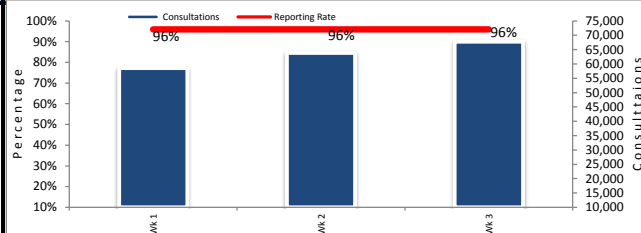


Volume 02, Issue 3, Epi week 3, 10 Jan. - 16 Jan. 2014

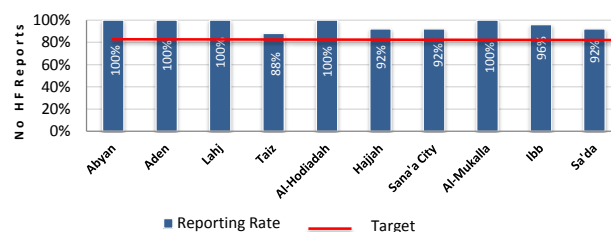
Highlights

- During week no 3, 2014; 96% (237/247) health facilities from 10 governorates provided valid surveillance data.
- The total number of consultations reported during the week in 10 governorates was 67802 compared to 63884 the previous reporting week. Acute respiratory tract infections (ARI), acute diarrhea (OAD) and suspected malaria (S.Mal) were the leading cause of morbidity this week.
- A total of 121 alerts were generated by eDEWS system in week 3, 2014; Of these, 92 alerts were verified as true for further investigations with appropriate response.
- Altogether 44 alerts Measles, 15 Petrusis, 7 each for C.Leishmaniasis and Acute Flaccid Paralysis, 5 each for AVH and Dengue fever, 4 Meningitis, 2 each for BD and Schistosomiasis, and 1 NNT were received and responded.
- Online disease surveillance and response system was launched in 4 governorates (Aden, Abyan, Lahj and Taiz) in March 2013 and the expansion phase has started in 6 Governorates (Sana'a City, Hodaidah, Hajjah, Ibb, Al-Mukalla and Sa'da) in November 2013. Ongoing on site trainings to improve weekly reporting and immediate notification are underway in all governorates.

eDEWS Reporting Rates vs Consultations in All Governorates, Epi weeks 1 to 3, 2014



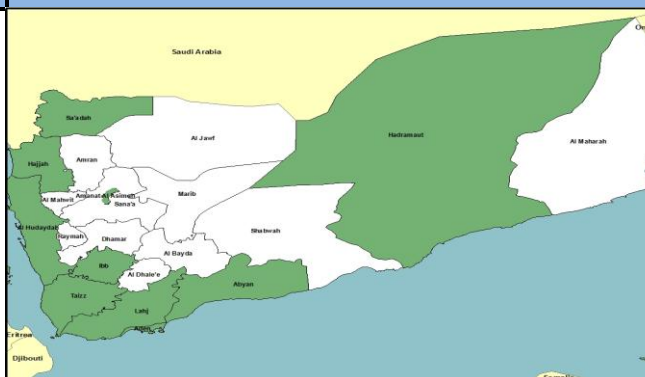
Distribution of Reporting Rates by Governorates (Epi-week 3, 2014)



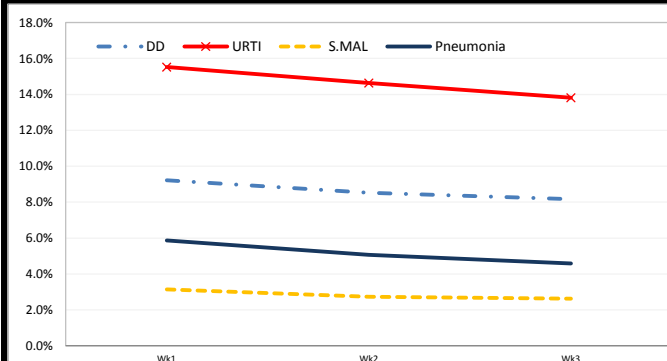
Leading Priority Diseases - 10 Governorates (Epi-week 3, 2014)

- URTI (13.8%), suspected malaria (2.6%), OAD (7.8%) and Pneumonia (4.6%) remain the leading causes of morbidity representing a total of 28.8%.
- Acute viral hepatitis, acute watery diarrhea and Schistosomiasis represented less than 1% of total morbidity in reporting period. Bloody diarrhea represented 0.3% of this morbidity.
- All diarrheal disease comprised 8.2% and Pneumonia 4.6% of total morbidity in All Governorates this week.
- All diarrheal disease comprised 4.8% and Pneumonia 2.5% of total morbidity in the <5 years age group.

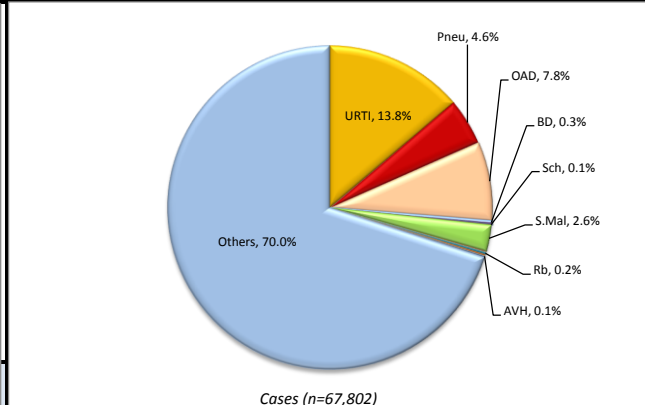
124 districts from 10 Governorates reported to eDEWS in week 3, 2014



Trends for Leading Priority Diseases in 10 Governorates - Epiweeks 1 to 3, 2014

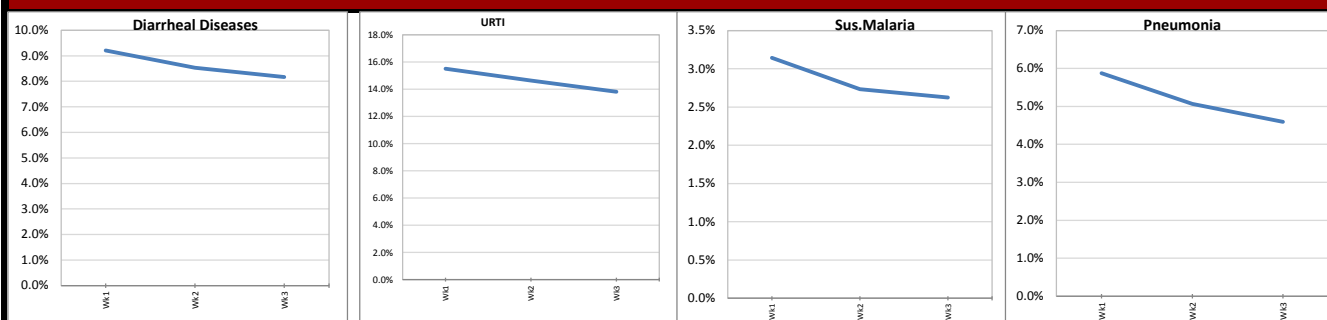


Proportional Morbidity for Leading Priority Diseases - Epiweek 3, 2014

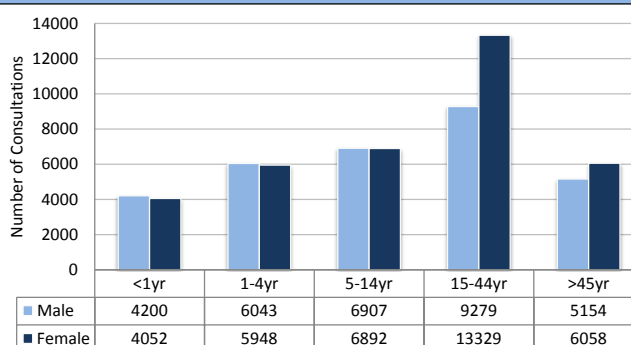


URTI=Upper respiratory infections; Pneu=Pneumonia; OAD=Other acute diarrhea; BD= Bloody diarrhea; AWD=Acute Watery Diarrhea; Sch=Schistosomiasis; Mal=Malaria; Rb= Rabies; AVH=Acute viral hepatitis; Meng=Meningitis; DF=Dengue fever; VHF=Viral hemorrhagic fever; Meas=Measles; CL=Cutaneous Leishmaniasis; Pert= Pertussis; Diph=Diphtheria; NNT=Neonatal Tetanus

Weekly trends of Diarrheal Diseases, Upper Respiratory infections, Suspected Malaria and Pneumonia (Epi week 1 to 3, 2014)



Age and Sex distribution of total consultations of leading diseases (Epi week 3, 2014)



Cumulative number of major health events reported in Epi-weeks 10, 2013 to 3, 2014 (1st March 2013 to 16th Jan. 2014)

Diseases	No of Cases	Percentage
Upper Respiratory Infections	199287	16.3%
Diarrheal Diseases	99013	8.1%
Suspected Malaria	21527	1.8%
Pneumonia	51116	4.2%
Others	851670	69.7%
Total (All consultations)	1222613	100%

Leading Diseases by Governorate, Epiweek 3

- URTI was highest in Governorate Aden (28.5%) this week.
- Diarrheal Disease was highest in Governorate Sa'da (15.3%) this week.

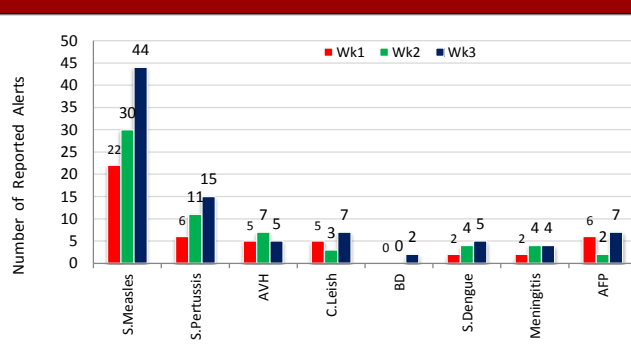
Distribution of consultations of leading diseases by Governorates, Epiweek 3

Suspected Disease	Lahj	Aden	Abyan	Taiz	Hadramout	Ibb	Hodaidah	Hajjah	Amana	Sa'da	Total
URTI	585	2052	793	822	650	842	509	458	1380	1284	9375
Pneumonia	136	228	340	240	82	667	607	300	420	95	3115
OAD	174	723	194	260	152	757	377	550	1303	825	5315
BD	4	4	1	13	4	124	42	1	10	22	225
AWD	0	0	0	0	0	0	0	0	0	0	0
Schistosomiasis	0	0	1	2	1	5	3	8	29	13	62
Malaria	18	40	20	2	0	131	784	650	3	132	1780
Meningitis	0	5	1	19	1	1	3	0	9	1	40
Dengue Fever	0	0	0	11	2	0	13	1	0	0	27
Viral Hemorrhagic Fever	0	0	0	0	0	0	0	0	0	0	0
Rabies	3	0	6	36	0	2	0	14	82	0	143
Measles	7	10	7	5	15	7	14	3	7	19	94
Acute Viral Hepatitis (A & E)	4	12	2	29	6	8	4	5	11	0	81
Neonatal Tetanus	0	0	0	0	1	0	1	0	0	0	2
Acute Flaccid Paralysis	1	1	0	1	0	3	0	1	0	0	7
Cutaneous Leishmaniasis	0	0	1	0	0	0	1	0	2	13	17
Diphtheria	0	0	0	0	0	0	0	0	0	0	0
Pertussis	8	5	2	0	5	1	1	3	4	6	35
OtherUn	1	1	6	0	0	0	1	0	1	0	10
Other Consultations	2618	4132	2693	6178	2393	5972	8121	1719	10587	3061	47474
Total Consultations	3559	7213	4067	7618	3312	8520	10481	3713	13848	5471	67802

Number of alerts & outbreaks reported and investigated with appropriate response

Diseases	2013 - 2014		Current week 3, 2013		System Gen. Alerts (week 3)	
	Alerts	Outbreaks	Alerts	Outbreaks	TRUE	FALSE
AWD	0	0	0	0	0	0
Pertussis	311	6	15	0	15	1
Measles	748	0	44	0	44	4
AFP	83	0	7	0	7	0
Schistosomiasis	27	0	2	0	2	1
Bloody Diarrhie	26	0	2	0	2	18
AVH	180	2	5	0	5	1
Denque fever	120	0	5	0	5	0
Meningitis	90	0	4	0	4	1
CL	116	1	7	0	7	2
NNT	32	0	1	0	1	0
OAD	14	0	0	0	0	1
VHF	4	0	0	0	0	0
Pneumonia	26	0	0	0	0	0
Total	1777	9	92	0	92	29

Number of Alerts Received and Responded (Epiweeks 1 to 3, 2014)



Lahj Governorate

25 health facilities from 13 districts in Lahj governorate reported to eDEWS with a total of 3559 patients consultations in week 3, 2014. Total 8 alerts were reported and appropriate measures were taken in week 3, 2014. Altogether 5 Alerts Measles, 2 Pertussis and 1 Acute Flaccid Paralysis were reported and responded.

Aden Governorate

25 health facilities from 8 districts in Aden governorate reported to eDEWS with a total of 7213 patients consultations in week 3, 2014. Total 9 alerts were reported and appropriate measures were taken in week 3, 2014. Altogether 3 alerts Measles, 2 Meningitis, and 1 each for AVH, Acute Flaccid Paralysis, Pertussis and Bloody Diarrhea were reported and responded.

Abyan Governorate

22 health facilities from 4 districts in Abyan governorate reported to eDEWS with a total of 4067 patients consultations in week 3, 2014. Total 6 alerts were reported and appropriate measures were taken in week 3, 2014. Altogether 3 alerts Measles, 2 Pertussis and 1 C. Leishmaniasis were reported and responded.

Taiz Governorate

22 health facilities from 8 districts in Taiz governorate reported to eDEWS with a total of 7618 patients consultations in week 3, 2014. Total 11 alerts were reported and appropriate measures were taken in week 3, 2014. Altogether 4 alerts Measles, 3 AVH, 2 Dengue Fever, and 1 each for Meningitis and Acute Flaccid Paralysis were reported and responded.

Hadramout Governorate

25 health facilities from 7 districts in Hadramout governorate reported to eDEWS with a total of 3312 patients consultations in week 3, 2014. Total 7 alerts were reported and appropriate measures were taken in week 3, 2014. Altogether 4 alerts Measles, 2 Pertussis, and 1 Bloody Diarrhea were reported and responded.

Ibb Governorate

24 health facilities from 15 districts in Ibb governorate reported to eDEWS with a total of 8520 patients consultations in week 3, 2014. Total 10 alerts were reported and appropriate measures were taken in week 3, 2014. Altogether 6 alerts Measles, 3 Acute Flaccid Paralysis, and 1 Pertussis were reported and responded.

Hodaidah Governorate

25 health facilities from 22 districts in Hodaidah governorate reported to eDEWS with a total of 10481 patients consultations in week 3, 2014. Total 16 alerts were reported and appropriate measures were taken in week 3, 2014. Altogether 10 alerts Measles, 3 Dengue Fever, and 1 each for C. Leishmaniasis, Meningitis and NNT were reported and responded.

Hajjah Governorate

23 health facilities from 23 districts in Hajjah governorate reported to eDEWS with a total of 3713 patients consultations in week 3, 2014. Total 7 alerts were reported and appropriate measures were taken in week 3, 2014. Altogether 2 alerts each for Measles and Pertussis, and 1 each for AVH, Acute Flaccid Paralysis and Schistosomiasis were reported and responded.

Amana Governorate

24 health facilities from 10 districts in Amana governorate reported to eDEWS with a total of 13848 patients consultations in week 3, 2014. Total 8 alerts were reported and appropriate measures were taken in week 3, 2014. Altogether 4 alerts Measles, 3 Pertussis and 1 C. Leishmaniasis were reported and responded.

Sa'da Governorate

23 health facilities from 15 districts in Sa'da governorate reported to eDEWS with a total of 5471 patients consultations in week 3, 2014. Total 10 alerts were reported and appropriate measures were taken in week 3, 2014. Altogether 4 alerts C. Leishmaniasis, 3 Measles, 2 Pertussis, and 1 Schistosomiasis were reported and responded.

Weekly Bulletin:Electronic Disease Early Warning & Response System, Yemen - Epidemiological Week Number 3 (10 Jan. - 16 Jan. 2014)

Alerts/ Outbreak Investigated and Responded in Epi-week 3, 2014

Suspected Disease	Governorate	District	HFs	Actions Taken / Notes	Cases	Deaths
Pertussis	Lahj	Labaos and Alara	Labaos and Alara HFs.	A field investigation was conducted today to Labose for active search of cases according to the alert received last week. The cases were diagnosed clinically by doctor in clinic and treated as per standard protocol for Pertussis. The cases from different areas.	7	0
Pertussis	Lahj	Alara	alara hospital	eDEWS team contact focal point, information share, cases were diagnosed clinically using case definition by doctor in clinic, and treated as per standard protocol for Pertussis.	1	0
Measles	Lahj	Alara, Radfan, Al-Mosimeer, Al-Had and Tuban	Alara, Radfan, Al-Mosimeer, Al-Had and Al-Hawtah HFs.	eDEWS team contact focal point, information shared; the cases were diagnosed clinically using case definition, blood samples were collected .	7	0
AFP	Lahj	ALKOBITAH	karash HC	eDEWS team contacted focal point, the case was a suspected AFP, surveillance coordinator was informed, stool samples were collected from case and close contacts, and sent to central surveillance center in Sana'a	1	0
BD	Aden	Al Mulla	Al Mulla Poly.Cl	By contact with focal point, we informed that 4 cases diagnosed clinically as bloody diarrhea, after investigation, 2 cases result were Amebiasis and the other 2 cases were Bacterial. Cases treated adequately. Doctors aware by eDEWS focal point to detect any bloody diarrhoea from same location for immediate notification.	4	0
Measles	Aden	Al Burieqa	Ash Shaab	A visit was conducted to the polyclinic by eDEWS team, focal point reported 2 measles cases, a field investigation was conducted for active search, no more measles cases were found on surrounding area. Blood sample was collected from one case. Both investigation form and blood sample will be sent to central lab in Sana'a for confirmation. No blood sample was collected from second case due to refusal of the relative.	2	0
AFP	Aden	Ash Shaikh Outhman	Al-Wahdah Hosp.	The case was reported by a private health facility then referred to Al Wahdah Hospital for admission. The case was from Abyen. Investigation was done by us, investigation form and two stool samples were collected in Aden. eDEWS coordinator for assistance in Abyan was informed to collect samples from close contacts of the case. Both investigation form and stool samples will be sent to Sana'a soon.	1	0
Pertussis	Aden	Ash Shaikh Outhman	Al-Wahdah Hosp.	By contact with eDEWS focal point we were informed that 4 cases were detected in OPD, one has investigation form. All cases diagnosed clinically, two cases were brothers from DarSaad, no full address was registered. Cases treated adequately.	4	0
Measles	Aden	Ash Shaikh Outhman and Al-Mansura	Al-Wahdah and Al-Wali HFs.	By contact with eDEWS focal point, we informed that the cases were seen by duty doctor, Blood sample was collected from one case and will be sent to central lab. in sana'a for confirmation, investigation form were filled for 2 cases.	3	0
Meningitis	Aden	Ash Shaikh Outhman	Al-Wahdah Hosp.	By contact with focal point we informed that the death case was referred from Abyan in a bad condition , admitted at 10/01/2014 and died at 14/01/2014 . Case was investigated by Meningitis surveillance Team.	5	1
Meningitis	Aden	Ash Shaikh Outhman	Al-Wahdah Hosp.	The information obtained from focal point indicate that 2 cases admitted from Aden, 1 from Abyan and 1 from Lahj (there is no cluster of cases). All cases treated according to the standard protocol of meningitis treatment.	5	0
AVH	Aden	Al Mansura	Al Wali Hosp.	By contact with focal point, we informed that 3 cases diagnosed clinically in OPD, no more data was registered by doctors.	3	0
Measles	Abyan	Mudiyah	Mudiya Hosp.	eDEWS team contact focal point, information shared; the case was diagnosed clinically using case definition, No blood sample was collected from the case.	1	0
Pertussis	Abyan	Lawdar and Khanfar	Lawdar and Batis HFs.	eDEWS team contact focal point, case was diagnosed clinically using case definition by doctor in health facilities, cases treated as per standard protocol for Pertussis.	2	0
Measles	Abyan	Khanfir	Al-Kawd and MCH HFs.	A visit was done to Al-Kawd and MCH, on job training was conducted to staff, 6 cases reported, they diagnosed clinically according to case definition, blood samples were collected from cases, five blood samples of last week were sent by eDEWS team.	6	0
CL	Abyan	Khanfir	Batis HC	eDEWS team contact focal point, information shared; the case diagnosed by eDEWS focal point according to case definition, the lesion was in the nose of a female child, no tissue sample was collected from lesion, further investigation of cases is ongoing.	1	0
Measles	Taiz	Al Misrakh, Al-Qahirah and Salah	Al Misrakh, Sweden, Al-Wahdah MCH and Yemen International HFs.	Focal point contacted, information shared, samples collected , and will be sent to the centra lab. in Sana'a.	8	0
AVH	Taiz	Al-Shamaetayn and Al-Qahirah	Khalifa and Labs National Center HFs.	All samples test results in Lab National Center (3 cases) were positive for Hepatitis A, pateints contact information were not available , the importance of detailed patients contact information was discussed.sanaa.	6	0
AFP	Taiz	Al Qahirah	Sweden Hospital	The suspected AFP death case aged 6 years Male child from Sharab , admitted to hospital on 14/1/2014 in Coma , he had fever and convulsion associated with upper limbs paralysis 3 days earlier, Medications have been started(Antibiotics , I.V fluids,Aminphyllin and Adrenaline) , he died on the 14/1/2014	0	1
Meningitis	Taiz	Al Qahirah	Sweden Hospital	HF was visited , information shared , samples sent to the HF lab. With negative results (No growth) .	19	0
AVH	Taiz	Al Qahirah	Sweden Hospital	A visit was conducted to the HF , 3 samples test results were positive for Hepatitis A, pateints contact information were not available , the importance of detailed patients contact information was discussed.sanaa.	7	0
DF	Taiz	Al Qahirah and Salah	Labs National Center and Yemen International HFs.	All samples test results in Lab National Center (4 cases) were positive fo DF and in other HF the cases were diagnosed clinically. Medication have been started. No cluster of 3 cases in one location was reported(Alert threshold), patients are from different areas in Taiz.	8	0
Measles	Hadramut	Alridh Qosear	Alridh Hosp	eDEWS team contact focal point, the cases diagnosed clinically using case definition.12 cases were registered from seven different locations. Surveillance coordinator was informed, blood samples collected and sent to central lab in Sana'a for confirmation.	12	0
Pertussis	Hadramut	Alridh Qosear and Al-Mukalla	Qosear and University HFs.	eDEWS team contact focal point, the cases diagnosed clinically using case definition. Antibiotic treatment were given to the patient.	5	0
Measles	Hadramut	Alshaheer and Al-Mukalla	Alshaheer, University and Al-Hamy HFs.	eDEWS team contact focal point, the cases diagnosed clinically using case definition. Surveillance coordinator was informed, blood sample was collected and sent to central lab in Sana'a for confirmation.	4	0
BD	Hadramut	Alridh Qosear	Alridh Hosp	eDEWS team contact focal point, the cases diagnosed clinically, lab investigation conducted and the result was Amebiasis. Cases were from different locations. Antibiotic treatment was given to the patient.	3	0
Measles	Ibb	Adhi har, Al-Mashanah, Badan and Al-Sayani	AL thawrah, MCH, Dar Al-Shifa, Al-Shaheed Al-Badani, Al-Sayani and Al-Khansa HFs.	focal point was contacted, information shared. Samples collected and sent to central Lab.	7	0
AFP	Ibb	Adhi har, Al-Mashanah and Yarim	AL thawrah, MCH and Dr. Waheeb Ata HFs.	focal point and coordinator were contacted.investigation form filled and samples from the case and contacts collected and sent to Sanaa	3	0
Pertussis	Ibb	AL Qafr	Rihab hospital	focal point was contacted,patient diagnosed clinically. Other lab test done(Lymphocytosis). Patient is 2,5 Years old male not vaccinated. Appropriate treatment given.	1	0
DF	Hodaidah	Al Garrahi, Al-Hawies and Al-Qanawis	Al Garrahi, Al-Aksa and Al-Qanawis HFs.	Focal point contacted , information shared , patients diagnosed clinically only (Elsa test wasn't done) , Patients are from different area , importance of refrerance of samples to Hodaidah national lab for confirmation were discussed.	11	0
Measles	Hodaidah	Al Garrahi, Al-Uhailah, Uhailh, Zabid, Bajel, Al-Zaidiah, Al-Sukhnah, Al-Amal, Al-Salakhnanah, Hais and Al-Thawrah HFs .	Al Garrahi, Al-Uhailah, Zabid, Bajel, Al-Zaidiah, Al-Sukhnah, Al-Amal, Al-Salakhnanah, Hais and Al-Thawrah HFs .	eDEWS coordinator contacted focal point, cases were suspected Measles , samples were collected from cases by district coordinator and sent to laboratory in Sanaa.	15	0
CL	Hodaidah	Al Hawak	Alamal Hosp.	eDEWS team contacted focal point. The cases confirmed to be CL , and treated appropriately..	1	0
Meningitis	Hodaidah	Al Hawak	Alaksa Hosp.	eDEWS coordinator contacted meningitis focal point, cases diagnosed as meningitis and treated appropriately.	3	0
NNT	Hodaidah	AL Hawak	Althawrah Hosp.	eDEWS team contacted focal point. The case confirmed to be NNT , and treated appropriately..	1	0
AFP	Hajjah	Haradh	Haradh hospital	eDEWS team contacted focal point, and information shared.The case diagnosed according to the standard case definition. The case was female of 4 yrs old, from (Al-Malahidh Saada Governorate). The collected samples of stool sent to the central level in Sana'a	1	0
Pertussis	Hajjah	khayran al muharraq and Washhah	ibn roshd and Washhah HFs.	eDEWS team contact focal point, the cases diagnosed clinically using case definition. Antibiotic treatment was given to the patients.	3	0
AVH	Hajjah	khayran al muharraq	ibn roshd health center	The cases confirmed to be AVH and treated appropriately	3	0
Sch	Hajjah	Qafil Shamer	Qafil Shamer Hospital	eDEWS team contacted focal point, and information shared.Cases from different areas and treated appropriately.	5	0
Measles	Hajjah	Qafil Shamer and Bani Qais	Qafil Shamer and Bani Qais HFs.	eDEWS team contact focal point, information shared; the cases were diagnosed clinically using case definition, blood samples were collected from the cases and will be send to sana'a for lab confirmation	3	0
Measles	Amana	Shuaub, Maain, Bani Al-Harith and Al-Safia	Al-razi, Maain, Al-Rawdhna and Al-Thawrah HFs.	eDEWS team contact focal point, information shared blood samples were collected from the cases and sent for lab confirmation.	8	0
Pertussis	Amana	Old city, Al-Safia and Al-Sabin	AL-Zubairi, Al-Thawra and Al-Wahda HFs.	eDEWS team contact focal point, cases diagnosed clinically using case definition. Antibiotic treatment was given to the patient ,the address of the cases not registered.	4	0
CL	Amana	Assafia	AL-Thwra HOSP	eDEWS team contact focal point. Cases diagnosed by dermatologist in OPD. Cases from different areas,no one from Sana'a city.	2	0
Measles	Saada	Saada, Sehar and Majz	Al-jumhory, Al-Talh and Majz HFs.	eDEWS team contact focal point, information shared; cases were diagnosed clinically using case definifion blood samples collected from 8 cases and will be sent to central lab in sanaa for conformation	11	0
CL	Saada	saada, Sehar, Hydan and Razih	Al-jumhory, Al-Talh, Hydan and Shaara HFs.	eDEWS team contacted focal point, the cases diagnosed CL and treated appropriately	9	0
Pertussis	Saada	Sehar and Razih	At Talh and Al-Nadhir HFs.	eDEWS team contact focal point,surveillance coordinator was informed,cases diagnosed clinically using case definifion by doctor in clinic.On job training of doctor about investigation was conducted.Reported cases were treated as per standard protocol for pertussis	5	0
Sch	Saada	Hydan	kamus maran	eDEWES team contact focal point, informaton shared, and treatment were given	5	0

The objective of this weekly epidemiological bulletin is to provide a snap shot on selected health events reported from the eDEWS surveillance system in All governorates (Aden, Abyan, Lahj, Taiz, Hadramout, Ibb, Hodaidah, Hajjah and Al-Amana) of Yemen. While every attempt is made to present the weekly trends of epidemic prone diseases, the information presented in the bulletin needs to be interpreted in the context that precise information on the reference populations is not always available. The bulletin also includes information collected by the eDEWS teams. The primary focus of DEWS is early detection of epidemic prone disease, to facilitate a rapid public health response.

This weekly Epidemiological bulletin is published jointly by the Ministry of Public Health & Polupation and World Health Organization (WHO), WHO/EHA office, Sana'a, Yemen.

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