



Weekly Epidemiological Bulletin

Disease early warning system and response in Pakistan

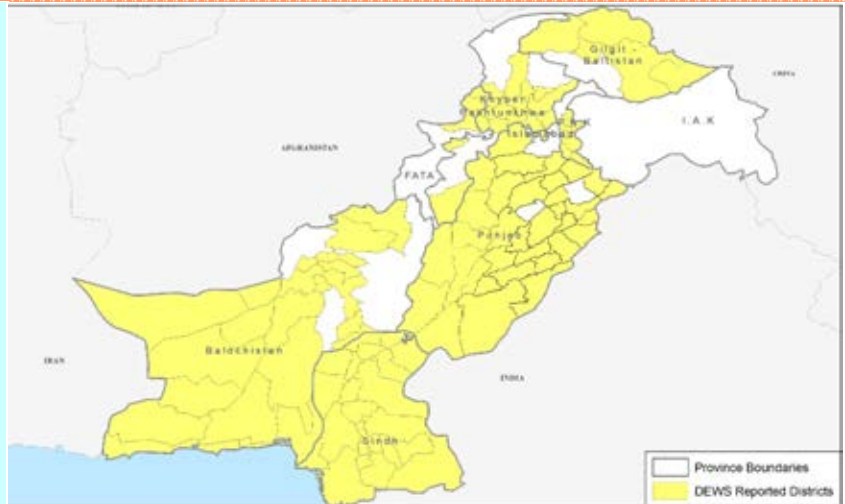
Volume 5, Issue 29, Wednesday 23 July 2014

Highlights

Epidemiological week no. 29
(13 - 19 July 2014)

- **CCHF:** During this week, 4 suspected CCHF cases with 3 deaths have been reported 2 cases were Punjab province, while 1 each from Balochistan and Khyber Pakhtunkhwa provinces; (1 out of 4 suspected cases belongs to Afghanistan and were brought to Pakistan for treatment).
- In this week, **75** out of 87 districts and 2,976 out of 3,590 health facilities have reported to Disease Early Warning System (DEWS), compared to 75 districts with 2,981 health facilities shared weekly data in week 28, 2014.
- Total **1,098,835** patients consultations reported in week 29, 2014 as compared to **1,112,504** consultations in week 28, 2014.
- In this week, a total of 55 alerts generated and timely responded. Altogether 28 alerts were for Measles; 8 for NNT; 4 for CCHF; 2 each for AWD, Diphtheria and Typhoid fever; while 1 each for Dengue fever, Bloody diarrhoea and Naegleria Meningitis.
- Three outbreak were also identified and timely responded.

Figure-1: 75 out of 87 districts reported to DEWS in week 29, 2014



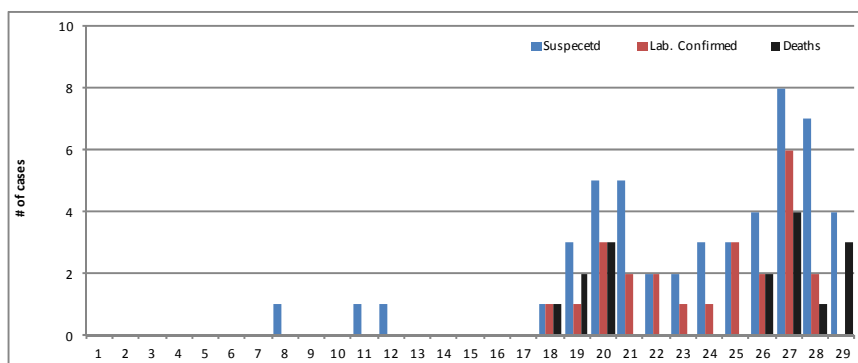
Priority diseases under surveillance in DEWS

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 29, 2014 (29 Dec 2013 to 19 July 2014)

Disease	# of Cases	Percentage
ARI	5,437,850	19.24%
Bloody diarrhoea	27,052	<1.00%
Acute diarrhoea	1,637,366	5.79%
S. Malaria	733,672	2.60%
Skin Diseases	859,739	3.04%
Unexplained fever	730,747	2.59%
All other consultations	18,830,234	66.64%
Total (All consultations)	28,256,660	100%

Figure-2: Weekly number of CCHF cases and deaths in Pakistan, week 1 to 29 2014



Major health events reported during the Epi-week - 29 (13 - 19 July 2014)

Disease	# of Cases	Percentage
ARI	158,054	14.38%
Bloody diarrhoea	1,025	<1.00%
Acute diarrhoea	68,132	6.20%
S. Malaria	22,747	2.07%
Skin Diseases	40,304	3.67%
Unexplained fever	27,752	2.53%
All other consultations	780,821	71.06%
Total (All consultations)	1,098,835	100%

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. 4 suspected CCHF cases (3 Laboratory confirmed), 3 deaths (2 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-29/2014):

Date	Disease	Province	District	Area	<5M	>5M	<5F	>5F	Action Taken
16-Jul	Leishmaniasis	Balochistan	Las Bela	Bela, Tehsil Bela	1	3	1	1	6 cases were reported from MO Civil Hospital. Investigation was done and patients were found with lesions on different body parts. All the cases were provided regular treatment and advised to complete the course until improvement. DHO was also informed.
13-Jul	Leishmaniasis	Balochistan	Quetta	MSF (Marriabad)	0	0	0	0	10 cases reported in continuation of Leishmaniasis outbreak. All the cases were presenting with different lesions on the body. Investigation was completed by MSF team and entire treatment is being provided by MSF too.
13-Jul	CCHF	Khyber Pakhtunkhwa	Peshawar	Rehman Medical Institute (Village Dhidana, Kabul, Afghanistan)	0	1	0	0	A 25 years old man residence of village Dhidana, Kabul was admitted in Rehman Medical Institute (PVT), Hayat Abad Peshawar emergency with history of Fever, Bleeding per rectum. He developed haematemesis afterwards. He was investigated for hemorrhagic fever from Agha Khan Laboratory and was reported Positive for CCHF. He is a farmer by profession and was in good state of health 10 days ago. WHO provided PPEs to RMI. The patient is improving and still under treatment. Information shared with DHO.
19-Jul	Leishmaniasis	Khyber Pakhtunkhwa	Mardan	Village & UC Kohi Bermol, Tehsil Katlang, Mardan	0	1	1	3	5 clinical cases of C - Leishmaniasis were reported from BHU Kohi Bermol, Tehsil Katlang. outbreak already declared in UC, line list was maintained. WHO supplied required doses of Inj-Glucantime to KPH Mardan for all registered cases. RBM, KPH were requested for vector control interventions in the areas and surrounding. On the job training of health staff was conducted for Intralesional administration of Inj-Glucantime. RBM focal person was informed and requested for vector control measures in the areas. EDO Health and focal person was informed.
19-Jul	Leishmaniasis	Khyber Pakhtunkhwa	Mardan	Village Haji Abad, Muslim Abad, UC Mian Essa, Tehsil Takht Bhai, Mardan	1	1	1	5	8 clinical cases of C - Leishmaniasis were reported from BHU Mian Essa. Outbreak already declared in UC, line list was maintained. WHO supplied required doses of Inj-Glucantime to KPH Mardan for all registered cases. RBM, KPH were requested for vector control interventions in the areas and surrounding. On the job training of health staff was conducted for Intralesional administration of Inj-Glucantime. RBM focal person was informed and requested for vector control measures in the areas. EDO Health and focal person was informed.
15-Jul	CCHF	Punjab	Chakwal	Mohra Qazi, PO- Karyala, Tehsil & District Chakwal	0	1	0	0	A death of 45 year old cattle handler was reported and was suspected as Crimean Congo Hemorrhagic Fever by Holy Family Hospital Rawalpindi. Verbal autopsy and retrograde investigations in HF hospital was done. Patient was admitted in Emergency ward under supervision of Medical specialist but expired on the same evening. Platelets were 10,000 and Hemoglobin was 14.1. Patient belongs to District Chakwal. The deceased developed high grade fever and blood in vomitus from last 5 days. Treatment was provided by various local doctors and DHQ hospital Chakwal but later referred to Holy Family hospital. Blood sample sent to NIH came positive for CCHF. Information and detail Investigation report was shared with WHO Punjab, EDO(H) Rawalpindi and EDO(H) Chakwal. Field investigation was done by DDHO Chakwal and entomologist with live stock focal persons. No contact was found with complaints or with any symptoms. All the necessary actions taken in the area by veterinary staff to disinfect the area and cattle. LHWs were sensitized to do further surveillance in the area.

Figure-3: Number of alerts received and responded, week 26 to 29 2014

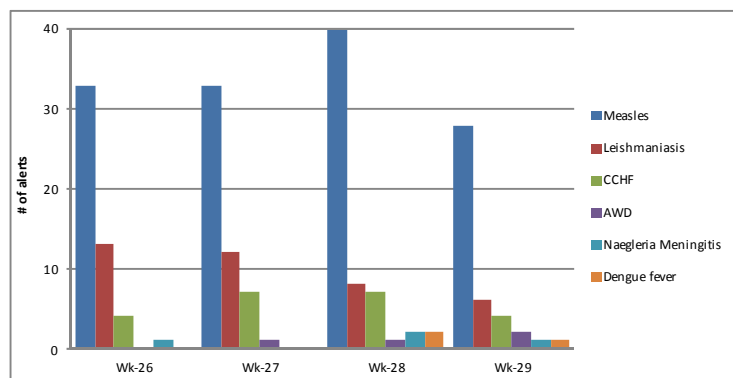
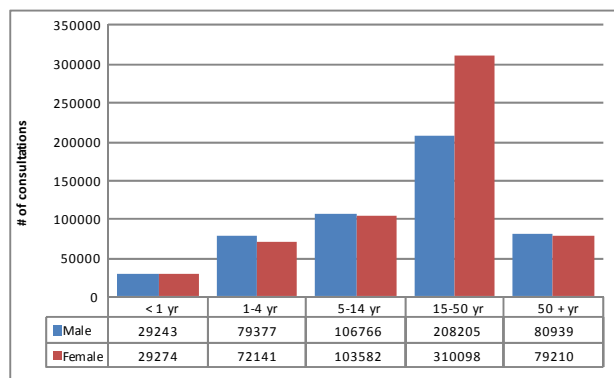
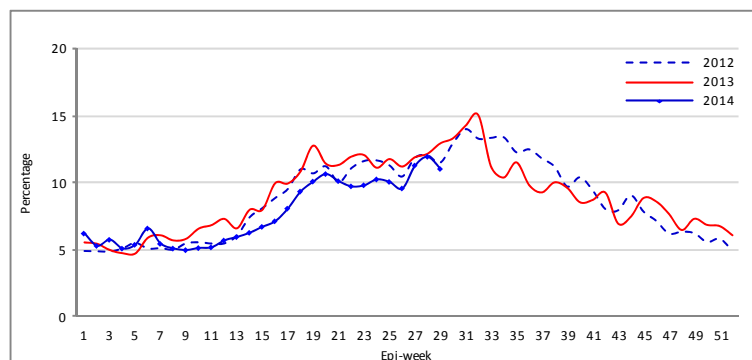


Figure-4: Number of consultations by age and gender, week 29, 2014



Province Khyber Pakhtunkhwa:

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



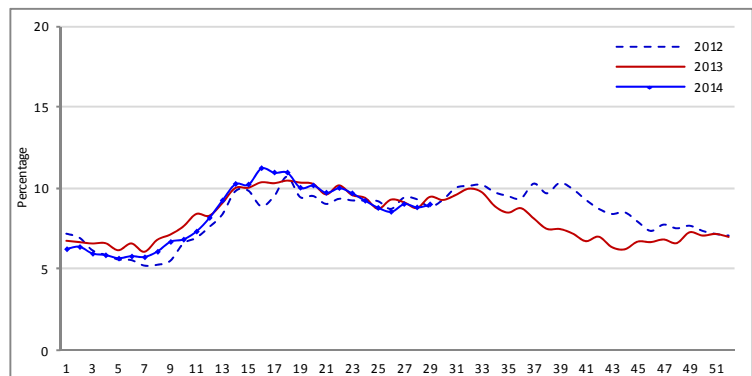
145 health facilities from 11 districts of Khyber Pakhtunkhwa sent reports to DEWS with a total of 32,110 patients consultations reported in week 29, 2014.

A total of 16 alerts, 12 were for Measles; while 2 each for CCHF and Leishmaniasis were reported and appropriate measures were taken.

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

Province Sindh:

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



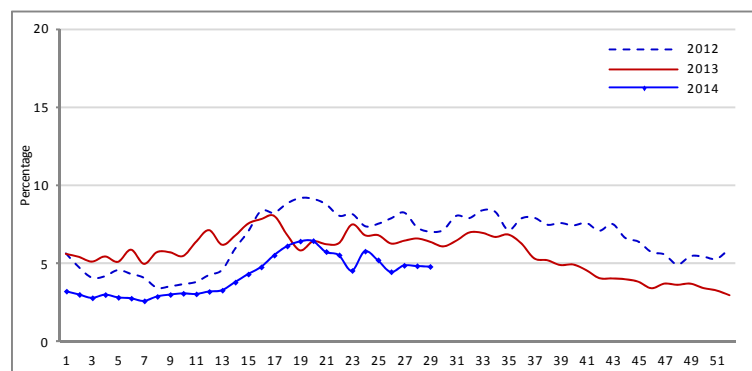
783 health facilities from 21 districts in Sindh province reported to DEWS with a total of 257,346 patient consultations in week 29, 2014.

A total of 14 alerts were received and appropriate measures were taken. Altogether 7 alerts were for NNT; 2 each for AWD, Leishmaniasis and Measles: While 1 for Naegleria Meningitis.

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



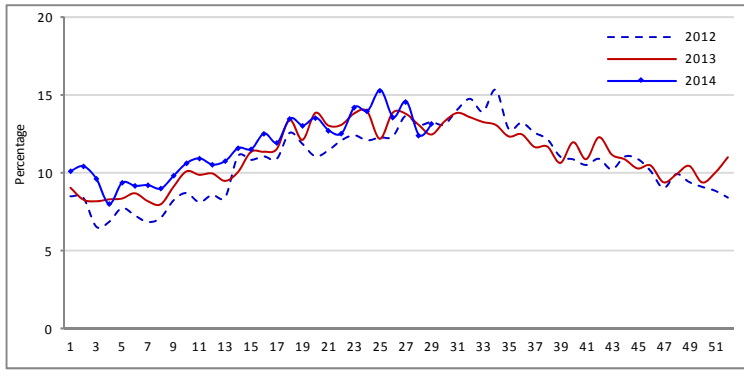
1,842 health facilities from 33 districts in Punjab province reported to DEWS with a total of 775,471 patients consultations in week 29, 2014.

Total 18 alerts were received and appropriate measures were taken. Altogether 11 alerts were for Measles; 2 each for Typhoid fever and Diphtheria; while 1 each for Bloody diarrhoea, CCHF and NNT 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



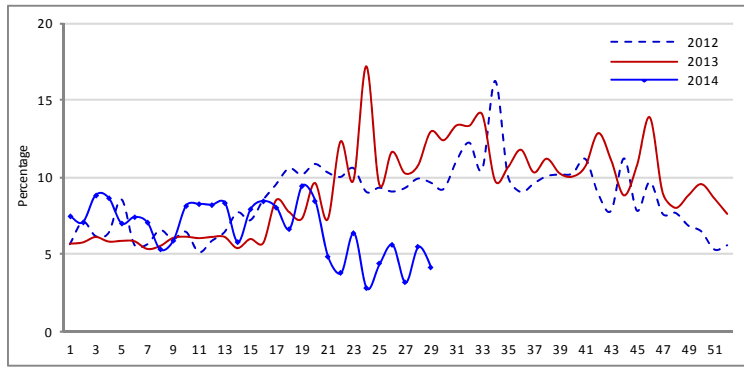
201 health facilities from 8 districts in Balochistan province reported to DEWS with a total of 32,833 patients consultations in week 29, 2014.

A total of 7 alerts were reported and appropriate measures were taken. Altogether 3 alerts were for Measles; 2 for Leishmaniasis; while 1 each for CCHF and Dengue fever.

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

FATA:

Figure-9: Weekly trend of Acute diarrhoea, FATA



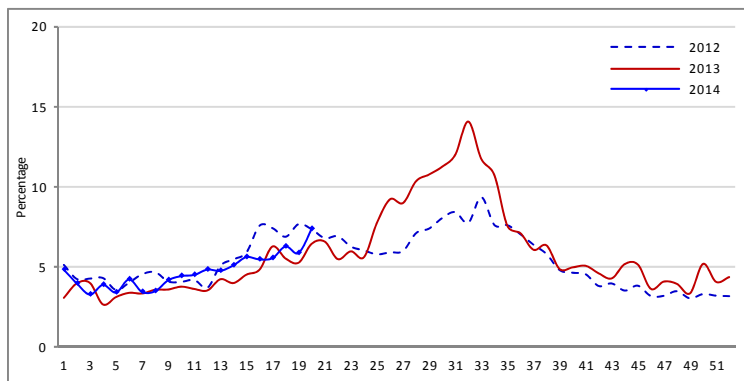
1 health facilities from 1 agency in FATA reported to DEWS with a total of 510 patients consultations in week 29, 2014.

No alert for any disease was received from any area in FATA in week 29 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



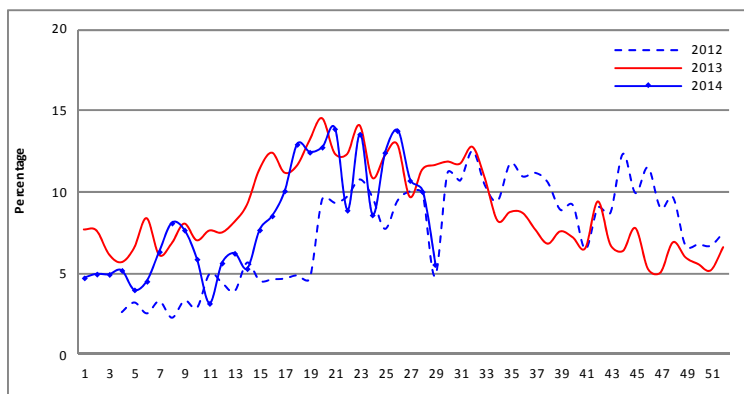
68 health facilities from 7 districts in AJ&K reported to DEWS with a total of 8,302 patients consultations in week 20, 2013.

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



4 health facilities reported to DEWS on time with a total of 565 patients consultations in week 29, 2014.

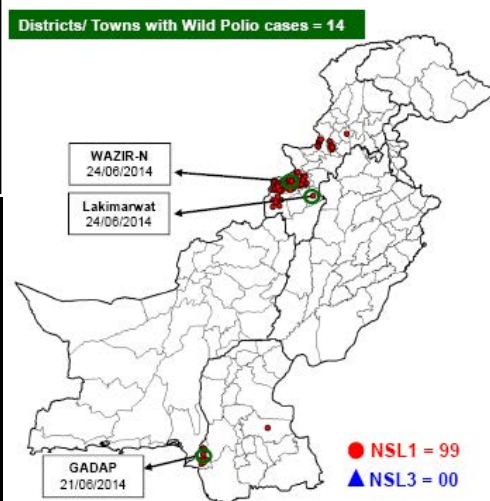
No alert for any disease was reported in Islamabad in week 29, 2014.

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 29 (13 to 19 July 2014), five new type-1 wild polio virus (WPV) cases were reported, three from Federally Administered Tribal Areas (two from North Waziristan, one from South Waziristan) and one each from Khyber Pakhtunkhwa (Lakki Marwat district) and Sindh (Gadap town Karachi). This brings the total number of polio cases in 2014 to 99 (compared to 24 in 2013 till this time) from 14 districts/town/tribal agencies/FR areas (compared to 12 in 2013 till this time).

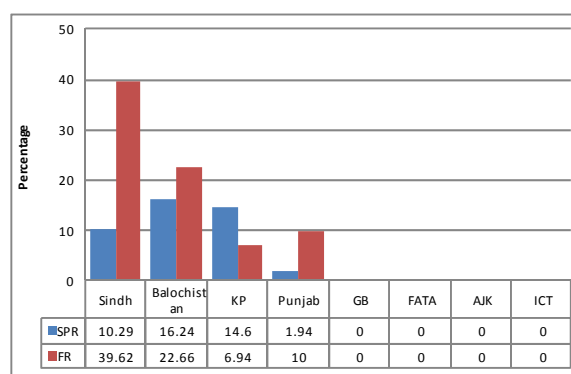
Province	2013			2014		
	P1	P3	P1+P3	P1	P3	P1+P3
Punjab	7	-	-	-	-	-
Sindh	10	-	-	9	-	-
Khyber Pakhtunkhwa	11	-	-	17	-	-
FATA	65	-	-	73	-	-
Balochistan	-	-	-	-	-	-
AJ&K	-	-	-	-	-	-
Gilgit-Baltistan	-	-	-	-	-	-
Islamabad	-	-	-	-	-	-
Total	93	-	-	99	-	-



Malaria:

The Table and chart given below shows the Malaria Slide Positivity and Falciparum Ratio in week 29, 2014. Total number of Malaria cases tested in this week is 7,937 out of which 567 were found positive; 424 for P. Vivax; 68 for P. Falciparum; while 75 for Mixed (SPR = 7.14%; F.R = 25.22%).

Malaria tests \ Province	Sindh	Balochistan	Khyber Pakhtunkhwa	Punjab	GB	FATA	AJK	ICT
P. Vivax	128	157	67	72	0	0	0	0
P. Falciparum	15	42	5	6	0	0	0	0
Mixed	69	4	0	2	0	0	0	0
# tested	2061	1250	493	4133	0	0	0	0
SPR	10.29	16.24	14.6	1.94	0	0	0	0
FR	39.62	22.66	6.94	10	0	0	0	0



Follow up on: CCHF

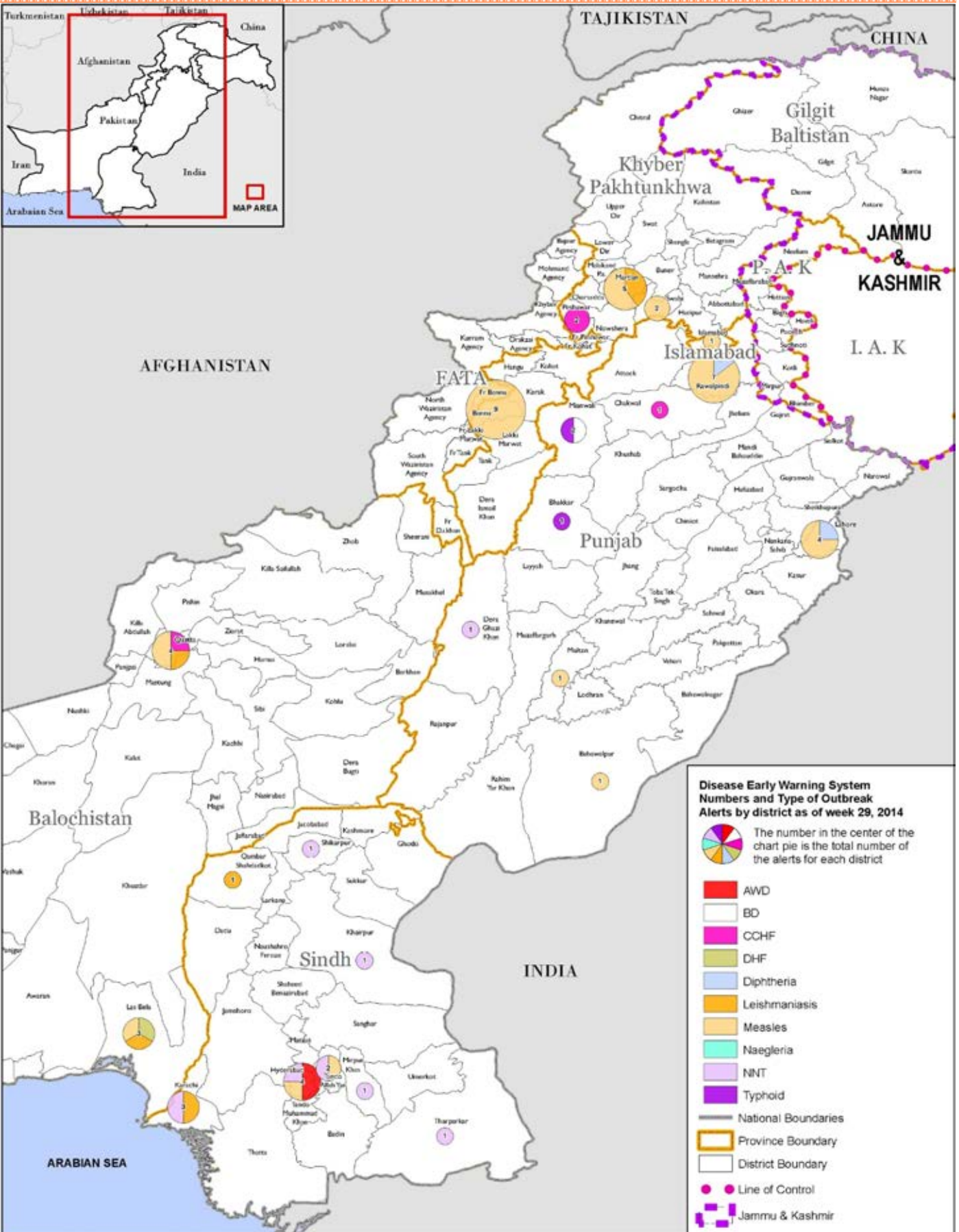
CCHF is a serious viral hemorrhagic fever with up to 50% case fatality rate, caused by an RNA virus of family Bunyaviridae, genus Nairovirus, carried by Hyalomma species of ticks. Human beings become infected by tick bites or crushing the ticks, which are usually found on sheep, cattle, goats or camels, 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 29 2014



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