

Liberia IDSR Epidemiology Bulletin

Epi-week 34 (August 21-27, 2023)

Country Population: 5,104,413	Volume 34 Issue 18 August 21-27, 2023	Data Source: CSOs from 15 Counties and Laboratory
Highlights		• •
Figure 1: Public Health	Events Reported	Keynotes and Events of Public Health Significance
Human Exposure to Rabies Measles Cholera	92 44 27	 A total of 248 events of public health importance including 21 deaths reported
AEFI	26	 Completeness and timeliness of health facility reports were 97% & 96%
Acute Bloody Diarrhea Neonatal Death	22	 Ongoing Lassa fever outbreak in 2
Maternal Death	10	Counties
Influenza	5	 Ongoing Measles outbreak in 7 Counties
Mpox Lassa Fever	4	
Yellow fever	3	
Neonatal Tetanus	1 Suspected Cases Samples Collected	

Adverse Events Following Immunization/Adverse Drug Reaction (AEFI)

Reporting Coverage

Table 1: Health Facility Weekly IDSR Reporting Coverage, Liberia, Epi-week 34, 2023

County	Expected Reports From HF*	Reports Received	Received on Time	Completeness (%)	Timeliness (%)	945(97%) Health facilities
Bomi	28	28	28	100	100	reported
Bong	67	58	58	87	87	IDSR data
Gbarpolu	18	18	18	100	100	
Grand Bassa	37	37	37	100	100	
Grand Cape Mount	34	34	34	100	100	
Grand Gedeh	24	24	24	100	100	
Grand Kru	24	24	24	100	100	96(98%)
Lofa	60	60	60	100	100	Health districts
Margibi	66	66	66	100	100	reported
Maryland	28	28	28	100	100	IDSR data
Montserrado	418	394	392	94	94	
Nimba	92	92	92	100	100	
Rivercess	21	21	21	100	100	
River Gee	20	20	20	100	100	0.42 (0.69()
Sinoe	41	41	41	100	100	943 (96%) Health
Liberia	978	945	943	97	96	facilities

• The national target for weekly IDSR reporting is 80%. Health facility timeliness is monitored at the health district level

• All counties reported on time to the national level with the exception of Bong and River Gee counties

Legend:

- Forty-four (44) suspected cases were reported from 12 Counties (see distribution in Table 2)
- Seven specimen were collected and five pending testing
- Fifteen (15) were vaccinated (see distribution in Table 3)

Table 2: Distribution of Measles cases per county and epi-classification, Liberia, Epi week 34, 2023

	CUMULATIVE	CUMULATIVE		SIFICAT FIRMED	ION OF CASES			#	#	% CHANGE
COUNTY	# SUSPECTED CASES	# CONFIRMED CASES	Lab confirmed	Epi Linked	Clinically Compatible	DEATHS		CONFIRMED CASES WEEK 33		
Bomi	75	66	2	13	51	0	0.0	0	0	0
Bong	205	205	2	6	197	1	0.5	2	1	-50
Gbarpolu	37	36	0	0	36	0	0.0	2	0	-100
Grand Bassa	170	168	0	0	168	0	0.0	1	2	100
Grand Cape Mount	73	65	1	2	62	0	0.0 0		0	0
Grand Gedeh	364	321	4	26	291	0	0.0	4	12	200
Grand Kru	725	723	6	72	645	2	0.3	0	2	0
Lofa	121	113	0	0	113	0	0.0	1	1	0
Margibi	201	199	1	8	190	0	0.0	1	0	-100
Maryland	672	670	0	0	670	0	0.0	10	8	-20
Montserrado	1061	1053	4	53	996	2	0.2	4	6	50
Nimba	334	332	2	33	297	3	0.9	4	7	75
River Gee	132	112	0	0	112	0	0.0	0	3	0
Rivercess	34	29	1	0	28	0	0.0	1	0	-100
Sinoe	125	111	4	11	96	0	0.0	2	2	-100

Table 3: Vaccination Status of Measles Cases, Liberia, Epi-week 34, 2023

		Numb	er of Doses Receiv	/ed
County	Vaccinated	One Dose	Two Doses	Doses Not Indicated
Bomi	0	0	0	0
Bong	0	0	0	0
Gbarpolu	0	0	0	0
Grand Bassa	1	0	0	1
Grand Cape Mount	0	0	0	0
Grand Gedeh	3	3	0	0
Grand Kru	2	2	0	0
Lofa	1	1	0	0
Margibi	0	0	0	0
Maryland	0	0	0	0
Montserrado	5	5	0	0
Nimba	4	4	0	0
River Gee	2	0	0	2
Rivercess	0	0	0	0
Sinoe	0	0	0	0
National	18	15	0	3

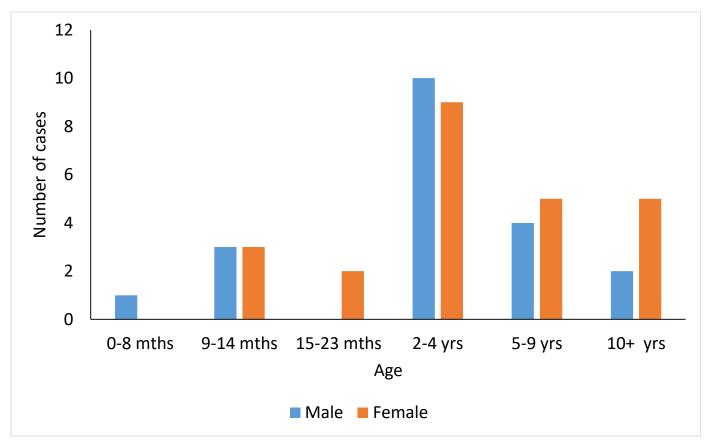
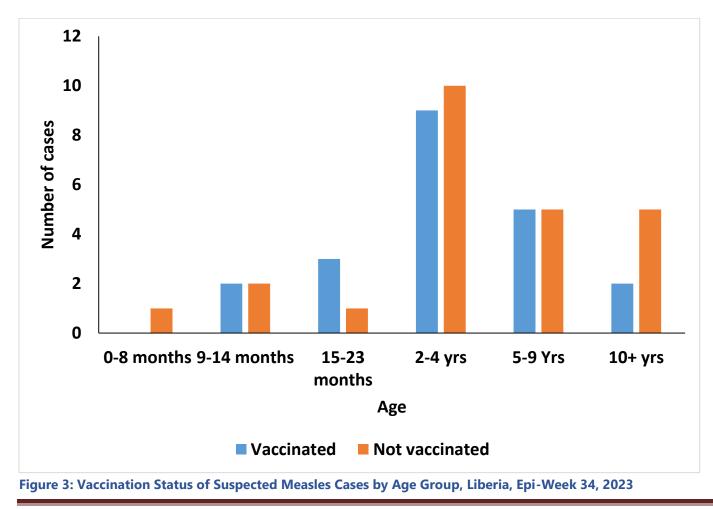


Figure 2: Distribution of Measles Cases by Age Group and Sex, Liberia Epi Week 34, 2023



COUNTY	CUMULA TIVE SUSPECT ED CASES	CUM ULAT IVE CON FIRM ED		SSIFICATIO IFIRMED O			SIFICATI IRMED D		CUMUL ATIVE DEATH S	CFR (%)	# CONFI RMED CASES WEEK	# CONF IRME D CASES WEEK 34	% CHA NGE	Outbrea k Status
CASES		CASE S	Lab confirmed	Epi Linked	Clinically Compatible	Lab confirmed	Epi Linked	Clinically Compatible			33			
Montser rado	5, 419	5,33 3	145	1657	3, 530	3	61	5	69	1.3	4	6	50	Ongoin g
Nimba	1,100	1,06 9	37	187	845	0	1	3	4	0.4	4	7	75	Ongoing
Margibi	827	803	34	136	633	0	0	1	1	0.1	0	0	-	Ended
Grand Bassa	945	907	40	212	655	1	0	6	7	0.9	1	2	100	Ongoing
Lofa	353	284	32	66	186	0	0	0	0	0	0	0	-	Ended
Bong	601	576	22	21	533	0	1	2	3	0.5	1	1	-	Ongoing
Marylan d	1061	1041	24	308	714	0	0	0	0	0	9	8	-11	Ongoing
Grand Gedeh	605	445	34	48	363	0	0	0	0	0	4	11	-50	Ongoing
Sinoe	284	231	36	84	111	0	0	0	0	0	0	0	-	Ended
Bomi	183	147	34	27	86	1	2	2	5	3	0	0	i.	Ended
Grd Cape Mt	215	187	17	18	152	0	2	1	3	1.6	0	0	-	Ended
Grand Kru	978	949	22	106	821	0	0	2	2	0.2	0	0	-	Ongoing
Gbarpol u	67	46	4	2	40	0	0	0	0	0	0	0	-	Ended
Riverces s	112	84	23	54	7	0	1	0	1	1.1	0	0	-	Ended
River Gee	103	79	0	0	79	0	0	0	0	0	0	0	-	Ended
Total	12,853	12,1 81	504	2,926	8,721	5	68	22	95	7.8	23	35		

Table 4: Cumulative Distribution of Measles Cases and Deaths, December 13, 2021- August 21, 2023

Public Health Response

I. Coordination

o IMS meetings are been held for coordination and mobilization of resources in response counties

II. Epidemiological Surveillance

o Active case search ongoing in Bong, Nimba and Maryland counties

III. Case management

o All reported cases were treated and sent for home isolation in Nimba, Maryland, and Grand Gedeh Counties

IV. Immunization

o Ended periodic Intensification of Routine immunization in all counties except for Margibi

V. Laboratory

- Specimen were collected from Bong-Jorquelleh, Nimba- Gbehlay-Geh, Rivergee-Jedepo, and Sinoe- Pynes and Kpanyan districts.
- Five hundred four (504) cases have been confirmed by laboratory from December 13, 2021 August 30, 2023.

VI. Risk Communication and Community Engagement

Community engagement and health education on measles prevention and control ongoing in Gbarpolu,
 Rivercess, Grand Gedeh, and Nimba Counties.

VII. Challenges

- Stock out of reporting tools (Gbarpolu, Maryland, Lofa Grand Cape Mounty, and Bomi) Counties
- Lack of functional motorbikes for CSOs in Margibi and Nimba Counties
 - Garwula District DSO, Grand Cape Mount
 - All DSOs in Nimba and Margibi Counties

Acute Flaccid Paralysis (AFP)

- Zero suspected cases reported
- Cumulatively, thirty-four (34) cases were reported
 - Ten (10) tested negative
 - Twenty-four (24) pending

Neonatal Tetanus

- One (1) case was reported from Montserrado county
- Cumulatively, forty-three (43) cases including 6 deaths reported

Influenza-Like Illnesses

Influenza

- Five (5) cases were reported from Montserrado County
- Specimens were collected and pending testing
- Cumulatively, eighty-nine (89) suspected cases reported
 - Proportion cases with sample collected (84/89) 94%
 - o Proportion of cases with sample tested (24/84) 29% and all negative

Viral Hemorrhagic Diseases

Lassa fever

- Four (4) suspected cases were reported from Bong (3), and Nimba (1-dead) Counties
- Specimens were collected and tested negative
- Cumulatively, one hundred sixty-six (166) suspected cases reported
 - \circ $\,$ Proportion of suspected cases with a sample collected (153/166) 92% $\,$
 - Proportion of suspected cases with sample tested (151/166) 91% (confirmed 44, negative 107)

Current Outbreak

Lassa fever disease

- No new confirmed cases reported
- Cumulatively, eighty-seven (87) laboratory-confirmed cases including 26 deaths reported (CFR=30%)

 Table 6: Summary of Lassa fever Outbreak, Liberia, Sept 9, 2022 to August 27, 2023

County	Outbreak Districts	Outbreak Start Date	Total suspected cases	Total confirmed cases	Deaths in HCWs	Total Deaths	CFR %	Total Contacts	# HCW contacts	Contacts_be came cases	HCW became confirmed case	Contacts under follow up	Contacts completed	Days in countdown	Outbreak Status
	Bushrod	13-Feb-23	15	2	0	1	50%	29	21	0	0	0	29	Completed	Over
Montserrado	Central Monrovia	3-Mar-23	28	1	0	1	100%	28	27	0	0	0	28	Completed	Over
	Suakoko	21-Apr-23	139	37	2	8	21%	342	168	6	4	8	334	Active	Ongoing
Bong	Sanoyea	5-Apr-22	1	1	0	1	100%	31	15	0	0	0	31	Completed	Over
	Jorquelleh	6-Jan-22	13	9	1	2	25%	107	69	3	3	0	107	Completed	Over
	District 3A&B	9-Sep-22	86	31	0	9	30%	177	35	2	0	0 18		Active	Ongoing
Grand Bassa	Buchanan	11-Aug-23	2	1	0	1	100%	4	2	0	0	4	0	Active	Ongoing
	Sanniquellie- Mah	6-Feb-23	36	2	0	0	0%	43	35	8	0	0	43	Completed	Over
Nimba	Tappita	13-Mar-23	12	1	0	1	100%	36	17 4 0		0	36	Completed	Over	
	Bain-Garr	1-Jun-23	9	2	0	2	100%	30	25	0	0	0	30	Completed	Over
Total	8		341	87	3	26	30%	827	414	23	7	30	797		

Public Health Measures

 National Public Health Institute of Liberia (NPHIL) and the Ministry of Health (MOH) are providing technical and logistical support to County Health Teams with support from partners.

I. Surveillance:

- o Active case search and contact tracing ongoing in affected communities and districts
- o Development and dissemination of weekly sitreps by affected counties

II. Laboratory

- o The National Public Health Reference Laboratory continues testing of Lassa fever samples
- o Total of 87 Lassa fever cases have been confirmed since this outbreak

Case management and IPC

o Cases isolated and managed at designated facilities

Environmental and Vector Control

• Ongoing clean-up campaigns and rodent control measures in Grand Bassa County

Risk Communication and Community Engagement

- Risk communication and community engagement ongoing in affected and surrounding communities
 - Airing of jingles on Lassa fever prevention and control in Bong and Grand Bassa Counties

Yellow fever

- Free (3) suspected cases were reported from Grand Kru County
- Specimens were collected and pending testing
- Cumulatively seventy-nine (79) suspected cases were reported
 - Three (3) samples (3/63) 5% not transported (Epi week 5 from Grand Gedeh, River Gee, and Grand Kru Counties)
 - Proportion of suspected cases with sample collected (66/79) 84%
 - The proportion of samples tested is (40/63) 63%
 - The proportion of samples pending testing is (23/63) 37%

Dengue Fever

Zero cases were reported

Ebola Virus Disease

Zero cases were reported

Diarrheal Diseases

Acute Bloody Diarrhea (Suspected Shigellosis)

- Twenty-two (22) cases were reported Grand Kru (3), Sinoe (3), River Gee (3), Nimba (3), Rivercess (2), Margibi (2), Lofa (2), Montserrado (2), Maryland (1), and Grand Gedeh (1) Counties
- Three (3) specimens were collected and pending testing
- Cumulatively, four hundred seventy (470) cases were reported
 - One hundred sixty (160) specimens were collected
 - 77 tested negative
 - 7 specimens rejected
 - 76 specimens were not transported

Severe Acute Watery Diarrhea (Suspected Cholera)

- Twenty-seven (27) suspected cases were reported Margibi (9), Lofa (6), Maryland (5), Nimba (4), River Gee (1), Grand Bassa (1), and Grand Gedeh (1) Counties
- Nine (9) specimens were collected and one (1) pending testing
- Cumulatively, six hundred twenty-nine (629) cases reported
 - o One hundred eighty-seven (187) specimens collected
 - 65 tested negative
 - 7 specimens rejected
 - 115 specimens were not transported

Other Reportable Diseases

Animal bite (Human Exposure to Rabies)

Ninety-two (92) animal bites reported

Table 6: Distribution of Animal Bite Cases and PEP Administration per County, Liberia, Epi week 34, 2023

Counties	Cases	Person receiving PEP	PEP doses administered	Cumulative cases (Wk 1-33)	Cumulative PEP administered (Wk 1-33)
Bomi	0	0	2	49	29
Bong	3	0	1	158	67
Gbarpolu	1	0	1	21	1
Grand Bassa	8	2	0	206	16
Grand Cape Mount	1	0	0	55	34
Grand Gedeh	4	0	1	80	10
Grand Kru	5	0	0	185	15
Lofa	6	3	0	170	63
Margibi	8	1	1	135	60
Maryland	7	2	2	133	45
Montserrado	20	3	3	681	168
Nimba	23	5	5	357	126
Rivercess	1	1	0	40	51
River Gee	0	0	0	91	0
Sinoe	5	0	0	92	6
Total	92	17	16	2453	691

Public Health Actions

Ongoing monitoring and follow-up of cases

Meningitis

- Zero cases were reported
- Cumulatively, thirty-one (31) suspected cases reported
 - Proportion of suspected cases with samples collected (26/31) 84%
 - Proportion of sample tested (22/26) 85%
 - o 17 negative and 4 positive (Streptococcal-3 & Hemophilus Influenza)

Mpox

- Four (4) suspected cases was reported from Sinoe County
- One specimen was collected and pending testing
- Cumulatively, one hundred eleven (111) suspected cases reported
 Seven (7) confirmed
- Unexplained cluster of deaths
- Zero cases reported

Events of Public Health Importance

Maternal Mortality

- 🖙 Ten (10) deaths were reported: Montserrado (6), Bomi (1), Bong (1), Margibi (1), and Nimba (1) Counties
- Reported causes: postpartum hemorrhage (5), Eclampsia (2), Rupture uterus (1), pulmonary embolism (1) and sepsis (1)
- Reporting Site:
 - Health facility (9/10) 90%
 - Community (1/10) 10%

- Cumulatively, two hundred twenty-two (222) deaths reported
 - Proportion of death reviewed (57/222) 26%
 - Proportion of community death (27/222)12%

Neonatal Mortality

- From (10) deaths were reported: Montserrado (6), Nimba (3), and Gbarpolu (1) Counties
- Reported causes: birth asphyxia (7), neonatal sepsis (2), and congenital heart failure (1)
- Reporting sites:
 - Health facility (9/10) 90%
 - o Community (1/10) 10%
- Cumulatively, five hundred twenty-seven (527) deaths reported

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

- Twenty-six (26) cases were reported from Sinoe (8), Lofa (7), Bomi (2), Grand Gedeh (2), (Rivercess (2), Grand Kru (1), Grand Bassa (1), Grand Cape Mount (1), Margibi (1), and Montserrado (1) Counties
- All reported cases were non-serious
- Related vaccine:
 - Penta (11/26) 42.3%
 - o COVID-19 (4/26) 15.4%
 - o Others (11/26) 42.3%
- Cumulatively, four hundred sixty-nine (469) events were reported and COVID-19 accounted for (169/469) 36%

Neglected Tropical Diseases

<u>YAWS</u>

- Zero cases were reported
- No specimen was collected
- Cumulatively, one hundred eighty-four (184) cases have been reported

Buruli Ulcer

- Zero suspected cases reported
- Cumulatively, one hundred nineteen (119) cases have been reported

Border Surveillance Update

A total of 4,956 travelers were recorded for the week with incoming travelers accounting for 46% (2,271/4,956) **Table 7: Border activity at the PoE for incoming and outgoing travelers, Liberia, Epi week 34, 2023**

Type of Ports	Point of Entry James S. Paynes	Weekly total	Arrival 88	Departur e 67	Total traverlers with YB 10	Yellow Book Damage O	Card Replace d	Travelers Vaccinated against YF & Issued book	Alerts detected/ Verified 0	COVID-19 Reactive O	Evidence of COVID- 19 vaccination card/certificate 10
Airport	Robert Int'l Airport	3682	1608	2074	3598	84	73	14	0	0	3613
Seaport	Freeport of Monrovi a	168	84	84	168	0	0	0	0	0	168
	Buchana n Port	80	40	40	80	0	0	0	0	0	80
Land	Bo Water Side	576	262	314	570	6	6	1	0	0	500
Crossin	Ganta	141	106	35	74	0	0	0	0	0	51
g	Yekepa	71	43	28	29	0	0	0	0	0	51
	Loguatu o	85	40	45	75	0	0	0	0	0	47
Total		4,958	2,271	2,687	4,604	90	79	15	0	0	4,520

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

Public Health Measures

- National level
- For Continue to distribute surveillance weekly ledgers and triplicate Lab alert and submission forms to the counties
- Distribution of 10 motorbikes to nine DSO's and one CSO from seven counties
- Providing remote technical and operational support to counties
- Produced and disseminated situation reports (Lassa fever, Measles, and Mpox outbreaks)

County-level

- Coordination
 - Partner coordination and resource mapping
- Surveillance
 - o Publication of situational reports
 - o Active case search ongoing in affected and surrounding communities

Case Management

- o Administration of PEP
- Management of measles cases ongoing

Appendi	X																			
Summary	y of Immediately Reportable	Dise	ease	es, C	ond	litio	ns, a	and	Eve	nts	by (Cour	nty			1				
			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
-	ted Health District		4	9	5	8	5	6	5	6	4	6	7	11	6	6	10	98		
	h District Reported	—	4	7	5	8	5	6	5	6	4	6	7	11	6	6	10	96		
Viral Hemorrhagic Fe Vaccine Preventable Diseas	Acute Flaccid Paralysis (Suspected Polio)	A D A	0 0 0	0 0 1	0 0 0	0 0 2	0 0 0	0 0 12	0 0 2	0 0 1	0 0 0	0 0 8	0 0 6	0	0 0 0	0 0 3	0 0 2	0 0 44	34 0 4,329	0 0 504
Prevent	Neonatal Tetanus	D A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8 37	2
Vaccine I	Yellow fever	D A D	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 3 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 3 0	6 79 0	0 0 0
rhagic Fe	Dengue fever	A D	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0
Hemor	Ebola Virus Disease	A D A	0 0 0	0 0 3	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 3	0 0 134	0 0 25
Like Vira	Lassa fever COVID-19	D	0	0	0	0	0	0	0	0	0	0	0	0 0	0	0	0	1 0	32 0	16 0
Public Health Ir Diarrheal Dises Influenza-Like	Influenza Like Illnesses	D A D	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 5 0	0 0 0	0 0 0	0 0 0	0 0 0	0 5 0	0 89 0	0 0 0
al Diseé li	Acute Bloody Diarrhoea (Shigellosis)	A	0	0	0	0	0	0 1 0	3 0	2 0	2 0	0 1 0	2 0	0 3 0	2 0	3 0	3 0	22 0	470 0	0
Diarrhe	Severe Acute Watery Diarrhoea (Cholera)	A D	0	0	0	1 0	0	1 0	0	6 0	9 0	5 0	0	4 0	0	1 0	0	27 0	628 0	0
lealth Ir	Maternal Mortality	D D	1 0	1 0	0	0	0	0	0	0	1 0	0	6	1	0	0	0	10 10	222 526	
	Neonatal Mortality AEFI	A	2 0	0	0	1 0	0 1 0	2 0	0 1 0	7 0	0 1 0	0	0 1 0	0	2 0	0	8 0	26 0	469	0
Events of	Unexplained Cluster of Health Events/Diseas	e D	0	0	0	0 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ases	Мрох	A D	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	4 0	111 0	7 0
ble Dise	Tuberculosis	A D A	0 0 0	0 0 3	0 0 1	0 0 8	0 0 1	0 0 4	0 0 5	0 0 6	0 0 8	0 0 7	0 0 20	0 0 23	0 0 1	0 0 0	0 0 5	0 0 92	0 0 2,453	0 0 0
Other Reportable Diseases	Human Exposure to Rabies (Suspected Hum Meningitis	D A	0	0	0	0	0	4 0 0	0	0	0	0	0	0	0	0	0	92 0 0	0 31	0
Other	Unexplained Cluster of deaths	D A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ted Tr	Buruli Ulcer	D A D	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	1 119 0	0 0 0
Neglected Tr	Yaws	A D	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	184 0	4 0
	тс	DTAL	3	8	2	12	0	20	0	22	0	21	0	42	0	7	22	248	9964	52

 \mathbf{D} = Dead \mathbf{A} = Alive

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%). 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
- IP 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 of 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 of 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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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.