



# Weekly Epidemiological Bulletin

## Disease early warning system and response in Pakistan

Volume 5, Issue 5, Wednesday 5 February 2014

### Highlights

*Epidemiological week no. 5  
(26 Jan to 1 Feb 2014)*

- **Dengue fever:** During this week, 13 Dengue fever lab confirmed cases have been reported from province Sindh. The outbreaks are being responded jointly.
- In this week, **74** districts and 2,216 health facilities have reported to Disease Early Warning System (DEWS), compared to 73 districts with 2,299 health facilities shared weekly data in week 4, 2014 to the DEWS.
- Total **845,798** patients consultations reported this week 5, 2014 compared with **844,175** consultations in week 4, 2014.
- In this week, a total of 62 alerts identified and timely responded. Altogether 28 alerts were for Measles; 13 for Leishmaniasis; 10 for NNT; 6 for Typhoid; 2 each for Diphtheria and Scabies; while 1 for Pertussis.

Figure-1: 74 districts reported to DEWS in week 5, 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

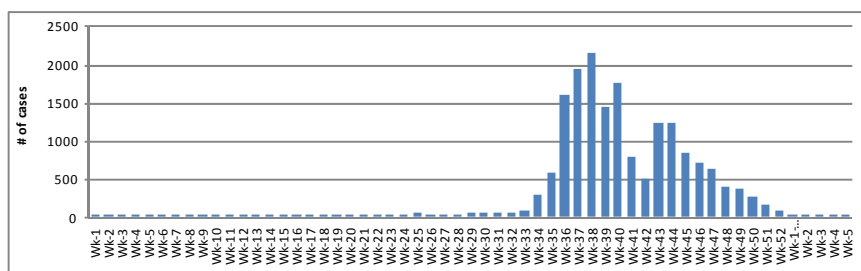
#### Cumulative number of selected health events reported in Epi-week 1 to 5, 2014 (29 Dec 2013 to 01 Feb 2014)

Disease	# of Cases	Percentage
ARI	918,666	23.08%
Bloody diarrhoea	3,846	<0.5%
Acute diarrhoea	175,492	4.41%
S. Malaria	100,132	2.52%
Skin Diseases	120,224	3.02%
Unexplained fever	110,468	2.78%
<b>Total (All consultations)</b>	<b>3,980,211</b>	

#### Major health events reported during the Epi-week - 5 (26 Jan to 01 Feb 2014)

Disease	# of Cases	Percentage
ARI	190,368	22.51%
Bloody diarrhoea	765	<0.5%
Acute diarrhoea	35,325	4.18%
S. Malaria	20,863	2.47%
Skin Diseases	23,482	2.78%
Unexplained fever	24,425	2.89%
<b>Total (All consultations)</b>	<b>845,798</b>	

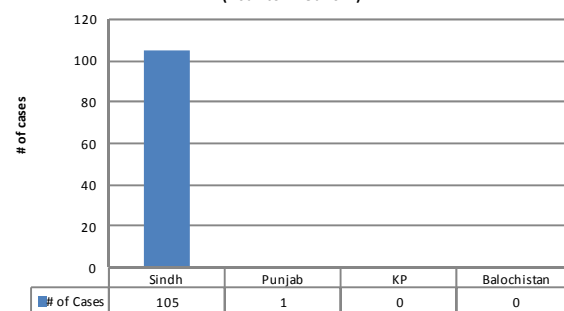
Figure-2: Number of Dengue fever positive cases in Pakistan, 1 Jan 2013 to 1 Feb 2014



From 1st January to 1st February 2014, a total of 106 lab confirmed Dengue fever cases were reported, out of them 105 positive cases from Sindh province; while 1 positive case was reported from province Punjab.

In year 2013 Dengue fever cases are reported from the less endemic areas. A huge outbreak is confronted in district Swat and increasing number of Dengue fever cases are reported from adjacent district also and cases are also reported from Gawadar district in Balochistan province and Karachi in Sindh province.

#### Number of positive Dengue fever cases by province, (1 Jan to 1 Feb 2014)



Continuous Outbreaks (Wk-5/2013):

Date	Disease	Province	District	Area	<5M	>5M	<5F	>5F	Action Taken
28-Jan	Measles	Sindh	Karachi	Saddar Town	1	0	4	0	Alert for suspected Measles cases were reported in PNS Shifa hospital. During investigation patient (2.5 yrs child) found in the usual state of health, according to the mother the child got ill around two weeks back developing high grade fever and cough, patient's condition did not improve after receiving treatment from nearby clinic, on 23rd of January patient developed rash on face which spread to the whole body within a day. On 25th January developed severe cough and restlessness and taken to PNS Shifa hospital, where diagnosed as having Measles and admitted for one day and got discharged on 26th January. Patient's 11 month old sister also developed fever and rash on 24th January and she was also taken to the hospital, where she also diagnosed as suspected Measles and kept in observation for one day and got discharged. During active surveillance 3 more suspected cases of Measles were found, all were not vaccinated. Vitamin-A dose given to all the suspected Measles cases in the locality. Imparted health education in the community regarding isolation of any suspected Measles case and delivered brief session on the importance of immunization and cleanliness in preventing various diseases. The THMT informed about the situation and requested to start the mop up activities in the area. Vaccination status checked in 30 houses where 14 children were assessed. BCG=10(71%), Penta-1=10(71%), Penta-2=10(71%), Penta-3=09(64%), Measles-1=8/12(67%), Measles-2=5/12(42%).
31-Jan	Measles	Sindh	Thatta	Village Ghulam Hussain Kaleri, UC Shahbandar, District Sujawal	34	13	34	19	2 deaths due to post Measles complication were notified from village Ghulam Hussain Kaleri, Sujawal Distt. Thatta. During field investigation found 98 cases of suspected Measles. Vaccination assessment of 200 children has been done, all were found unvaccinated for Measles and other VPD's. DHO Thatta started the mop-up activities in the area and adjacent villages. 122 children <5 yrs of age has vaccinated for Measles. 5 blood samples were collected and sent to NIH. Vitamin-A (2 doses) were given to all the suspected cases, health education imparted in the community regarding importance of routine immunization, isolation of suspected Measles cases and to improve nutrition status of the children. DHO Thatta planned activity regarding VPD's which is based on 4 teams, each team consist of 3 people's with the support of DC Sujawal from 03-02-14. Follow up planned.

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

Disease	2013		Current week 5, 2014		2014	
	A	O	A	O	A	O
Acute watery diarrhoea	142	40	0	0	3	0
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	2	0	12	1
Measles	3357	281	28	2	153	3
Pertussis	46	10	1	0	3	0
NNT + tetanus	349	0	10	0	44	0
Malaria	25	6	0	0	0	0
Cutaneous Leishmaniasis	621	51	13	0	68	0
Others	520	5	8	0	37	0
<b>Total</b>	<b>5628</b>	<b>534</b>	<b>62</b>	<b>2</b>	<b>328</b>	<b>4</b>

Figure-3: Number of alerts received and responded, week 2 to 5 2014

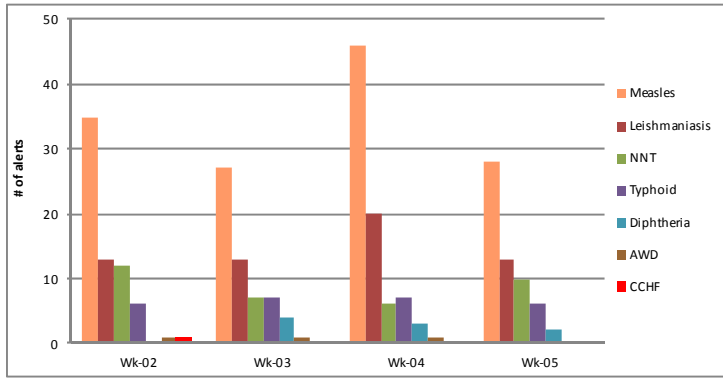
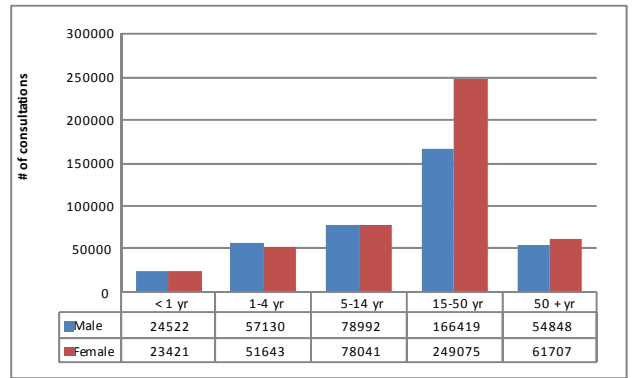
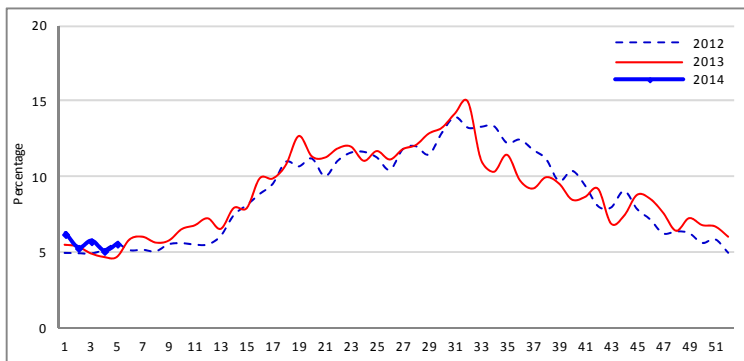


Figure-4: Number of consultations by age and gender, week 5, 2014



### Province Khyber Pakhtunkhwa:

Figure-5: Weekly trend of Acute diarrhoea, province Khyber Pakhtunkhwa



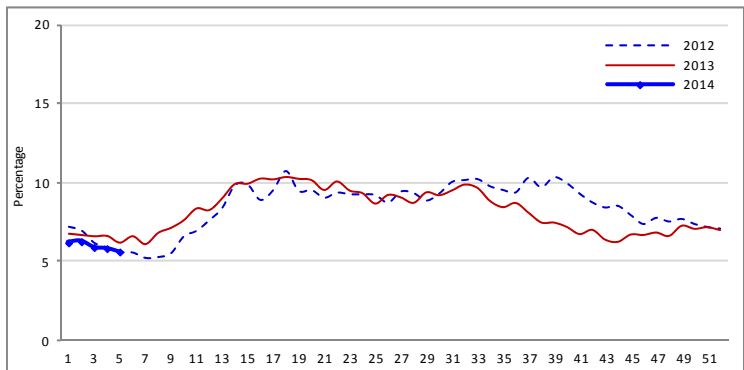
155 health facilities from 8 districts of Khyber Pakhtunkhwa sent reports to DEWS with a total of 47,028 patients consultations reported in week 5, 2014.

A total of 18 alerts were reported and appropriate measures were taken. Altogether 17 alerts were for Measles; while 1 for NNT.

The weekly trend of Acute diarrhoea is showing increase as compared with last week in KP, and the situation needs continuous attention in the province.

### Province Sindh:

Figure-6: Weekly trend of Acute diarrhoea, province Sindh



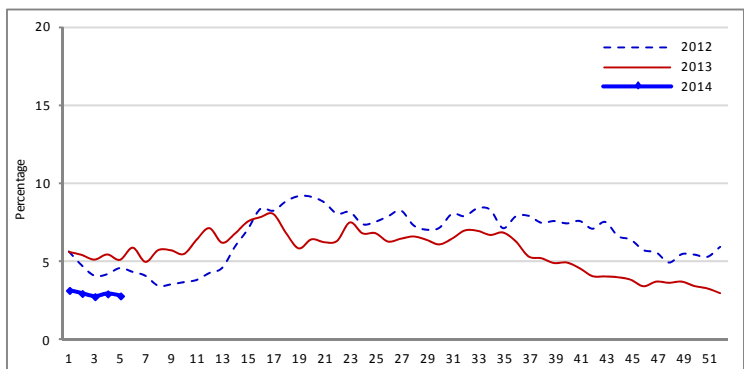
748 health facilities from 22 districts in Sindh province reported to DEWS with a total of 235,837 patient consultations in week 5, 2014.

A total of 15 alerts were received and appropriate measures were taken. Altogether 7 alerts were for NNT; While 4 each for Leishmaniasis and Measles.

The proportion of AD for the province is showing minor decrease as compared with last week, Although it is low from the same time period last year but still the situation needs continuous attention in the province.

### Province Punjab:

Figure-7: Trend of Acute diarrhoea, province Punjab



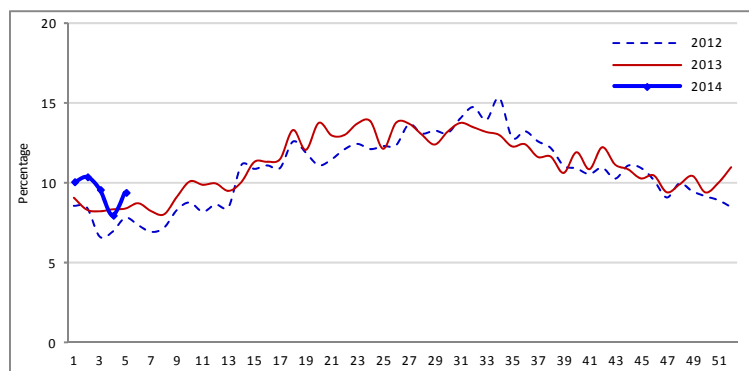
912 health facilities from 18 districts in province Punjab reported to DEWS with a total of 487,452 patients consultations in week 5, 2014.

Total 13 alerts were received and appropriate measures were taken. Altogether 6 alerts were for Typhoid; 3 each for Leishmaniasis and Scabies; while 1 each for Diphtheria, Measles and NNT were responded in province Punjab.

The weekly trend of AD in Punjab showing minor decrease as compared with last week.

**Province Balochistan:**

Figure-8: Weekly trend of Acute diarrhoea, province Balochistan



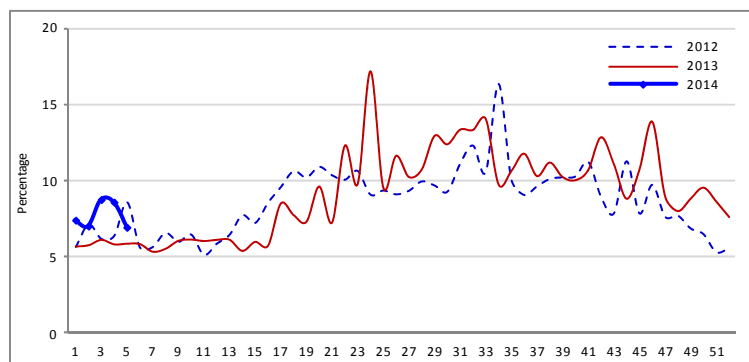
281 health facilities from 14 districts in province Balochistan reported to DEWS with a total of 42,148 patients consultations in week 5, 2014.

9 alerts were reported and appropriate measures were taken. Altogether 6 alerts were for Leishmaniasis; 2 for Measles; while 1 NNT.

In this week the weekly proportion of AD showing increase as compared with last week, and vigilant monitoring of the situation is required in the province.

**FATA:**

Figure-9: Weekly trend of Acute diarrhoea, FATA



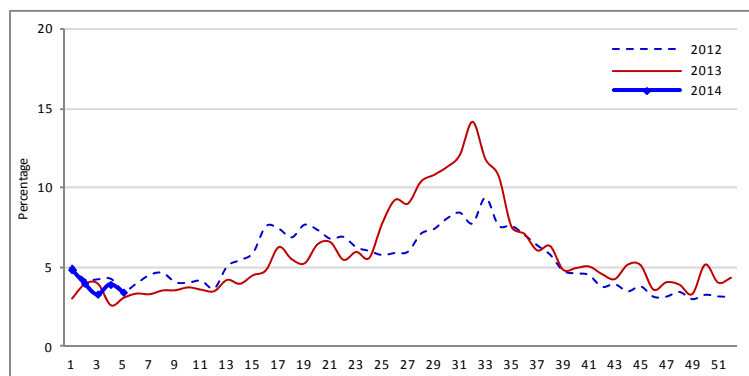
38 health facilities from 3 agencies in FATA reported to DEWS with a total of 14,466 patients consultations in week 5, 2014.

No alerts for any disease from any area in FATA were reported in week 5, 2014.

The proportion of Acute diarrhoea showing decrease as compared with last week, but high from the same time period last year and required vigilant monitoring of the situation in FATA.

**State of Azad Jammu and Kashmir:**

Figure-10: Weekly trend of Acute diarrhoea, AJ&K



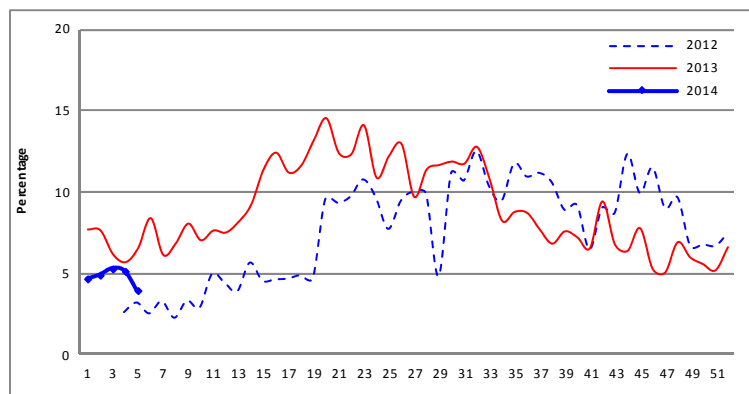
77 health facilities from 8 districts in AJ&K reported to DEWS with a total of 17,298 patients consultations in week 5, 2013.

A total of 6 alerts were reported, altogether 3 alerts were for Measles; while 1 each for Diphtheria, Leishmaniasis and Pertussis.

Weekly trend of Acute diarrhoea showing decrease as compared with last week, but vigilant monitoring of the situation is required.

**Islamabad:**

Figure-11: Weekly trend of Acute diarrhoea, Islamabad



5 health facilities reported to DEWS on time with a total of 1,569 patients consultations in week 5, 2014.

1 alert for Measles was reported in week 5, 2014 and appropriate measures were taken.

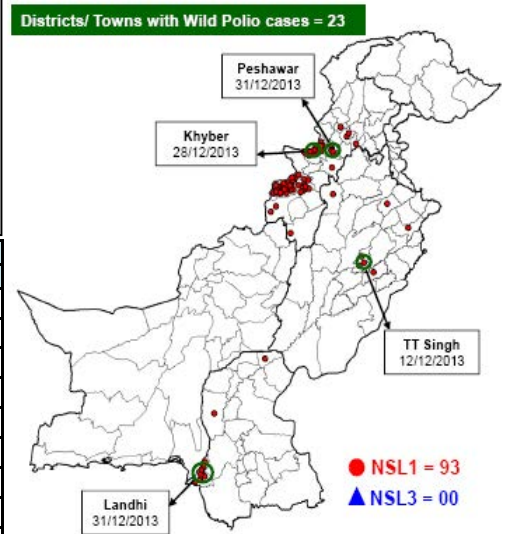
Weekly trend of Acute diarrhoea showing decrease as compared with last week, but vigilant monitoring of the situation is required.

Distribution of Wild Polio Virus cases in Pakistan 2012 and 2013

In this week 5 (26 Jan to 1 Feb 2014), two new wild type-1 polio cases were reported from Federally Administered Tribal Areas (North Waziristan Agency) with date of onset of paralysis in 2014. This brings the total number of polio cases in 2014 to seven, all from North Waziristan Agency in FATA.

The tribal Agency did not conduct any polio supplementary immunization activities (SIAs) since June 2012 leading to an ongoing explosive polio outbreak with 35 type-1 wild polio cases in 2013 and seven so far in 2014.

Province	2013			2014		
	P1	P3	P1+P3	P1	P3	P1+P3
Punjab	7	-	-	-	-	-
Sindh	10	-	-	-	-	-
Khyber Pakhtunkhwa	11	-	-	-	-	-
FATA	65	-	-	7	-	-
Balochistan	-	-	-	-	-	-
AJ&K	-	-	-	-	-	-
Gilgit-Baltistan	-	-	-	-	-	-
Islamabad	-	-	-	-	-	-
<b>Total</b>	<b>93</b>	<b>-</b>	<b>-</b>	<b>7</b>	<b>-</b>	<b>-</b>



Follow up of CCHF

In week 5, 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.

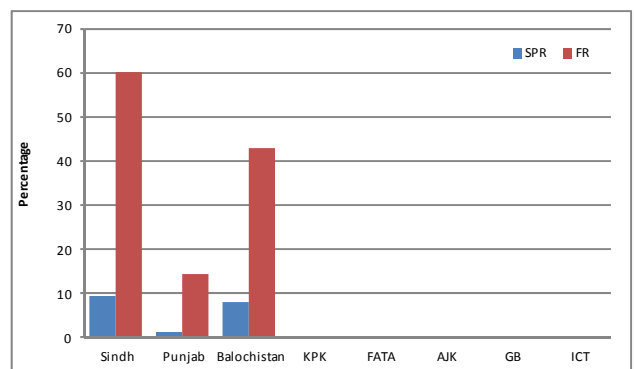
Approximately all the cases had contact history with animal trading/handling, tick bite, contact with patient, tannery worker, butcher/animals slaughtering, and fresh animal skin. There is ongoing trade of animals and animal skins with movement intra Pakistan and between neighboring countries (Afghanistan 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	
<b>Total</b>	<b>62</b>	<b>41</b>	<b>18</b>	<b>100</b>	<b>64</b>	<b>20</b>	

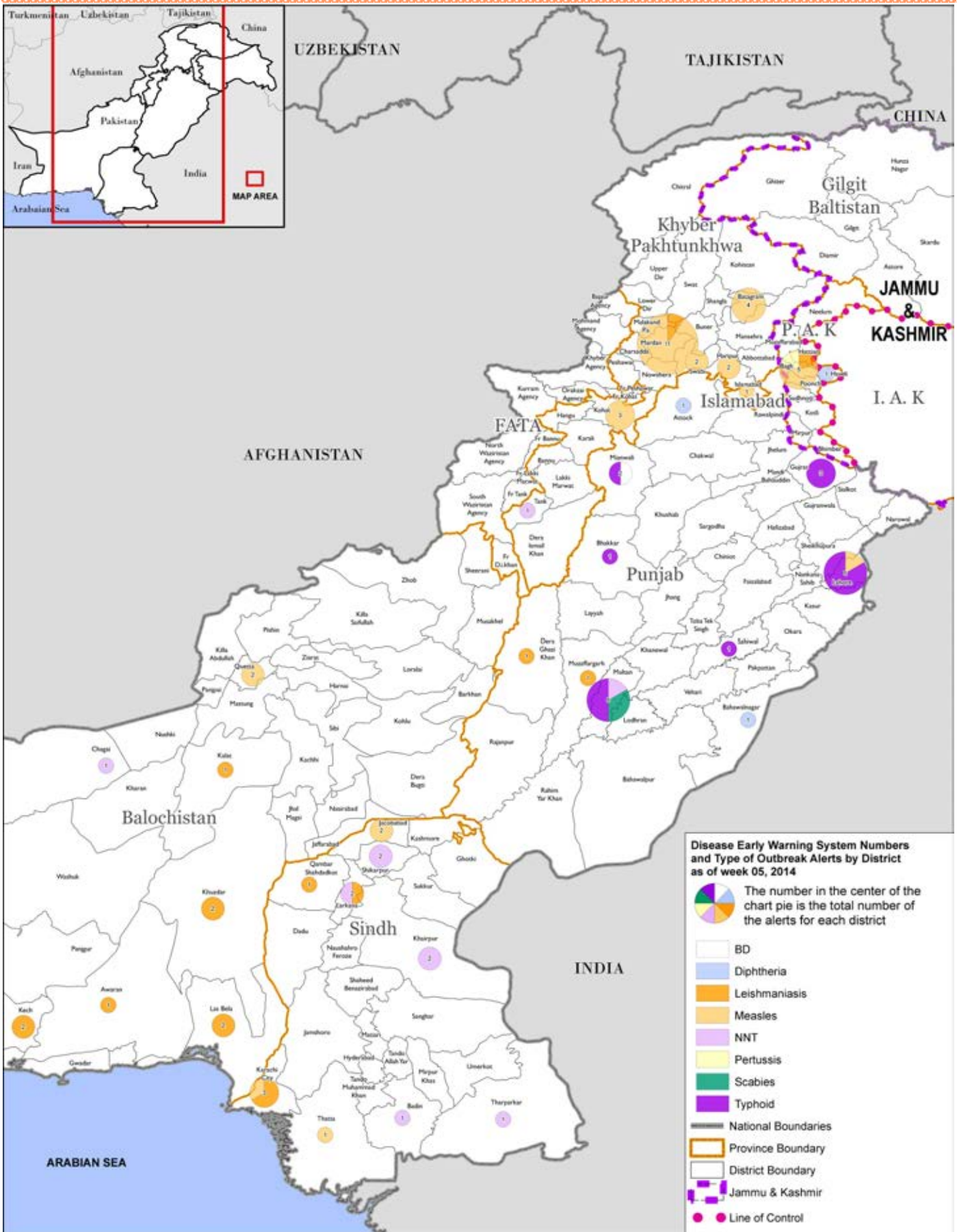
Malaria:

The chart at below shows the Malaria slide positivity and Falciparum ratio in week 5, 2014. Total number of Malaria cases tested in this week is 5,088 out of which 305 were found positive; 147 for P. Vivax; 116 for P. Falciparum; while 42 for Mixed (SPR = 5.99%; F.R = 51.80%).

Malaria tests \Province	Sindh	Punjab	Balochistan	KPK	FATA	AJK	GB	ICT
P. Vivax	75	18	54	0	0	0	0	0
P. Falciparum	75	2	39	0	0	0	0	0
Mixed	39	1	2	0	0	0	0	0
# tested	2040	1873	1175	0	0	0	0	0
SPR	9.26	1.12	8.09	0	0	0	0	0
FR	60.32	14.29	43.16	0	0	0	0	0



Alerts and outbreaks, week 5, 2014



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