



EPIDEMIOLOGICAL BULLETIN: Weekly/Volume 2/Number 07/ Page 1-8 /15-22 Feb 2016
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Highlights of the Week:

- ✦ The national Surveillance report completeness and timeliness rates in week 07 are 87.1% and 86.9% respectively;
- ✦ The new SAM cases reported in week 07 of 2016 are high comparing with similar week of 2014 and 2015;
- ✦ The number of malaria cases were increasing in 20 woredas while it is decreasing in majority of malaria hotspot woredas;
- ✦ Measles crosses the normal threshold (five suspected cases per month) in 45 woredas;
- ✦ Suspected Dengue Fever cases have been reported in Dollo woreda of Somali region;
- ✦ AWD outbreak is still ongoing in Moyale of Oromia and Somali regions;
- ✦ Influenza Like Illnesses have been reported in Addis Ababa, Oromia and Amhara regions

than 80%. Harari, Dire Dawa, Addis Ababa, Amhara, Tigray and Benishangul regions achieved more than 90% surveillance completeness. SNNP region reported less than 80% while Gambella region did not report for the week. In general nationally the surveillance is in the position of detecting any outbreak.

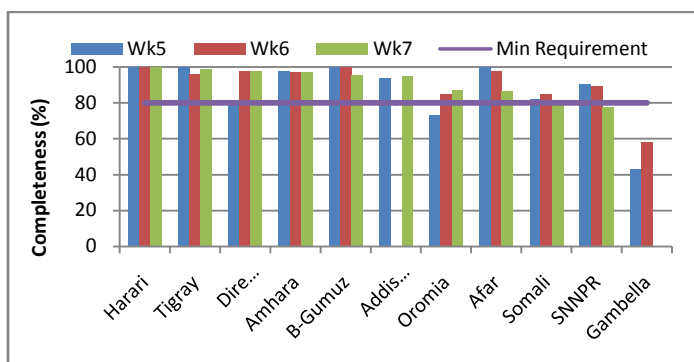


Figure 1: Regional Surveillance Report Completeness, Week 05-07/2016

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 07 of 2016 and daily phone communication, line list reports of outbreaks for week 08 of 2016. 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 number of disease specific cases indicated in this issue of bulletin are subject to change due to on-going receiving late surveillance data and retrospective verification and investigation of data from outbreak areas.

Timeliness: In week 07, the national surveillance timeliness rate is 86.1 % which is above WHO minimum requirement. From the total 11 regional states and city administrations 8 of them achieved more than 80% surveillance report timeliness. SANNP region reported under minimum requirement. Dire Dawa and Gambella did not report on time (Figure 2).

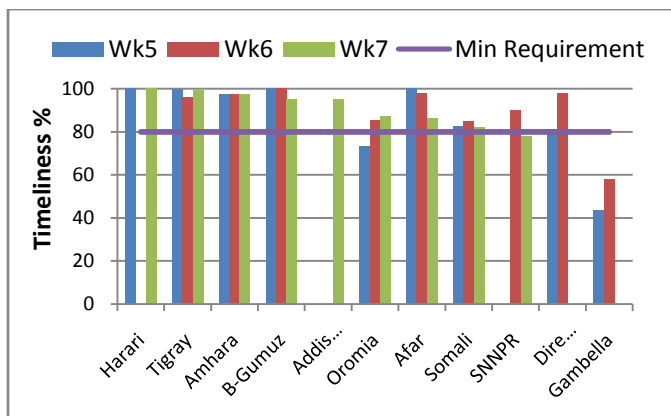


Figure 2: Regional Surveillance Report timeliness, Week 05-07/2016

II. Surveillance report completeness and timeliness

Completeness: In week 07, the national surveillance completeness rate is 87.1% which is above WHO minimum requirement. Comparing with previous week, the national completeness rate decreased. Of the 11 regional states and city administrations, 9 of them achieved more

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III. Diseases and conditions

1) Severe Acute Malnutrition (SAM)

National SAM Trend: In week 07, a total of 4,379 new SAM cases with two deaths reported to national level through weekly routine surveillance from all regions. Among the new cases 4,002 are outpatient and the rest 409 are inpatient cases. Relatively compared to week 05 of 2016 the new SAM cases in week 07 have increased by 3% (from 4,505 to 4,379). The new SAM cases are increased by 47% in week 07 of 2016 compared with the same week of 2014 (from 2,971 to 4,379) and by 38% compared with same week of 2015 (from 3,180 to 4,379) (Figure 3).

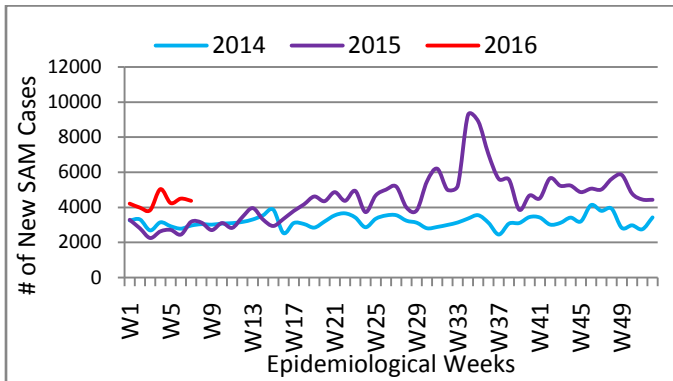


Figure 3: National SAM cases trend,2014-2016

Regional SAM Trend: Among the 4,379 new SAM cases reported in the week, 1731 (40%) are reported from Oromia regional state, followed by SNNP and Amhara regions, 765 (17%) and 629 (14%) respectively. Comparing with week 05 of 2016 the new SAM cases have been increased in Oromia and Somali regions while it is decreased in all other regions (Fig 4).

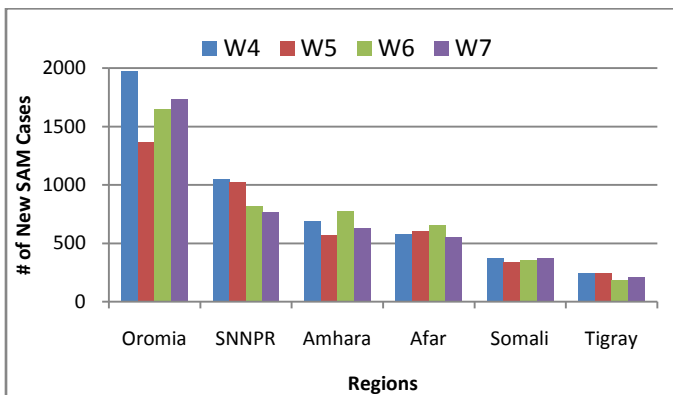


Figure 4: SAM trend by region by week 04-07/2016

Among the total new SAM cases reported in the week, 377 (8.9%) are new inpatient cases. Relatively the new inpatient SAM cases are high in Oromia followed by SNNP region (Table 1).

Table 1: New OTP and SC SAM cases and deaths in week 07, 2016

Region	Total SAM	OTP	Inpatient	Death
Oromia	1731	1562	169	0
SNNPR	765	657	108	2
Amhara	629	599	30	0
Afar	556	533	23	0
Somali	374	358	16	0
Tigray	210	192	18	0
Addis Ababa	37	35	2	0
Dire Dawa	37	27	10	0
Harari	23	23	0	0
Benishangul-Gumuz	17	16	1	0
Grand Total	4379	4002	377	2
Percent	100	91.4	8.6	0.5

Zonal SAM Trend: In week 07, East Hararge, West Hararge, Zone 02, Sidama, South Wollo, Hadiya, Guji, West Arsi and Bale zones reported the highest number of new SAM cases. Totally, top 15 zones contributed 59% of the national cases reported in the week. Comparing with previous week, the number of new SAM cases relatively increased in East Hararge, Sidama, Hadiya, Guji, Bale and Jigjiga zones (Table 2).

Table 2: Top 15 zones reported highest number of new SAM cases in week 07 of 2016

Region	Zone	W4	W5	W6	W7
Oromia	East Hararge	403		343	443
Oromia	West Hararge	276	346	315	276
Afar	Zone 02	85	176	225	220
SNNPR	Sidama	144	184	165	168
Amhara	South Wollo	180	0	185	161
SNNPR	Hadiya	147	217	146	158
Oromia	Guji	171	156	120	150
Oromia	West Arsi	249	198	164	146
Oromia	Bale	218	233	126	140
Oromia	Arsi	191	57	107	139
Afar	Zone 01	175	160	134	127
Amhara	Wag Himra	66	104	118	121
Afar	Zone 03	211	173	203	119
Somali	Jigjiga	63	77	101	116
Amhara	North Wollo	201	109	121	107
Sum Top 15 zones		2780	2190	2573	2591
Sum National		5041	4253	4505	4379
Percent top 15 zones		55	51	57	59



Woreda SAM Trend: In week 07, Bedu woreda of Zone 02, Siraro woreda of West Arsi, Gewane woreda of zone 03, Fadis woreda of East Hararge and Chiro woreda of West Hararge zone reported the highest number of new SAM cases. Top 15 woredas contributed 16% of the national new SAM cases reported in the week (table 3).

Table 3: Top 15 woredas reported highest number of new SAM cases in week 07 of 2016

Region	Zone	Woreda	W4	W5	W6	W7
Afar	Zone 02	Bedu		93	81	79
Oro	W/Arsi	Siraro	69	59		59
Afar	Zone 03	Gewane	37	43	81	50
Oro	E/Hararge	Fedis	32		44	49
Oro	W/Hararge	Chiro Z	36	38	46	49
Afar	Zone 02	Erebt	26	37	43	48
Oro	W/Hararge	Mesela	19	20	20	43
Som	Jijiga	TuliGuleed	10	5	13	43
Afar	Zone 03	B/Modayitu	39	21	20	42
Oro	E/Hararge	Kersa EH	43		13	40
Oro	E/Hararge	Meta	16		16	38
SNNP	Halaba	Halaba T	16	40	34	38
Oro	W/Hararge	Meiso	0	44	26	37
Afar	Zone 01	Asayta	83	14	44	36
Oro	E/Hararge	Chinakesen	30		31	36
Sum Top 15 Woredas			456	414	512	687
Sum National			5041	4253	4505	4379
Percent top 15 Woredas			9	10	11	16

2) Malaria

National Malaria Trend: Totally 24,932 malaria cases (clinical and Confirmed) are reported to the national level in week 07 of 2016. Comparing with last week data, in week 07 the national malaria cases decreased by 4% (25,849 to 24,932). The total malaria cases reported in week 07 of 2016 is decreased by 33% comparing with similar week of 2014 (from 37,505 to 24,932) and increased by 1 % comparing with similar week of 2015 (from 24,809 to 24,932) (Figure 5).

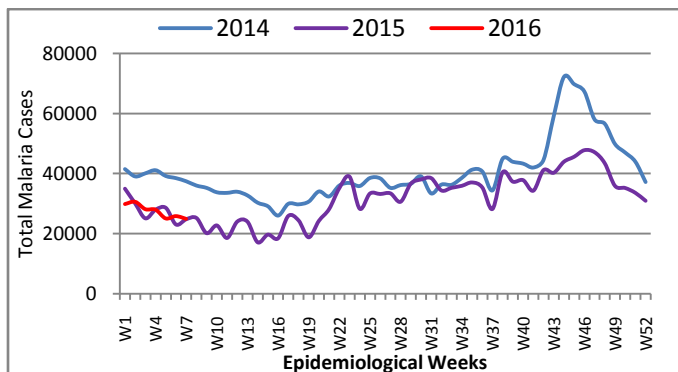


Figure 5: National Malaria cases trend, Week 2014-2016
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Regional Malaria Trend: Amhara region reported the highest number of cases in the week followed by SNNP and oromia regions. Compared with week 05 of 2016, the malaria cases relatively increased in Amhara, Oromia, regions (Figure 6).

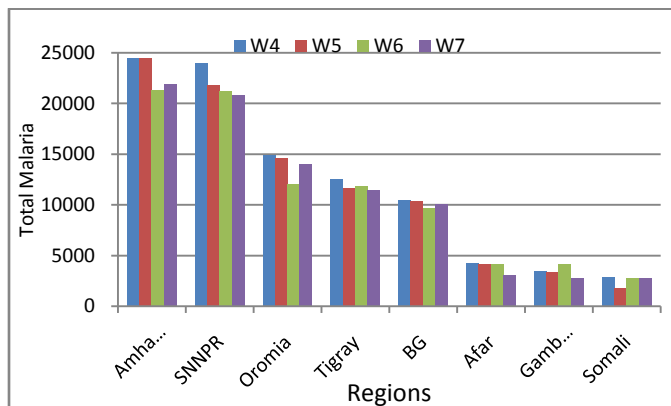


Figure 6: Regional Malaria trend, Week 04-07/2016

In week 07, a total of 119,899 febrile cases suspected for malaria are tested by microscopy or RDT. Of which 24,299 (21%) are ended positive for malaria parasites. PF contributes 15,093 (60%) while 8515 (34%) were PV and the rest 1,324 (5%) are clinically diagnosed malaria cases. There are only 163 (0.7%) inpatient cases with no death reported in the week (Table 4).

Table 4: Regional Malaria cases by type and region, Week 07, 2016

Region	Tested	Malaria	PF	PV	Inp	Death	MPR
AMH	36414	6691	4014	2676	9	0	18
SNNP	29338	5337	3003	2245	65	0	18
Tig	15212	3883	2536	1324	26	0	25
BG	8822	3392	2439	741	30	0	36
Oro	24706	3275	1632	1119	25	0	11
Afar	3917	1363	1143	280	0	0	36
Som	513	832	258	42	8	0	58
AA	616	116	41	75	0	0	19
Har	63	38	22	11	0	0	52
DD	298	5	5	2	0	0	2
Total	119899	24932	15093	8515	163	0	20

Note: Tested-Suspected malaria fever cases examined by microscopy or RDT, PF-Plasmodium falciparum, PV-Plasmodium vivax, Inp-Inpatient malaria cases, MPR, Malaria positivity rate

Zonal Malaria Trend: Up on disaggregating the data to the zonal level, the total malaria cases have been increased

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in North Gonder, Metekel, Awi, West Gojjem, Gamo Gofa, West Tigray, Walayita, South Omo, Gurage, Borana and Illu abba Bora zones comparing with previous weeks (Figure 7.1 & 7.2)

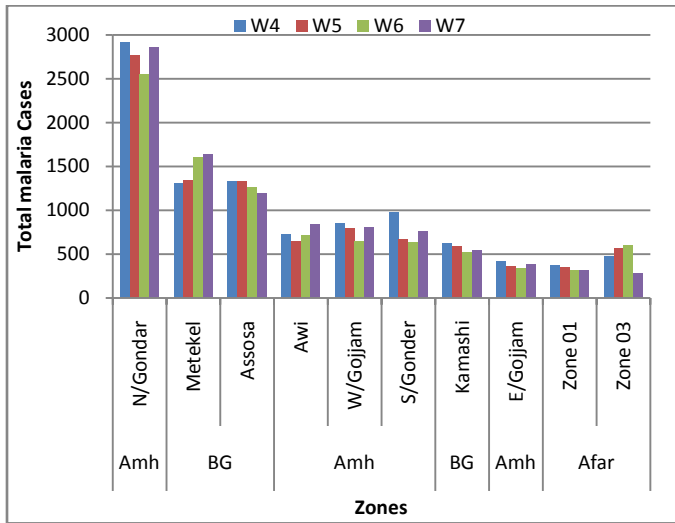


Figure 7.1: Malaria Cases by zones, Week 04-07/2016

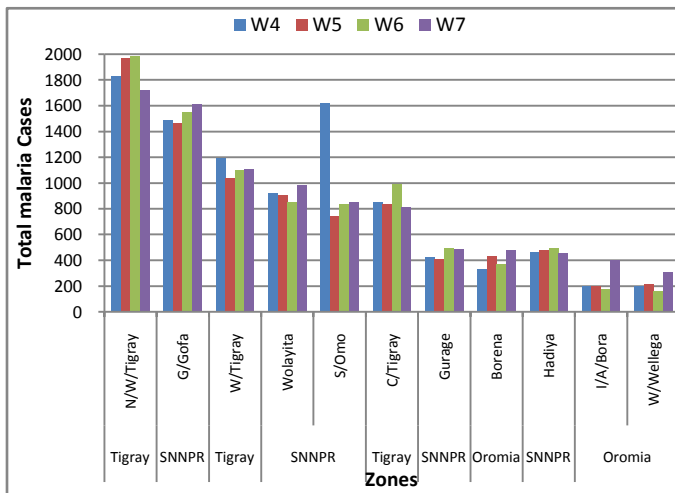


Figure 7.2: Malaria Cases by zone, Week 04-07/2016

Woreda Malaria Trend: Up on disaggregating the data to the woreda level, malaria cases have been increased in the last four weeks (week 04-07) in 20 woredas. Among them malaria cases are seriously increasing for the last four weeks in Jawi woreda of Awi zone, Gendawuha and Chilga woredas of North Gonder zone, Fogera of south Gonder zone, Quarit woreda of West Gojjem, Pawe and Debate woreda of Metekel zone, Abeya woreda of Borena zone, Shebe Senbo woreda of Jimma zone, Arbaminch, Bonke and Kucha woredas of Gamo Gofa zone, Hamar

and Selamago woredas of South Omo zone, Sodo Zuria woreda of walayita zone, Mereb Lehe woreda of central Tigry, Laylay Adiyabo woreda of North West Tigray and Tsegede woreda of West Tigray zone (Figure 8.1 & 8.2).

On the other hand, malaria trend seriously decreasing over the last four weeks in majority of malaria hotspot woredas. Among them, the trend is decreased in Walkayit woreda of West Tigray, Bambis, sherkole and Menge woredas of Assosa zone, Tegede and west Armachew woreda of north Gonder zone, Uba debretsehay woreda of Gamo Gofa zone, Sedel woreda of Kemashi zone and Guba woreda of Metekel zone (Figure 8.3).

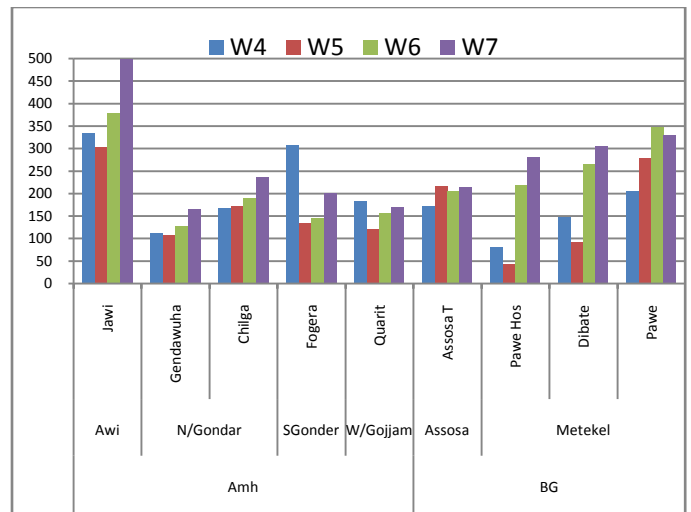


Figure 8.1: Woredas in which malaria cases increasing from week to week, Wk04-07/2016

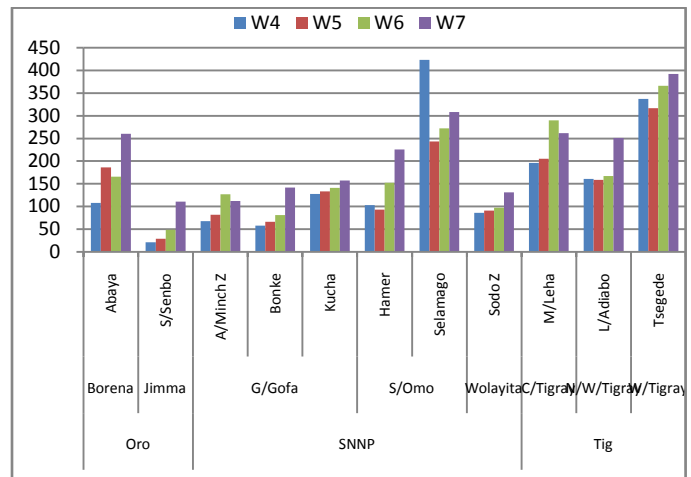


Figure 8.2: Woredas in which malaria cases increasing from week to week, Wk04-07/2016

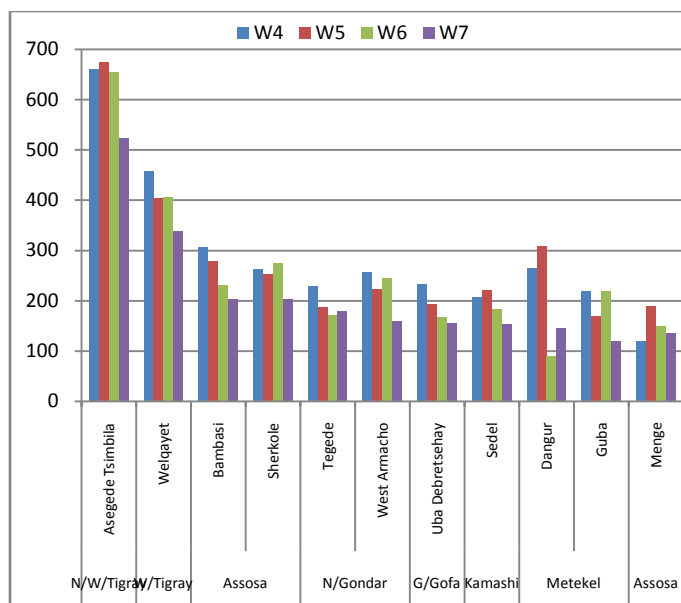


Figure 8.3: Woredas in which decreasing of malaria cases from week to week, Wk04-07/2016

3) Rabies:

Nationally, a total of 111 rabies exposure cases with 2 deaths are reported in week 07 of 2016. Among them 25 (23%) are reported from Tanqua Abergele woreda of Central Tigray, 15 (14%) are reported from Shire Endesilasie town of North West Tigray and 14 (13%) are reported from Gonder town (Table 5).

Table 5: Regional rabies Exposure cases , Week 07, 2016

Region	Zone	Woreda	E.Cases	Deaths
Tigray	C/Tigray	T/Abergele	25	0
Tigray	N/W/Tigray	S/ E/ilase T	15	0
Amhara	Gonder T	Gonder T	14	0
Tigray	C/Tigray	A/Adi T	9	0
Tigray	C/Tigray	Akisum T	9	0
Tigray	Mekele	Mekele	7	0
Tigray	S/East	S/Saharati	7	0
Oromia	W/Hararge	Meiso	4	0
Oromia	Arsi	Merti	3	0
Oromia	Arsi	Munesa	3	0
Oromia	Borena	B/Hora Hos	3	0
Tigray	S/East	D/Tembien	3	0
Tigray	E/Tigray	A/Girat T	2	0
Tigray	E/Tigray	G/Meheda	2	0
Oromia	I/A/Bora	Bedele T	1	1
Oromia	K/Wolega	Laloqile	1	0
Oromia	W/Hararge	H/gudina	1	0
Oromia	W/Wellega	Ayira Hos	1	0
Oromia	W/Wellega	Haru	1	1
Grand Total			111	2

4) Dengue Fever

There is an outbreak of dengue fever in Dollo woreda of Liben zone of Somali region. A total of 56 suspected cases were reported from the woreda. 12 samples collected and 8 of them tested positive for Dengue Fever. The cases is now decreasing.

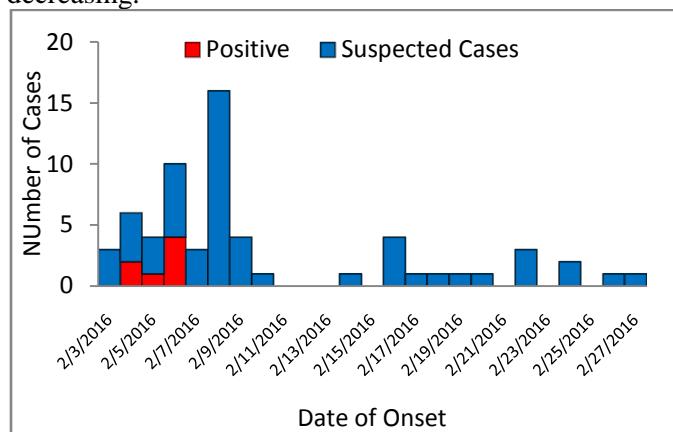


Figure 9: Dengue Fever Cases by date of onset, Dollo woreda, Liben zone, Somali region, 27 Feb 2016

5) Meningitis

In week 07 of 2016, a total of 21 suspected meningitis cases are reported to the national level through weekly routine surveillance . Among them 10 (48%) from SNNP, 5 (24%) cases were from Oromia, 4 (29%) were from Amhara, 2 (10%) from somali. Majority of the cases reported from Hospitals. Up on disaggregating the hospital cases to woreda level, the cases were reported from different wordas (table 6). The Meningitis threshold was not crossed in all reported woredas.

Table 6: Suspected Meningitis Cases in week 07, 2016

Region	Zone	Woreda	Total MM	OP	IP	Death
SNNP	Hawasa T	Hawasa Hos	5	0	5	0
Oro	Bale	Goba To	4	0	4	0
Amh	Gonder T	Gonder T	2	0	2	0
SNNP	S/Omo	Jinka Hos	2	0	2	0
Amh	Awi	B/Shekudad	1	1	0	0
Amh	E/Gojjam	D/Markos Hos	1	0	1	0
Oro	Bale	Robe T	1	0	1	0
SNNP	Sidama	Bona Hos	1	0	1	0
SNNP	Sidama	Hawasa Z	1	1	0	0
SNN	Sidama	Leku Hos	1	0	1	0
Som	Afder	Hargele Hos	1	1	0	0
Som	Warder	Warder Hos	1	1	0	0
Total			21	4	17	0

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6) Measles

National Measles trend: Grossly the national measles suspected cases reported through weekly routine surveillance is decreased in week 07 of 2016 compared with similar week of 2014 and 2015 (Figure 10.1). In week 07 of 2016, a total of 270 suspected measles reported from all regions. Majority of cases 111 (41%) were reported from Oromia region followed by Somali region 80(30%).

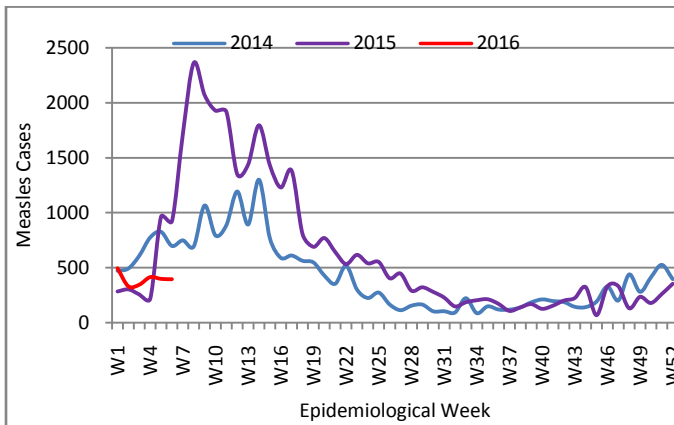


Figure 10.1: National suspected Measles Trend ,2014-2016

In week 07, a total of 31 samples were received at national laboratory and 11(35%) were turned positive for measles IgM and two (6%) were positive for Rubella IGM (Figure 10.1).

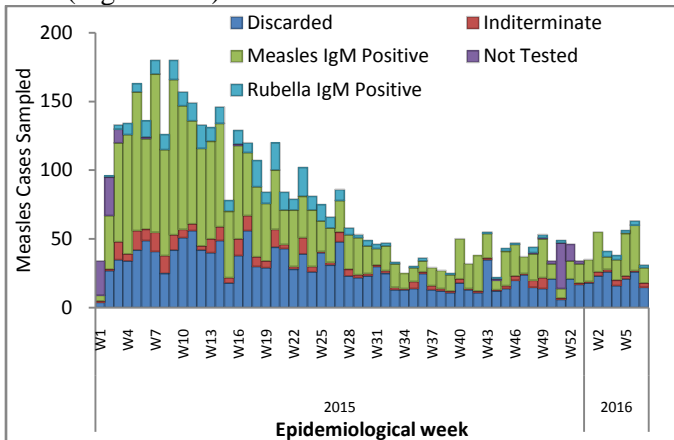


Figure 10.2: National Measles and Rubella laboratory test results , Wk1/2015-Wk7/2016

Woreda Measles trend: Up on disaggregating suspected measles cases to woreda level, 45 woredas reported five and more suspected cases in the last one month (Week 04-07 of 2016). This shows the woredas are in measles outbreak as per our technical guideline.

The suspected measles cases reported from woredas in the outbreak contributed 66% of the national cases reported in week 07. In the month, the highest cases were reported from Chre woreda of Sidama zone, Darimu woreda of illu Abab Bora zone, Meda WWelabu Woreda of bale zone, Gelana woreda of Borena zone and Adola Rede Woreda of Guji zone (Table 7).

Table 6: Suspected measles cases from Wk 04-07/2016

Region	Zone	Woreda	W4	W5	W6	W7	Total
Afar	Zone 05	Dalifagi	10	0	7	15	32
Afar	Zone 05	Dewe	0	0	10	12	22
Afar	Zone 05	S/Gelalo	0	0	5	0	5
Afar	Zone 05	Telalok	0	6	3	0	9
Amh	N/Shewa	M/Juru	0	0	5	0	5
Amh	S/Gonder	Andabet	1	1	3	0	5
Amh	S/Gonder	Dera	0	2	32	0	34
Amh	Waghmra	Zikwala	4	4	2	0	10
Amh	W/Gojjam	Y/Densa	0	4	1	0	5
BG	Kamashi	Yaso		12	0	0	12
Oro	Arsi	Guna	0	0	0	7	7
Oro	Arsi	Merti	0	0	0	6	6
Oro	Bale	Gololcha	2	4	2	3	11
Oro	Bale	M/Welabu	64	0	0		64
Oro	Borena	Gelana	30	14	13	3	60
Oro	Borena	Yabelo R	5	0	5	0	10
Oro	Guji	Adola Reda	10	22	6	19	57
Oro	Guji	Girja	16	2	0	0	18
Oro	Guji	H/Wamena	0	0	6	7	13
Oro	Guji	O/Shakiso	0	9	9	4	22
Oro	Guji	Shakiso T	0	0	17	13	30
Oro	H/G/W	J/Geneti	0	0	7	4	11
Oro	I/ABora	Bede Z	0	1	5	2	8
Oro	I/ABora	Chora	9	7	6	0	22
Oro	I/ABora	Darimu	31	9	18	8	66
Oro	I/ABora	Gechi	3	4	3	0	10
Oro	Jimma	L/Seka	28	3	0	0	31
Oro	Jimma	Sigmo	3	9	5	0	17
Oro	Jimma T	Jimma T	2	1	2	0	5
Oro	K/Welega	Dale Sedi	5	0		0	5
Oro	K/Welega	D/Wabera	16	6		12	34
Oro	K/Welega	Gidami	10	28			38
Oro	K/Welega	H/Gelan	15	14		9	38
SNNP	G/Gofa	A/Minch Z	0	8	7	1	16
SNNP	Gedeo	Dilazuria	3	0	0	4	7
SNNP	Gedeo	Gedeb	9	0	1	1	11
SNNP	Sidama	Bensa	0	5	1	0	6
SNNP	Sidama	Chire		42	23	20	85
Som	Afder	Gorobakaks	0	0	0	8	8
Som	Afder	Hargele	0	0	0	8	8
Som	Degehabur	Dagahbur R	0	0	8	10	18
Som	Degehabur	Gunagado	3	7	20	1	31
Som	Fiiq	Fiiq	4	9	1	0	14
Som	Korahe	Kabridahar	0	7	0	0	7
Som	Korahe	Kabridahar R	0	0	12	0	12
Sub-total			283	240	245	177	945
Total cases per week			414	398	396	270	1478
Percent			68	60	62	66	64



7) Anthrax

In week 07, a total of 25 suspected Anthrax cases with no death reported to the national level from Amhara, Oromia and Tigray regions. Tselemt woreda of Noth Gonder zone of Amhara region reported majority of the cases.

Region	Zone	Woreda	Cases	Deaths
Amhara	Awi	Chagni	1	0
Amhara	N/Gondar	Tselemet	8	0
Amhara	Waghimra	Sehale Seyemt	4	0
Amhara	Waghmra	Sekota	3	0
Oromia	N/Shewa	Kuyu	4	0
Tigray	C/Tigray	Abiyi Adi Town	2	0
Tigray	C/Tigray	Tahitay Maychew	1	0
Tigray	C/Tigray	Wereilehi	1	0
Tigray	N/W Tigray	Tahitay Adiyabo	1	0
Grand Total			25	0

8) Maternal Death

Since maternal death is integrated in PHEM surveillance system a number of deaths were reported to national level both through weekly report and MDRF. This week a total of 8 maternal deaths were reported to national level through routine surveillance (Table 8).

Table 8: Maternal Deaths report by Woreda, Week 07, 2016)

Region	Zone	Woreda	Death
Amhara	Dese Town	Dese Town	2
Somali	Degehabur	Daror	2
Addis Ababa	Arada	Arada	1
Amhara	East Gojjam	Debre /Hospital	1
Dire Dawa	Dredewa	Dilchora Hospital	1
SNNPR	Gurage	Sodo Wereda	1
Grand Total			8

9) Suspected AWD Cases:

The AWD outbreak in Moyale town is ongoing for the last more than fmonths. The transmission is not yet interrupted. As of 21 February 2016, a total of 418 suspected AWD cases were reported, of which 272 were from Oromia-Moyale, 146 from Somali-Moyale. Among them 113 were positive cases (15 by culture and 97 by RDT). The trend is now decreasing (Figure 11-13).

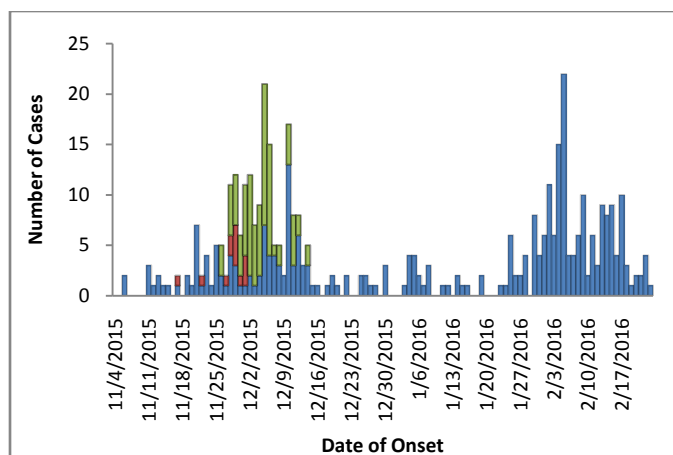


Figure 11: AWD Outbreak trend by date of onset, Moyale (Somali and Oromia), 2016, N=418 (113 positive, 15 on culture)

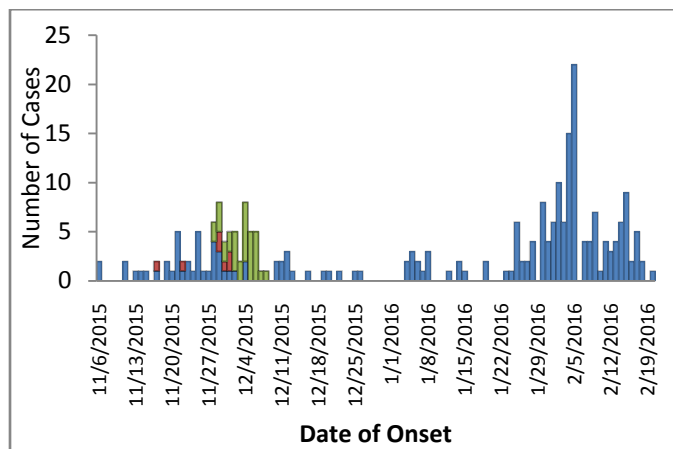


Figure 12: AWD Outbreak trend by date of onset, Moyale, Oromia, 2016, N=272 (53 positive, 10 on culture)

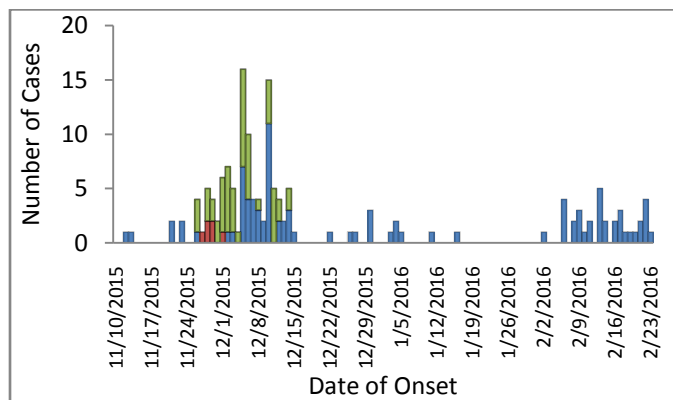


Figure 13: AWD Outbreak trend by date of onset, Moyale, Somali, 2016, N=146(84 positive, 5 on Culture)

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10) Influenza Sentinel Surveillance

In week 07 of 2016, a total of 22 patient complaining of ILI or SARI were reported with throat swab samples from predesignated influenza sentinel sites. Among them nine were tested positive for Influenza A H1N1 (2009Pandemic). Starting from week 49 of 2015 the positivity rate of Pandemic Influenza H1N1 is increasing.

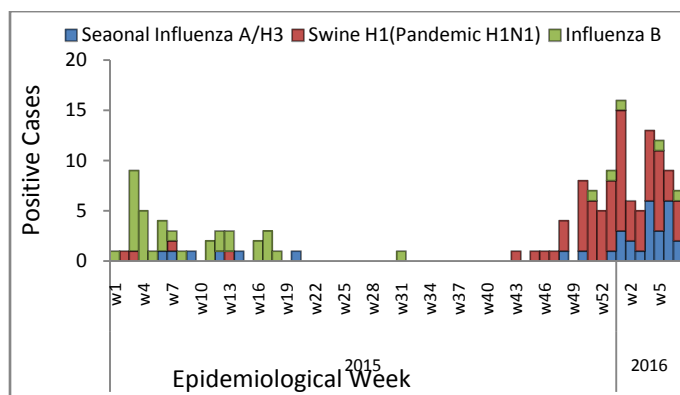


Figure 14: Influenza cases by subtype, Sentinel Surveillance, 2015-2016

11) Suspected Influenza Like Illness Event

There is abnormal increment of Influenza like illnesses in different areas of the country.

Addis Ababa: A total of 23 suspected Influenza cases were reported from different hospitals in addis Ababa. Among them Throat samples were collected from 20 patients and nine were turned positive for influenza A H1N1 (2009Pandemic). Of the cases six were died. Four of the died cases had comorbidity (two diabetic, one Asthmatic and one TB). Currently there is no new cases.

Arsi Robe Prison: A total of 65 suspected cases influenza like illness with no death are reported and samples collected from 19 patients. Laboratory result is pending.

Amhara region: The flu like illnesses have been reported from Laygaint, Estie and Andabet woredas of South Gondar. So far, a total of 354 influenza like illness cases were reported from amhara region different woredas. Among them samples are collected from 54 patients and the laboratory result was turned positive for Influenza a H1N1 (2009 Pandemic). This makes the positivity rate 56% (Table 9).

Table 9: Influenza Like illness in Amhara region, Week 07, 2016)

Zone	Wereda	Cases	# of samples	pdm H1N1	Positivity Rate
Oromyia	Bati	91	5	4	80
Oromyia	Dawachefe	2	2	2	100
N/Shewa	Antsokia	7	7	4	57
S/Gondar	Laygaint	81	1	1	100
S/Gondar	Estie	59	6	4	67
S/Gondar	Andabet	3	3	2	67
S/Gondar		111	30	13	43
Total		354	54	30	56

IV. Response

- Malnutrition:** Supplies are being distributed to the drought affected areas through PFSA. Case management and screening for Malnutrition is ongoing. The Medical teams (42 clinicians) from different health facilities in addis Ababa sent to Afar drought affected woredas have continued providing technical support on SAM management.
- Suspected AWD:** A total of 84 Health Extension Workers are mobilized from neighboring kebeles and deployed for house to house social mobilization and awareness creation activities. Daily and continuous announcement of the key messages of AWD using mobile van/loudspeaker was under way. All the woreda cabines and kebeles leaders were also deployed to mobilize the community at household level with a support of checklist. Distribution and demonstration of water treatment chemicals, More than 1,200 posters (four in items) were distributed for all at risk (seven) kebeles; Key messages was developed and distributed to schools; Orientations has also been given for all teachers in order to aware the students on regular basis. Community leaders and health development armies were oriented about reporting of AWD cases (active case search) and the key prevention actions that community members can take.
- Influenza Like Illness:** A team composed of Epidemiologist and Laboratory technologist sent to Arsi Robe to investigate and respond to the increment of the Influenza Like Illness.