



Highlights of the week

Surveillance Completeness Rate: Nationally, the proportion of health facilities that reported surveillance data was 86.1% which is above the minimum requirement (80%).

Surveillance Timeliness Rate: Nationwide, the proportion of health facilities that reported the surveillance data timely was above the minimum requirement i.e. 84.7%.

Malaria: A total of 110,193 febrile cases were suspected for malaria and tested either by microscopy or RDT in the week. Of these cases, 13.1% (14,384) were treated for malaria. As compared to last week, there was 4.8% (665 cases) increment.

Severe Acute Malnutrition: A total of 3,964 cases with one death were reported with decrement of 10.4% (462 cases) as compared to last week.

Measles: Measles suspected outbreak threshold was surpassed in twenty woredas as of the week.

Meningitis: A total of 47 suspected meningitis cases with two deaths were reported

Anthrax: A total of 15 suspected anthrax cases without death were reported during the week.

Rabies Exposure: A total of 133 exposure cases with two deaths were reported which was 135% (76 exposure cases) higher than the last week.

Maternal Death: A total of 23 maternal deaths were reported from 20 reporting sites.

Zero Reports: Zero suspected cases of avian human influenza, drancunculiasis, NNT, pandemic influenza, small pox, hemorrhagic fever, SARS and yellow fever were reported during the week.

Acute Watery Diarrhea Outbreak: Acute watery diarrhea outbreak is ongoing in some woredas of Somali and Tigray Regions and five cases were reported during the week from Tigray Region.

National Public Health Emergency Operation Center incident management system is coordinating the response to the outbreak.

Strengthening Public Health Emergency Management: As part of strengthening public health emergency management 2nd workshop of Frontline Field Epidemiology Training was conducted in Dire Dawa.



I. Introduction

This Epidemiological Weekly Bulletin serves to provide key information on public health emergency management activities, and summarizes surveillance data and performance on epidemic prone diseases and other public health emergencies. The bulletin mainly includes surveillance data of week 11 of 2018 and daily phone communication, line list reports of outbreaks for week 12 of 2018. It highlights the surveillance completeness and timeliness across the regions, trends of diseases under surveillance, cluster of cases and events, ongoing outbreaks and responses undertaken at all levels in Ethiopia. The numbers of disease specific cases indicated in this issue of bulletin are subject to change due to on-going receiving late weekly surveillance data and retrospective verification of data from outbreak areas.

II. National Surveillance Data Summary

Table 1: Comparison of surveillance data by week, week 10 and 11, 2018, Ethiopia.

Indicators	2018		
	Week 10	Week 11	% Change
Percent of Health Facility reported	92.4%	86.1%	-6.8
Percent of Health Facility reported timely	87.9%	84.7%	-3.7
Total Malaria Confirmed and Clinical	13,719	14,384	4.8
Typhoid fever	23,434	24,109	2.9
Epidemic Typhus	9,497	9,984	5.1
Dysentery	5,606	5,784	3.2
Severe Acute Malnutrition	4426	3964	-10.4
Suspected Measles	72	102	41.7
Rabies exposure	57	133	135.7
Suspected Meningitis	40	47	17.5
Relapsing Fever	25	17	-32.0
Suspected Anthrax	15	15	0.0
Maternal Death	13	23	76.9
Acute Flaccid Paralysis	6	9	50.0
Acute Watery Diarrhea	1	5	400.0
Neonatal Tetanus	2	0	-100.0
Avian Human Influenza	0	0	0.0
Polio	0	0	0.0
Drancunculiasis/Guinea worm	0	0	0.0
Pandemic Influenza	0	0	0.0
SARS	0	0	0.0
Small pox	0	0	0.0
Yellow Fever	0	0	0.0
Viral hemorrhagic fever	0	0	0.0

III. Public Health Surveillance Reporting Completeness and Timeliness Rates

A. Public Health Surveillance Reporting Completeness Rate

The national surveillance completeness rate was 86.1% in the week which is above the minimum requirement (80%) and all regions had achieved above the minimum requirement except Harari (0.0%), Diredawa (0.0%) and Oromia (72.1%) Regions (Fig 1).

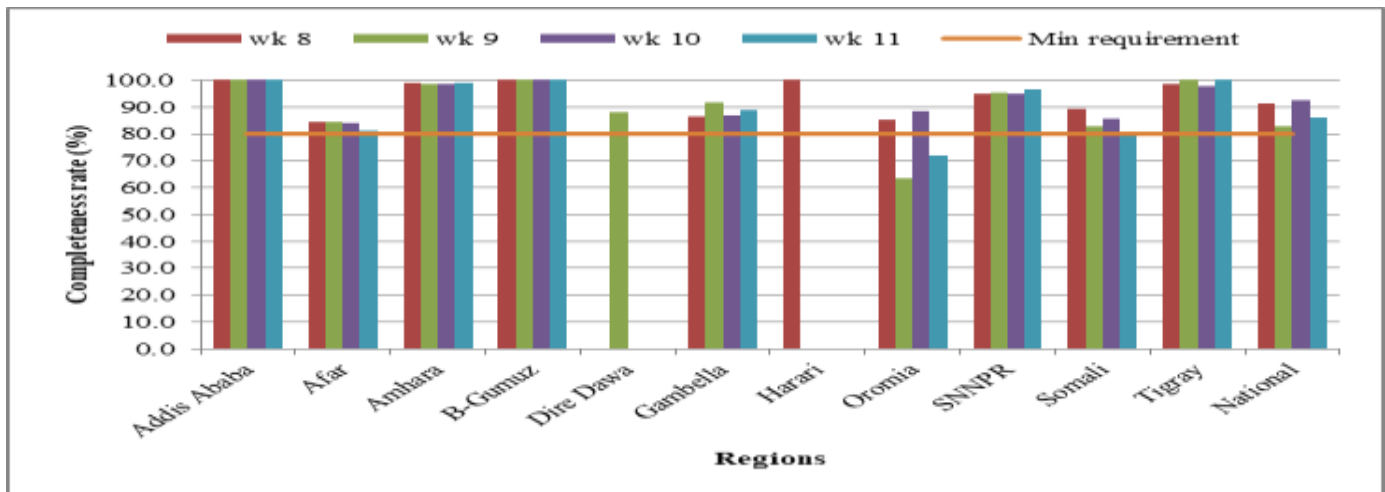


Figure 1: Surveillance data completeness rate by regions, week 8-11, 2018, Ethiopia.

B. Public Health Surveillance Reporting Timeliness Rate

During the week the national surveillance data reporting timeliness rate was 84.7% which is above the minimum requirement and all regions except Afar (0.0%), Harari (0.0%), Diredawa (0.0%), Oromia (72.1%) and Somali (79.9%) had achieved above the minimum requirement, 80%.

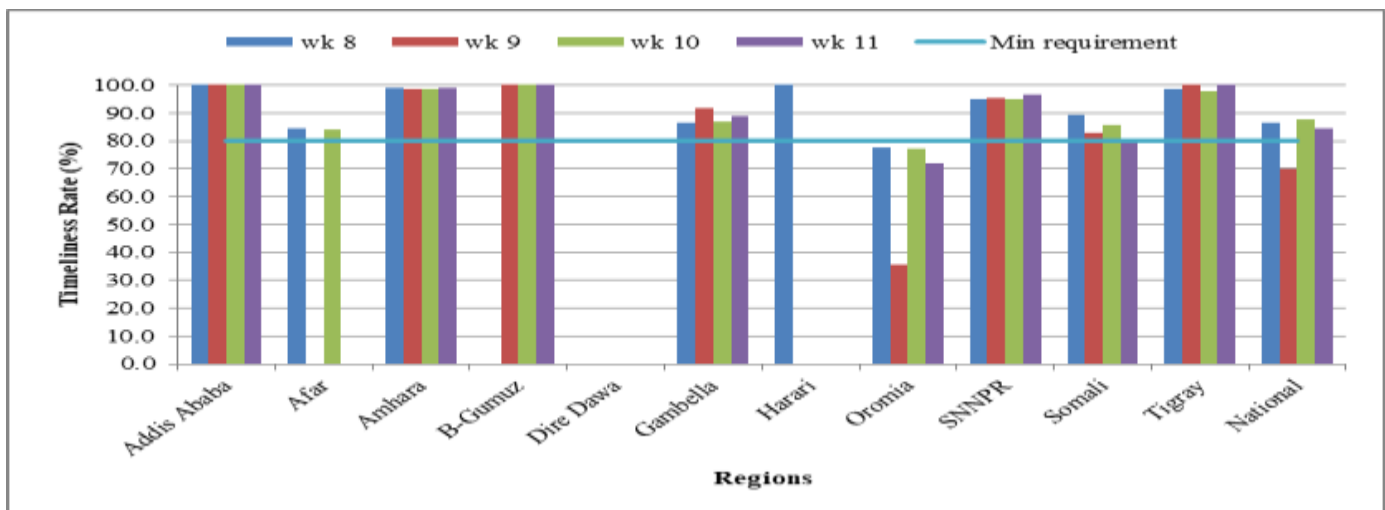


Figure 2: Surveillance data completeness rate by regions, week 8-11, 2018, Ethiopia.



IV. Diseases/Conditions under Surveillance Updates

1. Malaria

During the week a total of 110,193 health facilities visitors were suspected and examined for malaria of which 13.1% (14,384) cases were treated as malaria which was 4.8% (665 cases) higher than the last week. Plasmodium falciparum contributes the highest portion of the cases reported during the week, 71% (9,659 cases) of the cases nationally and 100%, 91.2% and 87.0% in Somali, Gambella and Afar Regions respectively. The number of cases reported in 2018 is still lower than the number of cases reported in the last two years.

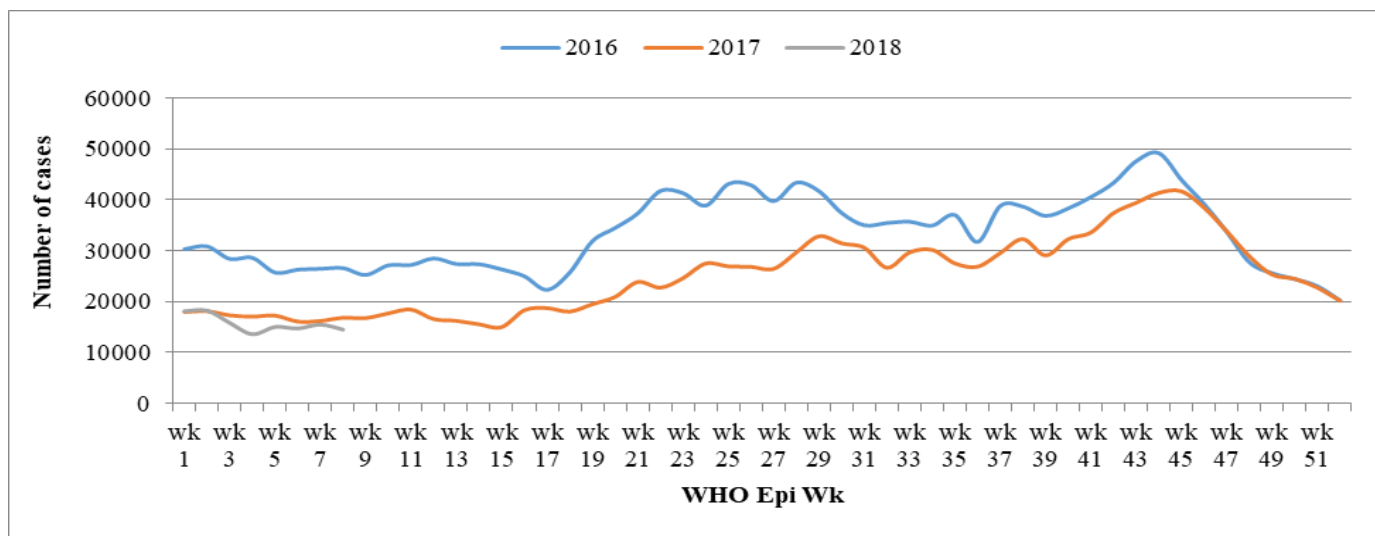


Figure 3: National malaria (clinical and laboratory confirmed) trend by week from 2016-2018, Ethiopia.

Cascading the malaria cases to regions, 21.5% (3,093 cases), 18.1% (2,612 cases) and 15.8% (2,281 cases) were reported from SNNP, Amhara and Tigray Regions respectively during the week.

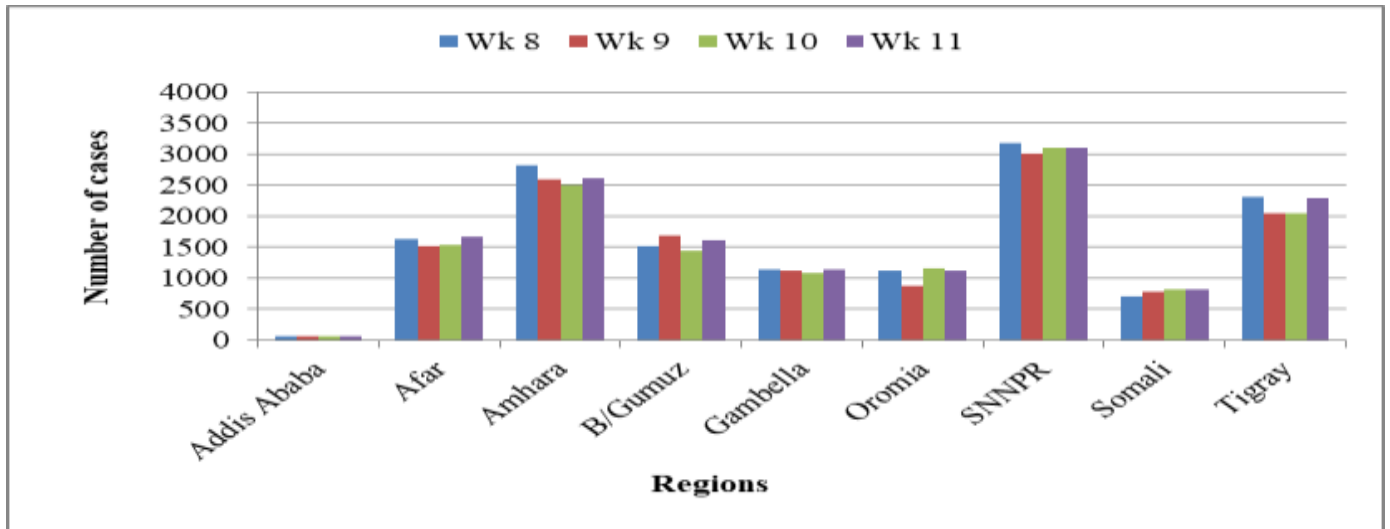


Figure 4: Regional malaria cases distribution, week 8-11, 2018, Ethiopia.

A total of 788 cases (5.5%) of malaria were treated clinically nationwide while 67.6%, 17.0% and 3.2% were treated clinically in Somali, Gambella and Oromia Regions respectively. The clinically treated malaria cases during the week is slightly above the national recommendation nationally and higher than in Somali and Gambella Regions. The nationwide malaria slide positivity rate during the week is 12.3% while 38.7%, 37.6% and 30.1% in Gambella, Somali and Afar Regions respectively.

2. Suspected Meningitis

During the week, a total of 47 suspected meningitis cases with two deaths were reported from SNNP (20 cases), Oromia (15 cases), Addis Ababa (5 cases), Amhara (3 cases), B-Gumuz (2 cases), Afar (1 case) and Tigray (1 case). The suspected cases reported during the week were higher than the suspected cases during the same week of the last two years.

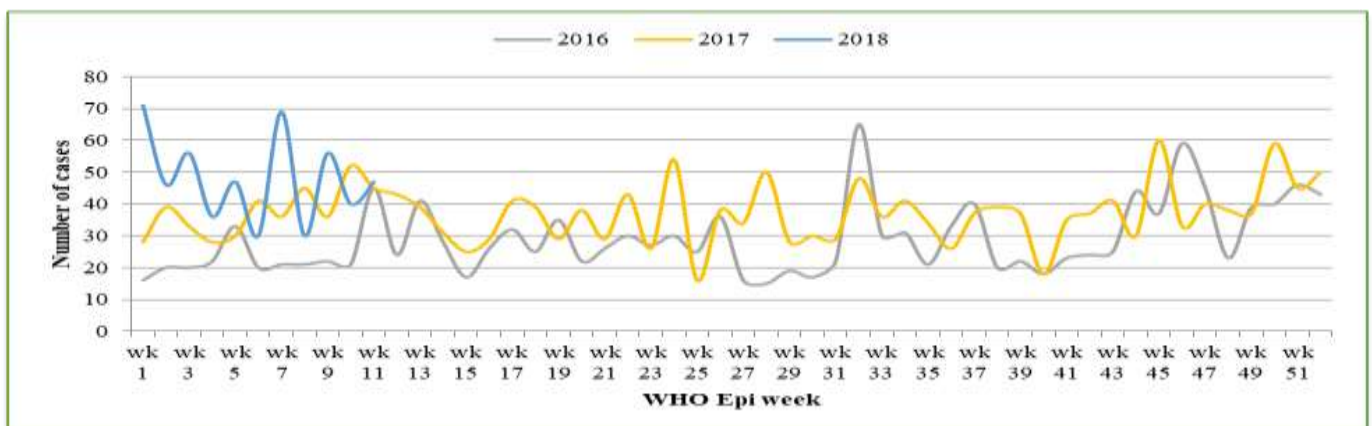


Figure 5: Trend of suspected meningitis cases over week, 2016-2018, Ethiopia.



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Table 2: Suspected meningitis cases and deaths distribution by reporting sites, week 11, 2018, Ethiopia.

Region	Zone	Reporting sites	Suspected cases	Death
SNNPR	Gedeo	Dila Hospital	9	2
SNNPR	Hawassa Town	Hawassa Referral Hospital	6	0
Oromia	Guji	Negele Hospital	3	0
Oromia	Guji	Adola Hospital	2	0
Addis Ababa	Kolfe Keraniyo	ALERT Hospital	2	0
Amhara	Bahir Dar Liyu Town	Bahir Dar Town	2	0
Oromia	Arsi	Bekoji Town	2	0
SNNPR	Sidama	Bona Hospital	2	0
Oromia	Bale	Goba Town	2	0
Oromia	Shashamane Town	Shashamane Town	2	0
Benishangul-Gumuz	Assosa	Sherkole	2	0
Addis Ababa	Gulele	St. Paulos Hospital	2	0
Oromia	Jimma	Agaro	1	0
Addis Ababa	Yeka	Dagmawi Menelik Hospital	1	0
SNNPR	Wolayita	Dubo Hospital	1	0
Afar	Zone 01	Dubti RHP	1	0
SNNPR	Kembata Tembaro	Durame Hospital	1	0
Oromia	East Wellega	Gida Ayana	1	0
Oromia	Jimma	Omonada	1	0
Amhara	South Wollo	Sayinit	1	0
SNNPR	Siliti	Silite	1	0
Tigray	North Western Tigray	Tahitay Qoraro	1	0
Oromia	Horo Gudru Wellega	Shambu Hospital	1	0
Grand Total			47	2

3. Dysentery

During the week, a total of 5,784 dysentery cases without death were reported showing 3.2% (178 cases) increment as compared to last week. The number of cases reported during the week is lower than the same weeks of the last two years cases.

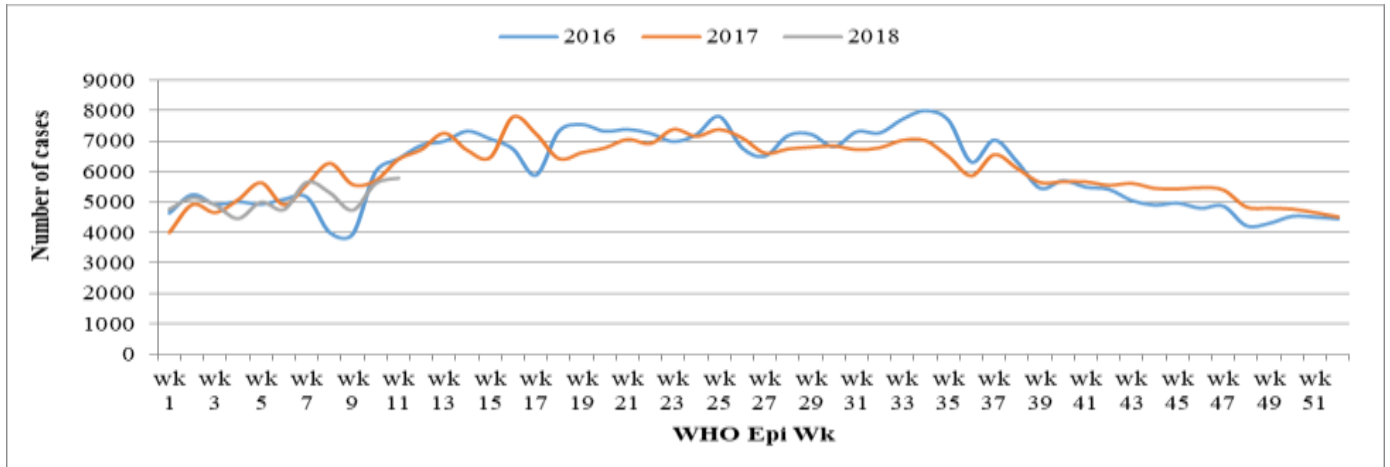


Figure 6: Dysentery cases trend by week, 2016-2018, Ethiopia.

4. Typhoid Fever

During the week, a total of 24,109 cases of typhoid fever without death were reported which was 2.9% (675 cases) higher than the last week. The typhoid fever cases reported during the week is lower than the same week of 2017 but higher than the 2016 cases.

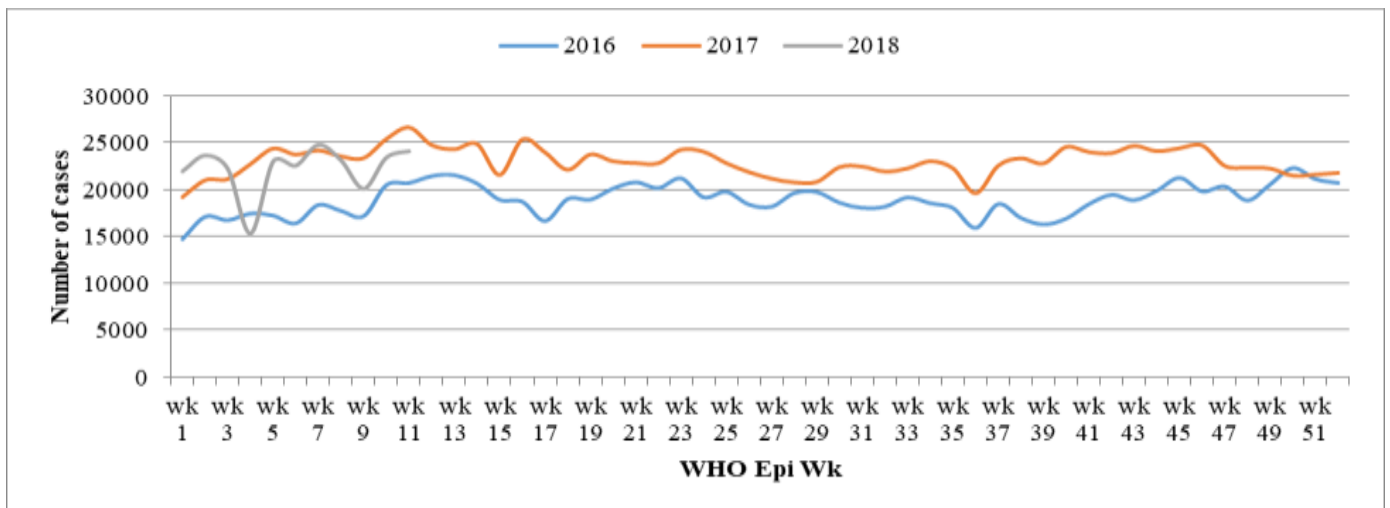


Figure 7: Typhoid fever cases trend by week, 2016-2018, Ethiopia.

5. Relapsing Fever

A total of 17 cases of relapsing fever without death were reported during the week which was 32% (8 cases) lower than the last week. The number of cases reported during the week is lower than the number of cases reported during the same week of the last two years.

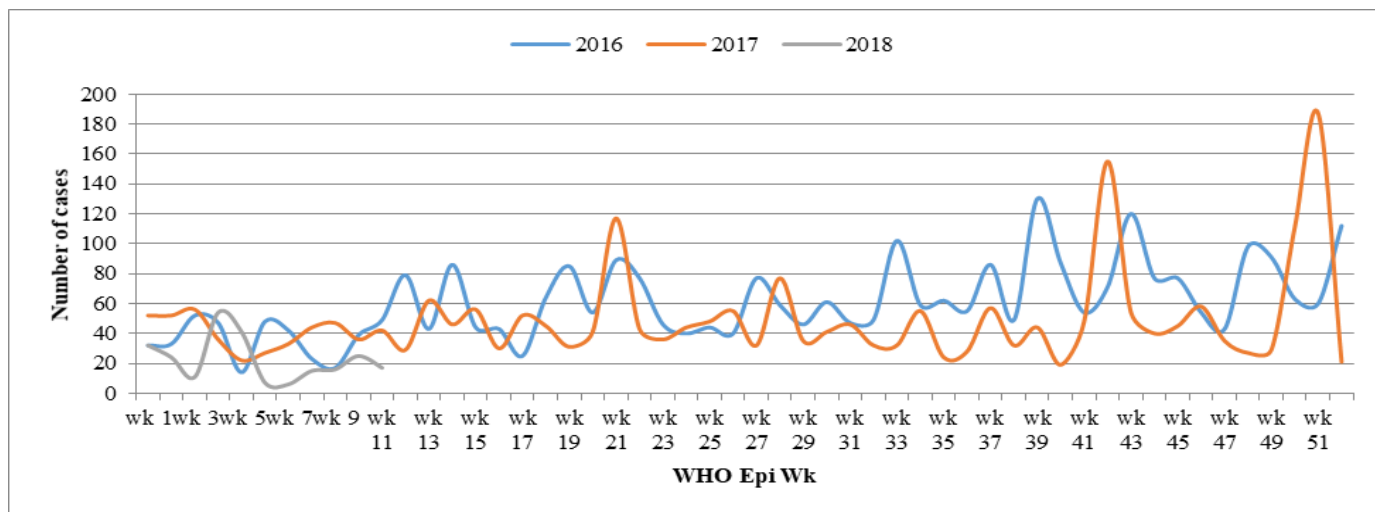


Figure 8: Relapsing fever cases trend by week, 2016-2018, Ethiopia.

6. Epidemic Typhus

A total of 9,984 cases of epidemic typhus without death were reported during the week, which was 5.1% (487 cases) higher than the last week. The number of cases reported during 2018 are continued to be higher than the number of cases reported during the similar weeks of 2017 and 2016.

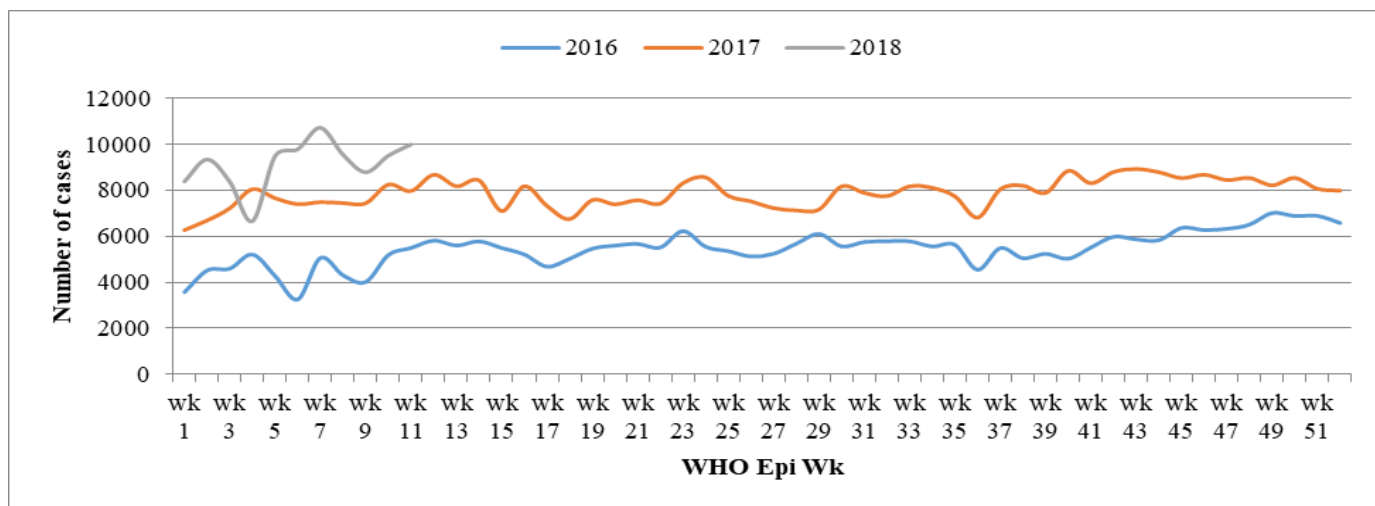


Figure 9: Epidemic typhus cases trend by week, 2016-2018, Ethiopia.

7. Severe Acute Malnutrition

During the week, a total of 3,964 cases with one death were reported which showed 10.4% (462 cases) decrement as compared to last week. The severe acute malnutrition cases reported during the week were lower than the number of cases reported during the same week of the last two years.

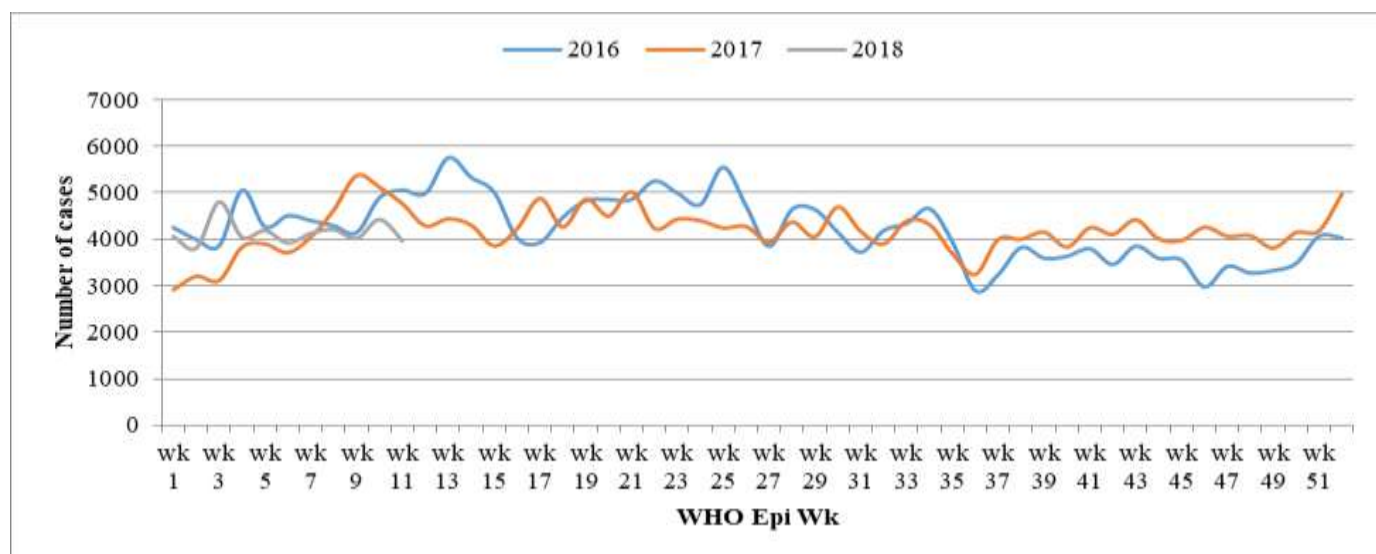


Figure 10: Severe acute malnutrition cases trend by week, 2016-2018, Ethiopia.

About 343 (8.7%) of the total reported SAM cases were treated in patient during the week nationally.

The top ten severe acute malnutrition leading woredas during the last one month (week 8-11) were from Oromia and Somali Regions.

Table 3: Top ten severe acute malnutrition cases reporting woredas, week 8-11, 2018, Ethiopia.

Region	Zone	Reporting sites	Cases				Grand Total
			wk 8	wk 9	wk 10	wk 11	
Oromia	West Arsi	Siraro	127	108	98	78	411
Oromia	West Arsi	Shashemene Rural	52	66	36	74	228
Somali	Shabeele	Mustahil	23	28	28	67	146
Oromia	West Arsi	Shala	68	0	62	58	188
Somali	Liben	Dolo Odo	34	24	26	56	140
Somali	Shabeele	EastImey	0	53	54	51	158
Somali	Afder	ElKare	41	49	44	49	183
Oromia	West Hararge	Gemechis	24	42	33	47	146
Somali	Shabeele	Kalafo	63	61	53	41	218
Somali	Faafan	Kabribayah	31	47	28	34	140
Somali	Jarar	Bilcilbur	19	9	116	13	157
Oromia	East Hararge	Fedis	48	67	25	0	140
Grand Total			530	554	603	568	2255

8. Scabies

During the week a total of 6,229 cases were reported which is 55.6% (7,820 cases) lower than the last week. Oromia Region reported highest number of cases (2,909 cases) followed by Amhara Region (2,653 cases) and SNNP Region (408 cases) during the week.



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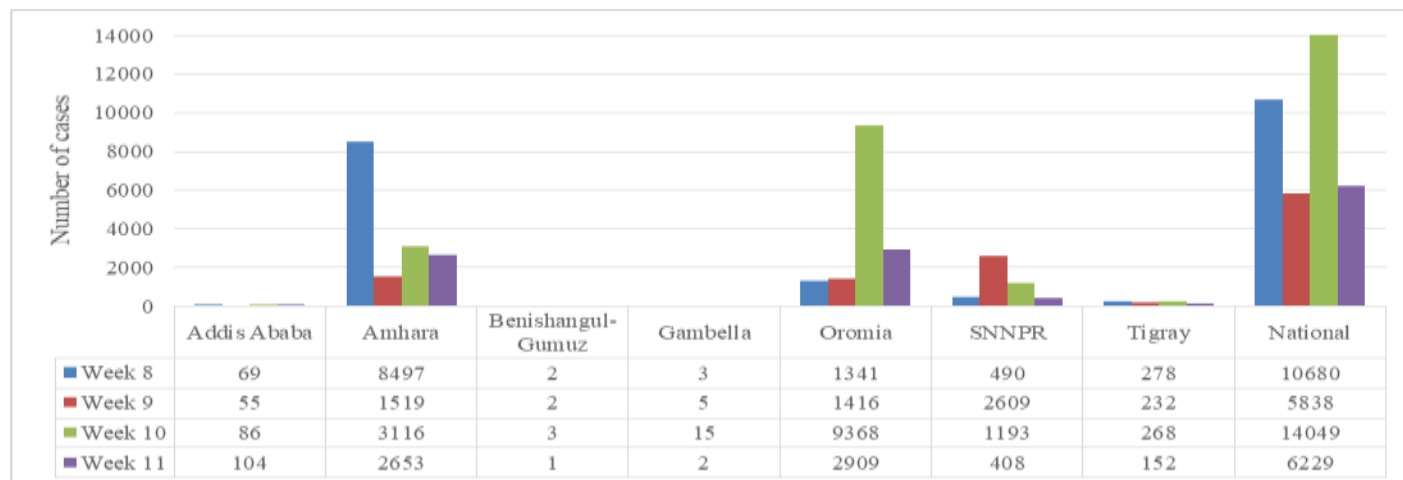


Figure 11: Scabies cases distribution and trend by Region, week 8-11, 2018, Ethiopia.

9. Acute Flaccid Paralysis

During the week a total of nine suspected AFP cases were reported which was 50% (3 cases) higher than the number of the suspected cases during the last week.

Table 4: Distribution of acute flaccid paralysis cases by reporting woredas, week 11, 2018, Ethiopia.

Region	Zone	Reporting sites	Suspected cases	Death
Oromia	Qeleme Wellega	Dambi Dolo Hospital	1	0
Amhara	East Gojjam	Debre Markos Hospital	1	0
Amhara	South Gonder	Debretabor	1	0
Amhara	South Gonder	Farta	1	0
Amhara	Awi	Injebra	1	0
Amhara	North Shewa	Menz Gera Meder	1	0
Tigray	North Western Tigray	Shire Enida Silase Town	1	0
Amhara	South Wollo	Were Ilu	1	0
Amhara	Oromiya	Kemise General Hospital	1	0
Grand Total			9	0

10. Suspected Anthrax

A total of 15 suspected anthrax cases without death were reported from Amhara and Tigray Regions during the week which is similar to the number of suspected cases during the last week.

Table 5: Distribution of suspected anthrax cases and deaths by woredas, week 11, 2018, Ethiopia.

Region	Zone	Reporting sites	Suspected cases	Death
Amhara	Wag Himra	Zikwala	5	0
Tigray	Western Tigray	Tsegede	4	0
Amhara	South Gonder	Sedie Muja	3	0
Tigray	Central Tigray	Wereilehi	2	0
Amhara	Wag Himra	Dehena	1	0
Grand Total			15	0

11. Suspected Measles

During the week, a total of 102 suspected measles cases without death were reported and as compared to last week there was 41.7% (30 cases) increment. Measles suspected outbreak threshold was surpassed in twenty woredas based on the national outbreak threshold criteria (woreda that reported greater than five suspected cases over the last four weeks, 8-11 weeks).



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Table 6: Woredas in which suspected measles outbreak threshold is surpassed as of week 11, 2018, Ethiopia.

Region	Zone	Reporting sites	Suspected cases				Grand total
			wk 8	wk 9	wk 10	wk 11	
Addis Ababa	Yeka	Yeka Woreda13	0	0	0	12	12
Amhara	North Wollo	Bugna	0	0	0	7	7
Addis Ababa	Nefas Silk Lafto	Nefas Silk Lafto Woreda03	0	1	0	5	6
Somali	Jarar	Gashamo	10	0	0	4	14
Benishangul-Gumuz	Assosa	Menge	0	0	1	4	5
Somali	Korahe	Shilabo	8	0	6	4	18
Addis Ababa	Kolfe Keraniyo	Kolfe Keraniyo Woreda06	0	1	1	4	6
Addis Ababa	Akaki Kaliti	Akaki Kaliti Woreda09	0	2	1	2	5
Addis Ababa	Gulele	Gulele Woreda03	0	7	4	2	13
Addis Ababa	Nefas Silk Lafto	Nefas Silk Lafto Woreda06	1	0	3	2	6
Somali	Doollo	Galhamur	5	0		1	6
Amhara	East Gojjam	Gozamin	0	0	5	1	6
Oromia	Sebeta Town	Sebeta Town	1	0	3	1	5
Addis Ababa	Arada	Arada Woreda02	0	3	2	1	6
SNNPR	Gamo Gofa	Arba Minch Town	20	2	2	0	24
SNNPR	Segen	Derashe	0	5	0	0	5
Somali	Liben	Guradhamole	0	12		0	12
Somali	Faafan	N.Jigjiga	7	0		0	7
Somali	Afder	Raso	4	3		0	7
Somali	Doollo	Warder	15	7	0	0	22
Grand Total			71	43	28	50	192

Remark: *Includes cases reported from hospitals

Note: “-“ = the woreda has not reported during the week

12. Rabies Exposure

A total of 133 exposure cases with two deaths were reported during the week which was 135% (76 exposure cases) higher than the last week exposure cases.

Table 7: Distribution of suspected rabies exposure cases and deaths by reporting sites, week 11 of 2018, Ethiopia.

Region	Zone	Reporting sites	Suspected cases	Death
Tigray	Eastern Tigray	Wekero Town	18	0
Tigray	Central Tigray	Ahiferom	15	0
Tigray	North Western Tigray	Shire Enida Silase Town	12	0
Tigray	Central Tigray	Akisum Town	11	0
Oromia	Qeleme Wellega	Yemalogi Wolel	10	1
Tigray	Eastern Tigray	Adi Girat Town	9	0
Benishangul-Gumuz	Assosa	Assosa Hospital	7	0
Tigray	Central Tigray	Abiyi Adi Town	5	0
Somali	Faafan	Karamara Hospital	5	0
Tigray	Mekele Especial Zone	South & North Mekele	5	0
Tigray	North Western Tigray	Shiraro Town	4	0
Tigray	Central Tigray	Adwa Town	3	0
Oromia	East Wellega	Jimma Arjo	3	0
Tigray	Western Tigray	Qafta Humera	3	0
Addis Ababa	Chirkos	Kirkos Woreda08	3	0
Amhara	East Gojjam	Gozamin	2	0
Amhara	North Wollo	Lalibela	2	0
Amhara	North Gondar	Wegera	2	0
Addis Ababa	Chirkos	Kirkos Woreda11	2	0
Amhara	North Shewa	Debrebrehan Hospital	1	0
Tigray	Eastern Tigray	Erop	1	0
Oromia	Bale	Goba	1	0
Tigray	Western Tigray	Humera Town	1	0
Benishangul-Gumuz	Assosa	Menge	1	0
Oromia	Qelem Wellega	Seyo	1	0
Addis Ababa	Gulele	St. Paulos Hospital	1	0
Amhara	Wag Himra	Tefera Hailu Hospital	1	0
Tigray	Western Tigray	Tsegede	1	0
SNNPR	Kembata Tembaro	Tembaro	1	1
Addis Ababa	Chirkos	Kirkos Woreda02	1	0
Addis Ababa	Chirkos	Kirkos Woreda04	1	0
Grand Total			133	2

13. Maternal Death

During the week a total of 23 maternal deaths were reported from 20 reporting sites of Amhara Region (9 deaths), Oromia Region (8 death), SNNP (2 deaths), Tigray (2 deaths), B-Gumuz (1 death) and Addis Ababa (1 death).



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Table 8: Distribution of maternal deaths by reporting sites, week 11 of 2018, Ethiopia.

Region	Zone	Reporting sites	Death
Oromia	Adama Special Town	Adama Town	3
Oromia	Arsi	Robe	2
Tigray	Central Tigray	Akisum Town	1
Oromia	East Wellega	Boneya Bushe	1
Amhara	North Wollo	Dawunt	1
Amhara	North Shewa	Debrebrehan Hospital	1
Amhara	Oromiya	Dewe Harewa	1
Amhara	East Gojjam	Enarj Enawuga	1
SNNPR	Segen	Gedola Hospital	1
SNNPR	Dawuro	Gena Bosa	1
Oromia	West Wellega	Gimbi public Hospital	1
Amhara	West Gojjam	Jebitenan	1
Oromia	Arsi	Merti	1
Benishangul-Gumuz	Metekel	Pawe	1
Amhara	West Gojjam	Sekela	1
Addis Ababa	Akaki Kaliti	Tirunesh Bejing Hospital	1
Tigray	Western Tigray	Welqayet	1
Amhara	West Gojjam	Wenberma	1
Amhara	West Gojjam	North Mecha	1
Amhara	West Gojjam	South Mecha	1
Grand Total			23

14. Other Immediately Notifiable Diseases/Conditions

During the week zero suspected cases of suspected cases of avian human influenza, drancunculiasis, neonatal tetanus, pandemic influenza, small pox, hemorrhagic fever, SARS and yellow fever were reported.

V. Diseases/Conditions Outbreaks

1. Acute Watery Diarrhea Outbreak

Acute watery diarrhea outbreak is ongoing in some woredas of K/Awlalo, Enderta and Mekele city Tigray Region and Kalafo woreda of Somali Region and a total of five cases (from Tigray Region) were reported during the week.

Team composing of epidemiologists from regional health bureaus, partners including WHO, UNICEF and MSF are enhancing the response to the AWD outbreak. Case management, surveillance, WASH and social mobilization are maintained and strengthened.

The Ethiopian Public Health Institute Emergency Operation Center has continued to coordinate the response to the outbreak by revitalizing the technical committees under incident management system. Rumor collection through toll free phone, 8335 and new PHEOC E-mail, ephieoc@gmail.com in addition to daily case and death due to AWD report collection from the affected areas is maintained at the PHEOC.



VI. Other Activities

1. Strengthening Public Health Emergency Management

With the financial and technical support of US CDC and technical support of WHO, Frontline Field Epidemiology training for woreda PHEM officers is ongoing by the center for Public Health Emergency Management in collaboration with Regional Health Bureaus. As part of the training of Frontline Field Epidemiology, 2nd workshop was conducted from 22-26 March 2018 in Diredawa, Ethiopia, for trainees enrolled from Somali, Diredawa and Harari Regions. Forty five trainees (of 53 initially enrolled, with completeness of 84%) have presented their workshop one outputs and completed workshop two training.

2. Weekly Epidemiological Feedback

Weekly epidemiological surveillance data feedback were prepared by regional focals and communicated to the respective regions.

Aknowledgement

Many thanks go to all regional states health bureau for sharing to national PHEM their respective regional weekly surveillance data, data managers of EPHI/cPHEM for compiling all regional surveillance data and all national PHEM officers for their close follow-up and sharing updates. Additionally, the center would like to extend its gratitude to partners including US CDC, African CDC, WHO, UNICEF, PHE UK, Carter Center and MSF.



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