



Weekly Epidemiological Bulletin

Disease early warning system and response in Pakistan

Volume 5, Issue 7, Wednesday 19 February 2014

Highlights

*Epidemiological week no. 7
(9 to 15 Feb 2014)*

- **Dengue fever:** During this week, 13 Dengue fever lab confirmed cases have been reported from Sindh province.
- In this week, **75** districts and 2,378 health facilities have reported to Disease Early Warning System (DEWS), compared to 79 districts with 2,330 health facilities shared weekly data in week 6, 2014 to the DEWS.
- Total **911,475** patients consultations reported this week 7, 2014 compare to **757,430** consultations in week 6, 2014.
- In this week, a total of 88 alerts identified and timely responded. Altogether 44 alerts were for Measles; 13 for Leishmaniasis; 11 for NNT; 6 for Typhoid fever; 3 each for H1N1, AWD and ARI; 2 for Acute diarrhoea; while 1 each for MERS-CoV, Diphtheria and Scabies.

Figure-1: 75 districts reported to DEWS in week 7, 2014



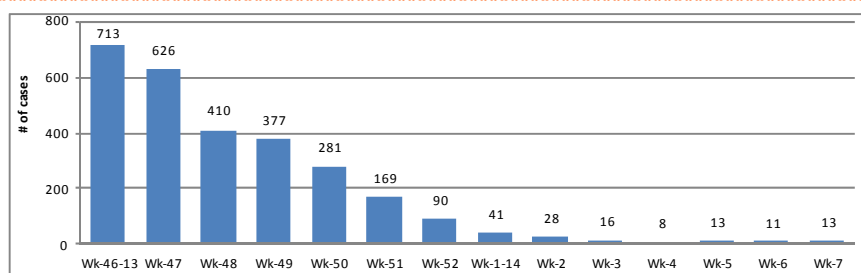
Priority diseases under surveillance in DEWS

- Pneumonia
- Acute Watery Diarrhoea
- Bloody diarrhoea
- Acute Diarrhoea
- Suspected Enteric/Typhoid Fever
- Suspected Malaria
- Suspected Meningitis
- Suspected Dengue fever
- Suspected Viral Hemorrhagic Fever
- Suspected Measles
- Suspected Diphtheria
- Suspected Pertussis
- Suspected Acute Viral Hepatitis
- Neonatal Tetanus
- Acute Flaccid Paralysis
- Scabies
- Cutaneous Leishmaniasis

Cumulative number of selected health events reported in Epi-week 1 to 7, 2014 (29 Dec 2013 to 15 Feb 2014)

Disease	# of Cases	Percentage
ARI	1,321,066	23.19%
Bloody diarrhoea	5,419	<1.00%
Acute diarrhoea	247,211	4.34%
S. Malaria	149,783	2.63%
Skin Diseases	171,399	3.01%
Unexplained fever	156,677	2.75%
Total (All consultations)	5,695,651	

Figure-2: Number of Dengue fever positive cases in Pakistan, Week 46-2013 to week 7-2014

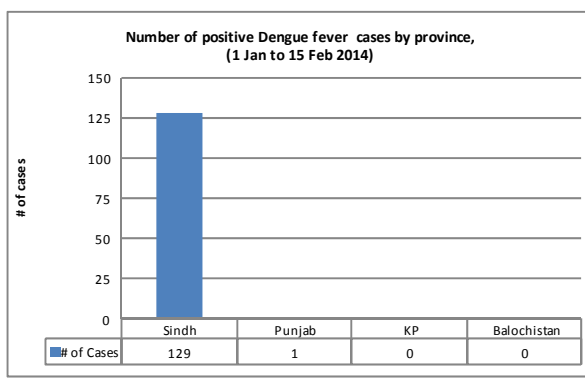


Major health events reported during the Epi-week - 7 (9 to 15 Feb 2014)

Disease	# of Cases	Percentage
ARI	217,194	23.83%
Bloody diarrhoea	783	<1.00%
Acute diarrhoea	37,787	4.15%
S. Malaria	26,311	2.89%
Skin Diseases	26,808	2.94%
Unexplained fever	24,765	2.72%
Total (All consultations)	911,475	

From 1st January to 15th February 2014, a total of 130 lab confirmed Dengue fever cases were reported, out of them 129 positive cases from Sindh province; while 1 positive case was reported from Punjab province.

In year 2013 Dengue fever cases were reported from many less endemic areas. A huge outbreak was confronted in district Swat and increasing number of Dengue fever cases were reported from adjacent district also and cases were also reported from Gawadar and Kech districts in Balochistan province and Karachi in Sindh province.



Number of Outbreaks (Wk-7/2013):

Date	Disease	Province	District	Area	<5M	>5M	<5F	>5F	Action Taken
14-Feb	Leishmaniasis	Balochistan	Jaffarabad	DHQ Hospital, Dera Allah Yar	0	5	0	1	6 cases of Cutaneous Leishmaniasis were reported from DHQ Hospital. Cases had lesion mostly on arm and legs. There was no traveling history among any case. All the cases were under treatment at DHQ Hospital. Information shared with DoH.
14-Feb	Leishmaniasis	Khyber Pakhtunkhwa	Mardan	Village and UC Kohi Bermol, Tehsil Katlang, Mardan	1	0	1	1	An Alert of Cutaneous Leishmaniasis was reported from UC Kohi Bermol. During active surveillance, 2 more clinical cases were identified in the area. Required doses of Inj-Glucantime were placed in nearby health facility for all the registered cases. On job training of health staff was conducted for Intralosomal administration of Inj-Glucantime. RBM focal person, EPHC and PPHI were informed and requested for vector control measures in the areas. Information shared with EDO-H and focal person.
11-Feb	H1N1	Khyber Pakhtunkhwa	BANNU	Sadda Khel, Tehsil Domel	0	1	0	0	Alert for suspected cases of H1N1, a 46 year old male was admitted in Khyber Teaching Hospital on 7-2-2014. Nasopharyngeal swab and blood sample were sent to NIH Islamabad and found negative for H1N1. The patient treated in the hospital but could not survive and expired on 10-2-2014. DHO formulated a Rapid Response Team to conduct active surveillance. WHO sensitized M.S. DHQ hospital and M.S. Women & Children hospital to adopt preventive measures and designate an Isolation ward for suspected cases and provided guidelines for management of Influenza H1N1 along with PPEs for the hospital staff.
11-Feb	H1N1	Khyber Pakhtunkhwa	Swabi	Mohalla Tajukheil, UC Anbar, Swabi	0	3	1	1	A suspected Influenza case was reported from BMC hospital Swabi, the case was admitted at Isolation unit of medical ward, there was no travel history found. Throat swab and blood serum was collected and sent to NIH Islamabad for laboratory confirmation and reported positive for H1N1. During active surveillance 4 more suspected cases found in same family, suffered from severe ARI and two of them were also admitted at BMC for emergency treatment; most of the cases were received Antibiotic therapy. Health education session was conducted with the staff and family members and in the community. Information shared with EDO-H and focal person.
13-Feb	H1N1	Khyber Pakhtunkhwa	Peshawar	KTH Peshawar (Muhalla Batur, Barawal, U-Dir)	0	1	0	0	An alert of suspected avian influenza/pandemic Influenza was reported from Khyber Teaching Hospital Peshawar. Sample was collected and sent to NIH and was found positive for Seasonal Influenza AH3. No other cases reported from the locality.
15-Feb	MERS-COV	Punjab	Rawalpindi	Village Nerian Sharif, Tehsil Tara Khel, Distt. Sadhnoti AJK	0	0	0	1	A death due to severe Acute Respiratory Infection was reported from ICU, MH hospital Rawalpindi. Patient was a 55 year old female admitted in MH due to SARI. The patient has travel history to Saudi Arabia for Umrah and returned 1 week back. She developed flu like symptoms during last days of her Umrah and symptoms got worsened after her arrival home. She was admitted in ICU, MH on 11th February and specimen were tested for MERS-CoV and found negative. The patient was a known case of Diabetes and Hypertension. The close contacts in the family were given awareness regarding the disease and educated on preventive measures.
10 Feb	Measles	Sindh	Thatta	Village Adama Kaleri; Village Haji Ghulam Hussain Kaleri, Village Nooru Mallah	73	37	4	0	Two deaths due to suspected Measles were reported from village Adam Khan Kaleri and Ghulam Hussain Kaleri, district Thatta on 30-01-2014. During field investigation around 100 suspected cases of Measles were found (both in active and post Measles phases). On follow up visit on 5 Feb 2014, 10 more new suspected Measles cases were found and 2 more deaths were reported due to measles. Verbal autopsy of 4 deaths were done. 9 blood samples were collected and sent to NIH for lab testing. Vit-A drops were given to all the Measles cases. Health education imparted regarding isolation of cases, taking good care of hygiene and nutrition of the sick children. DHO Thatta took on board PPHI and started a mobile dispensary with ambulance, MO and WMO work in all affected villages on daily basis and will continue till emergency will over. Further follow up in the field is planned. Vaccination assessment of more than 200 children has been done; all were found unvaccinated for Measles and other VPD's. From 3rd Feb, 2014, Crash Measles vaccination activity started in the affected area to vaccinate children between 6 months to 10 years of age.

Table-1: Number of alerts and outbreaks reported and investigated with appropriate response

Disease	2013		Current week 7, 2014		2014	
	A	O	A	O	A	O
Acute watery diarrhoea	142	40	3	0	11	1
Acute jaundice syndrome	49	6	0	0	1	0
Bloody diarrhoea	45	3	0	0	5	0
CCHF	90	47	0	0	1	0
Dengue fever	300	66	0	0	1	0
Diphtheria	84	19	1	0	14	1
Measles	3357	281	44	0	244	7
Pertussis	46	10	0	0	6	1
NNT + tetanus	349	0	11	0	65	0
Malaria	25	6	0	0	0	0
Cutaneous Leishmaniasis	621	51	13	1	95	2
Others	520	5	16	0	65	0
Total	5628	534	88	1	508	12

Figure-3: Number of alerts received and responded, week 4 to 7 2014

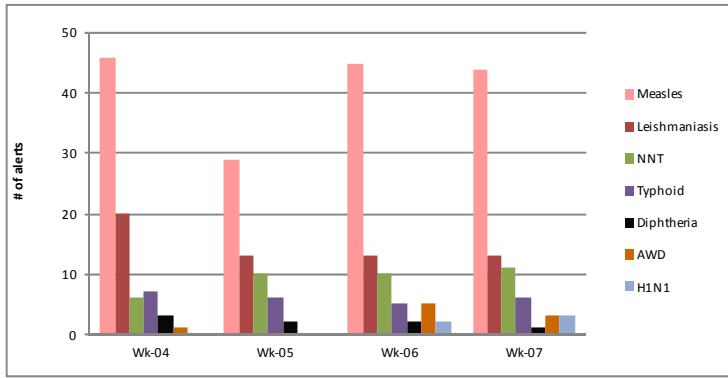
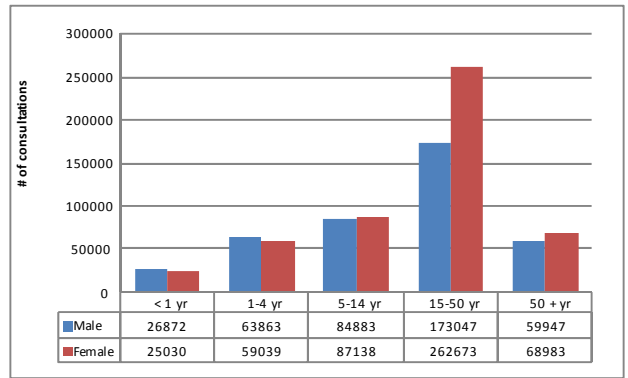
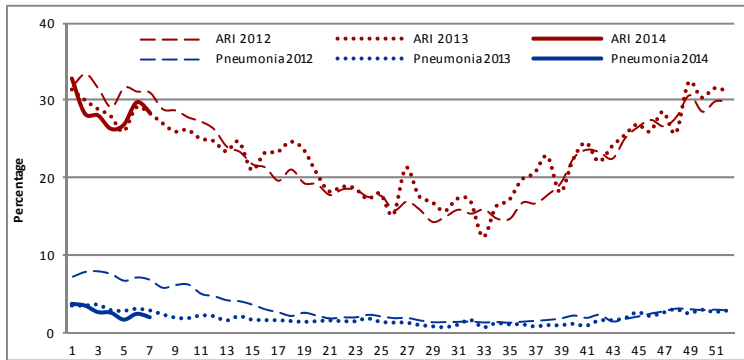


Figure-4: Number of consultations by age and gender, week 7, 2014



Province Khyber Pakhtunkhwa:

Figure-5: Weekly trend of ARI and Pneumonia, province Khyber Pakhtunkhwa



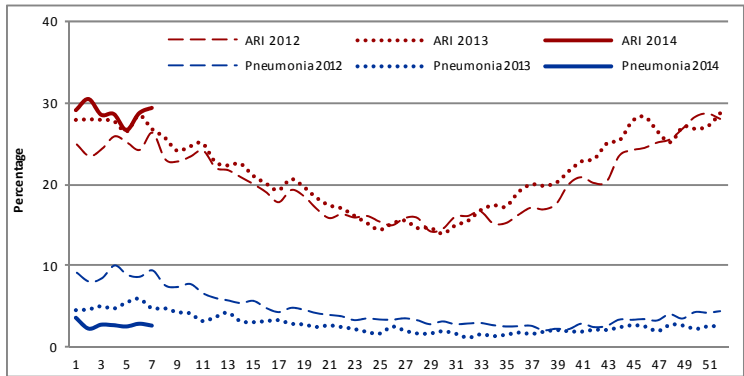
159 health facilities from 8 districts of Khyber Pakhtunkhwa sent reports to DEWS with a total of 43,996 patients consultations reported in week 7, 2014.

A total of 36 alerts were reported and appropriate measures were taken. Altogether 31 alerts were for Measles; 3 for H1N1; while 1 each for Diphtheria and Leishmaniasis.

Figure-5 shows the weekly trend of ARI and Pneumonia showing decrease as compare with last week.

Province Sindh:

Figure-6: Weekly trend of ARI and Pneumonia, province Sindh



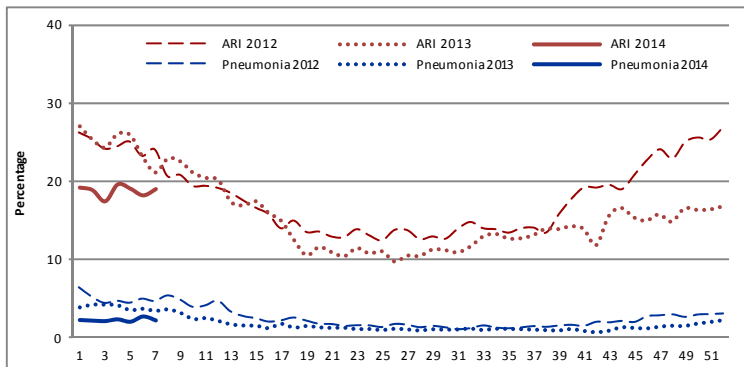
822 health facilities from 23 districts in Sindh province reported to DEWS with a total of 301,986 patient consultations in week 7, 2014.

A total of 13 alerts were received and appropriate measures were taken. Altogether 5 alerts were for NNT; 3 each for AWD and Leishmaniasis; while 2 for Measles.

The proportion of ARI for the province is showing increase as compared with last week, while Pneumonia shows minor decrease as compare with last week and low from the same time period last year.

Province Punjab:

Figure-7: Trend of ARI and Pneumonia, province Punjab



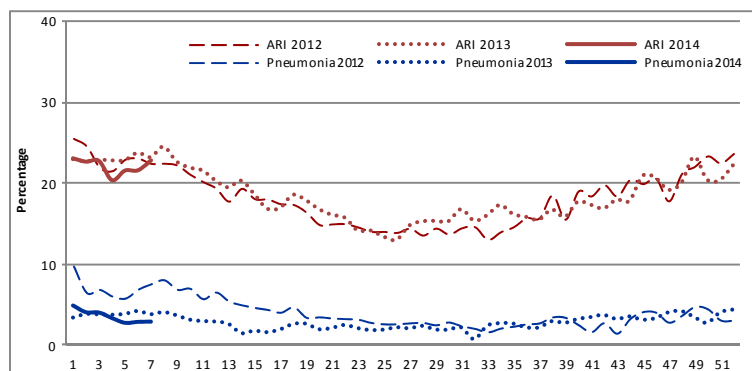
1,015 health facilities from 20 districts in Punjab province reported to DEWS with a total of 489,083 patients consultations in week 7, 2014.

Total 19 alerts were received and appropriate measures were taken. Altogether 6 alerts each were for Typhoid; 3 for ARI; 2 each for Acute diarrhoea, Leishmaniasis and Measles; While 1 each for MERS-CoV, NNT, Tetanus and Scabies were responded in Punjab province.

The weekly trend of ARI in Punjab showing increase as compared with last week; while Pneumonia trend showing minor decrease as compared with last week .

Province Balochistan:

Figure-8: Weekly trend of ARI and Pneumonia, province Balochistan



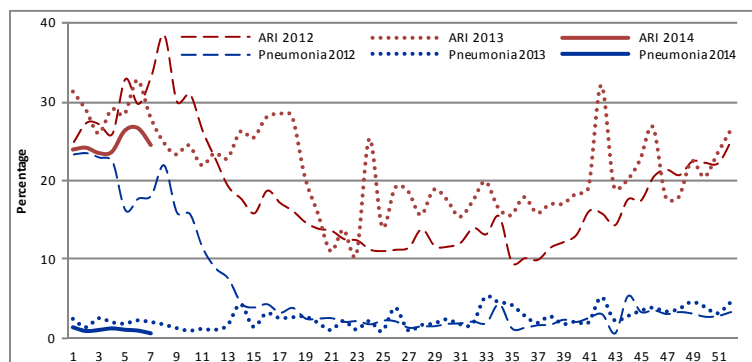
268 health facilities from 12 districts in Balochistan province reported to DEWS with a total of 45,694 patients consultations in week 7, 2014.

8 alerts were reported and appropriate measures were taken. Altogether 5 alerts were for Leishmaniasis; 2 for Measles; while 1 for NNT.

In this week the weekly proportion of ARI showing increase as compared with last week; while Pneumonia showing remain constant as compared with last week.

FATA:

Figure-9: Weekly trend of ARI and Pneumonia, FATA



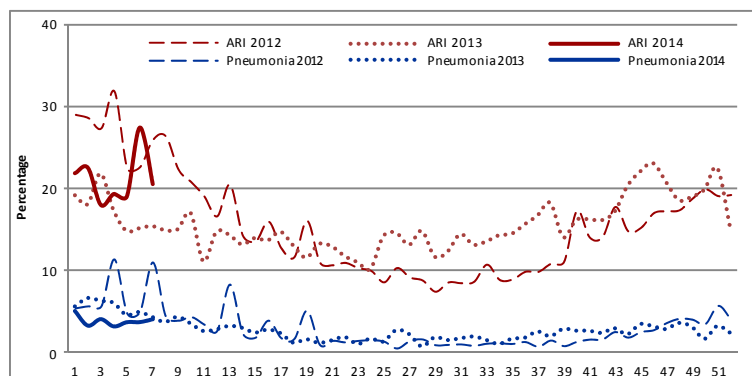
37 health facilities from 3 agencies in FATA reported to DEWS with a total of 12,508 patients consultations in week 7, 2014.

7 alerts, 3 for NNT; While 2 each were for Leishmaniasis and Measles were responded in FATA in week 7, 2014.

The proportion of ARI and Pneumonia showing decrease as compared with last week in FATA.

State of Azad Jammu and Kashmir:

Figure-10: Weekly trend of ARI and Pneumonia, AJ&K



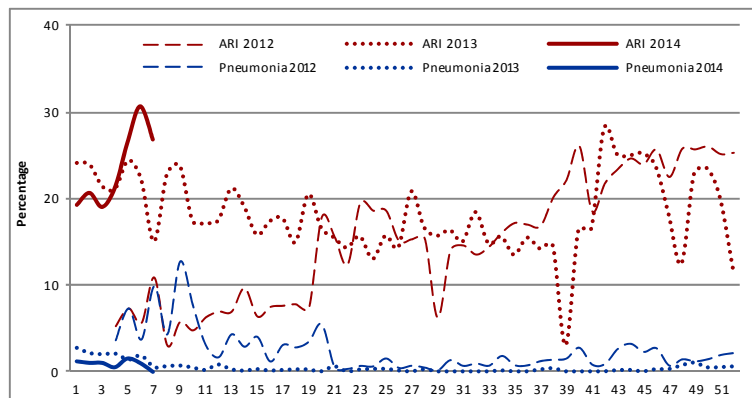
75 health facilities from 8 districts in AJ&K reported to DEWS with a total of 17,198 patients consultations in week 7, 2013.

5 alerts for Measles were reported, and appropriate measures were taken in week 7, 2014.

Weekly trend of ARI showing decrease as compared with last week; while Pneumonia trend showing increase as compared with last week and almost touched the same percentage same time period last year, and vigilant monitoring of the situation is required.

Islamabad:

Figure-11: Weekly trend of ARI and Pneumonia, Islamabad



4 health facilities reported to DEWS on time with a total of 1,010 patients consultations in week 7, 2014.

No alert for any disease reported from any area in Islamabad in week 7, 2014.

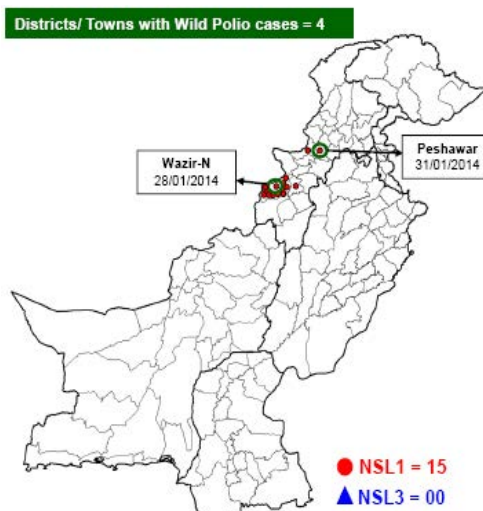
Weekly trend of ARI and Pneumonia showing decrease as compared with last week, but vigilant monitoring of the situation is required.

Distribution of Wild Polio Virus cases in Pakistan 2013 and 2014

In this week 7 (9 to 15 Feb 2014), 6 new wild type-1 polio cases were reported, 4 from the Federally Administered Tribal Areas (North Waziristan and Khyber agencies) and 2 from Khyber Pakhtunkhwa (Peshawar and Bannu districts). This brings the total number of polio cases in 2014 to 15 (from 4 districts/agencies).

The additional polio vaccination round (as per short interval additional dose strategy) has been completed in 43 districts. Charsadda, Mardan & Nowshera districts in Khyber Pakhtunkhwa and 5 towns of Karachi are in the process of implementation, whereas 5 towns of Karachi (Bin Qasim, Gadap, Gulshan, Landhi and Orangi) could not start the vaccination round due to insecurity. While north and south Waziristan tribal agencies in FATA remain unreached (since June 2012).

Province	2013			2014		
	P1	P3	P1+P3	P1	P3	P1+P3
Punjab	7	-	-	-	-	-
Sindh	10	-	-	-	-	-
Khyber Pakhtunkhwa	11	-	-	2	-	-
FATA	65	-	-	13	-	-
Balochistan	-	-	-	-	-	-
AJ&K	-	-	-	-	-	-
Gilgit-Baltistan	-	-	-	-	-	-
Islamabad	-	-	-	-	-	-
Total	93	-	-	15	-	-



Follow up of CCHF

In week 7, 2014, no new CCHF cases reported from any district. A total of 100 suspected, 64 confirmed CCHF cases and 20 deaths have been reported country wide in year 2013.

In year 2012, a total of 62 suspected cases were reported throughout the country with 41 cases confirmed and in total 18 deaths; of which 13 deaths (CFR is 31.7%) are reported of the lab confirmed cases and 5 deaths are reported as suspected CCHF cases. 23 confirmed cases were reported from Balochistan; 7 from Sindh; 6 from Khyber Pakhtunkhwa and 5 from Punjab. Table on right illustrates situation of CCHF cases in 2012-13.

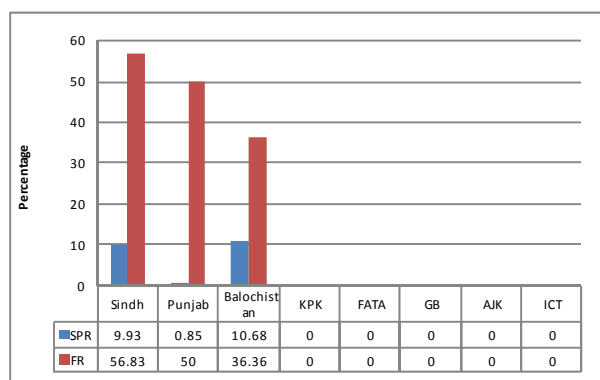
Approximately all the cases had contact history with animal trading/handling, tick bite, contact with patient, tannery worker, butcher/animals slaughtering, and fresh animal skin. There is ongoing trade of animals and animal skins with movement intra Pakistan and between neighboring countries (Afghanistan and Iran).

Province	2012			2013			
	Suspected	Lab confirmed	Deaths	Suspected	Lab confirmed	Deaths	
AJ&K	0	0	0	1	1	0	
Balochistan	Afghanistan*	5	5	3	12	6	2
	Balochistan	33	18	4	54	33	7
ICT	-	-	-	4	4	1	
KPK	9	6	5	9	9	4	
Punjab	8	5	3	18	9	5	
Sindh	7	7	3	2	2	1	
Total	62	41	18	100	64	20	

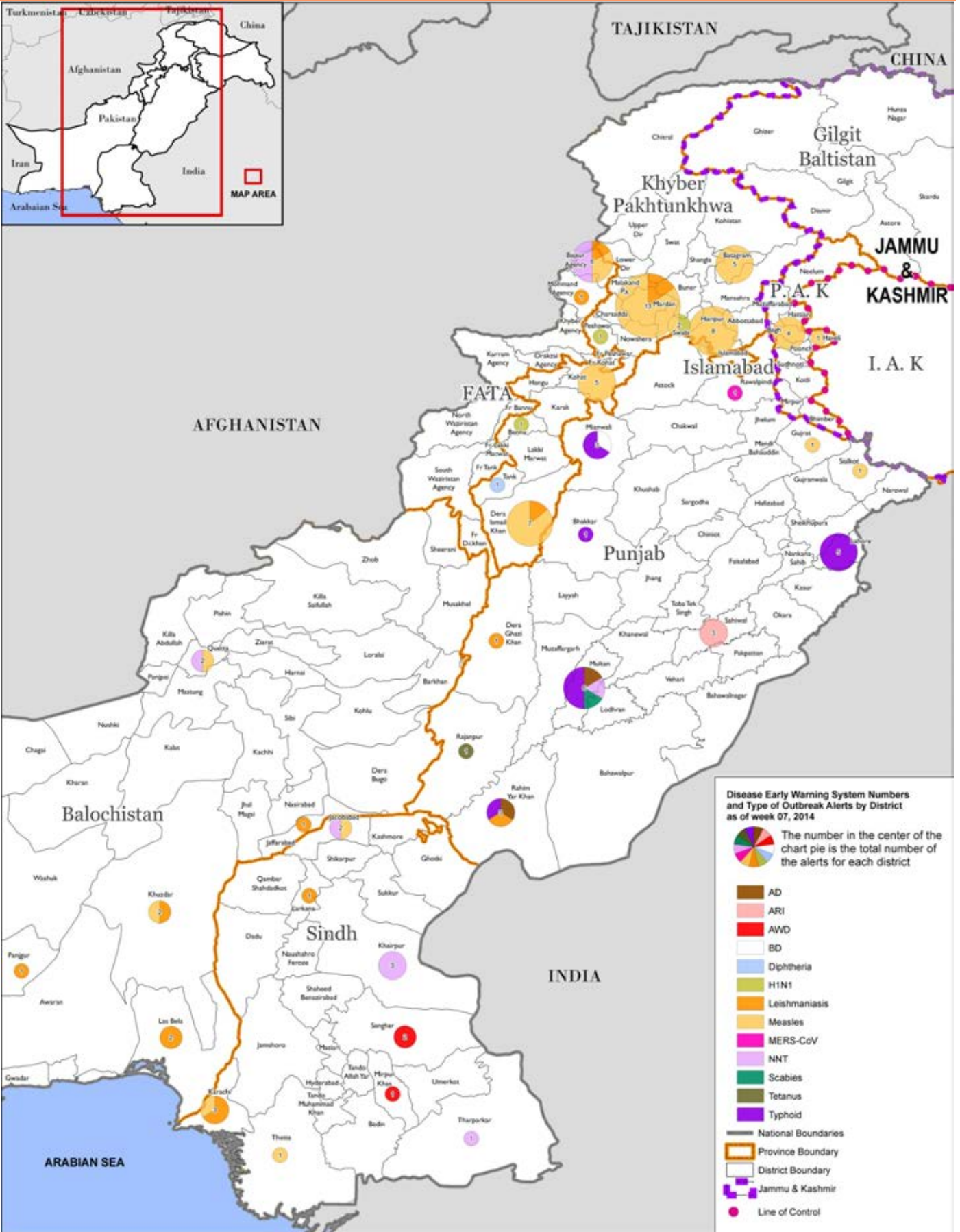
Malaria:

The chart at below shows the Malaria slide positivity and Falciparum ratio in week 7, 2014. Total number of Malaria cases tested in this week is 6,294 out of which 443 were found positive; 224 for P. Vivax; 81 for P. Falciparum; while 138 for Mixed (SPR = 7.04%; F.R = 49.44%).

Malaria tests \Province	Sindh	Punjab	Balochistan	KPK	FATA	AJK	GB	ICT
P. Vivax	117	9	98	0	0	0	0	0
P. Falciparum	19	6	56	0	0	0	0	0
Mixed	135	3	0	0	0	0	0	0
# tested	2730	2122	1442	0	0	0	0	0
SPR	9.93%	0.85%	10.68%	0	0	0	0	0
FR	56.83%	50%	36.36%	0	0	0	0	0



Alerts and outbreaks, week 7, 2014



This weekly Epidemiological Bulletin is published jointly by the National Institute of Health, Islamabad and World Health Organization (WHO), Pakistan. For Correspondence: NIH: eic.nih@gmail.com; WHO: Tel : +92-051-9255184-5, Fax : +92-051-9255083; E-mail: wr@pak.enro.who.int.