



# Weekly Epidemiological Bulletin

## Disease early warning system and response in Pakistan

Volume 5, Issue 36, Wednesday 10 September 2014

### Highlights

*Epidemiological week no. 36  
(31 August - 6 September 2014)*

- **CCHF:** During this week, 1 laboratory confirmed CCHF case has been reported from Sindh province.
- In this week, **85** out of 87 districts and 2,963 out of 3,590 health facilities have reported to Disease Early Warning System (DEWS), compared to 85 districts with 3,039 health facilities shared weekly data in week 35, 2014.
- A total of **1,121,482** patients consultations reported in this week 36, 2014.
- In this week, a total of 36 alerts generated and timely responded. Altogether 12 alerts were for Measles; 9 for NNT; 4 for Leishmaniasis; 3 for Dengue fever; 2 each for Acute diarrhoea, AWD and Naegleria Meningitis; while 1 each for CCHF and Typhoid fever.

Figure-1: 85 out of 87 districts reported to DEWS in week 36, 2014



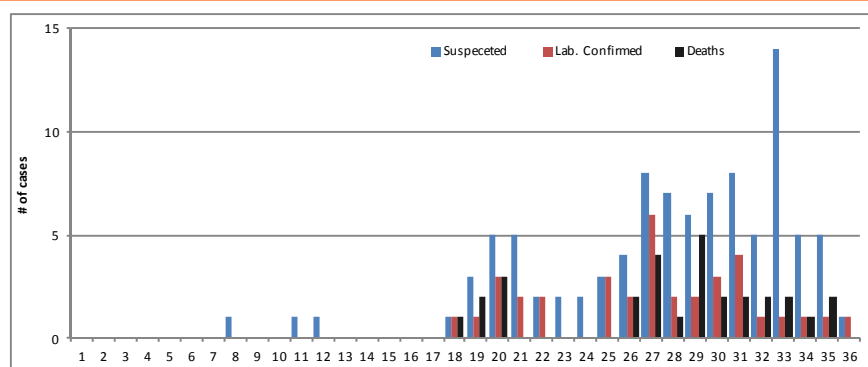
#### Priority diseases under surveillance in DEWS

Acute Respiratory Infection  
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  
Cutaneous Leishmaniasis

#### Cumulative number of selected health events reported in Epi-week 1 to 36, 2014 (29 Dec 2013 to 6 September 2014)

Disease	# of Cases	Percentage
ARI	6,679,978	18.39%
Bloody diarrhoea	35,296	<1.00%
Acute diarrhoea	2,116,326	5.83%
S. Malaria	918,458	2.53%
Skin Diseases	1,151,479	3.17%
Unexplained fever	930,757	2.56%
All other consultations	24,491,390	67.43%
<b>Total (All consultations)</b>	<b>36,323,684</b>	<b>100%</b>

Figure-2: Weekly number of CCHF cases and deaths in Pakistan, week 1 to 36 2014



#### Major health events reported during the Epi-week - 36 (31 August - 6 September 2014)

Disease	# of Cases	Percentage
ARI	196,691	17.54%
Bloody diarrhoea	1,431	<1.00%
Acute diarrhoea	67,334	6.00%
S. Malaria	28,596	2.55%
Skin Diseases	38,271	3.41%
Unexplained fever	30,405	2.71%
All other consultations	758,754	67.66%
<b>Total (All consultations)</b>	<b>1,121,482</b>	<b>100%</b>

Crimean Congo Haemorrhagic Fever (CCHF) cases are reported continuously from epidemiological week 8, 2014. So far total 97 suspected cases, 36 laboratory confirmed, and 28 deaths (of these 14 laboratory confirmed) have been reported. Most of the cases are from Balochistan province 46 suspected (13 cases belongs to Afghanistan), 10 Laboratory confirmed and 9 deaths. 27 suspected, 15 Laboratory confirmed (10 from Afghanistan) and 10 deaths (7 Lab confirmed) were reported from Khyber Pakhtunkhwa province. 4 suspected cases (2 from Afghanistan), 3 Laboratory confirmed and 2 deaths were reported from Islamabad. 15 suspected CCHF cases (7 Laboratory confirmed), 6 deaths were reported from Punjab province. 2 laboratory confirmed cases (1 death) were reported from Sindh province; While 1 suspected case was from district Sudhnuti (AJK) and found negative for CCHF.

The CCHF cases from Afghanistan are detected and reported from Quetta and Peshawar. The patients are referred for treatment (mostly self referrals) to the Tertiary Care hospitals in both these cities. The list of CCHF cases with addresses shared with concerned person at the Ministry of Public Health Afghanistan for preventive measures at community level.

Number of Outbreaks (Wk-36/2014):

Date	Disease	Province	District	Area	<5M	>5M	<5F	>5F	Action Taken
5-Sep	Acute Diarrhoea	Balochistan	Kech	BHU Balgather	11	44	12	61	128 suspected cases of Acute diarrhoea were reported from BHU Balgather, district Kech. All the patients treated according to plan A and B. Health and hygiene session was conducted in the community. Water samples were collected and sent for Laboratory testing. Aqua tabs and ORS were distributed in the community. All information shared with DHO and TMA. The situation is under control.
3-Sep	Leishmaniasis	Balochistan	Las Bela	(RHC) winder, Tehsil Winder	0	3	1	2	6 suspected Leishmaniasis cases were reported from RHC Winder, district Lasbela. All the cases were presenting with lesions mostly on foot. Including these cases a total of 78 case have been reported so far from this centre. Health and hygiene session was conducted in the community. On the job training of health staff was conducted for Intralesional administration of Inj-Glucantime and treatment was provided to all the patients through RHC.
6-Sep	Leishmaniasis	Khyber Pakhtunkhwa	Mardan	Village Haji Abad, Muslim Abad, UC Mian Essa, Tehsil Takht Bhai, Mardan	1	1	2	4	Eight clinical cases of Cutaneous Leishmaniasis were reported from BHU Baizo Kharki. WHO supplied required doses of Inj-Glucantime to KPH Mardan for all the registered cases. On the job training of health staff was conducted for Intralesional administration of Inj-Glucantime. RBM focal person, EDO-Health were informed and requested for vector control measures in the areas.
6-Sep	Leishmaniasis	Khyber Pakhtunkhwa	Mardan	Village Liyasey, Kharki, UC Kharki, Mardan	0	2	2	5	Nine clinical cases of Cutaneous Leishmaniasis were reported from BHU Kohi Bermol, Tehsil Katlang. WHO supplied required doses of Inj Glucantime to KPH Mardan for all the registered cases. On the job training of health staff was conducted for Intralesional administration of Inj-Glucantime. RBM focal person, EDO Health were informed and requested for vector control measures in the areas
4-Sep	Leishmaniasis	Punjab	Multan	Wilayat abad, Double Phatak	0	3	0	1	Four new Clinical cases of Cutaneous Leishmaniasis were reported from Civil Hospital Multan. Vector surveillance activity has been conducted in the affected areas and Permethrin Fogging and IRS was conducted in affected households. 2 Health education sessions were conducted in the community with the help of Public Health Workers. Injection Glucantime were also provided to Civil hospital and treatment of the cases has been started. Information shared with EDO-Health.

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

Disease	2013		Current week 36, 2014		2014	
	A	O	A	O	A	O
Acute watery diarrhoea	142	40	2	1	53	13
Acute jaundice syndrome	49	6	0	0	15	3
Bloody diarrhoea	45	3	0	0	26	0
CCHF	90	47	1	0	85	44
Dengue fever	300	66	3	0	15	0
Diphtheria	84	19	0	0	42	4
Measles	3357	281	12	0	985	31
Pertussis	46	10	0	0	25	2
NNT + tetanus	349	0	9	0	199	0
Malaria	25	6	0	0	0	0
Cutaneous Leishmaniasis	621	51	4	0	325	18
Others	520	5	5	0	258	6
<b>Total</b>	<b>5628</b>	<b>534</b>	<b>36</b>	<b>1</b>	<b>2028</b>	<b>121</b>

Figure-3: Number of alerts received and responded, week 33 to 36 2014

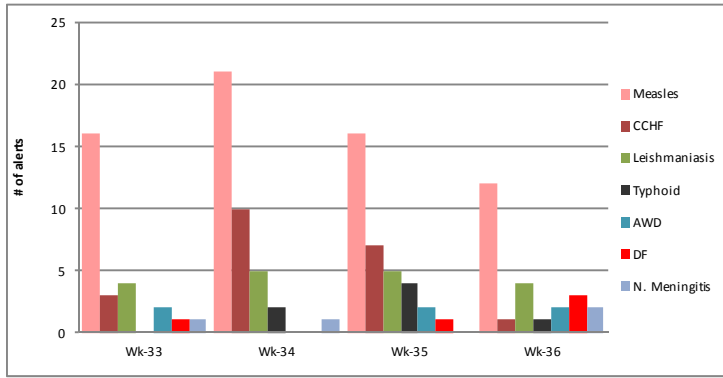
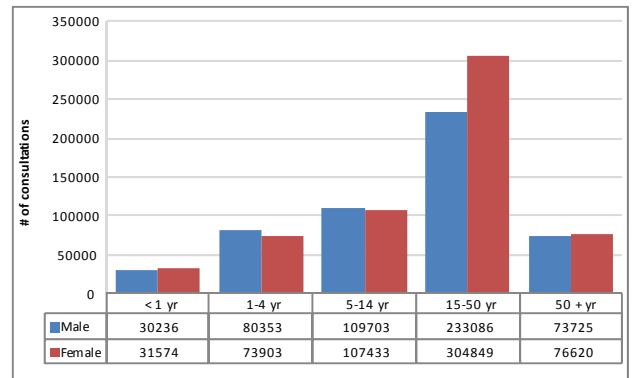
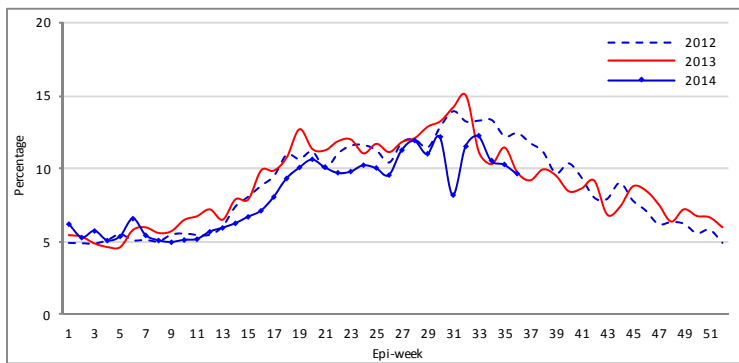


Figure-4: Number of consultations by age and gender, week 36, 2014



**Province Khyber Pakhtunkhwa:**

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



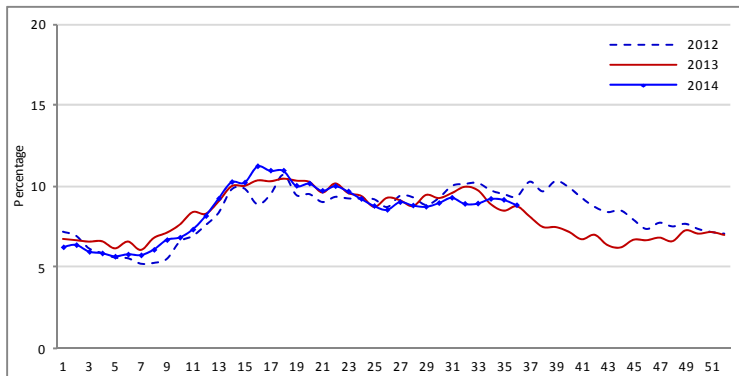
144 health facilities from 11 districts of Khyber Pakhtunkhwa sent reports to DEWS with a total of 41,829 patients consultations reported in week 36, 2014.

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

Figure-5 shows the weekly trend of Acute diarrhoea showing decrease this week but vigilant monitoring of the situation is required.

**Province Sindh:**

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



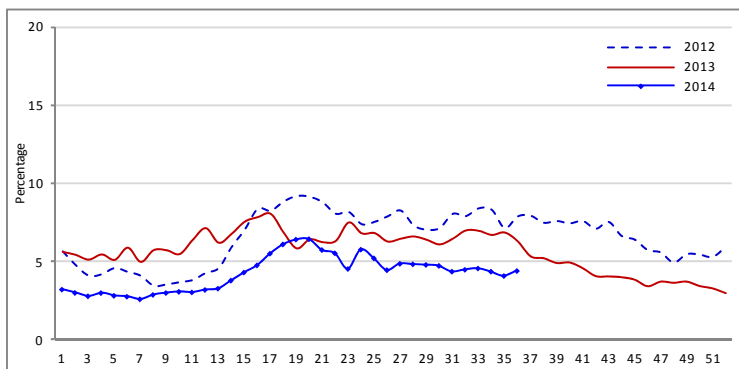
791 health facilities from 23 districts in Sindh province reported to DEWS with a total of 293,587 patient consultations in week 36, 2014.

A total of 13 alerts were received and appropriate measures were taken. Altogether 6 alerts were for NNT; 2 each for Leishmaniasis Measles and Naegleria Meningitis; while 1 for AWD.

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

**Province Punjab:**

Figure-7: Trend of Acute diarrhoea, province Punjab



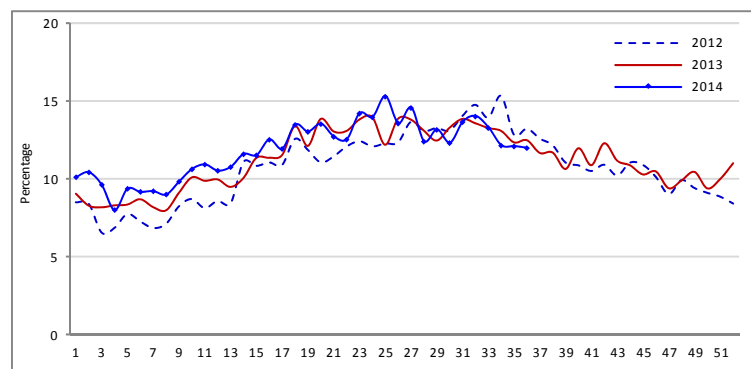
1,768 health facilities from 35 districts in Punjab province reported to DEWS with a total of 744,566 patients consultations in week 36, 2014.

Total 11 alerts were received and appropriate measures were taken. Altogether 3 alerts each were for Dengue fever and NNT; 2 each for Measles and Acute diarrhoea; while 1 for Typhoid fever were responded in province Punjab.

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

**Province Balochistan:**

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



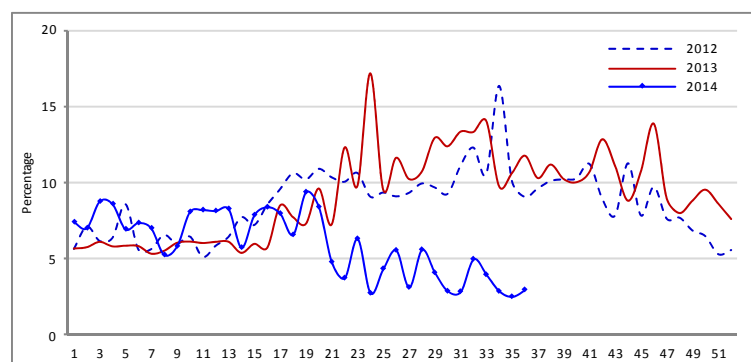
205 health facilities from 8 districts in Balochistan province reported to DEWS with a total of 33,734 patients consultations in week 36, 2014.

A total of 7 alerts were reported and appropriate measures were taken. Altogether 4 alerts for Measles; while 1 each for AWD, CCHF and Leishmaniasis.

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

**FATA:**

Figure-9: Weekly trend of Acute diarrhoea, FATA



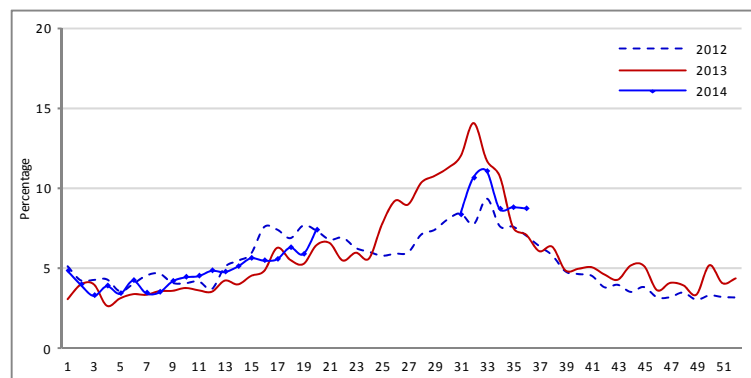
1 health facilities from 1 agency in FATA reported to DEWS with a total of 767 patients consultations in week 36, 2014.

No alert for any disease was received from any area in FATA in week 36 2014.

The proportion of AD showing some spikes as the number of consultations is low, but vigilant monitoring of the situation is required.

**State of Azad Jammu and Kashmir:**

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



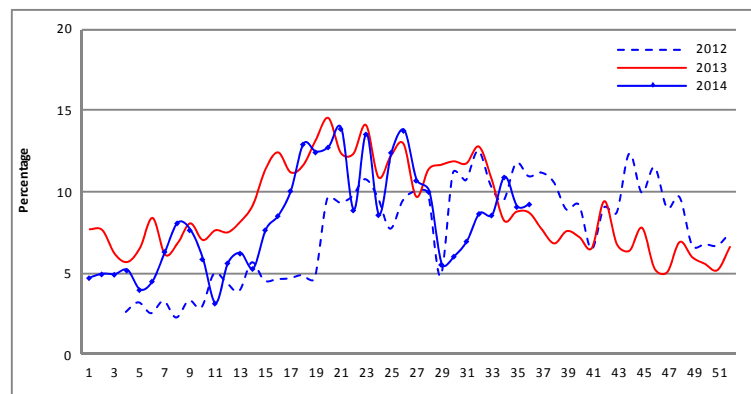
52 health facilities from 5 districts in AJ&K reported to DEWS with a total of 6,673 patients consultations in week 36, 2013.

2 alerts, 1 each for Measles and Leishmaniasis were reported in this week and appropriate measures were taken.

Weekly trend of AD showing minor decrease as compared with last week but 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 326 patients consultations in week 36, 2014.

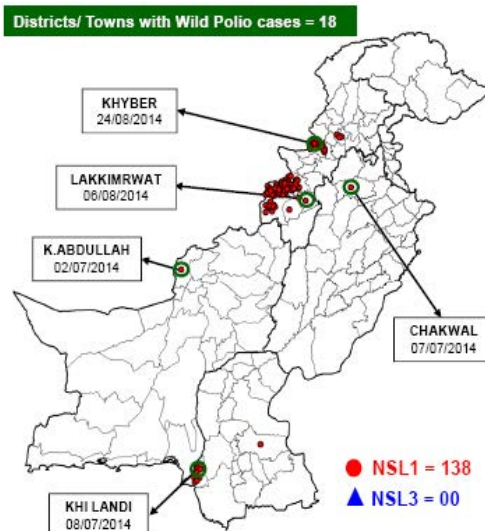
no alert for any disease was reported in week 36 from Islamabad in this week.

Weekly trend of AD showing spikes as the number of reporting health facilities is low from last couple of weeks, but vigilant monitoring of the situation is required.

Distribution of Wild Polio Virus cases in Pakistan 2013 and 2014

In week 36 (31 August to 6 September 2014), nineteen new wild polio virus (WPV) cases were reported, sixteen from FATA (two from North Waziristan, four from South Waziristan and ten from Khyber agency) and two from Khyber Pakhtunkhwa; one each from Tank and Bannu (while investigation for one of the new cases located at the boundary of FR Bannu and Lakki Marwat is in process and exact location is being determined). This brings the total number of polio cases in 2014 to 138 (compared to 35 in 2013 till this time) from 18 districts/towns/tribal agencies/FR areas (compared to 14 in 2013 till this time).

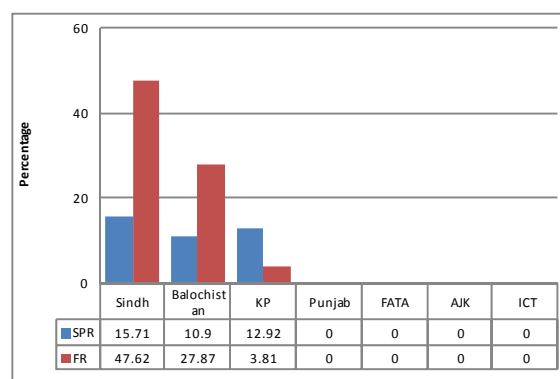
Province	2013			2014		
	P1	P3	P1+P3	P1	P3	P1+P3
Punjab	7	-	-	1	-	-
Sindh	10	-	-	11	-	-
Khyber Pakhtunkhwa	11	-	-	23	-	-
FATA	65	-	-	102	-	-
Balochistan	-	-	-	1	-	-
AJ&K	-	-	-	-	-	-
Gilgit-Baltistan	-	-	-	-	-	-
Islamabad	-	-	-	-	-	-
<b>Total</b>	<b>93</b>	<b>-</b>	<b>-</b>	<b>138</b>	<b>-</b>	<b>-</b>



Malaria:

The Table and chart given below shows the Malaria Slide Positivity and Falciparum Ratio in week 36, 2014. Total number of Malaria cases tested in this week is 4,472 out of which 626 were found positive; 398 for P. Vivax; 67 for P. Falciparum; while 161 for Mixed (SPR = 14.00%; F.R = 36.42%).

Malaria tests \ Province	Sindh	Balochistan	Khyber Pakhtunkhwa	Punjab	GB	FATA	AJK	ICT
P. Vivax	209	88	101	0	0	0	0	0
P. Falciparum	32	31	4	0	0	0	0	0
Mixed	158	3	0	0	0	0	0	0
# tested	2540	1119	813	0	0	0	0	0
SPR	15.71	10.9	12.92	0	0	0	0	0
FR	47.62	27.87	3.81	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 Bunyaviridae, 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.

Crimean Congo Haemorrhagic Fever (CCHF) cases are reported continuously from epidemiological week 8, 2014. So far total 97 suspected cases, 36 laboratory confirmed, and 28 deaths (of these 14 laboratory confirmed) have been reported. Most of the cases are from Balochistan province 46 suspected (13 cases belongs to Afghanistan), 10 Laboratory confirmed and 9 deaths. 27 suspected, 15 Laboratory confirmed (10 from Afghanistan) and 10 deaths (7 Lab confirmed) were reported from Khyber Pakhtunkhwa province. 4 suspected cases (2 from Afghanistan), 3 Laboratory confirmed and 2 deaths were reported from Islamabad. 15 suspected CCHF cases (7 Laboratory confirmed), 6 deaths were reported from Punjab province. 2 laboratory confirmed cases (1 death) were reported from Sindh province; While 1 suspected case was from district Sudhuti (AJK) and found negative for CCHF. 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 36 2014

