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

- **Measles**: 87 cases
- **Human Exposure to Rabies**: 35 cases
- **Lassa Fever**: 13 cases
- **Neonatal Death**: 11 cases
- **Acute Bloody Diarrhea**: 7 cases
- **Maternal Death**: 4 cases
- **Meningitis**: 2 cases
- **Cholera**: 2 cases
- **Yellow Fever**: 1 case

**Keynotes and Events of Public Health Significance**

- A total of 162 events of public health importance including 20 deaths were reported.
- Completeness and timeliness of health facility reports were both 99%.
- Ongoing Lassa fever outbreaks in four counties.
- Ongoing Measles outbreak in four counties.

### Reporting Coverage

**Table 1: Health Facility Weekly DSR Reporting Coverage, Liberia, Epi week 8, 2020**

<table>
<thead>
<tr>
<th>County</th>
<th>Expected Report from Health Facility</th>
<th>Reports Received</th>
<th>Received on Time</th>
<th>Completeness (%)</th>
<th>Timeliness (%)</th>
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<td>839</td>
<td>835</td>
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</table>

Legend:

- ≥80
- <80

The national target for weekly IDSR reporting is 80%
- Health facility timeliness is monitored at District level
- Fourteen of the fifteen counties submitted their weekly IDSR report to the national level on time while Maryland reported late.
Vaccine Preventable Diseases

Measles

- Eighty-seven (87) suspected cases were reported from Grand Kru (49 including 2 deaths), Sinoe (16), Nimba (6), Grand Gedeh (4), Montserrado (3), River Gee (3), Maryland (2), Cape Mount (1), Margibi (1), Rivercess and Bomi (1) counties
  - Thirty-four (34) specimens were collected, 24 tested; 16 positive, 7 negative, 1 indeterminate and 10 are clinically confirmed

- Vaccination status among suspected cases
  - Vaccinated 39 (44.8%), not vaccinated 41 (47.1%) and unknown 7 (8%)

- Age distribution among suspected cases:
  - 1–4 years: 25 (28.7%), ≥5 years: 62 (71.2%)

- Cumulatively, since epi week 1, Two hundred fifty-seven (257) suspected cases have been reported. Of the total, 124 have been tested by the National Reference Laboratory and results showed 52 positive, 68 negative and 4 equivocal.

- Epi classification is as follow: 185 (72%) confirmed cases (lab confirmed 52, clinically confirmed 63, epi-linked 70), 68 (26.4%) negative, and 4 (1.5%) indeterminate
  - Of the samples tested negative for measles, 34 tested for rubella and results showed 19 positive, 14 negative and 1 equivocal

Public Health Action

- Case management, active case search, health education, and community engagement are ongoing in affected districts and communities

Acute Flaccid Paralysis (Suspected Polio)

- Zero case was reported
- Cumulatively, since epi week 1, four (4) suspected cases have been reported
Neonatal Tetanus
- Zero case was reported
- Cumulatively, since epi week 1, four (4) clinically diagnosed cases have been reported

Viral Hemorrhagic Diseases
Ebola Virus Disease (EVD)
- Zero alert was reported

Lassa fever
- Thirteen (13) suspected cases were reported from Grand Bassa (9), Montserrado (2 deaths) and Bong (2 including 1 death) Counties
- Specimens were collected for all and tested; 5 positive 8 negative
- Cumulatively, since epi week 1, eighty-six (86) suspected cases have been reported
  - Proportion of suspected cases with sample collected 100% (n=86)
  - Proportion of suspected cases with specimen tested 100% (n=86)
  - Laboratory confirmed: 40.6% (n=35)
  - Case fatality rate in confirmed cases: 42.8% (n=15/35)
  - Epi classification is as follows: 35 lab confirmed and 51 not a case

Yellow fever
- One suspected case was reported from Grand Bassa County
  - Specimen was collected and tested negative
- Cumulatively, since epi week 1, twenty-one (21) suspected cases have been reported of which 17 negative and 3 pending

Monkeypox
- Zero case was reported
- Cumulatively, since epi week 1, four (4) suspected cases have been reported

Meningitis
- Two suspected cases were reported from Grand Gedeh and Montserrado Counties
  - Specimens were collected and tested negative
- Cumulatively, since epi week 1, sixteen (16) suspected cases have been reported with 3 confirmed (2 streptococcal and 1 meningococcal)
### Events of Public Health Importance

**Maternal Mortality**

- Four (4) deaths were reported from Grand Kru, Grand Gedeh, Montserrado and Nimba Counties
- Causes of deaths: Post-partum hemorrhage (2), Antepartum hemorrhage and Eclampsia
- Reporting site: health facilities 4 (100%)
- Cumulatively, since epi week 1, Thirty-seven (37) deaths have been reported

**Neonatal Mortality**

- Eleven (11) deaths were reported from Nimba (3), Margibi (2), one each from Bong, Gbarpolu, Montserrado, Maryland, Grand Bassa and Grand Gedeh Counties
- Causes of deaths: Birth asphyxia (5), Neonatal sepsis (5) and Preterm
- Reporting sites: health facilities 11 (100%)
- Cumulatively, since epi week 1, ninety-three (93) deaths have been reported

### Other Reportable Diseases

**Animal Bites (Human Exposure to Rabies)**

- Thirty-five (35) suspected cases were reported from Montserrado (9), Grand Kru (6), Nimba (6), Maryland (3), Grand Bassa (2), Bong (2), Grand Gedeh (2), Lofa (2), Margibi (2) and Sinoe (1) Counties
- Cumulatively, since Epi week one, 276 suspected cases have been reported

**Acute Bloody Diarrhea (Suspected Shigellosis)**

- Seven (7) suspected cases were reported from Grand Kru (2), Nimba (2), one each from Lofa, Maryland and Montserrado Counties
- Four specimens were collected and pending testing
- Cumulatively, since epi week 1, sixty-two (62) cases have been reported, one tested positive and 17 negative

**Severe Acute Watery Diarrhea (Suspected Cholera)**

- Two suspected cases were reported from Bong (dead) and Nimba Counties
- One specimen was collected and pending laboratory confirmation
- Cumulatively, since epi week 1, twelve (12) cases have been reported

**Unexplained death**

- Zero case was reported
- Cumulative, since epi week 1, one (1) case has been reported
Points of Entry

Zero IDSR alert detected and verified across the points of entry

A total of 3,107 travelers were recorded for the week (See Table 2)

Table 2: Total Travelers, IDSR Alerts Detected and Verified at Points of Entry, Liberia, Epi-week 8, 2020

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<tr>
<th>Type of Ports</th>
<th>Point of Entry</th>
<th>Weekly total</th>
<th>Arrival</th>
<th>Departure</th>
<th>Yellow Book Issued</th>
<th>Yellow Book Damage</th>
<th>Card Replaced</th>
<th>Travelers Vaccinated</th>
<th>Alerts Verified</th>
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</table>

Total Traveler for the Week 3,107 1,396 1,711 50 8 19 23 0

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

AFRO Public Health Events

The National Public Health Institute of Liberia continues to monitor acute public health emergencies and outbreaks occurring in the African Region in order to ensure preparedness and preventive measures are implemented.

During this week, 69 ongoing events are being monitored through WHO Health Emergencies Program in the African Region. Key events highlighted during the week include the following:

- Measles in Democratic Republic of the Congo
- Cholera in Ethiopia
- Ebola virus disease in Democratic Republic of the Congo
- Humanitarian crisis in South Sudan

Source: WHO Week 8 Bulletin on Outbreaks and Other Emergencies
Outbreaks

Lassa fever

**District 3A & B, Grand Bassa County**
- Two new confirmed cases reported
  - A total of 53 contacts line listed, 45 completed and 8 under follow up
  - No case in isolation
- From January 1, 2020 to date, 15 confirmed cases have been recorded
  - 12 alive
  - 3 confirmed deaths (CFR 20%)
- Since the declaration of the outbreak in August 2019, twenty-four (24) confirmed cases including 4 deaths have been reported

**Suakoko District, Bong County**
- One new confirmed case reported
  - A total of 232 contacts line listed, 164 completed and 68 under follow-up
- From January 1, 2020 to date, 16 confirmed cases have been recorded
  - 7 alive
  - 9 confirmed deaths (CFR 56.2%)
- Since declaration of the outbreak in August 2019, twenty-five (25) confirmed cases including 10 deaths have been reported

**Commonwealth District, Montserrado County**
- No new confirmed case reported as of February 21, 2020
  - Total contacts under follow up 13
    - From January 1, 2020 to date, two confirmed cases have been recorded
    - CFR 50%
- Since the declaration of the outbreak in November 2019, four (4) confirmed cases have been reported

Measles

- Seventy-one (71) cases including 8 laboratory confirmed were reported from 8 Counties (Grand Kru (49), Sinoe (16), Nimba (6)
- Cumulatively, 149 suspected cases have been recorded including 23 laboratory confirmed
  - Grand Kru (8), Sinoe (8), Nimba (4) and Gbarpolu (3)

Epi-classification
- Laboratory confirmed (23), clinically confirmed (26), epi-linked (92), discarded (7) and pending (1)

Vaccination Status among laboratory confirmed
- Vaccinated (15)
- Not vaccinated (4)
- Unknown (4)

Public health action
- All cases were treated and discharged
- Plan to conduct a mini campaign targeting 3,032 children ages 6-59 months in affected and surrounding communities

Public Health Measures

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

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

- **Completeness** refers to the proportion of expected weekly IDSR reports received (target: ≥80%).
- **Timeliness** refers to the proportion of expected weekly IDSR reports received by the next level on time (target: ≥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: ≥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
- **Case Fatality Rate (CFR)** is the proportion of deaths among confirmed cases
### Appendix 1: Summary of immediately reportable diseases, conditions, and events by County during Epi week 8 report, Liberia, 2020

<table>
<thead>
<tr>
<th>Counties</th>
<th>No. of Health District</th>
<th>No. of Health District Reported</th>
<th>Acute Flaccid Paralysis (Suspected Polio)</th>
<th>Acute Bloody Diarrhea (Meningitis)</th>
<th>Severe Acute Watery Diarrhea (Cholera)</th>
<th>Human Exposure to Animal bites (Suspected Rabies)</th>
<th>Lassa fever</th>
<th>measles</th>
<th>Meningitis</th>
<th>Maternal Mortality</th>
<th>Neonatal Tetanus</th>
<th>Ebola Virus Disease</th>
<th>Yellow Fever</th>
<th>Monkeypox</th>
<th>Dengue Fever</th>
<th>Buruli Ulcer</th>
<th>MRSA Tuberculosis</th>
<th>Unexplained Cluster of deaths</th>
<th>Unexplained Cluster of Health Events/Disease</th>
<th>Other Disease/Events</th>
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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.