

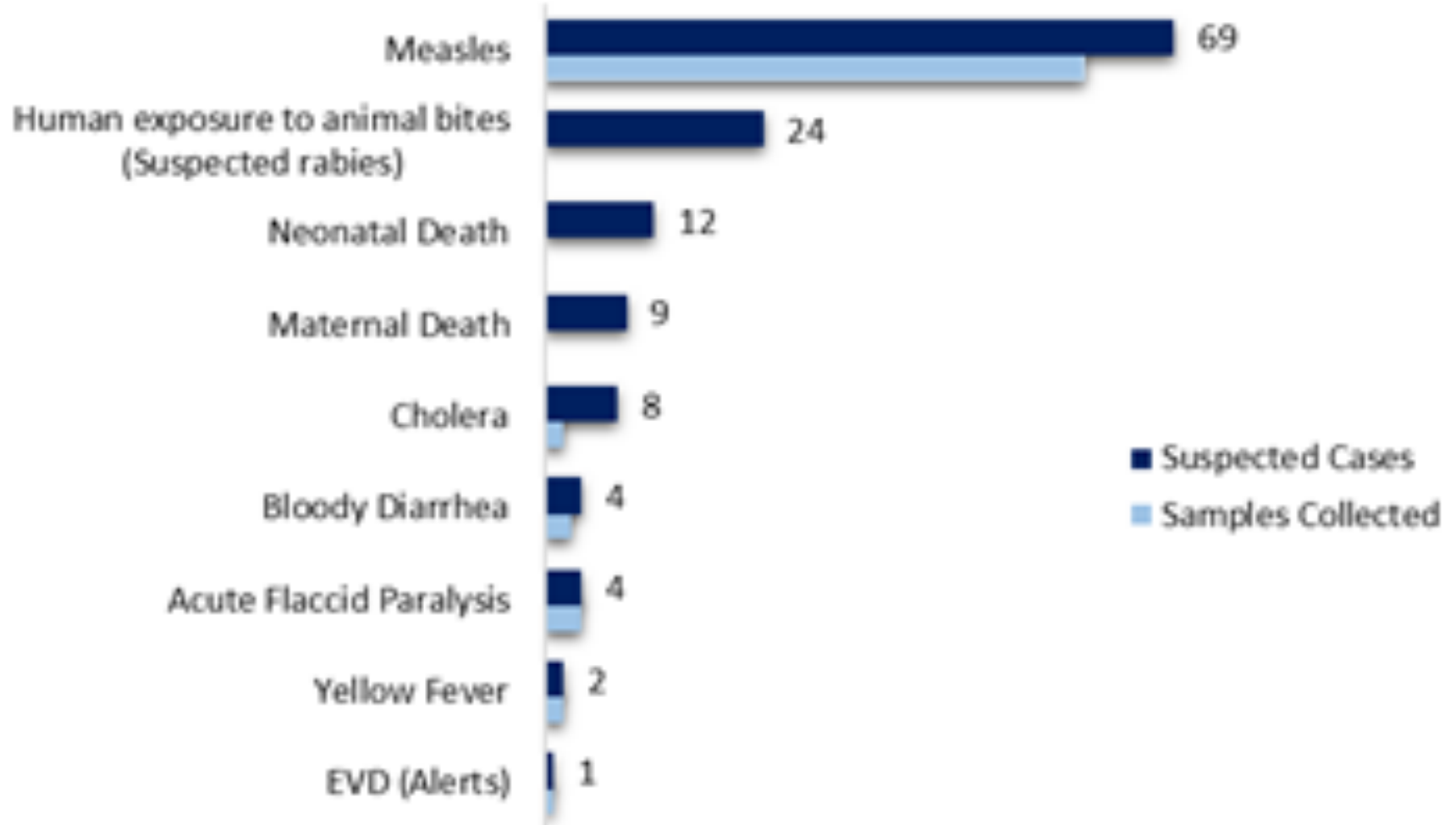


**Liberia Early Warning and
Disease Surveillance Bulletin**
Epidemiological Week 13
MARCH 26- April 3 2017

Data Source: CSOs from 15 Counties and Lab

Highlights

Total Number of Suspected Cases Reported by Events, Liberia, Epi-week 13, 2017 (n=133)



Highlights

- One hundred and thirty three public health events were reported across the country
- Two outbreaks confirmed during the week.
 - Cholera & Measles
- 98% completeness in reporting from health facilities.
- 97% reporting timeliness from health facilities.
- IDSR Data Quality Audit
- Administrative coverage of OPV (99%), Vit A (100%), and Mebendazole 104%

Reporting Coverage

County	Number of Expected Report from Health Facility	Number of Reports Received	Number Received on Time	Completeness (%)	Timeliness (%)
Bomi	23	23	23	100	100
Bong	55	55	55	100	100
Gbarpolu	15	15	15	100	100
Grand Bassa	33	33	32	100	97
Grand Cape Mount	32	32	32	100	100
Grand Gedeh	24	24	24	100	100
Grand Kru	19	17	15	89	79
Lofa	59	59	59	100	100
Margibi	44	44	44	100	100
Maryland	25	25	25	100	100
Montserrado	284	274	274	96	96
Nimba	75	74	74	99	99
Rivercess	19	19	14	100	74
River Gee	19	19	19	100	100
Sinoe	35	35	35	100	100
Liberia	761	748	740	98	97

748 (98%)

Health facilities out of 761 reported IDSR data

90 (100%)

Health districts out of 90 reported IDSR data

740 (97%)

Health Facility timeliness for weekly IDSR reporting

- *The target for weekly IDSR reporting is 80%.*

Vaccine Preventable Diseases

Measles

- Sixty-nine suspected cases were reported from
 - Montserrado (18), Lofa (17), Margibi (12), Bong (7), Bomi (8), Grand Bassa (5), Sinoe (1), and Grand Cape Mount (1) counties.
- Twelve tested positive, 39 negative and 3 equivocal.
- Confirmed measles cases reported from Foya (5), Camp wood (3), Suakoko (2), and Montserrado (2)
- Of the 39 negative measles samples, 12 were tested for Rubella of which 6 were positive.

Vaccine Preventable Diseases

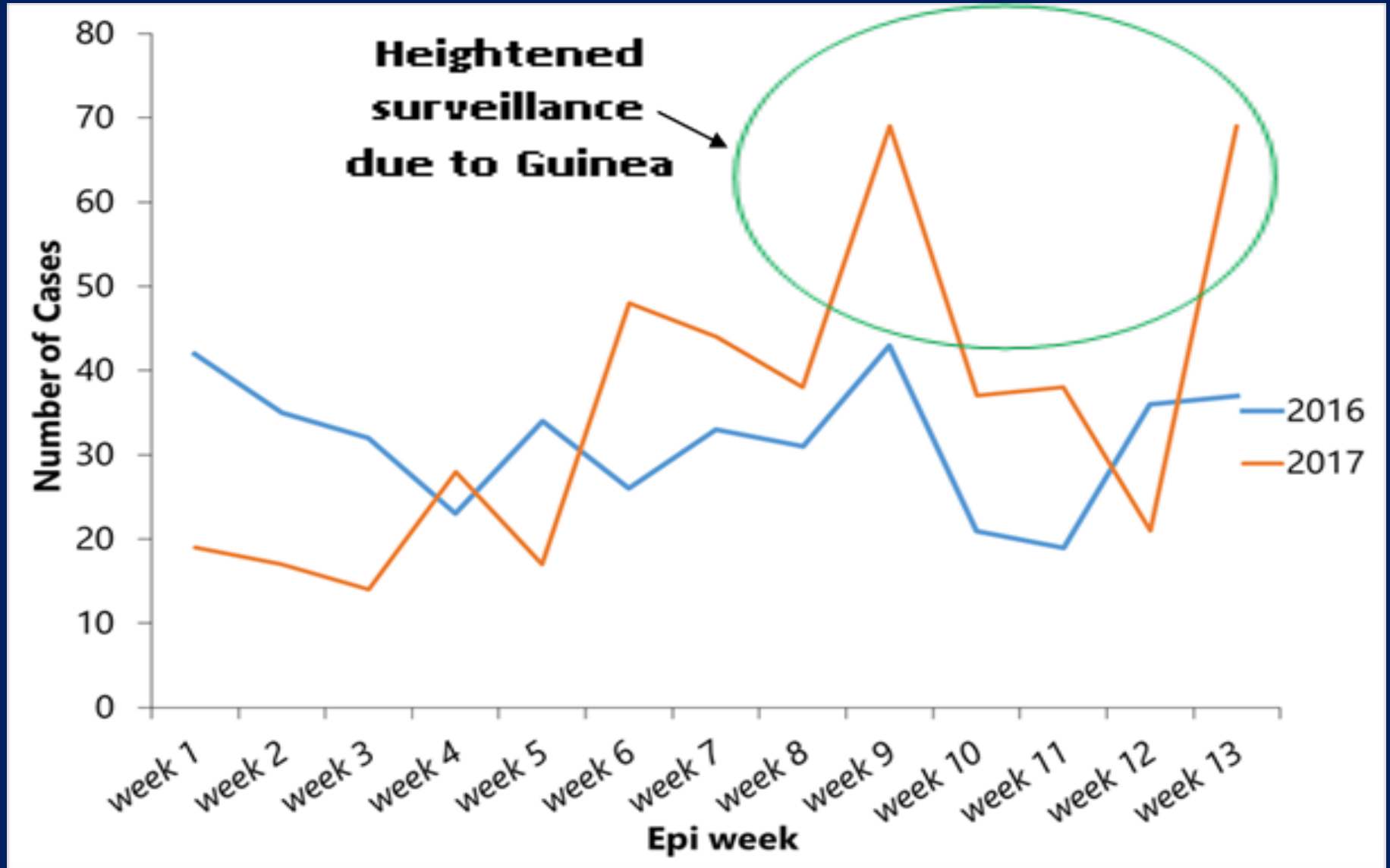
Measles

31 (45%) were previously vaccinated, 10 (14.5%) not vaccinated and 28 (40.5%) had unknown vaccination status.

- 45 (65%) were ≥ 5 years
- **2017 Cumulative:** 464 suspected cases
37 were positive, 342 negative, and 22 equivocal.
- **2017 Cumulative:** 130 samples tested for rubella
51 were positive.

Vaccine Preventable Diseases

Measles



Acute Flaccid Paralysis (Polio)

- Four (4)
 - Grand Bassa (1), Grand Cape Mount (1), Montserrado (1) and River Gee (1)
- **2017 Cumulative: 50 (Six)**
- **2017 Confirm: 0 (Zero)**
- 99% of 945,464 children less than 5 years received bOPV throughout the 15 counties.
- Auto Visual AFP Detection and Reporting (AVADAR) implementation ongoing in Montserrado County.

Yellow Fever

- **Suspected:** Two were reported from Grand Gedeh and Grand Kru Counties.
- **2017 Cumulative:** 69
 - 60 samples tested negative and 8 pending laboratory confirmation. 1 presumptive positive case
- **Public Health Actions**
- Specimens were collected for all suspected Yellow fever cases.
- National risk assessment

Ebola Virus Disease (EVD)

- **Suspected :** One
- **Laboratory Confirmed**
: One tested negative
- **2017 Cumulative :** 270

Maternal Deaths

Nine maternal deaths reported

Montserrado (3), Bong (2), Maryland (2), Grand Bassa (1), and Margibi (1) counties.

Causes of deaths

PPH (3) , prolong labour, Cardiac failure Obstructed labour , uterine rapture , anemia, and unknown

- 7 of the deaths occurred in health facilities
- 2017 Cumulative: 68 maternal deaths

Public Health Actions

- Two of the maternal deaths were investigated by counties and review forms were submitted to Disease Prevention and Control Division.

Causes of Maternal Deaths (n=68)

Maternal Death	Proportion	Percentage
Post-partum hemorrhage	18	30.5
Anemia	11	18.6
Sepsis	9	15.3
Congestive Heart failure	4	6.8
Renal failure	4	6.8
Ruptured uterus	4	6.8
Multiple organ failure (herbal ingestion-1)	2	3.4
Pre-eclampsia	2	3.4
Abruptio placenta	2	3.4
Eclampsia	2	3.4
Dissimilated intravascular coagulation	1	1.7
Amniotic fluid embolism	1	1.7
Cardiac pulmonary failure	1	1.7
Respiratory Distress	1	1.7
Umbilical Hernia (Omphalocele)	1	1.7
Spinal shock	1	1.7
Obstructed labor	2	3.4

Cumulative Maternal Deaths Reported by Counties, Liberia, Epi weeks 1-13, 2017

County	Annual Live birth 4.3% (EPI 2017)	Current week	Cumulative	% of Cumulative Maternal deaths	Annualized Maternal Mortality Ratio
Bomi	4361	0	2	3	238
Bong	17289	2	7	10	211
Gbarpolu	4323	0	1	1	120
Grand Bassa	11494	1	7	10	317
Grand Cape Mount	6588	0	0	0	0
Grand Gedeh	6494	0	0	0	0
Grand Kru	3002	0	1	1	173
Lofa	14354	0	4	6	145
Margibi	10883	1	2	3	96
Maryland	7048	2	5	7	369
Montserrado	57974	3	24	35	215
Nimba	23953	0	9	13	195
Rivercess	3463	0	1	1	150
River Gee	3707	0	2	3	281
Sinoe	5308	0	3	4	294

Neonatal Deaths

- Twelve neonatal deaths reported
 - Montserrado (3), Bong (3), Grand Kru (2) Grand Gedeh (1), Maryland (1), Nimba (1), and RiverGee (1) counties.
- **Causes of death were:**
 - Birth asphyxia (6), Neonatal sepsis (3), Neonatal tetanus (2) and Preterm (1)
- Ten of the deaths were reported to have occurred in health facilities.
- **2017 Cumulative:** 148 neonatal deaths have been reported.

Cumulative Neonatal Deaths Reported by Counties, Liberia, Epi weeks 1-13, 2017

County	Annual Live birth 4.3% (EPI 2017)	Current week	Cumulative neonatal deaths	% of Cumulative Neonatal deaths	Annualized Neonatal Mortality Rate
Bomi	4361	0	0	0	0.0
Bong	17289	3	19	13	5.7
Gbarpolu	4323	0	1	1	1.2
Grand Bassa	11494	0	4	3	1.8
Grand Cape Mount	6588	0	1	1	0.8
Grand Gedeh	6494	1	4	3	3.2
Grand Kru	3002	2	6	4	10.4
Lofa	14354	0	3	2	1.1
Margibi	10883	0	4	3	1.9
Maryland	7048	1	12	8	8.9
Montserrado	57974	3	60	41	5.4
Nimba	23953	1	9	6	2.0
Rivercess	3463	0	4	3	6.0
River Gee	3707	1	8	5	11.2
Sinoe	5308	0	13	9	12.7

Human Exposure to Animal Bite: Suspected Rabies

- **Suspected:** 24
 - Montserrado (8), Sinoe (4), River Gee (4), Rivercess (3), Grand Gedeh (2), Grand Bassa (2), and Lofa (1) counties.
- **2017 Cumulative:** 485 events of animal bites

Public Health Action

- All cases (suspected human rabies) received post-exposure prophylaxis (anti-rabies vaccine).

Bloody Diarrhea: Shigellosis

- **Suspected: 4**
 - Rivercess (2), Montserrado (1) and Sinoe (1) counties
- One sample of shigella tested positive from Nimba County
- **Laboratory Investigation: 3/4 Stool sample**
- **2017 Cumulative:77**
 - 2 were confirmed positive for shigella, 40 were negative and 35 are pending laboratory testing.

Cholera

- **Suspected: 8**
 - Sinoe (7) and Grand Bassa (1) Counties.
- Specimens were collected from all suspected cases
- **Laboratory Investigation: 2/8 Stool sample**
- **2017 Cumulative: 37**
 - 3 deaths attributable to cholera
 - 15 samples collected, 9 samples have been tested negative, 8 pending laboratory confirmation and 5 were rejected.

Cholera Public Health Actions

- Social mobilization and awareness activities on going in the affected communities.
- 100 pieces of jerry cans donated by Red Cross were distributed to the affected communities with 23 homes benefiting from the initial supply.
- Drug sensitivity test is ongoing at the Jackson F. Doe Hospital laboratory with results pending.
- The confirmed case was isolated and management of other cases ongoing.
- IPC materials (PPEs, Chlorine, antibiotics, ringer lactate, gloves etc.) supplied to the Diallah Clinic.
- The National team provided remote technical support to County Health Team.

Cholera Outbreak

On 22th March 2017, a suspected case of cholera was reported from Nimba County.

The patient 10 years old female was admitted to Diallah clinic.

- As of 6th April 2017, a total of 6 suspected cases including 2 deaths were reported from 3 communities Dialla (1 case), Nahlah 1 (4 cases), Nalah 2 (1 case).
- Specimens were collected from 2 cases, one tested positive for vibrio cholera and the other tested negative at the Jackson F. Doe referral hospital in Tappita District.

Cholera Outbreak cont'd

- All suspected cases linked to a common drinking water source
- 83% of the community inhabitants main source of drinking water is Nahlah creek while 17% get water from open well.
- None of the communities has flush latrines.
- The last case was discharged on 31 March, 2017.

Measles Outbreak

- On Monday March 27, 2017 the DSO for suakoko District received a report from Phebe Hospital of a suspected case of measles from Camp Wood community Grand Bassa County.
- Six additional cases with sign and symptoms of measles and conducted case investigation and collected sample form four cases.

Measles Outbreak cont'd

- The index case was a 16 years old child with onset of symptom on March 21, 2017.
- As part of the outbreak investigation 15 households with under five children to check the vaccination status of the community and found 22 under-five children of which only 5 children vaccinated for measles.

Public Health Measure

- All this children took the measles vaccine in Fenutoli clinic, Suakoko District, Bong County.

PUBLIC HEALTH MEASURES

National level:

- IDSR Data Quality Audit been conducted in five Counties
- Pilot implementation of an (AVADAR) surveillance
- Follow up with counties to conduct maternal deaths investigation, revision of forms and implement recommendations made.

PUBLIC HEALTH MEASURES Cont'd

- Planning is ongoing for eIDSR pilot in two counties (Grand Cape Mount and Margibi)
- IDSR training rollout in all the 15 counties is scheduled for 3rd week of April to 1st week of May 2017.



THANK YOU!!!