



# Weekly Epidemiological Bulletin

## Disease early warning system and response in Pakistan

Volume 5, Issue 27, Wednesday 9 July 2014

### Highlights

Epidemiological week no. 27  
(29 June - 5 July 2014)

- **CCHF:** During this week, 6 lab confirmed CCHF cases have been reported 3 from Balochistan province (2 cases belongs to Afghanistan); 2 from Khyber Pakhtunkhwa province (both the cases belongs to Afghanistan); while 1 lab confirmed CCHF death was from Punjab province. (4 out of 6 cases belongs to Afghanistan and were brought to Pakistan for treatment).
- In this week, **76** out of 87 districts and 2,925 out of 3,590 health facilities have reported to Disease Early Warning System (DEWS), compared to 76 districts with 2,751 health facilities shared weekly data in week 26, 2014.
- Total **987,644** patients consultations reported in week 27, 2014 as compared to **1,166,436** consultations in week 26, 2014.
- In this week, a total of 42 alerts generated and timely responded. Altogether 23 alerts were for Measles; 7 for CCHF; 5 for Leishmaniasis; 2 each for Typhoid fever and NNT; while 1 each for Acute Watery Diarrhoea, Acute diarrhoea and Diphtheria.

Figure-1: 76 out of 87 districts reported to DEWS in week 27, 2014



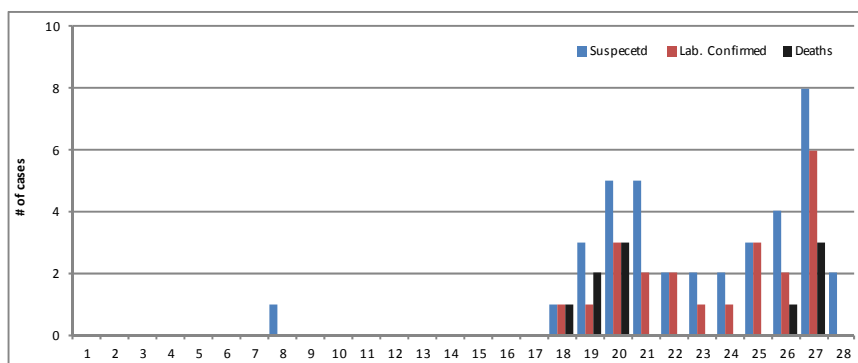
#### Priority diseases under surveillance in DEWS

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  
Scabies  
Cutaneous Leishmaniasis

#### Cumulative number of selected health events reported in Epi-week 1 to 27, 2014 (29 Dec 2013 to 5 July 2014)

Disease	# of Cases	Percentage
ARI	5,108,264	19.64%
Bloody diarrhoea	25,010	<1.00%
Acute diarrhoea	1,497,794	5.76%
S. Malaria	684,483	2.63%
Skin Diseases	777,040	2.99%
Unexplained fever	674,824	2.59%
All other consultations	17,239,711	66.29%
<b>Total (All consultations)</b>	<b>26,007,126</b>	<b>100%</b>

Figure-2: Weekly number of CCHF cases and deaths in Pakistan, week 1 to 27 2014



#### Major health events reported during the Epi-week - 27 (29 June - 5 July 2014)

Disease	# of Cases	Percentage
ARI	145,951	14.78%
Bloody diarrhoea	951	<1.00%
Acute diarrhoea	62,604	6.34%
S. Malaria	22,407	2.27%
Skin Diseases	34,291	3.47%
Unexplained fever	26,849	2.72%
All other consultations	694,591	70.33%
<b>Total (All consultations)</b>	<b>987,644</b>	<b>100%</b>

Crimean Congo Haemorrhagic Fever (CCHF) cases are reported continuously from epidemiological week 8 2014. So far total 38 suspected cases, 22 laboratory confirmed, and 10 deaths (of these 7 laboratory confirmed) have been reported. Most of the cases are from Balochistan province 17 suspected (9 cases belongs to Afghanistan), 9 Laboratory confirmed and 1 death. 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 reported 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-27/2014):

Date	Disease	Province	District	Area	<5M	>5M	<5F	>5F	Action Taken
30-Jun	CCHF	Balochistan	Quetta	FJCH (Killi Beraw, Saryab Road)	0	1	0	0	One CCHF case was reported from FJCH. Investigations revealed that the patient is a dairy farmer and had usual contact with cattle. As per investigations patient had developed rigors, headache, abdominal pain from last 10 days with complaints of nasal / gum bleeding for 3 days. The lab results showed Hb 13.5 mg/dl, platelets 12,000/cmm and also malaria was positive. Symptomatic treatment, supportive fluids was started. There was no travelling history. Awareness session was taken with family regarding CCHF disease. Blood sample collected and was found positive for CCHF.
30-Jun	CCHF	Balochistan	Quetta	FJCH (Killi Poroon, Anjeel District, Afghanistan)	0	1	0	0	One CCHF case reported from FJCH. Patient had high grade fever, headache, body ache and nasal / gum bleeding. Patient is an animal trader by profession and also had animals at home. The lab investigation showed Hb 13.4 mg/dl, platelets 129,000/cmm, urea 48 mg%, Creatinine 0.8 mg% whereas Malaria and Dengue were negative. Patient is living in an endemic area and travel to other districts for trading. Supportive treatment and fluids intake started. Family was sensitized about CCHF and case condition. Blood sample collected and was found positive for CCHF.
2-Jul	CCHF	Balochistan	Quetta	FJCH (Killi Pethaw Kholaw, District Malghao, Afghanistan)	0	1	0	0	One CCHF case was reported from FJCH. Case is an animal trader by profession. Symptomatic history showed high grade fever with rigors and weakness in lower limb from last 10 days and nasal/gum bleeding for last 3 days. The lab investigations revealed Hb 15.5 mg/dl, platelets 61,000/cmm and blood sample sent to NIH came out positive whereas malaria and Dengue were negative. Symptomatic treatment, supportive fluids was given. There was no travelling history neither any such case at his family. Awareness session was taken on CCHF. Family was sensitized for being isolated with the case and inform if any contact gets similar sign and symptoms.
1-Jul	CCHF	Khyber Pakhtunkhwa	Peshawar	Tajkungan, Mazarsharif Afghanistan	0	1	0	0	A CCHF case was reported from Isolation Room of Khyber Teaching Hospital, Peshawar. The patient was a 32 year old male, resident of Taj Kurghan, Mazar Sharif, Afghanistan having fever, headache, body aches for the last 5 days, bruises on hands for the last 4 days and bleeding from gums and rectum for the last 2 days. By profession the patient is a butcher. The laboratory investigations show low platelets (35,000/cmm). Sample was collected and was found positive for CCHF. The patient did not survive and died on 2nd July 2014.
2-Jul	CCHF	Khyber Pakhtunkhwa	Peshawar	Gadi Khana, Lahori Gate, Peshawar City	0	1	0	0	Information by DMS HMC about admission of a staff member of Emergency Department who was involved in shifting of a Positive CCHF case to the Medical Ward. Initially he was only treated for Fever but later on it was revealed that he was exposed to the vomitus of the CCHF case. He developed Gums & Mouth bleeding. Ribavirin was started along with supportive therapy. Blood sample sent to NIH came positive for CCHF. The patient could not survive and expired.
4-Jul	CCHF	Khyber Pakhtunkhwa	Peshawar	Mohallah Naranj Bagh, Jalal Abad, Afghanistan	0	0	0	1	An 18 years old female from Jalal Abad Afghanistan was suspected as a CCHF case at Hayat Abad Medical Complex. Patient had history of fever, body aches and hemorrhage from nose and mouth. Patient belongs to a family that deals with domestic animals and butchers. Patient was isolated in a separate room and investigations revealed that platelet count was 23000; blood sample sent to NIH found positive for CCHF. Ribavirin treatment initiated to the patient as well as to close contacts including health care providers that examined the patient.
29-Jun	CCHF	Punjab	Chakwal	Village Jhatla Talagang Chakwal	0	1	0	0	A death due to CCHF was reported from Holy Family Hospital (HFH) Rawalpindi. WHO responded with DDHO Chakwal by visiting the hospital and in the community. Patient was consulted local doctors but later come to HFH OPD and was given out patient prescription. Later started blood in vomit and was admitted in Emergency ward under supervision of Medical ward specialist but could not survive and expired on 30 June 2014. The deceased was farmer by profession, with history of cattle handling. Blood sample sent to NIH during admission, came out positive, Platelets 17000 and Hb was 4.5. Field visit was arranged and contacts were briefed about symptoms and CCHF. No family members found ill, LHW were instructed to remain vigilant about any case in the area. Shared the detail Investigation report with WHO Punjab, EDO(H) Chakwal and WHO DEWS Islamabad. Deceased was buried with proper instructions from NIH.

Figure-3: Number of alerts received and responded, week 24 to 27 2014

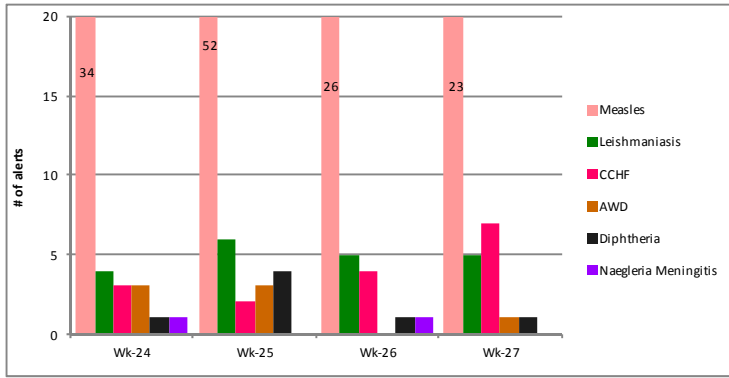
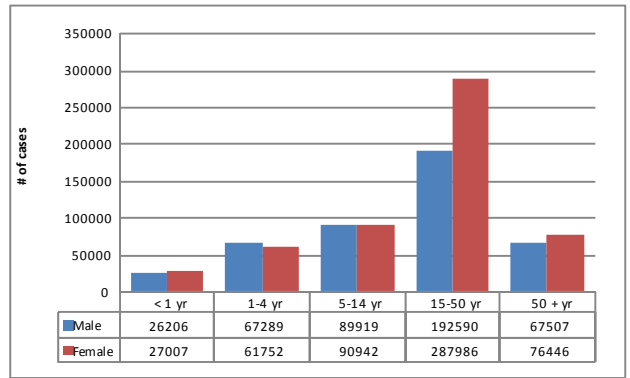
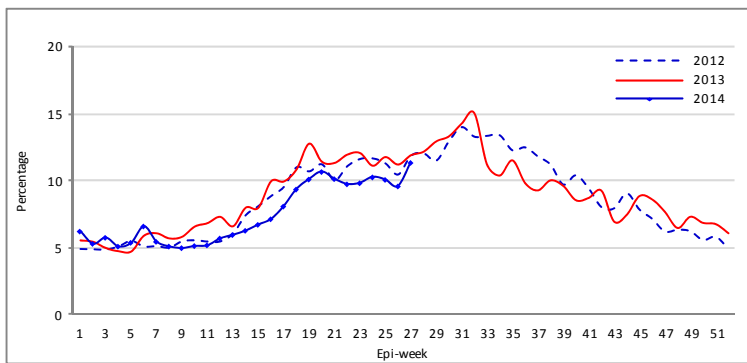


Figure-4: Number of consultations by age and gender, week 27, 2014



**Province Khyber Pakhtunkhwa:**

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



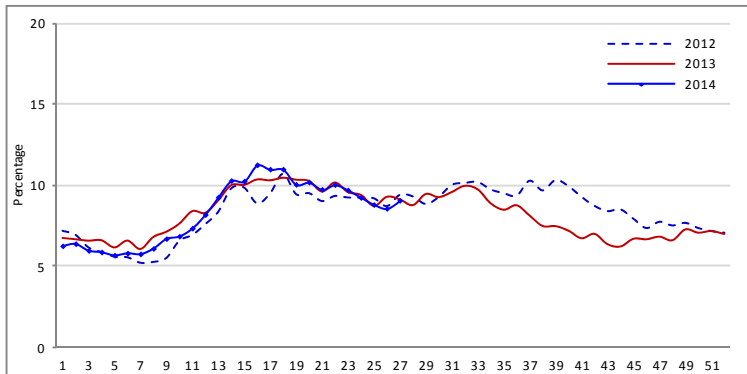
147 health facilities from 11 districts of Khyber Pakhtunkhwa sent reports to DEWS with a total of 30,886 patients consultations reported in week 27, 2014.

A total of 5 alerts, 3 were for CCHF; while 1 each for Measles and Diphtheria were reported and appropriate measures were taken.

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

**Province Sindh:**

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



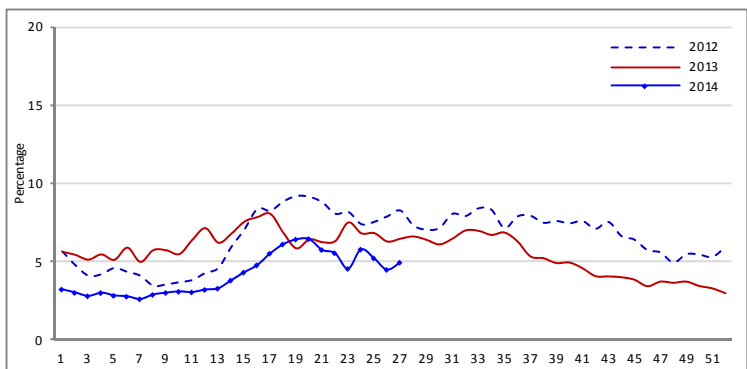
795 health facilities from 22 districts in Sindh province reported to DEWS with a total of 224,868 patient consultations in week 27, 2014.

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

The proportion of AD for the province is showing 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



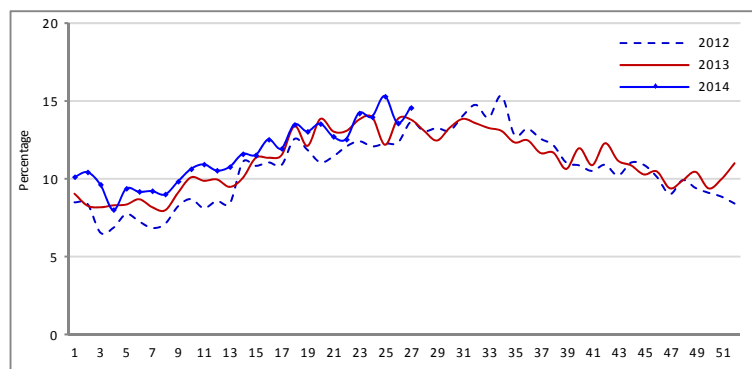
1,775 health facilities from 33 districts in Punjab province reported to DEWS with a total of 702,728 patients consultations in week 27, 2014.

Total 20 alerts were received and appropriate measures were taken. Altogether 13 alerts were for Measles; 2 for Typhoid fever; while 1 each for Acute watery diarrhoea, Acute diarrhoea, CCHF, Leishmaniasis and NNT were responded in Punjab province.

The weekly trend of Acute diarrhoea in Punjab showing increase 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



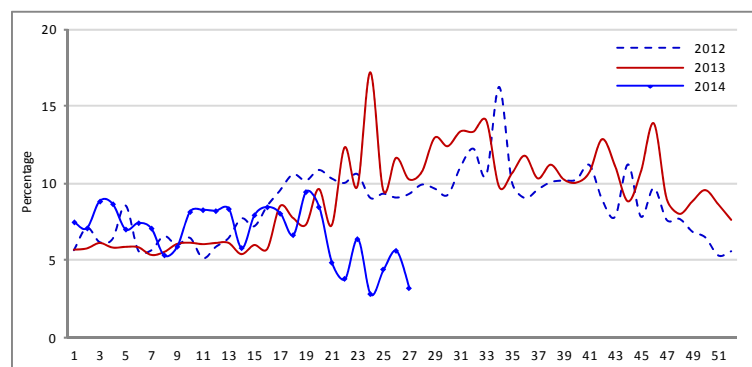
205 health facilities from 8 districts in Balochistan province reported to DEWS with a total of 28,513 patients consultations in week 27, 2014.

A total of 8 alerts were reported and appropriate measures were taken. Altogether 5 alerts were for Measles; while 3 for CCHF.

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



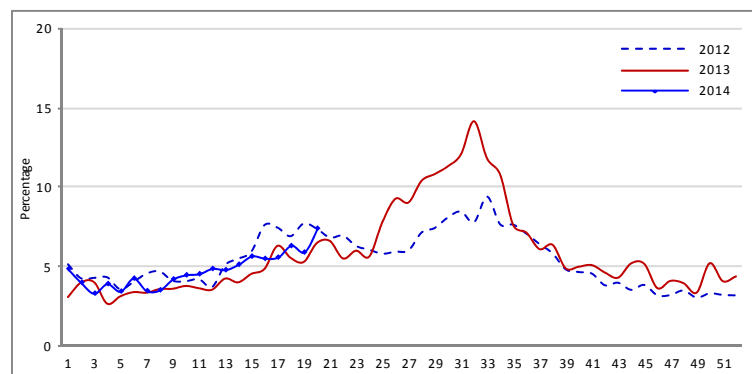
1 health facilities from 1 agency in FATA reported to DEWS with a total of 412 patients consultations in week 27, 2014.

No alert for any disease was received from any area in FATA in week 27 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



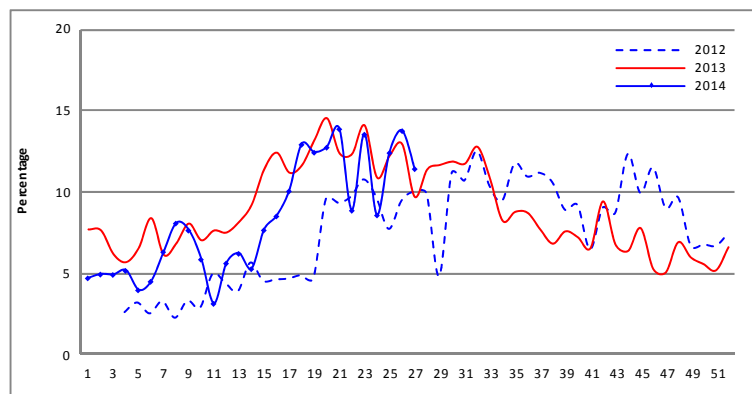
68 health facilities from 7 districts in AJ&K reported to DEWS with a total of 8,302 patients consultations in week 20, 2013.

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 237 patients consultations in week 27, 2014.

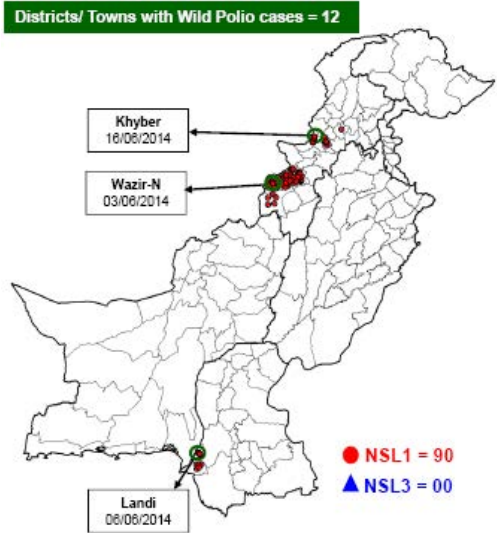
1 alert for Measles was reported in Islamabad in week 27, 2014.

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 this week 27 (29 June to 5 July 2014), two new type-1 wild polio virus (WPV) cases were reported from Federally Administered Tribal Areas (Khyber Agency). This brings the total number of polio cases in 2014 to 90 (compared to 22 in 2013 till this time) from 12 districts/towns/tribal agencies/FR areas (compared to 11 in 2013 till this time).

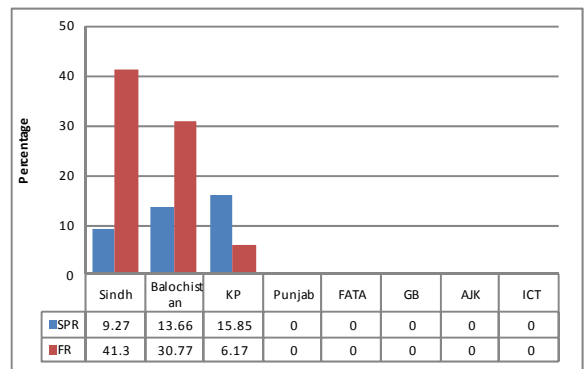
Province	2013			2014		
	P1	P3	P1+P3	P1	P3	P1+P3
Punjab	7	-	-	-	-	-
Sindh	10	-	-	7	-	-
Khyber Pakhtunkhwa	11	-	-	15	-	-
FATA	65	-	-	68	-	-
Balochistan	-	-	-	-	-	-
AJ&K	-	-	-	-	-	-
Gilgit-Baltistan	-	-	-	-	-	-
Islamabad	-	-	-	-	-	-
<b>Total</b>	<b>93</b>	<b>-</b>	<b>-</b>	<b>90</b>	<b>-</b>	<b>-</b>



Malaria:

The Table and chart given below shows the Malaria Slide Positivity and Falciparum Ratio in week 26, 2014. Total number of Malaria cases tested in this week is 3,067 out of which 343 were found positive; 238 for P. Vivax; 38 for P. Falciparum; while 67 for Mixed (SPR = 11.18%; F.R = 30.61%).

Malaria tests \ Province	Sindh	Balochistan	Khyber Pakhtunkhwa	Punjab	GB	FATA	AJK	ICT
P. Vivax	108	54	76	0	0	0	0	0
P. Falciparum	9	24	5	0	0	0	0	0
Mixed	67	0	0	0	0	0	0	0
# tested	1985	571	511	0	0	0	0	0
SPR	9.27	13.66	15.85	0	0	0	0	0
FR	41.3	30.77	6.17	0	0	0	0	0



Follow up on: CCHF

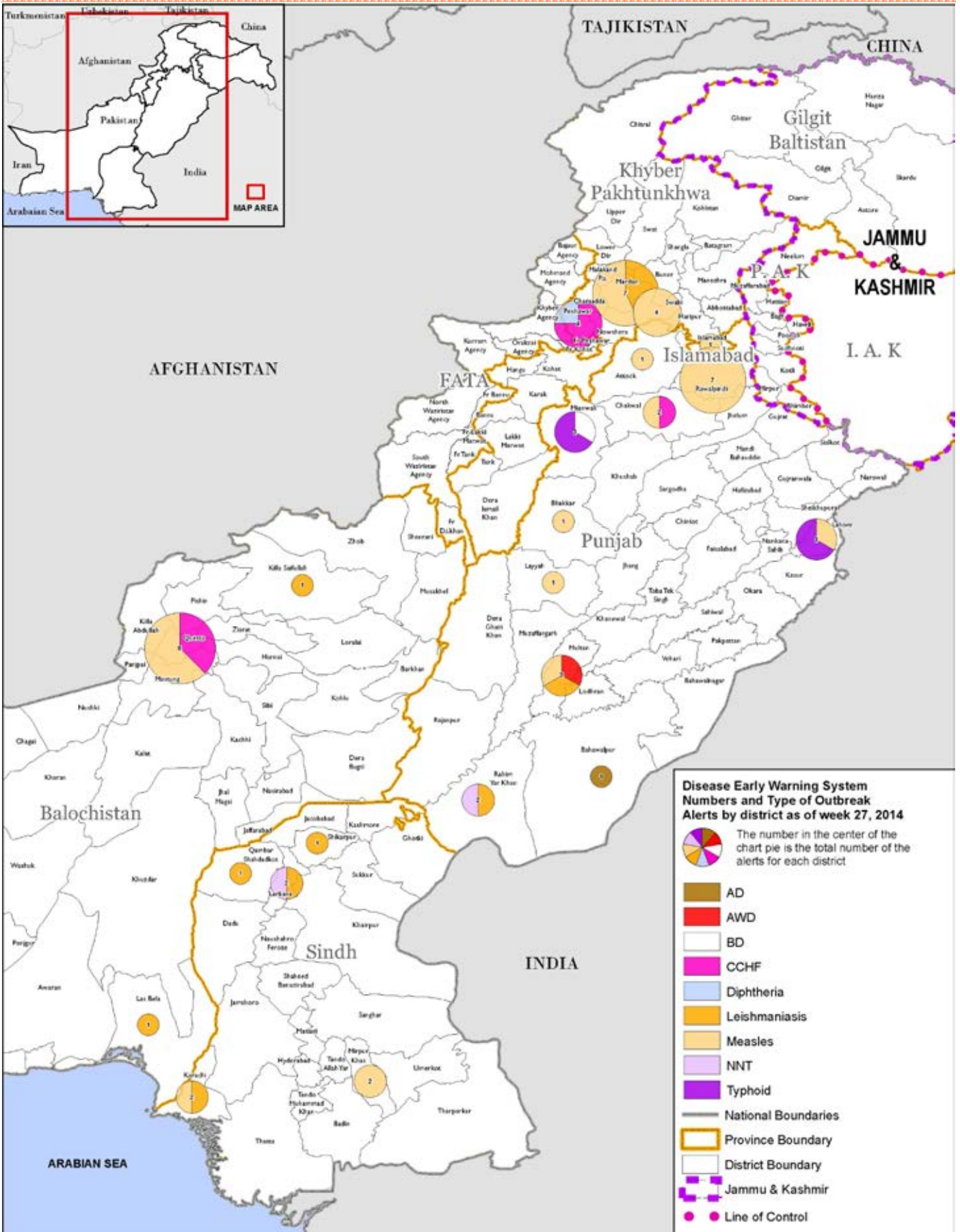
CCHF is a serious viral hemorrhagic fever with up to 50% case fatality rate, caused by an RNA virus of family Bunyaviridae, genus Nairovirus, carried by Hyalomma species of ticks. Human beings become infected by tick bites or crushing the ticks, which are usually found on sheep, cattle, goats or camels,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

Crimean Congo Haemorrhagic Fever (CCHF) cases are reported continuously from epidemiological week 8 2014. So far total 38 suspected cases, 22 laboratory confirmed, and 10 deaths (of these 7 Laboratory confirmed) have been reported. Most of the cases are from Balochistan province 17 suspected (9 cases belongs to Afghanistan), 9 Laboratory confirmed and 1 death. 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 reported from district Sudhnuti (AJK) and was negative for CCHF.

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 27 2014



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