

Weekly Epidemiological Bulletin

Of the Public Health Emergency Management, Ethiopian Public Health Institute

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HIGHLIGHT OF THE WEEK

This summary narrates the weekly surveillance data for week 39 and data/information gathered through line list and phone calls for week 40, 2016.

- ✚ Completeness and timeliness of reporting was **73.5% and 75.0% respectively**. Report received from all regions.
- ✚ Completeness of reporting was **below the minimum standard (<80%)** in **Somali (24.9%)** and **Oromia (53.9%)** regions.
- ✚ Acute watery diarrhea (AWD) outbreak is ongoing in ten regions: **Addis Ababa, Oromia, SNNP, Amhara, Afar, Ethio-Somali, Harari, Dire Dawa, Benishangul-Gumuz** and **Tigray** regions. A total of **456 cases** with zero death reported during the week. Nationally, the case load decreased this week.
- ✚ Since the beginning of the AWD outbreak in November 2015, a total of **20,816 cases** with **74 deaths (CFR=0.4%)** reported
- ✚ Malaria decreased by 6% (2473) compared to last week.
- ✚ **Continued daily follow-up** of disease outbreaks and other activities through national PHEM officers.
- ✚ **Interventions** to tackle AWD outbreak is underway in all affected areas: Surveillance, Case management, health education.

ADDITIONAL ACTIVITIES – Achievements of the week

- ✚ Bulletin for week 38 of 2016 was shared to responsible bodies.
- ✚ Weekly feedback based on the weekly surveillance data was given to all regions.
- ✚ Daily meeting and disease outbreaks situations shared among all PHEM officers.
- ✚ MDSR training given in Afar region from October 3-4/2016
- ✚ Weekly case team meeting conducted and weekly performance reviewed.

1. Introduction

Epidemiological bulletin of public health emergency management is prepared and shared on weekly basis.

This bulletin is produced based on the weekly surveillance data for week 39 of 2016 and the information gathered through outbreak line list and phone calls for week 40 of 2016.

The main objective of this bulletin is to provide information on current disease outbreaks and other public health emergencies and interventions that are undergoing.

The figures of disease specific cases and deaths indicated in this bulletin are subject to change due to collection of late surveillance data and retrospective verifications.

2. Completeness and timeliness

2.1. Completeness of reporting

The national reporting completeness rate was 73.5%. All regions except, Oromia and Somali, met the minimum completeness requirement for the week. Among the nine regional states and two city administrations, six (54.5%) of them achieved more than 90% surveillance completeness rate (Figure 1).

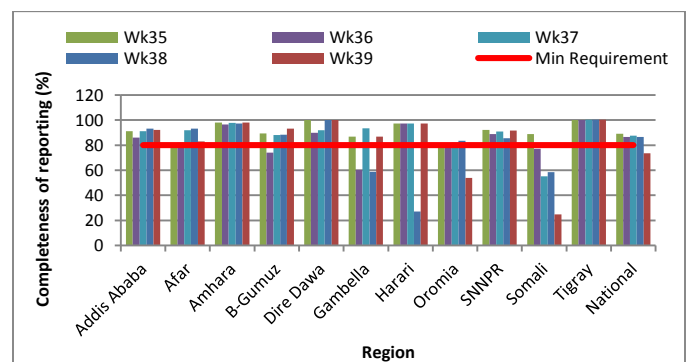


Figure 1: Regional Surveillance Report Completeness, Week 35-39/2016

2.2. Timeliness of reporting

The national surveillance timeliness rate was 75.0%, which is above the minimum requirement. All regions except Somali and Oromia regions, achieved more than 80% surveillance report timeliness (Figure 2).

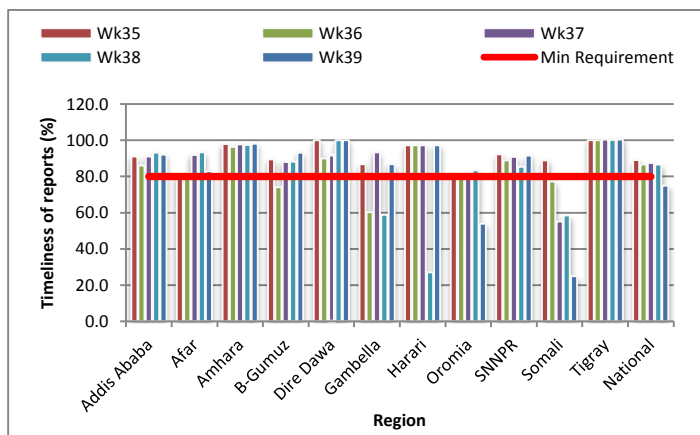


Figure 2: Regional Surveillance Report timeliness, Week 35-39/2016

	Haromaya	3	5.3
	Chinaksen	15	26.3
	Gursum	3	5.3
Arsi	Merti	2	3.5
	Munesa	2	3.5
E/Shoa	Fentale	5	8.8
	ATJK	4	7.0
W/Arsi	Shashemene Zuria	2	3.5
	Wondo	2	3.5
W/Hararghe	Doba	2	3.5
Total		57	100.0

Amhara Region: Since June 14/2016, the beginning of outbreak in North Shoa zone, Amhara region reported a total of 3,565 cases with 17 deaths (CFR=0.8%). The outbreak affected 89 woredas. Currently the case is being reported from 7 woreda. In week 40, a total of 99 cases with zero death were reported. Most, 76 % (40 cases) were reported from West Armachiho and Enarje woredas (table 2)

Table 2: AWD case by woreda of Amhara region, week 40/2016

Zone	Woreda	Wk 40	Percent
Bahir Dar Town	Bahir Dar town	6	10
North Gondar	W/Armachiho	40	40
	Wogera	8	8
	Metema	5	5
	Misrak Belesa	3	3
	Tegede	1	1
	Enarje	36	36
Total		99	100

Tigray: From the beginning of the outbreak on 8/2/2016 a total of 2,621 cases with 42 deaths (CFR=1.6%) were reported. As of week 40 a total of 53 cases with no death were reported. The outbreak affected 7 woredas of four zones. See table 3 below:

Table 3: AWD case by woredas of Tigray region, week 40/2016

Zone	Woreda	Wk 40	Percent
Central Tigray	Mereb Leha	5	9.4
South & North mekelle	Mekele	14	26.4
North Western Tigray	Asegede Tsimbila	4	7.5
	Tahitay Adiyabo	5	9.4
Western Tigray	Qafta Humera	6	11.3
	Tsegede	13	24.5
	Welqayet	6	11.3
Total		53	100.0

Addis Ababa: Since June 25, 2016, Addis Ababa regional health bureau reported 8,001 cases. As of week 40, a total of 53 AWD cases were reported.

3. Diseases and conditions

3.1. Acute watery diarrhea (AWD)

The AWD outbreak is still ongoing in ten regions; Addis Ababa, Oromia, SNNP, Afar, Harari, Amhara, Tigray, Dire Dawa, Benishangul-Gumuz and Ethio-Somali. During week 40, 53 woredas and 10 sub cities were reported suspected AWD cases in nine regions (Oromia, SNNP, Somali, SNNP, Tigray, Afar, Harari, Dire Dawa, Benishangul-Gumuz and Addis Ababa). In week 40, a total of 456 suspected and confirmed AWD cases were reported during the week. Since the beginning of the outbreak in November 2015, a total of 20,367 cases with 74 deaths (CFR: 0.4 %) were reported.

Oromia: On week 40 a total of 57 cases with no death from 18 woredas were reported (Figure: 3-7). So far, the region reported a total of 4011 cases with 45 deaths (CFR=1.127%). The case load has decreased during week 40.

During the week, most (15 cases) were reported from Chinaksen woreda of East Harerge zone (See table 1).

Table 1: AWD cases by woreda, Oromia Region, Wk40/2016

Zone	Woreda	Wk 40	Percent
E/Hararghe	Babile	3	5.3
	Girawa	1	1.8
	Fadis	3	5.3
	Gola Oda	1	1.8
	Kumbi	1	1.8
	Jarso	2	3.5
	Goro Gutu	1	1.8
	Awaday	5	8.8

As the figure depicted below, the case load has decreased during the week (Figure 6).

Wenago Dilla Halaba 52 Kebele distributed treatment lotion

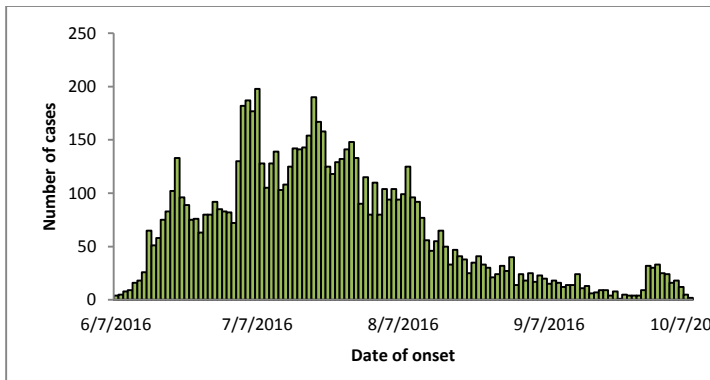


Figure 3: AWD case trend by Date of onset, Addis Ababa 2016(N=8001)

All of the 10 sub cities reported cases. Majority of the cases were reported from Akaki Kality sub city (Table 4).

Table 4: AWD cases by sub city, Addis Ababa, week40, 2016

Sub city	Wk 40	Population	AR/10,000 pop
Akaki Kality	41	224370	1.83
Bole	5	398192	0.13
Kolfe Keraniyo	2	524200	0.04
Addis Ketema	1	312005	0.03
Arada	1	232128	0.04
Gulele	1	322375	0.03
Nefas Silk	1	423784	0.02
Yeka	1	433672	0.02
Total	53	3376175	0.16

Ethio-Somali region: Since 7/18/2016, a total of 608 cases with one death were reported. The outbreak affected two zones and 9 woredas. On week 40, 136 cases were reported most 71% were reported from Jijjiga and Shinile woreda. See table 5.

Table 5: AWD cases by woreda, Addis Ababa, week40, 2016

Zone	Woreda	Wk 40	Percent
Faffan	Jijjiga	62	45.59
	Jijjiga zuriya	3	2.21
Sitti	Shinile	35	25.74
	Afdem	6	4.41
Faafan	Babilie	15	11.03
	Tuliguled	8	5.88
	Awbare	2	1.47
Afder	East emey	4	2.94
	West emey	1	0.74
Total		136	100

Afar region: The region started reporting on July 15/2016 and a total of 644 cases with 12 deaths (CFR=1.9%) were reported. The outbreak affected nine woredas of four zones: zone 03, 02, 01 and 05 (Amibara, Awash Fentale, Gelealo, Gewane, Chfira, Dalol, Dubti, Gewane, Mille, Berahle, Abaala and Samurobi woredas).

On week 40, A total of 93 cases were reported from 10 woredas of three zone. See table 6

Table 6: AWD cases by sub city, Addis Ababa, week39, 2016

Zones	Woredas	Wk40 cases	Percent
Zone 1	Dubti	7	7.5
	Mille	0	0.0
	Tendaho S.P	37	39.8
Zone 2	Dalol	10	10.8
	Berhale	1	1.1
	Abaala	10	10.8
	Megale	2	2.2
	Erebt	12	12.9
Zone 3	Amibara	9	9.7
	Gewane	5	5.4
Total		93	100.0

SNNPR: Since the beginning of the outbreak on 6/13/2016, a total of 803 cases with six deaths (CFR=0.7%) were reported. The outbreak affected 11 woredas of 5 zones and one town administration. On week 40, a total of 11 cases with zero deaths were reported from four woredas; Wendogenet(6cases), Dilla town (2 cases), Meskan woreda(2 cases) and Siltie(one case).

Harari region: Since July 8, 2016, 264 cases with no death were reported. On week 40, a total of 17 cases were reported from three woredas (Sofi, Hakim and Dire teyara woredas) of harari region;.

Dire Dawa region: From the beginning of the outbreak in 8/2/2016, a total of 33 cases with zero death were reported. As of week 40, one new cases were reported.

Benishangul Gumuz region: In week 40, a total of 17 suspected AWD cases with zero death were reported from Wombera woreda of Metekel Zone. Among the total cases one were confirmed positive for Cholera O1.

3.2. Malaria

A total of 35,625 malaria cases (clinical and confirmed) were reported in week 39. Case load decreased by 6% in this week (from 38,098 in week 38 to 35,625 during week 39). The trend has decreased comparing with similar week of 2014 and 2015 (Figure 8)

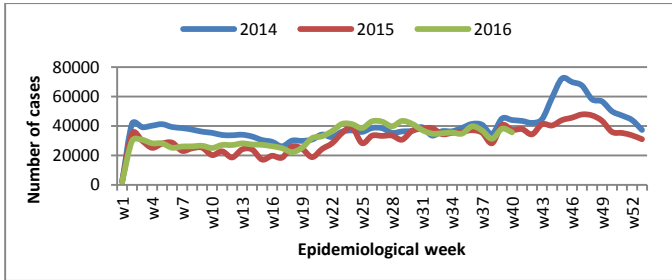


Figure 4: National Malaria cases trend, 2014-2016

Regional Malaria Trend: Amhara region contributed highest 12,689 (36%) number of cases followed by Tigray 7,555 (21%) and SNNP 4,584(13%) regions. Compared with week 38, malaria cases are slightly increased in SNNP and Benishangul regions (Figure 5).

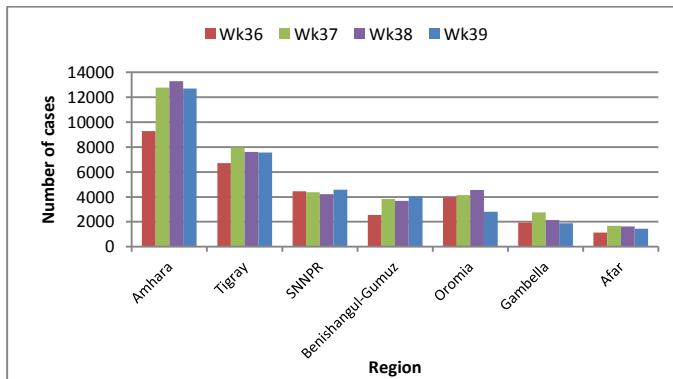


Figure 5: Regional Malaria trend, Week 36-39/2016

In week 39, a total of 127,542 cases suspected for malaria tested either by microscopy or RDT. Of which; 35,625(28%) are ended positive for malaria parasites. PF contributed 25,861 (72.6%) whereas 9,800 (27.9%) were PV. The rest 36 (0.1%) were clinically diagnosed. There were only 174 (0.5%) inpatient cases with three deaths reported in the week (Table 7).

Table 7: Malaria cases by type and region, Week 39, 2016

Region	Tested	Malaria	PF	PV	Cli.	Inp	Deaths	MPR
Amhara	42828	12689	9305	3381	3	27	0	30
Tigray	22358	7555	5127	2443	-15	18	2	34
SNNPR	29201	4584	2695	1841	48	41	1	16
Benishangul-Gumuz	10231	4040	3348	559	133	31	0	38
Oromia	14620	2810	1806	890	114	6	0	18
Gambella	3147	1888	1983	347	442	51	0	74
Afar	3576	1448	1240	208	0	0	0	40
Harari	511	274	234	18	22	0	0	49
Somali	145	193	75	17	101	0	0	63
Addis Ababa	429	125	39	86	0	0	0	29
Dire Dawa	496	19	9	10	0	0	0	4
Grand Total	127542	35625	25861	9800	36	174	3	
Percnet		27.9	72.6	27.5	0.1	0.5	0.0	

Note: Tested-Suspected malaria fever cases examined by microscopy or RDT, PF-Plasmodium falciparum, PV-Plasmodium vivax, Cli-Clinical Malaria, In-patient malaria cases, MPR, Malaria positivity rate

Zonal Malaria Trend: Malaria cases have increased in 12 zones. The top 15 zones which reported highest number of cases during the week (Figure 6 and 7).

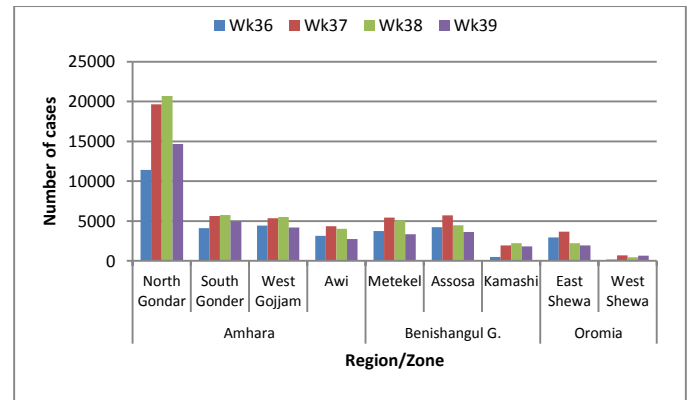


Figure 6: Zonal malaria case trend Amhara, Benishangul-Gumuz and Tigray regions, Week 39/2016

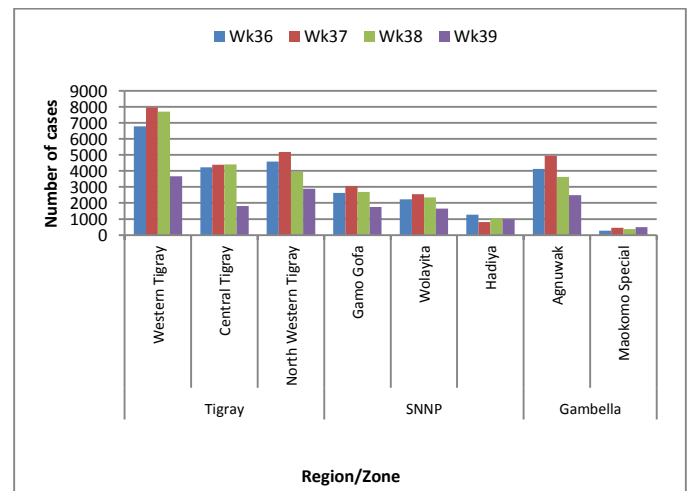


Figure 7; Zonal malaria case trend, Tigray, SNNP and Gambella Week 39/2016

Woreda Malaria Trend: Up on disaggregating the data to the woreda level, Slight increment of cases has been shown in 38 woredas, of which the top 15 woredas which shows increment of cases compared with week 39 (Figure 8 & 9).

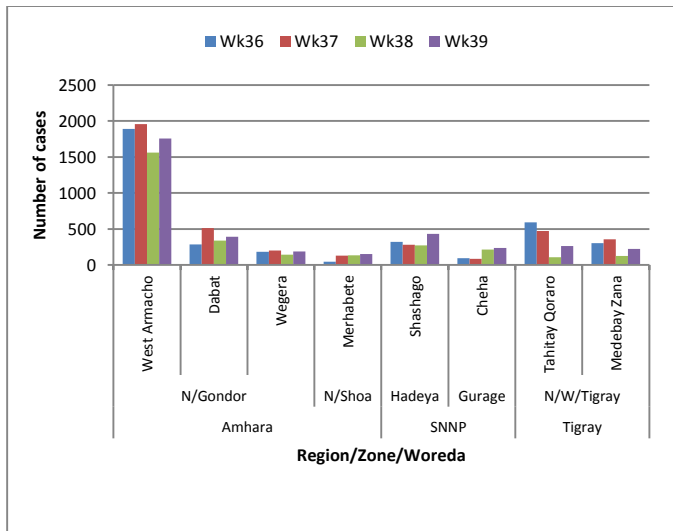


Figure 8: woredas in which malaria cases are increased compared with previous week, Tigray and SNNP regions, Week 36-39/2016

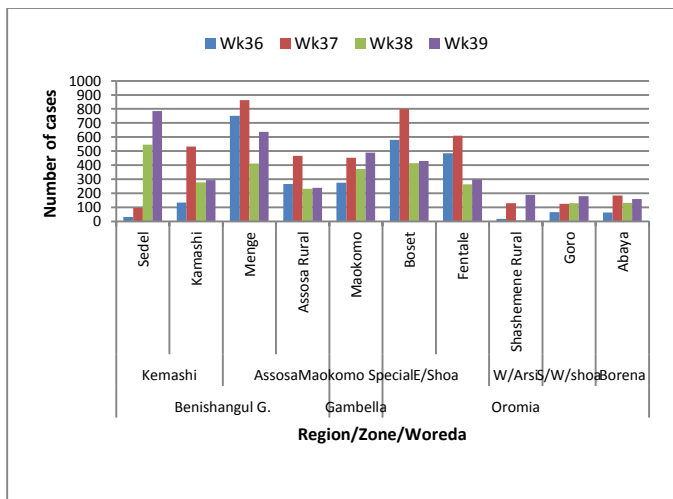


Figure 9: woredas in which malaria cases are increased compared with previous week, Oromia, Benishangul-Gumuz and Gambella regions, Week 36-39/2016

3.3. Severe Acute Malnutrition (SAM)

In week 39, a total of 3,526 new SAM cases were reported. Compared to week 38 of 2016 SAM cases have decreased by 8% (297 cases).

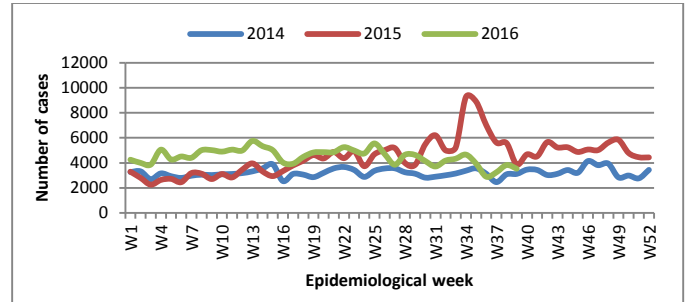


Figure 10: National SAM cases trend 2014-week39/2016

3.4. Rabies:

Nationally, a total of 68 rabies exposure cases with one death reported in week 39 of 2016. All cases were reported from three regions: Tigray (33), Amhara (32) and Oromia (4).

3.5. Meningitis

A total of 22 suspected meningitis cases with zero death were reported. Of these, 73% (16 cases) were reported from SNNPR followed by Afar (3cases), Addis Ababa (2cases) and Oromia (1 case). Up on disaggregating the cases to woreda level, they were reported from different woredas and crossed the threshold in SNNP region Sodo Hospital the other woredas does not pass the threshold all reported woredas.

3.6. Measles

A total of 20 cases were reported from Oromia (9 cases), Addis Ababa (6 cases), Amhara (2 cases), Tigray(1 case) and SNNP (2 case) regions. The cases not crossed the threshold in the reported woredas.

3.7. Maternal Death

A total of 11 maternal deaths were reported from Amhara (2 cases), Oromia(7 cases), Benishangul (1 case) and Gambella(1 case) regions. The other regions reported zero maternal death during the week.

3.8. Relapsing Fever

During the week 130 relapsing fever cases were reported from six regions. Of which most 44 %(57 cases) were reported from Addis Ababa. Up on disaggregating the data to the woreda level 63% were reported from Arada sub city (see table 8)

Table 8: AWD cases by woreda, Addis Ababa, week40, 2016

Region	Zone	Woreda	Wk 36	Wk 37	Wk 38	Wk 39	Wk 39%
Addis Ababa	Addis Ketema	Addis Ketema	9	6	7	12	9
	Arada	Arada	0	38	2	28	22
		Ras Desta Damitew Hosp.	1	0	0	6	5
		Yekatit 12 Hospital	1	2	0	2	2
		Zeweditu Hosp.	1	0	0	4	3
	Chirkos	Kolfe Keraniyo	2	2	2	1	1
Lideta	Lideta	1	3	3	4	3	
Amhara	East Gojjam	Baso Liben	0	0	0	1	1
	North Wollo	Meket	0	0	0	6	5
	South Gonder	Libokemkem	0	0	0	3	2
Benishangul Gumuz	Assosa	Assosa T.	13	0	0	28	22
		police commission		0	0	2	2
Oromia	Arsi	Hitosa	0	0	0	8	6
	Assela Town	Assela T.	5		2	4	3
	Bishoftu T.	Bishoftu T.	0	0	0	1	1
	East Wellega	Gida Ayana	0	0	0	8	6
SNNP	Hawassa T.	Hawassa Sub-City	1	2	1	1	1
	South Omo	Bena Tsemay	0	0	0	7	5
	Wolayita	Dubo Hosp.	0	0	0	1	1
Tigray	Mekele Esp. Zone	South & North Mekele	2	0	2	3	2
Total			36	53	19	130	100

3.9. Guinea Worm (GW)

No New Guinea worm case reported during the week.

3.10. Influenza

In week 39 of 2016, a total of eight samples were collected from patients with influenza Like Illness (ILI) and Severe Acute Respiratory infection(SARI) at pre designated influenza sentinel sites. Among them two were tested positive for influenza B. Starting from week 29 of 2016 the positivity rate of seasonal influenza A/H3 is relatively increasing (see figure 11).

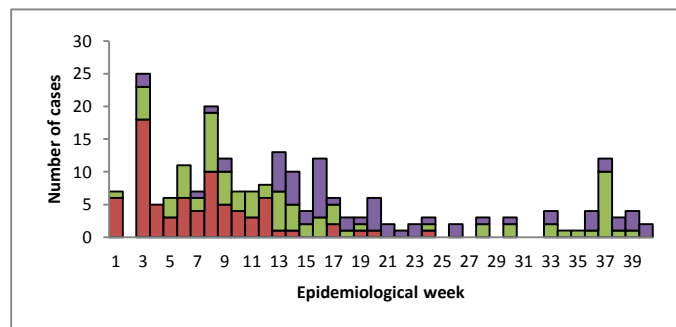


Figure 11: Influenza cases by sub type, sentinel surveillance, week 40/2016

4. Response to AWD in all affected areas

- Team deployed to Somali and Afar regions for investigation and to institute prevention and control measures.
- Case management in the established CTC sites.
- Infection prevention, health education and social mobilization activities, distribution of water treatment chemicals at household level, treatment of water at the source and detail case investigation is undertaking in all AWD affected woredas.

5. Additional Activities

Some of the key activities accomplished over the week:

- Bulletin for week 38 of 2016 was shared to responsible bodies.
- MDSR training given in Afar region from October 3-4/2016
- Weekly feedback based on the weekly surveillance data was given to all regions.
- Daily meeting and disease outbreaks situations shared among all PHEM officers.
- Weekly case team meeting conducted and weekly performance reviewed.

6. Acknowledgment

We acknowledge the following:

- All regional health bureaus – for sharing us their respective regional weekly surveillance data.
- Data managers of EPHI – for compiling all regional surveillance data.
- All national PHEM officers – for their daily follow-up and sharing updates.