

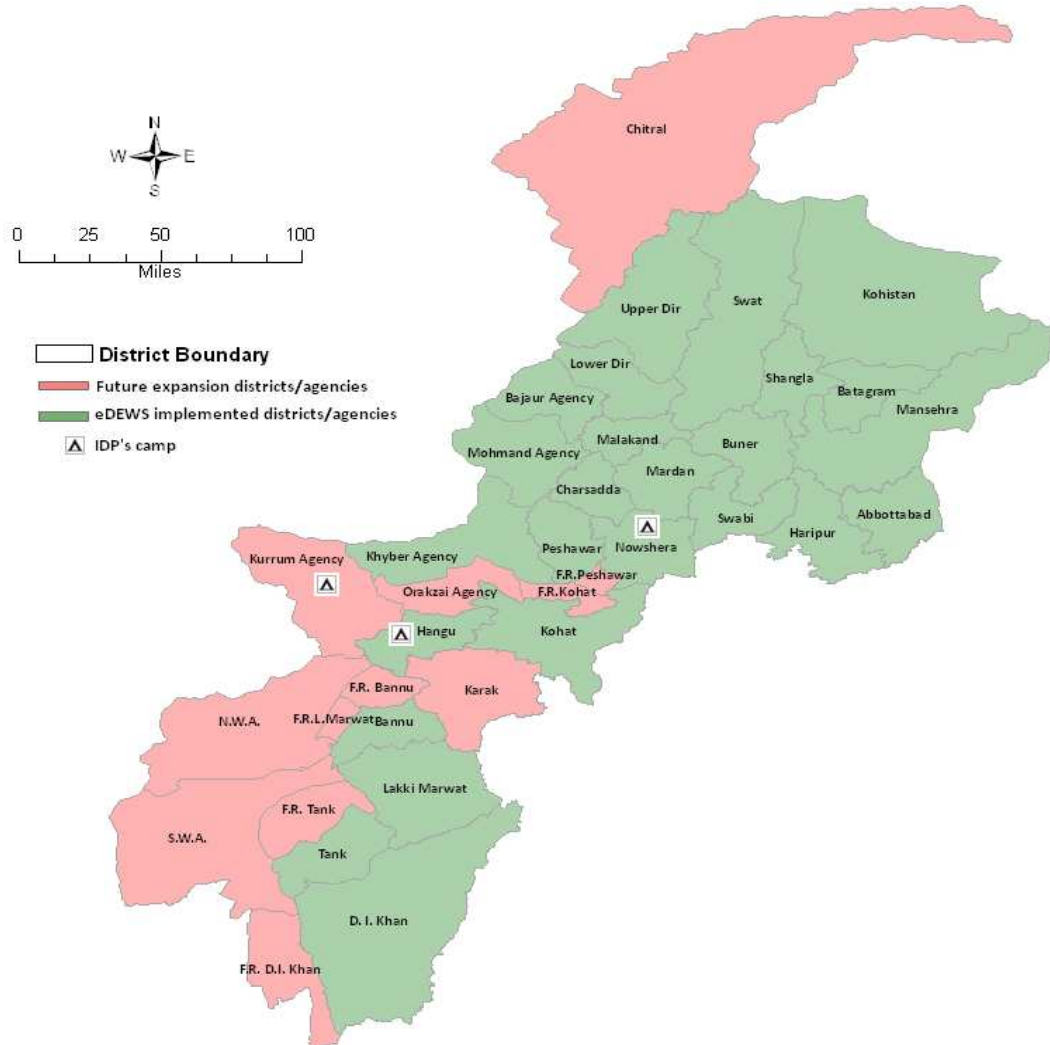


Weekly **Epidemiological Bulletin**

Electronic Disease Early Warning System & Response (eDEWS)

in Khyber Pakhtunkhwa and FATA

Epidemiological Week-11 (11th March to 17th March, 2012)



Priority diseases under surveillance in eDEWS

Respiratory Diseases

Acute (upper) respiratory infections
Pneumonia <5 years
Pneumonia > 5 years
Suspected Diphtheria
Suspected Pertussis

Gastro Intestinal Diseases

Acute Watery Diarrhea <5 year
Acute Watery Diarrhea > 5 year
Bloody Diarrhea <5 years
Bloody Diarrhea > 5 years
Other Acute Diarrhea < 5 years
Other Acute Diarrhea > 5 years
Suspected Enteric/Typhoid Fever

Other Communicable

Suspected Malaria
Suspected Meningitis
Suspected Dengue Fever
Suspected Viral Hemorrhagic Fever
Pyrexia Of Unknown Origin

Vaccine Preventable

Suspected Measles
Suspected Acute Viral Hepatitis
Chronic Viral Hepatitis
Neonatal Tetanus
Acute Flaccid Paralysis

Skin Disease

Scabies
Cutaneous Leishmaniasis

Injuries /Poisoning

Injuries
Snake bite

Other unusual diseases

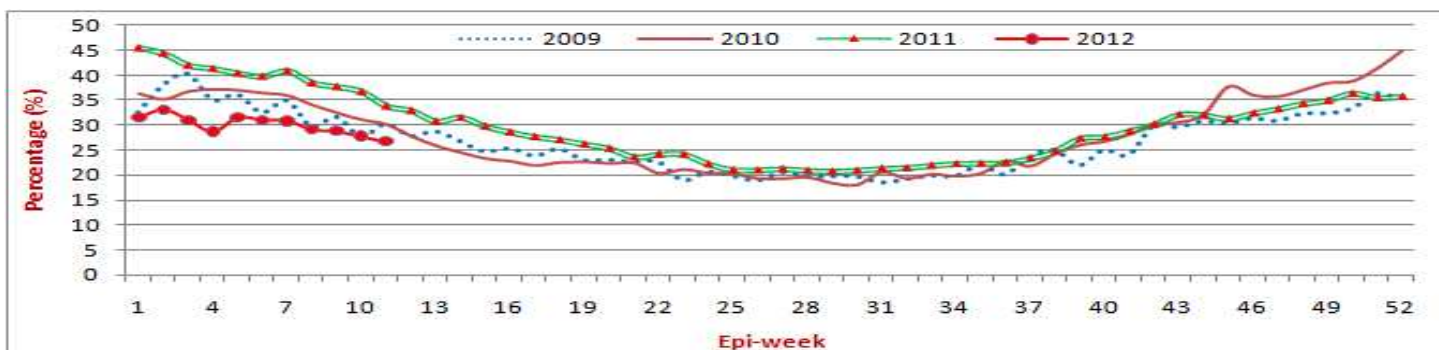
Other unusual diseases

HIGHLIGHTS

- ❖ 18 districts and 3 agencies provided surveillance data to the eDEWS this week from 524 health facilities on time.
- ❖ A total of 133,873 consultations were reported through eDEWS of which 27% or 35,857 cases were Acute Upper Respiratory Infection, is still the highest cause of morbidity of total consultations were showing 1% decrease in percentage as compared to week 10.
- ❖ Other Acute Diarrhoea shared 5% or 7,312 cases of the total consultations showing 1% decrease in percentage as compared to previous week.
- ❖ Pyrexia of Unknown Origin accounted for 5% or 6,852 cases out of total consultations.
- ❖ Skin Infection (Skin Inf.) reported at 3% or 3,794 cases and Typhoid Fever comprised only 0.3% or 346 cases out of total consultations.
- ❖ A total of 51 alerts including 4 measles outbreaks were reported in this week. 37 alerts for suspected Measles, 4 for Cutaneous Leishmaniasis, 2 for Diphtheria, 5 for Neonatal Tetanus while 1 each for Falciparum Malaria, Acute Watery Diarrhoea and Bloody Diarrhea.

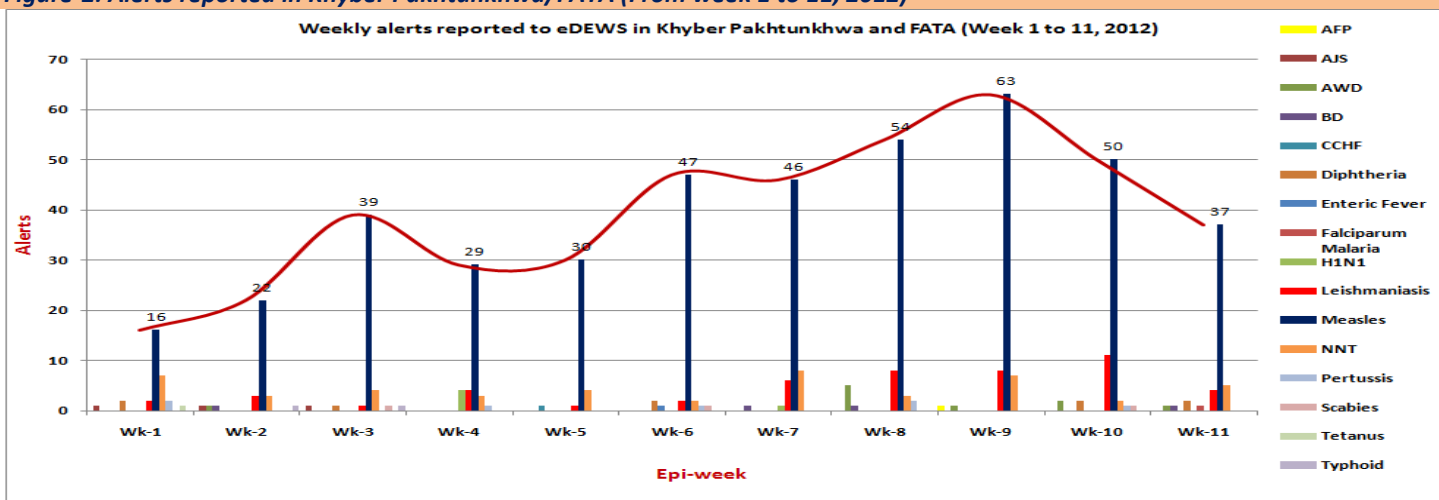
Compiled situation in Khyber Pakhtunkhwa & FATA

Figure-1: Four years trend of Acute Respiratory Tract Infection in Khyber Pakhtunkhwa/FATA (2009, 2010, 2011 and 2012)



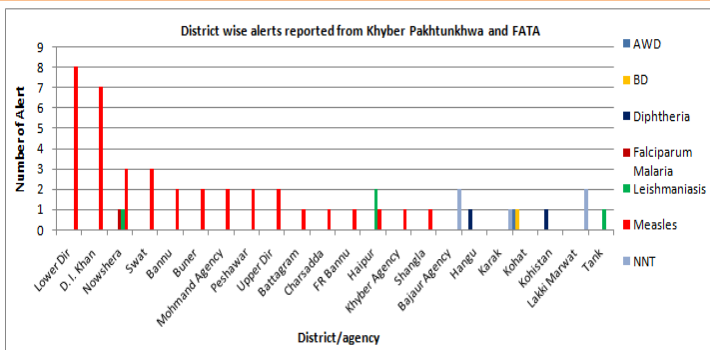
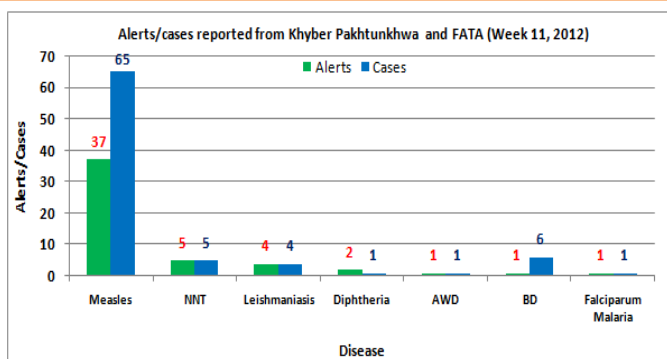
The above graph shows the trend of Acute Respiratory Tract Infection cases out of total consultations reported to DEWS in 2009, 2010, 2011 and 2012 up until now. ARI percentage trend in year 2012 is showing low than previous three years due to intervention of ARI centres in Khyber Pakhtunkhwa. In this week 11, 2012 ARI consultations shows 27% or 35,857 cases of total cases which shows 1% decrease in percentage as compared to week 10.

Figure-2: Alerts reported in Khyber Pakhtunkhwa/FATA (From week 1 to 11, 2012)



The above graph shows the different reported alerts to DEWS from week 1 to 11, 2012. A cumulative figure for the current year is **579 alerts (1,330 cases)** including of **43 outbreaks** were reported. Measles alerts are leading in Khyber Pakhtunkhwa and FATA with 433 alerts (797 cases) including 31 outbreaks. Followed by Leishmaniasis 50 alerts (162 cases) including 3 outbreaks, Neonatal Tetanus 48 alerts (50 cases), AWD 10 alerts (18 cases), Diphtheria 9 alerts (9 cases), Pertussis 7 alerts (11 cases), H1N1 5 alerts (11 cases) including 1 outbreak, Bloody Diarrhoea 4 alerts (19 cases) including 2 outbreaks, AJS 3 alerts (28 cases) including 1 outbreak, Scabies 3 alerts (179 cases) including 2 outbreaks, Typhoid 3 alerts (42 cases) including 3 outbreaks, AFP 1 alert (1 case), CCHF 1 alert (1 case), Tetanus 1 alert (1 case) and Falciparum Malaria 1 alert (1 case) were shared.

Figure-3: Number of alerts and alert cases reported in Khyber Pakhtunkhwa/FATA (Week 11, 2012)



The above left side graph shows different alerts and their cases reported in KP/FATA and right side graph shows different alerts shared by district wise in week 11, 2012. In this week a total of **51 alerts (83 cases)** including **4 measles outbreaks** were reported. High number of alerts reported from district Lower Dir 8 measles alerts (27 cases) including 2 outbreaks were shared, followed by D.I.Khan 7 measles alerts (7 cases), Nowshera 5 alerts (5 cases) including 1 Falciparum Malaria, 1 Leishmaniasis and 3 Measles, Swat

3 measles alerts (3 cases), Haripur 3 alerts (6 cases) including leishmaniasis 2 alerts (2 cases) and measles 1 alert (1 case), Kohat 2 alerts (7 cases) including 1 AWD alert (1 case) and BD 1 alert (6 cases from different location), Bannu 2 measles alerts (2 cases), Buner 2 measles alerts (2 cases), Mohamand Agency 2 measles alerts (2 cases), Peshawar 2 measles alerts (2 cases), Upper Dir 2 measles alerts (2 cases), Bajaur 2 NNT alerts (2 cases), Lakki Marwat 2 NNT alerts (2 cases), Shangla 1 measles alert (7 cases) including 1 outbreak, Battagram 1 measles alert (1 case), Charsadda 1 measles 1 alert (1 case), FR Bannu 1 measles alert (1 case), Khyber Agency measles 1 alert (1 case), Hangu 1 diphtheria alert (1 case), Karak 1 NNT alert (1 case), Kohistan 1 diphtheria (1 case), and Tank 1 Leishmaniasis alert (1 case) were reported and responded.

✓ **A total of 4 measles outbreaks were shared..**

- ❖ 2 measles outbreaks from district Lower Dir...
 - 1 measles outbreak of 9 cases from Village Manogay, UC Koto Tehsil Balmabat was reported. Initially for 1 case active surveillance conducted hilly area with total population of 150 houses, 8 more cases were found in the surrounding, routine outreach vaccination conducted in the area by EPI Team and vaccinated 178 children (BCG- 9, Measle-136, Penta- 33). Vit-A was given, Blood Sample Collected for confirmation of antibodies, Health education session conducted with the family members and community, patient isolated, EDO-H & EPI Coordinator were informed & requested for regular outreach immunization in the area and surrounding.
 - Other measles outbreak of 7 cases was reported from village Hasil Banda, UC Mayar, Tehsil Samar Bagh. Active Surveillance conducted, remote/hilly area with total population of 120 houses, 6 more recovered cases were found in the surrounding, routine outreach vaccination conducted in the area by EPI Team and vaccinated 96 children for routine immunization (BCG- 3 & Measles-93), Vit-A was given, Blood Sample Collected for confirmation of antibodies, Health education session conducted with the family members and community, patient isolated, EDO-H & EPI Coordinator were informed and requested for regular outreach immunization in the area.
- ❖ 4 measles cases including 3 deaths were reported from W & C Hospital Bannu. Initially a suspected case of measles was reported from W & C hospital Bannu. Case was 15 months old female child with vaccination history zero. Area was visited. On active surveillance 3 more cases were found, one in the same house and two in the neighbour house. Surroundings all 17 houses were checked and total 21 children were given vitamin A and vaccinated against measles. Data was shared with EPI coordinator and EDO health.
- ❖ A total of 7 measles cases were reported from village Khwar Kele, Shangla. Initially a phone call from community elder of Village Khwar Kele was received with report of his grand daughter having suspected Measles and a possible outbreak in the village. On response it was noted that 07 children had signs and symptoms of measles in the surrounding 10 houses, as a result blood samples were taken from 2- 4yrs female children were taken and sent to NIH for further analysis. On active surveillance a total of 18 children till the age of 15yrs were analysed and partially vaccinated plus none vaccinated were vaccinated. Outbreak was declared by EDOH and EPI teams were sent to the area for mass vaccination. Early report has been shared with District, Hub and National office. Vitamin A was given to the affected and EPI based sessions were taken in the community. No other case has been reported since than. Follow up is planned outlining weekly report sharing for the next 4 weeks plus line list maintenance. WHO technical assistance will continue through out this phase.

Table-1: Leading causes of seeking health care in flood affected districts, compiled weekly reports

Disease name	Week-8	Week-9	Week-10	Week-11	Total Consultations (1 st Jan to 17 th Mar, 2012)
Acute Diarrhoea	6,569 (5%)	7,356 (6%)	7,203 (6%)	7,312 (5%)	63,382 (5.3%)
Bloody Diarrhoea	851 (1%)	976 (1%)	1,047 (1%)	956 (1%)	8,557 (1%)
Suspected Malaria	1,222 (1%)	1,872 (1%)	1,981 (2%)	1,366 (1%)	13,243 (1%)
Skin Diseases	3,426 (3%)	3,745 (3%)	3,748 (3%)	3,794 (3%)	31,444 (3%)
Pyrexia of Unknown Origin	5,977 (5%)	6,791 (5%)	6,269 (5%)	6,852 (5%)	53,615 (5%)
Acute Respiratory Infection	37,427 (29%)	38,299 (29%)	35,525 (28%)	35,857 (27%)	356,475 (30%)
Total Consultations	128,128	132,831	127,703	133,873	1,195,544

The above table shows compiled communicable diseases cases from weekly reports and proportional morbidity through eDEWS reported.

Since January 1, 2012, approximately **1,195,544** patient consultations have been reported to the eDEWS from Khyber Pukhtunkhwa province and Federal Administered Treaty Agency (FATA).

In this week 11, 2012 (11th March to 17th March, 2012) reports were received from 524 health centres and the major causes for seeking health care by the communities in almost all of the regions were diarrhoeal diseases 7,312 cases or 6%, acute respiratory infections 35,857 cases or 27%, skin diseases 3,794 cases or 3% and suspected malaria 1,366 cases or 1%.

Figure-4: Total number of HF# reported and consultations (Week no.1 to 11, 2012)

Figure-5: Leading communicable diseases percentage trend in Khyber Pakhtunkhwa/FATA (Week no.1 to 11, 2012)

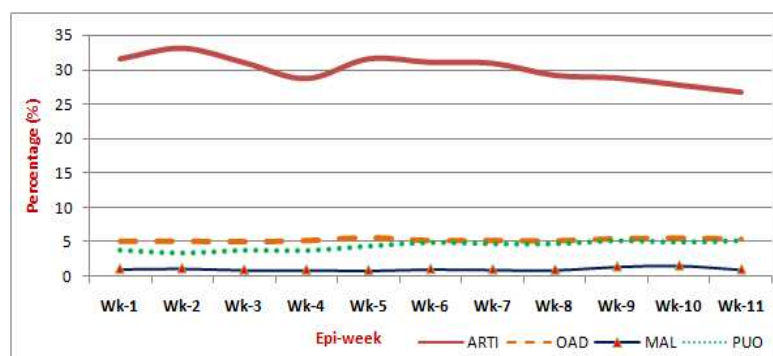
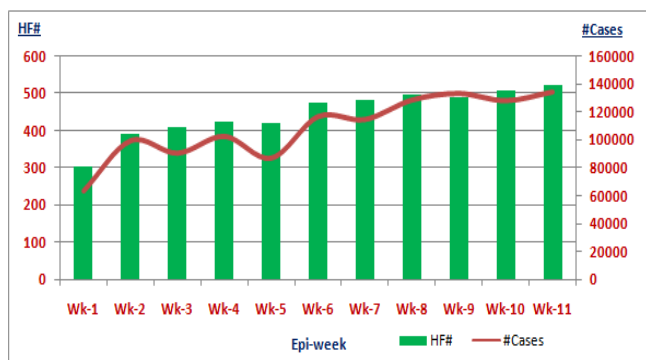


Figure 4 shows the number of health facilities and total number of consultations reported. Increasing in number of cases and reporting units have shown since week 8, 2012 because of more health facilities and districts reported to eDEWS.

Figure 5 shows the weekly percentage trend of ARTI, Other Acute Diarrhoea, suspected Malaria and Pyrexia of Unknown Origin in Khyber Pakhtunkhwa/FATA from week 1 to 11, 2012.

Table-2: Respiratory Diseases situation in Khyber Pakhtunkhwa and FATA

Respiratory Diseases	Week-10	Week-11
Upper Respiratory Infection	32,389	33,300
Pneumonia <5	1,786	1,490
Pneumonia >5	1,350	1,067

Figure-6:

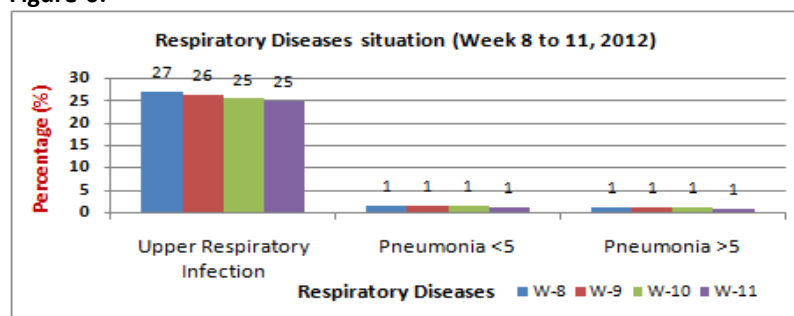


Table 2 shows the last two weeks Acute Respiratory Tract Infection (Upper Respiratory Tract Infection and Lower Respiratory Tract Infection (Pneumonia)) consultations comparison and figure 5 shows the last four weeks percentage situation of ARI.

Table-3: Gastro Intestinal Diseases situation in Khyber Pakhtunkhwa and FATA

Gastro Intestinal Diseases	Week-10	Week-11
Bloody Diarrhea <5	431	424
Bloody Diarrhea >5	616	532
Other Acute Diarrhea <5	3,804	3,891
Other Acute Diarrhea >5	3,399	3,421
Typhoid Fever	414	346

Figure-7:

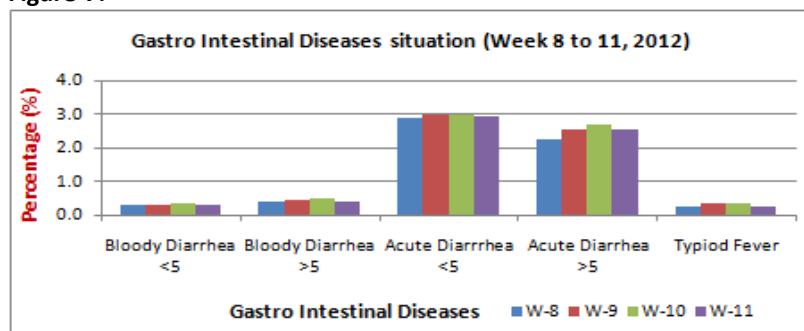


Table 3 shows the last two weeks cases of Gastro Intestinal Diseases and figure 6 shows the percentage of last four weeks.

Province Khyber Pakhtunkhwa:

Figure-8: Distribution of consultations by communicable diseases

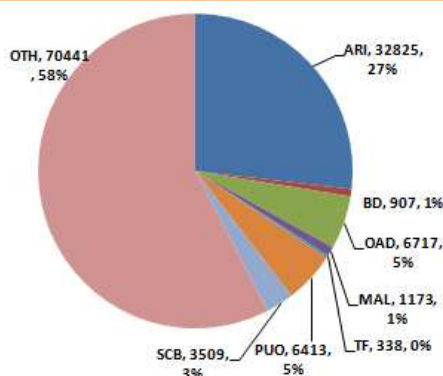
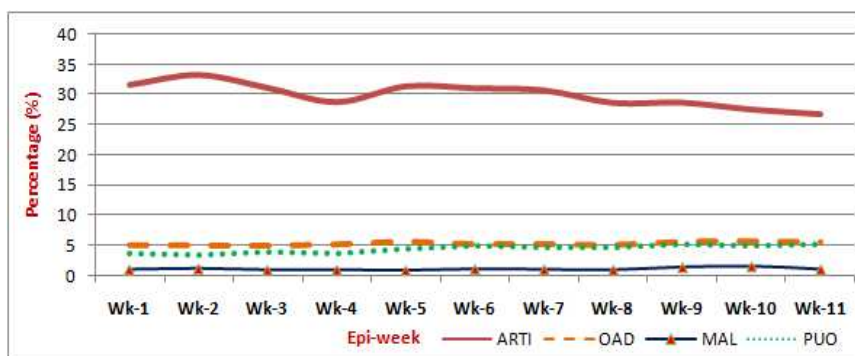
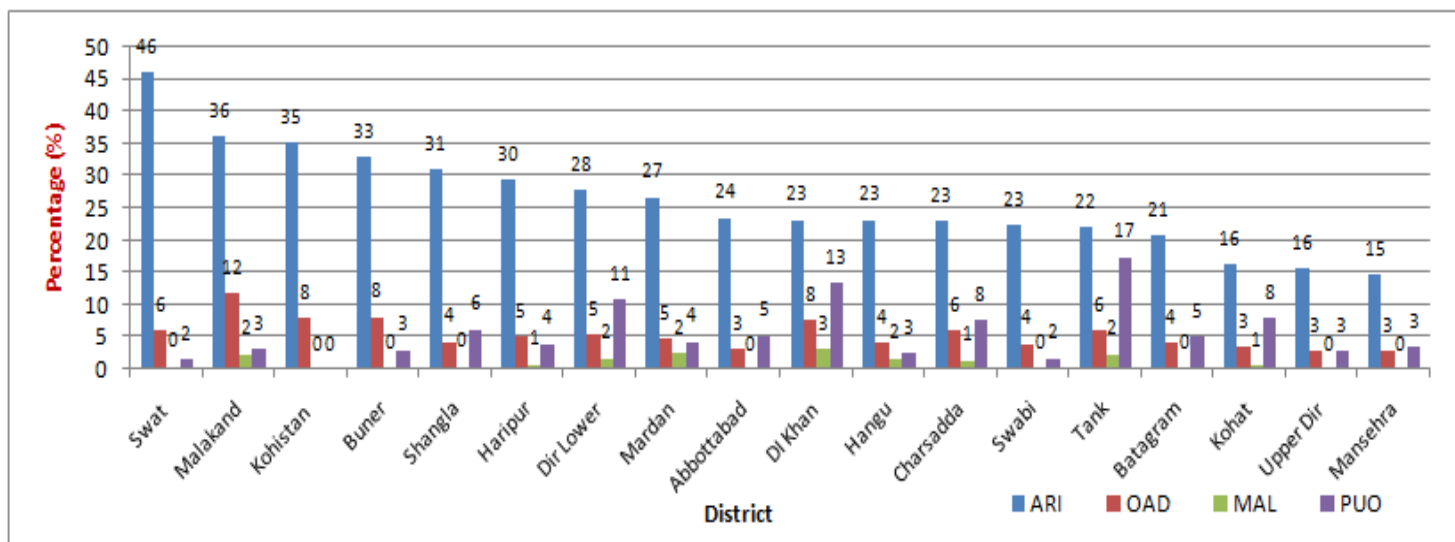


Figure-9: Weekly diseases (ARI, OAD, MAL and PUO) percentage trend



- Figure 8 shows distribution of consultations by communicable diseases in week 11, 2012 and figure 9 shows weekly percentage trend of ARI, OAD, MAL and PUO from week 1 to 11, 2012.
- This week 18 districts reported to eDEWS from 478 health facilities with a total of 122,323 patients' consultations.
- Acute Respiratory Tract Infection 32,825 cases reported were showing 1% decrease in percentage as compared to week 10 patients' visits and accounted for 27% of the total consultations.
- Other Acute Diarrhea cases 6,717 or 5% showing 1% decrease in percentage as compared to last previous week and Suspected Malaria 1,173 cases or 1% were reported.
- While Pyrexia of Unknown Origin cases 6,413 or 5% showing no change in percentage as compared to previous week 10.
- Typhoid Fever (TF) cases 338 (<1%) and Scabies cases 3,509 or 3% were reported.

Figure-10: ARI, OAD, MAL and PUO percentage situation of Khyber Pakhtunkhwa district wise in week 11, 2012



The above figure shows ARI, OAD, MAL and PUO percentage situation district wise in week 11, 2012. During this week high percentage of ARI consultations were reported from district Swat 46% (6,557 cases), followed by district Malakand 36% (2,658 cases), Kohistan 35% (1,001 cases), Buner 33% (2,018 cases) and Shangla 31% (1,673 cases). Similarly high percentage of OAD cases were reported from district Malakand 12% (876 cases), Buner 8% (496 cases), Kohistan 8% (228 cases), D.I. Khan 8% (495 cases) and Swat 6% (860 cases). High percentages of suspected Malaria were reported from district D.I. Khan 3% (202 cases), Mardan 3% (133 cases) and Malakand 2.4% (175 cases). High percentage of Pyrexia of Unknown Origin (PUO) consultations were reported from district Tank 17% (342 cases), D.I. Khan 13% (857 cases), Lower

Dir 11% (618 cases), Kohat 8% (667 cases), Charsadda 8% (1,097 cases) and Shangla 6% (334 cases).

Current week's Alert/Outbreak in Khyber Pakhtunkhwa:

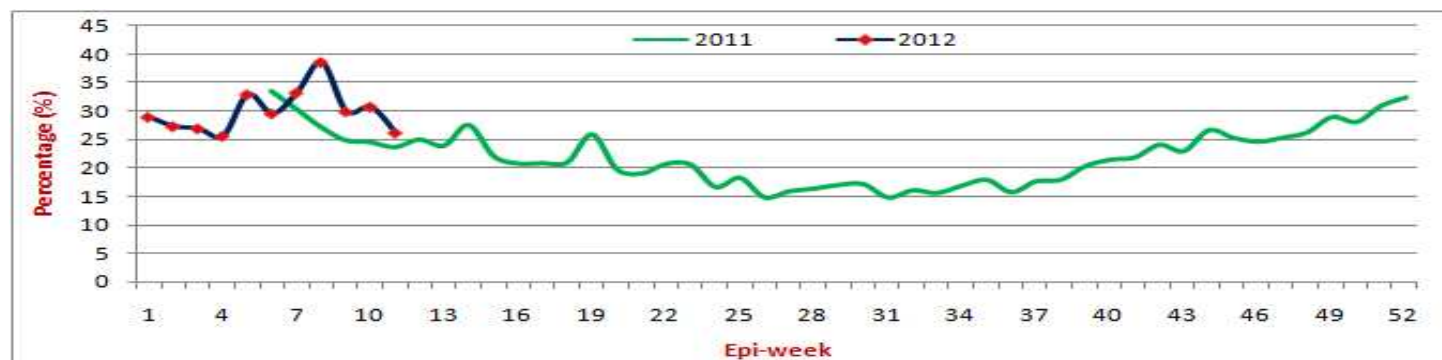
❖ A total of 45 alerts including 4 measles outbreaks were reported in this week. 33 alerts for suspected Measles, 4 for Cutaneous Leishmaniasis, 2 for Diphtheria while 1 each for Neonatal Tetanus, Falciparum Malaria, Acute Watery Diarrhoea and Bloody Diarrhea.

S. No.	Date Investigated	Suspected Disease	District	Location	<5 M	>5 M	<5 F	>5 F	Sample	Positive	Cases	Death
1	14-Mar-12	Measles	Bannu	Village Baka Khel	1	0	0	0	0	r	1	0
2	14-Mar-12	Measles	Bannu	Village Sra Darga	1	0	3	0	1	r	1	3
3	16-Mar-12	NNT	Lakki Marwat	Mohallah Sayed Khel	1	0	0	0	0	r	1	0
4	16-Mar-12	NNT	Lakki Marwat	Village ozhaiki	1	0	0	0	0	r	1	0
5	13-Mar-12	Measles	Battagram	Village Chalonain, UC Rajdhari	1	0	0	0	1	r	1	0
6	13-Mar-12	Measles	D. I. Khan	Jameel Town, Qureshi Morr	0	0	1	0	1	r	1	0
7	13-Mar-12	Measles	D. I. Khan	Mangal Village, Darazinda	1	0	0	0	1	r	1	0
8	13-Mar-12	Measles	D. I. Khan	Wacha Khora, Wana, SWA	0	0	1	0	1	r	1	0
9	13-Mar-12	Measles	D. I. Khan	Gypsies Tents, Bypass Chowk, Kotla Saidan	1	0	0	0	1	r	1	0
10	16-Mar-12	Measles	D. I. Khan	Noble Town, Eid Gah Road	0	0	0	7	1	r	1	0
11	16-Mar-12	Measles	D. I. Khan	Village Fateh	1	0	0	0	1	r	1	0
12	16-Mar-12	Measles	D. I. Khan	Village Kala Gorh, Rang Pur, Tehsil Pahar Pur	1	0	0	0	1	r	1	0
13	12-Mar-12	Measles	Haripur	Afghan Refugee camo Padinna	1	0	0	3	1	r	4	4
14	14-Mar-12	Leishmaniasis	Haripur	Ghazi city, UC and Tehsil Ghazi	0	1	0	0	0	r	1	1
15	15-Mar-12	Leishmaniasis	Haripur	Gudwalian, UC Bakka	0	1	0	0	1	r	1	1
16	14-Mar-12	NNT	Karak	Village Lwargee banda , UC Jandri, Tehsil Banad Dawood Sha	1	0	0	0	0	r	1	0
17	13-Mar-12	AWD	Kohat	Union Council Dhoda	0	0	1	0	0	r	1	0
18	15-Mar-12	BD	Kohat	Union Council Usterzai	1	2	0	3	0	r	6	0
29	16-Mar-12	Diphtheria	Hangu	Village Togh, UC Togh Saray	0	0	0	0	0	r	0	0
20	12-Mar-12	Measles	Lower Dir	Village Manogay, UC Koto Tehsil Balmabat, Lower Dir	2	0	2	5	1	r	9	0
21	12-Mar-12	Measles	Lower Dir	Village Darmal Payeen, UC Lajbook, Tehsil Balmabat, Lower Dir	1	0	0	0	1	r	1	0
22	13-Mar-12	Measles	Lower Dir	Village Dandona Surano, UC & Tehsil Samar Bagh, Lower Dir	1	0	0	0	1	r	1	0
23	13-Mar-12	Measles	Lower Dir	Village Qallagai, UC & Tehsil Samar Bagh, Lower Dir	1	0	2	0	1	r	3	0
24	14-Mar-12	Measles	Lower Dir	Village Kar Kabanj, UC Khagram, Tehsil Warri, Upper Dir	1	0	0	0	1	r	1	0

25	14-Mar-12	Measles	Lower Dir	Village Hasil Banda, UC Mayar, Tehsil Samar Bagh, Lower Dir	1	1	4	1	1	r	7	0
26	15-Mar-12	Measles	Lower Dir	Village Qazi Abad, UC Koto, Tehsil Balmbat, Lower Dir	2	0	1	1	1	r	4	0
27	16-Mar-12	Measles	Lower Dir	Village Markhanai, UC Beshigram, Tehsil Lal Qilla, Lower Dir	1	0	0	0	1	r	1	0
28	12-Mar-12	Measles	Nowshera	Phase 1, Sector C, Block 12, Tent 170, IDP # 82831, Jalozaï IDP's Camp	1	0	0	0	1	r	1	0
29	13-Mar-12	Falci-parum Malaria	Nowshera	Phase 3, Sector K, Block 12, Registration No: 5804, Jalozaï IDP's Camp	0	0	0	1	1	r	1	0
30	16-Mar-12	Leishmaniasis	Nowshera	Mohallah: Kasai, Zando Banda	0	1	0	0	1	r	1	0
31	13-Mar-12	Measles	Nowshera	Risalpur	1	0	0	0	1	r	1	0
32	13-Mar-12	Measles	Peshawar	Yousaf Khel Kohat Road	0	0	1	0	1	r	1	0
33	13-Mar-12	Measles	Nowshera	District Nowshera	0	0	1	0	1	r	1	0
34	13-Mar-12	Diphtheria	Kohistan	Village Kalan Bala Bijlee Ghar Tal	0	0	1	0	1	r	1	0
35	13-Mar-12	Measles	Peshawar	Dalazak Road	1	0	0	0	1	r	1	0
36	15-Mar-12	Measles	Charsadda	Prang	1	0	0	0	1	r	1	0
37	13-Mar-12	Measles	Shangla	Village Khwar Kele/UC Lelonai	1	3	3	0	2	r	7	0
38	15-Mar-12	Measles	Swat	Village Chamtalai, UC Janu, Tehsil Khwazakhela	0	1	0	0	1	r	1	0
39	15-Mar-12	Measles	Swat	Village Chinkolai, UC Mashkumai, Tehsil Khwazakhela	0	0	0	1	1	r	1	0
40	16-Mar-12	Measles	Swat	Village Maloch, UC Hazara, Tehsil Kabal	0	1	0	0	1	r	1	0
41	16-Mar-12	Leishmaniasis	Tank	Ranwal	0	0	0	1	0	r	1	0
42	15-Mar-12	Measles	Upper Dir	Village Shaw, UC Dir Urban	1	0	0	0	1	r	1	0
43	15-Mar-12	Measles	Upper Dir	Village Baradog, UC Dogdara	1	0	0	0	1	r	1	0
44	13-Mar-12	Measles	Buner	village maradoo tehsil chagharzai	1	0	0	0	1	r	1	0
45	13-Mar-12	Measles	Buner	village agarai tehsil mandan	1	0	0	0	1	r	1	0

Federal Administrated Tribal Agency (FATA):

Figure-11: Two years trend of ARI in FATA



DEWS was started in FATA three agencies (Bajaur, Khyber, Mohmand) since February, 2011 during FATA IDPs crisis. Figure 11 shows 2 years weekly percentage trend of Acute Respiratory Tract Infection (ARI) percentage trend. In week 11, 2012 ARI 3,032 cases or 26% were shared showing 5% decrease as compared to previous week. 2012 ARI percentage trend is showing fluctuation since week 4, 2012.

Figure-12: Distribution of consultations by communicable diseases

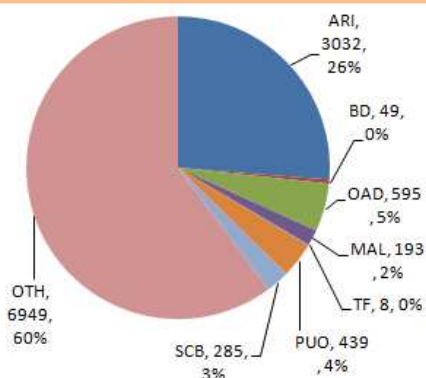
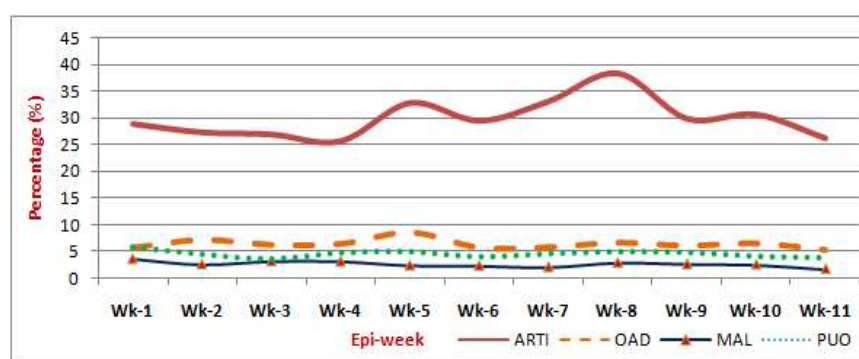
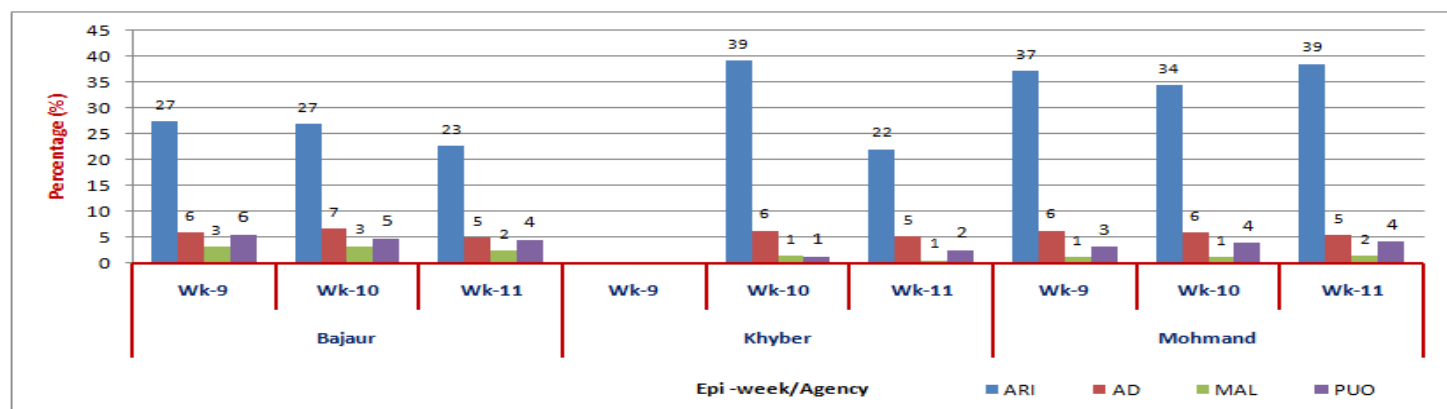


Figure-13: Weekly diseases (ARTI, OAD, MAL and PUO) percentage trend



- Figure 12 shows distribution of consultations by communicable diseases in week 11, 2012 and figure 13 shows weekly percentage trend of ARI, OAD, MAL and PUO from week 1 to 11, 2012.
- This week, 46 health facilities reported from 3 agencies to eDEWS with a total of 11,550 patients' consultations.
- Acute Respiratory Tract Infection (ARI) 3,032 cases reported were showing 5% increase in percentage as compared to week 10 patients' visits and accounted for 26% of the total consultations.
- Other Acute Diarrhea (OAD) 595 cases or 5% were showing 1% decrease in percentage as compared to week 10 and Suspected Malaria (Mal) 193 cases or 2% were shared.
- While Pyrexia of Unknown Origin (PUO) shared 439 cases or 4% which shows no change in percentage as compared to last week, Typhoid Fever (TF) 8 cases or <1% and Scabies 285 cases or 2% were reported.

Figure-14: ARI,OAD, MAL and PUO percentage situation of Federal Administered Treaty Agency (FATA) in last four weeks



The above figure 14 shows ARI, OAD, MAL and PUO percentage situation in FATA three agencies. During week 11, 2012 high percentage of ARI consultations were reported as compared to other diseases. In this week high percentage of ARI consultations were reported from Mohmand agency. In this week ARTI 34% or 762 cases and 27% or 1,291 cases were shared respectively from Mohmand and Bajaur Agency. Similarly Other Acute Diarrhoea, suspected Malaria and Pyrexia Unknown Origin (PUO) high percentage were reported 7% or 319 cases, 3% or 159 cases and 5% or 232 cases respectively from Bajaur agency as compared to other agencies.

Current week's Alert/Outbreak in FATA:

A total of 6 alerts including 2 for NNT and 4 for measles were reported in this week

S. No.	Date Investigated	Suspected Disease	Agency	Location	<5 M	>5 M	<5 F	>5 F	Sample	Positive	Cases	Death
1	15-Mar-12	NNT	Bajaur Agency	village Mor dara Barang, Tehsil Barang	1	0	0	0	A	0	1	0
2	16-Mar-12	NNT	Bajaur Agency	village Daglam sha, Mandal, Tehsil Salarzai	1	0	0	0	A	0	1	0
3	13-Mar-12	Measles	FR Bannu	Miran Shah	0	0	1	0	A	1	1	0
4	13-Mar-12	Measles	Mohm and Agency	Arat Kalay	1	0	0	0	A	1	1	0
5	14-Mar-12	Measles	Mohm and Agency	engaran	1	0	0	0	A	1	1	0
6	15-Mar-12	Measles	Khyber Agency	Dara Adam Khel	1	0	0	0	A	1	1	0

Figure-15: Total number of alerts/outbreak situation in Khyber Pakhtunkhwa & FATA through eDEWS System (Week 11, 2012)

