



Weekly Epidemiological Bulletin

Disease early warning system and response in Pakistan

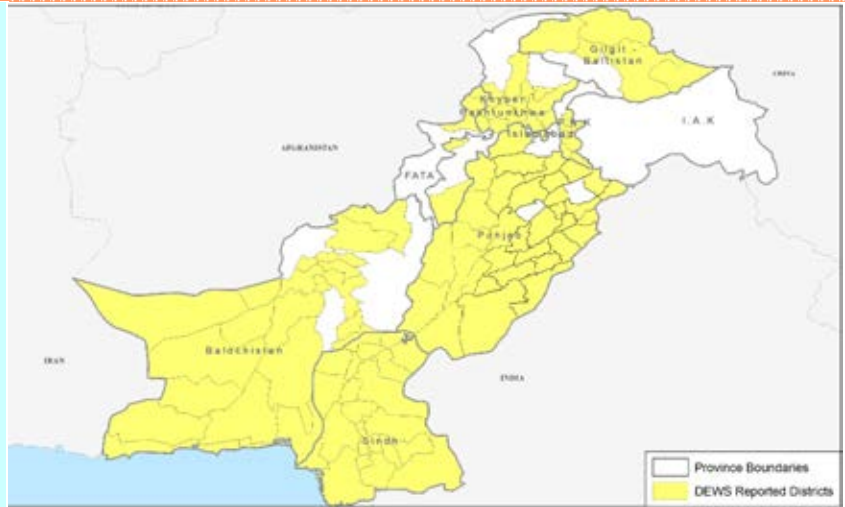
Volume 5, Issue 42, Wednesday 22 October 2014

Highlights

Figure-1: 81 out of 87 districts reported to DEWS in week 42, 2014

Epidemiological week no. 42
(12 - 18 October 2014)

- In this week, **81** out of 87 districts and 2,750 out of 3,590 health facilities have reported to Disease Early Warning System (DEWS), compared to 85 districts with 2,791 health facilities shared weekly data in week 41, 2014.
- A total of **1,078,852** patients consultations reported in this week 42, 2014.
- In this week, a total of 43 alerts generated and timely responded. Altogether 13 alerts were for Measles; 9 for CCHF; 7 for Leishmaniasis; 6 for Dengue fever; 5 for Diphtheria; while 3 for NNT.
- 3 outbreaks were also identified and timely responded. Altogether 1 each for CCHF; Dengue fever and Diphtheria.



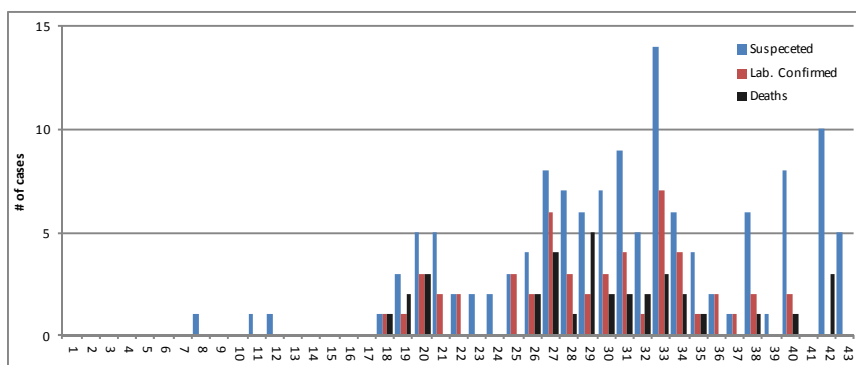
Priority diseases under surveillance in DEWS

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 42, 2014 (29 Dec 2013 to 18 October 2014)

Disease	# of Cases	Percentage
ARI	7,822,198	18.38%
Bloody diarrhoea	42,911	<1.00%
Acute diarrhoea	2,456,637	5.77%
S. Malaria	1,077,025	2.53%
Skin Diseases	1,352,061	3.18%
Unexplained fever	1,087,233	2.55%
All other consultations	28,726,869	67.49%
Total (All consultations)	42,564,934	100%

Figure-2: Weekly number of CCHF cases and deaths in Pakistan, week 1 to 43 2014



Major health events reported during the Epi-week - 42 (12 - 18 October 2014)

Disease	# of Cases	Percentage
ARI	227,362	21.07%
Bloody diarrhoea	1,239	<1.00%
Acute diarrhoea	51,881	4.81%
S. Malaria	26,535	2.46%
Skin Diseases	30,791	2.85%
Unexplained fever	26,765	2.48%
All other consultations	714,279	66.21%
Total (All consultations)	1,078,852	100%

Crimean Congo Haemorrhagic Fever (CCHF) cases are reported continuously from epidemiological week 8, 2014. So far total 129 suspected cases, 52 laboratory confirmed, and 35 deaths (of these 16 laboratory confirmed) have been reported. Most of the cases are from Balochistan province 66 suspected (14 cases belongs to Afghanistan), 20 Laboratory confirmed and 15 deaths. 39 suspected, 19 Laboratory confirmed (14 from Afghanistan) and 12 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. 17 suspected CCHF cases (8 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-42/2014):

Date	Disease	Province	District	Area	<5M	>5M	<5F	>5F	Action Taken
14-Oct	CCHF	Khyber Pakhtunkhwa	Peshawar	Rehmat Abad, Sabzi Mandi, Bannu	0	1	0	0	An alert for CCHF reported from Bannu district. The patient is 35 years old male and involved in animal slaughtering on occasion of Eid-ul-Azha. He became sick, having fever followed by generalized weakness and lethargy. One blood sample was taken and sent to Agha Khan Laboratory which came out positive for CCHF. Family members have been sensitized about the nature of the disease. Information shared with DoH.
18-Oct	Leishmaniasis	Khyber Pakhtunkhwa	Mardan	Village & UC Kohi Bermol, Tehsil Katlang, Mardan	2	2	3	8	An alert for 15 clinical cases of Cutaneous Leishmaniasis were reported from BHU Kohi Bermol, Tehsil Katlang. WHO supplied required doses of Inj-Glucantime to KPH Mardan for treatment of registered cases. On the job training of health staff was conducted for intralésional administration of Inj-Glucantime. EDO, RBM focal person was informed and requested for vector control measures in the area.
16-Oct	Dengue fever	Punjab	Lahore	UC 34 Shalimar Town	0	4	0	1	4 suspected and 1 confirmed Dengue fever cases were reported from Teaching units in Lahore. 1 blood sample was taken and sent for laboratory confirmation and was found positive for Dengue fever. The confirmed case was admitted and kept in isolation ward (HDU) in Teaching hospital. Health education session was conducted in the community. Information shared with EDOH.
13-Oct	Dengue fever	Punjab	Rawalpindi	Rawal Town Rawalpindi	0	21	8	11	105 suspected, 100 probable and 128 confirmed Dengue Fever cases were notified from DHQ, Holy Family and BB Hospitals Rawalpindi during the week. A total of 228 blood samples were taken and sent for laboratory confirmation and 128 patients were found positive for Dengue fever. All the positive cases were admitted and kept in isolation wards in the hospitals. Health education sessions were conducted in the community on proper solid waste disposal and improved water storage practices, use of protective clothing and repellents. Information shared with EDO(H) Rawalpindi. Follow up planned.
15-Oct	Dengue fever	Punjab	Rawalpindi	Cantonment Area Rawalpindi	0	37	0	21	34 confirmed, 12 probable and 12 suspected cases of Dengue fever were reported from DHQ Hospital Rawalpindi. The cases were admitted and kept in isolation wards of the hospital. A total of 44 blood samples were taken and sent for laboratory confirmation and 34 patients were found positive for Dengue fever. Health education session was conducted in the community on proper solid waste disposal and improved water storage practices, use of protective clothing and repellents. Information shared with EDO(H) Rawalpindi and

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

Disease	2013		Current week 42, 2014		2014	
	A	O	A	O	A	O
Acute watery diarrhoea	142	40	0	0	61	15
Acute jaundice syndrome	49	6	0	0	15	3
Bloody diarrhoea	45	3	0	0	27	0
CCHF	90	47	9	1	109	51
Dengue fever	300	66	6	1	51	12
Diphtheria	84	19	5	1	57	5
Measles	3357	281	13	0	1050	32
Pertussis	46	10	0	0	27	2
NNT + tetanus	349	0	3	0	229	0
Malaria	25	6	0	0	0	0
Cutaneous Leishmaniasis	621	51	7	0	354	19
Others	520	5	0	0	273	6
Total	5628	534	43	3	2253	145

Figure-3: Number of alerts received and responded, week 39 to 42 2014

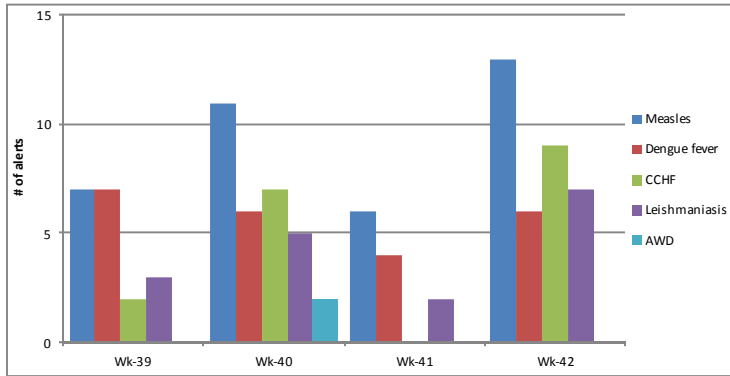
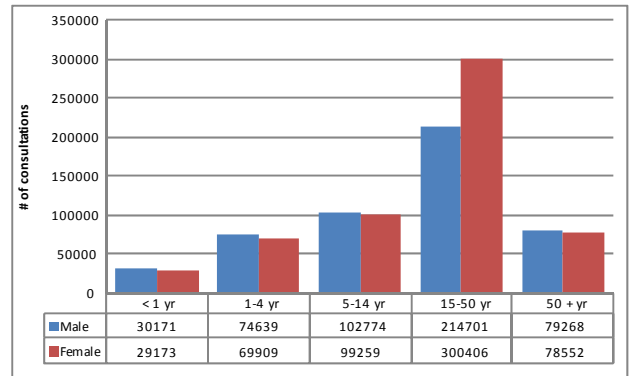
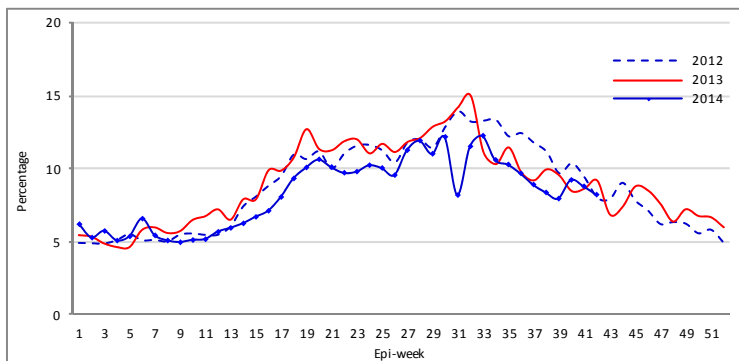


Figure-4: Number of consultations by age and gender, week 42, 2014



Province Khyber Pakhtunkhwa:

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



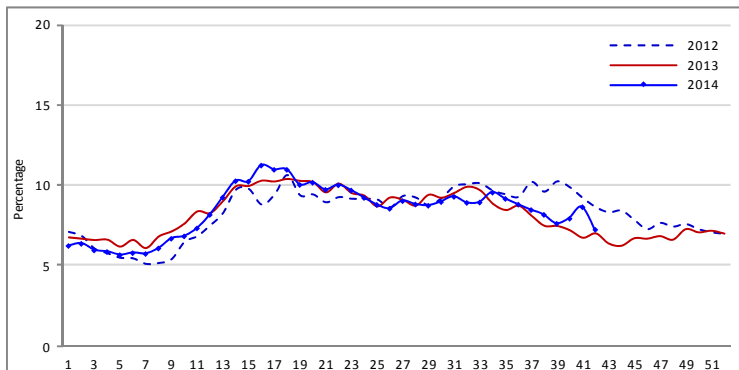
138 health facilities from 11 districts of Khyber Pakhtunkhwa sent reports to DEWS with a total of 31,285 patients consultations reported in week 42, 2014.

A total of 14 alerts were received and appropriate measures were taken during this week. Altogether 6 alerts were for Measles; 5 for CCHF; while 3 for Diphtheria.

Figure-5 shows the weekly trend of Acute diarrhoea showing decrease as compared with last weeks but vigilant monitoring of the situation is required.

Province Sindh:

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



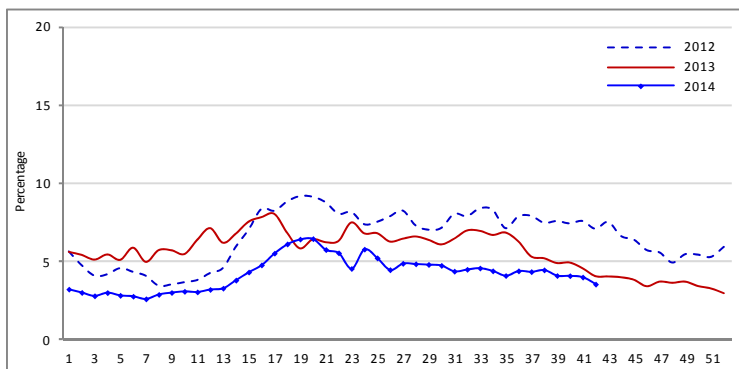
696 health facilities from 22 districts in Sindh province reported to DEWS with a total of 261,391 patient consultations in week 42, 2014.

A total of 8 alerts were received and appropriate measures were taken. Altogether 5 alerts were for Leishmaniasis; 2 for NNT; while 1 for Diphtheria.

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

Province Punjab:

Figure-7: Trend of Acute diarrhoea, province Punjab



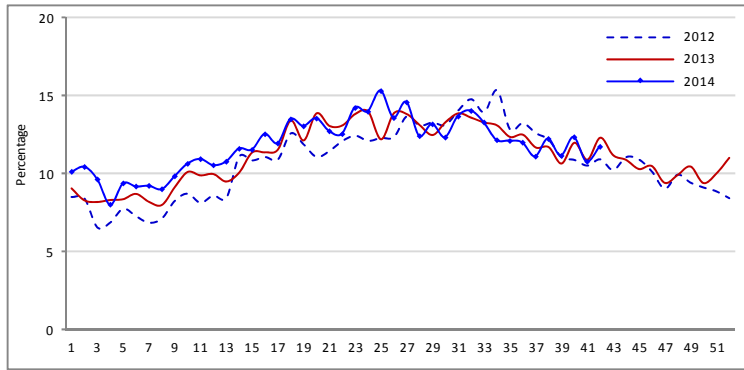
1,682 health facilities from 35 districts in Punjab province reported to DEWS with a total of 748,016 patients consultations in week 42, 2014.

Total 8 alerts were received and appropriate measures were taken. Altogether 5 alerts were for Dengue fever; while 1 each for Diphtheria, Measles and NNT were responded in province Punjab.

The weekly trend of Acute diarrhoea in Punjab showing minor 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



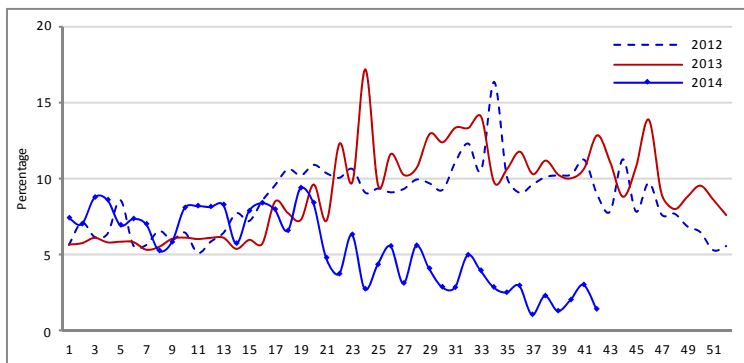
193 health facilities from 8 districts in Balochistan province reported to DEWS with a total of 30,850 patients consultations in week 42, 2014.

A total of 8 alerts were reported and appropriate measures were taken. Altogether 4 alerts were for CCHF; 3 for Measles; while 1 for Leishmaniasis.

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

FATA:

Figure-9: Weekly trend of Acute diarrhoea, FATA



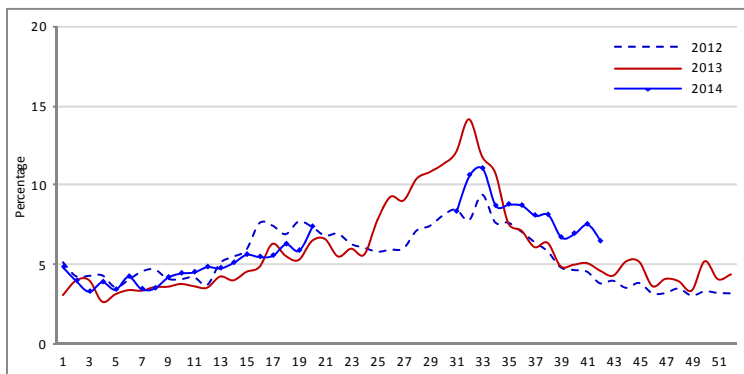
1 health facilities from 1 agency in FATA reported to DEWS with a total of 617 patients consultations in week 42, 2014.

No alert for any disease was received from any area in FATA in week 42 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



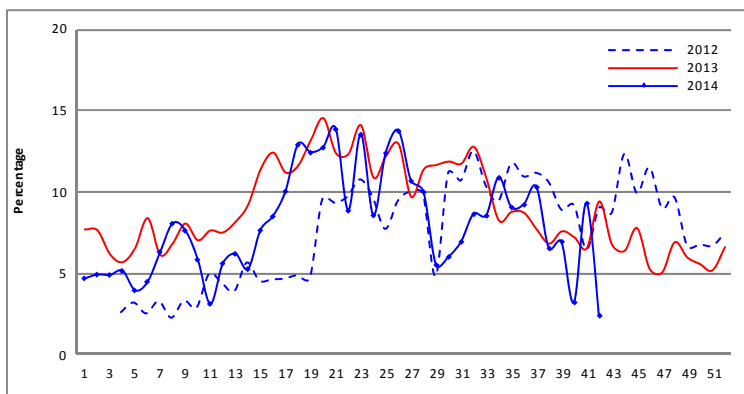
39 health facilities from 3 districts in AJK reported to DEWS with a total of 6,524 patients consultations in week 42, 2013.

A total of 5 alerts were received; Altogether 3 alerts were for Measles; while 1 each for Dengue fever and Leishmaniasis.

Weekly trend of AD showing decrease this week as compared with last week but vigilant monitoring of the situation is required as the proportion of AD is higher as compared with the same time period last year.

Islamabad:

Figure-11: Weekly trend of Acute diarrhoea, Islamabad



1 health facility reported to DEWS on time with a total of 169 patients consultations in week 42, 2014.

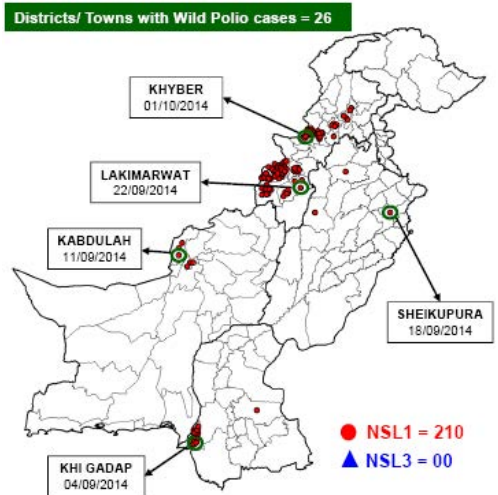
No alert for any disease was reported in week 42 from Islamabad in this week.

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 42 (12 - 18 Oct 2014) four new wild polio virus (WPV) cases were reported, three from Federally Administered Tribal Areas (**two from Khyber and one from South Waziristan agencies**) and one from Khyber Pakhtunkhwa (**Lakki Marwat district**). This brings the total number of polio cases in 2014 to 210 (compared to 61 in 2013 till this time) from 26 districts/towns/tribal agencies/FR areas (compared to 18 in 2013 till this time).

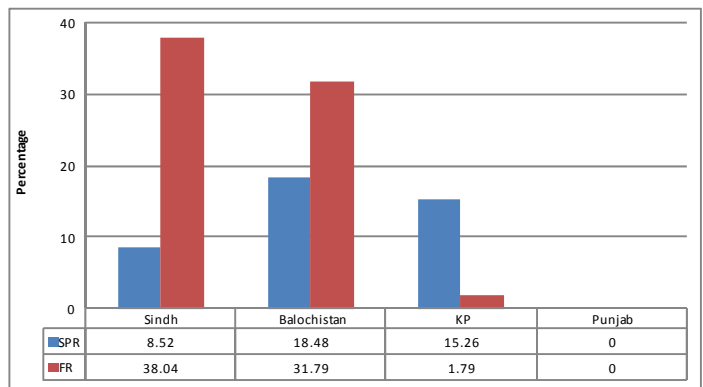
Province	Year 2013			Year 2014 (till 18 Oct)		
	P1	P3	P1+P3	P1	P3	P1+P3
FATA	65	-	-	139	-	-
Khyber Pakhtunkhwa	11	-	-	43	-	-
Sindh	10	-	-	19	-	-
Balochistan	-	-	-	6	-	-
Punjab	7	-	-	3	-	-
Gilgit-Baltistan	-	-	-	-	-	-
AJ&K	-	-	-	-	-	-
Islamabad	-	-	-	-	-	-
Total	93	-	-	210	-	-



Malaria:

The Table and chart given below shows the Malaria Slide Positivity and Falciparum Ratio in week 42, 2014. Total number of Malaria cases tested in this week is 3,463 out of which 413 were found positive; 287 for P. Vivax; 70 for P. Falciparum; while 56 for Mixed (SPR = 11.93%; F.R = 30.51%).

Malaria tests \ Province	Sindh	Balochistan	Khyber Pakhtunkhwa	Punjab
P. Vivax	114	118	55	0
P. Falciparum	32	38	0	0
Mixed	38	17	1	0
# tested	2160	936	367	0
SPR	8.52	18.48	15.26	0
FR	38.04	31.79	1.79	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.

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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 42 2014

