



# Liberia IDSR Epidemiology Bulletin

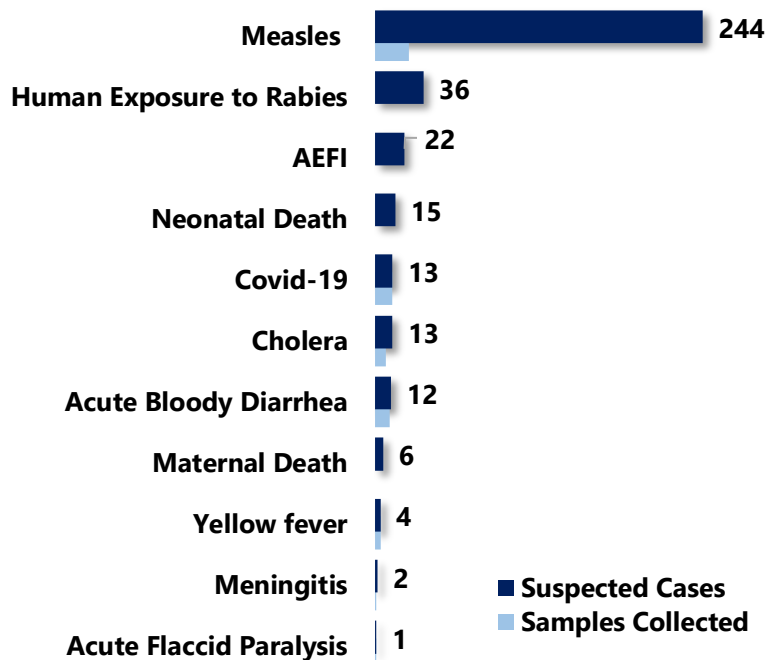
Epi-week 16 (April 18 - 24, 2022)

Country Population: 5,104,413 || Volume 14 Issue 16 | April 18-24, 2022

Data Source: CSOs from 15 Counties and Laboratory

## Highlights

### Figure 1: Public Health Events Reported during this week



### Keynotes and Events of Public Health Significance

- ♦ A total of **368** events of public health importance including **21** deaths were reported
- ♦ Completeness and timeliness of health facility reports were both **99%**
- ♦ **Ongoing Lassa fever** outbreak in one county
- ♦ **Ongoing Measles** outbreak in thirteen counties
- ♦ **Thirteen (13)** new confirmed **Covid-19** cases reported

\*Adverse Events Following Immunization /Adverse Drug Reaction

## Reporting Coverage

**Table 1: Health Facility Weekly DSR Reporting Coverage, Liberia, Epi Week 16, 2022**

County	Expected from HF*	Reports	Reports Received	Received on Time	Completeness (%)	Timeliness (%)
Bomi	26	26	26	26	100	100
Bong	57	57	57	57	100	100
Gbarpolu	16	15	15	15	94	94
Grand Bassa	36	36	36	36	100	100
Grand Cape Mount	34	34	34	34	100	100
Grand Gedeh	24	24	24	24	100	100
Grand Kru	23	23	23	23	100	100
Lofa	66	66	66	66	100	100
Margibi	56	56	56	56	100	100
Maryland	27	27	27	27	100	100
Montserrado	334	326	326	326	98	98
Nimba	91	91	91	91	100	100
Rivercess	21	21	18	18	100	86
River Gee	20	20	20	20	100	100
Sinoe	37	37	37	37	100	100
<b>Liberia</b>	<b>868</b>	<b>859</b>	<b>856</b>	<b>856</b>	<b>99</b>	<b>99</b>

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

Legend: ≥80 <80

**859(99%)**  
Health facilities reported IDSR data

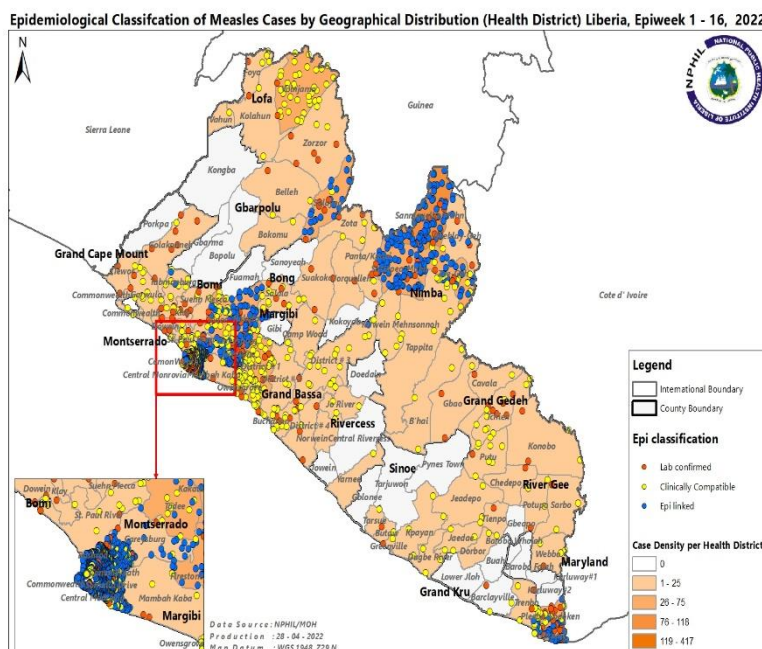
**93 (100%)**  
Health districts reported IDSR data

**856 (99%)**  
Health facilities reported timely IDSR data

## Vaccine Preventable Diseases

### Measles

- ☞ Two hundred forty-four (244) suspected cases were reported from Montserrado (137), Grand Bassa (37), Nimba (14), Margibi (14), Lofa (13), Grand Gedeh (13), Sinoe (4), Grand Cape Mount (4), Bong (3), Maryland (1), Bomi (1), Gbarpolu (1), Grand Kru (1), and Rivercess (1) counties
- ☞ Twenty-five (25) specimens collected, 3 tested positive
- ☞ Vaccination status among suspected cases
  - Vaccinated - 117 (48%)
  - Not vaccinated- 103 (42%)
  - Unknown – 24 (9%)
- ☞ Age distribution among suspected cases
  - < 5 years: 149 (61%)
  - ≥ 5 years: 95 (39%)
- ☞ Cumulatively, two thousand one hundred thirty-nine (2,139) cases have been reported including 20 deaths
  - Confirmed: 1,899(89%)
    - ✓ Laboratory confirmed: 265
    - ✓ Clinically compatible: 474
    - ✓ Epidemiologically linked: 1,160
  - Non-measles discarded: 240
  - Proportion of samples collected: 30% (641/2,139)
  - Proportion of samples tested: 79% (505/641)



## Outbreak

### Measles: (Situation update as of the 13th December 2021-April 24, 2022)

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

- ☞ One hundred thirty-eight (138) new suspected cases reported for the week
  - Bushrod (47), Todee (17) Commonwealth (24) Somalia Drive (33), Careysburg (2), and St. Paul (6)
- ☞ A total of 1,147 suspected cases line listed up to date
  - 100 lab confirmed
  - Age range (2 months-31 years)
  - Death: 12
  - CFR in lab confirmed 2% (2/100)
  - All reported cases are undergoing treatment

#### Vaccination status among lab confirmed:

- Vaccinated by record- 41% (43/100)
- Not vaccinated – 42% (41/100)
- Unknown - 17% (16/100)



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## Bong County: Suakoko, Zota, Salala and Panta Districts

- 👉 Three (3) new suspected cases reported from Salala District for this week
- 👉 A total of 102 suspected cases have been recorded including two (2) deaths
  - Ten (10) labs confirmed
  - Range 3 (9 months-35 years)
  - 17% (1/6) not vaccinated

## Lofa County: Voinjama, Zorzor and Salayea districts

- 👉 Thirteen (13) new suspected cases reported
  - Voinjama (8), Salayea (3), and Zorzor (3)
- 👉 A total of ninety-seven (110) suspected cases have been recorded
  - Twelve (12) laboratory confirmed
  - 100% (12/12) vaccinated
  - Range 2 months-27 years

## Nimba County: Saclepea-Mah, Sanniquellie-Mah, Gbehlay Geh and Zoe-Geh Districts

- 👉 Thirteen (13) new suspected cases reported for the week under review
  - Saclepea-Mah- (5) Sanniquellie-Mah (3), and Gbehlay-Geh (5)
- 👉 A total two hundred five (205) cases line listed
  - Twenty-five (25) laboratories confirmed
  - Range 6 (2 months-45years)
  - 44% (11/25) vaccinated

## Maryland County: Harper and Pleebo Districts

- 👉 One (1) new case reported
- 👉 A total of 73 suspected cases have been recorded
  - Fifteen (15) laboratory confirmed
  - Range 2 months-48 years
  - 7% (1/15) vaccinated

## Grand Bassa County: District # 1, district # 2 and Buchanan Districts

- 👉 Thirty-four (34) new cases reported
  - Buchanan (5), Owensgrove (9), and District #1 (20)
- 👉 A total of 122 cases have been recorded
  - Eleven (11) laboratories confirmed
  - Range 1 month-43 years
  - 45% (5/11) vaccinated
  - Death- (1)



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## Bomi County: Suehn Mecca, Senjeh, Dewein and Klay Districts (Situation update as of 7 March- 17 April, 2022)

- 👉 One (1) new case recorded from Senjeh District
- 👉 A total of 46 cases have been recorded
  - Nineteen (19) laboratory confirmed
  - Range 1 month-67 years
  - 37% (7/19) were vaccinated
  - Death (2)
  - CFR in Lab. Confirmed 5% (1/19)

## Grand Kru: Trehn District (Situation update as of 14bMarch 17-April, 2022)

- 👉 One (1) new case reported
- 👉 A total of 16 suspected cases reported
  - Two (2) lab confirmed
  - Range 10 months-16 years
  - 100% (2/2)

## Rivercess: (Situation update as of 16 March 17-April, 2022)

- 👉 No new case reported from Joe Rive
- 👉 A total 8 suspected cases reported

## Margibi County: Firestone, Kakata and Mamba Kaba Districts (Situation update as of 28 February -17 April, 2022)

- 👉 Fourteen (14) new cases reported
  - Kakata (13), and Firestone (1)
- 👉 A total of 134 suspected cases reported
  - Twenty-three (23) laboratory confirmed
  - Range 4 months-43 years
  - 78% (18/23) were vaccinated

## Grand Cape Mount County: Gola Konneh (Situation update as of 10 March - 17 April, 2022)

- 👉 Four (4) new case recorded
- 👉 A total of 29 cases have been reported
  - Nine (9) laboratory confirmed
  - Range 5 months – 22 years
  - 89% (8/9) were vaccinated

## Grand Gedeh County: Konobo District (Situation update as of 10 March - 17 April, 2022)

- 👉 Four (4) new case recorded
- 👉 A total of 22 cases have been reported
  - Six (6) laboratory confirmed
  - Range 1–5 years
  - 100% (6/6) were vaccinated



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## Gbarpolu: Belleh district

- 👉 No new case reported
- 👉 A total of 8 suspected cases recorded
  - One (1) laboratory confirmed
- 👉 Range 4-50 years
- 👉 Unknown Vaccination status

## Public Health Actions

- 👉 Case investigation, active case search and line listing ongoing
- 👉 Case management ongoing
- 👉 Radio talk show ongoing in (Lofa county)

## Challenges

- Lacked of essential medications such as; Amoxicillin, Erythromycin, Vitamin A and Calamine Lotion Cream for case management (Grand Kru and Gbarpolu) counties
- Stock out of measles vaccines and vitamin A, in some counties (Bong and Margibi Counties)
- Limited specimen collection kits (Margibi County)
- Limited medical supplies for case management

## Influenza-Like Illnesses

## Coronavirus Disease (COVID-19)

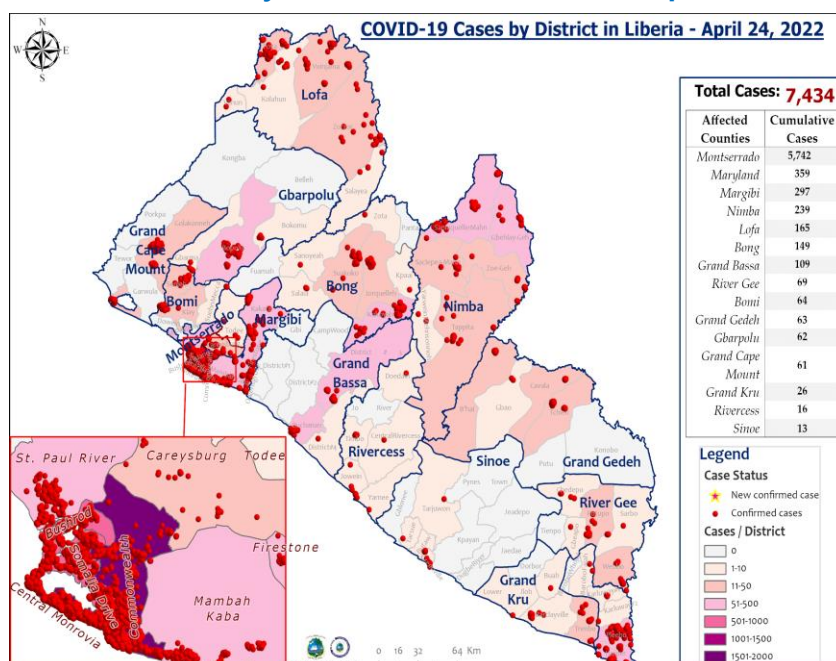
## Outbreak

- 👉 Thirteen (13) new cases were reported from Montserrado County
- 👉 A total of five hundred ninety-seven (597) confirmed cases have been reported since epi week 1
- 👉 Cumulatively, seven thousand four hundred thirty-four (7,434) confirmed cases recorded including 294 deaths 601 healthcare workers reported with 17,653 contacts generated

## Public Health Actions

- 👉 Weekly 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

**Figure 2: Geographical Distribution of Laboratory Confirmed COVID-19 Cases by Health Districts, Liberia, as of April 24, 2022**



## Acute Flaccid Paralysis (AFP)

- 👉 One (1) case reported from Bong County
  - Specimen collected and shipped
- 👉 Cumulatively, thirty-nine (39) cases have been reported

## Neonatal Tetanus

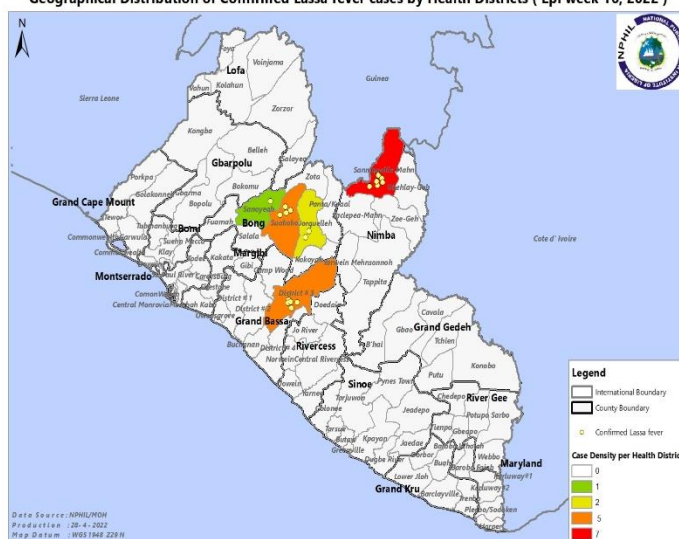
- 👉 Zero case was reported
- 👉 Cumulatively, nineteen (19) clinically diagnosed cases reported

## Viral Hemorrhagic Diseases

### Lassa fever

- 👉 Zero case reported
- 👉 Cumulatively, fifty-three (53) suspected cases have been reported including 9 deaths
  - Twenty-one (21) confirmed cases recorded including 7 deaths
  - CFR 33%
  - Proportion of suspected cases with sample collected 100% (53/53)
  - Proportion of suspected cases with sample tested 100% (53/53)

Geographical Distribution of Confirmed Lassa fever cases by Health Districts (Epi week 16, 2022)



## Outbreak

### Lassa fever disease: (sitrep update as of April 18-24, 2022)

- One (1) county currently in outbreak: Bong
- Two (2) counties completed countdown: Grand Bassa and Nimba

### Bong County: Suakoko District

- 👉 No new confirmed case reported
- 👉 Cumulatively, nine cases confirmed with CFR 22% (n=2/9)
- 👉 Cumulatively, 112 contacts including 64 HCWs have been line listed
  - 29 contacts including 11 HCWs under 21-day of follow up

### Public Health Actions

- 👉 Health educational interventions
  - Daily health talk in all health facilities on priority diseases
  - Airing of LF preventive and control messages
- 👉 Case management
  - Isolation of cases
  - Administration of ribavirin





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## 📁 Surveillance

- Active case search ongoing in the affected health district
- Heighten surveillance in all districts
- Daily sitreps shared regularly to national level

## Yellow fever

- 📁 Four (4) suspected cases reported from Grand Bassa, Grand Gedeh, Rivercess and Grand Kru Counties
- 📁 Specimens collected and pending testing
- 📁 Cumulatively, thirty-four (34) suspected cases reported
  - Proportion of suspected cases with sample collected 91% (31/34)
  - Proportion of suspected cases with sample tested 24% (8/34)

## Diarrheal Diseases

### Acute Bloody Diarrhea (Suspected Shigellosis)

- 📁 Twelve (12) suspected cases were reported from Grand Gedeh (7), Rivercess (2), Sinoe (1), Nimba (1) and Bong (1) Counties
  - Eleven (11) specimens were collected and seven (7) tested negative
- 📁 Cumulatively, two hundred twenty-one (221) suspected cases reported
  - One hundred twenty-three (123) specimens collected
    - 61 negative, 1 positive

### Severe Acute Watery Diarrhea (Suspected Cholera)

- 📁 Thirteen (13) suspected cases reported from Bong (7), Montserrado (1), Maryland (1), Grand Bassa (1), Nimba (2), and Rivercess (1) Counties
  - Eight (8) specimens collected & 3 tested negative
- 📁 Cumulatively, one hundred thirty-eight (138) suspected cases reported
  - 71 specimens collected
    - 68 tested negatives
    - 3 rejected

## Other Reportable Diseases

### Animal bite (Human Exposure to Rabies)

- 📁 Thirty-six (36) animal bite cases reported Montserrado (5), Bong (5), Grand Bassa (5), Rivercess (3), Maryland (3), Nimba (6), Sinoe (2), Lofa (2), Grand Kru (2), Cape Mount (1), Margibi (1) and Grand Gedeh (1) counties
  - 14% (5/36) persons received PEP
- 📁 Cumulatively, seven hundred seventy (770) animal bite cases reported
  - Dog bites account for 100%
  - 1-4 doses (PEP) administered to about 16% (120/770) of patients

## Public Health Actions

- 📁 Administration of post exposure prophylaxis

## Meningitis

- 📁 Two (2) cases reported from Montserrado and Grand Cape Mount
- 📁 One specimen was collected but rejected
- 📁 Cumulatively, sixteen (16) suspected cases reported
  - One confirmed



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## Monkeypox

- 👉 Zero suspected cases reported
- 👉 Cumulatively, seven (7) suspected cases reported, two (2) specimens collected pending shipment

## Events of Public Health Importance

### Maternal Mortality

- 👉 Six (6) deaths reported from Montserrado, Maryland, Sinoe, Nimba, Bong and Lofa counties
  - Cause of death: post-partum hemorrhage (2), eclampsia (2), hypoglycemic shock (1) and asthmatic attack (1)
  - All deaths occurred at the health facility
- 👉 Cumulatively, one hundred two (102) deaths reported
  - Proportion of deaths reviewed 40% (41/102)
  - Proportion of community deaths 14% (14/102)
    - Proportion of community deaths reviewed: 71% (10/14)

### Neonatal Mortality

- 👉 Fifteen (15) deaths reported from Montserrado (3), Grand Kru (3), Margibi (2), Bong (2) and Lofa (1), Sinoe (1), Nimba (2) and River Gee (1) Counties
  - Causes of death: Birth asphyxia (9) and Sepsis (5), neonatal jaundice (1)
  - All deaths occurred at the health facility
- 👉 Cumulatively, two hundred fifty-four (254) deaths have been reported
  - Proportion of deaths reviewed 26% (66/254)
  - Proportion of community deaths 5% (8/254)
    - Proportion of deaths reviewed from community 38% (3/8)

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

- 👉 Twenty-two (22) cases reported from River Gee (9), Grand Kru (9), Bong (2), Grand Cape Mount (1) and Bomi (1) counties
  - COVID-19 vaccine: 20
  - Rota vaccine: 2
- 👉 Cumulatively: one hundred thirty-two (132) events reported with 89% (117/132) related to COVID-19
- 👉 Proportion of COVID-19 vaccine
  - J&J vaccine – 91% (107/117)
  - AstraZeneca – 5% (6/117)
  - Pfizer – 3% (4/117)
- 👉 Proportion of other vaccine related events -11% (15/132)

## Public Health Actions

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

## Unexplained death

- 👉 Zero case reported





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## Border Surveillance Update

**Table2: Border activity at the PoE for Incoming and Outgoing Travelers, Liberia, Epi week 16 2022**

📁 A total of 6,391 travelers recorded for the week with incoming travelers accounting for 29% (1,874/6,391)

Type of Ports	Point of Entry	Weekly total	Arrival	Departure	Yellow Book Issued	Yellow Book Damage	Card Replaced	Travelers Vaccinated	Alerts detected/ Verified	COVID-19 Reactive	Fully vaccinated for COVID-19
Airport	James S. Paynes	60	36	24	0	0	0	0	0	0	8
	Robert Int'l Airport	5047	1231	3816	34	30	0	4	0	0	5036
Seaport	Freeport of Monrovia	130	65	65	0	0	0	0	0	0	65
	Harper	0	0	0	0	0	0	0	0	0	0
	Buchanan Port	88	44	44	0	0	0	0	0	0	44
Land Crossing	Bo Water Side	616	278	338	58	58	0	0	0	0	83
	Ganta	334	165	169	18	18	0	0	0	0	69
	Yekepa	37	21	16	28	28	0	0	0	0	31
	Loguatu	79	34	45	0	0	0	0	0	0	23
	Yeala	0	0	0	0	0	0	0	0	0	0
	Kpazagizzia	0	0	0	0	0	0	0	0	0	0
	Safedu	0	0	0	0	0	0	0	0	0	0
	Konadu	0	0	0	0	0	0	0	0	0	0
	Bolongoidu	0	0	0	0	0	0	0	0	0	0
	Lawalazu	0	0	0	0	0	0	0	0	0	0
	Foya Tengia	0	0	0	0	0	0	0	0	0	0
	Sorlumba	0	0	0	0	0	0	0	0	0	0
	Mendicoma	0	0	0	0	0	0	0	0	0	0
	Worsonga	0	0	0	0	0	0	0	0	0	0
Total travelers		6,391	1,874	4,517	138	134	0	4	0	0	5359

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

## Public Health Measures

### National level

- 📁 Providing technical, logistical, and financial support to counties
  - Publication of situational reports
  - 3<sup>rd</sup> edition IDSR training conducted in Gbarpolu County for 43 participants from 16 health facilities
  - Management of all cases as per disease ongoing
  - Ensure the appropriate medical protocol in place
- 📁 Operational Activity
  - Continued support for operational activities ongoing

### County level

#### 📁 Surveillance

- Quarantine and monitoring of domestic animal (Dog) and cases possibly exposed to rabies
- Publication of situational reports
- Active case search ongoing in affected and surrounding communities

#### 📁 Case Management

- Administration of PEP and ribavirin
- Management of all cases as per disease ongoing
- Ensure the appropriate medical protocol in place
- Isolation of 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	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	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	39	0
		D	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Measles	A	1	3	1	37	4	13	1	13	14	1	137	14	1	0	4	244	2139	1899
		D	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0
	Neonatal Tetanus	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	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	1	0	1	1	0	0	0	0	0	1	0	0	4	34	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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	46	21
		D	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	7
Influenza-Like Illnesses	COVID-19	A	0	0	0	0	0	0	0	0	0	0	13	0	0	0	0	13	597	7434
		D	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	294
Diarrheal Diseases	Acute Bloody Diarrhoea (Shigellosis)	A	0	1	0	0	0	7	0	0	0	0	0	1	2	0	1	12	221	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	7	0	1	0	0	0	0	0	1	1	2	0	1	0	13	138	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	1	0	1	1	1	0	0	1	6	102	
	Neonatal Mortality	D	0	2	0	0	0	0	3	1	2	0	3	2	0	1	1	15	254	
	Adverse Events Following Immunization (AEFI)	A	1	2	0	0	1	0	9	0	0	0	0	0	0	9	0	22	132	0
		D	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	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
Other Reportable Diseases	Monkeypox	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	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 Rabies (Suspected Human Rabies)	A	0	5	0	5	1	1	2	2	1	3	5	6	3	0	2	36	770	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	1	0	0	0	0	0	1	0	0	0	0	2	16	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			2	22	1	44	7	22	16	17	17	6	161	26	7	11	9	368	4526	9656

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

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## 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

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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.