



# Liberia IDSR Epidemiology Bulletin

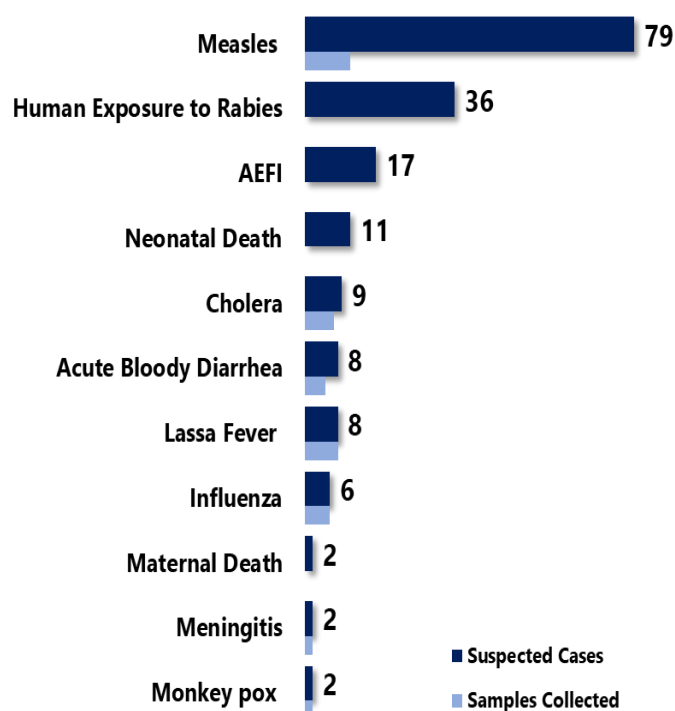
Epi-week 49 (December 5- 11, 2022)

Country Population: 5,104,413 | Volume 17 Issue 49 | Dec 5- 11, 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 **180 events** of public health importance including **13 deaths** reported
- ♦ **Completeness and timeliness** of health facility reports were both **99%** respectively
- ♦ **Ongoing Lassa fever** outbreak in **4** Counties
- ♦ **Ongoing Measles** outbreak in **13** Counties
- ♦ **Ongoing Monkeypox** outbreak in Rivercess county

Adverse Events Following Immunization/Adverse Drug Reaction

## Reporting Coverage

Table 1: Health Facility Weekly IDSR Reporting Coverage, Liberia, Epi-week 49, 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	22	22	99	99
Lofa	66	66	66	100	100
Margibi	68	68	68	100	100
Maryland	27	27	27	100	100
Montserrado	326	326	326	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>868</b>	<b>866</b>	<b>99</b>	<b>99</b>

868(99%)  
Health facilities reported IDSR data

93 (100%)  
Health districts reported IDSR data

868(99%)  
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 submitted weekly IDSR reports to the national level on time

Legend: ≥80 <80



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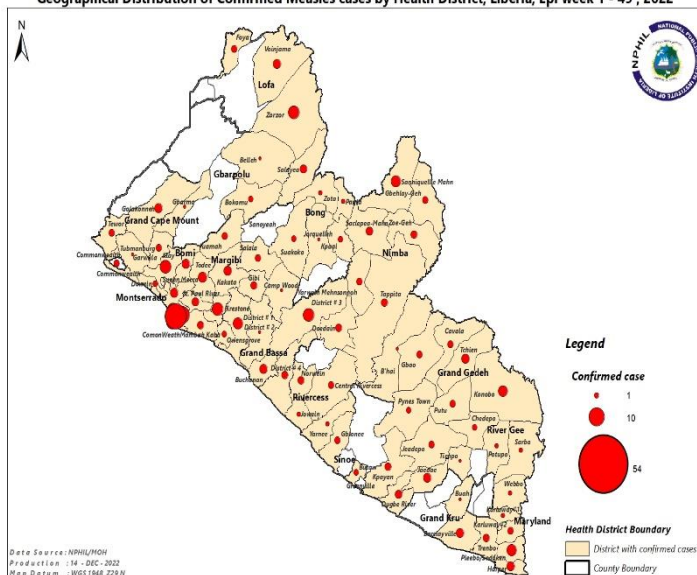
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## Vaccine-Preventable Diseases

### Measles

- ☞ Seventy-nine (79) suspected cases were reported: Montserrado (17), Margibi (17), Maryland (14), Grand Kru (11), Grand Bassa (4), Bomi (3), Grand Gedeh (3), Bong (3), Lofa (2), Grand Cape Mount (2), Nimba (2), and Sinoe (1) Counties
- ☞ Eleven (11) specimens collected and pending testing
- ☞ Vaccination status among suspected cases
  - Vaccinated: (40) 51%
  - Not vaccinated: (31) 39%
  - Unknown: (8) 10%
- ☞ Age distribution among suspected cases
  - < 5 years: (44) 56%
  - ≥ 5 years: (35) 44%
- ☞ Cumulatively, eight thousand five hundred thirty-nine (8,539) suspected cases have been reported including 85 deaths
  - (7,955) 93% confirmed:
    - ✓ Laboratory confirmed: (488/7,955) 6%
    - ✓ Clinically compatible: (580/7,955) 7%
    - ✓ Epidemiologically linked: (6,887/7,955) 87%
  - Non-measles discarded: 584
    - ✓ 58 tested positive for Rubella
- ☞ Proportion of samples collected: (1,369/8,539) 16%
- ☞ Proportion of samples tested: (1,072/1,369) 78%
- ☞ CFR: (85/7,955) 1.1%

Geographical Distribution of Confirmed Measles cases by Health District, Liberia, Epi week 1 - 49, 2022



## Outbreak

### Measles: (Situation update from 13<sup>th</sup> December 2021- 11<sup>th</sup> December 2022)

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

- ☞ Seventeen (17) new cases were reported from Bushrod (7), Todee (6), and Commonwealth (4) Districts
- ☞ A total of 4,245 cases have been confirmed including sixty-five (65) deaths
  - Median age 6 (1month-59years)
  - Vaccinated - (2,056/4,245) 48.4%
  - Not Vaccinated- (2,123/4,245) 50.0%
  - CFR (66/4,245) – 1.6%

#### Bong County: Suakoko, Jorquelleh, Salala, and Kokoyah Districts (Situation update from 20<sup>th</sup> December 2021- 11<sup>th</sup> December 2022)

- ☞ One (1) new case was reported from Jorquelleh District
- ☞ 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- 11<sup>th</sup> December 2022)

- ☞ Two (2) new cases were reported from Zorzor District
- ☞ A total of 184 cases have been confirmed



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- Median age: 10 (2 months-46years)
- Vaccinated: (168/184) 91%
- Not vaccinated: (16/184) 9%

## **Nimba County: Gbehlay-Geh, Sacleapea-Mah, Zoe-Geh, Tappita, Yarwin Mehnsonnoh, and Sanniquellie-Mah Districts (Situation update from 20<sup>th</sup> January-11<sup>th</sup> December, 2022)**

👉 Two (2) new cases were reported from Gbehlay-Geh, and Sanniquellie-Mah Districts

👉 A total of 732 cases have been confirmed including one death

- Median age 7 (2 months- 48years)
- Vaccinated: (172/732) 23.5%
- Not Vaccinated: (559/732) 76.4%
- CFR (1/732) 0.1%

## **Maryland County: Harper, Karluway II and Pleebo Districts (Situation update from 1<sup>st</sup> February- 11<sup>th</sup> December 2022)**

👉 Fourteen (14) new cases were reported from Karluway II (9), Harper (3), and Pleebo (2) Districts

👉 A total of 294 cases have been confirmed

- Median age 7 (7 months-48 years)
- Vaccinated: (36/294) 12%
- Not Vaccinated: (258/294) 88%

## **Grand Bassa County: District #1, District #2, District #3 A&B, and Buchanan Districts (Situation update from 22<sup>nd</sup> April -11<sup>th</sup> December 2022)**

👉 Two (2) new cases were reported from District #4 District

👉 A total of 717 cases have been confirmed including 7 deaths

- Median age 7 (1 month-45 years)
- Vaccinated: (280/717) 39%
- Not Vaccinated: (430/717) 60%
- CFR (7/717) 1%

## **Bomi County: Klay, Senjeh, and Suehn Mecca Districts (Situation update from 14<sup>th</sup> March-11<sup>th</sup> December 2022)**

👉 Two (2) new cases were reported from Klay, and Senjeh Districts

👉 A total of 75 cases have been confirmed including 5 deaths

- Median age 7 (1 month-48 year)
- Vaccinated: (31/75) 41%
- Not Vaccinated: (39/75) 52%
- CFR (5/75) 7%

## **Grand Kru: Barclayville, and Dorbor Districts (Situation update from 14<sup>th</sup> March – 11<sup>th</sup> December 2022)**

👉 Ten (10) new cases were reported from Barclayville District

👉 A total of 170 cases have been confirmed

- Median age 9 (53 months-18 years)
- Vaccinated: (127/170) 75%
- Not Vaccinated: (43/170) 25%

## **Rivercess: Doedain, and Jowein Districts (Situation update from 16<sup>th</sup> March – 11<sup>th</sup> December 2022)**

👉 No new case was reported

👉 A total of 76 confirmed cases have been confirmed including 1 death

- Median age 5 (6 months -36 years)
- Vaccinated: (18/76) 24%
- Not Vaccinated: (57/76) 75%
- CFR: (1/76) 1.3%



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## Margibi County: Firestone, Gibi, Kakata, and Mamba Kaba Districts (Situation update from 21<sup>st</sup> February–11<sup>th</sup> December 2022)

- 📁 Seventeen (17) new cases were reported from Mamba Kaba (12), and Kakata (5) Districts
- 📁 A total of 595 cases have been confirmed
  - Median age 6 (4 months - 67 years)
  - Vaccinated: (290/595) 49%
  - Not Vaccinated: (305/595) 51%

## Grand Cape Mount County: Gola Konneh, District (Situation update from 10<sup>th</sup> March –11<sup>th</sup> December 2022)

- 📁 Two (2) new cases were reported from Gola Konneh District
- 📁 A total of 119 cases have been confirmed including 3 deaths
  - Median age 12 (2 months – 45 years)
  - Vaccinated: (102/119) 85.7%
  - Not Vaccinated: (14/119) 11.7%
  - CFR: (3/119) 2.5%

## Grand Gedeh County: Tchien, Konobo, B'hai, and Gbao Districts (Situation update from 10<sup>th</sup> March–11<sup>th</sup> December, 2022)

- 📁 No new case was reported
- 📁 A total of 135 cases have been confirmed
  - Median age 6 (6 months-35 years)
  - Vaccinated (48/135) 36%
  - Not Vaccinated: (87/135) 64%

## Sinoe: Gblonee, Dugbeh River, Kpanyan, Jaedae, and Jedepo Districts (Situation update from 19<sup>th</sup> May – 11<sup>th</sup> December 2022)

- 📁 One (1) new case was reported from Jaedae District
- 📁 A total of 144 cases have been confirmed
  - Median age 6 (2 months-38 years)
  - Vaccinated: (71/144) 49%
  - Not Vaccinated (73/144) 51%

## **Public Health Response**

### **I Coordination**

- 📁 Ongoing monitoring of measles surveillance data with the provision of feedback to relevant stakeholders and developmental partners
- 📁 Measles case studies ongoing with support from AFENET/CDC-Liberia

### **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 from the 15 counties

### **Next steps**

- NPHIL/partners to procure essential drugs for case management
- Develop national Measles preparedness and response guide.



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- 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

- 👉 zero case reported
- 👉 Cumulatively, forty-nine (49) clinically diagnosed cases reported

## Influenza-Like Illnesses

### Coronavirus Disease (COVID-19)

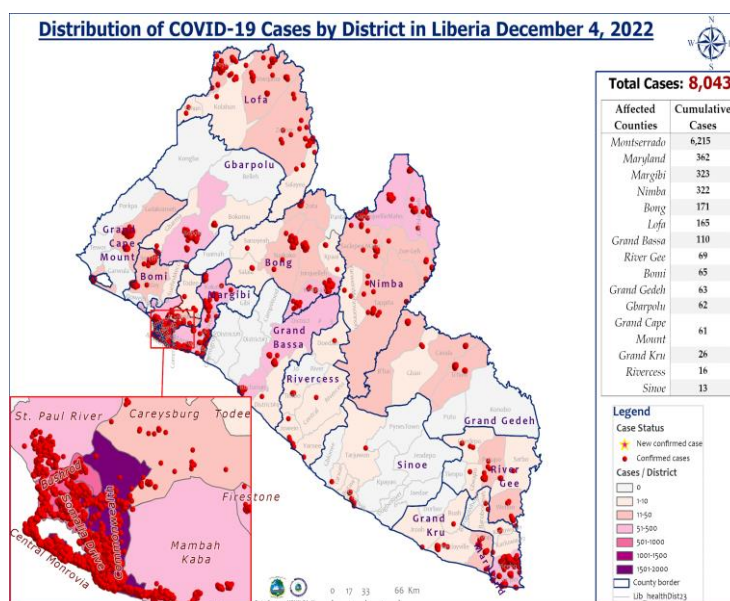
#### Outbreak

- 👉 No new confirmed case 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

### 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

**Figure 2: Geographical Distribution of Laboratory Confirmed COVID-19 Cases by Health Districts, Liberia, as of Dec. 5-11, 2022**



## Influenza Like Illnesses

- 👉 Six (6) cases reported from Montserrado (5), and Bong (1) Counties
- 👉 Cumulatively, eighty-three (83) cases have been reported

## Viral Hemorrhagic Diseases

### Lassa fever

- 👉 Eight (8) suspected cases reported from Grand Bassa (4), Bong (2), and Nimba (2) Counties
- 👉 Specimen was collected: 6 tested negative, 1 positive (Grand Bassa) and 1 pending testing

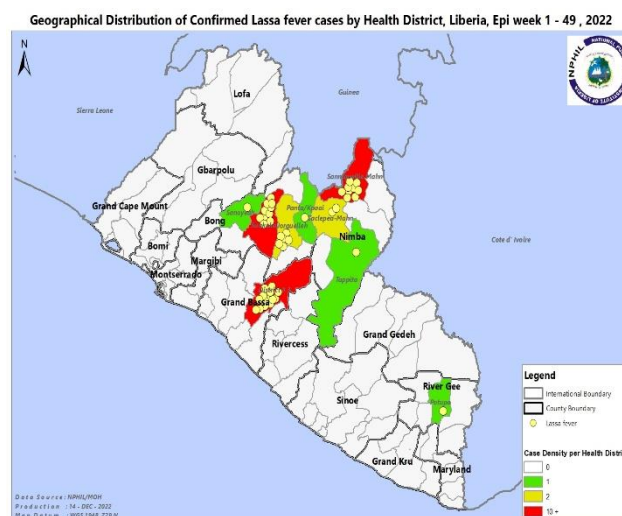




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- 👉 Cumulatively, one hundred ninety-two (192) suspected cases have been reported including 32 deaths
  - Sixty-seven (67) confirmed cases were recorded including 23 deaths
  - One hundred sixteen (116) negatives
  - Case Fatality Rate: (23/67) 34%
  - Proportion of suspected cases with sample collected (191/192) 99.5%
  - Proportion of suspected cases with sample tested (185/191) 97%
    - 3 specimens rejected (inadequate specimen, wrong packaging, wrong collection tube)
  - 1 not collected



## Outbreak

### Lassa fever disease: (Sitrep update as of December 14, 2022)

- 👉 One new confirmed case reported
- 👉 Sixty-five (65) contacts under 21 days' follow-up
- 👉 Cumulatively, sixty-seven (67) laboratory-confirmed cases including 23 deaths reported (CFR=33%)

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

- 👉 One new confirmed case reported
  - A 7-year-old male from Estate 4 in LAC Plantation, District #3A
  - Onset of symptoms was December 1, 2022, presented with high fever ( $>38.5^{\circ}\text{C}$ ) headache, weakness, vomiting, and myalgia December 8, 2022. The case sought treatment at LAC Hospital, suspected of Lassa fever, isolated and the specimen collected on December 8, 2022
  - December 8, 2022: Ribavirin treatment was initiated
  - December 8, 2022: The specimen was sent to the National Public Health Reference Laboratory (NPHRL) and tested positive on December 12, 2022, and results were released on the same day.
  - A total of six (6) contacts were identified and line-listed
  - The case is currently alive and in isolation
- 👉 Cumulative confirmed cases: Twenty-seven (27)
  - CFR (6/27) 22%
  - All reported from District #3 A&B
- 👉 Cumulatively, 125 contacts including two healthcare workers were generated since this year
  - Fourteen (14) contacts are currently under follow-up

### Public Health Measures

- 👉 NPHIL providing 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 in (District #3 A&B, and District 2 in Grand Bassa 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
  - Limited community engagement



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## Nimba County: Sanniquellie-Mah District

- 📁 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
  - Twenty-nine (29) contacts are currently under follow-up

## Public Health Measures

- 📁 NPHIL and MOH providing 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 (Sanniquellie-Mah & Sacleapea-Mah 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
- 📁 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 20 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

## Bong County: Suakoko District

- 📁 No new confirmed case reported
- 📁 Cumulative confirmed cases: Twenty-two (22)
  - CFR: (5/22) 23%
- 📁 Districts that have reported confirmed cases since this year:
  - Suakoko District: 17 cases (4 deaths)
  - Jorquellah District: 3 cases (1 death)
  - Sanoyea District: 1 case
  - Kpaai District: 1 case



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- 👉 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

## Yellow fever

- 👉 Zero suspected case reported
- 👉 Cumulatively, eighty-six (86) suspected cases have been reported
  - Proportion of suspected cases with samples collected (77/86) 90%
  - Proportion of suspected cases with samples not collected (9/86) 10%
- 👉 Samples collected and tested
  - Tested negative (67/77) 87%
  - Pending testing (7/77) 9%
  - Not transported (5/77) 6%

## Ebola Virus Disease

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

## Diarrheal Diseases

### Acute Bloody Diarrhea (Suspected Shigellosis)

- 👉 Eight (8) cases were reported from Grand Gedeh (2), Grand Kru (1), Sinoe (1), River Gee (1), Maryland (1), Lofa (1), and Nimba (1) Counties
- 👉 Five (5) specimens were collected out of which 3 were not transported
- 👉 Cumulatively, four hundred thirty-seven (437) suspected cases reported
- 👉 Two hundred twenty (220) specimens were collected
- 👉 One hundred sixty-nine (169) received by the lab
  - 11 rejected (inadequate specimen, wrong packaging)
  - 24 specimens discarded
  - 134 tested
    - 133 negatives
    - 1 positive (epi week 24, from Grand Gedeh county)





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## Severe Acute Watery Diarrhea (Suspected Cholera)

- 📁 Nine (9) suspected cases were reported from Maryland (2), Nimba (2), Grand Kru (1), Rivercess (1), Sinoe (1), River Gee (1), and Gbarpolu (1) counties
- 📁 Seven (7) specimens collected and pending testing
- 📁 Cumulatively, three hundred Sixty-three (363) suspected cases reported
  - Two hundred ten (210) specimens collected
  - One hundred thirty-two (132) received by the lab
    - 5 rejected (inadequate specimen, wrong packaging, specimen not label)
    - 42 specimens discarded
    - 85 tested negatives

## Other Reportable Diseases

### Animal bite (Human Exposure to Rabies)

- 📁 Thirty-six (36) animal bite cases were reported: Grand Kru (6), Nimba (6), Montserrado (5), Grand Cape Mount (3), Grand Bassa (3), Lofa (2), Rivercess (2), Grand Gedeh (2), Gbarpolu (2), Bomi (2), Margibi (1), Maryland (1), and Bong (1) counties
  - Persons received Post Exposure Prophylaxis (PEP) (10/36) 28%
- 📁 Cumulatively, two thousand five (2,005) animal bite cases reported
  - Dog bites account for 99.9%
  - Snake bite account for 0.1%
  - 1-4 doses (PEP) administered to (392/2,005) 20% of patients

## Public Health Actions

- 📁 Ongoing monitoring and follow-up of cases
- 📁 Quarantined (3/36) 8% of suspected rabid dogs

## Meningitis

- 📁 Two (2) suspected cases reported from Lofa and Montserrado Counties
- 📁 Specimen was collected: 1 tested negative and 1 pending
- 📁 Cumulatively, thirty-four (34) suspected cases 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

- 📁 Two (2) suspected case was reported from Montserrado and Lofa Counties
- 📁 Specimens were collected and pending testing
- 📁 Cumulatively, Six-one (61) suspected cases reported with four (4) confirmed

## Outbreak

### Monkeypox: (Sitrep update as of December 14, 2022)

- 📁 One confirmed case reported from Rivercess county
- 📁 Five (5) contacts under 21 days' follow-up (2 health care worker and 3 family member)

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

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,



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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 swab) were collected and sent to the National Public Health Reference Laboratory (NPHRL) on November 28, 2022. On December 5, 2022, the case was confirmed Monkey pox positive. The case travelled 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 herbal treatment. He had contact with bush or domestic animals in Belvenee where he was seeking herbal treatment

## Public Health Measures

### I. Coordination

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

### II. Epidemiological Surveillance

- Active case search and contact tracing ongoing in affected district
- Orientation of facilities' staff and Community Health Assistances (CHAs) on Monkey pox case definition
- Development and dissemination of Sitrep by affected county and national

### III. Laboratory

- The National Public Health Reference Laboratory continues testing of Monkey pox samples
- One (1) Monkey pox case has been confirmed

### IV. Case management and IPC

- Case isolated and supportive management is on going

### 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
- Community awareness ongoing via the HSFP/CHSS/DSO in the affected community and surrounding towns and villages

## Key Challenges

- No specimen collection kits for monkey pox
- Limited support to enhance active case finding in Monkey pox affected and neighboring districts
- No support from county-based partners for response activities



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- No communication card for response activities
- Lack of Calamine lotion for patient use

## Events of Public Health Importance

### Maternal Mortality

- 👉 Two (2) deaths were reported from Nimba and Maryland Counties
- 👉 Reported causes: Pre-eclampsia (1) and PPH (1)
- 👉 Reported sites:
  - Health facility: (1) 50% and community (1) 50%
- 👉 Cumulatively, two hundred sixty-six (266) deaths have been reported
  - Proportion of deaths reviewed (49/266) 18%
  - Proportion of community deaths (29/266) 11%
    - Proportion of community deaths reviewed: (8/29) 28%

### Neonatal Mortality

- 👉 Eleven (11) deaths were reported: Montserrado (3), Lofa (3), Grand Cape Mount (1), Maryland (1), Bong (1), Grand Bassa (1), and Nimba (1) Counties
- 👉 Reported causes: Birth asphyxia (6), preterm (1), and neonatal sepsis (3), and one pending investigation
- 👉 Reported sites:
  - Health facility: (8) 73% and community (3) 27%
- 👉 Cumulatively, seven hundred thirty-four (734) deaths have been reported
  - The proportion of deaths reviewed (79/734) 11%
  - Proportion of community deaths (35/734) 5%
    - Proportion of deaths reviewed from the community (8/35) 23%

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

- 👉 Seventeen (17) cases were reported: Grand Kru (10), Margibi (3), Grand Gedeh (3), and Lofa (1) Counties
- 👉 Related vaccine:
  - Penta (6/17) 35%
  - COVID-19 (11/17) 65%
- 👉 Cumulatively, five hundred eighty-four (584) events were reported with (409/584) 70% related to COVID-19
- 👉 Proportion of COVID-19 vaccine
  - J&J vaccine – (288/409) 70%
  - AstraZeneca – (6/409) 1%
  - Pfizer – (115/409) 28%
- 👉 Proportion of other vaccine-related events – (175/584) 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 11,048 travelers were recorded for the week with incoming travelers accounting for 54% (5,940/11,048)

**Table 2: Border activity at the PoE for Incoming and Outgoing Travelers, Liberia, Epi week 49, 2022**



# Liberia IDSR Epidemiology Bulletin

Epi-week 49 (December 5- 11, 2022)

Type of Ports	Point of Entry	Weekly total	Arrival	Departure	Total travelers with YB	Yellow Book Damage	Card Replaced	Travelers Vaccinated against YF & Issued	Alerts detected/ Verified	COVID-19 Reactive	Evidence of COVID-19 vaccination card/certificate
Airport	James S. Paynes Robert Int'l Airport	71	32	39	71	0	0	0	0	0	71
	Freeport of Monrovia	4257	2283	1974	4223	20	0	14	0	0	4246
Seaport	Buchanan Port	356	178	178	356	0	0	0	0	0	356
	Buchanan Port	130	65	65	130	0	0	0	0	0	130
Land Crossing	Bo Water Side	801	407	394	796	5	0	0	0	0	789
	Ganta	216	112	104	179	37	0	0	0	0	102
	Yekepa	132	62	70	120	12	0	0	0	0	91
	Loguatu	83	48	35	76	7	0	0	0	0	80
	Yeala	249	139	110	0	0	0	0	0	0	200
	Kpazagizzia	237	140	97	0	0	0	0	0	0	176
	Bolongoidu	414	277	137	0	0	0	0	0	0	393
	Lawalazu	209	120	89	0	0	0	0	0	0	109
	Safedu	305	190	115	0	0	0	0	0	0	250
	Konadu	290	180	110	0	0	0	0	0	0	210
	Foya Tengia	859	479	380	0	0	0	0	0	0	710
	Mendicoma	1065	565	500	0	0	0	0	0	0	840
	Sorlumba	744	363	381	0	0	0	0	0	0	588
	Worsonga	630	300	330	0	0	0	0	0	0	560
Total		11,048	5,940	5,108	5,951	81	0	14	0	0	9,901

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

## Public Health Measures

### National level

- 👉 Ongoing distribution of post exposure prophylaxis for rabies to counties
- 👉 Participated in a regional PHEOC functional simulation exercise to assess country's preparedness
- 👉 Ongoing Environmental interventions in Lassa fever hotspot communities
- 👉 Ongoing distribution of IPC materials to designated PoEs
- 👉 Completed CEBS training in three counties (River Gee, Grand Kru & Maryland)
- 👉 Continued support for operational activities ongoing

### 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	
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	9	5	8	5	6	5	6	4	6	7	6	6	6	10	93			
Vaccine Preventable Diseases	Acute Flaccid Paralysis (Suspected Polio)	A	0	0	0	0	1	0	0	1	0	1	0	1	0	0	0	4	106	0	
		D	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Measles	A	2	1	0	3	7	0	0	1	6	7	14	9	0	0	0	50	8,397	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	0	0	0	0	0	0	0	0	0	0	49	0	
		D	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	
	Yellow fever	A	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	86	0
		D	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Viral Hemorrhagic Fe	Dengue fever	A	0	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	0
		D	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	
	Lassa fever	A	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	183	67	
		D	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	22	20	
Influenza-Like Illness	COVID-19	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8,043	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	72	0	
		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	0	0	0	0	0	1	0	0	0	0	0	0	2	0	2	5	428	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	1	0	0	0	0	0	1	1	0	1	0	2	5	0	0	11	354	0	
		D	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Events of Public Health Interest	Maternal Mortality	D	0	1	0	0	0	0	0	0	0	1	5	0	0	0	0	7	260		
	Neonatal Mortality	D	1	0	0	0	0	0	1	1	0	1	0	2	0	5	0	11	712		
	Adverse Events Following Immunization (AEFI)	A	0	0	0	0	0	0	0	0	2	0	0	1	0	0	0	3	558	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	0
		D	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Reportable Diseases	Monkeypox	A	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	56	2	
		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	0
		D	0	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	3	5	2	1	0	2	11	2	3	6	4	5	2	1	6	53	1,946	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	1	0	0	0	0	0	0	0	1	32	1	
		D	0	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	0
		D	0	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	0
		D	0	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	0
		D	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL			7	7	2	5	8	3	13	7	11	17	23	20	11	6	8	148	21394	881	

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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### 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.