



**Highlights of the week**

**Surveillance Completeness Rate:** Nationally, the proportion of health facilities that reported surveillance data was 88.6 %, 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. 82.8%.

**Malaria:** A total of 95,808 febrile cases with one death were suspected for malaria and tested either by microscopy or RDT in the week. Of these cases 18.0% (17,217) were treated for malaria. As compared to last week, there was 12.8% (2535 cases) decrement.

**Severe Acute Malnutrition:** A total of 4,878 cases with six deaths were reported with increment of 1.6% (75 cases) as compared to last week.

**Measles:** A total of 91 cases were reported and measles suspected outbreak threshold was surpassed in twenty-two woredas as of the week.

**Meningitis:** A total of 39 suspected meningitis cases without death were reported.

**Anthrax:** A total of 7 suspected anthrax cases with no death were reported during the week.

**Rabies Exposure:** A total of 88 exposure cases with no death were reported which showed 5.4%

decrement compared with exposures reported in the last week.

**Maternal Death:** A total of 23 maternal deaths were reported from 22 reporting sites.

**Influenza Sentinel Surveillance:** a total of 21 patients complaining of ILI or SARI were reported and six were reported positive for Influenza.

**Zero Reports:** Zero suspected cases of avian human influenza, neonatal tetanus, Drancunculiasis, 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 Tigray and Afar regions.

**Global Situation:** On 24 July 2018, the Minister of Health of DRC, Dr Oly Ilunga announced the end of the outbreak in the Democratic Republic of the Congo.

**Vaccine Preventable Disease and Guinea Worm Training:** conducted from July 26-28,2018 in Asosa town.

**FETP-Frontline mentorship training:** conducted from July 27-31,2018 in Adama town.

**PHEOC 11th Technical meeting:** Conducted in EPHI training center on July 24, 2018.



## I. Introduction

This Epidemiological 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 28 of 2018 and daily phone communication, line list reports of outbreaks for week 29 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 and different activities. 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 Public Health Surveillance Data Summary

**Table 1: Comparison of surveillance data by week, week 27 and 28, 2018, Ethiopia.**

Indicators/diseases/conditions	2018		
	Week 27	Week 28	% Change
Percent of Health Facility reported	92.4%	88.6%	-4.1
Percent of Health Facility reported timely	84.3%	82.8%	-1.7
Total Malaria Confirmed and Clinical	19,752	17,217	-12.8
Typhoid fever	22,035	21,037	-4.5
Epidemic Typhus	10,030	9,499	-5.3
Dysentery	7,608	6,284	-17.4
Severe Acute Malnutrition	4803	4878	1.6
Suspected Measles	76	91	19.7
Rabies exposure	93	88	-5.4
Suspected Meningitis	52	39	-25.0
Relapsing Fever	37	29	-21.6
Suspected Anthrax	10	7	-30.0
Maternal Death	22	23	4.5
Acute Flaccid Paralysis	17	7	-58.8
Acute Watery Diarrhea	59	55	-6.8
Neonatal Tetanus	0	0	0.0
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 88.6% in the week which is above the minimum requirement and all regions except Somali region (59.1%) had achieved above the minimum requirement, 80%. (Fig 1).

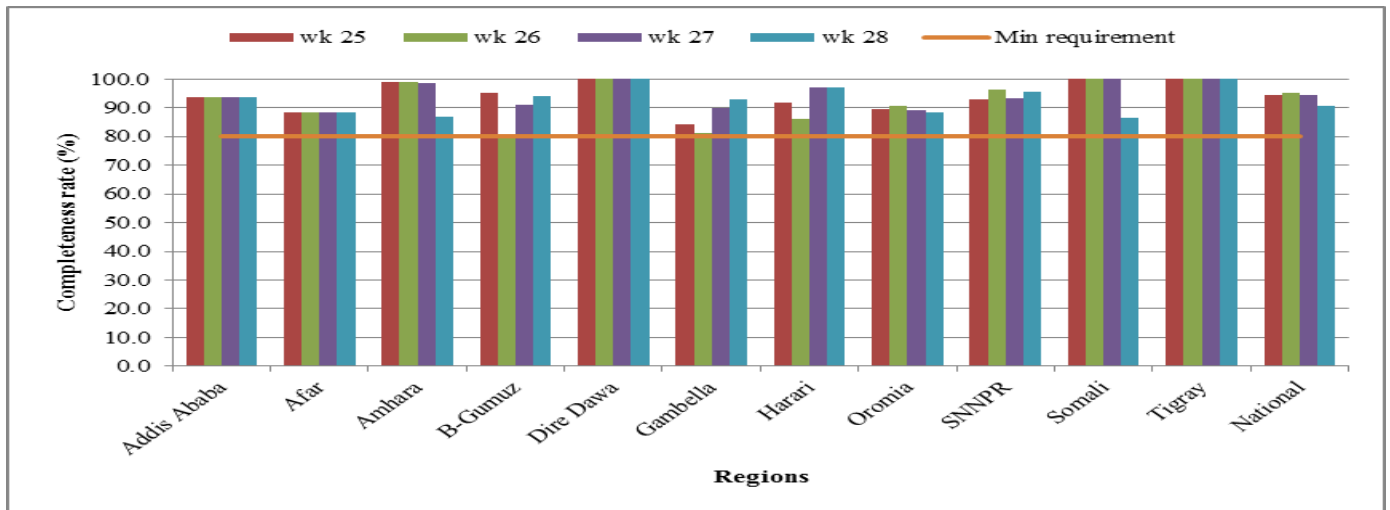


Figure 1: Surveillance data completeness rate by regions, week 25-28, 2018, Ethiopia.

#### B. Public Health Surveillance Reporting Timeliness Rate

During the week the national surveillance data reporting timeliness rate was 82.8% which is above the minimum requirement and all regions except Afar Region (0.0%), Dire Dawa (0.0%) and Somali (0.0%) had achieved above the minimum requirement, 80%.

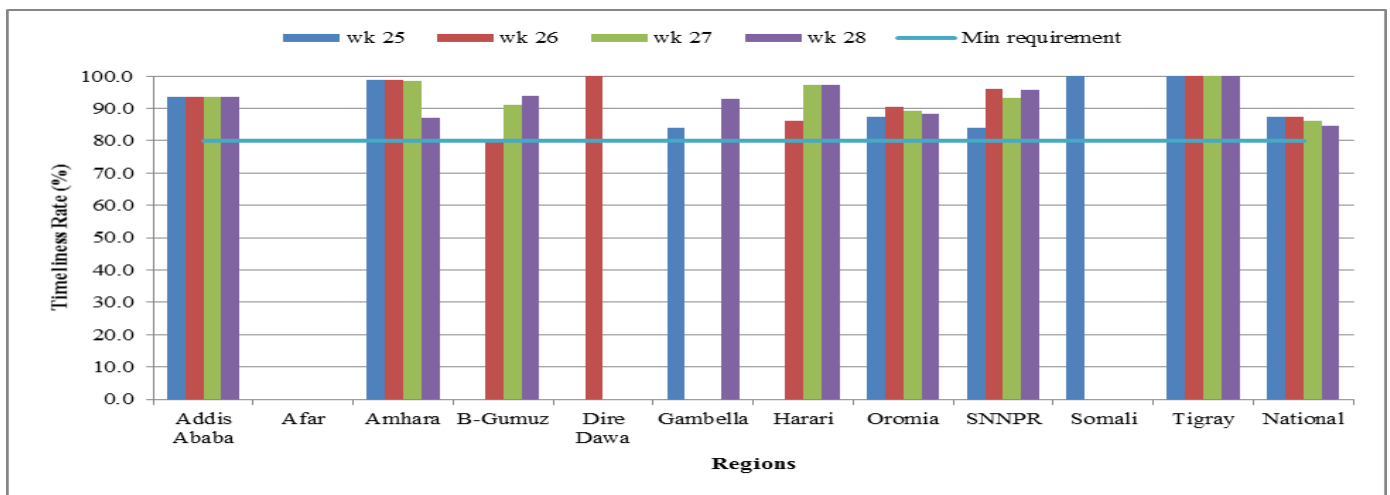
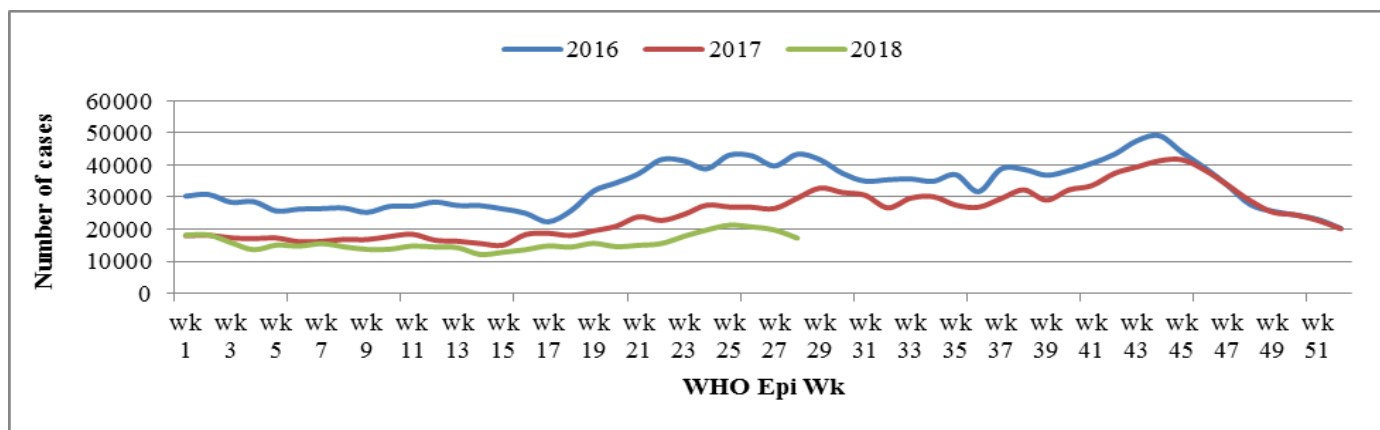


Figure 2: Surveillance data Timeliness rate by regions, week 25-28, 2018, Ethiopia.

## IV. Diseases/Conditions under Surveillance Updates

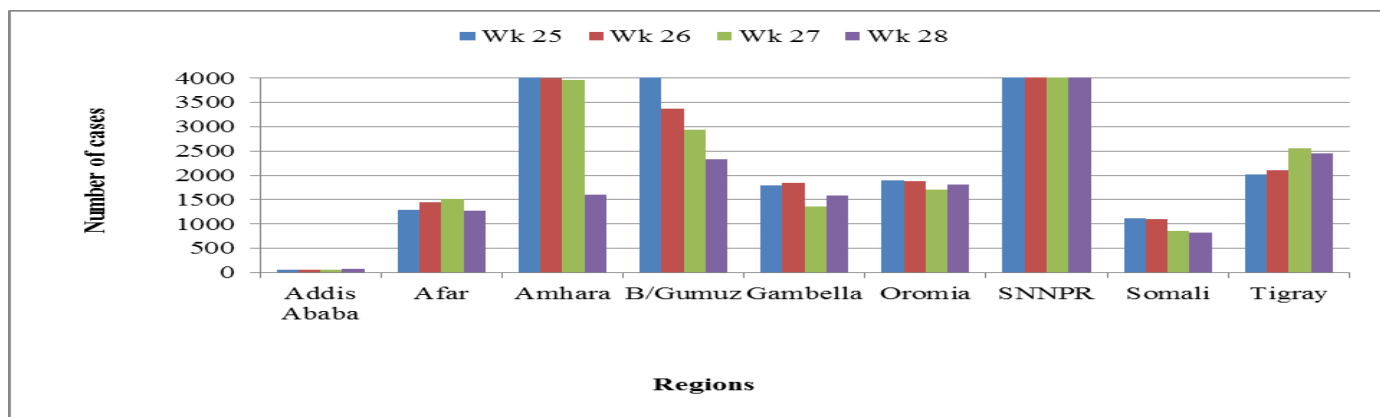
### 1. Malaria

During the week a total of 95,808 health facilities visitors were suspected and examined for malaria of which 18.0% (17,217) cases were treated as malaria which was 12.8% (2535 cases) lower than the last week. Plasmodium falciparum contributes the highest portion of the cases reported during the week, 76.3% (12,618 cases) of the cases nationally and 94.4%, 91.8% and 86.0% in Gambella, Benishangul-Gumuz and A 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, 30.3% (5,219 cases), 14.3% (2,454 cases) and 13.5% (2,327 cases) were reported from SNNPR, Tigray and Benishangul Gumuz regions respectively during the week.



**Figure 4: Regional malaria cases distribution, week 25-28, 2018, Ethiopia.**

A total of 678 cases (3.9%) of malaria were treated clinically nationwide while 54.1% and 7.7% were treated clinically in Somali and Gambella Regions respectively. The clinically treated malaria cases during the week are consistent with the national recommendation nationwide. However, the clinically treated malaria cases in Somali and Gambella are above the national recommendation. The nationwide malaria slide positivity rate during the week is 17.3% while 72.9%, 45.6% and 36.4% in Somali, Gambella and Afar regions respectively.

## 2. Suspected Meningitis

During the week, a total of 39 suspected meningitis cases without death were reported from Oromia (12 cases), Somali (10 cases), SNNPR (9 cases), Addis Ababa (5 cases), Amhara (2 cases) and Gambella (1 case). The suspected cases reported during the week were lower than the suspected cases during the same week of the last year cases.

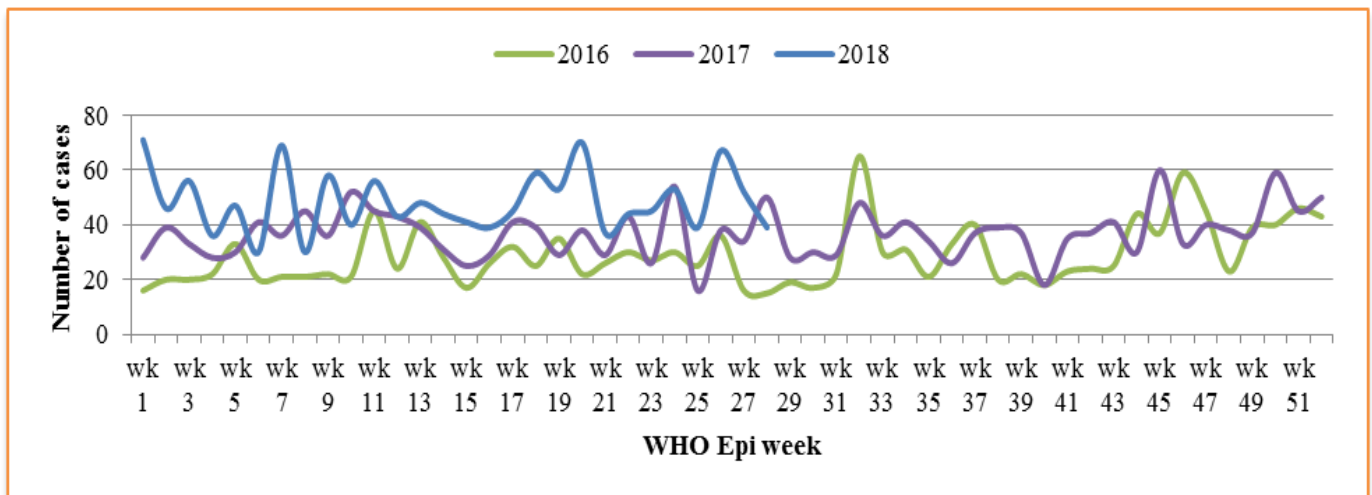


Figure 5: Trend of suspected meningitis cases by week, 2016-2018, Ethiopia.



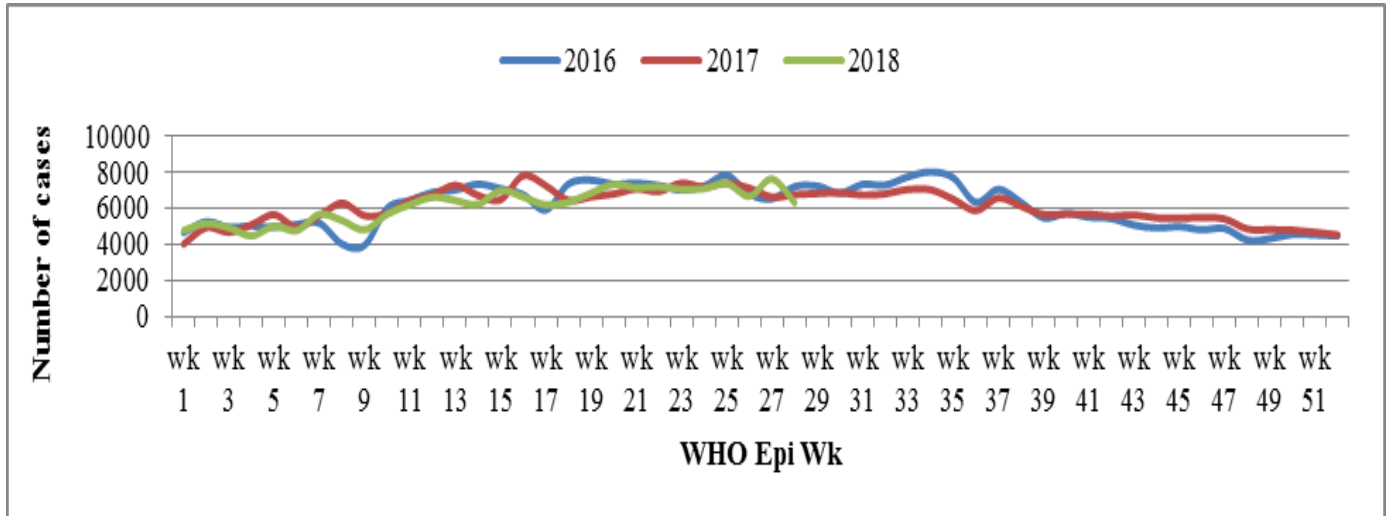
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**Table 2: Suspected meningitis cases and deaths distribution by reporting sites, week 28, 2018, Ethiopia.**

Region	Zone	Reporting sites	Suspected Cases	Death
Somali	FAAFAN	Meles Referral HOSP	6	0
SNNPR	Bench Maji	Mizan Aman Hospital	4	0
Oromia	Guji	Adola Hospital	3	0
Somali	Jarar	Dagahbur Hospital	3	0
SNNPR	Gedeo	Dila Hospital	3	0
Addis Ababa	Gulele	St. Paulos Hospital	3	0
Oromia	Dukem Town	Dukem Town	2	0
Oromia	West Hararge	Gelemso Hospital	2	0
SNNPR	Halaba	Halaba Hospital	2	0
Oromia	Jimma	Agaro Hospital	1	0
Oromia	Qeleme Wellega	Dambi Dolo Hospital	1	0
Amhara	Dese Town	Dese Town	1	0
Gambella	Agnuwak	Gambella Hospital	1	0
Oromia	Bale	Ginir	1	0
Oromia	Bale	Goba Town	1	0
Somali	SHABEELE	Gode Hospital	1	0
Amhara	Oromiya	Kemise General Hospital	1	0
Addis Ababa	Nefas Silk Lafto	Nefas Silk Lafto Woreda08	1	0
Oromia	Horo Gudru Wellega	Shambu Hospital	1	0
Addis Ababa	Lideta	Tikur Anbesa	1	0
<b>Grand Total</b>			<b>39</b>	<b>0</b>

### 3. Dysentery

During the week, a total of 6,284 dysentery cases without death were reported showing 17.4% (1324 cases) decrement as compared to last week. The number of cases reported during the week is lower than the number of cases reported during the same week of the 2017.

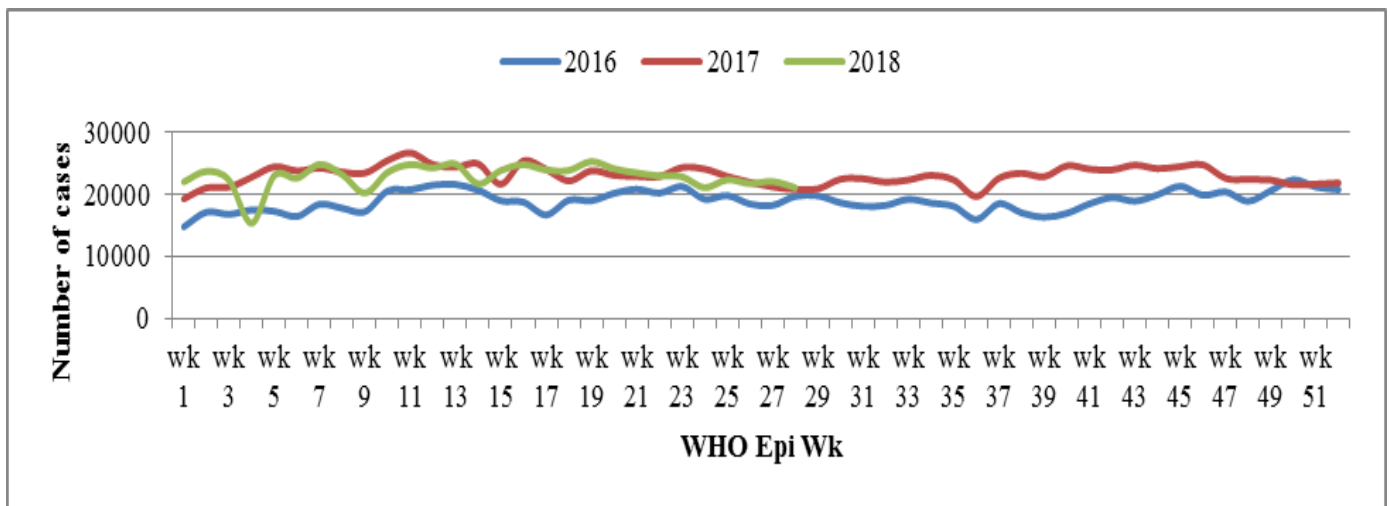


**Figure 6: Dysentery cases trend by week, 2016-2018, Ethiopia.**

Amhara Region reported highest number of cases (1,881 cases) followed by Oromia Region (1,434 cases) and Tigray Region (911 cases) during the week.

#### 4. Typhoid Fever

During the week, a total of 21,037 cases of typhoid fever without death were reported which was 4.5% (998 cases) lower than the last week. The typhoid fever cases reported during the week is higher than the number of cases reported during the same week of the last year.

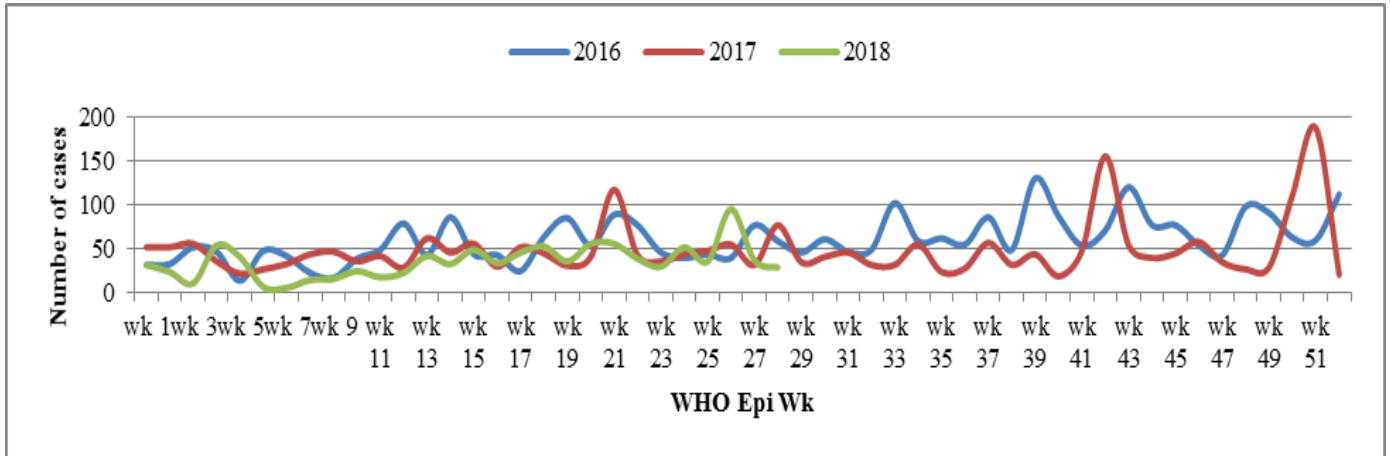


**Figure 7: Typhoid fever cases trend by week, 2016-2018, Ethiopia.**

SNNP Region reported highest number of cases (7,446 cases) followed by Oromia (5,701 cases) and Addis Ababa City Administration (3,404 cases) during the week.

### 5. Relapsing Fever

A total of 29 cases of relapsing fever without death were reported during the week which showed 21.6% (8 cases) decrement from the last week. The number of cases reported during the week is lower than the number of cases reported during the same week of 2017.

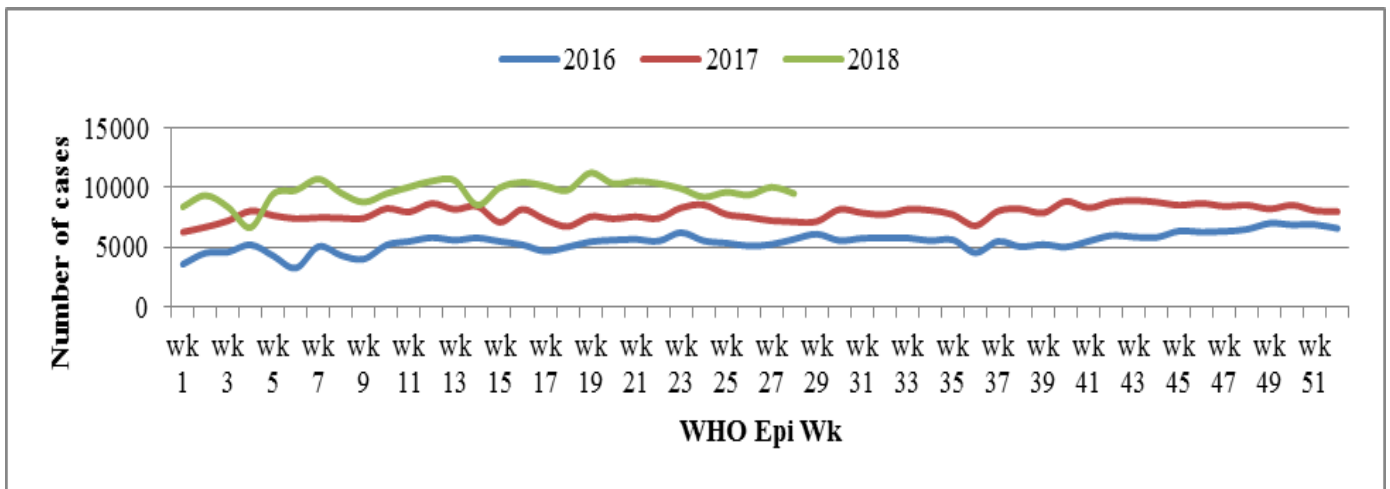


**Figure 8: Relapsing fever cases trend by week, 2016-2018, Ethiopia.**

Addis Ababa City Administration reported highest number of cases (13 cases) followed by Afar Region (10 cases) and Amhara region (4 case) during the week.

### 6. Epidemic Typhus

A total of 9,499 cases of epidemic typhus without death were reported during the week, which was 5.3% (531 cases) lower than the last week. The number of cases reported during 2018 were higher than the number of cases reported during the same weeks of the last two years.



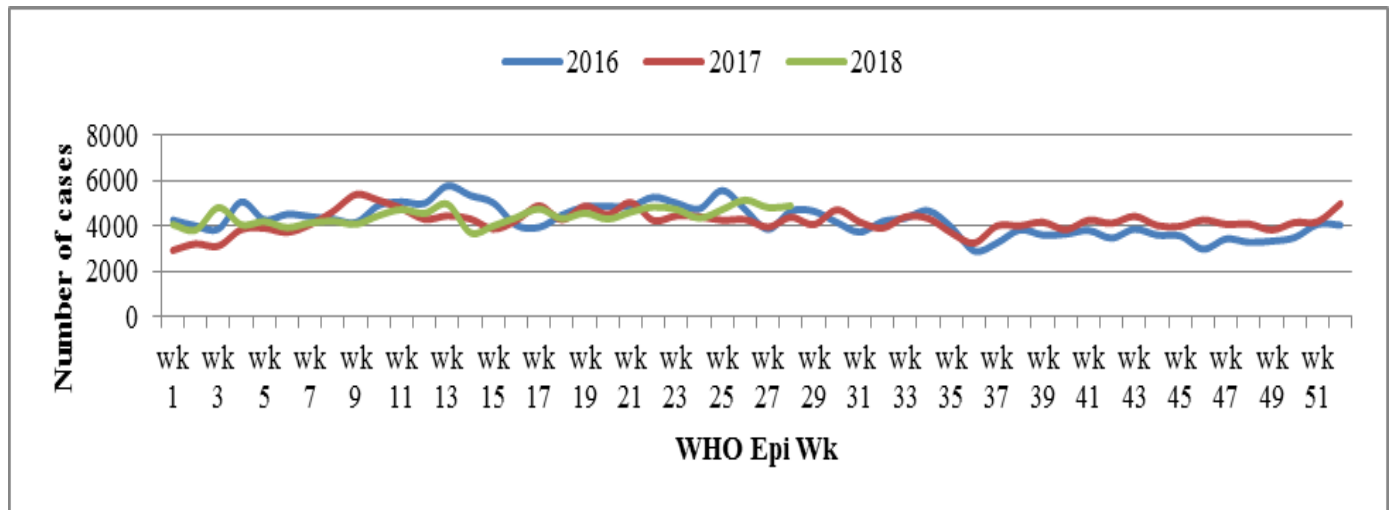
**Figure 9: Epidemic typhus cases trend by week, 2016-2018, Ethiopia.**



Addis Ababa City Administration reported highest number of cases (3,084 cases) followed by SNNP (2,865 cases) and Oromia regions (1,531 cases).

### 7. Severe Acute Malnutrition

During the week, a total of 4,878 cases with six deaths were reported which showed 1.6% (75 cases) increment as compared to last week. The severe acute malnutrition cases reported during the week were higher than the number of cases reported during the same week of the last year.



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

About 632 (13%) of the total reported SAM cases were treated in patient during the week nationally. Oromia Region reported highest number of cases (2,227 cases) followed by SNNP (1,098 cases) and Somali (775 cases) regions during the week.

The top ten severe acute manutrition leading woredas during the last one month (week 25-28) were from Oromia, Afar, SNNP and Somali regions.



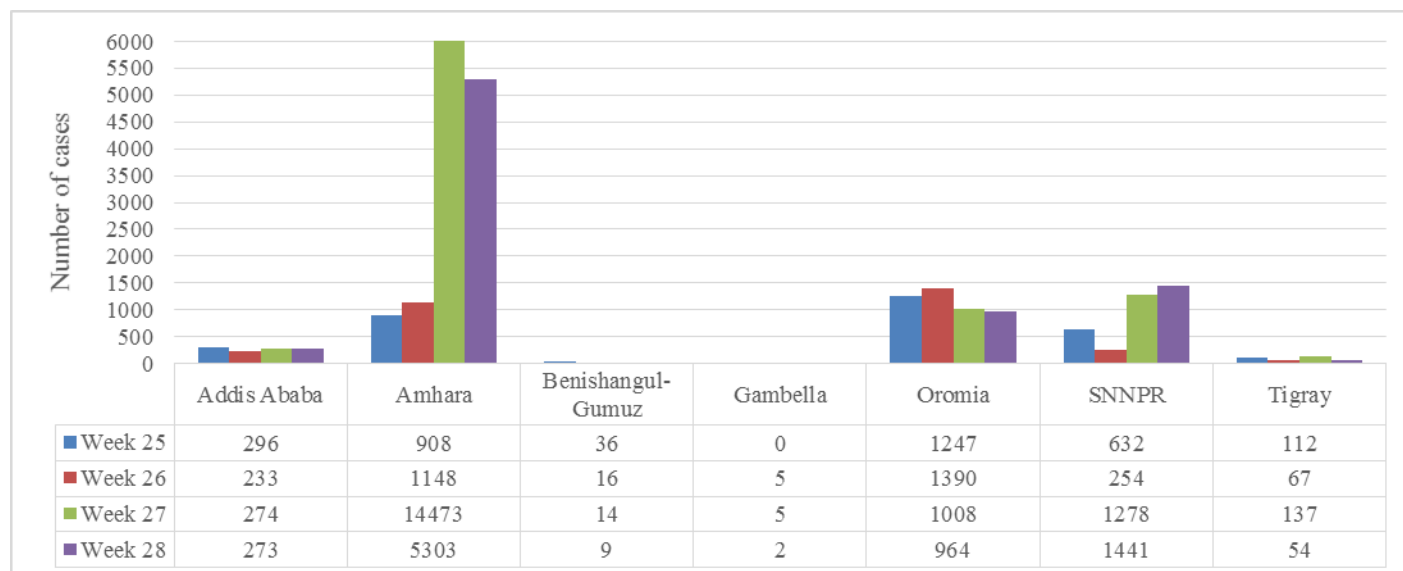
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**Table 3: Top ten severe acute malnutrition cases reporting sites, week 25-28, 2018, Ethiopia.**

Region	Zone	Reporting sites	Cases				Grand Total
			Wk 25	Wk 26	Wk 27	Wk 28	
SNNPR	Gedeo	Gedeb	0	29	31	200	260
SNNPR	Gedeo	Yirgachefe	48	42	76	121	287
Oromia	East Hararge	Bedeno	50	50	53	102	255
Oromia	East Hararge	Fedis	53	103	46	102	304
Oromia	West Arsi	Siraro	41	74	50	95	260
Oromia	West Hararge	Habro	59	69	83	94	305
Oromia	East Hararge	Haromaya Rural	119	30	32	81	262
Oromia	East Hararge	Gursum	36	71	81	61	249
Afar	Zone 02	Dalol	55	101	51	58	265
Oromia	East Hararge	Girawa	100	53	64	33	250
Somali	Fafan	Gursum	10	9	24	0	43
<b>Grand Total</b>			<b>561</b>	<b>622</b>	<b>567</b>	<b>947</b>	<b>2697</b>

### 8. Scabies

During the week a total of 8,108 cases were reported which is 112.7 % (9,142 cases) lower than the last week. Amhara (5,303 cases) reported highest number of cases followed by SNNP Region (1,441 cases) and Oromia (964 cases).



**Figure 11: Scabies cases distribution and trend by Region, week 25-28, 2018, Ethiopia.**

### 9. Acute Flaccid Paralysis (AFP)

During the week a total of 7 suspected AFP cases were reported which showed 30 % (3 cases) decrement as compared to the number of the suspected cases reported during the last week.

**Table 4: Distribution of acute flaccid paralysis cases by reporting woredas, week 28, 2018, Ethiopia.**

Region	Zone	Reporting sites	Suspected Cases	Death
Benishangul-Gumuz	Assosa	Bambasi	1	0
Dire Dawa	Dredewa	Dilchora Hospital	1	0
Oromia	Jimma	Guma	1	0
Amhara	South Gonder	Lay Gayint	1	0
Oromia	South West Shewa	St.Luke Hospital	1	0
Amhara	North Wollo	Wadla	1	0
Addis Ababa	Arada	Yekatit 12 Hospital	1	0
<b>Grand Total</b>			<b>7</b>	<b>0</b>

### 10. Suspected Anthrax

A total of 7 suspected anthrax cases with no death was reported from Amhara and Tigray Regions during the week which was 30% (3 cases) lower than the number of cases reported during the last week.

**Table 5: Distribution of suspected anthrax cases and deaths by woredas, week 28, 2018, Ethiopia.**

Region	Zone	Reporting sites	Cases	Death
Amhara	Wag Himra	Zikwala	3	0
Amhara	Wag Himra	Abergele	1	0
Amhara	North Gondar	Debark Zuria	1	0
Tigray	Central Tigray	Mereb Leha	1	0
Amhara	Wag Himra	Sehale Seyemt	1	0
<b>Grand Total</b>			<b>7</b>	<b>0</b>

### 11. Suspected Measles

During the week, a total of 91 suspected measles cases with no death were reported and as compared to last week there was 19.7% (15 suspected cases) decrement. Measles suspected outbreak threshold was surpassed in twenty-three woredas based on the national outbreak threshold criteria (woreda that reported greater than five suspected cases over the last four weeks, 25-28 weeks).



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**Table 6: Woredas in which suspected measles outbreak threshold is surpassed as of week 28, 2018, Ethiopia.**

Region	Zone	Reporting sites	wk 25	wk 26	wk 27	wk 28	Grand total
Gambella	Agnuwak	Dima	0	20	0	12	32
Somali	Jarar	Daror	2	12	6	-	20
Amhara	South Wollo	Sayinit	12	6	1	0	19
Oromia	West Hararge	Chiro Zuriya	0	17	0	0	17
Oromia	Woliso town	Woliso Town	5	3	4	4	16
Amhara	North Gondar	Debark Zuria	5	8	0	0	13
Addis Ababa	Yeka	Yeka Woreda13	5	2	3	3	13
Tigray	Eastern Tigray	Adi Girat Town	0	0	0	11	11
Addis Ababa	Bole	Bole Woreda03	4	4	2	0	10
Addis Ababa	Bole	Bole Woreda10	4	4	2	0	10
Tigray	North Western Tigray	Tselemt	0	0	0	10	10
Addis Ababa	Yeka	Yeka Woreda12	4	2	0	3	9
Oromia	South West Shewa	St.Luke Hospital	0	4	2	1	7
Somali	Jarar	Gashamo	5	0	1	0	6
Oromia	Arsi	Guna	0	0	3	3	6
Oromia	Bishoftu Town	Bishoftu Town	0	1	3	1	5
Oromia	Burayu Town	Burayu Town	1	3	0	1	5
Amhara	East Gojjam	Dejen	2	3	0	0	5
Addis Ababa	Gulele	Gulele Woreda03	0	3	1	1	5
Addis Ababa	Chirkos	Kirkos Woreda04	3	0	1	1	5
Addis Ababa	Kolfe Keraniyo	Kolfe KeraniyoWoreda08	0	0	3	2	5
Oromia	Nekemte Town	Nekemte Town	1	2	2	-	5
Oromia	Guji		0	0	0	0	0
<b>Grand Total</b>			<b>53</b>	<b>94</b>	<b>34</b>	<b>53</b>	<b>234</b>

Note: “-“= the woreda has not reported during the week  
\*report includes cases reported from hospital

## 12.Rabies Exposure

A total of 88 exposure cases with no death were reported during the week which has 5.4 % (5 cases) decrement compared with the last week exposure cases.

**Table 7: Distribution of suspected rabies exposure cases and deaths by reporting sites, week 28 of 2018, Ethiopia.**

Region	Zone	Reporting sites	Suspected Exposure Cases	Deaths
Tigray	North Western Tigray	Shire Enida Silase Town	20	0
Tigray	South Tigray	Maychew Town	11	0
Tigray	South Tigray	Alamata Town	10	0
Somali	FAAFAN	Karamara Hospital	9	0
Addis Ababa	Chirkos	Kirkos Woreda11	6	0
Tigray	Central Tigray	Akisum Town	5	0
Benishangul-Gumuz	Assosa	Assosa Hospital	5	0
Tigray	Eastern Tigray	Wekero Town	4	0
Gambella	Mejenger	Godere	3	0
Tigray	Western Tigray	Humera Town	3	0
Tigray	Central Tigray	Adwa Town	2	0
Addis Ababa	Chirkos	Kirkos Woreda02	2	0
Tigray	Mekele Especial Zone	South & North Mekele	2	0
Tigray	Eastern Tigray	Adi Girat Town	1	0
Oromia	West Wellega	Ayira Hospital	1	0
Amhara	East Gojjam	Debre Markos Hospital	1	0
Addis Ababa	Chirkos	Kirkos Woreda04	1	0
Tigray	South Tigray	Korem Town	1	0
Benishangul-Gumuz	Assosa	Menge	1	0
<b>Grand Total</b>			<b>88</b>	<b>0</b>



### 13. Maternal Death

During the week a total of 23 maternal deaths were reported from 22 reporting sites of Oromia (11 deaths), Amhara (5 Deaths), Addis Ababa City Administration, Somali and SNNP (2 cases) and Tigray (1 death) Regions.

**Table 8: Distribution of maternal deaths by reporting sites, week 28 of 2018, Ethiopia.**

Region	Zone	Reporting site	Death
Somali	Shabelle	Adadle	2
Amhara	Dese Town	Dese Town	2
SNNPR	Hawassa Town	Adara Hospital	1
Tigray	Central Tigray	Ahiferom	1
Oromia	Ilu Aba Bora	Algesachi	1
Amhara	East Gojjam	Baso Liben	1
Oromia	Bale	Berbere	1
Oromia	Arsi	Chole	1
Amhara	Wag Himra	Dehena	1
Oromia	Bale	Delo Mena	1
Oromia	Borena	Dilo	1
Oromia	West Wellega	Gimbi Rural	1
Amhara	East Gojjam	Gozamin	1
Oromia	East Hararge	Gursum	1
Oromia	West Arsi	Kokosa	1
Addis Ababa	Kolfe Keraniyo	Kolfe Keraniyo Woreda12	1
SNNPR	Dawuro	Loma	1
Oromia	Arsi	Robe	1
Oromia	South West Shewa	Seden Sodo	1
Oromia	Arsi	Shenan kolu	1
Addis Ababa	Chirkos	Zeweditu Hospital	1
<b>Grand Total</b>			<b>23</b>

### 14. Influenza Sentinel Surveillance

During week 28, a total of 21 patients complaining of ILI or SARI were reported and throat swab samples were collected and tested in predesignated influenza sentinel sites. Among the 21 samples processed six samples were tested positive for influenza during the week.

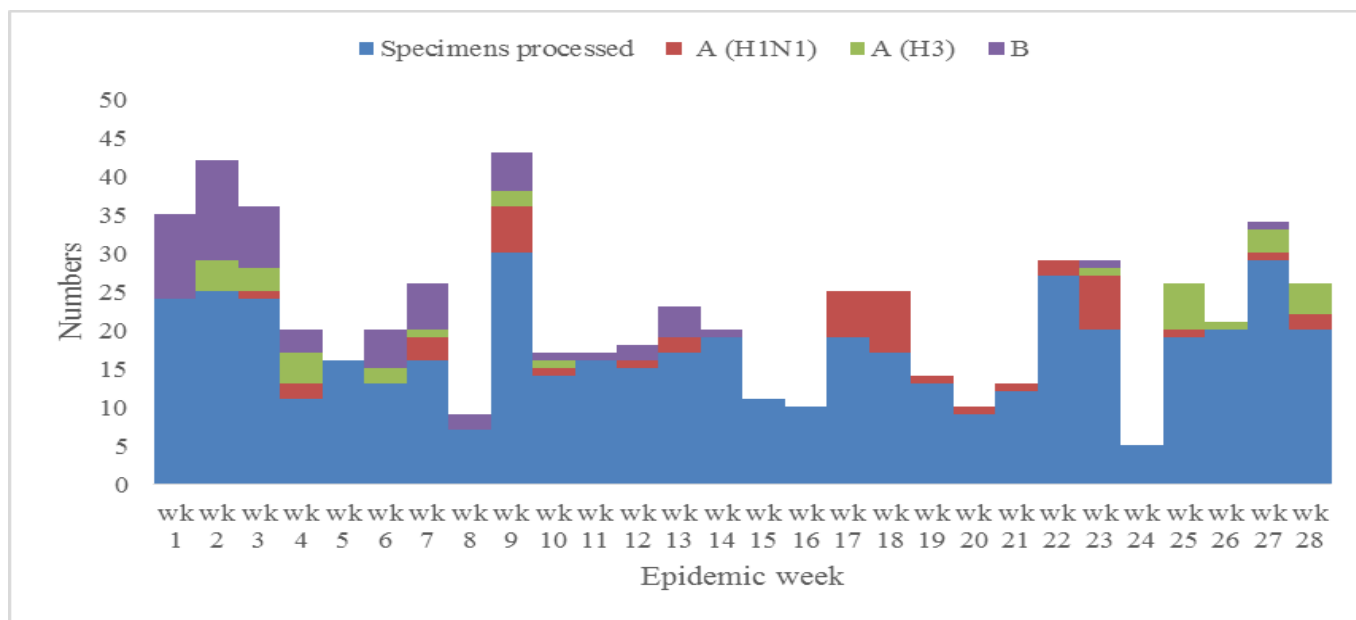


Figure 12: Influenza Sentinel Surveillance Laboratory Result by week, 2018, Ethiopia.

### 15. Other Immediately Notifiable Diseases/Conditions

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



## **IV. Diseases/Conditions Outbreaks**

### **1. Acute Watery Diarrhea Outbreak**

Acute watery diarrhea outbreak is ongoing in Tigray region and Afambo, Dubti and Asayita woredas of Afar Region. A team comprising of field epidemiologists are investigating and responding to the outbreak with all stakeholders and partners.

## **V. Global Situation**

### **1. Ebola Viral Disease Outbreak in Democratic Republic of Congo**

As 42 days (two incubation periods) have passed since the last possible exposure to a confirmed Ebola virus disease case, on 24 July 2018, the Minister of Health, Dr Oly Ilunga announced the end of the outbreak in the Democratic Republic of the Congo. In contrast to previous Ebola virus disease outbreaks in the country, this outbreak involved three health zones, including an urban center with river connections to the capital and to neighboring countries, as well as remote rainforest villages. As of 24 July 2018, a total of 54 Ebola virus disease cases (38 confirmed and 16 probable) were reported, with illness onset between 5 April and 2 June 2018. Of these cases, 33 died (overall case fatality ratio: 61%), including 17 deaths among confirmed cases.

*Source:* <http://www.who.int/csr/don/25-july-2018-ebola-drc/en/>



## VI. Other Activities

### 1. Vaccine Preventable Disease and Guinea Worm Training

Ethiopian Public Health Institute center for Public Health Emergency Management has organized vaccine preventable disease and Guinea worm training from July 26-28, 2018 for 39 PHEM officers in collaboration with Benshangul-Gumuz Regional Bureau in Assosa town.

### 2. FETP-Frontline Mentorship Training

Ethiopian Public Health Institute center for Public Health Emergency Management in collaboration with WHO has organized FETP-Frontline mentorship training from July 27-31, 2018 for around 50 participants from Amhara, Oromia, Tigray, Somali and Afar regions and zones in Adama town.

### 3. Public Health Emergency Operation Center 11st Technical meeting

Ethiopian Public Health Institute emergency operation center conducted PHEOC 11<sup>th</sup> technical meeting in EPHI training center on July 24<sup>th</sup>, 2018. Stakeholders from CDC, WHO, MSF, FMOH, AARHB, PFSA, PHE UK, EFMHACA, UNICEF, IRC, INSA and Ministry of Defense had participated.

### 4. Weekly Epidemiological Feedback

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



## **Aknowledgements**

Many thanks to all regional states health bureau, zonal health departments, woreda health offices and governmental and nongovernmental health facilities for sharing to cPHEM 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 FMOH, PFSA, EFMHACA, Ministry of Livestock and Fishery, Ministry of Defense, Federal Police, different directorates of EPHI, US CDC, African CDC, WHO, UNICEF, PHE UK, MSF, NDRMC, UNFPA, ARRA, UNHCR, WFP, INSA, MSF, MOD and IRC.

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**For Further Information:**

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Please Contact Us: Ethiopian Public Health Institute (EPHI), Center for Public Health Emergency Management (PHEM),

Early Warning and Response Unit (EWaR),

Web site: [www.ephi.gov.et](http://www.ephi.gov.et),

P.O Box 1242, Telephone: +251-11-27-65-340/58-896

For any rumor or information please call: Toll free telephone: 8335

Send to: [ephieoc@gmail.com](mailto:ephieoc@gmail.com) / [pheidatacenter@gmail.com](mailto:pheidatacenter@gmail.com)

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**Author and Editor in Chief:**

Zewdu Assefa (MPH, Field Epidemiologist)

Lead, Public Health Emergency Early Warning and Response Unit

E-mail: [zedhiwot05@gmail.com](mailto:zedhiwot05@gmail.com)

Mobile: +251-919-59-97-09

**Assistant Editors:**

Bethel Teshome<sup>1</sup>

**Contributors:**

Diriba Sufa<sup>1</sup>, Bethel Teshome<sup>1</sup>, Getaneh Abrha<sup>2</sup> and Medhanye Habtetsion<sup>2</sup>: *VPD Surveillance and Response Training*

Dr. Yaregal Fufa<sup>2</sup>, Tadesse Yalew<sup>1</sup>, Yoseph G/Egziabher<sup>3</sup> and Shambel Habebe<sup>1</sup>: *AWD outbreak*

**Reviewers:**

Dr. Beyene Moges (MD, PhD, Deputy Director General of Ethiopian Public Health Institute)

Dr. Feyessa Regassa (MSc, Acting Director of Public Health Emergency Management Directorate)

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**Affiliations:**

<sup>1</sup> Ethiopian Public Health Institute center for Public Health Emergency Management PHE EWaR Team

<sup>2</sup> Ethiopian Public Health Institute center for Public Health Emergency Management PHE Preparedness and Capacity Building Team

<sup>3</sup> Saint Paul's Hospital Millennium Medical College, Field Epidemiology Resident