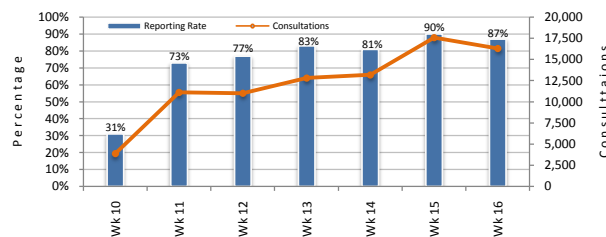


Volume 01, Issue 6, Epi week 16, 12 April - 18 April 2013

Highlights

- During week no 16, 2013; 87% (82/90) health facilities from 4 pilot governorates provided valid surveillance data.
- The total number of consultations reported during the week in pilot governorates was 16288 compared to 17559 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 53 alerts were generated by eDEWS system in week 16, 2013; Of these, 48 alerts were verified as true for further investigations with appropriate response.
- Altogether 29 alerts of Measles, 7 AVH, 6 Pertussis, 3 Cut.Leishmaniasis, and 1 each for Acute Diarrhea, Meningitis and Dengue Fever were received and responded. In total, 4 deaths due to Pneumonia (2), Meningitis (1) and acute diarrhea (1) were reported from Taiz and Aden (Alert table, page 3)
- Online disease surveillance and response system was launched in 4 governorates (Aden, Abyan, Lahj and Taiz) in March 2013. Ongoing on site trainings to improve weekly reporting and immediate notification are underway in all 4 pilot governorates.

eDEWS Reporting Rates vs Consultations in Pilot Governorates, Epi weeks 10 to 16, 2013



Distribution of Reporting Rates by Governorates (Epi-week 16, 2013)



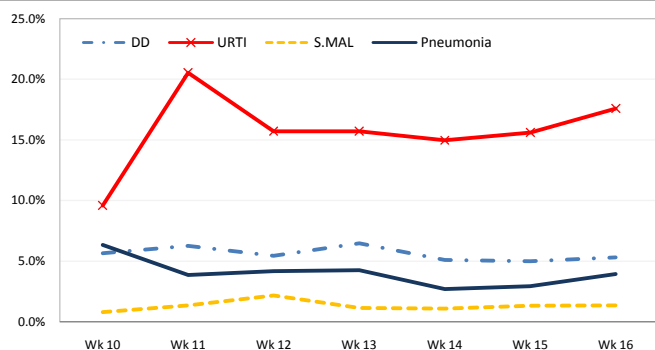
Leading Priority Diseases - Pilot Governorates (Epi-week 16, 2013)

- URTI (17.6%), suspected malaria (1.3%), OAD (5.1%) and Pneumonia (3.9%) remain the leading causes of morbidity representing a total of 27.9%.
- Acute viral hepatitis, acute watery diarrhea and Schistosomiasis represented less than 1% of total morbidity in reporting period. Bloody diarrhea represented 0.1% of this morbidity.
- All diarrheal disease comprised 5.3% and Pneumonia 3.9% of total morbidity in Pilot Governorates this week.
- All diarrheal disease comprised 3.08% and Pneumonia 2.31% of total morbidity in the <5 years age group.

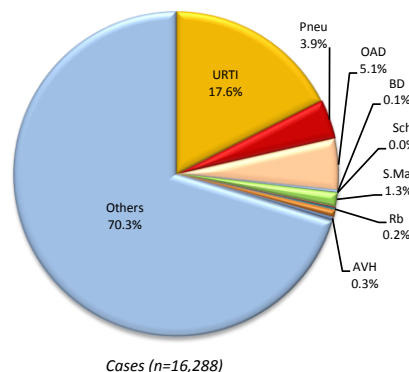
31 districts from 4 Governorates reported to eDEWS in week 16, 2013



Trends for Leading Priority Diseases in Pilot Governorates - Epiweeks 10 to 16, 2013



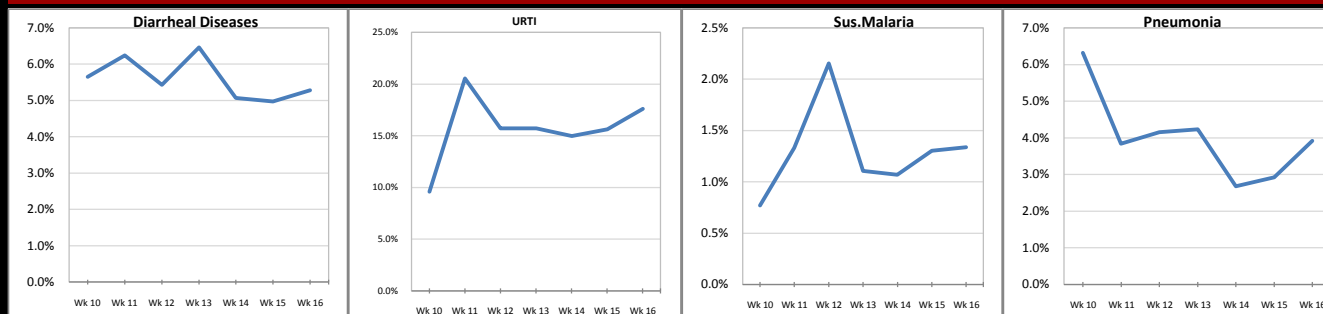
Proportional Morbidity for Leading Priority Diseases - Epiweek 16, 2013



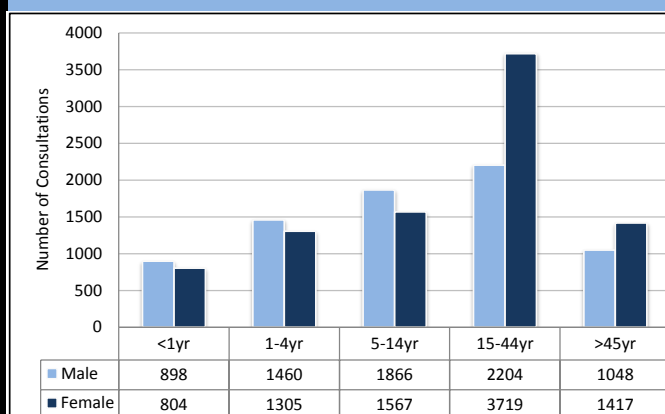
Cases (n=16,288)

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 10 to 16, 2013)



Age and Sex distribution of total consultations of leading diseases (Epi week 16, 2012)



Cumulative number of major health events reported in Epi-weeks 10 to 16, 2013 (1st March 2013 to 18th April 2013)

Diseases	No of Cases	Percentage
Upper Respiratory Infections	13956	16.2%
Diarrheal Diseases	4732	5.5%
Suspected Malaria	1147	1.3%
Pneumonia	3182	3.7%
Total (All consultations)	85914	100%

Leading Diseases by Governorate, Epiweek 16

- URTI was highest in Governorate Abyan (26.2%) this week.
- Diarrheal Disease was highest in Governorate Aden (5.3%) this week.

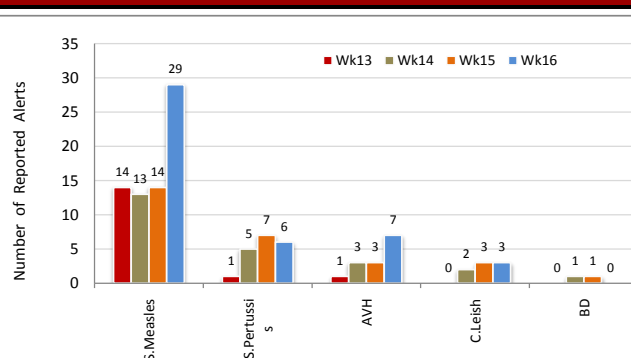
Distribution of consultations of leading diseases by Governorates, Epiweek 16

Suspected Disease	Lahj	Aden	Abyan	Taiz	Total
Upper Respiratory Infections	514	1403	484	463	2864
Pneumonia	155	202	116	166	639
Other Acute Diarrhea	162	358	81	237	838
Bloody Diarrhea	5	2	6	10	23
Acute Watery Diarrhea	0	0	0	0	0
Schistosomiasis	2	0	1	1	4
Malaria	30	108	35	45	218
Meningitis	0	2	0	28	30
Dengue Fever	0	2	0	4	6
Viral Hemorrhagic Fever	1	0	0	0	1
Rabies	0	0	0	27	27
Measles	50	41	5	17	113
Acute Viral Hepatitis (A & E)	3	23	2	28	56
Neonatal Tetanus	0	0	0	0	0
Acute Flaccid Paralysis	0	0	0	0	0
Cutaneous Leishmaniasis	3	0	0	2	5
Diphtheria	0	0	0	0	0
Pertussis	9	4	0	1	14
Other Consultations	2247	4578	1117	3508	11450
Total Consultations	3181	6723	1847	4537	16288

Number of alerts & outbreaks reported and investigated with appropriate response

Sus.Diseases	2013		Current week 16, 2013		System Gen. Alerts (week 16)	
	Alerts	Outbreaks	Alerts	Outbreaks	TRUE	FALSE
OAD	1	0	1	0	1	0
Sus.Pertussis	30	0	6	0	6	0
Sus.Measles	96	0	29	0	29	2
AFP	3	0	0	0	0	0
Bloody Diarrhea	4	0	0	0	0	3
AVH	15	2	7	2	7	0
Sus.Dengue fever	5	0	1	0	1	0
Sus.Meningitis	6	0	1	0	1	0
Cut.Leishmaniasis	10	0	3	0	3	0
NNT	1	0	0	0	0	0
Total	171	2	48	0	48	5

Number of Alerts Received and Responded (Epiweeks 12 to 16, 2013)



Lahj Governorate

25 health facilities from 13 districts in Lahj governorate reported to eDEWS with a total of 3181 patients consultations in week 16, 2013. Total 19 alerts were reported and appropriate measures were taken in week 16, 2013. Altogether 13 alerts for Measles, 4 pertussis and 2 CL were reported and responded.

Aden Governorate

23 health facilities from 8 districts in Aden governorate reported to eDEWS with a total of 6,723 patients consultations in week 16, 2013. Total 14 alerts were reported and appropriate measures were taken in week 16, 2013. Altogether 8 alerts for Measles, 3 AVH and 1 alert each for Pertussis, OAD and Pneumonia were reported and responded.

Abyan Governorate

16 health facilities from 3 districts in Abyan governorate reported to eDEWS with a total of 1,847 patients consultations in week 16, 2013. One alert was reported and appropriate measures were taken in week 16, 2013.

Taiz Governorate

18 health facilities from 7 districts in Taiz governorate reported to eDEWS with a total of 4,537 patients consultations in week 16, 2013. Total 16 alerts were reported and appropriate measures were taken in week 16, 2013. Altogether 7 alerts for Measles, 4 AVH and 1 for each Meningitis, Dengue Fever, Pertussis, Pneumonia and CL were reported and responded.

Outbreak Investigated and Responded in Epi-week 16, 2013

Suspected Disease	Governorate	District	Health Facilities	Actions Taken / Notes	Cases	Deaths
AVH	Aden	Al-Mualla, Craiter and Al-Shaikh Othman	Al-Mualla, AlMaidan, AlWehda	SC was contacted, all cases were from same location meeting outbreak criteria, prompt action was taken with health education sessions in schools about causative agent, mode of transmission and prevention of viral hepatitis. Outbreak investigations and response are underway.	13	0

Alerts Investigated and Responded in Epi-week 16, 2013

Suspected Disease	Governorate	District	Health Facilities	Actions Taken / Notes	Cases	Deaths
Measles	Taiz	Ash Shamayatyn	Khalifa Hosp	Field visit was conducted by eDEWS team, the alert was found to be true alert, samples were collected and sent to central lab in Sanaa, an active case search was done in village and school of a case but no other cases were found. 30% (6/17) children were not immunized and 70% (11/17) children were partially immunized. Information was shared with EPI focal point and DG health office to plan mopup activity to immunize missing children.	1	0
Meningitis	Taiz	Al-Qahirah	Al-Sewedi	eDEWS team visited HF and it was found that a 6 months old male child was brought to hospital from Alrahida area on 14th April with complain of high fever, neck stiffness and convulsions. He was admitted, LP was done and proper medication was started. Results were not available at the time of investigations, pt died on third day of admission, no similar cases in the same house or same area were reported. Followup of previous weeks samples: Only one sample was found positive (positivity rate <2%) for Bacterial Meningitis (Strept. Meng) of total 67 samples collected from suspected meningitis cases in March 2013.	28	1
Pertussis	Taiz	Al-Qahirah	Al-Sewedi	District coordinator was contacted, a 10 months old female child from Mawiah was suspected as a case of pertussis clinically. Pt was not vaccinated, brought to hospital with severe cough for 12 days followed by whooping cough, no contact information was available for field investigations, importance of immediate alert notification and recording of detailed contact information of pt was discussed with HF focal person.	1	0
Measles	Aden	Dar-Saad, Al-Shakh Othman, Al-Mansora, Al-Buriqa, Al-Mualla, Craiter	Dar-Saad, Kod Al-Othmani, Hashed, AlShaab, AlMualla, AlMaidan, AlQateeh	Cases diagnosed as suspected measles clinically, blood samples were collected from 13 cases of under 5 years of age in DarSaad Polyclinic, AlMualla, AlMaidan and AlQateeh HFs. Samples were not collected in other HFs because of previously confirmed Rubella outbreak.	34	0
Measles	Lahj	Tuban, Al-Hawtah, Radfan, AlMadaribah, AlMaflahy, AlQabyatah and Haliman	Al-Feyoush HU, Ibn Khaldon, Radfan, Saber, AlShat, AlWaht, Jiblah, AlSharif, Karish, AlMaflahy and Halimain HFs	Measles focal point was contacted and information was shared; Field investigation was done, blood sample was collected and sent to central lab sana'a for lab confirmation.	47	0
Acute Viral Hepatitis	Taiz	Salah	Lab National Center	District surveillance coordinator was contacted, reinforced case management, samples were collected and sent to lab, results are awaited.	4	0
Cut.Leishmaniasis	Taiz	Ash Shamayatyn	Khalifa Hosp	District coordinator was contacted, blood samples were collected and sent to lab. Results are awaited. Contact information of some cases was not available so importance of recoding contact information for field investigations was discussed with HF focal person. Further investigations planned.	1	0
Measles	Taiz	Al-Moudafer, Salah, AlQahira	Al-Hekma, AlMoudafer, Alawdah, AlSewedi, 26Sep HFs	District coordinator was contacted, information shared, samples were collected and sent to central lab Sana'a, results are awaited. Results for samples collected between 1st Jan 2013 and 10th March 2013 showed 11 positive samples for Rubella only.	17	0
Dengue Fever	Taiz	Al-Moudafer	Al-Hekma Hosp	District coordinator was contacted, alert was true as 4 cases were suspected for Dengue, samples were collected and sent to lab, results are awaited. Contact information of cases was not available so importance of recoding contact information for field investigations was discussed with HF focal person.	4	0
Pneumonia	Taiz	Al-Qahirah	Al-Sewedi	The HF was visited, it was found that a 8 months male child (malnourished) from Mawiah was brought to hospital with history of severe chest infection on 15th April, he was admitted, proper treatment was provided for pneumonia but he died on the same day, no similar cases were found the same house or area.	0	1
Pneumonia	Aden	Al-Shakh Othman	Al-Wehda	eDEWS team visited hospital for investigation, the death case was a female aged 15 years, referred from yafe'a on 10/4/2013 with provisional diagnosis of pneumonia. She was admitted in ICU and died due to cardiopulmonary arrest on 14/4/2013.	0	1
Other Acute Diarrhea	Aden	Al-Shakh Othman	Al-Wehda	eDEWS team visited hospital for investigation, the death case was a female child aged 1 year; pt was brought to the hospital with complain of diarrhea (brain atrophy was diagnosed later on), admitted in ICU on 8/4/2013 with a diagnosis of bronchopneumonia. Pt died on 13/4/2013 at due to cardiopulmonary arrest.	0	1
Bloody Diarrhea	Taiz	Al-Qahirah	26-Sep	District coordinator was contacted, upon investigation it was found that it was a false alert (didn't meet alert threshold criteria) as cases were sporadic not from a single location. On job training was given on case definition of BD.	2	0
Acute Viral Hepatitis	Taiz	Al-Rawdah, AlQahira	Al-Rawdah, AlSewedi	District coordinator was contacted, upon investigation it was found that it was a false alert (didn't meet alert threshold criteria) as cases were sporadic not from a single location. On job training was given on case definition of AVH.	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 four governorates (Aden, Abyan, Lahj and Taiz) 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.