



Weekly Epidemiological Bulletin

Disease early warning system and response in Pakistan

Volume 5, Issue 6, Wednesday 12 February 2014

Highlights

*Epidemiological week no. 6
(2 to 8 Feb 2014)*

- **Dengue fever:** During this week, 11 Dengue fever lab confirmed cases have been reported from province Sindh. The outbreaks are being responded jointly.
- In this week, **79** districts and 2,330 health facilities have reported to Disease Early Warning System (DEWS), compared to 74 districts with 2,216 health facilities shared weekly data in week 5, 2014 to the DEWS.
- Total **749,831** patients consultations reported this week 6, 2014 compared with **883,780** consultations in week 5, 2014.
- In this week, a total of 89 alerts identified and timely responded. Altogether 45 alerts were for Measles; 13 for Leishmaniasis; 9 for NNT; 5 each for AWD and Typhoid fever; 3 each for Pertussis and Scabies; 2 each for H1N1 and Diphtheria; while 1 each for ARI and Chickenpox.

Figure-1: 79 districts reported to DEWS in week 6, 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

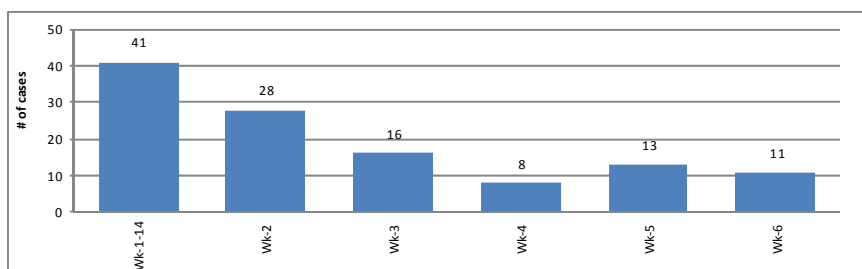
Cumulative number of selected health events reported in Epi-week 1 to 6, 2014 (29 Dec 2013 to 08 Feb 2014)

Disease	# of Cases	Percentage
ARI	1,100,352	23.07%
Bloody diarrhoea	4,546	<1.00%
Acute diarrhoea	208,906	4.38%
S. Malaria	122,806	2.58%
Skin Diseases	143,991	3.02%
Unexplained fever	131,309	2.75%
Total (All consultations)	4,769,126	

Major health events reported during the Epi-week - 6 (2 to 08 Feb 2014)

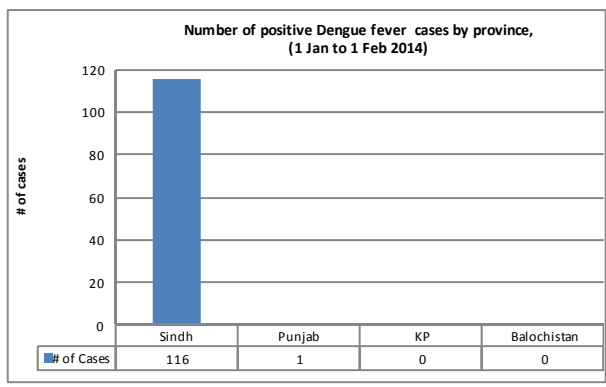
Disease	# of Cases	Percentage
ARI	172,345	22.98%
Bloody diarrhoea	691	<1.00%
Acute diarrhoea	31,937	4.26%
S. Malaria	21,205	2.83%
Skin Diseases	22,320	2.98%
Unexplained fever	20,340	2.71%
Total (All consultations)	749,831	

Figure-2: Number of Dengue fever positive cases in Pakistan, 1 Jan to 8 Feb 2014



From 1st January to 8th February 2014, a total of 117 lab confirmed Dengue fever cases were reported, out of them 116 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 Outbreaks (Wk-6/2013):

Date	Disease	Province	District	Area	<5M	>5M	<5F	>5F	Action Taken
4-Feb	AWD	Balochistan	Lasbela	Moza Wato, UC Kehwari, Tehsil Uthal	3	12	1	13	Alert for 29 AWD cases were reported from Moza Wato, Tehsil Uthal. RRT responded on time and all required medicine were provided to the health facility. All patient treated according to plan A, B and C. Health and hygiene session conducted in the community and Aqua tabs and ORS were distributed in the community. 2 stool samples and 3 water samples were collected and sent to NIH. Information shared with DHO.
4-Feb	Leishmaniasis	Balochistan	Lasbela	Uthal, UC Uthal, Tehsil Uthal	1	3	1	1	Alert for 6 suspected cases of Cutaneous Leishmaniasis were reported from DHQ Hospital Uthal. Cases found with lesion mostly on hands. Cases were provided symptomatic treatment through DHQ. During field surveillance no more Leishmaniasis cases were identified.
6-Feb	Measles	Balochistan	Lasbela	Daroo hotel, UC Beroot, Tehsil Hub	0	1	4	3	Alert for 5 Measles cases were reported from JGQ Hospital. Vit-A given to all the suspected cases. During active surveillance 3 more suspected Measles cases were found in the community. Among the total 8 children only 1 found vaccinated. 3 blood samples were collected and sent to NIH. EPI team was informed and requested to start the vaccination activities in the area. All information shared with DHO.
5-Feb	Measles	Balochistan	Quetta	(BMC Hospital Quetta) Pashtoon-Bagh	2	1	3	1	7 Measles cases were reported. Vit-A provided. 1 blood sample collected and sent to NIH. No more suspected Measles cases were found during house to house surveillance. Awareness session conducted in the community regarding the importance of routine immunization. EPI team informed and requested to start vaccination in the area. Information shared with DoH.
3-Feb	H1N1	Khyber Pakhtunkhwa	Peshawar	KTH Peshawar (Warsak Road)	0	1	0	0	Alert of suspected Avian influenza/pandemic Influenza was reported from Khyber Teaching Hospital, Peshawar. A week ago the patient developed fever along with cough and dyspnea. He was admitted in Medical unit KTH and later was shifted to ICU due to deteriorating condition. On the sixth day of illness he developed haemoptysis. Sample was collected and sent to NIH and was found positive for H1N1. Hospital staff informed to take precautionary measures for isolation of patient and use of personal protective equipment.
4-Feb	Measles	Khyber Pakhtunkhwa	Mardan	Village Kandaro, Kalusha, UC Lundkhowar, Takht Bhai, Mardan	0	4	1	1	Alert for suspected Measles was reported from BHU Lund Khowar, Tehsil Takht Bhai, district Mardan, the child found partially vaccinated for routine vaccination but unimmunized for measles vaccination, Vitamin-A was given. During Active surveillance in the area and surrounding, 5 more clinical cases were found. All children of less than 5 years were sent to near by health facility for vaccination. EPI team was informed and requested for Outreach vaccination activities in the area and surrounding. Health education session was conducted in the community. EDO-H Focal person and EPI Coordinator were informed.
6-Feb	Measles	Sindh	TM Khan	Village Pir Ghulam Hyder, UC Saeed Matto of Taluka Bulhri Shah Karim	6	1	3	2	Alert for 2 Suspected Measles cases were reported from village Ghulam Hyder. During active surveillance 9 cases were found. According to the people a 21months old female baby got fever and rashes on January 27, 2014, but due to traditional myths child should not go out and on a restricted diet, but could not survive and expired after two days. Vitamin-A dose were given to all the suspected cases. Health education imparted. Vaccination status of 60 children were assessed. BCG = 10(17%). 6 blood samples were collected and sent to NIH. Information shared with EDOH office.
7-Feb	Pertussis	Sindh	Matiari	Village Sadiq khoso UC Sekhat Taluka Matiari	2	2	5	1	Alert for 10 cases of Probable Pertussis were reported from village Sadiq Khoso. All of these cases were found unvaccinated against any antigens. All cases were suffering from Whooping cough, Erythrosine Syp prescribed. Health education imparted. 2 Nasopharyngeal swab samples collected and sent to NIH. During field investigation no more Pertussis cases were found. Information shared with EDOH and DHO Matiari.

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

Disease	2013		Current week 6, 2014		2014	
	A	O	A	O	A	O
Acute watery diarrhoea	142	40	5	1	8	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	2	0	13	1
Measles	3357	281	45	4	201	7
Pertussis	46	10	3	1	6	1
NNT + tetanus	349	0	9	0	53	0
Malaria	25	6	0	0	0	0
Cutaneous Leishmaniasis	621	51	13	1	82	1
Others	520	5	12	1	49	1
Total	5628	534	89	8	420	12

Figure-3: Number of alerts received and responded, week 3 to 6 2014

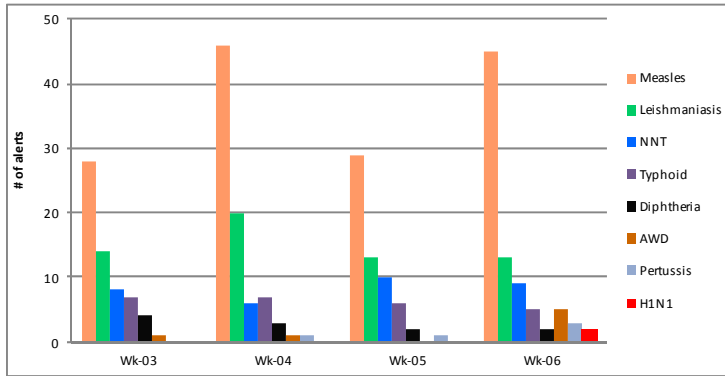
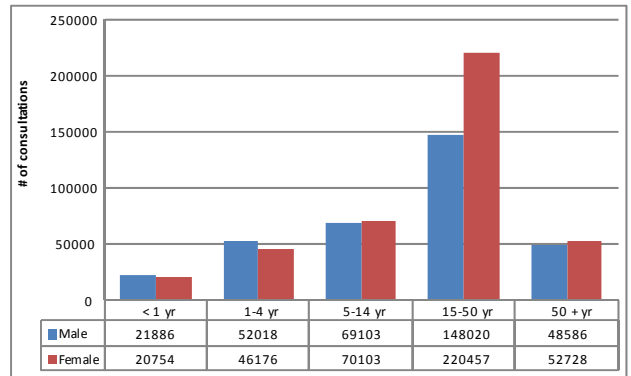
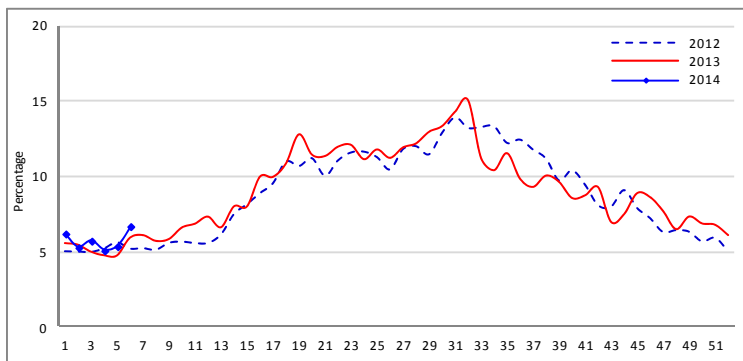


Figure-4: Number of consultations by age and gender, week 6, 2014



Province Khyber Pakhtunkhwa:

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



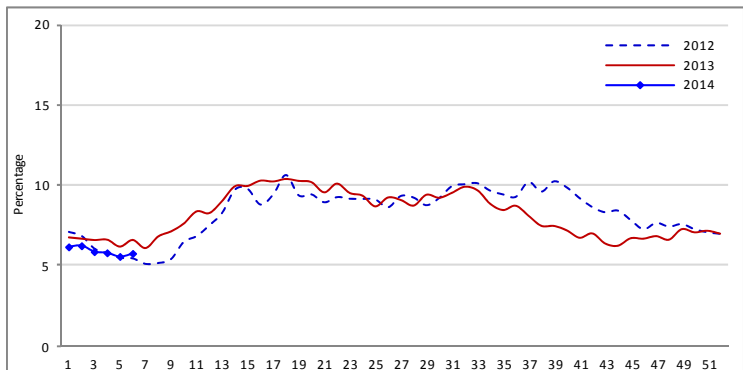
161 health facilities from 9 districts of Khyber Pakhtunkhwa sent reports to DEWS with a total of 28,302 patients consultations reported in week 6, 2014.

A total of 35 alerts were reported and appropriate measures were taken. Altogether 32 alerts were for Measles; while 1 each for H1N1, NNT and Pertussis.

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



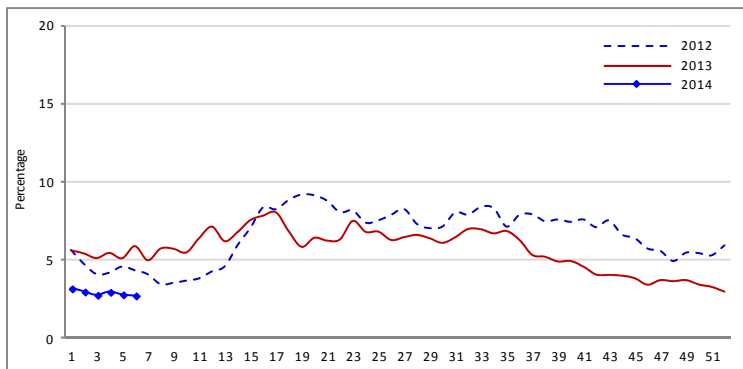
767 health facilities from 23 districts in Sindh province reported to DEWS with a total of 229,671 patient consultations in week 6, 2014.

A total of 22 alerts were received and appropriate measures were taken. Altogether 7 alerts were for Measles; 5 for NNT; 4 each for AWD and Leishmaniasis; while 1 each for Pertussis and Typhoid fever.

The proportion of AD for the province is showing minor increase 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



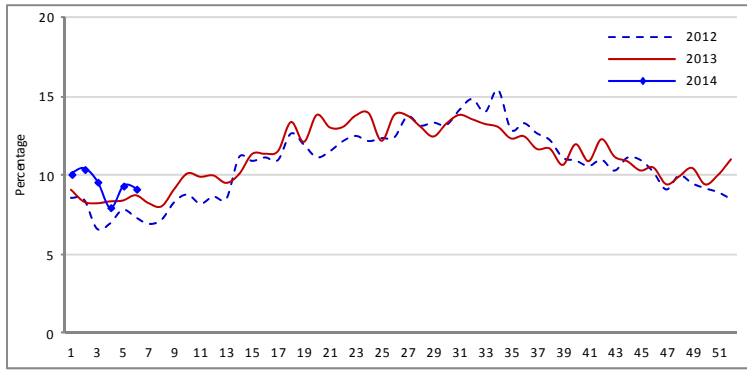
992 health facilities from 21 districts in province Punjab reported to DEWS with a total of 429,373 patients consultations in week 6, 2014.

Total 12 alerts were received and appropriate measures were taken. Altogether 3 alerts each were for Typhoid and Scabies; 2 for Diphtheria; while 1 each for H1N1, Leishmaniasis, Tetanus and ARI 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



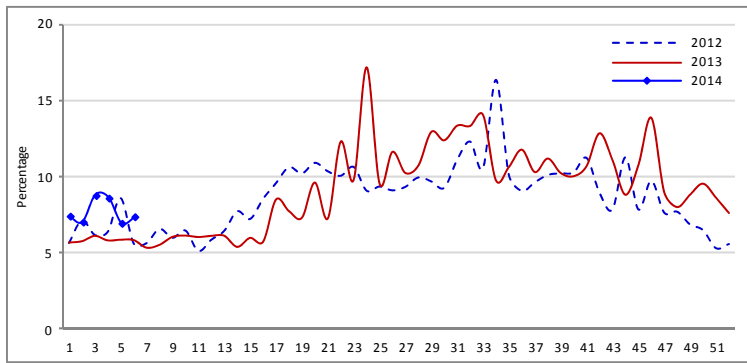
290 health facilities from 14 districts in province Balochistan reported to DEWS with a total of 41,075 patients consultations in week 6, 2014.

13 alerts were reported and appropriate measures were taken. Altogether 6 alerts were for Leishmaniasis; 3 for Measles; while 1 each for AWD, Pertussis, Typhoid fever and Chickenpox.

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

FATA:

Figure-9: Weekly trend of Acute diarrhoea, FATA



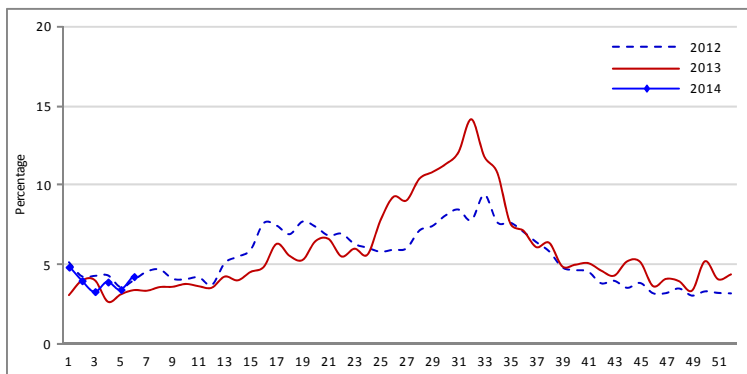
37 health facilities from 3 agencies in FATA reported to DEWS with a total of 11,289 patients consultations in week 6, 2014.

6 alerts, 2 each were for Leishmaniasis, Measles and NNT were responded in FATA in week 6, 2014.

The proportion of Acute diarrhoea showing increase as compared with last week, and 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



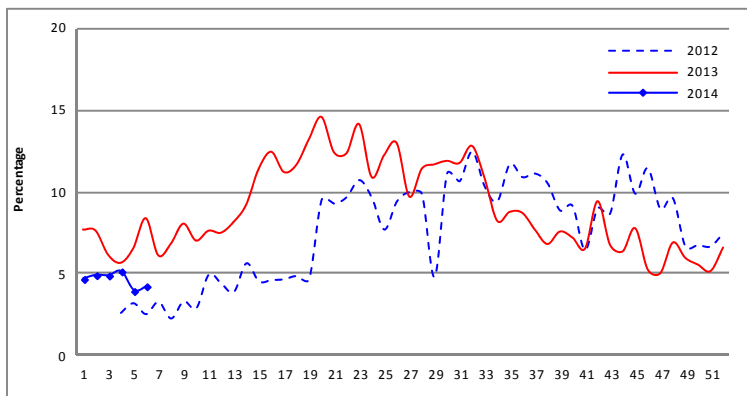
77 health facilities from 8 districts in AJ&K reported to DEWS with a total of 9,362 patients consultations in week 6, 2013.

1 alert for Measles was reported, and appropriate measures were taken in week 6, 2014.

Weekly trend of Acute diarrhoea showing increase as compared with last week, and high from same time period last year, and vigilant monitoring of the situation is required.

Islamabad:

Figure-11: Weekly trend of Acute diarrhoea, Islamabad



6 health facilities reported to DEWS on time with a total of 759 patients consultations in week 6, 2014.

No alert for any disease reported from any area in Islamabad in week 6, 2014.

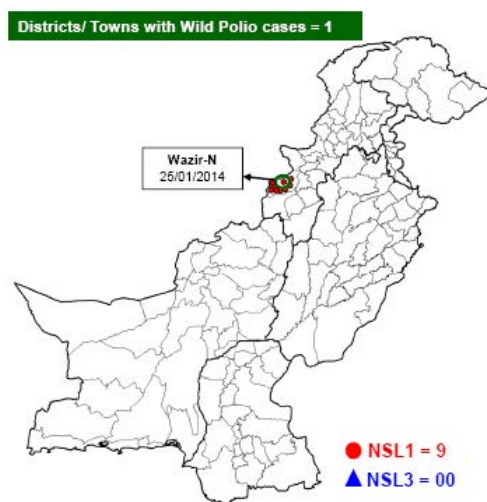
Weekly trend of Acute diarrhoea showing increase as compared with last week, and vigilant monitoring of the situation is required.

Distribution of Wild Polio Virus cases in Pakistan 2013 and 2014

In this week 6 (2 to 8 Feb 2014), two new wild type-1 polio cases were reported from the 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 nine, all from North Waziristan Agency in FATA.

The total number of polio cases in 2013 remains 93 (as compared to 58 in 2012) from 23 districts/ towns/ tribal agencies/ areas (as compared to 28 in 2012).

Province	2013			2014		
	P1	P3	P1+P3	P1	P3	P1+P3
Punjab	7	-	-	-	-	-
Sindh	10	-	-	-	-	-
Khyber Pakhtunkhwa	11	-	-	-	-	-
FATA	65	-	-	9	-	-
Balochistan	-	-	-	-	-	-
AJ&K	-	-	-	-	-	-
Gilgit-Baltistan	-	-	-	-	-	-
Islamabad	-	-	-	-	-	-
Total	93	-	-	9	-	-



Follow up of CCHF

In week 6, 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.

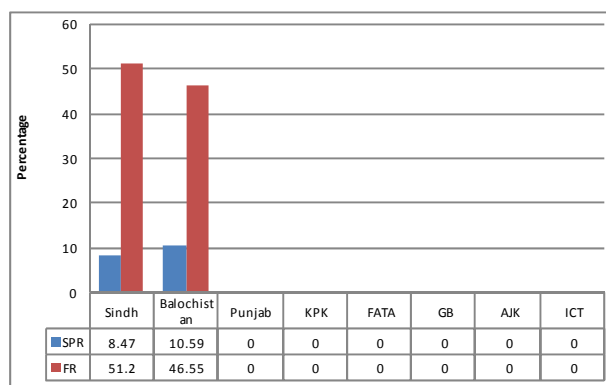
Approximately all the cases had contact history with animal trading/handling, tick bite, contact with patient, tannery worker, butcher/animals slaughtering, and fresh animal skin. There is ongoing trade of animals and animal skins with movement intra Pakistan and between neighboring countries (Afghanistan 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 5, 2014. Total number of Malaria cases tested in this week is 3,562 out of which 325 were found positive; 164 for P. Vivax; 55 for P. Falciparum; while 106 for Mixed (SPR = 9.12%; F.R = 49.54%).

Malaria tests \Province	Sindh	Balochistan	Punjab	KPK	FATA	AJK	GB	ICT
P. Vivax	102	62	0	0	0	0	0	0
P. Falciparum	9	46	0	0	0	0	0	0
Mixed	98	8	0	0	0	0	0	0
# tested	2467	1095	0	0	0	0	0	0
SPR	8.47	10.59	0	0	0	0	0	0
FR	51.2	46.55	0	0	0	0	0	0



Alerts and outbreaks, week 6, 2014

