



# Weekly Epidemiological Bulletin

## Disease early warning system and response in Pakistan

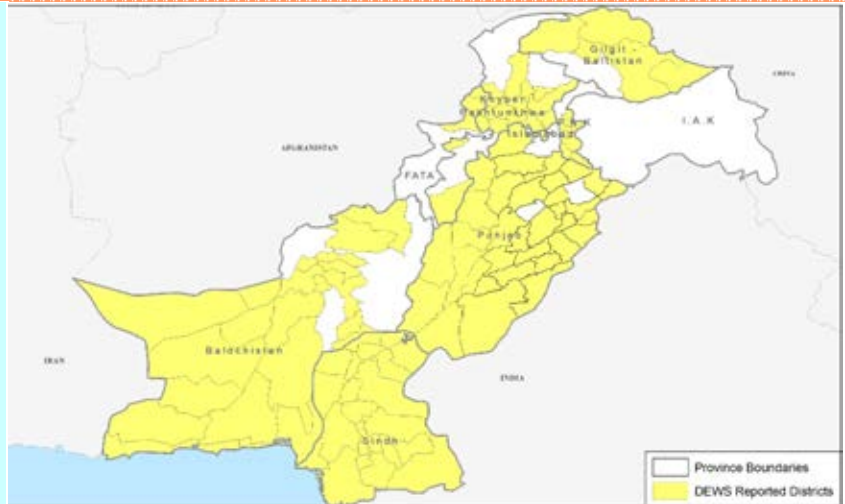
Volume 5, Issue 33, Wednesday 20 August 2014

### Highlights

Figure-1: 81 out of 87 districts reported to DEWS in week 33, 2014

Epidemiological week no. 33  
(10 - 16 August 2014)

- **CCHF:** During this week, 13 suspected CCHF cases with 2 deaths have been reported 11 suspected cases were from Balochistan province; while 2 suspected cases from Khyber Pakhtunkhwa province.
- In this week, **86** out of 87 districts and 3,139 out of 3,590 health facilities have reported to Disease Early Warning System (DEWS), compared to 81 districts with 2,945 health facilities shared weekly data in week 32, 2014.
- A total of **1,290,495** patients consultations reported in this week 33, 2014.
- In this week, a total of 49 alerts generated and timely responded. Altogether 19 alerts were for Measles; 8 for Leishmaniasis; 7 for NNT; 3 each for AWD and Acute diarrhoea; 2 each for CCHF and Pertussis; while 1 each for BD, dengue fever, Diphtheria, Naegleria Meningitis and Scabies.



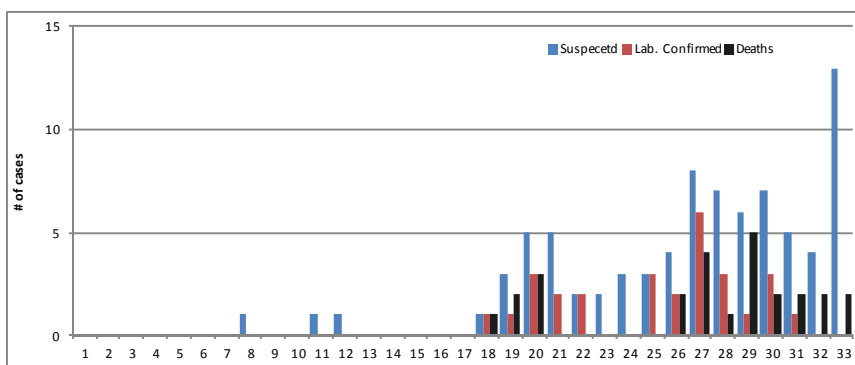
#### Priority diseases under surveillance in DEWS

- 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 33, 2014 (29 Dec 2013 to 16 August 2014)

Disease	# of Cases	Percentage
ARI	6,026,514	18.62%
Bloody diarrhoea	30,678	<1.00%
Acute diarrhoea	1,885,611	5.83%
S. Malaria	825,261	2.55%
Skin Diseases	1,018,409	3.15%
Unexplained fever	829,129	2.56%
All other consultations	21,753,911	67.20%
<b>Total (All consultations)</b>	<b>32,369,513</b>	<b>100%</b>

Figure-2: Weekly number of CCHF cases and deaths in Pakistan, week 1 to 33 2014



#### Major health events reported during the Epi-week - 33 (10 - 16 August 2014)

Disease	# of Cases	Percentage
ARI	195,847	15.18%
Bloody diarrhoea	1,105	<1.00%
Acute diarrhoea	79,407	6.15%
S. Malaria	30,166	2.34%
Skin Diseases	49,552	3.84%
Unexplained fever	33,588	2.60%
All other consultations	900,830	69.80%
<b>Total (All consultations)</b>	<b>1,290,495</b>	<b>100%</b>

Crimean Congo Haemorrhagic Fever (CCHF) cases are reported continuously from epidemiological week 8, 2014. So far total 81 suspected cases, 28 laboratory confirmed, and 26 deaths (of these 11 laboratory confirmed) have been reported. Most of the cases are from Balochistan province 42 suspected (12 cases belongs to Afghanistan), 9 Laboratory confirmed and 7 deaths. 23 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 Outbreaks (Wk-33/2014):

Date	Disease	Province	District	Area	<5M	>5M	<5F	>5F	Action Taken
12-Aug	Leishmaniasis	Balochistan	Las Bela	(RHC) Winder, Tehsil Winder	1	4	0	3	Alert for 8 Cutaneous Leishmaniasis cases were reported from RHC Winder. Including these cases so far 80 cases have been reported from this health facility. None of the cases had any travelling history. Treatment was provided to all the cases through health facility. The cases were presenting with lesions mostly on legs. DHO was informed.
13-Aug	AWD	Khyber Pakhtunkhwa	Swabi	Bacha Khan Medical Complex-BMC, Swabi	0	4	0	0	Four new AWD cases were reported from Bacha Khan Medical Complex Swabi. During response epidemiological and environmental assessment was carried out in the area and surrounding, no more AWD cases were found. 2/4 stool samples were collected and sent to NIH were found negative for Vibrio cholera. Field investigation found possible source was contaminated water supply, water samples were collected from different points for laboratory testing. Meeting with PHED team was conducted for regular cleaning and chlorination of their water schemes available in the affected areas. Health education session was conducted in community. Aqua tabs, Antiseptic soaps, hygiene kits, Jerry cane and ORS were supplied in community. EDO health and DSM PPHI Swabi were informed.
16-Aug	Leishmaniasis	Khyber Pakhtunkhwa	Mardan	Village & UC Kohi Bermol, Tehsil Katlang, Mardan	1	0	2	4	7 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 registered cases. RBM, KPH were requested for vector control interventions in the area and surrounding. on job training of health staff was conducted for Intralesional administration of Inj-Glucantime. EDO Health and focal person were informed.
16-Aug	Leishmaniasis	Khyber Pakhtunkhwa	Mardan	Village Haji Abad, Muslim Abad, UC Mian Essa, Tehsil Takht Bhai, Mardan	0	1	2	2	Five clinical cases of Cutaneous Leishmaniasis were reported from BHU Baizo Kharki. WHO supplied required doses of Inj Glucantime to KPH Mardan for all registered cases. RBM, KPH were requested for vector control interventions in the area and surrounding. On the job training of health staff was conducted for Intralesional administration of Inj-Glucantime. EDO Health and focal person were informed.

Figure-3: Number of alerts received and responded, week 30 to 33 2014

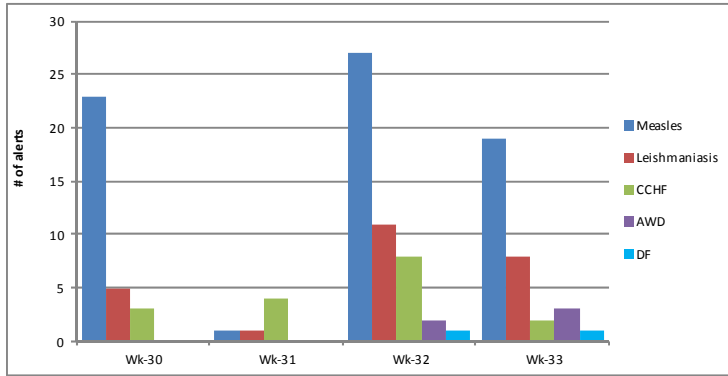
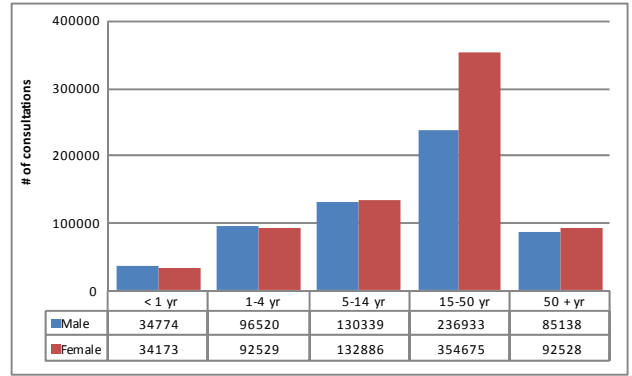
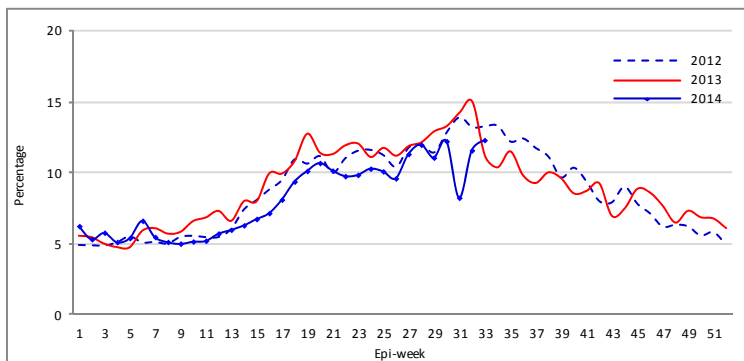


Figure-4: Number of consultations by age and gender, week 33, 2014



Province Khyber Pakhtunkhwa:

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



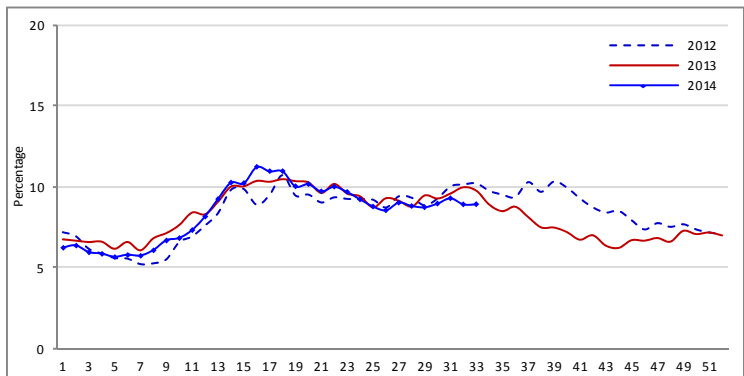
143 health facilities from 11 districts of Khyber Pakhtunkhwa sent reports to DEWS with a total of 36,035 patients consultations reported in week 33, 2014.

A total of 11 alerts were received and appropriate measures were taken. Altogether 6 alerts were for Measles; 2 for Leishmaniasis; while 1 each for AWD, Dengue fever and NNT.

Figure-5 shows the weekly trend of Acute diarrhoea showing minor increase this week but high as compared with same time period last year. Vigilant monitoring of the situation is required.

Province Sindh:

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



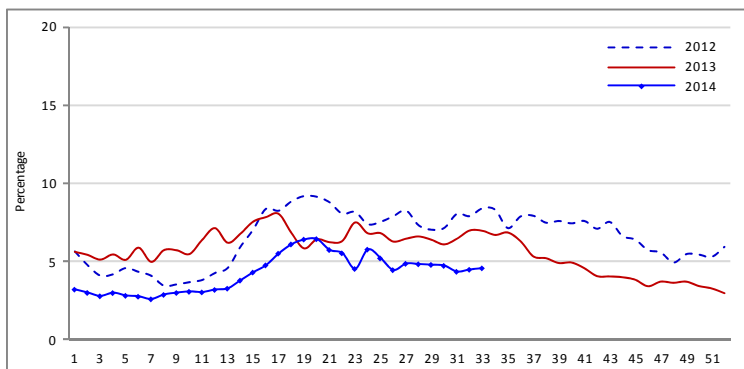
808 health facilities from 23 districts in Sindh province reported to DEWS with a total of 323,468 patient consultations in week 33, 2014.

A total of 10 alerts were received and appropriate measures were taken. Altogether 4 alerts were for NNT; 2 each for AWD and Leishmaniasis; while 1 for Measles and Naegleria Meningitis.

The proportion of AD for the province is showing decrease as compared with last two weeks 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



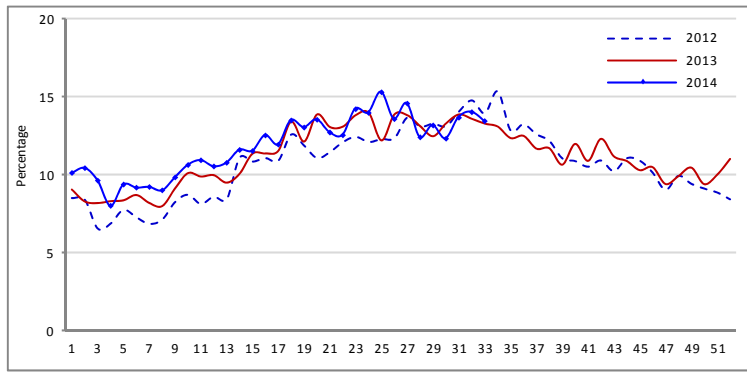
1,907 health facilities from 34 districts in Punjab province reported to DEWS with a total of 885,468 patients consultations in week 33, 2014.

Total 12 alerts were received and appropriate measures were taken. Altogether 4 alerts were for Measles; 3 for Acute diarrhoea; 2 for NNT; while 1 each for Bloody diarrhoea, Diphtheria and Scabies were responded in province Punjab.

The weekly trend of Acute diarrhoea in Punjab showing stability 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



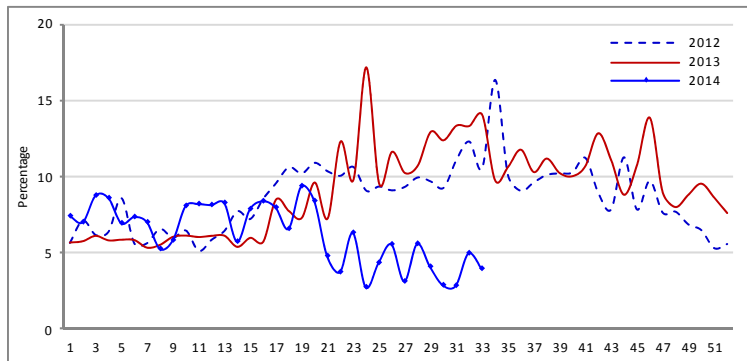
209 health facilities from 8 districts in Balochistan province reported to DEWS with a total of 32,449 patients consultations in week 33, 2014.

A total of 12 alerts were reported and appropriate measures were taken. Altogether 6 alerts for Measles; while 2 each for CCHF, Leishmaniasis and Pertussis.

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

**FATA:**

Figure-9: Weekly trend of Acute diarrhoea, FATA



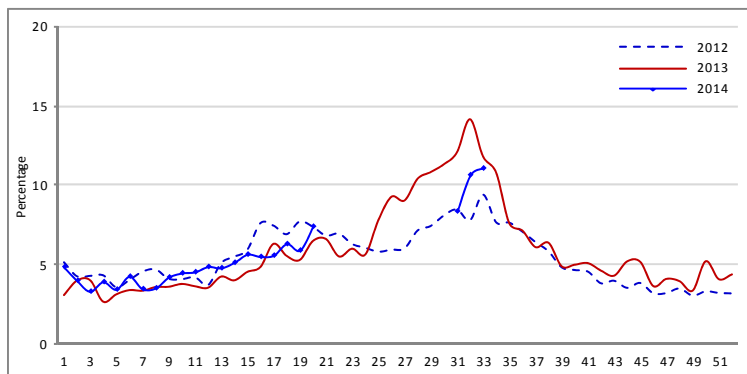
1 health facilities from 1 agency in FATA reported to DEWS with a total of 776 patients consultations in week 33, 2014.

No alert for any disease was received from any area in FATA in week 33 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



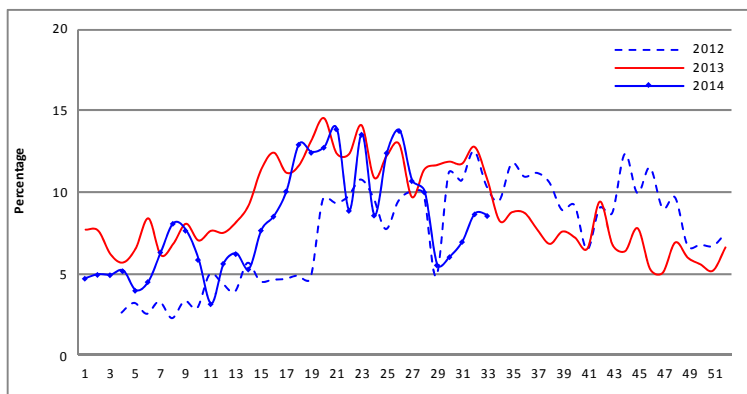
70 health facilities from 8 districts in AJ&K reported to DEWS with a total of 12,171 patients consultations in week 33, 2013.

Total 4 alerts were reported and appropriate measures were taken. Altogether 2 each alerts were for Measles and 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



1 health facility reported to DEWS on time with a total of 176 patients consultations in week 33, 2014.

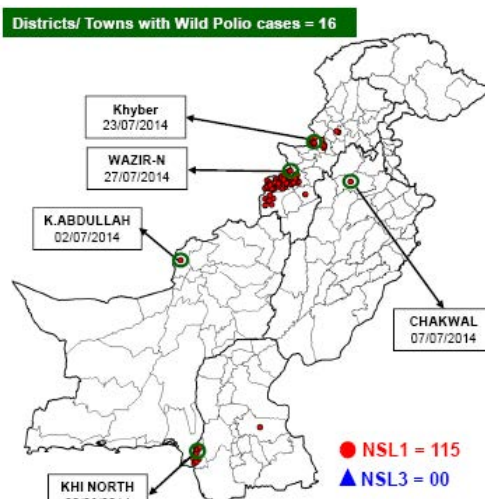
No alerts for any disease was reported in week 33 from any area in Islamabad in this week.

Weekly trend of AD showing spikes as the number of reporting health facilities is low 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 week 33 (10 to 16 August 2014), seven new type-1 wild polio virus (WPV) cases were reported from Federally Administered Tribal Areas (four from North Waziristan and three from Khyber Agencies). This brings the total number of polio cases in 2014 to 115 (compared to 27 in 2013 till this time) from 17 districts/towns/tribal agencies/FR areas (compared to 12 in 2013 till this time).

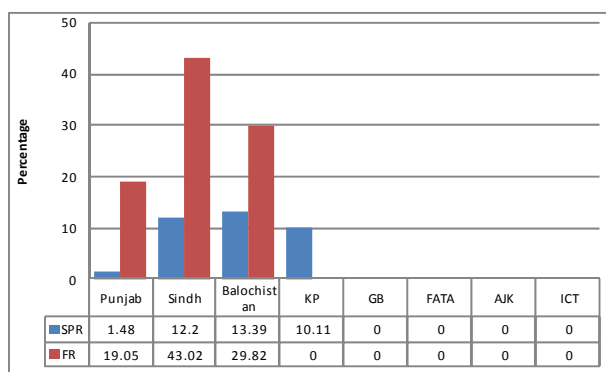
Province	2013			2014		
	P1	P3	P1+P3	P1	P3	P1+P3
Punjab	7	-	-	1	-	-
Sindh	10	-	-	10	-	-
Khyber Pakhtunkhwa	11	-	-	19	-	-
FATA	65	-	-	84	-	-
Balochistan	-	-	-	1	-	-
AJ&K	-	-	-	-	-	-
Gilgit-Baltistan	-	-	-	-	-	-
Islamabad	-	-	-	-	-	-
<b>Total</b>	<b>93</b>	<b>-</b>	<b>-</b>	<b>115</b>	<b>-</b>	<b>-</b>



Malaria:

The Table and chart given below shows the Malaria Slide Positivity and Falciparum Ratio in week 33, 2014. Total number of Malaria cases tested in this week is 8,877 out of which 633 were found positive; 419 for P. Vivax; 68 for P. Falciparum; while 146 for Mixed (SPR = 7.13%; F.R = 33.81%).

Malaria tests \ Province	Punjab	Sindh	Balochistan	KP	GB	FATA	AJK	ICT
P. Vivax	51	200	120	48	0	0	0	0
P. Falciparum	3	23	42	0	0	0	0	0
Mixed	9	128	9	0	0	0	0	0
# tested	4247	2878	1277	475	0	0	0	0
SPR	1.48	12.2	13.39	10.11	0	0	0	0
FR	19.05	43.02	29.82	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.

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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.

