



# Weekly Epidemiological Bulletin

## Disease early warning system and response in Pakistan

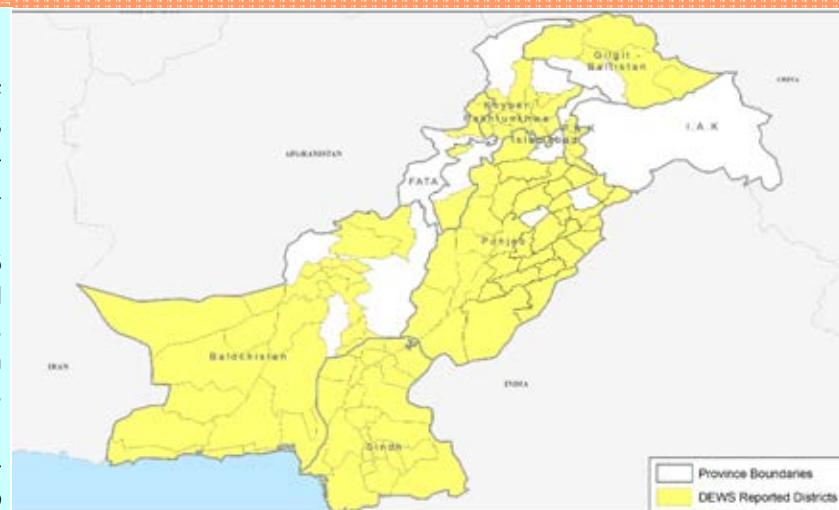
Volume 5, Issue 30, Wednesday 30 July 2014

### Highlights

Epidemiological week no. 30  
(20 - 26 July 2014)

- CCHF:** During this week, 4 suspected CCHF cases with 1 death have been reported. 3 cases were from Khyber Pakhtunkhwa province (1 belongs to Afghanistan), while 1 from Punjab province.
- In this week, **70** out of 87 districts and 2,366 out of 3,590 health facilities have reported to Disease Early Warning System (DEWS), compared to 75 districts with 2,976 health facilities shared weekly data in week 29, 2014.
- Total **901,697** patients consultations reported in week 30, 2014 as compared to **1,139,389** consultations in week 29, 2014.
- In this week, a total of 36 alerts generated and timely responded. Altogether 21 alerts were for Measles; 5 for Leishmaniasis; 3 for Typhoid fever; 2 each for Acute diarrhoea and NNT; while 1 each for AJS, Bloody diarrhoea and Scabies.
- Four outbreaks were also identified and timely responded.

Figure 1: 70 out of 87 districts reported to DEWS in week 30, 2014



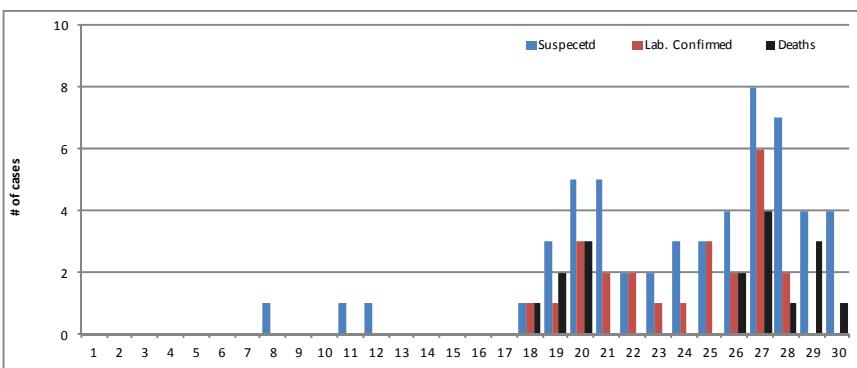
#### Priority diseases under surveillance in DEWS

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 30, 2014 (29 Dec 2013 to 26 July 2014)

Disease	# of Cases	Percentage
ARI	5,564,792	19.06%
Bloody diarrhoea	27,500	<1.00%
Acute diarrhoea	1,695,104	5.81%
S. Malaria	756,305	2.59%
Skin Diseases	894,394	3.06%
Unexplained fever	749,611	2.57%
All other consultations	19,511,334	66.82%
<b>Total (All consultations)</b>	<b>29,199,040</b>	<b>100%</b>

Figure 2: Weekly number of CCHF cases and deaths in Pakistan, week 1 to 30 2014



#### Major health events reported during the Epi-week - 30 (20 - 26 July 2014)

Disease	# of Cases	Percentage
ARI	123,545	13.70%
Bloody diarrhoea	436	<1.00%
Acute diarrhoea	55,393	6.14%
S. Malaria	19,868	2.20%
Skin Diseases	32,089	3.56%
Unexplained fever	17,641	1.96%
All other consultations	652,725	72.39%
<b>Total (All consultations)</b>	<b>901,697</b>	<b>100%</b>

Crimean Congo Haemorrhagic Fever (CCHF) cases are reported continuously from epidemiological week 8, 2014. So far total 54 suspected cases, 24 laboratory confirmed, and 17 deaths (of these 10 laboratory confirmed) have been reported. Most of the cases are from Balochistan province 18 suspected (9 cases belongs to Afghanistan), 9 Laboratory confirmed and 2 deaths. 8 Laboratory confirmed (6 from Afghanistan) were reported from Khyber Pakhtunkhwa province. 4 suspected cases (1 from Afghanistan), 2 Laboratory confirmed and 3 deaths (due to suspected CCHF) were reported from Islamabad. 10 suspected CCHF cases (4 Laboratory confirmed), 3 deaths (Lab confirmed) 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-30/2014):

Date	Disease	Province	District	Area	<5M	>5M	<5F	>5F	Action Taken
21-Jul	Leishmaniasis	Balochistan	Las Bela	(RHC) winder, Tehsil Winder	1	3	0	3	7 cases reported from this unit. Including them, 72 cases have been reported from this HF so far. All the cases were investigated. There was no travelling history. Symptomatic treatment was provided. cases were sensitized over completing the treatment course. DHO was informed.
25-Jul	Measles	Khyber Pakhtunkhwa	Bannu	Village Saffar, UC Ma-mashkhel	1	1	1	3	During routine visit to W&C Hospital Bannu, measles case was seen. Verbal autopsy revealed about 2 other cases and further, death due to same disease. A team comprised of S.O and Pharmacist from WHO, DSV and Vaccinator from BHU visited the area. 6 cases with one death were identified due to Measles. These cases belong to IDP families and none of them was found vaccinated. Vit. A was administered. As many as 30 houses were surveyed and looked out for potential cases. Only 2 more cases were found and that too were in IDP families. 2 samples were collected and sent to NIH, and line list was maintained. Health sessions were conducted in houses being surveyed. Mop up campaign launched and vaccinated 42 children regardless of vaccination status. Cases and contacts are being followed.
25-Jul	AJS	Punjab	Multan	New Multan; Chowk Shah Abbas	1	5	0	13	Around eighty five cases of AVH reported from Nishter Hospital and Civil Hospital Multan belonging to different areas of Multan, Khanewal and Muzaffargarh. Line list was obtained. Most of the cases were reported from different areas of Multan City but a cluster of 12 cases was reported from New Multan and a cluster of six cases were reported from Chowk Shah Abbas. 02 suspected cases were identified with jaundice during active surveillance and were referred to Civil Hospital. Blood samples of 05 cases were tested and 3 of them found positive for hepatitis A on Elisa. Aqua tabs were distributed in the selected households and localities from where the cases were reported. Health education sessions were conducted on food safety and safe drinking water by Public Health workers. Water supply is already compromised with sewerage lines. Chlorination of the supply is being ensured by DoH and TMAs but major portion of the sewerage lines is under reconstruction in the area and water lines are contaminated with sewerage line at numerous places. DoH has also started action against hawkers and cold drinks sellers. Health education sessions are also being conducted in the affected areas through Public Health workers.
24-Jul	Leishmaniasis	Punjab	Multan	Timber Market, Delhi Gate	0	1	0	2	Three new cases of cutaneous Leishmaniasis were reported from Civil Hospital Multan . All the cases were diagnosed clinically. Vector surveillance activity has been conducted in the affected areas and Permethrin Fogging and IRS was conducted in affected households. 02 Health education sessions were conducted with community with the help of Public Health Workers. Injection Glucantime were also provided to MS Civil Hospital and treatment of the cases has been started. The cases were advised to cover the lesions to avoid any further spread.

Figure-3: Number of alerts received and responded, week 27 to 30 2014

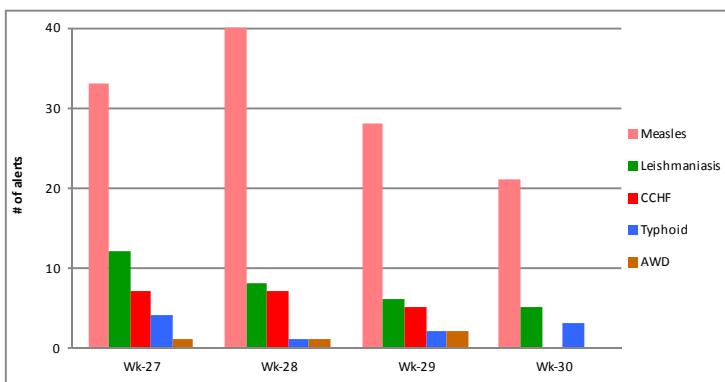
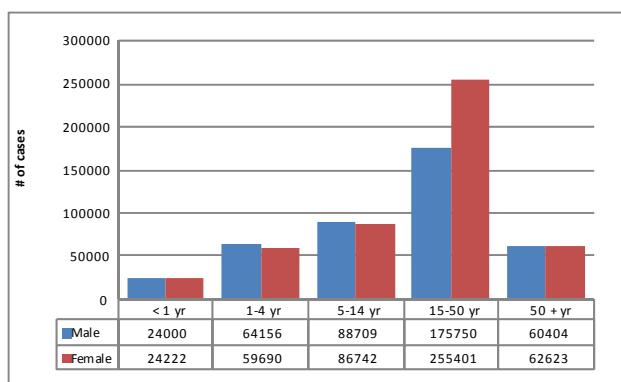
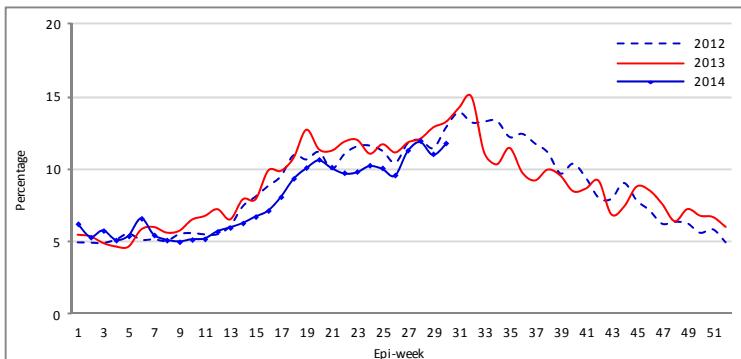


Figure-4: Number of consultations by age and gender, week 30, 2014



### Province Khyber Pakhtunkhwa:

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



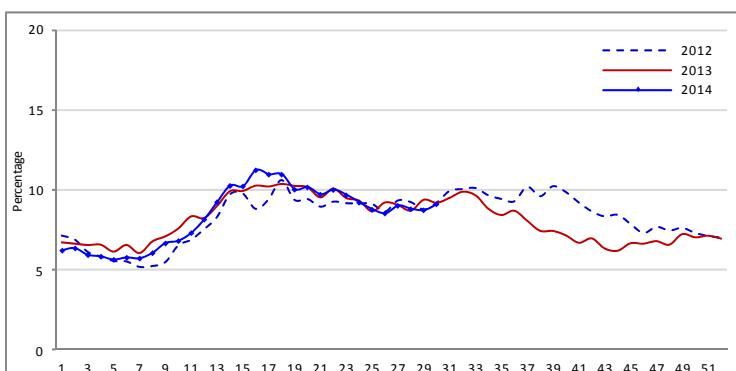
69 health facilities from 9 districts of Khyber Pakhtunkhwa sent reports to DEWS with a total of 16,225 patients consultations reported in week 30, 2014.

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

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

### Province Sindh:

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



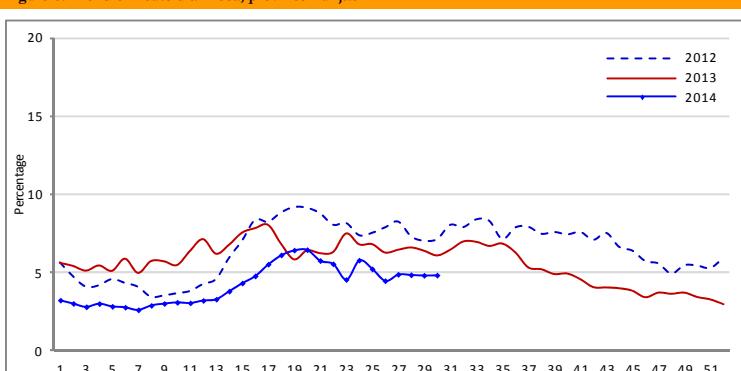
746 health facilities from 23 districts in Sindh province reported to DEWS with a total of 218,853 patient consultations in week 30, 2014.

A total of 7 alerts were received and appropriate measures were taken. Altogether 3 alerts were for Measles; While 2 each for Leishmaniasis and NNT.

The proportion of AD for the province is showing minor increase 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



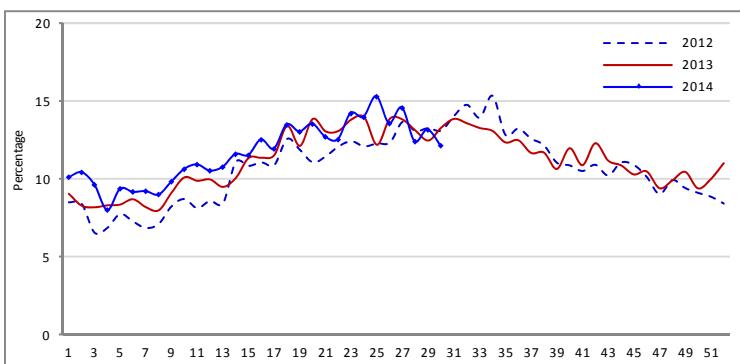
1,407 health facilities from 31 districts in Punjab province reported to DEWS with a total of 644,968 patients consultations in week 30, 2014.

Total 17 alerts were received and appropriate measures were taken. Altogether 8 alerts were for Measles; 3 for Typhoid fever; 2 for Acute diarrhoea; while 1 each for AJS Bloody Diarrhoea, Leishmaniasis, and Scabies were responded in Punjab province.

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

### Province Balochistan:

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



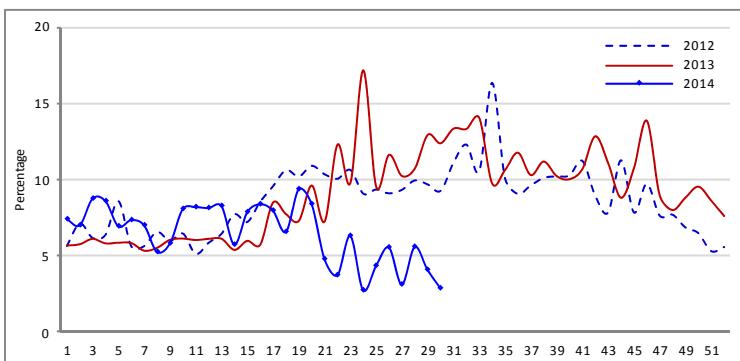
141 health facilities from 5 districts in Balochistan province reported to DEWS with a total of 21,001 patients consultations in week 30, 2014.

A total of 6 alerts were reported and appropriate measures were taken. Altogether 5 alerts were for Measles; while 1 for Leishmaniasis.

In this week the weekly proportion of AD showing decrease as compared with last week, and 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



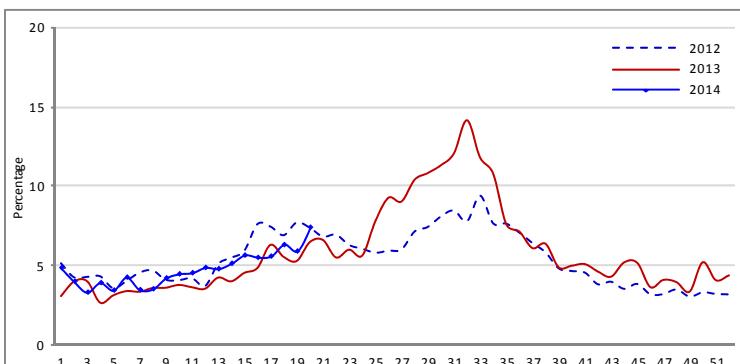
1 health facilities from 1 agency in FATA reported to DEWS with a total of 446 patients consultations in week 30, 2014.

No alert for any disease was received from any area in FATA in week 30 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



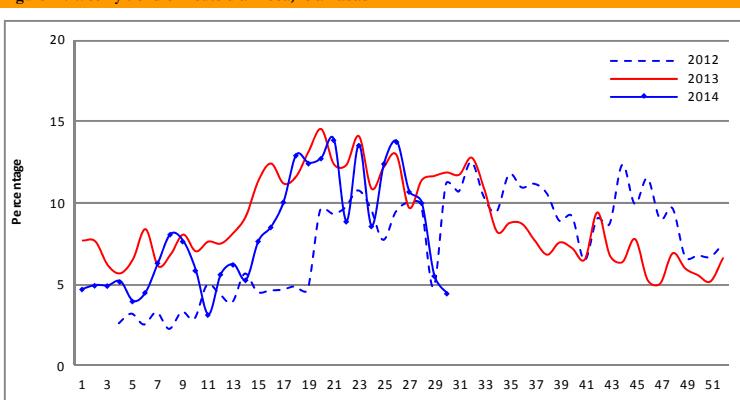
68 health facilities from 7 districts in AJ&K reported to DEWS with a total of 8,302 patients consultations in week 20, 2013.

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 204 patients consultations in week 30, 2014.

One alert for Measles was reported and appropriate measures were taken in week 30, 2014.

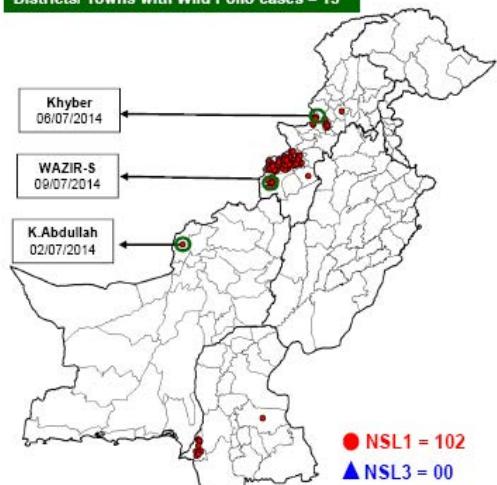
Weekly trend of AD showing spikes as the number of reporting health facilities is low from last couple of weeks, and vigilant monitoring of the situation is required.

### Distribution of Wild Polio Virus cases in Pakistan 2013 and 2014

In week 30 (20 to 26 July 2014), three new type-1 wild polio virus (WPV) cases were reported, two from Federally Administered Tribal Areas (one each from South Waziristan and Khyber Agency) and one from Balochistan province (Killa Abdullah). This brings the total number of polio cases in 2014 to 102 (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	-	-	17	-	-
FATA	65	-	-	75	-	-
Balochistan	-	-	-	1	-	-
AJ&K	-	-	-	-	-	-
Gilgit-Baltistan	-	-	-	-	-	-
Islamabad	-	-	-	-	-	-
Total	93	-	-	102	-	-

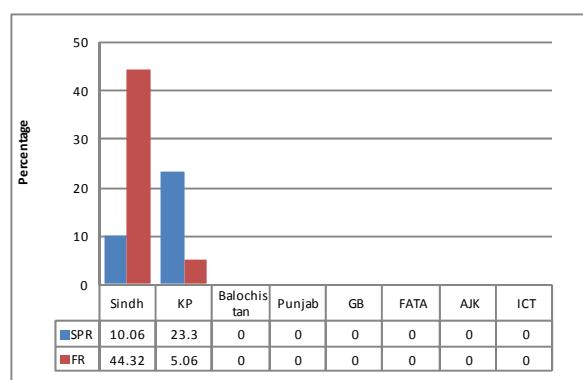
Districts/Towns with Wild Polio cases = 15



### Malaria:

The Table and chart given below shows the Malaria Slide Positivity and Falciparum Ratio in week 30, 2014. Total number of Malaria cases tested in this week is 2,088 out of which 255 were found positive; 173 for P. Vivax; 15 for P. Falciparum; while 67 for Mixed (SPR = 12.21%; F.R = 32.16%).

Malaria tests \ Province	Sindh	Khyber Pakhtunkhwa	Balochistan	Punjab	GB	FATA	AJK	ICT
P. Vivax	98	75	0	0	0	0	0	0
P. Falciparum	11	4	0	0	0	0	0	0
Mixed	67	0	0	0	0	0	0	0
# tested	1749	339	0	0	0	0	0	0
SPR	10.06	23.3	0	0	0	0	0	0
FR	44.32	5.06	0	0	0	0	0	0



### Follow up on: CCHF

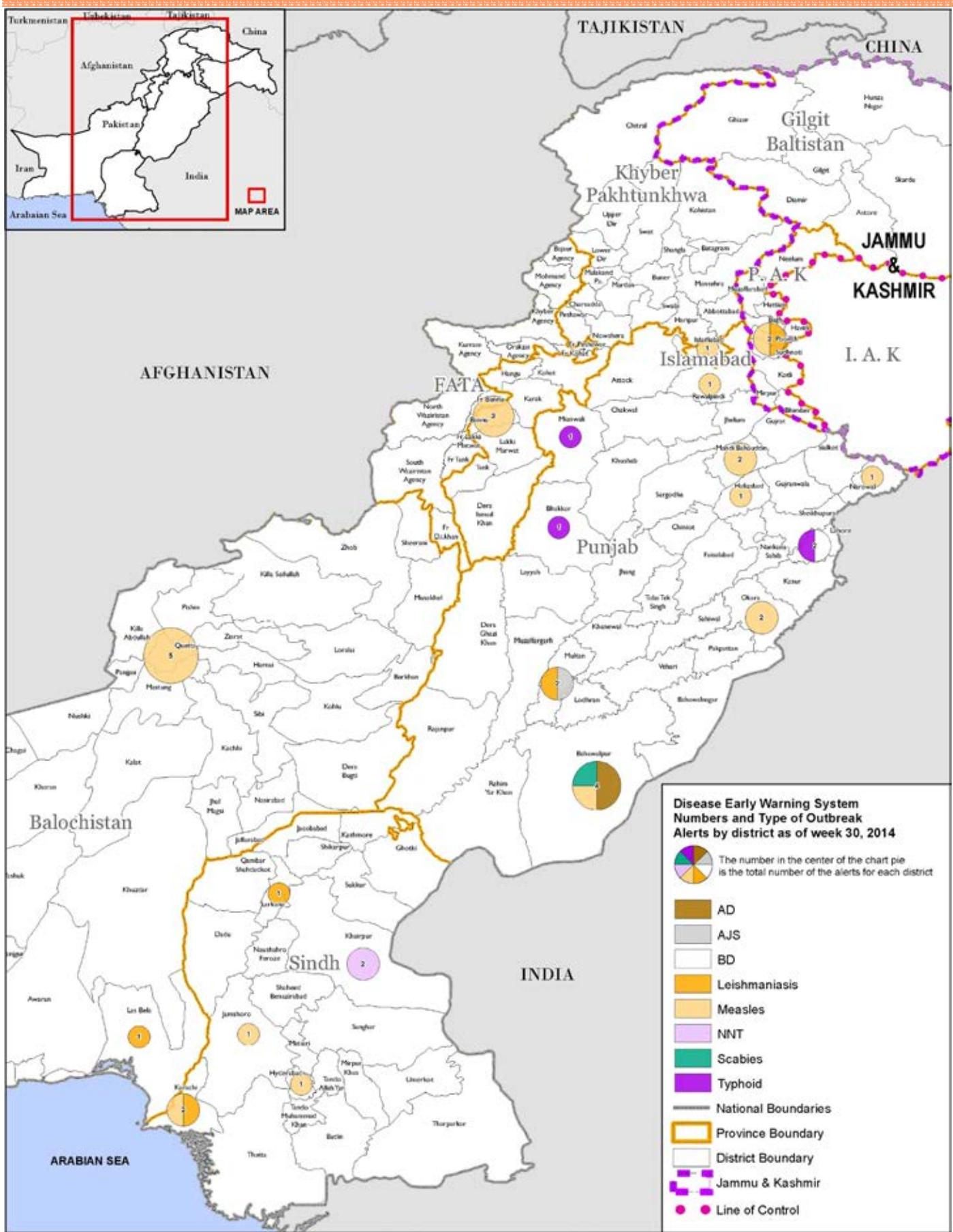
CCHF is a serious viral hemorrhagic fever with up to 50% case fatality rate, caused by an RNA virus of family Bunyaviridae, genus Nairovirus, carried by Hyalomma species of ticks. Human beings become infected by tick bites or crushing the ticks, which are usually found on sheep, cattle, goats or camels, 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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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 30 2014



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