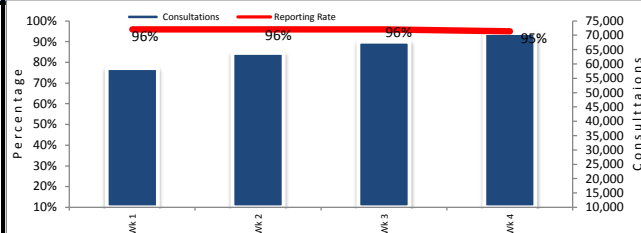


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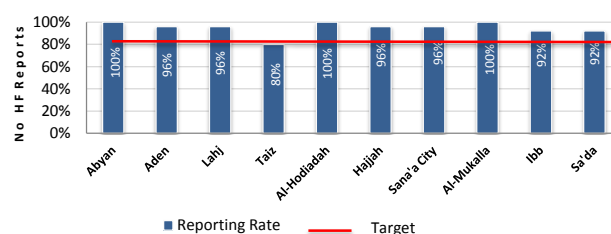
Highlights

- During week no 4, 2014; 95% (234/247) health facilities from 10 governorates provided valid surveillance data.
- The total number of consultations reported during the week in 10 governorates was 70778 compared to 67802 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 106 alerts were generated by eDEWS system in week 4, 2014; Of these, 73 alerts were verified as true for further investigations with appropriate response.
- Altogether 28 alerts Measles, 13 C.Leishmaniasis, 12 Petrusis, 4 each for AVH, Acute Flaccid Paralysis and Meningitis, 3 Dengue fever, 2 Boody Diarrhea, and 1 each for Schistosomiasis, Pneumonia and 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 4, 2014



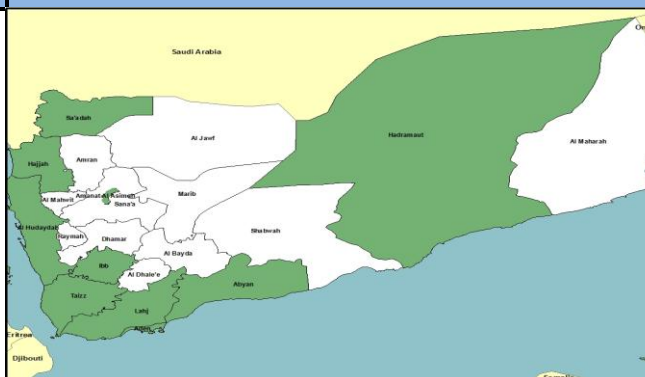
Distribution of Reporting Rates by Governorates (Epi-week 4, 2014)



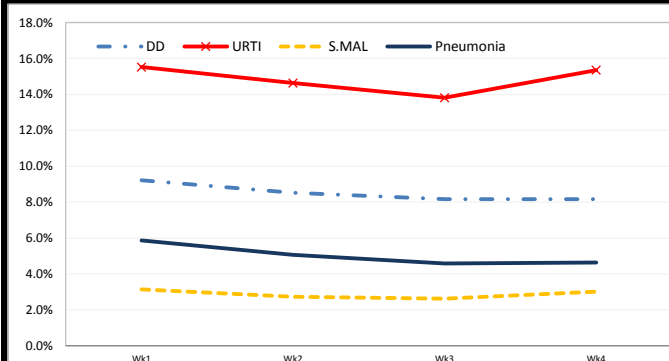
Leading Priority Diseases - 10 Governorates (Epi-week 4, 2014)

- URTI (15.4%), suspected malaria (3%), OAD (7.8%) and Pneumonia (4.6%) remain the leading causes of morbidity representing a total of 30.8%.
- Acute viral hepatitis, acute watery diarrhea and Schistosomiasis represented less than 1% of total morbidity in reporting period. Bloody diarrhea represented 0.4% 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 2.6% of total morbidity in the <5 years age group.

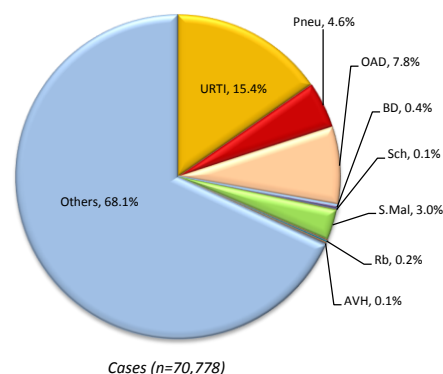
124 districts from 10 Governorates reported to eDEWS in week 4, 2014



Trends for Leading Priority Diseases in 10 Governorates - Epiweeks 1 to 4, 2014

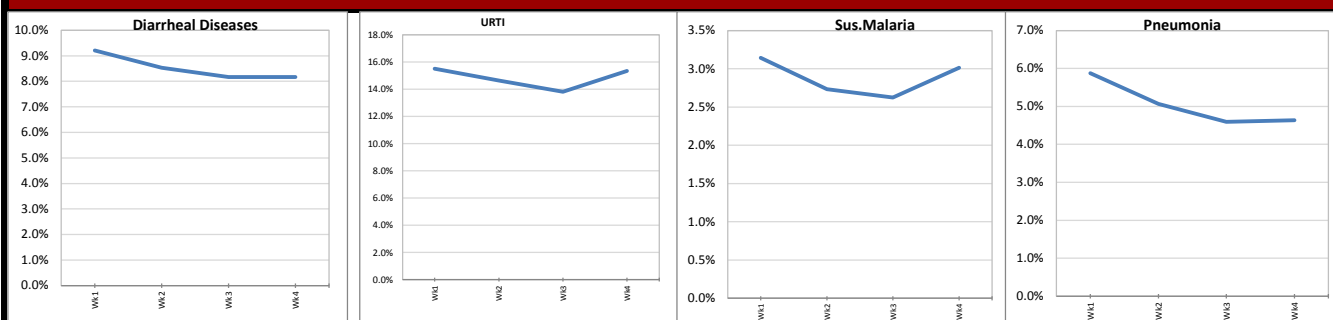


Proportional Morbidity for Leading Priority Diseases - Epiweek 4, 2014

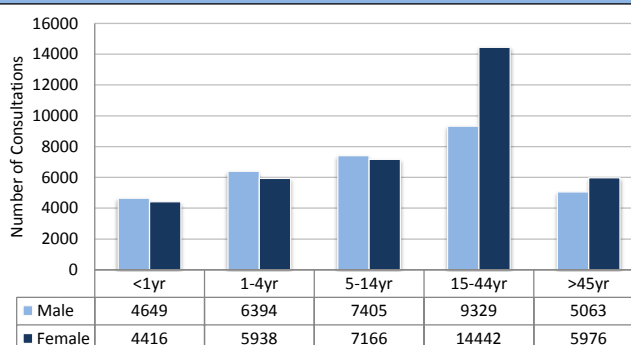


URTI=Upper respiratory infections; Pneu=Pneumonia; OAD=Other acute diarrhea; BD= Bloody diarrhea; AWD=Acute Watery Diarrhea; Sch=Schistosomiasis; Mal=Malaria; Rb= Rabies; AVH=Acute viral hepatitis; Meng=Meningitis; DF=Dengue fever; VHF=Viral hemorrhagic fever; Meas=Measles; CL=Cutaneous Leishmaniasis;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

Weekly trends of Diarrheal Diseases, Upper Respiratory infections, Suspected Malaria and Pneumonia (Epi week 1 to 4, 2014)



Age and Sex distribution of total consultations of leading diseases (Epi week 4, 2014)



Cumulative number of major health events reported in Epi-weeks 10, 2013 to 4, 2014 (1st March 2013 to 20th Jan. 2014)

Diseases	No of Cases	Percentage
Upper Respiratory Infections	210153	16.2%
Diarrheal Diseases	104796	8.1%
Suspected Malaria	23658	1.8%
Pneumonia	54395	4.2%
Others	900389	69.6%
Total (All consultations)	1293391	100%

Leading Diseases by Governorate, Epiweek 4

- URTI was highest in Governorate Aden (27.1%) this week.
- Diarrheal Disease was highest in Governorate Hajjah (14.6%) this week.

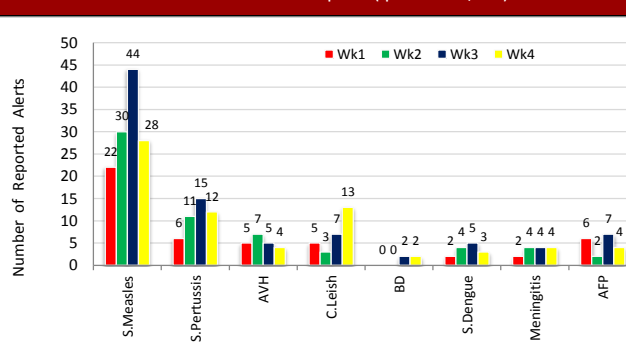
Distribution of consultations of leading diseases by Governorates, Epiweek 4

Suspected Disease	Lahj	Aden	Abyan	Taiz	Hadramout	Ibb	Hodaidah	Hajjah	Amana	Sa'da	Total
URTI	706	2222	821	829	765	783	723	438	1772	1807	10866
Pneumonia	126	227	359	171	63	594	738	362	519	120	3279
OAD	227	779	127	382	202	660	591	559	1076	897	5500
BD	4	7	3	16	7	125	102	2	8	9	283
AWD	0	0	0	0	0	0	0	0	0	0	0
Schistosomiasis	1	0	1	6	0	2	13	8	30	12	73
Malaria	26	73	19	55	2	105	856	848	12	135	2131
Meningitis	0	9	0	29	2	1	3	0	12	0	56
Dengue Fever	0	0	0	7	0	0	15	0	0	0	22
Viral Hemorrhagic Fever	0	0	0	0	0	0	0	0	0	0	0
Rabies	0	0	3	31	0	2	2	8	71	2	119
Measles	9	9	0	1	19	5	9	0	11	37	100
Acute Viral Hepatitis (A & E)	10	8	1	15	3	6	6	2	18	0	69
Neonatal Tetanus	0	0	0	2	0	0	0	0	0	0	2
Acute Flaccid Paralysis	0	3	0	0	0	0	0	0	3	1	7
Cutaneous Leishmaniasis	1	0	0	0	1	3	2	1	7	14	29
Diphtheria	0	0	0	0	0	0	0	0	0	0	0
Pertussis	16	7	1	0	1	0	2	2	2	12	43
OtherUn	2	6	5	2	0	0	2	0	13	0	30
Other Consultations	3037	4843	2543	4128	2538	6319	8003	1610	10453	4695	48169
Total Consultations	4165	8193	3883	5674	3603	8605	11067	3840	14007	7741	70778

Number of alerts & outbreaks reported and investigated with appropriate response

Diseases	2013 - 2014		Current week 4, 2014		System Gen. Alerts (week 4)	
	Alerts	Outbreaks	Alerts	Outbreaks	TRUE	FALSE
AWD	0	0	0	0	0	0
Pertussis	323	7	12	1	12	3
Measles	776	0	28	0	28	4
AFP	87	0	4	0	4	0
Schistosomiasis	28	0	1	0	1	2
Bloody Diarrhie	28	0	2	0	2	18
AVH	184	2	4	0	4	3
Denque fever	123	0	3	0	3	0
Meningitis	94	0	4	0	4	1
CL	129	1	13	0	13	2
NNT	33	0	1	0	1	0
OAD	14	0	0	0	0	0
VHF	4	0	0	0	0	0
Pneumonia	27	0	1	0	1	0
Total	1850	10	73	1	73	33

Number of Alerts Received and Responded (Epiweeks 1 to 4, 2014)



Lahj Governorate

24 health facilities from 13 districts in Lahj governorate reported to eDEWS with a total of 4165 patients consultations in week 4, 2014. Total 8 alerts were reported and appropriate measures were taken in week 4, 2014. Altogether 3 Alerts each for Measles and Pertussis, and 1 each for AVH and C. Leishmaniasis were reported and responded.

Aden Governorate

24 health facilities from 8 districts in Aden governorate reported to eDEWS with a total of 8193 patients consultations in week 4, 2014. Total 13 alerts were reported and appropriate measures were taken in week 4, 2014. Altogether 4 alerts Measles, 2 each for Pertussis, Acute Flaccid Paralysis and Meningitis, and 1 each for AVH, Pneumonia 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 3883 patients consultations in week 4, 2014. Total 1 alert were reported and appropriate measures were taken in week 4, 2014. Altogether 1 alert Measles was reported and responded.

Taiz Governorate

20 health facilities from 8 districts in Taiz governorate reported to eDEWS with a total of 5684 patients consultations in week 4, 2014. Total 5 alerts were reported and appropriate measures were taken in week 4, 2014. Altogether 1 alert each for Measles, AVH, Dengue Fever, Meningitis and NNT were reported and responded.

Hadramout Governorate

25 health facilities from 7 districts in Hadramout governorate reported to eDEWS with a total of 3603 patients consultations in week 4, 2014. Total 5 alerts were reported and appropriate measures were taken in week 4, 2014. Altogether 3 alerts Measles, and 1 each for Pertussis and C. Leishmaniasis were reported and responded.

Ibb Governorate

23 health facilities from 15 districts in Ibb governorate reported to eDEWS with a total of 8605 patients consultations in week 4, 2014. Total 8 alerts were reported and appropriate measures were taken in week 4, 2014. Altogether 4 alerts Measles, 3 C. Leishmaniasis, and 1 Bloody Diarrhea were reported and responded.

Hodaidah Governorate

25 health facilities from 22 districts in Hodaidah governorate reported to eDEWS with a total of 11067 patients consultations in week 4, 2014. Total 11 alerts were reported and appropriate measures were taken in week 4, 2014. Altogether 4 alerts Measles, 2 Dengue Fever, and 1 each for AVH, Pertussis, C. Leishmaniasis, Meningitis and Schistosomiasis were reported and responded.

Hajjah Governorate

24 health facilities from 23 districts in Hajjah governorate reported to eDEWS with a total of 3840 patients consultations in week 4, 2014. Total 2 alerts were reported and appropriate measures were taken in week 4, 2014. Altogether 1 alert each for Pertussis and C. Leishmaniasis were reported and responded.

Amana Governorate

24 health facilities from 10 districts in Amana governorate reported to eDEWS with a total of 14007 patients consultations in week 4, 2014. Total 7 alerts were reported and appropriate measures were taken in week 4, 2014. Altogether 5 alerts Measles, 1 each for Pertussis and Acute Flaccid Paralysis were reported and responded.

Sa'da Governorate

23 health facilities from 15 districts in Sa'da governorate reported to eDEWS with a total of 7741 patients consultations in week 4, 2014. Total 13 alerts were reported and appropriate measures were taken in week 4, 2014. Altogether 6 alerts C. Leishmaniasis, 4 Measles, 2 Pertussis, and 1 Acute Flaccid Paralysis were reported and responded.

Outbreak Investigated and Responded in Epi-week 4, 2014

Suspected Disease	Governorate	District	HF's	Actions Taken / Notes	Cases	Deaths
Pertussis	Lahj	Labaos	Labaos Hospital	A visit was conducted to labose hospital, then a field investigation was conducted by eDEWS team to Gudra village in labose district were most cases come from. There was an outbreak of pertussis (cases diagnosed by a pediatric specialist in the field), most cases were not vaccinated (due to refusal of families). Therapeutic and preventive erythromycin was distributed to cases and contact. Health education was conducted during active search of cases. The situation was discussed with DG of	13	0

Alerts Investigated and Responded in Epi-week 4, 2014

Suspected Disease	Governorate	District	HF's	Actions Taken / Notes	Cases	Deaths
Pertussis	Lahj	Radffan and Al-Maflahi	Radffan and Al-Maflahi HF's.	eDEWS team contact focal point, information share, cases were diagnosed clinically using case definition by doctor in clinic, cases were treated as per standard protocol for Pertussis..	3	0
Measles	Lahj	Alara, Al-Hawtah and Tuban	Alara, MCH and Saber HF's.	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 sent to central lab in sana'a for confirmation. Further investigation will be conducted.	9	0
AVH	Lahj	Radffan	Radffan hospital	eDEWS team contact focal point, cases were diagnosed clinically using case definition, after further investigation, there was no cluster of cases. All patients were treated adequately.	3	0
AFP	Aden	Craiter	Al Qatea	A visit was made, the case of AFP was reported on 17/01/ 2014, investigation was conducted on 18/01/ 2014 at home, two stool samples were collected from patient and three samples from contacts, samples were sent to Sanaa on 20/01/ 2014. .	1	0
Measles	Aden	Al Muala, Al-Mansora and Al-Shaikh Othman	Al Muala, Al-Wali, Al-Qahirah and Al-Wahdah HF's.	eDEWS team contact focal point, information shared, and visit 2 health facilities, 9 cases were reported, investigation forms were filled by OPD doctor for 7 cases, blood samples were collected at the same day from 5 cases. Both investigation forms and blood samples are in the province level to be	9	0
Pertussis	Aden	al Mansora and Al-Shaikh Othman	Al Wali and Al-Wahdah HF's.	eDEWS team contact focal point, information shared, 7 cases were reported by duty doctor using case definition. The three cases were brothers from Shabwa (vaccination was completed from history, no EPI cards were seen), all patients were treated by antibiotics.	7	0
AVH	Aden	Ash Shaikh Outhman	Al Wahdah Hosp.	A visit was made by eDEWS team, three cases were reported. One case was reported from Aden and the other two cases with no contact information .	3	0
AFP	Aden	Ash Shaikh Outhman	Al Wahdah Hosp.	A visit was made, the case was a suspected AFP complained from paralysis a week before it was reported on 14/01/ 2014, investigation was conducted in the hospital on 16/01/ 2014. Two stool samples were collected from the case and sent to Sanaa at 19/01/ 2014. Three stool samples from contacts were collected from Abyan by eDEWS surveillance coordinator/ Abyan on 22/01/ 2014 and	1	0
Meningitis	Aden	Ash Shaikh Outhman	Al Wahdah Hosp.	A visit was made, information was shared, 5 cases were admitted (from two different governorates) and underwent the measures of Meningitis Surveillance Programme in the hospital by filling investigation forms, LP was conducted only for one case, the sixth case was seen in OPD.	6	0
Pneumonia	Aden	Ash Shaikh Outhman	Al Wahdah Hosp.	First case: A four month female arrived to emergency department on 16/01/2014 in a sever condition, complaining from cough, high grade fever and difficulty in breathing for 3days. Died on 17/01/2014 with a final diagnosis of Bronchopneumonia. Second case: A 40 days male infant from Tur-albaha admitted to hospital through emergency department on 20/01/2014. Patient died within an hours from admission. Final diagnosis was	30	2
Meningitis	Aden	Ash Shaikh Outhman	Al Wahdah Hosp.	First case: A 1.2 years cerebral palsy male child from Al-memdara, admitted on 17/01/2014 complaining of high grade fever, projectile vomiting, convulsion and loss of conscious. Patient was in ICU, died on 18/01/2014 with a final diagnosis of meningococcal meningitis . Second case: A 5 years female child from Alsubeha, admitted on 22/01/2014 through emergency department in a shock state and died after one hour. Final diagnosis was suspected meningitis?, Septic	6	2
Pertussis	Abyan	Zingibar	MCH Zonjibar	A visit was made by eDEWS team, the case was diagnosed clinically using case definition by doctor in OPD, case was treated as per standard protocol for Pertussis.	1	0
Measles	Taiz	Al Mudhaffar	Almodafar Hospital	Focal point contacted, information shared, samples were collected , and will be send to the centrla lab.	1	0
Meningitis	Taiz	Al Qahirah	Sweden Hospital	HF was visited ,, information shared , samples were sent to the HF lab. With negative results (No growth).	28	0
AVH	Taiz	Al Qahirah	Sweden Hospital	A visit was conducted to the HF , 2 samples results only were positive .out of 10 samples tested week according to the lab. Records(No alert threshold)	8	0
NNT	Taiz	Al Qahirah	Sweden Hospital	The suspected NNT case aged 11 days Female child from Osiferah brought to hospital 6 days ago . C/O fever convulsion and inability to breast feed(sucking) she was admitted into hospital , anti-tetanus toxoid doses , antibiotic therapy have been started. The suspected NNT death case aged 7 days Male, child from Alhashamah , date of admission:17/01/2014 , C/O fever , convulsion , inability to breast feed ,general condition :BAD , Anti-tetanus toxoid , Antibiotic ,I.V fluids were given , date of death	1	1
DF	Taiz	Salh	Al-Thawrah Hosp.	Focal point contacted , she informed us that the suspected DF cases had history of high fever , retrobulbar pain ,myalgia and arthralgia , Elisa test is not avilable at the HF, cases were diagnosed clinically only , Medications have been started, No cluster of 3 cases in one location was reported.Alert	3	0
Measles	Hadramut	Alridh Qosear, Al-Mukalla and Al-Shaher	Alridh, University and Al-Hamy	eDEWS team contact focal point, the cases were diagnosed clinically using case definition. Surveillance coordinator was informed, blood samples were collected from 4 cases only and will be sent to surveillance central lab in Sana'a for confirmation.	19	0
Pertussis	Hadramut	Alridh Qosear	Gosear H.C.	eDEWS team contact focal point, the case was diagnosed clinically using case definition. Antibiotic treatment was given to the patient.	1	0
Measles	Ibb	Adhi har and Al-Mashanah	Al thawrah, MCH, Naser and Al-Noor	focal point was contacted. Information shared samples collected and sent to central LAB.	5	0
DF	Hodaidah	AL Hawak and Al-Qanawis	AlAksa and Al-Qanawis HF's.	Focal point contacted , information shared , patients were diagnosed clinically only (Elisa test wasn't done) , samples collected from pateints stay in hosp , refereance pateint to Hodaidah national lab for confirmation, patients from diferent area.	12	0
Measles	Hodaidah	Al Garrahi, At Tuhayta, Al-Hawak and Ad Dahi	Al Garrahi, At Tuhayta, Al-Aksa and Ad Dahi HF's.	eDEWS coordinator contacted focal point, cases were suspected Measles , samples were collected from patients by district coordinator ,send to laboratory in Sanaa.	9	0
Meningitis	Hodaidah	AL Hawak	AlAksa Hosp.	eDEWS coordinator contacted meningitis focal point, cases diagnosed as meningitis and treated	3	0
AVH	Hodaidah	Al Garrahi	Al Garrahi Hosp.	eDEWS coordinator contacted focal point, cases diagnosed as AVH and treated appropriately.	4	0
Pertussis	Hodaidah	Zabid	Zabid Hosp.	eDEWS coordinator contacted focal point. The cases confirmed to be Pert , and treated	2	0
Pertussis	hajjah	Washhah	Health Center	eDEWS team contact focal point, the cases were diagnosed clinically using case definition. Antibiotic treatment was given to the patients.	2	0
AFP	Amana	Assafia	AL-Thwra HOSP	frist case from SanaCity 7Yold ,the second case male 11Yfrom Mahweet,the bothe tow caeses dignosed asGulliaín Barre syndrome.Third case 2Yold male from saada dignosid as Lipoma in the spain by MRI .stool sampols were collected from the cases and sent for lab confirmation.	3	0
Measles	Amana	Shuaub, Azzal, Al-Sabin, Old City and Al-Tahrir	Al-razi, Azzal, Al-Shaheed AbdullAziz, Al-Zubairi and A-Olofi HF's.	eDEWS team contact focal point, information shared blood samples were collected from the cases and sent for lab confirmation.	9	0
Pertussis	Amana	Al-sabin	Al-sabin Hosp.	eDEWS team contact focal point, 2.5M femal was diagnosed clinically using case definition in ER and admitted in the hospital . Antibiotic treatment was given to the patient . Case from Mahweet.	1	0
Measles	Saada	Saada, Sehar and Majz	Al-jumhory, Al-Talh, Majz and Dhahian HF's.	eDEWS team contact focal point, information shared; cases were diagnosed clinically using case definitin blood samples were collected from 13 cases and will be sent to central lab in sanaa for conformation	26	0
AFP	Saada	saada	Al-jumhory hospital	eDEWS team visit the hospital. Investigation was conducted by AFP surveillance coordinator, 2 stool samples were collected from patient and 3from close contacts .All samples were sent to central	1	0
Pertussis	Saada	Sehar and Ghamer	At Talh and Ghamer HF's.	eDEWS team contact focal point,surveillance coordinator was informed,cases diagnosed clinically using case definition by doctor in clinic.On job training of doctor about investigaton was conducted.Reported cases were treated as per standard protocol for pertussis .	8	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.