



Weekly Epidemiological Bulletin

Disease early warning system and response in Pakistan

Volume 5, Issue 39, Wednesday 01 October 2014

Highlights

Figure-1: 83 out of 87 districts reported to DEWS in week 39, 2014

Epidemiological week no. 39
(21 - 27 September 2014)

- In this week, **83** out of 87 districts and 2,668 out of 3,590 health facilities have reported to Disease Early Warning System (DEWS), compared to 85 districts with 2,700 health facilities shared weekly data in week 38, 2014.
- A total of **1,136,269** patients consultations reported in this week 39, 2014.
- In this week, a total of 32 alerts generated and timely responded. Altogether 8 alerts were for NNT; 7 each for Measles and Dengue fever; 3 for Cutaneous Leishmaniasis; 2 each for Acute diarrhoea and CCHF; while 1 each for Diphtheria, Typhoid and Scabies.
- 5 outbreaks were also identified and timely responded. Altogether 4 were for Dengue fever; while 1 for Cutaneous Leishmaniasis.



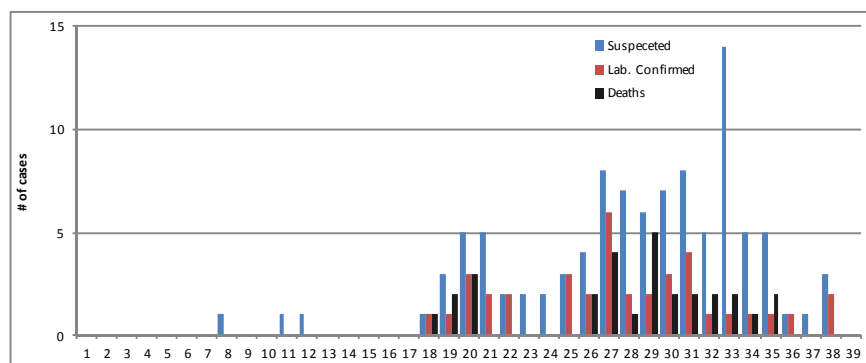
Priority diseases under surveillance in DEWS

- 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 39, 2014 (29 Dec 2013 to 27 September 2014)

Disease	# of Cases	Percentage
ARI	7,302,482	18.32%
Bloody diarrhoea	39,384	<1.00%
Acute diarrhoea	2,316,302	5.83%
S. Malaria	1,010,692	2.53%
Skin Diseases	1,271,032	3.19%
Unexplained fever	1,019,797	2.56%
All other consultations	26,910,682	67.49%
Total (All consultations)	39,870,371	100%

Figure-2: Weekly number of CCHF cases and deaths in Pakistan, week 1 to 39 2014



Major health events reported during the Epi-week - 39 (21 - 27 September 2014)

Disease	# of Cases	Percentage
ARI	206,967	18.21%
Bloody diarrhoea	1,025	<1.00%
Acute diarrhoea	59,605	5.25%
S. Malaria	28,623	2.52%
Skin Diseases	34,177	3.01%
Unexplained fever	26,640	2.34%
All other consultations	779,232	68.58%
Total (All consultations)	1,136,269	100%

Crimean Congo Haemorrhagic Fever (CCHF) cases are reported continuously from epidemiological week 8, 2014. So far total 100 suspected cases, 38 laboratory confirmed, and 28 deaths (of these 14 laboratory confirmed) have been reported. Most of the cases are from Balochistan province 46 suspected (13 cases belongs to Afghanistan), 10 Laboratory confirmed and 9 deaths. 30 suspected, 17 Laboratory confirmed (12 from Afghanistan) and 10 deaths (7 Lab confirmed) were reported from Khyber Pakhtunkhwa province. 4 suspected cases (2 from Afghanistan), 3 Laboratory confirmed and 2 deaths were reported from Islamabad. 15 suspected CCHF cases (7 Laboratory confirmed), 6 deaths were reported from Punjab province. 2 laboratory confirmed cases (1 death) were reported from Sindh province; While 1 suspected case was from district Sudhnuti (AJK) and found negative for CCHF.

The CCHF cases from Afghanistan are detected and reported from Quetta and Peshawar. 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-39/2014):

Date	Disease	Province	District	Area	<5M	>5M	<5F	>5F	Action Taken
24-Sep	Leishmaniasis	Balochistan	Las Bela	Bela, Tehsil Bela	2	3	0	3	8 suspected Cutaneous Leishmaniasis cases were reported from Civil Hospital Bela. All the cases have no travelling history. Cases had lesions mostly on legs. Treatment was provided to the patients through Leishmaniasis treatment centre. All the information shared with DHO.
23-Sep	Dengue fever	Punjab	Lahore	UC 146 Kahna Nau Nishtar Town	0	2	0	5	Two confirmed, 4 suspected and one probable case of Dengue fever notified from Teaching Units in Lahore. 2 blood samples were taken and sent for laboratory confirmation and result for IgM were found positive for both the cases. The confirmed cases were admitted and kept in isolation ward (HDU) in Teaching hospital. Health education sessions were conducted in the community on proper solid waste disposal and improved water storage practices, use of protective clothing and repellents. Information shared with AD(VBD) and EDO Health Lahore. Follow up planned.
24-Sep	Dengue fever	Punjab	Lahore	Allama Iqbal Town	0	14	0	2	13 suspected, 2 probable and 1 confirmed case of Dengue fever notified from Teaching Units in Lahore. 1 blood sample was taken and sent for laboratory confirmation, result for IgM was found positive. The confirmed cases were admitted and kept in the isolation ward (HDU) of Teaching hospital. There is no travel History of patient. Health education session conducted in the community on proper solid waste disposal and improved water storage practices, use of protective clothing and repellents. All the information shared with AD (VBD) and EDO Health Lahore. Follow up planned.
22-Sep	Dengue fever	Punjab	Rawalpindi	Potohar Town, Rawalpindi	0	5	0	3	4 suspected and 4 confirmed Dengue fever cases were notified from Holy Family Hospital and BB Hospital Rawalpindi. The cases were investigated and 7 blood samples were taken and sent to lab for detection of dengue specific antibodies. Two patients were positive with NS-1 and 2 positive for IgM and 2 IgG. All the positive Dengue fever cases were admitted and kept in isolation ward in the hospitals. Cases were reported from different locations in the districts. Health education sessions were conducted in the community on proper solid waste disposal and improved water storage practices, use of protective clothing and repellents. Information shared with EDO(H) Rawalpindi.
25-Sep	Dengue fever	Punjab	Rawalpindi	Cantonment Area Rawalpindi	0	9	0	1	3 suspected, 1 probable and 6 confirmed cases of Dengue fever reported from Holy Family Hospital and BB Hospital Rawalpindi. All the patient belong to Rawalpindi cantonment area. The cases were admitted and kept in isolation ward in the hospitals. 7 blood samples were taken and sent to lab for detection of dengue specific antibodies. Six patients were found positive for Dengue fever. Health education session was conducted in the community. Information shared with EDO(H) Rawalpindi and follow up planned.

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

Disease	2013		Current week 39, 2014		2014	
	A	O	A	O	A	O
Acute watery diarrhoea	142	40	0	0	59	15
Acute jaundice syndrome	49	6	0	0	15	3
Bloody diarrhoea	45	3	0	0	26	0
CCHF	90	47	2	0	93	49
Dengue fever	300	66	7	4	35	9
Diphtheria	84	19	1	0	46	4
Measles	3357	281	7	0	1020	32
Pertussis	46	10	0	0	27	2
NNT + tetanus	349	0	8	0	221	0
Malaria	25	6	0	0	0	0
Cutaneous Leishmaniasis	621	51	3	1	340	19
Others	520	5	4	0	268	6
Total	5628	534	32	5	2150	139

Figure-3: Number of alerts received and responded, week 36 to 39 2014

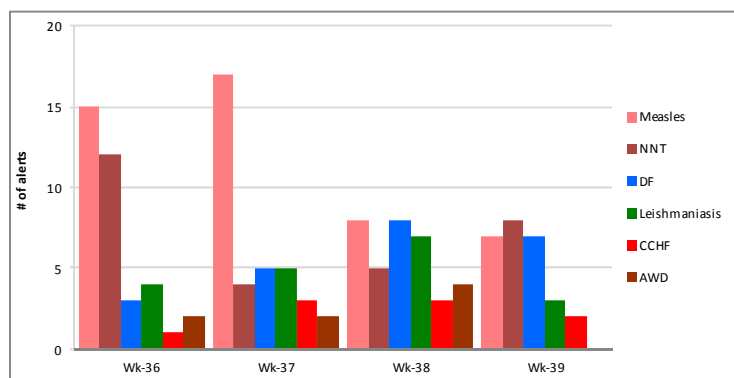
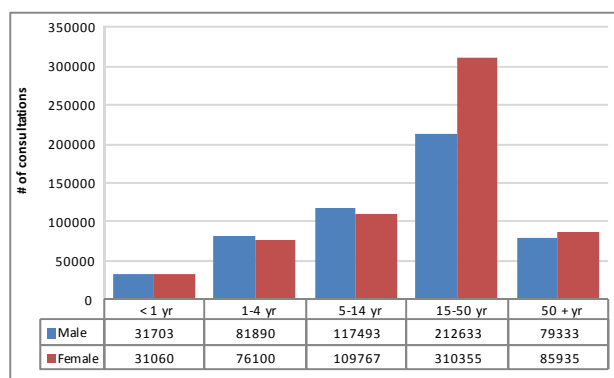
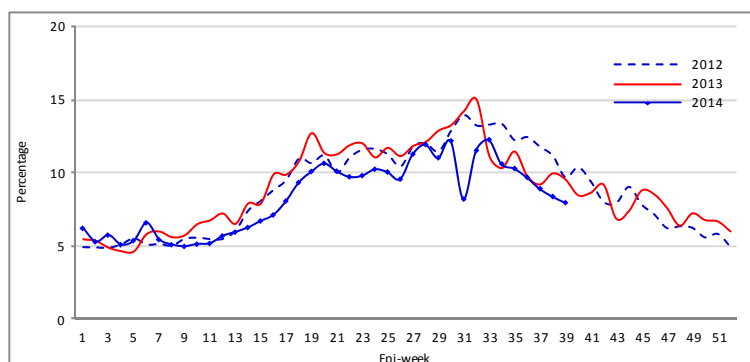


Figure-4: Number of consultations by age and gender, week 39, 2014



Province Khyber Pakhtunkhwa:

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



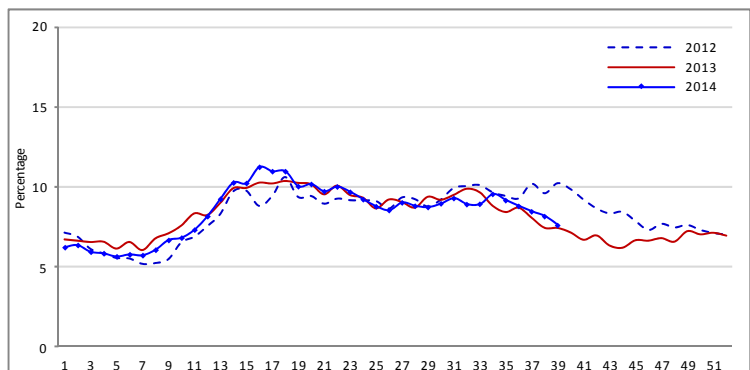
144 health facilities from 11 districts of Khyber Pakhtunkhwa sent reports to DEWS with a total of 38,089 patients consultations reported in week 39, 2014.

A total of 1 alert for Measles was received and appropriate measures were taken.

Figure-5 shows the weekly trend of Acute diarrhoea showing decrease from last couple of weeks but vigilant monitoring of the situation is required.

Province Sindh:

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



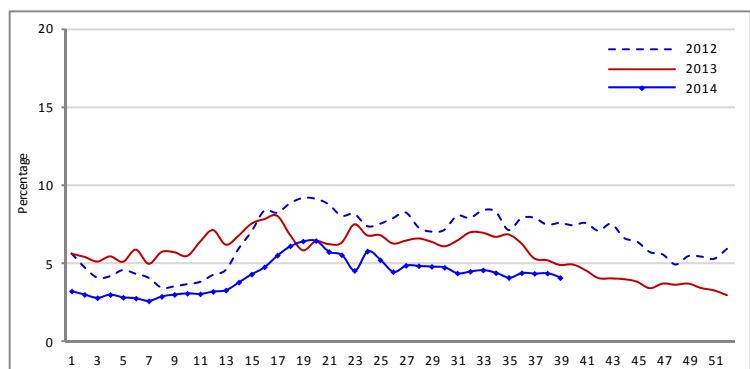
760 health facilities from 23 districts in Sindh province reported to DEWS with a total of 285,461 patient consultations in week 39, 2014.

A total of 8 alerts were received and appropriate measures were taken. Altogether 7 alerts were for NNT; while 1 for Leishmaniasis.

The proportion of AD for the province is showing decrease as compared with last week but vigilant monitoring of the situation is required as proportion of AD is high in the province as compared with same time period last year.

Province Punjab:

Figure-7: Trend of Acute diarrhoea, province Punjab



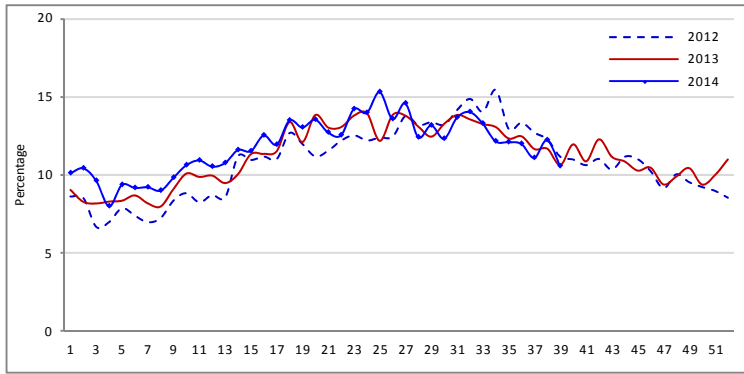
1,559 health facilities from 34 districts in Punjab province reported to DEWS with a total of 776,135 patients consultations in week 39, 2014.

Total 15 alerts were received and appropriate measures were taken. Altogether 6 alerts were for Dengue fever; 3 for Measles; 2 for Acute diarrhoea; while 1 each for diphtheria; NNT; Typhoid fever and Scabies were responded in province Punjab.

The weekly trend of Acute diarrhoea in Punjab showing minor decrease 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



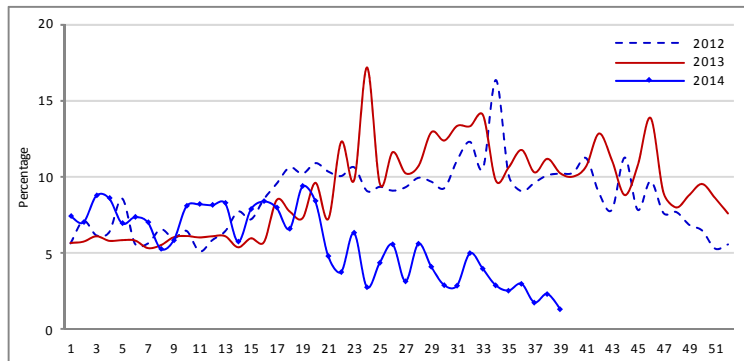
138 health facilities from 5 districts in Balochistan province reported to DEWS with a total of 24,891 patients consultations in week 39, 2014.

A total of 6 alerts were reported and appropriate measures were taken. Altogether 3 alerts were for Measles; 2 for CCHF; while 1 for Leishmaniasis.

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

FATA:

Figure-9: Weekly trend of Acute diarrhoea, FATA



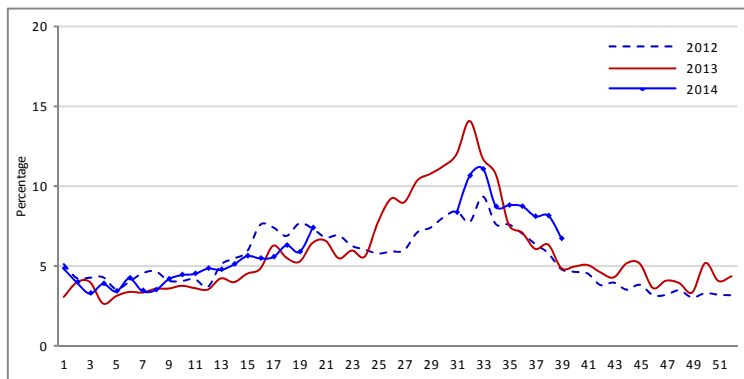
1 health facilities from 1 agency in FATA reported to DEWS with a total of 599 patients consultations in week 39, 2014.

No alert for any disease was received from any area in FATA in week 39 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



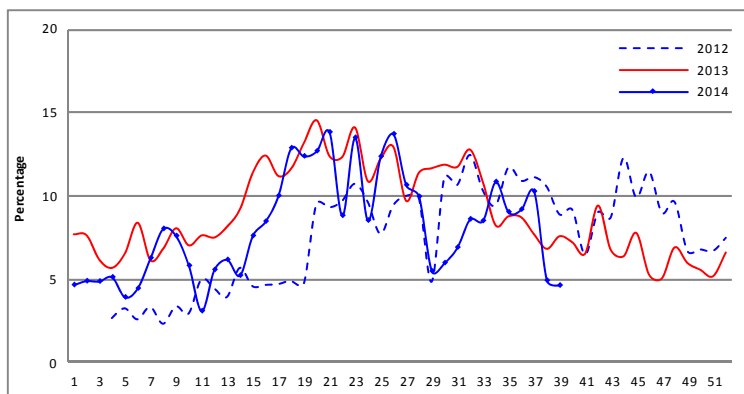
65 health facilities from 8 districts in AJK reported to DEWS with a total of 10,900 patients consultations in week 39, 2013.

A total of 2 alerts were reported in this week and appropriate measures were taken. Altogether 1 alert each for Measles and Leishmaniasis.

Weekly trend of AD showing decrease as compared with last week but vigilant monitoring of the situation is required as the proportion of AD is higher as compared with the same time period last year.

Islamabad:

Figure-11: Weekly trend of Acute diarrhoea, Islamabad



1 health facility reported to DEWS on time with a total of 194 patients consultations in week 39, 2014.

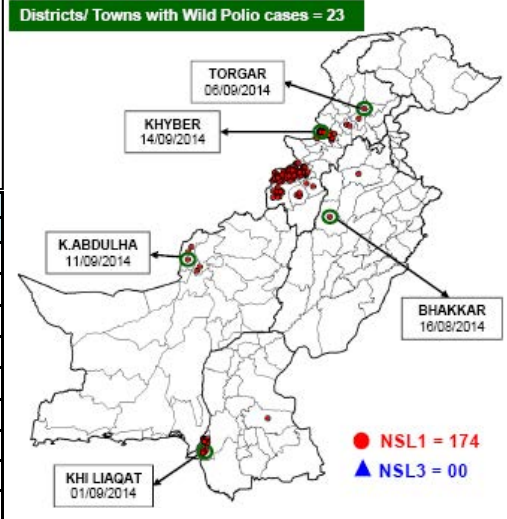
No alert for any disease was reported in week 39 from Islamabad in this week.

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 39 (21 to 27 September 2014) eight new wild polio virus (WPV) cases were reported, three from FATA (two from Khyber, one from North Waziristan agencies); two from Khyber Pakhtunkhwa (one each from Tank and Torgar districts); one from Sindh (Liaqatabad town of Karachi) and two from Balochistan (Kila Abdullah and Quetta districts). This brings the total number of polio cases in 2014 to 174 (compared to 52 in 2013 till this time) from 23 districts/towns/tribal agencies/FR areas (compared to 16 in 2013 till this time).

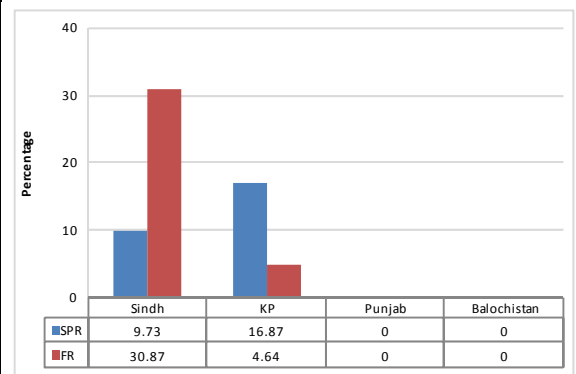
Province	2013			2014		
	P1	P3	P1+P3	P1	P3	P1+P3
FATA	65	-	-	121	-	-
Khyber Pakhtunkhwa	11	-	-	31	-	-
Sindh	10	-	-	15	-	-
Balochistan	-	-	-	5	-	-
Punjab	7	-	-	2	-	-
Gilgit-Baltistan	-	-	-	-	-	-
AJ&K	-	-	-	-	-	-
Islamabad	-	-	-	-	-	-
Total	93	-	-	174	-	-



Malaria:

The Table and chart given below shows the Malaria Slide Positivity and Falciparum Ratio in week 38, 2014. Total number of Malaria cases tested in this week is 3,957 out of which 449 were found positive; 350 for P. Vivax; 35 for P. Falciparum; while 64 for Mixed (SPR = 11.35%; F.R = 22.05%).

Malaria tests \ Province	Sindh	Khyber Pakhtunkhwa	Balochistan	Punjab	GB	FATA	AJK	ICT
P. Vivax	206	144	0	0	0	0	0	0
P. Falciparum	29	6	0	0	0	0	0	0
Mixed	63	1	0	0	0	0	0	0
# tested	3062	895	0	0	0	0	0	0
SPR	9.73	16.87	0	0	0	0	0	0
FR	30.87	4.64	0	0	0	0	0	0



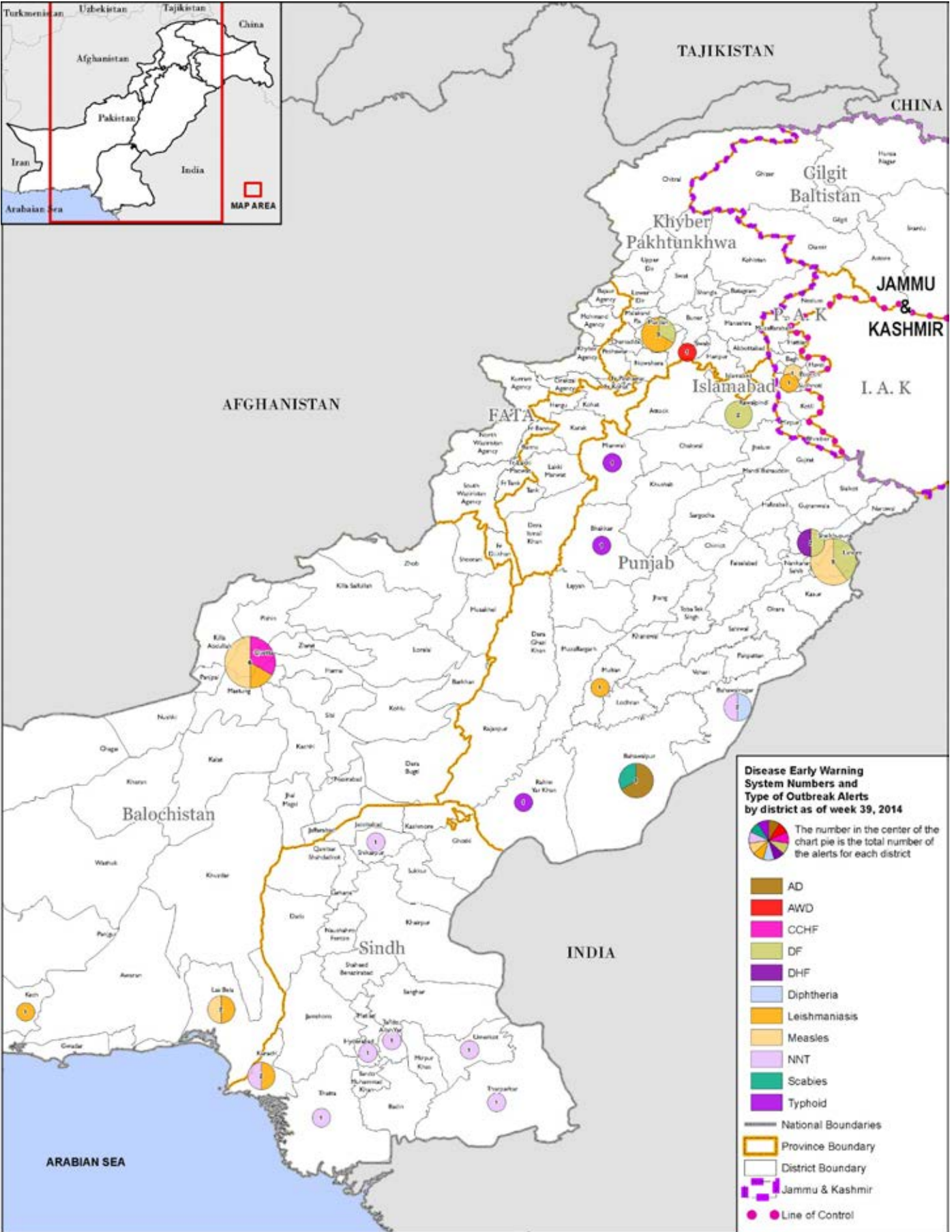
Follow up on: CCHF

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.

Criean Congo Haemorrhagic Fever (CCHF) cases are reported continuously from epidemiological week 8, 2014. So far total 100 suspected cases, 36 laboratory confirmed, and 28 deaths (of these 14 laboratory confirmed) have been reported. Most of the cases are from Balochistan province 46 suspected (13 cases belongs to Afghanistan), 10 Laboratory confirmed and 9 deaths. 30 suspected, 17 Laboratory confirmed (12 from Afghanistan) and 10 deaths (7 Lab confirmed) were reported from Khyber Pakhtunkhwa province. 4 suspected cases (2 from Afghanistan), 3 Laboratory confirmed and 2 deaths were reported from Islamabad. 15 suspected CCHF cases (7 Laboratory confirmed), 6 deaths were reported from Punjab province. 2 laboratory confirmed cases (1 death) were reported from Sindh province; While 1 suspected case was from district Sudhnuti (AJK) and found 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 39 2014



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