



Weekly Epidemiological Bulletin

Disease early warning system and response in Pakistan

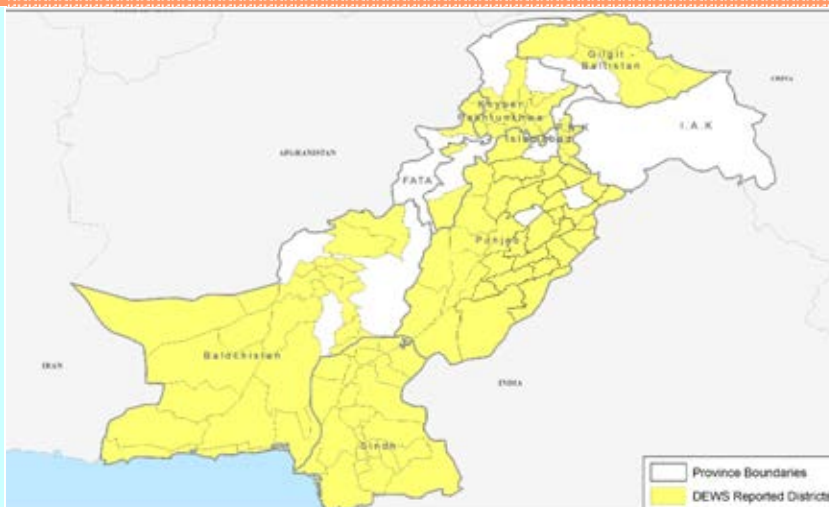
Volume 5, Issue 31, Wednesday 30 July 2014

Highlights

Epidemiological week no. 31
(27 July - 2 Aug 2014)

- **CCHF:** During this week, 4 suspected CCHF cases with 1 death have been reported from Balochistan province.
- In this week, **82** out of 87 districts and 2,437 out of 3,590 health facilities have reported to Disease Early Warning System (DEWS), compared to 70 districts with 2,366 health facilities shared weekly data in week 30, 2014.
- A total of **413,036** patients consultations reported in this week 31, 2014. The timeliness decreased compared with last week due to Eid holidays.
- In this week, a total of 9 alerts generated and timely responded. Altogether 4 alerts each for CCHF and NNT; while 1 for Leishmaniasis.

Figure-1: 82 out of 87 districts reported to DEWS in week 31, 2014



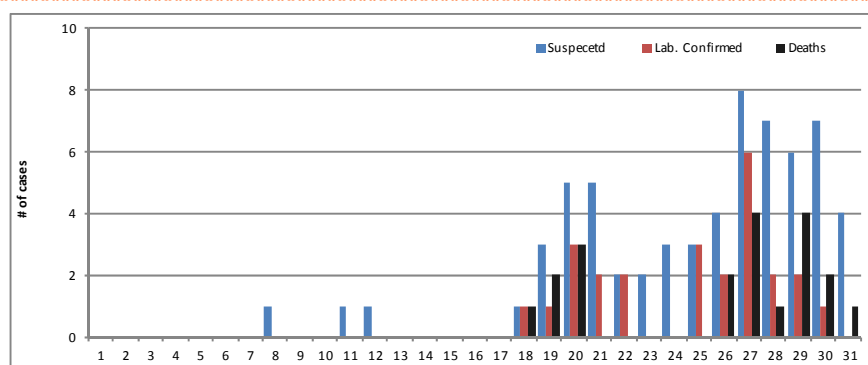
Priority diseases under surveillance in DEWS

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 31, 2014 (29 Dec 2013 to 2 August 2014)

Disease	# of Cases	Percentage
ARI	5,640,412	18.94%
Bloody diarrhoea	28,274	<1.00%
Acute diarrhoea	1,726,860	5.80%
S. Malaria	765,556	2.57%
Skin Diseases	918,063	3.08%
Unexplained fever	763,920	2.57%
All other consultations	19,930,190	66.94%
Total (All consultations)	29,773,275	100%

Figure-2: Weekly number of CCHF cases and deaths in Pakistan, week 1 to 31 2014



Major health events reported during the Epi-week - 31 (27 July - 2 August 2014)

Disease	# of Cases	Percentage
ARI	52,186	12.63%
Bloody diarrhoea	356	<1.00%
Acute diarrhoea	23,098	5.59%
S. Malaria	7,165	1.73%
Skin Diseases	15,349	3.72%
Unexplained fever	8,903	2.16%
All other consultations	305,979	74.08%
Total (All consultations)	413,036	100%

Crimean Congo Haemorrhagic Fever (CCHF) cases are reported continuously from epidemiological week 8, 2014. So far total 63 suspected cases, 25 laboratory confirmed, and 20 deaths (of these 11 laboratory confirmed) have been reported. Most of the cases are from Balochistan province 27 suspected (11 cases belongs to Afghanistan), 9 Laboratory confirmed and 5 deaths. 21 suspected, 11 Laboratory confirmed (6 from Afghanistan) and 8 deaths (6 Lab confirmed) were reported from Khyber Pakhtunkhwa province. 3 suspected cases (1 from Afghanistan), 2 Laboratory confirmed and 2 deaths were reported from Islamabad. 12 suspected CCHF cases (4 Laboratory confirmed), 4 deaths were reported from Punjab province. While 1 suspected case was from district Sudhnuti (AJK) and was negative for CCHF.

The CCHF cases from Afghanistan are detected and reported from Quetta and Peshawar because 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 Alerts/Outbreaks (Wk-31/2014):

Date	Disease	Province	District	Area	<5M	>5M	<5F	>5F	Action Taken
27-Jul	CCHF	Punjab	Rawalpindi	Village Mori Sher, Kahuta, Rawalpindi	1	0	0	0	Suspected case 17 years old boy reported from HF Hospital Rawalpindi emergency on 27th July, admitted in medical isolation ward. Patient get fever and vomiting on one week back, treated locally but did not improved. Referred by THQ Kahuta to HFH when developed haematemesis on 25th July. Blood sample sent to NIH. Patient platelets count was 19000. Patient has cows and goats in his house, no travel history. DDHO with livestock department has visited patients house and aware the community about the CCHF preventions. SO DEWS visited the patient and discussed with the hospital staff about management and prevention. Patient is recovering.
31-Jul	CCHF	Balochistan	Loralai	DHQ Hospital, Loralai	0	0	0	2	2 suspected cases reported from DHQ hospital. Investigation was completed. The index case was a pregnant woman brought with complication to the labor ward of civil hospital where she was attended by a LMO and staff nurse. However case was referred but could not survive and expired. The contact of the case "staff nurse" also found with typical symptoms of high grade fever, severe headache and body ache. This case was diagnosed as suspected CCHF and brought to Multan where she was discharged. After few days, this case was brought to service hospital Lahore with unconscious status. Sample was taken and sent to NIH, treatment started and now she is improving.
31-Jul	CCHF	Balochistan	Loralai	Village Sinjavi, Ziarat district	0	1	0	0	One case was reported from Loralai. Investigation was done. Case was belonging to Ziarat district. History shows that case was animal trader and had acute contact with animals. Case was referred to Loralai where he was further referred to Nishter Multan. This case was under treatment.
2-Aug	CCHF	Khyber Pakhtunkhwa	Peshawar	Domel, Bannu	0	1	0	0	A 40 years old man, Butcher by profession, resident of Domel, Bannu got sick on 26th July when he was in Bannu and had fever, malaise and headache. He was brought to KTH Peshawar on 1st August 2014. He developed Petechial Hemorrhages and massive haematemesis later on. His platelet count declined to 36000/cmm. Blood sample was taken and sent to NIH which came out positive for CCHF. He was receiving supportive treatment but his condition did not improve and he expired on 4th August 2014. SO WHO for Bannu Division and DHO Bannu was informed about the case.

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

Disease	2013		Current week 31, 2014		2014	
	A	O	A	O	A	O
Acute watery diarrhoea	142	40	0	0	44	11
Acute jaundice syndrome	49	6	0	0	15	3
Bloody diarrhoea	45	3	0	0	22	0
CCHF	90	47	4	0	56	25
Dengue fever	300	66	0	0	9	0
Diphtheria	84	19	0	0	38	4
Measles	3357	281	0	0	892	29
Pertussis	46	10	0	0	21	2
NNT + tetanus	349	0	4	0	166	0
Malaria	25	6	0	0	0	0
Cutaneous Leishmaniasis	621	51	0	0	298	18
Others	520	5	0	0	229	5
Total	5628	534	8	0	1790	97

Figure-3: Number of alerts received and responded, week 28 to 31 2014

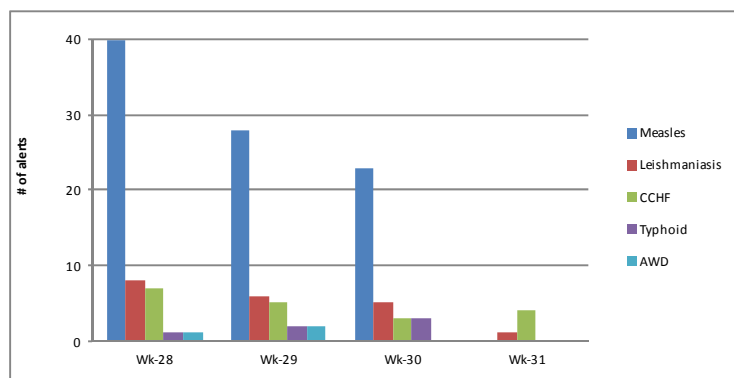
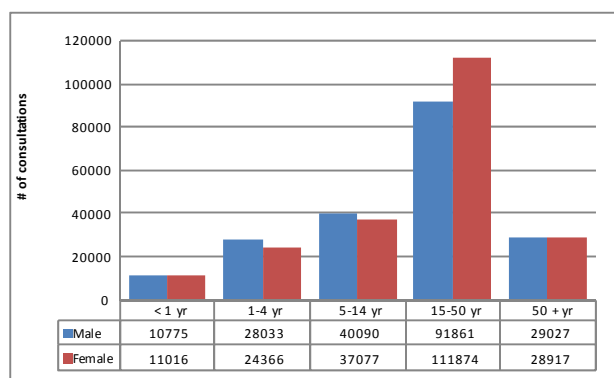
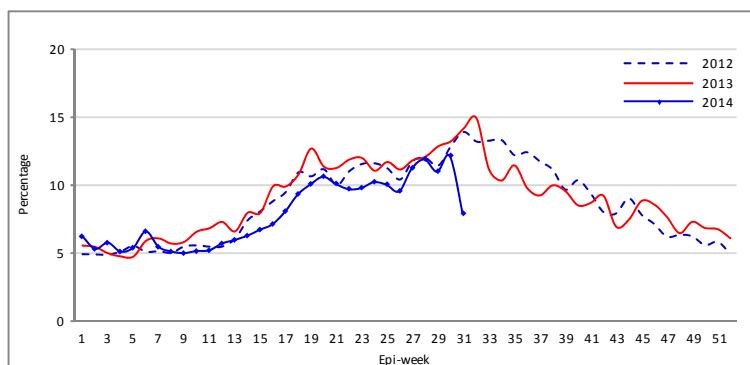


Figure-4: Number of consultations by age and gender, week 31, 2014



Province Khyber Pakhtunkhwa:

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



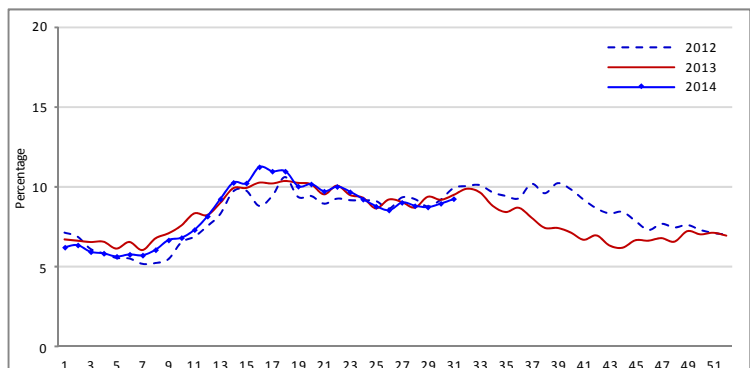
64 health facilities from 9 districts of Khyber Pakhtunkhwa sent reports to DEWS with a total of 7,598 patients consultations reported in week 31, 2014.

An alert for CCHF was reported and appropriate measures were taken.

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

Province Sindh:

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



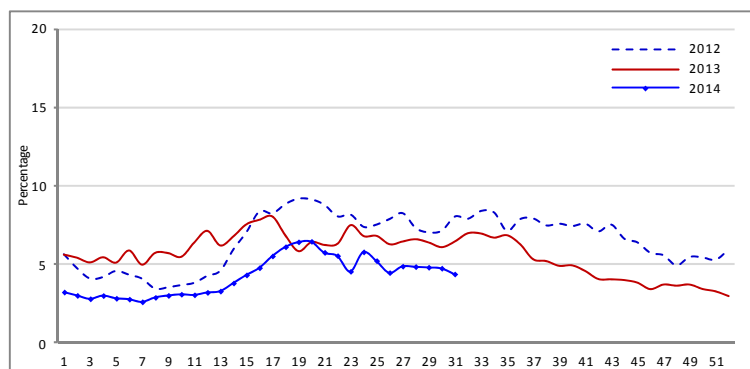
698 health facilities from 23 districts in Sindh province reported to DEWS with a total of 77,832 patient consultations in week 31, 2014.

A total of 4 alerts for NNT were received and appropriate measures were taken.

The proportion of AD for the province is showing minor increase as compared with last week. 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



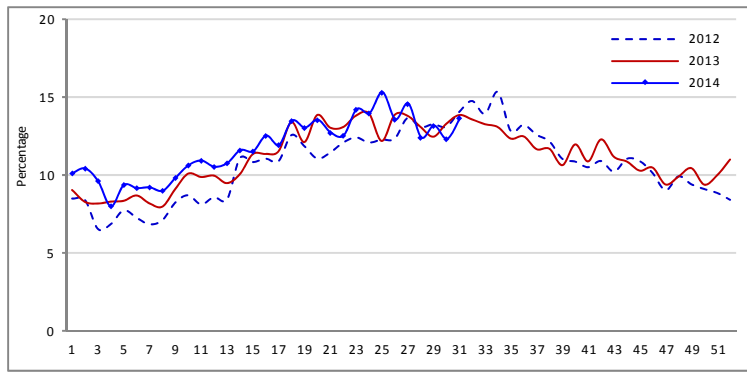
1,461 health facilities from 33 districts in Punjab province reported to DEWS with a total of 312,121 patients consultations in week 31, 2014.

An alert for CCHF was received and appropriate measures were taken.

The weekly trend of Acute diarrhoea in Punjab showing minor decreasing 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



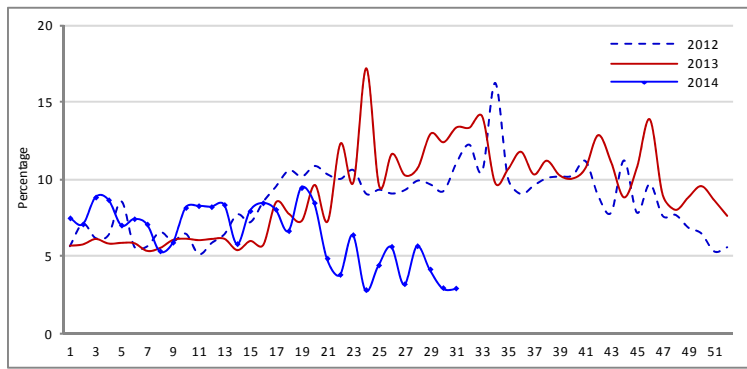
145 health facilities from 8 districts in Balochistan province reported to DEWS with a total of 8,377 patients consultations in week 31, 2014.

A total of 3 alerts were reported and appropriate measures were taken. Altogether 2 alerts were for CCHF; while 1 for Leishmaniasis.

In this week the weekly proportion of AD showing increase as compared with last week, but lower as compared with the same time period last year but vigilant monitoring of the situation is required.

FATA:

Figure-9: Weekly trend of Acute diarrhoea, FATA



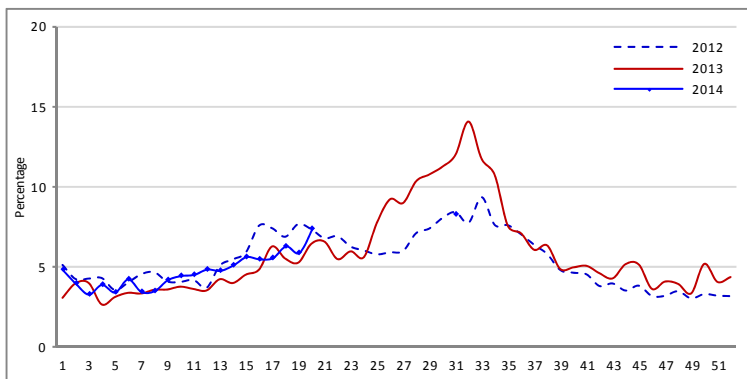
1 health facilities from 1 agency in FATA reported to DEWS with a total of 313 patients consultations in week 31, 2014.

No alert for any disease was received from any area in FATA in week 31 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



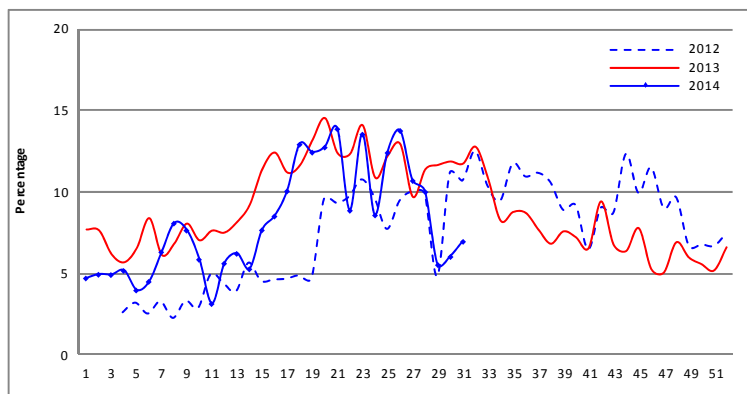
64 health facilities from 7 districts in AJ&K reported to DEWS with a total of 6,636 patients consultations in week 21, 2013.

No alerts for any disease was reported from AJ&K in week 31 2014.

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



4 health facilities reported to DEWS on time with a total of 159 patients consultations in week 31, 2014.

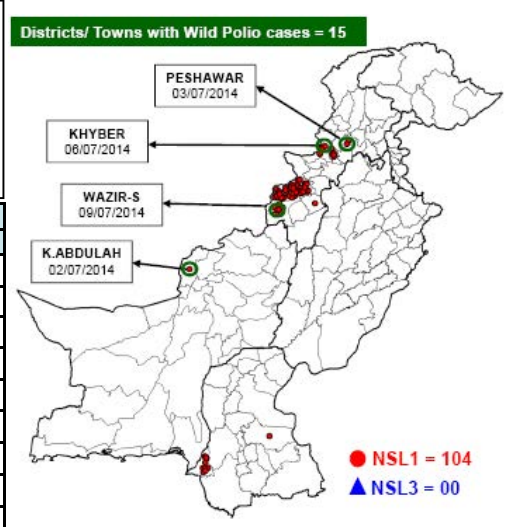
No alert for any disease was reported in week 31, 2014 from any area in Islamabad.

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 31 (27 July to 2 August 2014), two new type-1 wild polio virus (WPV) cases were reported, one each from Federally Administered Tribal Areas (Khyber Agency) and Khyber Pakhtunkhwa province (Peshawar district). This brings the total number of polio cases in 2014 to 104 (compared to 25 in 2013 till this time) from 15 districts/towns/tribal agencies/FR areas (compared to 12 in 2013 till this time).

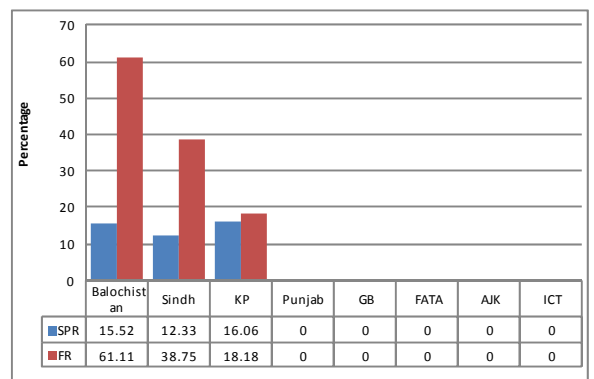
Province	2013			2014		
	P1	P3	P1+P3	P1	P3	P1+P3
Punjab	7	-	-	-	-	-
Sindh	10	-	-	9	-	-
Khyber Pakhtunkhwa	11	-	-	18	-	-
FATA	65	-	-	76	-	-
Balochistan	-	-	-	1	-	-
AJ&K	-	-	-	-	-	-
Gilgit-Baltistan	-	-	-	-	-	-
Islamabad	-	-	-	-	-	-
Total	93	-	-	104	-	-



Malaria:

The Table and chart given below shows the Malaria Slide Positivity and Falciparum Ratio in week 31, 2014. Total number of Malaria cases tested in this week is 902 out of which 120 were found positive; 74 for P. Vivax; 19 for P. Falciparum; while 27 for Mixed (SPR = 13.30%; F.R = 38.33%).

Malaria tests \ Province	Balochistan	Sindh	Khyber Pakhtunkhwa	Punjab	GB	FATA	AJK	ICT
P. Vivax	7	49	18	0	0	0	0	0
P. Falciparum	11	4	4	0	0	0	0	0
Mixed	0	27	0	0	0	0	0	0
# tested	116	649	137	0	0	0	0	0
SPR	15.52	12.33	16.06	0	0	0	0	0
FR	61.11	38.75	18.18	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.

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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.

