



# Liberia IDSR Epidemiology Bulletin

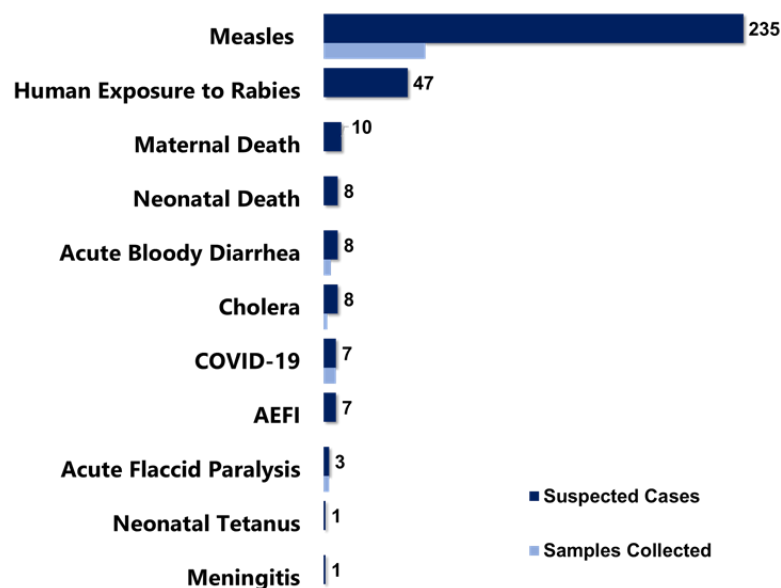
Epi-week 12 (March 21-27, 2022)

Country Population: 5,104,413 | Volume 18 Issue 12 | March 21-27, 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 **335** events of public health importance including **18** deaths were reported
- ♦ Completeness and timeliness of health facility reports were both **99%** respectively
- ♦ **Ongoing Lassa fever** outbreak in three Counties
- ♦ **Ongoing Measles** outbreak in eleven counties
- ♦ **Seven new confirmed COVID-19** cases reported from three counties

\*Adverse Event Following Immunization/Adverse Drug Reaction

## Reporting Coverage

Table 1: Health Facility Weekly DSR Reporting Coverage, Liberia, Epi Week 12, 2022

County	Expected Report from Health Facility	Reports Received	Received on Time	Completeness (%)	Timeliness (%)
Bomi	26	26	26	100	100
Bong	57	57	57	100	100
Gbarpolu	16	15	15	94	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	23	23	23	100	100
Lofa	66	66	66	100	100
Margibi	55	54	54	98	98
Maryland	27	27	27	100	100
Montserrado	334	329	329	99	99
Nimba	91	88	88	97	97
Rivercess	21	21	21	100	100
River Gee	20	20	20	100	100
Sinoe	37	37	37	100	100
<b>Liberia</b>	<b>867</b>	<b>857</b>	<b>857</b>	<b>99</b>	<b>99</b>

857 (99%)  
Health facilities reported IDSR data

92 (98%)  
Health districts reported IDSR data

857 (99%)  
Health facilities reported timely IDSR data

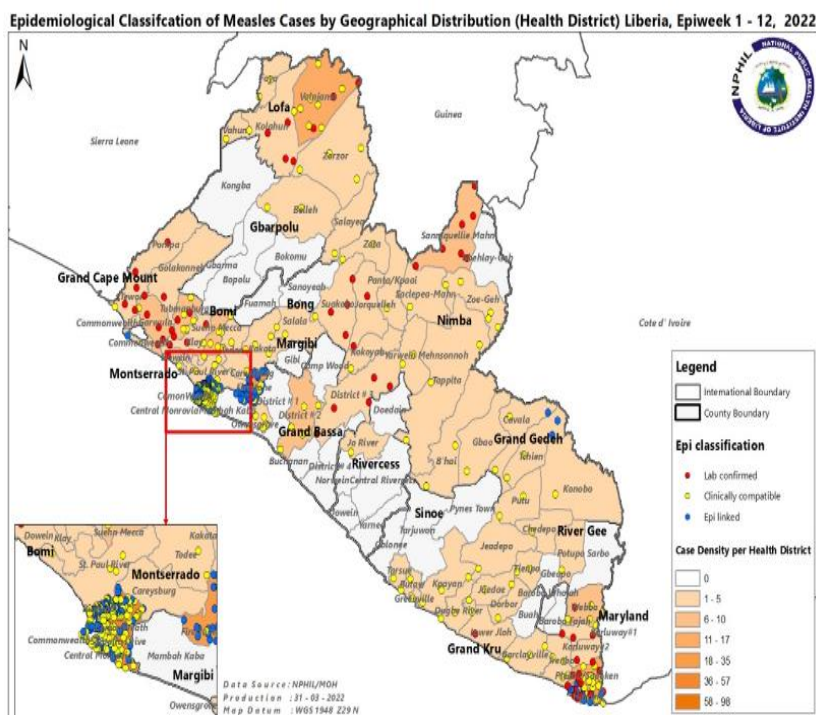
- ♦ The national target for weekly IDSR reporting is 80%. Health facility timeliness is monitored at health district level
- ♦ All counties submitted weekly IDSR reports to the national level on times.

Legend: ≥80 <80

## Vaccine Preventable Diseases

### Measles

- ☞ Two hundred thirty-five (235) suspected cases were reported from Montserrado (110), Margibi (30), Nimba (28), Lofa (24), Bong (8), Grand Bassa (8), Bomi (7), Maryland (7), River Gee (4), Grand Gedeh (4), Grand Cape Mount (4), Grand Kru (1) counties
- ☞ Fifty-seven (57) specimens collected and pending testing:
- ☞ Vaccination status among suspected cases
  - Vaccinated - 112 (48%)
  - Not vaccinated- 95 (40%)
  - Unknown - 28 (12%)
- ☞ Age distribution among suspected cases
  - < 5 years: 143 (61%)
  - ≥ 5 years: 92 (39%)
- ☞ Cumulatively, one thousand one hundred ninety-six (1,196) suspected cases have been reported
  - Confirmed: 1036 (87%)
    - ✓ Laboratory confirmed: 213
    - ✓ Clinically compatible: 320
    - ✓ Epidemiologically linked: 503
  - Non-measles discarded cases: 160
  - Proportion of samples collected: 48% (518/1,196)
  - Proportion of samples tested: 80% (373/518)



## Outbreak

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

(Situation update as of the 14<sup>th</sup> December 2021-March 27, 2022)

- ☞ One hundred fourteen (109) new cases recorded from Somalia Drive (45), Central Monrovia (23), Bushrod (21), Commonwealth (18), Careysburg (1), and St. Paul (1)
- ☞ A total of 576 suspected cases line listed up to date
  - 95 laboratory confirmed
  - Median age 6 (range 1 day-48 years)
  - Death in suspected: 3
  - CFR 2% (2/95)
  - All reported cases are undergoing treatment

### Vaccination status among lab confirmed:

- Vaccinated by record- 41% (39/95)
- Not vaccinated – 43% (41/95)
- Unknown - 16% (15/95)



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## Bong County: Suakoko, Zota, and Panta Districts (Situation update as of the 28<sup>th</sup> February – March 27, 2022)

- 📁 Eight (8) new cases reported
  - Salala (7) and Panta (1)
- 📁 A total of 60 suspected cases reported
  - Eight (8) lab confirmed
  - Median age 3 (range 1- 36 years)
  - 50% (4/8) not vaccinated

## Margibi County: Firestone District (Situation update as of February 28- March 27, 2022)

- 📁 Thirty (30) new cases reported
  - Kakata (23) and Mamba Kaka (7)
- 📁 A total of 88 suspected cases reported
  - Fifteen (15) laboratory confirmed
  - Median age 3 (range 1- 36 years)
  - 13 (87%) were vaccinated

## Nimba County: Saclepea-Mah, Sanniquellie-Mah, Gbehlay Geh and Zoe-Geh Districts (Situation update as of the 26<sup>th</sup> January – March 27, 2022)

- 📁 Twenty-eight (28) new cases reported
  - Zoe-Geh (13), Sanniquellie-Mah (10) Saclepea-Mah (5)
- 📁 A total of One hundred sixty-five (165) cases line listed
  - Twenty-two (22) laboratory confirmed
  - Median age 6 (range 2 months- 45years)
  - 45% (10/22) were vaccinated
  - 32% (7/22) not vaccinated

## Maryland County: Harper and Pleebo Districts (Situation update as of the 31<sup>st</sup> January – March 27, 2022)

- 📁 Seven (7) new cases reported
  - Harper (4) and Pleebo (3)
- 📁 A total of 64 suspected cases reported
  - Fifteen (15) laboratory confirmed
  - Median age 7 (range 1-48 years)
  - 93% (14/15) vaccinated status

## Bomi County: Suehn Mecca, Senjeh, and Klay Districts (Situation update as of March 7-27, 2022)

- 📁 Seven (7) new cases recorded
  - Klay (4) and Senjeh (3)
- 📁 A total of 34 cases reported
  - Eight (8) laboratory confirmed
  - Median age 10(range 4 months-35 years)
  - 50% (4/8%) were vaccinated



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## Grand Bassa County: District #2 (Situation update as of March 10-27, 2022)

- No new case recorded
- Total of 12 cases recorded line listed

## Cape Mount County: Gola Konneh (Situation update as of March 10-27, 2022)

- 👉 No new case recorded
- 👉 A total of 10 cases have been reported
  - Six (6) laboratory confirmed
  - 5 (53%) were vaccinated

## Lofa County: Voinjama and Salayea (Situation update as of the March 27, 2022)

- 👉 Twenty-nine (29) new cases reported
  - Voinjama (20) and Salayea (9)
- 👉 A total of 43 suspected cases reported
  - Three (3) laboratory confirmed
  - 100% (3/3) vaccinated

## Grand Kru: Trehn District (Situation update as of March 14-27, 2022)

- 👉 Six (6) new suspected cases reported
- 👉 A total of 12 suspected cases reported

## Rivercess: (Situation update as of March 16-27, 2020)

- 👉 No new suspected case reported from Joe Rive
- 👉 A total 6 suspected cases reported

## Public Health Actions

- 👉 Community sensitization ongoing
- 👉 Utilization of vaccination services
- 👉 Case investigation, active case search and line listing ongoing
- 👉 Case management of cases ongoing

## Challenges

- Limited logistical and operational support for response activities
- Stock out of measles vaccines and vitamin A, in some counties (Bong and Margibi Counties)
- Delay in specimen's transportation and feedback
- Limited medical supplies for case management

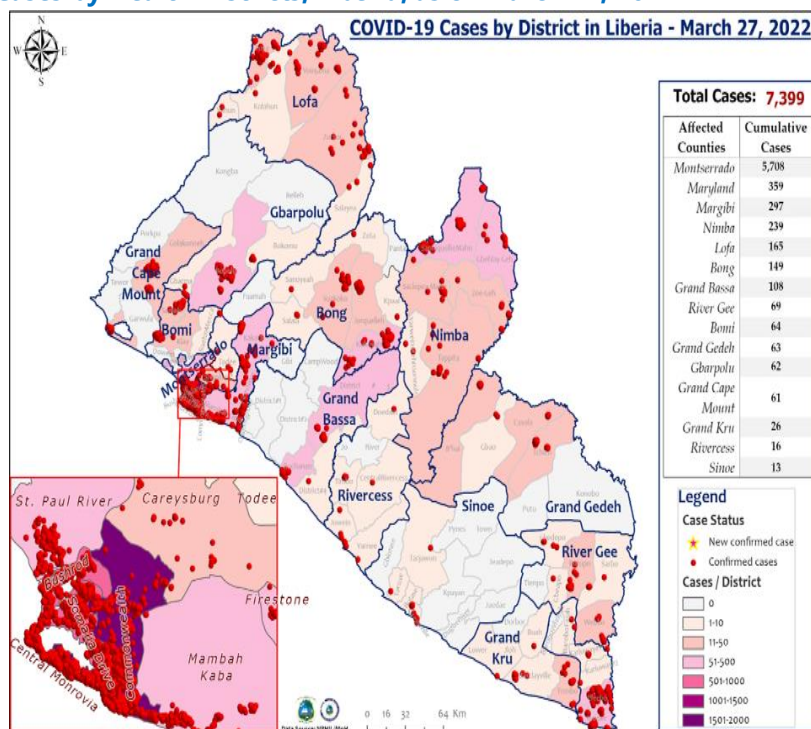
## Influenza-Like Illnesses

### Coronavirus Disease (COVID-19)

#### Outbreak

- ☞ Seven (7) new cases were reported from Nimba (4) and Montserrado (3) Counties
  - Nineteen (19) contacts are being followed up in Nimba County
- ☞ A total of five hundred sixty-two (562) confirmed cases have been reported since epi week 1
- ☞ Cumulatively, seven thousand three hundred ninety-nine (7,399) confirmed cases recorded including 294 deaths 601 healthcare workers reported with 17,646 contacts generated

**Figure 2: Geographical Distribution of Laboratory Confirmed COVID-19 Cases by Health Districts, Liberia, as of March 27, 2022**



#### 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

### Acute Flaccid Paralysis (AFP)

- ☞ Three (3) cases reported from Bong (2) and Nimba (1) Counties
  - Specimens were collected and pending shipment
- ☞ Cumulatively, twenty-eight (28) AFP cases have been reported

### Neonatal Tetanus

- ☞ One (dead) case reported from Lofa County
- ☞ Cumulatively, fifteen (15) clinically diagnosed cases reported

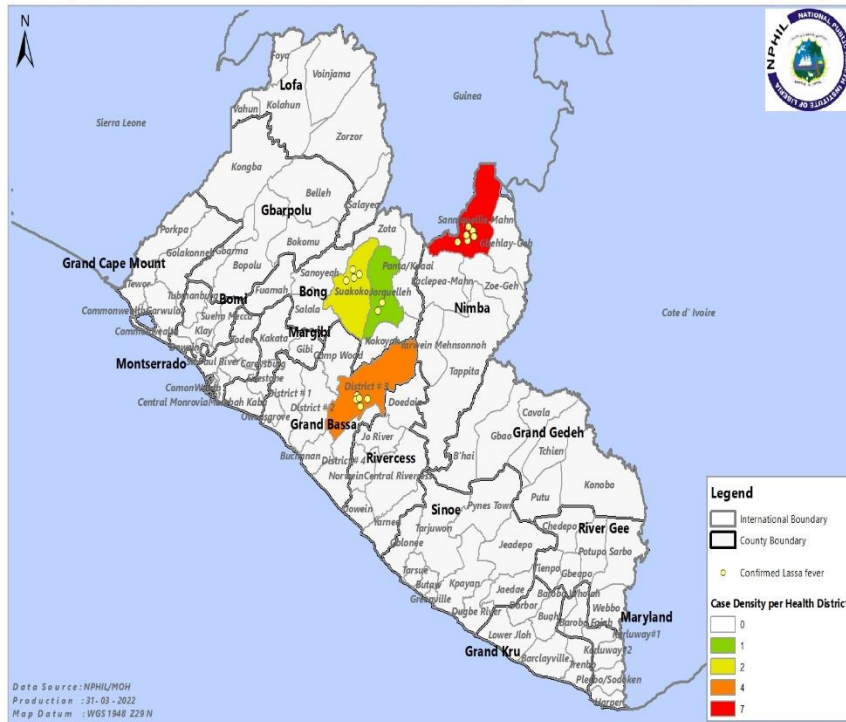


## Viral Hemorrhagic Diseases

### Lassa fever

- 👉 Zero suspected cases reported
- 👉 Cumulatively, forty-nine (49) suspected cases reported including 7 deaths
- 👉 Proportion of suspected cases with sample collected 100% (49/49)
  - Proportion of suspected cases with sample tested 100% (49/49)
  - Nineteen (19) confirmed including 6 deaths CFR 32% (6/19)

Geographical Distribution of Confirmed Lassa fever cases by Health Districts ( Epi week 12, 2022 )



### Outbreak

#### Three Counties currently in Outbreak: Grand Bassa, Nimba, and Bong

##### Grand Bassa County: District 3 A&B (Countdown begin)

- 👉 No new suspected case reported
- 👉 A total of 38 days gone by since the last confirmed case was discharged from admission.
- 👉 Zero active case
- 👉 Zero active contact
- 👉 Total confirmed cases five. CFR 20% (n=1/5)
- 👉 A total of 24 contacts generated. All 24 contacts were family and community members and have completed 21 days' follow-up.

##### Nimba County: Sanniellie-Mah District (Countdown begin)

- 👉 No new suspected case reported
- 👉 A total of 27 days gone by since last confirmed case was discharged from admission
- 👉 Zero active case
- 👉 Zero active contact
- 👉 Total confirmed cases seven. CFR 57% (n=4/7)
- 👉 A total of 104 contacts were generated. All 104 contacts (47 HCWs & 57 families) completed 21 days' follow-up



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## Bong County: Jorquelleh & Suakoko Districts

- ✎ No new confirmed case reported
- ✎ Three suspected cases reported for epi-week 11
- ✎ Total confirmed cases seven. CFR 14% (n=1/7)
- ✎ A total 70 contacts were generated from epi-week 1-12, 2022 of which 49 contacts completed 21 days' follow-up and 21 contacts still under follow-up (13 HCWs & 8 families).

## Public Health Actions

- ✎ Case management ongoing for the confirmed cases in isolation
- ✎ Continue to air LF prevention and control messages in affected and surrounding districts

## Yellow fever

- ✎ Zero suspected case reported
- ✎ Cumulatively, twenty-six (26) suspected cases reported
  - Proportion of suspected cases with sample collected 92% (24/26)
  - Proportion of suspected cases with sample tested 33% (8/24)

## Diarrheal Diseases

### Acute Bloody Diarrhea (Suspected Shigellosis)

- ✎ Eight (8) suspected cases were reported from Grand Gedeh (3), Grand Kru (1), Lofa (1), Margibi (1), Sinoe (1) and Montserrado (1) Counties
  - Four (4) specimens collected and pending testing
- ✎ Cumulatively, one hundred sixty-nine (169) suspected shigellosis cases reported with sixty-three (63) specimens collected: 38 negative, 1 positive, 24 pending

### Severe Acute Watery Diarrhea (Suspected Cholera)

- ✎ Eight (8) suspected cases reported from Bong (4), Lofa (2), Nimba (1) and Grand Kru (1) Counties
  - Two (2) specimens collected and pending testing
- ✎ Cumulatively, ninety-two (92) suspected cholera cases reported with 48 specimens collected and 18 tested negative

## Other Reportable Diseases

### Animal bite (Human Exposure to Rabies)

- ✎ Forty-seven (47) animal bite cases reported Nimba (7), Montserrado (7), Grand Bassa (7), Grand Kru (6), Bong (5), Maryland (4), Lofa (3), Rivercess (2), Sinoe (2), Grand Gedeh (1), Grand Cape Mount (1), Gbarpolu (1), River Gee (1) Counties
  - 17% (8/47) persons received PEP
- ✎ Cumulatively, five hundred eighty-seven (587) animal bite cases reported
- ✎ Dog bites account for 100%
- ✎ 1-4 doses (PEP) administered to about 16% (92/587) of patients

## Public Health Actions

- ✎ 1-4 doses of post exposure prophylaxis administered to about 17% (8/47) persons
- ✎ Cumulatively, 1-4 doses of post exposure prophylaxis were administered to about 16% (92/587)



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## Meningitis

- 👉 One suspected case reported from Lofa County
- 👉 No specimen was collected
- 👉 Cumulatively, twelve (12) suspected cases reported including one confirmed

## Monkeypox

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

## Events of Public Health Importance

### Maternal Mortality

- 👉 Ten (10) deaths reported from Montserrado (7), Grand Bassa (1), Nimba (1) and Lofa (1) Counties
  - Causes of death: Pending investigation (4), Eclampsia (2), Rupture uterus (1), Sepsis (1), PPH (1), and Anemia (1)
  - Nine deaths occurred at the health facility and one community
- 👉 Cumulatively, eighty-three (83) deaths reported
  - The proportion of deaths reviewed was 30% (25/83)
  - The proportion of community deaths 16% (13/83)
    - The proportion of deaths reviewed in the community was 54% (7/13)

### Neonatal Mortality

- 👉 Eight (8) deaths reported from Montserrado (2), Bong (2), Nimba (1), Margibi (1), Lofa (1) and Bomi (1) Counties
- 👉 Causes of deaths: Birth asphyxia (5), Neonatal tetanus (1), Preterm (1), and Jaundice (1)
- 👉 All deaths occurred at the health facility
- 👉 Cumulatively: one hundred seventy-seven (177) deaths have been reported
  - The proportion of deaths reviewed 21% (38/177)
  - The Proportion of community deaths 5% (7/177)
    - The proportion of deaths reviewed from the community 43% (3/7)

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

- 👉 Seven (7) cases reported from Sinoe (5), Maryland (1) and Grand Kru (1) Counties
- 👉 Cumulatively: sixty-two (62) events reported with 81% (50/62) related to COVID-19
  - Proportion of J&J -77.4% (48/62)
  - Proportion of AstraZeneca – 3.2% (2/62)
  - Proportion of other related events -19.4% (12/62)

## 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
- 👉 No specimen was collected





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## Border Surveillance Update

**Table2: Border activity at the PoE for Incoming and Outgoing Travelers, Liberia, Epi week 12 2022**

✎ A total of 5,594 travelers recorded for the week with incoming travelers accounting for 48% (2,682/5,594)

✎ Zero travelers reactive for COVID-19

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	72	42	30	0	0	0	0	0	0	12
	Robert Int'l Airport	3806	1714	2092	0	0	0	0	0	0	3794
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	108	54	54	0	0	0	0	0	0	54
Land Crossing	Bo Water Side	646	400	246	54	39	0	15	0	0	22
	Ganta	390	186	204	0	0	0	0	0	0	0
	Yekepa	211	99	112	0	0	0	0	0	0	0
	Loguatu	231	122	109	0	0	0	0	0	0	0
	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		5,594	2,682	2,912	54	39	0	15	0	0	3947

**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 ongoing in Bomi County including 54 participants from 27 health facility
- ✎ 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

- PEP administered to four cases
- Management of admitted cases ongoing
- Ensure the appropriate medical protocol in place

# 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	2	0	0	0	0	0	0	0	0	0	1	0	0	0	3	28	0
		D	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Measles	A	7	8	0	8	4	4	1	24	30	7	110	28	0	4	0	235	1196	213
		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	15	0
		D	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0
	Yellow fever	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	26	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	49	19
		D	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	6
Influenza-Like Illnesses	COVID-19	A	0	0	0	0	0	0	0	0	0	0	3	4	0	0	0	7	562	7399
		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	0	0	0	0	3	1	1	1	0	1	0	0	0	1	8	169	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	4	0	0	0	0	1	2	0	0	0	1	0	0	0	8	92	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	0	0	1	0	0	0	1	0	0	7	1	0	0	0	10	83	
	Neonatal Mortality	D	1	2	0	0	0	0	0	1	1	0	2	1	0	0	0	8	177	
	Adverse Events Following Immunization (AEFI)	A	0	0	0	0	0	0	1	0	0	1	0	0	0	0	5	7	62	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	1	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	1	7	1	1	6	3	0	4	7	7	2	1	2	47	587	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	12	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			8	21	1	16	5	8	10	34	32	12	130	43	2	5	8	335	3068	7932

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.