



Highlights of the week

Surveillance Completeness Rate: Nationally, the proportion of health facilities that reported surveillance data was 86.9 %, 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. 85.3%.

Malaria: A total of 102,576 febrile cases without death were suspected for malaria and tested either by microscopy or RDT in the week. Of these cases 18.3% (18,744) were treated for malaria. As compared to last week, there was 12.2% (2608 cases) decrement.

Severe Acute Malnutrition: A total of 3,381 cases with four deaths were reported with decrement of 6.9% (251 cases) as compared to last week.

Measles: A total of 25 cases were reported and measles suspected outbreak threshold was surpassed in seven woredas as of the week.

Meningitis: A total of 27 suspected meningitis cases with one death were reported.

Anthrax: A total of 6 suspected anthrax cases with no death were reported during the week.

Rabies Exposure: A total of 74 exposure cases with one death were reported which showed 28.8% (30 cases) decrement compared with exposures reported in the last week.

Neonatal Tetanus: A total of one NNT case without death were reported during the week.

Maternal Death: A total of 22 maternal deaths were reported from 19 reporting sites.

Zero Reports: Zero suspected cases of avian human influenza, 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 Region.

Global Situation: There is ongoing EVD outbreak in Democratic Republic of Congo.

Influenza Protocol Development Workshop: Conducted in Mekele Town on 3-5 September, 2018.

PHEOC 16th Technical meeting: Conducted in EPHI training center on September 4, 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 34 of 2018 and daily phone communication, line list reports of outbreaks for week 35 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 33 and 34, 2018, Ethiopia.

Indicators/diseases/conditions	2018		
	Week 33	Week 34	% Change
Percent of Health Facility reported	86.1%	86.9%	0.9
Percent of Health Facility reported timely	84.6%	85.3%	0.9
Total Malaria Confirmed and Clinical	21,352	18,744	-12.2
Typhoid fever	22,227	21,163	-4.8
Epidemic Typhus	10,359	9,582	-7.5
Dysentery	6,247	6,443	3.1
Severe Acute Malnutrition	3632	3381	-6.9
Suspected Measles	55	25	-54.5
Rabies exposure	104	74	-28.8
Suspected Meningitis	23	23	0.0
Relapsing Fever	36	40	11.1
Suspected Anthrax	5	6	20.0
Maternal Death	16	22	37.5
Acute Flaccid Paralysis	12	8	-33.3
Acute Watery Diarrhea	643	184	-71.4
Neonatal Tetanus	2	1	-50.0
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 86.9% in the week which is above the minimum requirement and all regions except Dire Dawa region (0.0), Benishangul-Gumuz region (0.0) and Somali region (0.0%) had achieved above the minimum requirement, 80%. (Fig 1).

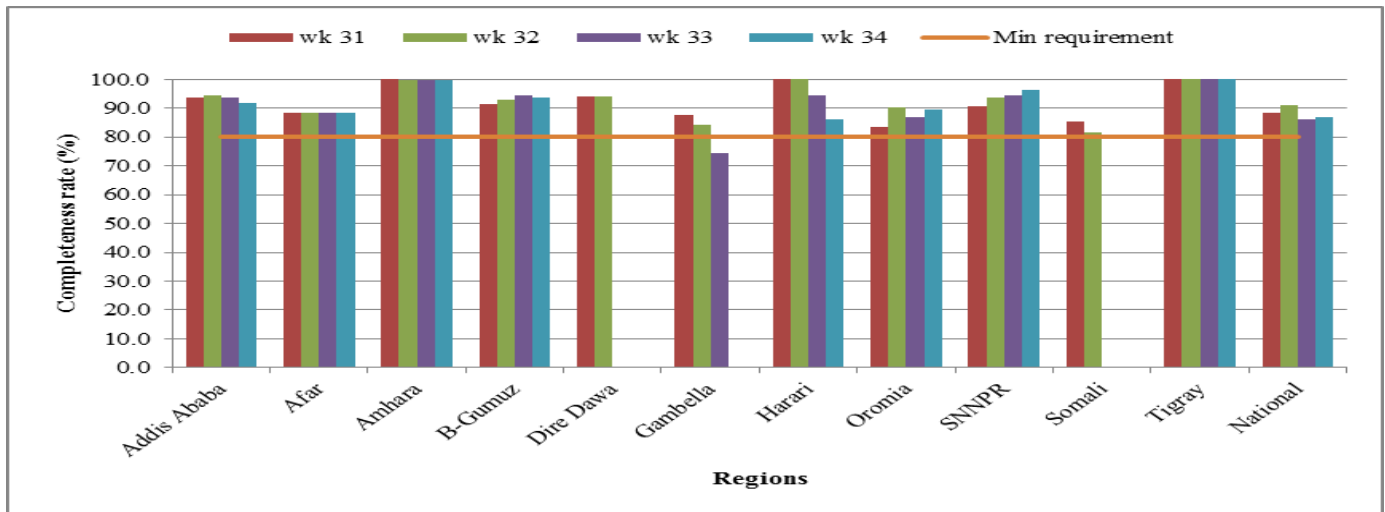


Figure 1: Surveillance data completeness rate by regions, week 31-34, 2018, Ethiopia.

B. Public Health Surveillance Reporting Timeliness Rate

During the week the national surveillance data reporting timeliness rate was 85.3% which is above the minimum requirement and all regions except Afar Region (0.0%), Benishangul-Gumuz region (0.0), Dire Dawa (0.0) and Somali (0.0%) had achieved above the minimum requirement, 80%.

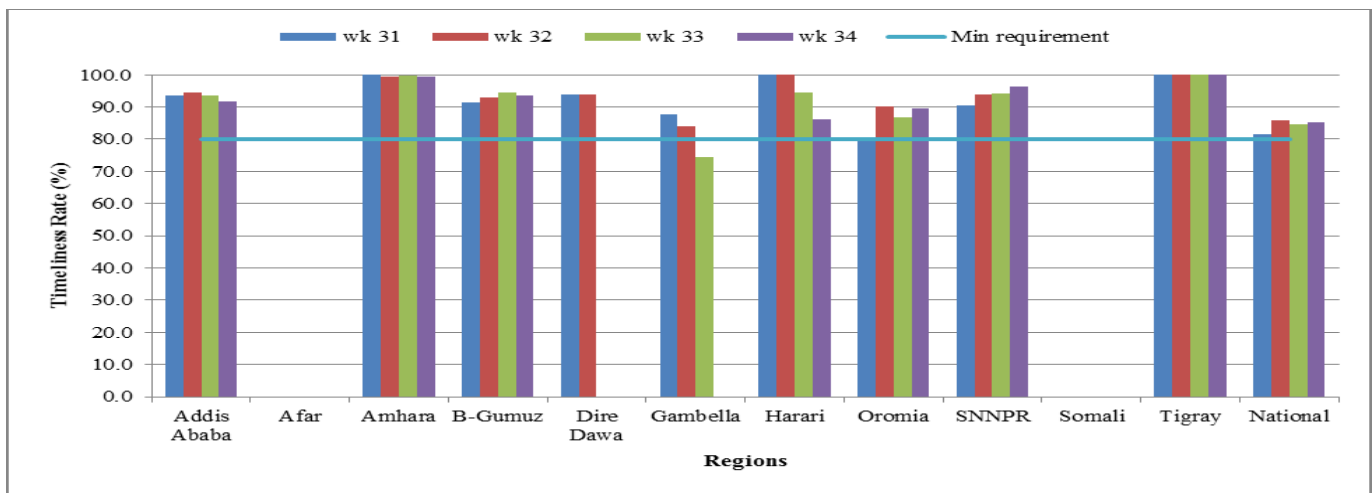


Figure 2: Surveillance data Timeliness rate by regions, week 31-34, 2018, Ethiopia.

IV. Diseases/Conditions under Surveillance Updates

1. Malaria

During the week a total of 102,738 health facilities visitors were suspected and examined for malaria of which 18.3% (18,744) cases were treated as malaria which was 12.2% (2,608 cases) lower than the last week. Plasmodium falciparum contributes the highest portion of the cases reported during the week, 74.3% (13,831 cases) of the cases nationally and 90%, 89.7% and 83.8% in Benishangul-gumuz, Harari, 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.

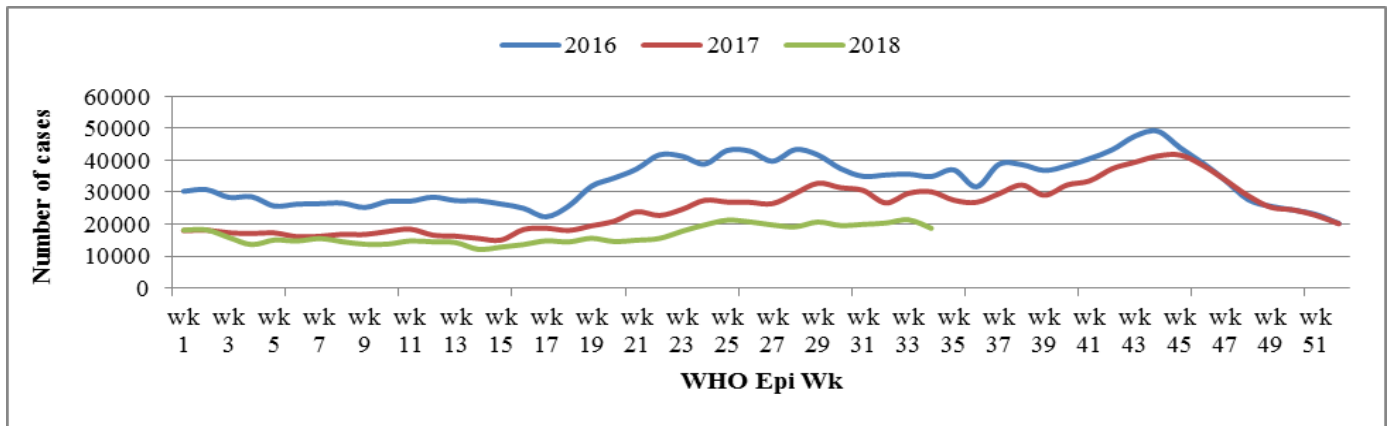


Figure 3: National malaria (clinical and laboratory confirmed) trend by week from 2016-2018, Ethiopia.

Cascading the malaria cases to regions, 28.3% (3,309 cases), 24.6% (4,614 cases) and 18.2% (3,422 cases) were reported from Amhara, SNNPR and Tigray Regions respectively during the week.

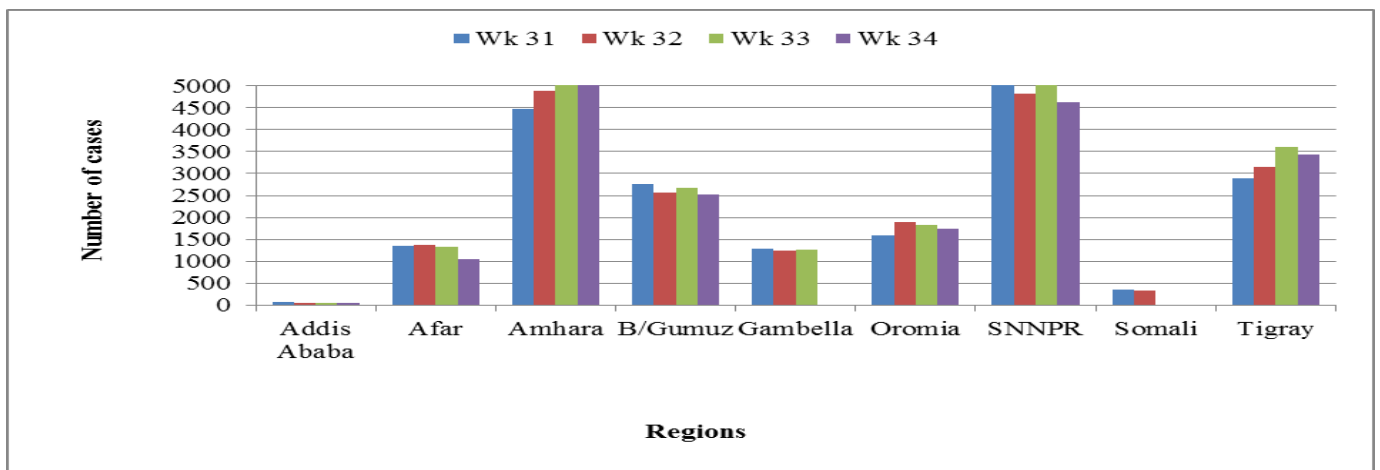


Figure 4: Regional malaria cases distribution, week 31-34, 2018, Ethiopia.

A total of 129 cases (0.7%) of malaria were treated clinically nationwide while 1.8% and 0.8% were treated clinically in SNNP and Benishangul-Gumuz Regions respectively. The clinically treated malaria cases during the week are below the national recommendation nationwide as well as in Gambella and Tigray Regions. The nationwide malaria slide positivity rate during the week is 18.1% while 35.2%, 27.3% and 21.7% in Afar, Benishangul-Gumuz and Harari Regions respectively.

2. Suspected Meningitis

During the week, a total of 27 suspected meningitis cases without death were reported from Oromia (16 cases), SNNPR (4 cases), Somali (4 cases), Addis Ababa (2 cases) and Amhara (1 case). The suspected cases reported during the week were lower than the suspected cases during the same week of the last year cases.

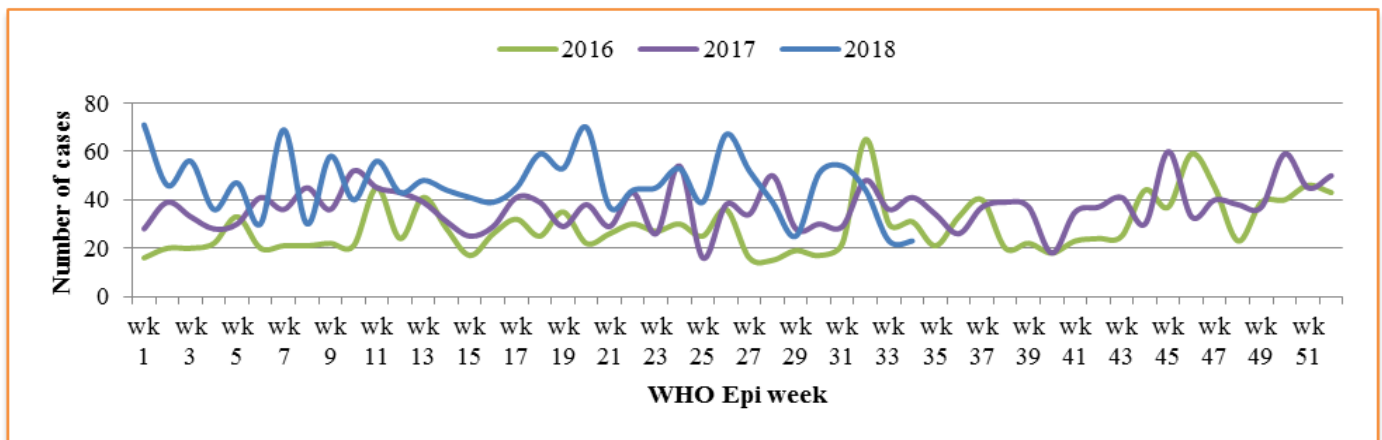


Figure 5: Trend of suspected meningitis cases over week, 2016-2018, Ethiopia.

Table 2: Suspected meningitis cases and deaths distribution by reporting sites, week 34, 2018, Ethiopia.

Region	Zone	Reporting sites	Suspected Cases	Death
Oromia	Bale	Goba Town	3	0
SNNPR	Halaba	Halaba Hospital	3	0
Oromia	Arsi	Bale Gesgara	2	0
Oromia	Qeleme Wellega	Dambi Dolo Hospital	2	0
Oromia	West Hararge	Gelemso Hospital	2	0
Somali	SHABEELE	Gode Rural	2	0
Somali	FAAFAN	Karamara Hospital	2	0
Oromia	Bale	Sinana	2	0
Addis Ababa	Kolfe Keraniyo	ALERT Hospital	1	0
Amhara	Central Gondar	Chilga	1	0
Oromia	West Shewa	Ginde Beret	1	0
Oromia	West Shewa	Gindeberet Hospital	1	0
Oromia	East Wellega	Jimma Arjo	1	0
SNNPR	Konta Town	Konta Special Town	1	0
Oromia	Horo Gudru Wellega	Shambu Hospital	1	0
Addis Ababa	Lideta	Tikur Anbesa	1	0
Oromia	Borena	Yabelo Hospital	1	0
Grand Total			27	0

3. Dysentery

During the week, a total of 6,443 dysentery cases without death were reported showing 3.1% (19 cases) increment 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.

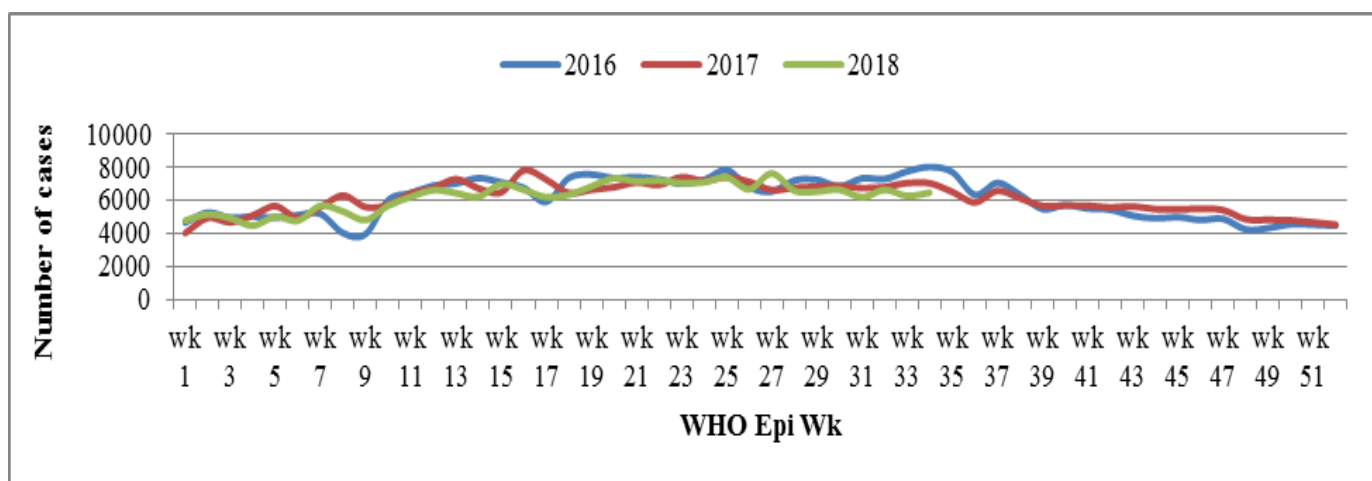


Figure 6: Dysentery cases trend by week, 2016-2018, Ethiopia.

Amhara Region reported highest number of cases (2,570 cases) followed by Oromia Region (1,372 cases) and Tigray Region (1,225 cases) during the week.

4. Typhoid Fever

During the week, a total of 21,163 cases of typhoid fever without death were reported which was 4.8% (1,064 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.

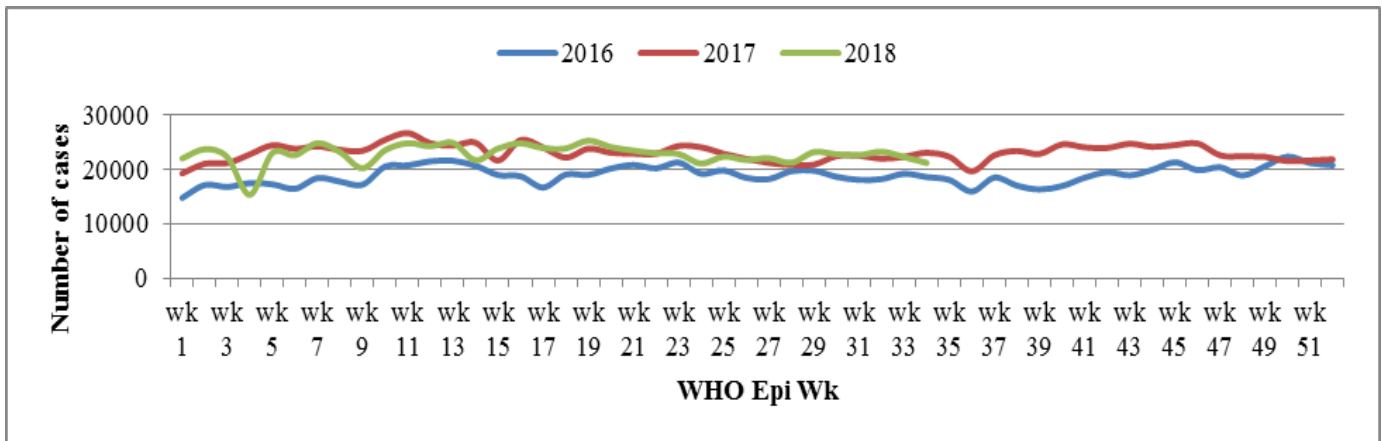


Figure 7: Typhoid fever cases trend by week, 2016-2018, Ethiopia.

SNNP Region reported highest number of cases (7,228 cases) followed by Oromia (6,508 cases) and Addis Ababa City Administration (3,038 cases) during the week.

5. Relapsing Fever

A total of 40 cases of relapsing fever without death were reported during the week which showed 11.1% (4 cases) increment 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.

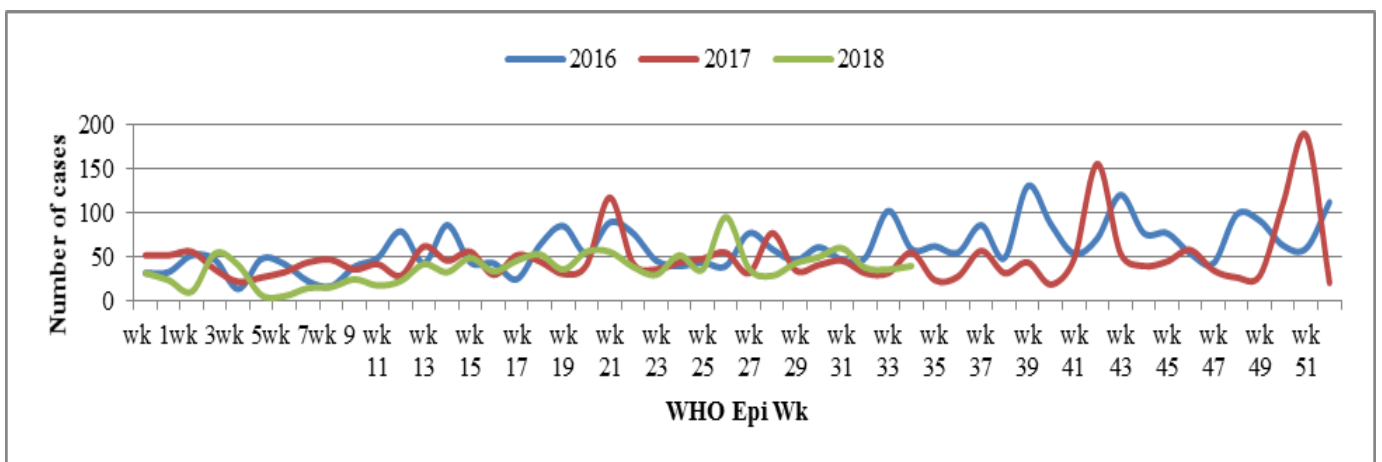


Figure 8: Relapsing fever cases trend by week, 2016-2018, Ethiopia.



Addis Ababa City Administration and Afar region reported highest number of cases (17 cases) followed by Oromia Region (4 cases) and Amahara and SNNP region (1 case) during the week.

6. Epidemic Typhus

A total of 9,582 cases of epidemic typhus without death were reported during the week, which was 7.5% (777 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.

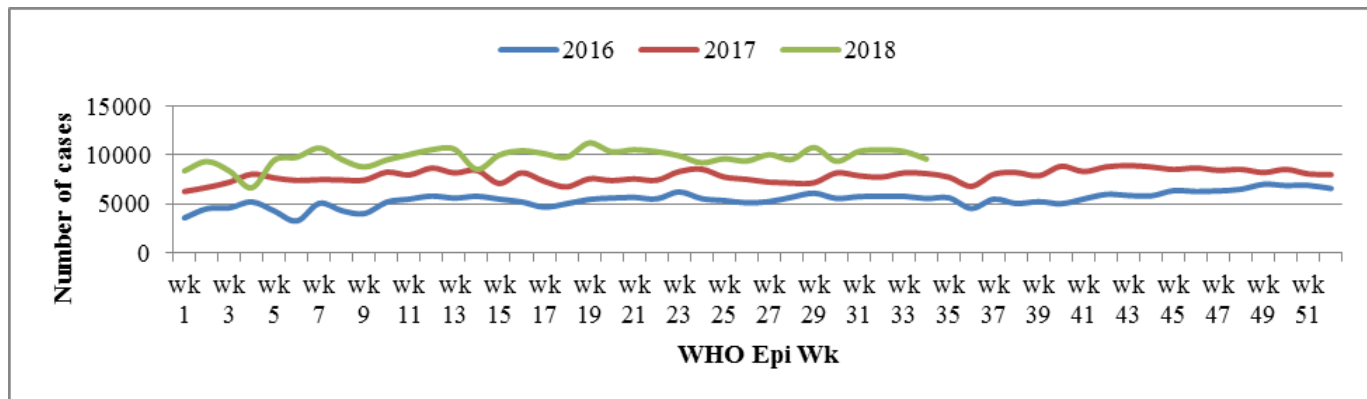


Figure 9: Epidemic typhus cases trend by week, 2016-2018, Ethiopia.

Addis Ababa City Administration reported highest number of cases (2,968 cases) followed by SNNP region (2,517 cases) and Oromia Region (1,933 cases).

7. Severe Acute Malnutrition

During the week, a total of 3,381 cases with nine deaths were reported which showed 6.9% (251 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 year.

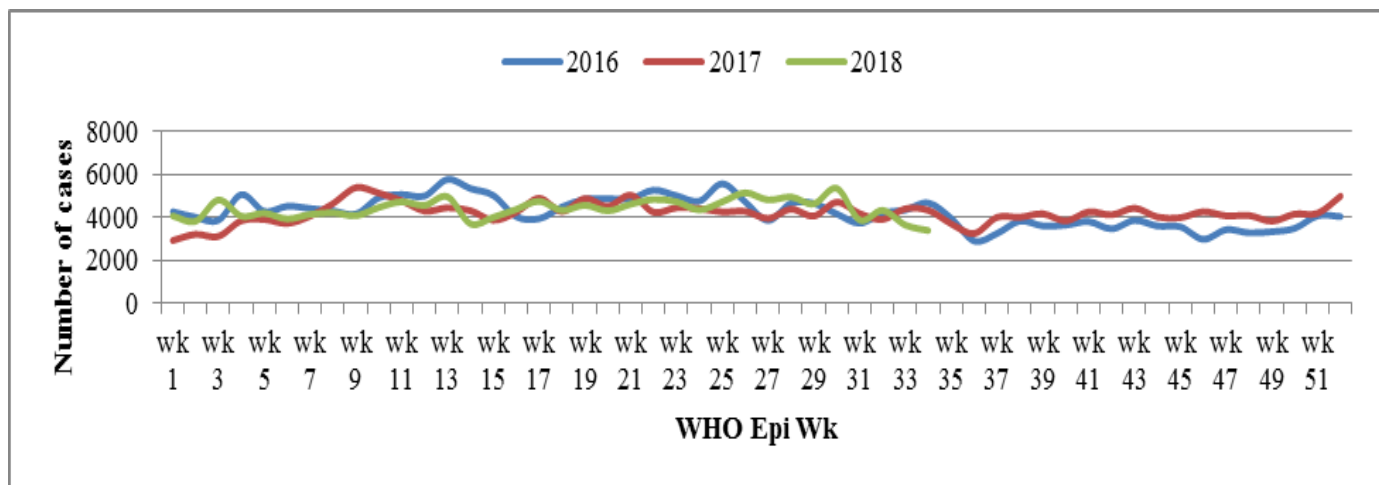


Figure 10: Severe acute malnutrition cases trend by week, 2016-2018, Ethiopia.

About 430 (12.7%) of the total reported SAM cases were treated in patient during the week nationally. Oromia Region reported highest number of cases (1,743 cases) followed by SNNP (701 cases) and Amhara (451 cases) during the week.

The top ten severe acute malnutrition leading woredas during the last one month (week 31-34) were from Oromia, Afar and SNNP.

Table 3: Top ten severe acute malnutrition cases reporting sites, week 31-34, 2018, Ethiopia.

Region	Zone	Reporting sites	Wk 31	Wk 32	Wk 33	Wk 34	Grand Total
Afar	Zone 02	Dalol	102	0	36	55	193
Oromia	East Hararge	Fedis	-	81	70	40	191
Oromia	East Hararge	Gursum	24	65	63	66	218
Somali		FAAFAN	24	24	24	24	96
Oromia	West Hararge	Habro	77	47	24	16	164
Oromia	East Hararge	Haromaya Rural	-	114	41	18	173
SNNPR	Gedeo	Kochore	52	21	115	29	217
Oromia	West Hararge	Oda Bultum	83	50	63	39	235
Oromia	West Arsi	Shala	58	43	44	34	179
Oromia	West Arsi	Shashemene Rural	42	42	45	30	159
Oromia	West Arsi	Siraro	54	61	82	67	264
		Grand Total	492	524	583	394	1993

8. Scabies

During the week a total of 4,905 cases were reported which is 30.7 % (1,504 cases) higher than the last week. SNNPR (1,964 cases) reported highest number of cases followed by Oromia Region (1,643 cases) and Amhara region (860 cases).

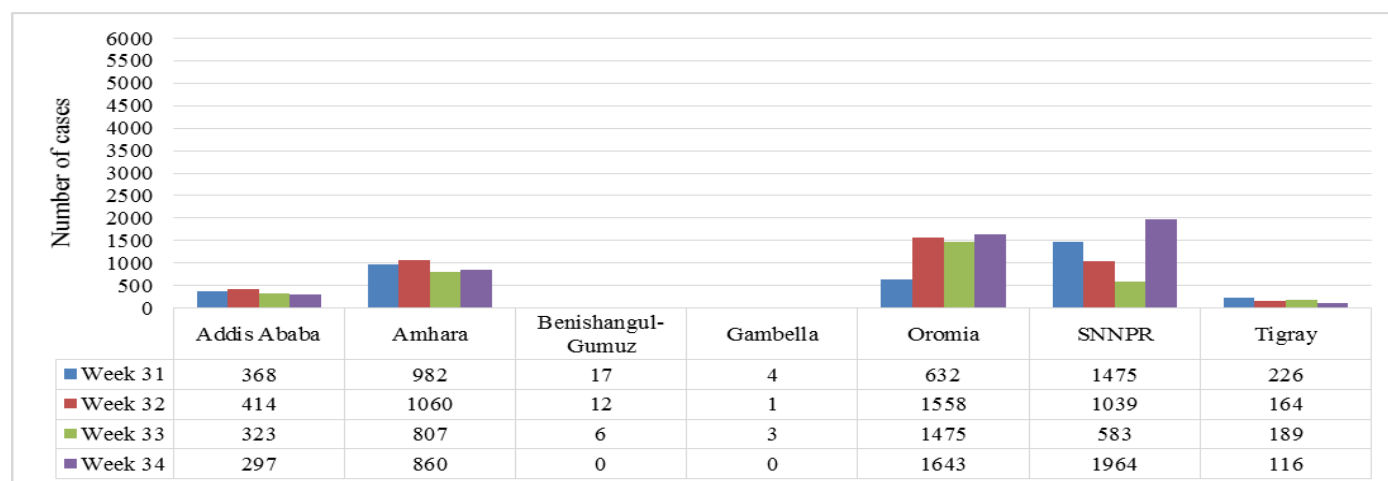


Figure 11: Scabies cases distribution and trend by Region, week 31-34, 2018, Ethiopia.



9. Acute Flaccid Paralysis (AFP)

During the week a total of 8 suspected AFP cases were reported which showed 33.3 % (4 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 34, 2018, Ethiopia.

Region	Zone	Reporting sites	Suspected Cases	Death
SNNPR	Gurage	Abeshege	1	0
SNNPR	Segen	Ali	1	0
Oromia	West Shewa	Ambo Hospital	1	0
Benishangul-Gumuz	Assosa	Assosa Rural	1	0
Oromia	West Wellega	Ayira Hospital	1	0
Amhara	Awi	Dangla Zuria	1	0
Oromia	East Wellega	Leqa Dulecha	1	0
Amhara	South Gonder	Libokemkem	1	0
Grand Total			8	0

10. Suspected Anthrax

A total of 6 suspected anthrax cases with no death was reported from Amhara and Tigray Regions during the week which was 20% (1 case) higher than the number of cases reported during the last week.

Table 5: Distribution of suspected anthrax cases and deaths by woredas, week 34, 2018, Ethiopia.

Region	Zone	Reporting sites	Cases	Death
Amhara	East Gojjam	Motta Hospital	1	0
Amhara	South Wollo	Sayinit	2	0
Amhara	Wag Himra	Sehale Seyemt	1	0
Tigray	North Western Tigray	Shiraro Town	1	0
Amhara	Wag Himra	Zikwala	1	0
Grand Total			6	0

11. Suspected Measles

During the week, a total of 25 suspected measles cases with no death were reported and as compared to last week there was 54.5% (30 suspected cases) decrement. Measles suspected outbreak threshold was surpassed in seven woredas based on the national outbreak threshold criteria (woreda that reported greater than five suspected cases over the last four weeks, 31-34 weeks).

Table 6: Woredas in which suspected measles outbreak threshold is surpassed as of week 34, 2018, Ethiopia.

Region	Zone	Reporting sites	Suspected cases				Grand total
			wk 31	wk 32	wk 33	wk 34	
Oromia	West Guji	Abaya	3	2	3	3	11
Amhara	Oromiya	Artuma Fursi	2	0	14	0	16
SNNPR	Sidama	Chire HSP	0	5	0	0	5
Gambella	Agnuwak	Dima	0	5	1	0	6
Amhara	Gonder Town	Gonder Town	2	3	0	1	6
Tigray	North Western Tigray	Tselemt	35	16	14	10	75
Oromia	Woliso town	Woliso Town	2	4	1	0	7
Grand Total			44	35	33	14	126

12. Rabies Exposure

A total of 74 exposure cases without death were reported during the week which has 28.8 % (30 cases) decrement compared with the last week exposure cases.

Table 7: Distribution of suspected rabies exposure cases and deaths by reporting sites, week 34 of 2018, Ethiopia.

Region	Zone	Reporting sites	Suspected Exposure Cases	Deaths
Tigray	Eastern Tigray	Adi Girat Town	3	0
Tigray	Central Tigray	Adwa Town	4	0
Tigray	Central Tigray	Ahiferom	9	0
Tigray	Central Tigray	Akisum Town	4	0
Oromia	West Shewa	Gindeberet Hospital	3	0
Amhara	Gonder Town	Gonder Town	1	0
Oromia	East Wellega	Jimma Arjo	1	0
Addis Ababa	Chirkos	Kirkos Woreda11	5	0
Addis Ababa	Kolfe Keraniyo	Kolfe Keraniyo Woreda03	1	0
Addis Ababa	Kolfe Keraniyo	Kolfe Keraniyo Woreda09	1	0
Tigray	South Tigray	Korem Town	5	0
Tigray	North Western Tigray	Laelay Adiabo	4	0
Tigray	South Tigray	Maychew Town	1	0
Amhara	Central Gondar	Mirab Dembia	6	0
Amhara	East Gojjam	Motta Hospital	8	0
Benishangul-Gumuz	Kamashi	Sedel	10	0
Tigray	Central Tigray	Tanqua Abergele	1	0
Tigray	Eastern Tigray	Wekero Town	7	0
Grand Total			74	0



13. Maternal Death

During the week a total of 22 maternal deaths were reported from 19 reporting sites of Oromia (13 deaths), Amhara (6 Deaths) and Addis Ababa City Administration (3 cases) Regions.

Table 8: Distribution of maternal deaths by reporting sites, week 34 of 2018, Ethiopia.

Region	Zone	Reporting site	Death
Oromia	West Shewa	Ambo University Hosp	1
Oromia	Assela Town	Assela Town	2
Amhara	East Gojjam	Debre Markos Hospital	1
Oromia	West Shewa	Dendi	1
Addis Ababa	Chirkos	Gandi Mem Hos[pital	1
Amhara	Wag Himra	Gazgibila	1
Oromia	West Hararge	Gelemso Hospital	2
Oromia	East Hararge	Goro Muti	1
Oromia	North Shewa	Kuyu Hospital	1
Amhara	South Gonder	Lay Gayint	1
Amhara	South Wollo	Legamibo	1
Addis Ababa	Lideta	Lideta Woreda10	1
Oromia	Arsi	Limuna Bilbilo	1
Oromia	Modjo town	Modjo town	1
Amhara	East Gojjam	Motta Hospital	1
Amhara	West Gojjam	Sekela	1
Oromia	Shashamane Town	Shashamane Town	2
Addis Ababa	Gulele	St. Paulos Hospital	1
Oromia	Finfine Zuria	Sululta Town	1
Grand Total			22

14. Influenza Sentinel Surveillance

During week 34, a total of 18 patients complaining of ILI or SARI were reported and throat swab samples were collected and tested in pre designated influenza sentinel sites. Among the collected 18 samples processed five samples were tested positive cases tested for influenza A (H3) during the week.

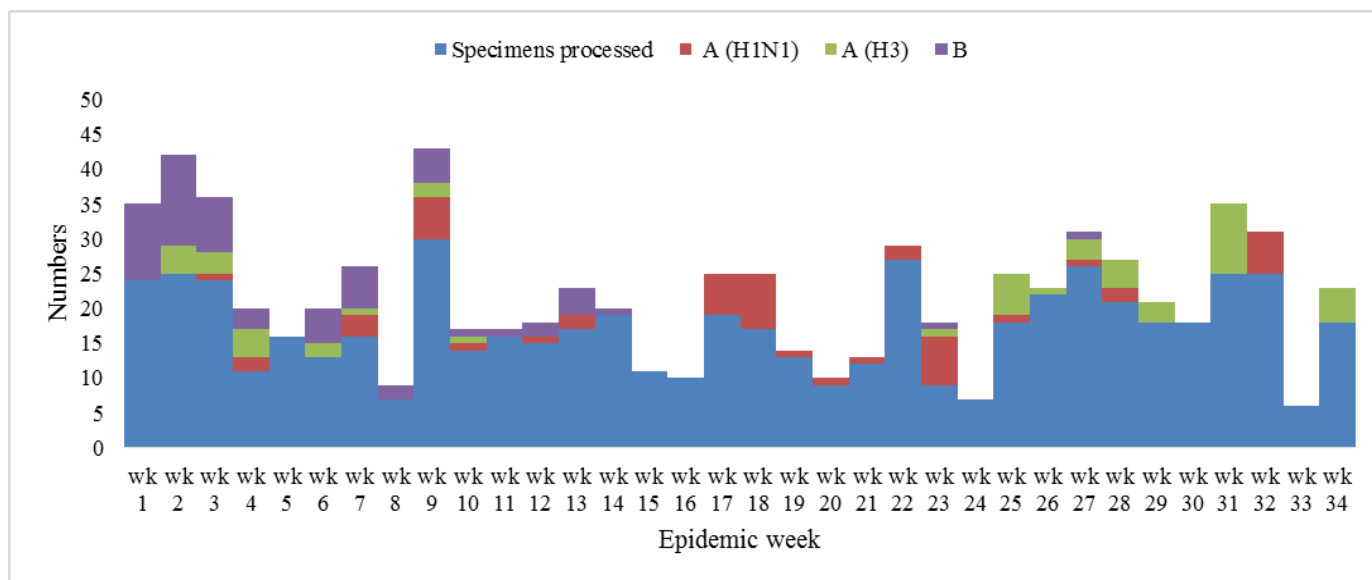


Figure 12: Influenza Sentinel Surveillance Laboratory Result by week 34, 2018, Ethiopia

15. Neonatal Tetanus

During the week a single case of NNT was reported from SNNP region.

16. Other Immediately Notifiable Diseases/Conditions

During the week zero suspected cases of avian human influenza, drancunculiasis, 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. 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 of 2 September 2018, a total of 122 confirmed and probable EVD cases, including 82 deaths, have been reported. Of the 122 cases, 91 are confirmed and 31 are probable. Of the 82 deaths, 51 occurred in confirmed cases.

Source: Ebola Viral Diseases Democratic Republic of Congo External Situation Report 05: can be accessed from <http://www.who.int/ebola/situation-reports/drc-2018/en/>

VI. Other Activities

1. Influenza Protocol Development Workshop

Ethiopian Public Health Institute center for Public Health Emergency Management has organized an Influenza protocol development workshop at Mekele Town on September 3 to September 5, 2018. Participants from the selected sentinel sites attended the work shop and the Influenza protocol was revised.

2. Weekly Epidemiological Feedback

Weekly epidemiological surveillance data feedback 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.

For Further Information:

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,

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 / [pheedatcenter@gmail.com](mailto:phemdatcenter@gmail.com)

Author and Editor in Chief:

Zewdu Assefa (MPH, Field Epidemiologist)

Lead, Public Health Emergency Early Warning and Response Unit

E-mail: zedhiwot05@gmail.com

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

Editor:

Bethel Teshome¹

Contributors:

Dr. Musse Tadesse¹: *Influenza protocol development workshop*

Misgana Bancha¹, Tesfahun Abiye¹ and Shambel Habebe¹: *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)

Affiliations:

¹ Ethiopian Public Health Institute center for Public Health Emergency Management PHE EWaR Team