



Weekly Epidemiological Bulletin

Disease early warning system and response in Pakistan

Volume 5, Issue 23, Wednesday 4 June 2014

Highlights

Epidemiological week no. 23 (1 - 7 June 2014)

- **CCHF:** During this week, 2 suspected CCHF cases have been reported from province Balochistan; laboratory results awaited.
- In this week, **73** out of 87 districts and 2,724 out of 3,590 health facilities have reported to Disease Early Warning System (DEWS), compared to 69 districts with 2,377 health facilities shared weekly data in week 22, 2014.
- Total **1,234,518** patients consultations reported in week 23, 2014 as compared to **1,035,621** consultations in week 22, 2014.
- In this week, a total of 43 alerts generated and timely responded. Altogether 27 alerts were for Measles; 5 for Leishmaniasis; 4 for AWD; 3 for NNT; 2 for CCHF; while 1 each for Bloody diarrhoea and Diphtheria.
- 8 outbreaks were also identified and timely responded.

Figure-1: 73 out of 87 districts reported to DEWS in week 23, 2014



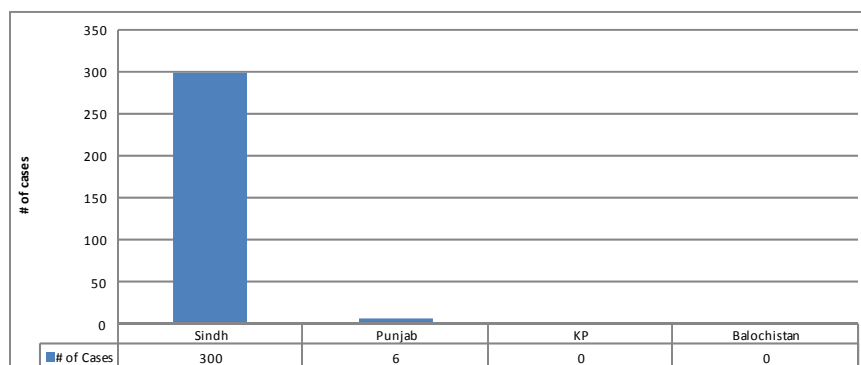
Priority diseases under surveillance in DEWS

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 23, 2014 (29 Dec 2013 to 7 June 2014)

Disease	# of Cases	Percentage
ARI	4,435,752	20.57%
Bloody diarrhoea	20,815	<1.00%
Acute diarrhoea	1,212,756	5.62%
S. Malaria	584,977	2.71%
Skin Diseases	627,620	2.91%
Unexplained fever	556,850	2.58%
All other consultations	14,123,309	65.50%
Total (All consultations)	21,562,079	100%

Figure-2: Number of Dengue fever positive cases in Pakistan, Week 1 to 23 2014



Major health events reported during the Epi-week - 23 (1 to 7 June 2014)

Disease	# of Cases	Percentage
ARI	162,980	13.20%
Bloody diarrhoea	933	<1.00%
Acute diarrhoea	71,971	5.83%
S. Malaria	22,297	1.81%
Skin Diseases	30,806	2.50%
Unexplained fever	29,047	2.35%
All other consultations	916,484	69.39%
Total (All consultations)	1,234,518	100%

From 1st January to 7th June 2014, a total of 306 lab confirmed Dengue fever cases were reported, out of these 300 positive cases were from Sindh province; while 6 positive cases were reported from Punjab province.

In 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. The provincial and local health departments were supported for the Dengue control and outbreak response activities.

Number of Outbreaks (Wk-23/2014):

Date	Disease	Province	District	Area	<5M	>5M	<5F	>5F	Action Taken
4-Jun	AWD	Balochistan	Gwadar	DHQ Hospital	13	115	9	44	A total of 181 AWD cases (from 1st to 4th June) were reported from DHQ Hospital Gwadar. RRT responded on time and all the required medicines were provided to the hospital. Health and hygiene sessions conducted with all the patients and contacts and treatment providing according to plan A, B and C. Aqua tabs and extra pack of ORS were distributed to all the patients and contacts. All information shared with DoH.
5-Jun	AWD	Balochistan	Las Bela	Lak Rohail, UC Lohi, Tehsil Uthal	3	40	9	33	85 cases including 1 death due to AWD were reported from community, UC Lohi, district Las Bela. All the cases were jointly investigated by SO DEWS and RRT and the treatment provided as per plan A, B and C. All required medicines provided to nearest health facility. Health and hygiene sessions conducted in the community. Aqua tabs, micro filters and extra packs of ORS were distributed in the community. 2/4 stool samples were found positive for Cholera; while 4 water samples were collected and sent to NIH for lab testing and confirmation, results were awaited. DC, DHO, Incharge Eidhi ambulance service were also visited the affected area. Information shared with all the health partners in the area.
7-Jun	Measles	Balochistan	Quetta	BMCH (P1-Saryab Road, P2-Nawa Killi, P3-Nohsar)	1	2	2	0	5 suspected Measles cases were reported from BMC hospital. All the cases were found unvaccinated against Measles. Vit-A was provided along with symptomatic treatment in the hospital. Families were educated on the importance of immunization. No more cases found during active search. information shared with concerned quarters.
7-Jun	Leishmaniasis	Khyber Pakhtunkhwa	Mardan	Village & UC Kohi Bermol, Tehsil Katlang, Mardan	8	2	4	15	29 clinical cases of Cutaneous Leishmaniasis were reported from village and UC Kohi Bermol, Mardan. Required doses of Inj-Glucantime to KPH Mardan by WHO for all the registered cases. On the job training of health staff was conducted for Intralesional administration of Inj-Glucantime. EDO Health and focal person RBM were informed and requested for taking vector control measures in the area.
7-Jun	Leishmaniasis	Khyber Pakhtunkhwa	Mardan	Village Haji Abad, Muslim Abad, UC Mian Essa, Tehsil Takht Bhair, Mardan	2	0	2	3	Seven clinical cases of Cutaneous Leishmaniasis were reported from BHU Mian Essa. Required doses of Inj-Glucantime to KPH Mardan by WHO for all registered cases. On the job training of health staff was conducted for Intralesional administration of Inj-Glucantime. EDO Health and focal person RBM were informed and requested for taking vector control measures in the area.
5-Jun	Measles	Khyber Pakhtunkhwa	Swabi	Isolation Unit, Children Unit, Bacha Khan Medical Complex, Swabi	13	1	10	2	26 suspected Measles cases were reported from Children Unit of Bacha Khan Medical Complex Hospital, Swabi. All the cases were sporadic and no clustering was found. Most of the children were found partially vaccinated for routine immunization but unimmunized for measles (verbal history). Vitamin-A dose given to all the patients. EDO-H Focal person and EPI Coordinator were informed and requested for outreach immunization in the area.
2-Jun	AWD	Punjab	Multan	Chungi #1, St # 2, Multan	1	1	0	0	An AWD case reported from Nishtar Hospital Multan. The case had diarrhea for last 36 hours and severely dehydrated, treated with IV Ringers Lactate solution and antibiotics in the hospital. The case originally belongs to district Bahawalpur and had travelled to Multan to visit relatives 2 weeks ago. On further investigation, one of his relatives, a 3 year old male child had developed diarrhea 6 days ago but cured. On active surveillance no more cases of AWD could be identified. 1 stool sample was collected and sent to NIH found positive for Cholera. Aqua tabs and Jerry cans were distributed in the community during health education session in the community.
4-Jun	AWD	Sindh	Hyderabad	Gulistan e Sajjad Taluka Qasimabad	0	1	1	2	Two cases of AWD were reported from Peds ward THQ Qasimabad with severe dehydration Diarrhea and vomiting. According to the parents attended nearest GP but did not cured feels generalized weakness and severe dehydration due to continuously watery diarrhea and vomiting. During active surveillance 2 more case were found in the area with no travel history. One Stool sample was taken and 2 water samples were taken for bacterial analysis and sent to NIH for confirmation. Health education imparted and community was sensitized regarding proper hand washing, Aqua tabs, ORS and Zinc tabs were provided. Information shared with DoH.

Figure-3: Number of alerts received and responded, week 20 to 23 2014

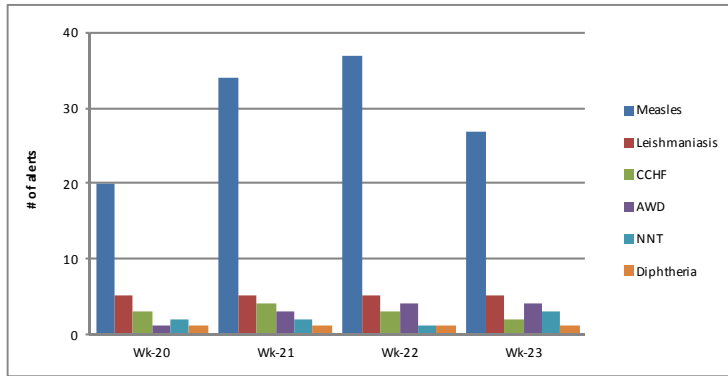
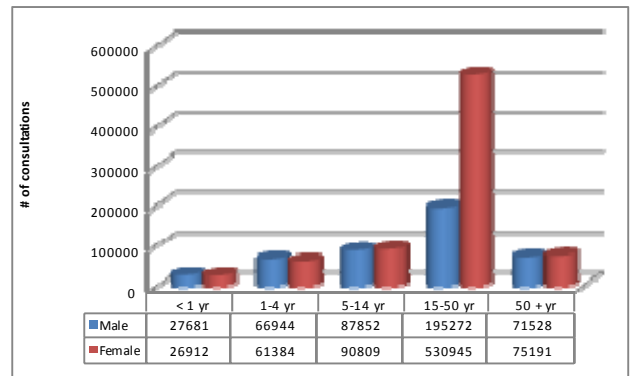
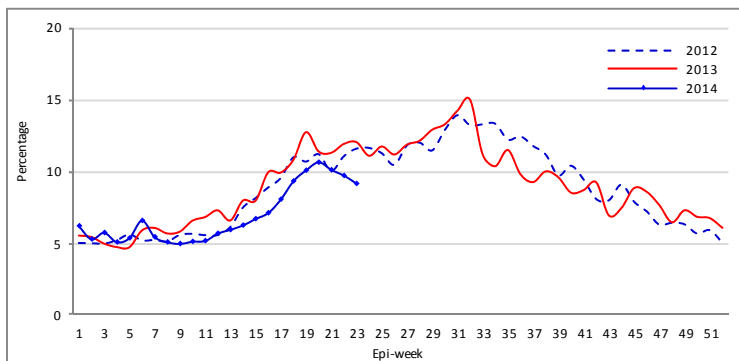


Figure-4: Number of consultations by age and gender, week 23, 2014



Province Khyber Pakhtunkhwa:

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



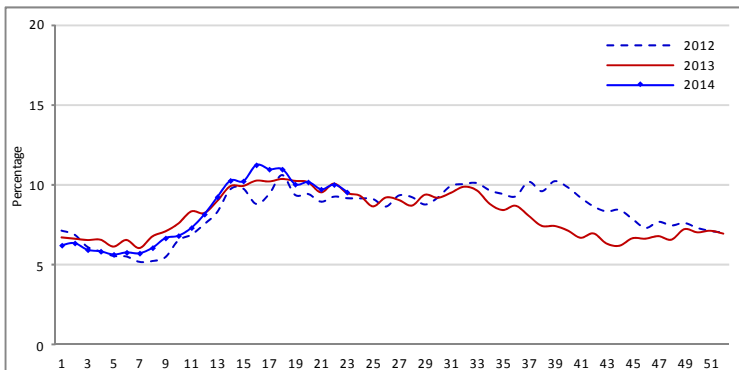
105 health facilities from 9 districts of Khyber Pakhtunkhwa sent reports to DEWS with a total of 30,143 patients consultations reported in week 23, 2014.

A total of 3 alerts for Measles were reported and appropriate measures were taken.

Figure-5 shows the weekly trend of Acute diarrhoea showing decrease and having low as compared with same time period last year.

Province Sindh:

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



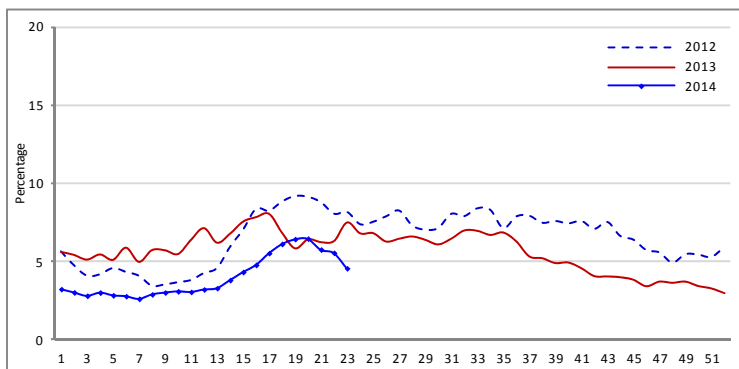
723 health facilities from 22 districts in Sindh province reported to DEWS with a total of 224,134 patient consultations in week 23, 2014.

A total of 13 alerts were received and appropriate measures were taken. Altogether 6 alerts were for Measles; 3 each for Leishmaniasis and NNT; while 1 for AWD.

The proportion of AD for the province is showing decrease as compared with last week, but vigilant monitoring of the situation required, as proportion of AD is showing same pattern in the province as compared with same time period last year.

Province Punjab:

Figure-7: Trend of Acute diarrhoea, province Punjab



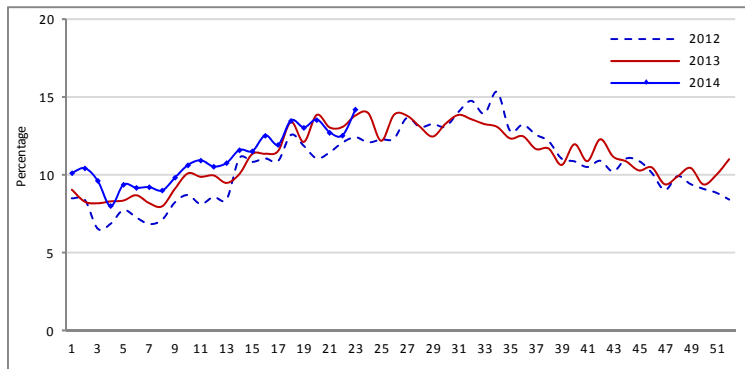
1,671 health facilities from 32 districts in Punjab province reported to DEWS with a total of 944,732 patients consultations in week 23, 2014.

Total 16 alerts were received and appropriate measures were taken. Altogether 13 alerts were for Measles; while 1 each for AWD, Bloody diarrhoea and Diphtheria were responded in Punjab province.

The weekly trend of Acute diarrhoea in Punjab showing decrease as compared with last week and low as compared with same time period last year.

Province Balochistan:

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



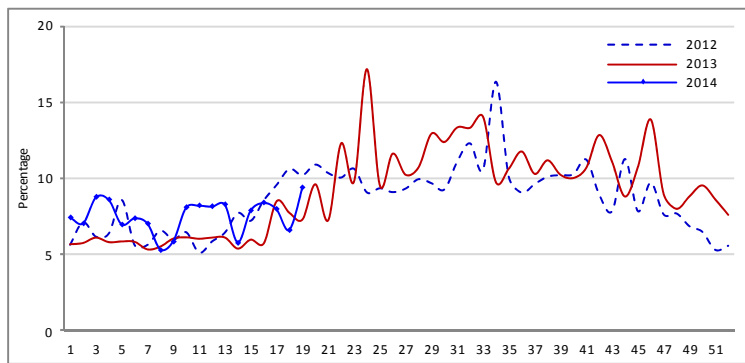
222 health facilities from 8 districts in Balochistan province reported to DEWS with a total of 34,477 patients consultations in week 23, 2014.

A total of 11 alerts were reported and appropriate measures were taken. Altogether 5 alerts were for Measles; 2 each for AWD, CCHF and Leishmaniasis.

In this week the weekly proportion of AD showing increase as compared with last week, and high from the same time period last year; vigilant monitoring of the situation required.

FATA:

Figure-9: Weekly trend of Acute diarrhoea, FATA



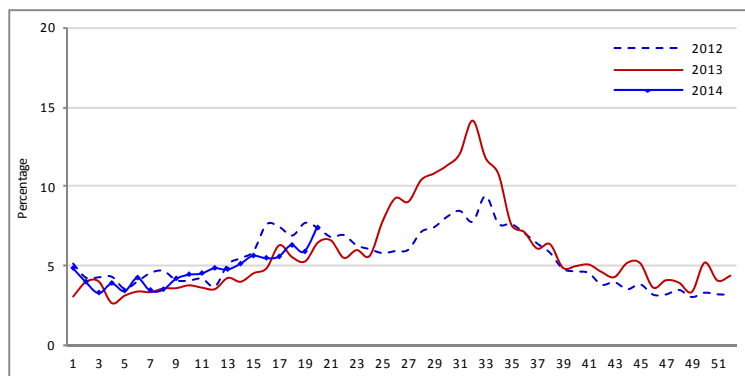
1 health facilities from 1 agency in FATA reported to DEWS with a total of 677 patients consultations in week 23, 2014.

No alert for any disease was received from any area in FATA in week 23 2014.

The proportion of AD showing increase, and high from same time period last year. Vigilant monitoring of the situation is required.

State of Azad Jammu and Kashmir:

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



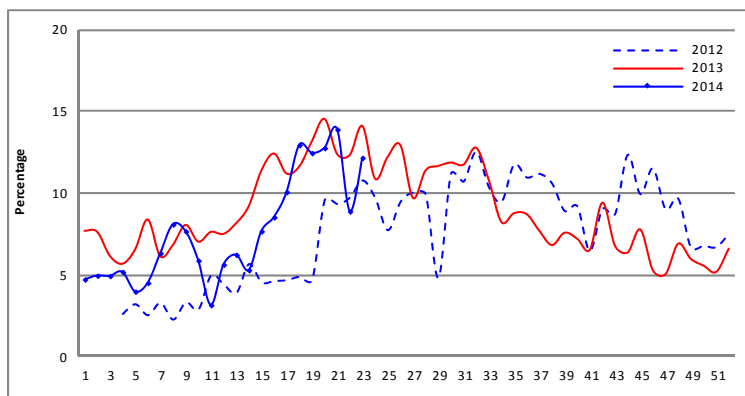
68 health facilities from 7 districts in AJ&K reported to DEWS with a total of 8,302 patients consultations in week 20, 2013.

6 alerts were reported from AJ&K and appropriate measures were taken in week 20 2014. Altogether 5 alerts were for Measles; while 1 for Leishmaniasis.

Weekly trend of AD showing increase as compared with last week and higher from same time period last year; vigilant monitoring of the situation is required.

Islamabad:

Figure-11: Weekly trend of Acute diarrhoea, Islamabad



2 health facilities reported to DEWS on time with a total of 355 patients consultations in week 23, 2014.

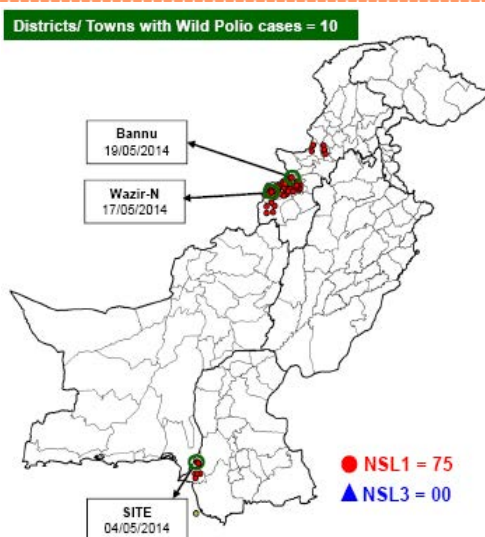
No alert for any disease was reported from any area in Islamabad in week 23, 2014.

Weekly trend of AD showing continuously increase from last couple of weeks, and vigilant monitoring of the situation is required.

Distribution of Wild Polio Virus cases in Pakistan 2013 and 2014

In this week 23 (1 to 7 June 2014), four new type-1 wild polio cases have been reported in the country, three from Federally Administered Tribal Areas (North Waziristan Agency) and one from Khyber Pakhtunkhwa (Bannu district). This brings the total number of polio cases in 2014 to 75 (compared to 18 in 2013 till this time) from 10 districts/towns/tribal agencies/FR areas (compared to 10 in 2013 till this time).

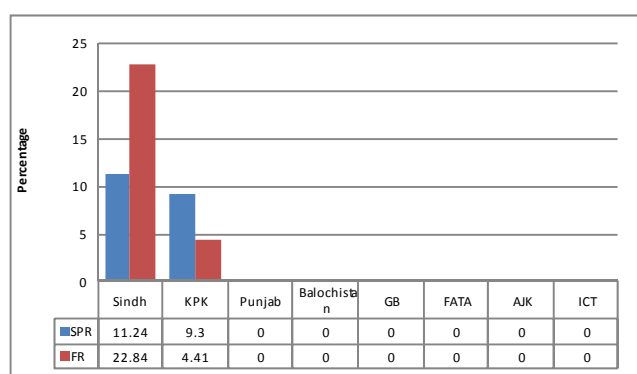
Province	2013			2014		
	P1	P3	P1+P3	P1	P3	P1+P3
Punjab	7	-	-	-	-	-
Sindh	10	-	-	6	-	-
Khyber Pakhtunkhwa	11	-	-	12	-	-
FATA	65	-	-	57	-	-
Balochistan	-	-	-	-	-	-
AJ&K	-	-	-	-	-	-
Gilgit-Baltistan	-	-	-	-	-	-
Islamabad	-	-	-	-	-	-
Total	93	-	-	75	-	-



Malaria:

The Table and chart given below shows the Malaria slide positivity and Falciparum ratio in week 23, 2014. Total number of Malaria cases tested in this week is 2,483 out of which 365 were found positive; 217 for P. Vivax; 18 for P. Falciparum; while 30 for Mixed (SPR = 10.67%; F.R = 18.11%).

Malaria tests \ Province	Sindh	KPK	Balochistan	Punjab	GB	FATA	AJK	ICT
P. Vivax	152	65	0	0	0	0	0	0
P. Falciparum	15	3	0	0	0	0	0	0
Mixed	30	0	0	0	0	0	0	0
# tested	1752	731	0	0	0	0	0	0
SPR	11.24	9.3	0	0	0	0	0	0
FR	22.84	4.41	0	0	0	0	0	0



Follow up on: CCHF

CCHF is a serious viral hemorrhagic fever with up to 50% case fatality rate, caused by an RNA virus of family Bunyviridae, genus Nairovirus, carried by Hyalomma species of ticks. Human beings become infected by tick bites or crushing the ticks, which are usually found on sheep, cattle, goats or camels, and their slaughtered skins. They may also be exposed to the virus in blood or tissues of a viremic animal during its slaughter and butchering; or by contact with infected blood or secretions of acute human cases in home or hospital setting. Any contact of a CCHF patient should monitor his/her temperature for 14 days and see a doctor if fever develops. The anti viral medicine Ribavirin has been effective in saving lives of patients who report early to the health facility.

Suspected and confirmed CCHF cases are reported continuously from epidemiological week 8 2014. So far total 18 suspected cases, 7 laboratory confirmed, and 5 deaths (4 due to positive CCHF) have been reported where most of the cases are from province Balochistan Suspected cases = 11 (6 were from Afghanistan); Lab confirmed = 3, and 1 death. 4 suspected cases (1 from Afghanistan) reported from Islamabad; 1 positive and 3 deaths. While 1 each case was reported from province Khyber Pakhtunkhwa (belongs to Afghanistan and positive for CCHF) province Punjab (+ve and expired) and AJ&K (-ve).

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

WHO team is supporting the provincial health departments in handling the situation. The WHO-DEWS team conducts epidemiological investigation and contacts tracing (active surveillance in the community and hospitals), sharing information with the stake holders (DoH, Livestock Dept., hospitals and other partners). Give health education to family members and close contacts of the cases on preventive measures and seeking immediate health care in case of fever/symptoms. Collect and transport blood samples to NIH for laboratory testing and confirmation. Although joint efforts are being taken, however, more vigorous actions are required on the eradication of infected ticks in the high risks areas and awareness raising in the population.

Alerts and outbreaks, week 23, 2014

