 1: Health Facility Weekly IDSR Reporting Coverage, Liberia, Epi-week 51, 2022

County	Expected Reports From HF*	Reports Received	Received on Time	Completeness (%)	Timeliness (%)
Bomi	26	26	26	100	100
Bong	57	57	57	100	100
Gbarpolu	16	16	16	100	100
Grand Bassa	36	36	36	100	100
Grand Cape Mount	34	34	34	100	100
Grand Gedeh	24	24	24	100	100
Grand Kru	23	23	23	100	100
Lofa	66	66	66	100	100
Margibi	68	68	68	100	100
Maryland	27	27	27	100	100
Montserrado	326	326	323	100	99
Nimba	88	88	88	100	100
Rivercess	21	21	21	100	100
River Gee	20	20	20	100	100
Sinoe	37	37	37	100	100
<b>Liberia</b>	<b>869</b>	<b>869</b>	<b>865</b>	<b>100</b>	<b>99</b>



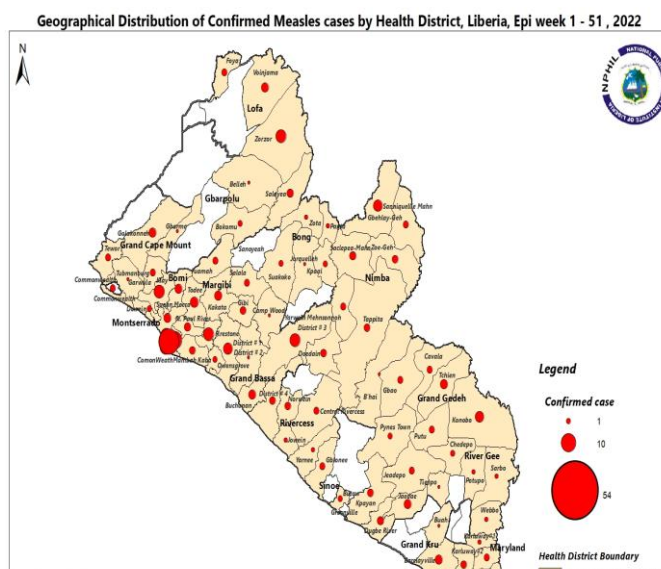
- ◆ The national target for weekly IDSR reporting is 80%. Health facility timeliness is monitored at the health district level
- ◆ All counties submitted weekly IDSR reports to the national level on time

Legend: ≥80 <80

## Vaccine-Preventable Diseases

### Measles

- 👉 Ninety-eight (98) suspected cases were reported: Maryland (37), Grand Kru (19), Grand Bassa (15), Montserrado (11), Margibi (5), Sinoe (3), Nimba (3), Rivercess (2), Grand Cape Mount (2), and Lofa (1) Counties
- 👉 Twelve (12) specimens collected and pending testing
- 👉 Vaccination status among suspected cases
  - Vaccinated: (40) 41%
  - Not vaccinated: (25) 26%
  - Unknown: (33) 33%
- 👉 Age distribution among suspected cases
  - < 5 years: (45) 46%
  - ≥5 years: (53) 54%
- 👉 Cumulatively, eight thousand seven hundred seventy-one (8,771) suspected cases have been reported including 86 deaths
  - (8,187) 93% confirmed:
    - ✓ Laboratory confirmed: (488/8,187) 6%
    - ✓ Clinically compatible: (580/8,187) 7%
    - ✓ Epidemiologically linked: (7,119/8,187) 87%
  - Non-measles discarded: 584
    - ✓ 58 tested positive for Rubella
- 👉 Proportion of samples collected: (1,408/8,771) 16%
- 👉 Proportion of samples tested: (1,072/1,408) 76%
- 👉 CFR: (86/8,187) 1.1%



## Outbreak

### Measles: (Situation update from 13<sup>th</sup> December 2021- 25<sup>th</sup> December 2022)

#### Montserrado County: Commonwealth, Bushrod, Somalia Drive, St. Paul, Central Monrovia, Todee, and Careysburg Districts

- 👉 Eleven (11) new cases were reported from Bushrod (4), Commonwealth (4), Todee (6), and Somalia Drive (1) Districts
- 👉 A total of 4,296 cases have been confirmed including sixty-five (67) deaths
  - Median age 6 (1 month-59 year)
  - Vaccinated - (2,071/4,296) 48.2%
  - Not Vaccinated- (2,158/4,296) 50.2%
  - CFR (67/4,296) 1.6%

#### Bong County: Suakoko, Jorquelleh, Salala, and Kokoyah Districts (Situation update from 20<sup>th</sup> December 2021- 25<sup>th</sup> December 2022)

- 👉 No new case was reported
- 👉 A total of 366 cases have been confirmed including two (2) deaths
  - Median age 8 (1 month - 38 years)
  - Vaccinated - (149/366) 40.7%
  - Not vaccinated - (215/366) 58.7%
  - CFR (2/366) 0.5%

#### Lofa County: Voinjama, Foyah, Zorzor, and Salayea Districts (Situation update from 21<sup>st</sup> January- 25<sup>th</sup> December 2022)

- 👉 One (1) new case was reported from Zorzor District
- 👉 A total of 190 cases have been confirmed



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- Median age: 10 (2 months-46years)
- Vaccinated: (174/190) 92%
- Not vaccinated: (16/190) 8%

## **Nimba County: Gbehlay-Geh, Sacleapea-Mah, Zoe-Geh, Tappita, Yarwin Mehnsonnoh, and Sanniquellie-Mah Districts (Situation update from 20<sup>th</sup> January-25<sup>th</sup> December 2022).**

👉 Three (3) new cases were reported from Sanniquellie-Mah District

👉 A total of 740 cases have been confirmed including one death

- Median age 7 (2 months- 48years)
- Vaccinated: (175/740) 23.6%
- Not Vaccinated: (564/740) 76.2%
- CFR (1/740) 0.1%

## **Maryland County: Harper, Karluway II, and Pleebo Districts (Situation update from 1<sup>st</sup> February- 25<sup>th</sup> December 2022)**

👉 Thirty-six (36) new cases were reported from Pleebo (25), and Karluway II (11) Districts

👉 A total of 352 cases have been confirmed

- Median age 7 (7 months-48 years)
- Vaccinated: (44/352) 13%
- Not Vaccinated: (308/352) 87%

## **Grand Bassa County: District #1, District #2, District #3 A&B, and Buchanan Districts (Situation update from 22<sup>nd</sup> April -25<sup>th</sup> December 2022)**

👉 Twenty (20) new cases were reported in Buchanan (11), and District #3 A&B (8), and District #1(1) Districts

👉 A total of 746 cases have been confirmed including 7 deaths

- Median age 7 (1 month-45 years)
- Vaccinated: (292/746) 39%
- Not Vaccinated: (447/746) 60%
- CFR (7/746) 1%

## **Bomi County: Klay, Senjeh, and Suehn Mecca Districts (Situation update from 14<sup>th</sup> March-25<sup>th</sup> December 2022)**

👉 No new case was reported

👉 A total of 80 cases have been confirmed including 5 deaths

- Median age 7 (1 month-48 year)
- Vaccinated: (35/80) 44%
- Not Vaccinated: (40/80) 50%
- CFR (5/80) 6%

## **Grand Kru: Barclayville, and Dorbor Districts (Situation update from 14<sup>th</sup> March – 25<sup>th</sup> December 2022)**

👉 Nineteen (19) new cases were reported from Barclayville (15), and Trehn (4) Districts

👉 A total of 239 cases have been confirmed

- Median age 9 (53 months-18 years)
- Vaccinated: (180/239) 75%
- Not Vaccinated: (59/239) 25%

## **Rivercess: Doedain, and Jowein Districts (Situation update from 16<sup>th</sup> March – 25<sup>th</sup> December 2022)**

👉 Two (2) new cases were reported from Jowein District

👉 A total of 80 confirmed cases have been confirmed including 1 death

- Median age 5 (6 months -36 years)
- Vaccinated: (60/80) 75%
- Not Vaccinated: (19/80) 23.7%
- CFR (1/80) 1.3%



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## **Margibi County: Firestone, Gibi, Kakata, and Mamba Kaba Districts (Situation update from 21<sup>st</sup> February–25<sup>th</sup> December 2022)**

- 📁 Three (3) new cases were reported from Gibi (2), and Kakata (1) Districts
- 📁 A total of 598 cases have been confirmed
  - Median age 6 (4 months - 67 years)
  - Vaccinated: (293/598) 49%
  - Not Vaccinated: (305/598) 51%

## **Grand Cape Mount County: Gola Konneh, and Tewor Districts (Situation update from 10<sup>th</sup> March –25<sup>th</sup> December 2022)**

- 📁 One (1) new case was reported from Gola Konneh District
- 📁 A total of 121 cases have been confirmed including 3 deaths
  - Median age 12 (2 months – 45 years)
  - Vaccinated: (106/121) 88%
  - Not Vaccinated: (12/121) 10%
  - CFR: (3/121) 2%

## **Grand Gedeh County: Tchien, Konobo, B'hai, and Gbao Districts (Situation update from 10<sup>th</sup> March–25<sup>th</sup> December 2022)**

- 📁 No new case was reported from
- 📁 A total of 143 cases have been confirmed
  - Median age 6 (6 months-35 years)
  - Vaccinated (51/143) 36%
  - Not Vaccinated: (92/143) 64%

## **Sinoe: Gblonee, Dugbeh River, Kpanyan, Jaedae, and Jedepo Districts (Situation update from 19<sup>th</sup> May – 25<sup>th</sup> December 2022)**

- 📁 Two (2) new cases were reported from Kpanyan and Dugbeh River districts
- 📁 A total of 146 cases have been confirmed
  - Median age 6 (2 months-38 years)
  - Vaccinated: (73/146) 50%
  - Not Vaccinated (73/146) 50%

## **Public Health Response**

### **I Coordination**

- 📁 Ongoing monitoring of measles surveillance data with the provision of feedback to relevant stakeholders and developmental partners

### **II. Epidemiological Surveillance**

- 📁 Active case search and line listing of cases ongoing

### **III. Case Management**

- 📁 Isolation and treatment of cases ongoing

### **IV. Immunization**

- 📁 Routine immunization intensified across the country targeting 9 to 23 months

### **V. Laboratory**

- 📁 Four hundred eighty-eight (488) cases have been confirmed by the laboratory the 15 counties

### **VI. Risk Communication and Community Engagement**

- 📁 Community engagement and health education ongoing in affected counties



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## Next steps

- NPHIL/partners to procure essential drugs for case management
- Develop national Measles preparedness and response guide.
- Develop and validate the national Measles and Rubella Surveillance guide.
- Develop and validate Measles SOP

## Acute Flaccid Paralysis (AFP)

- 👉 Zero case reported
- 👉 Cumulatively, one hundred-seven (107) cases have been reported
  - 106 specimens collected
  - 86 tested and 20 pending testing
    - 70 negative
    - 16 Non-polio enteroviruses (NPENT)

## Neonatal Tetanus

- 👉 Two (2) cases were reported from Grand Kru and Rivercess (including 1 death) Counties
- 👉 Cumulatively, fifty-one (51) clinically diagnosed cases reported

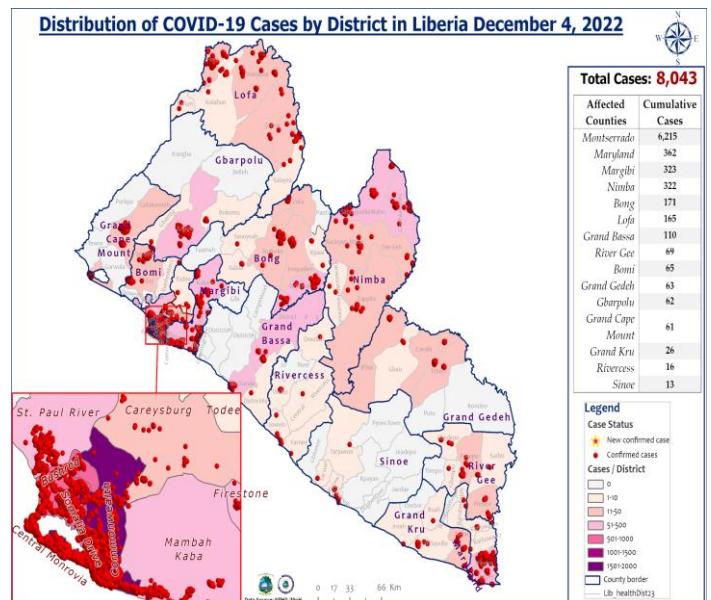
## Influenza-Like Illnesses

### Coronavirus Disease (COVID-19)

#### Outbreak

- 👉 No new confirmed case was reported
- 👉 A total of one thousand one hundred-seven (1,107) confirmed cases have been reported since epi week 1
- 👉 Cumulatively, eight thousand forty-three (8,043) confirmed cases, including 294 deaths
  - 601 healthcare workers
- 👉 A total of 17,827 contacts have been generated
  - 1,772 healthcare workers

Figure 2: Geographical Distribution of Laboratory Confirmed COVID-19 Cases by Health Districts, Liberia, as of Dec 19-25, 2022



## Public Health Actions

- 👉 IMS coordination meeting ongoing.
- 👉 Surveillance activities including active case search and case investigation ongoing in the affected counties using WHO interim guidelines
- 👉 Case management ongoing for confirmed cases
- 👉 Compulsory testing among outgoing travelers as required by the country of destination ongoing

## Influenza Like Illnesses

- 👉 Zero cases reported
- 👉 Cumulatively, eighty-five (85) cases have been reported



## Viral Hemorrhagic Diseases

### Lassa fever

- 👉 Eleven (11) suspected cases were reported from Bong (6), Grand Bassa (3), and Montserrado (2) Counties
- 👉 Specimens were collected and pending testing
- 👉 Cumulatively, two hundred three (203) suspected cases have been reported including 34 deaths
  - Seventy-three (73) confirmed cases were recorded including 23 deaths
  - One hundred twenty-four (124) negatives
  - Case Fatality Rate: (23/73) 32%
  - Proportion of suspected cases with a sample collected (202/203) 99%
  - Proportion of suspected cases with sample tested (197/202) 98%
    - 3 specimens rejected (inadequate specimen, wrong packaging, wrong collection tube)
      - 1 not collected

## Outbreak

### Lassa fever disease: (Sitrep update as of December 25, 2022)

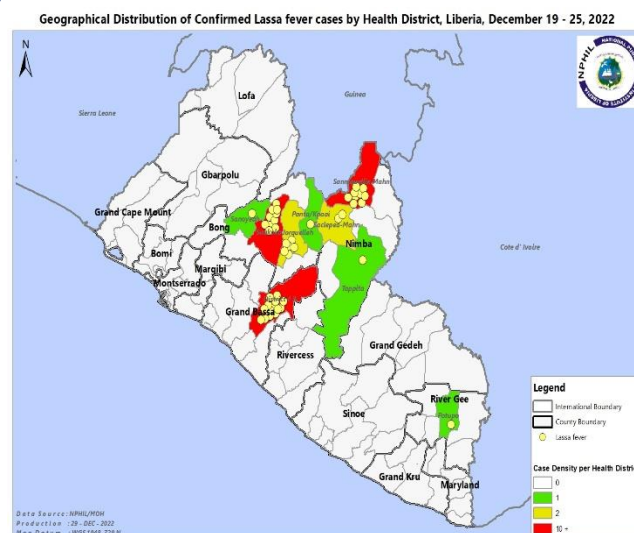
- 👉 One new confirmed case reported
- 👉 Twenty-five (25) contacts under 21 days' follow-up
- 👉 Cumulatively, seventy-three (73) laboratory-confirmed cases including 23 deaths reported (CFR=32%)

### Grand Bassa County: District #3A&B

- 👉 One new confirmed case reported
  - A 32-year-old-female from Gba Town, District #3A&B
  - Onset of symptom was December 18, 2022, and presented with fever, nausea, dizziness, diarrhea, weakness, and headache
  - On December 21, 2022, she sought treatment at LAC Hospital, suspected of Lassa fever, and was isolated
  - On December 21, 2022, specimen was collected and sent to the National Public Health Reference Laboratory the same day. Ribavirin treatment was initiated on that same day
  - The specimen tested Lassa fever positive on December 27, 2022, and the results were released on the same day.
  - A total of seven (7) contacts have been identified and line-listed
  - The case is currently alive and in isolation
- 👉 Cumulative confirmed cases: Twenty-nine (29)
  - CFR (6/29) 21%
  - All reported from District #3 A&B
- 👉 Cumulatively, 140 contacts including thirteen healthcare workers were generated since this year
  - Fourteen (14) contacts are currently under follow-up

### Public Health Measures

- NPHIL provides technical support to the county
- A one-day district meeting on Lassa fever prevention and control creating awareness of the prevention of Lassa fever was conducted in two districts (District 3A&B and district 2 in Grand Bassa county)





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- Affected communities were empowered with the WASH package to enable them to undertake short-term interventions that will improve the sanitation situation in each community thereby helping in Lassa fever prevention and control
- Health workers and visitors are encouraged to enhance IPC practices by regular washing of hands
- Limited community engagement

## Bong County: Suakoko District

- 👉 On new confirmed case was reported
- 👉 Cumulative confirmed cases: Twenty-five (25)
  - CFR: (5/25) 20%
- 👉 Districts that have reported confirmed cases since this year:
  - Suakoko District: 17 cases (4 deaths)
  - Jorquelleh District: 6 cases (1 death)
  - Sanoyea District: 1 case
  - Kpaai District: 1 case
- 👉 Cumulatively, 222 contacts including 129 HCWs have been recorded
  - Eight (8) contacts from the confirmed case in River Gee are under follow up

## Public Health Measures

- 👉 Risk communication interventions
  - Daily health talk in all health facilities on priority diseases
  - Airing of LF preventive and control messages
- 👉 Case Management
  - Confirmed case is isolated and being managed
- 👉 Surveillance
  - Active case searches ongoing in the affected health districts
  - Heighten surveillance in all affected communities and districts daily situational reports are shared regularly at the national level
  - Daily situational reports are shared regularly at the national level
  - A one-day district meeting on Lassa fever prevention and control creating awareness of the prevention of Lassa fever was conducted in two districts in (Jorquelleh & Suakoko districts in Bong County)
  - Affected communities were empowered with the WASH package to enable them to undertake short-term interventions that will improve the sanitation situation in each community thereby helping in Lassa fever prevention and control

## Nimba County: Sanniquellie-Mah District

- 👉 No new confirmed case reported
- 👉 Countdown to end of outbreak: 39/42
- 👉 Cumulative confirmed cases: Seventeen (17)
  - CFR (11/17) 65%
- 👉 Districts with confirmed cases since this year:
  - Sanniquellie-Mah: 13 cases (9 deaths)
  - Sacleapea-Mah: 3 cases (1 death)
  - Tappita: 1 case (dead)
- 👉 Cumulatively, 294 contacts including 187 HCWs have been generated since this year
  - All contacts have completed 21 days follow-up

## Public Health Measures

- NPHIL and MOH providing technical support to the county



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- A one-day district meeting on Lassa fever prevention and control creating awareness of the prevention of Lassa fever was conducted in two districts in (Sanniquellie-Mah & Saclepea-Mah Districts in Nimba County)
- Affected communities were empowered with the WASH package to enable them to undertake short-term interventions that will improve the sanitation situation in each community thereby helping in Lassa fever prevention and control
- Health workers and visitors are encouraged to enhance IPC practices by regular washing of hands

## River Gee County: Putopo District

- 👉 No new confirmed case reported
- 👉 Countdown to end of outbreak: 34/42
- 👉 Cumulative confirmed case: One
  - CFR (1/1) 100%
- 👉 Districts with confirmed cases since this year:
  - Putopo: 1 case (dead)
- 👉 Cumulatively, 14 contacts including 5 HCWs have been generated since this year
  - All contacts have gone 21 days follow-up

## Public Health Measures

- 👉 Infection Prevention Control
  - Infection prevention control actively heighten at the health facility
  - Ensure adherence to IPC practices by healthcare workers
- 👉 Case Management
  - No case in isolation
- 👉 Surveillance
  - All 14 contacts under monitoring and follow-up
  - Active case searches ongoing in the affected communities and health facilities

## Yellow fever

- 👉 Zero case reported
- 👉 Cumulatively, eighty-eight (88) suspected cases have been reported
  - Proportion of suspected cases with samples collected (78/88) 87%
  - Proportion of suspected cases with samples not collected (10/86) 12%
- 👉 Samples collected and tested
  - Tested negative (67/78) 86%
  - Pending testing (6/78) 8%
  - Not transported (5/78) 6%

## Ebola Virus Disease

- 👉 Zero suspected cases reported
- 👉 Cumulatively, one (1) suspected case has been reported from Grand Cape Mount (tested Negative)

## Diarrheal Diseases

### Acute Bloody Diarrhea (Suspected Shigellosis)

- 👉 Two (2) cases were reported from Sinoe and Lofa Counties
- 👉 No specimen was collected
- 👉 Cumulatively, four hundred forty-one (441) suspected cases reported
- 👉 Two hundred twenty-two (221) specimens were collected
- 👉 One hundred seventy (170) received by the lab
  - 11 rejected (inadequate specimen, wrong packaging)
  - 25 specimens discarded





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- 134 tested
  - 133 negatives
  - 1 positive (epi week 24, from Grand Gedeh county)

## Severe Acute Watery Diarrhea (Suspected Cholera)

- 👉 Two (2) suspected cases were reported from Grand Kru and Maryland counties
- 👉 One specimen was collected and pending testing
- 👉 Cumulatively, three hundred seventy (370) suspected cases reported
  - Two hundred twelve (212) specimens collected
  - One hundred thirty-three (133) received by the lab
    - 5 rejected (inadequate specimen, wrong packaging, specimen not label)
    - 42 specimens discarded
    - 86 tested negatives

## Other Reportable Diseases

### Animal bite (Human Exposure to Rabies)

- 👉 Twenty-two (22) animal bite cases were reported: Nimba (5), Grand Kru (3), Rivercess (3), Grand Gedeh (2), Lofa (2), Montserrado (2), Bomi (2), Margibi (1), Maryland (1), and Bong (1) Counties
  - PEP was administered (2/22) 9%
- 👉 Cumulatively, two thousand fifty-three (2,053) animal bite cases reported
  - Dog bites account for 99.9%
  - Snake bite account for 0.1%
  - 1-4 doses (PEP) administered to (394/2,053) 19% of patients

## Public Health Actions

- 👉 Ongoing monitoring and follow-up of cases
- 👉 Quarantined (4/22) 18% of suspected rabid dogs

## Meningitis

- 👉 Zero cases reported
- 👉 Cumulatively, thirty-four (34) suspected cases were reported with one (1) confirmed
  - Proportion of suspected cases with samples collected (20/34) 59%
  - Proportion of suspected cases with samples not collected (14/34) 41%
  - Proportion of sample tested (15/20) 75%
    - Tested negative (14/20) 70%
    - Pending testing (5/34) 15%

## Monkeypox

- 👉 Three (3) suspected cases were reported from Maryland (2), and Lofa (1) Counties
- 👉 Three specimens were collected: 1 tested positive and 2 pending testing
- 👉 Cumulatively, sixty-eight (68) suspected cases were reported with four (4) confirmed

## Outbreak

### Monkeypox: (Sitrep update as of December 19-25, 2022)

- 👉 Two (2) new confirmed cases were reported from Lofa County
  - Ten (10) contacts are line-listed and being monitored
- 👉 Cumulative contacts under follow-up: 16
- 👉 Total confirmed cases reported: 3
- 👉 Counties currently in outbreak: 2



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## Rivercess County: District Jay Judoe Town in Jo-River

☞ The current case is a 53-year-old male teacher from Belvenee, Kploh clinic catchment community. Symptoms onset was November 17, 2022. He presented with body pain, difficulty swallowing, sore throat, abdominal pain, and severe headache, chills, fluid-filled rashes on the entire body including palms with a history of herbal home treatment. The case was investigated by the surveillance team and three separate specimens (blood/serum, crusts, and lesion swabs) were collected and sent to the National Public Health Reference Laboratory (NPHRL) on November 28, 2022. On December 5, 2022, the case was confirmed Monkeypox positive. The case traveled from Jay Judoe Town in Jo-River District, Rivercess County around the last week of October 2022 to Belvenee Town in Central "C" District for an herbal treatment. He had contact with bush or domestic animals in Belvenee where he was seeking herbal treatment. A total of six (6) contacts including 2 healthcare workers and four (4) family members have been identified, line listed, and monitored.

## Lofa County: Zorzor and Salayea Districts

☞ **Case 1:** A 7-year-old female, resident of Gbanway Town, Zorzor District. She visited the Gbanway Clinic on December 9, 2022, presenting with a fever and rashes on the soles of her palm and feet. The case was suspected of Monkeypox, two specimens (blood/serum and lesion swab) were collected on December 9, 2022, and sent to the National Public Health Reference Laboratory (NPHRL). She was treated with antibiotics, analgesics, and calamine lotion and sent home for close monitoring. Positive Laboratory result was released on December 22, 2022. Five (5) contacts including relatives, friends, and others have been line-listed and undergoing follow-up. The case is gradually responding to treatment. There has been no epi-linked established so far. An investigation is still ongoing to establish the source of the infection.

☞ **Case 2:** A 7-year-old male student, resident of Sucromu Town Salayea District. He was referred by the Sucromu Clinic to the Curran Lutheran Hospital on December 12, 2022, for further management of his illness. Upon arrival, he was suspected of monkeypox, isolated, specimens were collected and sent to the NPHRL. He was placed on antibiotics, analgesics, and calamine lotion treatment in isolation for eight days while awaiting laboratory confirmation. On 19th December 2022, the case was discharged after he recovered. Medical records revealed that there are an unspecified number of suspects in the Sucromu community with similar conditions. The mother of the child also revealed that her son has been interacting with many other persons in Sucromu Town which might have had epidemiologically linked to his infection. Positive Laboratory result was released on December 22, 2022. Five contacts were identified, line listed, and monitored. No new case has been identified so far.

## Public Health Measures

### I. Coordination

- National Public Health Institute of Liberia (NPHIL) and the Ministry of Health (MOH) along with partners are also providing technical support to the County Health Team
- Incident Management System activated to coordinate the response
- The county Rapid Response Team has been activated to assess the progress of the confirmed Monkeypox response activities

### II. Epidemiological Surveillance

- Active case search, case investigation, and contact tracing ongoing in the affected and neighboring communities and districts
- Development and dissemination of Sitrep by affected county and national

### III. Laboratory

- The National Public Health Reference Laboratory continues testing of Monkeypox samples
- Three (3) specimens collected and tested
- Three (3) monkeypox cases have been confirmed



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## IV. Case management and IPC

- Supportive management is ongoing for confirmed cases
- Symptomatic treatment of the suspected case initiated
- One case has been treated and discharged
- IPC measures instituted in affected communities and schools
  - All affected communities advised following IPC protocol

## V. Risk Communication and Community Engagement

- Community engagement and awareness with local leaders and community development health committees in the affected community and surrounding towns ongoing
- Radio talk show ongoing to create public awareness in the affected community and surrounding towns

## Key Challenges

- No specimen collection kits for monkeypox
- Limited support to enhance active case finding in Monkeypox affected and neighboring districts
- No support from county-based partners for response activities
- Delay in sending lab results to the Counties
- Lack of IPC materials for response activities
- Shortages of updated samples collection (EDTA blood tubes) materials
- Limited case-based forms for the case investigators (Lofa)
- Limited monkeypox standard case definitions

## Events of Public Health Importance

### Maternal Mortality

- 📁 Five (5) deaths were reported from Margibi, Sinoe, Nimba, Gbarpolu, and Maryland Counties
- 📁 Reported causes: PPH (4) and Multiple organ failure (1)
- 📁 Reported sites:
  - Health facility: (4) 99%
  - Community: (1) 1%
- 📁 Cumulatively, two hundred seventy-five (275) deaths have been reported
  - Proportion of deaths reviewed (49/275) 18%
  - Proportion of community deaths (30/275) 11%
    - Proportion of community deaths reviewed: (8/30) 27%

### Neonatal Mortality

- 📁 Two (2) deaths were reported: Grand Kru and Nimba Counties
- 📁 Reported causes: Birth asphyxia (2)
  - Health facility: (1) 50%
  - Community: (1) 50%
- 📁 Cumulatively, seven hundred forty-seven (747) deaths have been reported

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

- 📁 Five (5) cases were reported from Grand Kru County
- 📁 Related vaccine:
  - Penta (3/5) 60%
  - COVID-19 (2/5) 40%



# Liberia IDSR Epidemiology Bulletin

Epi-week 51 (December 19- 25, 2022)

- 👉 Cumulatively, five hundred eighty-nine (589) events were reported with (411/589) 70% related to COVID-19
- 👉 Proportion of COVID-19 vaccine
  - J&J vaccine – (290/411) 71%
  - AstraZeneca – (6/411) 1%
  - Pfizer – (115/411) 28%
- 👉 Proportion of other vaccine-related events – (178/589) 30%

## Public Health Actions

- 👉 All events were investigated, categorized as non-serious AEFI, and symptomatically treated
- 👉 Active case search and community engagement ongoing

## Border Surveillance Update

- 👉 A total of 9,694 travelers were recorded for the week with incoming travelers accounting for 54% (5,271/9,694)

**Table 2: Border activity at the PoE for Incoming and Outgoing Travelers, Liberia, Epi week 51, 2022**

Type of Ports	Point of Entry	Weekly total	Arrival	Departure	Total travelers with YB	Yellow Book Damage	Card Replaced	Vaccinated against YF & Issued	Alerts detected/ Verified	COVID-19 Reactive	Evidence of COVID-19 vaccination card/certificate
Airport	James S. Paynes	93	47	46	72	0	0	0	0	0	62
	Robert Int'l Airport	3769	1889	1880	2600	97	0	0	0	0	3000
Seaport	Freeport of Monrovia	128	64	64	128	0	0	0	0	0	128
	Buchanan Port	142	71	71	142	0	0	0	0	0	142
Land Crossing	Bo Water Side	559	326	233	394	0	0	0	0	0	163
	Ganta	194	86	108	31	8	10	0	0	0	26
	Yekepa	40	29	11	21	0	0	0	0	0	0
	Loguatu	174	90	84	200	13	0	0	0	0	107
	Yeala	168	79	89	0	0	0	0	0	0	0
	Kpazagizzia	81	39	42	0	0	0	0	0	0	0
	Bolongoidu	456	356	100	0	0	0	0	0	0	0
	Lawalazu	120	90	30	0	0	0	0	0	0	0
	Safedu	287	198	89	0	0	0	0	0	0	0
	Konadu	406	294	112	0	0	0	0	0	0	0
	Foya Tengia	822	388	434	0	0	0	0	0	0	0
	Mendicoma	1160	630	530	0	0	0	0	0	0	0
	Sorlumba	640	365	275	0	0	0	0	0	0	0
Worsonga	455	230	225	0	0	0	0	0	0	0	
<b>Total</b>		<b>9,694</b>	<b>5,271</b>	<b>4,423</b>	<b>3,588</b>	<b>118</b>	<b>10</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>3,628</b>

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

## Public Health Measures

### National level

- 👉 National bridging workshop annual review meeting
- 👉 Distribution of tablets and laptops ongoing at national and 7 designated POEs
- 👉 Ongoing distribution of post-exposure prophylaxis for rabies to counties
- 👉 Ongoing Environmental interventions in Lassa fever hotspot communities
- 👉 Continued support for operational activities ongoing



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## County-level

### 👉 Surveillance

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

### 👉 Case Management

- Administration of PEP and ribavirin
- Management of measles cases ongoing

**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	6	6	6	10	93			
<b>No. of Health District Reported</b>		4	9	5	8	5	6	5	6	4	6	7	6	6	6	10	93			
<b>Vaccine Preventable Diseases</b>	Acute Flaccid Paralysis (Suspected Polio)	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	107	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	15	2	0	19	1	5	37	11	3	2	0	3	98	8,771	488
		D	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	84	0
	Neonatal Tetanus	A	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	47	0
		D	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	4	0
	Yellow fever	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	88	0
		D	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Viral Hemorrhagic Fe</b>	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	1	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	1	0
	Lassa fever	A	0	6	0	3	0	0	0	0	0	0	2	0	0	0	0	11	169	50
		D	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	34	23
<b>Influenza-Like Illne</b>	COVID-19	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8,014	8
		D	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	294
	Influenza Like Illnesses	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	85	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	1	0	0	0	0	0	0	0	1	2	441	1
		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	1	0	0	1	0	0	0	0	0	2	370	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	1	0	0	0	0	1	1	0	1	0	0	1	5	275		
	Neonatal Mortality	D	0	0	0	0	0	1	0	0	0	0	1	0	0	0	2	747		
	Adverse Events Following Immunization (AEFI)	A	0	0	0	0	0	5	0	0	0	0	0	0	0	0	5	589	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
<b>Other Reportable Diseases</b>	Monkeypox	A	0	0	0	0	0	0	1	2	0	0	0	0	0	0	0	3	68	4
		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	2	1	0	0	0	2	3	2	1	1	2	5	3	0	0	22	2,053	0
		D	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
	Meningitis	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	32	1
		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
<b>Neglected Tr</b>	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
<b>TOTAL</b>		<b>2</b>	<b>7</b>	<b>1</b>	<b>18</b>	<b>2</b>	<b>2</b>	<b>30</b>	<b>5</b>	<b>9</b>	<b>40</b>	<b>15</b>	<b>10</b>	<b>6</b>	<b>0</b>	<b>5</b>	<b>152</b>	<b>21981</b>	<b>869</b>	

**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:  $\geq 80\%$ ). 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:  $\geq 2/100,000$ )
- ☞ **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 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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### For comments or questions, please contact

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## National Public Health Institute of Liberia (NPHIL)

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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

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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.