



Weekly Epidemiological Bulletin

Disease early warning system and response in Pakistan

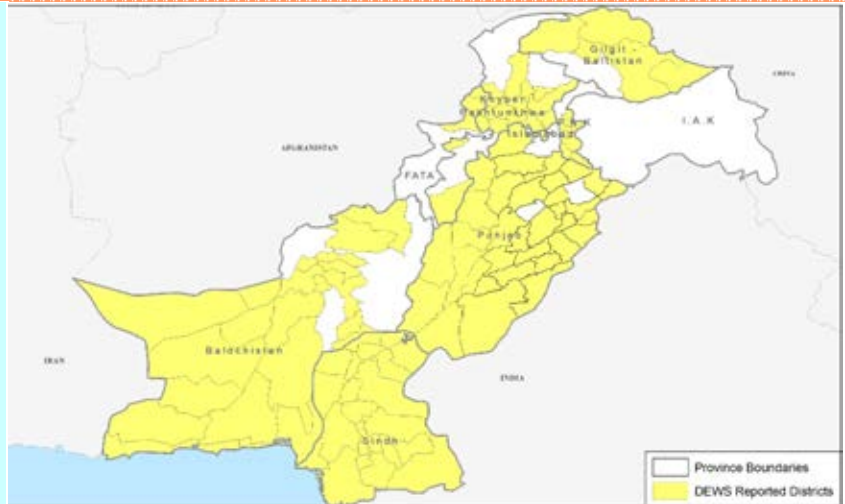
Volume 5, Issue 34, Wednesday 27 August 2014

Highlights

Epidemiological week no. 34
(17 - 23 August 2014)

- **CCHF:** During this week, 6 suspected CCHF cases with 1 deaths have been reported 3 suspected cases were from Balochistan province; while 1 each from Sindh, Punjab and Khyber Pakhtunkhwa provinces.
- In this week, **85** out of 87 districts and 3,014 out of 3,590 health facilities have reported to Disease Early Warning System (DEWS), compared to 86 districts with 3,139 health facilities shared weekly data in week 33, 2014.
- A total of **1,381,195** patients consultations reported in this week 34, 2014.
- In this week, a total of 54 alerts generated and timely responded. Altogether 16 alerts were for Measles; 11 for CCHF; 8 for Leishmaniasis; 6 for NNT; 3 each for Bloody diarrhoea and Typhoid fever; 2 for Acute diarrhoea; while 1 each for AWD, Naegleria Meningitis, Diphtheria, Pertussis and Tetanus.

Figure-1: 85 out of 87 districts reported to DEWS in week 34, 2014



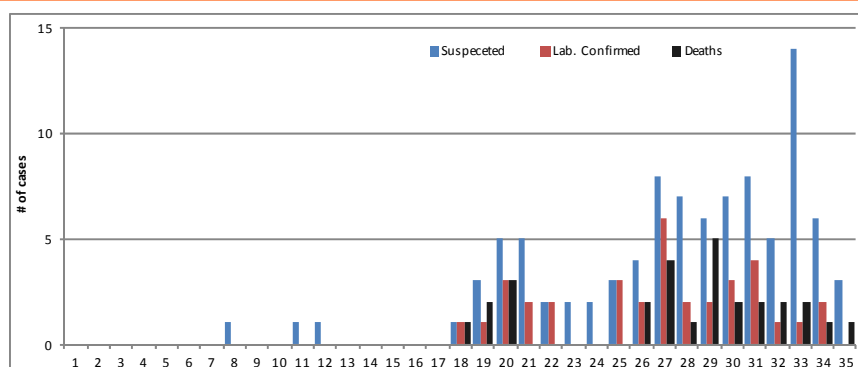
Priority diseases under surveillance in DEWS

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 34, 2014 (29 Dec 2013 to 23 August 2014)

Disease	# of Cases	Percentage
ARI	13,823,977	19.37%
Bloody diarrhoea	105,798	<1.00%
Acute diarrhoea	4,641,628	6.51%
S. Malaria	2,340,948	3.28%
Skin Diseases	2,531,629	3.55%
Unexplained fever	1,930,402	2.71%
All other consultations	45,978,583	64.44%
Total (All consultations)	71,352,965	100%

Figure-2: Weekly number of CCHF cases and deaths in Pakistan, week 1 to 34 2014



Major health events reported during the Epi-week - 34 (17 - 23 August 2014)

Disease	# of Cases	Percentage
ARI	222,813	16.13%
Bloody diarrhoea	1,398	<1.00%
Acute diarrhoea	83,264	6.03%
S. Malaria	32,217	2.33%
Skin Diseases	47,237	3.42%
Unexplained fever	34,427	2.49%
All other consultations	959,839	69.49%
Total (All consultations)	1,381,195	100%

Crimean Congo Haemorrhagic Fever (CCHF) cases are reported continuously from epidemiological week 8, 2014. So far total 94 suspected cases, 35 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. 27 suspected, 15 Laboratory confirmed (10 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. 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-34/2014):

Date	Disease	Province	District	Area	<5M	>5M	<5F	>5F	Action Taken
17-Aug	CCHF	Balochistan	Quetta	FJCH (Gawal Ismaiel zai, Near Levis Thana, Killa Saifullah)	0	1	0	2	Alert for 3 suspected CCHF cases and one suspected CCHF death was reported from FJCH. All cases belongs to district Killa Saifullah. 2 blood samples have been collected and sent to NIH result is awaited. The patients are presently under treatment. Information shared with DoH Killa Saifullah and requested for relevant field investigation and appropriate response. Health education session was conducted with the family members of the patients.
20-Aug	CCHF	Balochistan	Quetta	FJCH (Gawal Ismaiel zai, Near Levis Thana, Killa Saifullah)	0	3	0	0	Alert for 3 suspected CCHF cases were reported from FJCH in continuation to the outbreak held at district Killa Saifullah. All the cases were found with high grade fever, body ache, headache and weakness. By occupation all the cases are farmer and having animal contact. 2 blood samples have been collected and sent to NIH. Presently all the cases are admitted and under treatment. Health education session was conducted with the family members of the patients. DoH is informed and requested to take precautionary measures.
22-Aug	Measles	Balochistan	Quetta	BMCH (Ferozabad, Aaqā Khailabad, Sabzal Road)	3	1	2	1	Alert for 2 suspected Measles cases were reported from BMCH. During response 5 more suspected Measles cases were found in BMCH. Patients belong to different families but from the same location. First dose of Vit-A was given and second dose was ensured through the health facility staff on the next day. The patients had probable link to Saraghargai area where they had travel history. The patients were not immunized against Measles and BCG. 2 blood samples were collected and sent to NIH for laboratory confirmation. Health education was given to the community on importance of routine immunization. DoH was informed and requested to send vaccination team for outreach immunization.
19-Aug	CCHF	ICT	ICT	PIMS	0	1	0	0	One Laboratory confirmed case of CCHF was reported from NIH with history of Fever and epistaxis. Patient is a butcher by profession and belongs to Afghanistan. Blood transfusion, platelets and anti-viral were administered. Blood sample was found positive for CCHF. Health education session was conducted with the family members of the patient.

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

Disease	2013		Current week 34, 2014		2014	
	A	O	A	O	A	O
Acute watery diarrhoea	142	40	0	0	48	12
Acute jaundice syndrome	49	6	0	0	15	3
Bloody diarrhoea	45	3	3	0	25	0
CCHF	90	47	10	2	77	33
Dengue fever	300	66	0	0	11	0
Diphtheria	84	19	1	0	41	4
Measles	3357	281	14	1	950	31
Pertussis	46	10	1	0	25	2
NNT + tetanus	349	0	7	0	182	0
Malaria	25	6	0	0	0	0
Cutaneous Leishmaniasis	621	51	5	0	316	18
Others	520	5	5	0	243	6
Total	5628	534	46	3	1933	109

Figure-3: Number of alerts received and responded, week 31 to 34 2014

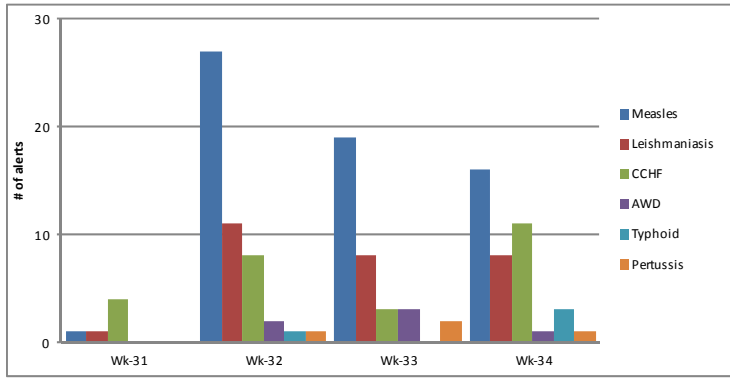
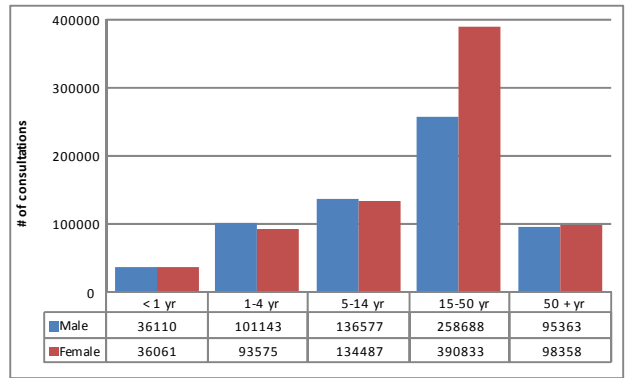
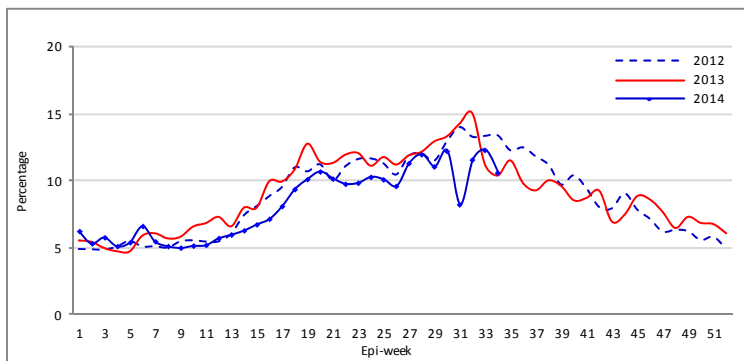


Figure-4: Number of consultations by age and gender, week 34, 2014



Province Khyber Pakhtunkhwa:

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



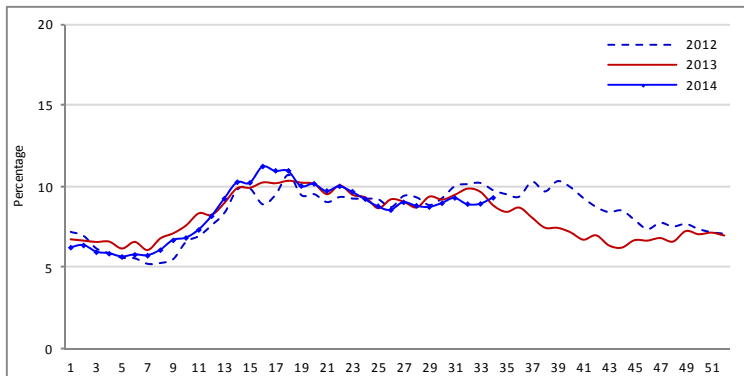
136 health facilities from 11 districts of Khyber Pakhtunkhwa sent reports to DEWS with a total of 42,162 patients consultations reported in week 34, 2014.

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

Figure-5 shows the weekly trend of Acute diarrhoea showing decrease 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



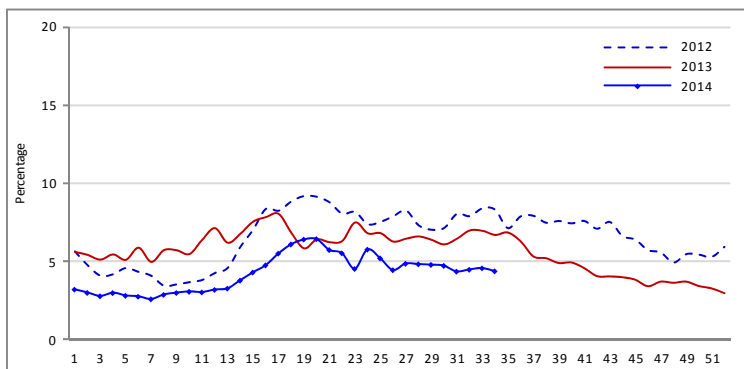
811 health facilities from 23 districts in Sindh province reported to DEWS with a total of 345,497 patient consultations in week 34, 2014.

A total of 10 alerts were received and appropriate measures were taken. Altogether 5 alerts were for NNT; 3 for Leishmaniasis; while 1 for Naegleria Meningitis and diphtheria.

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

Province Punjab:

Figure-7: Trend of Acute diarrhoea, province Punjab



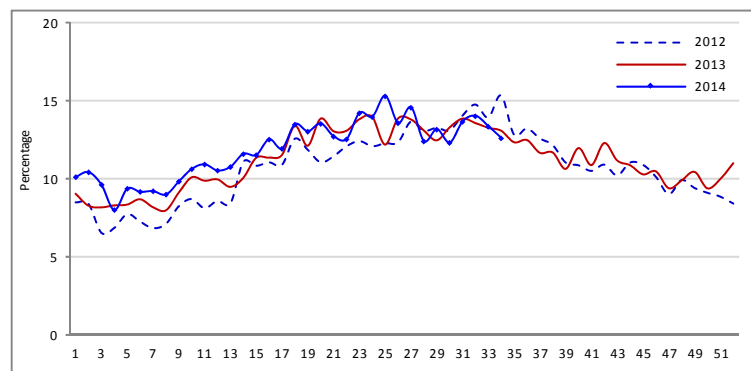
1,814 health facilities from 34 districts in Punjab province reported to DEWS with a total of 946,879 patients consultations in week 34, 2014.

Total 18 alerts were received and appropriate measures were taken. Altogether 8 alerts were for Measles; 3 each for Bloody diarrhoea and Typhoid fever; 2 for Acute diarrhoea; while 1 each for CCHF and NNT 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



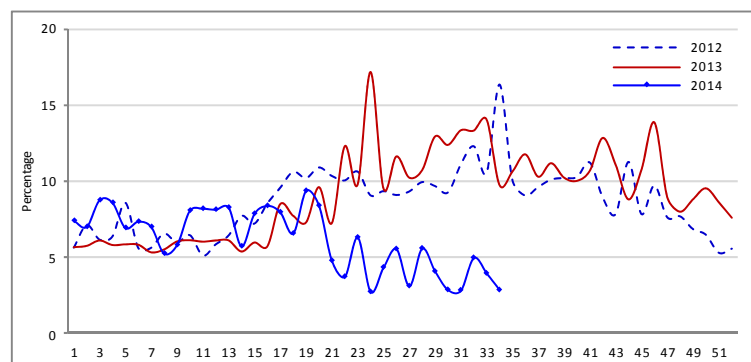
186 health facilities from 8 districts in Balochistan province reported to DEWS with a total of 31,842 patients consultations in week 34, 2014.

A total of 19 alerts were reported and appropriate measures were taken. Altogether 7 alerts each for CCHF and Measles; 3 for Leishmaniasis; while 1 each for Pertussis and Tetanus.

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

FATA:

Figure-9: Weekly trend of Acute diarrhoea, FATA



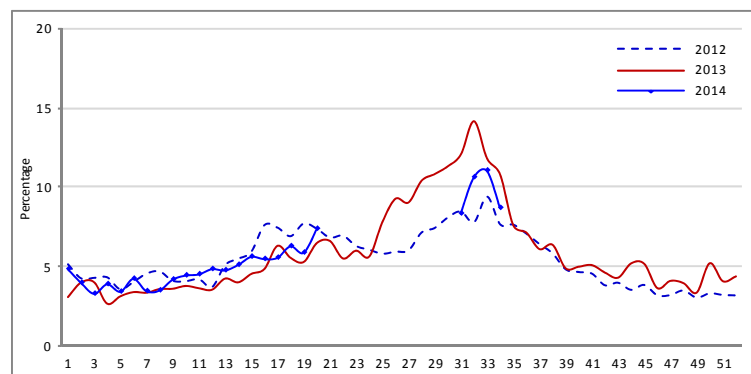
1 health facilities from 1 agency in FATA reported to DEWS with a total of 863 patients consultations in week 34, 2014.

No alert for any disease was received from any area in FATA in week 34 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



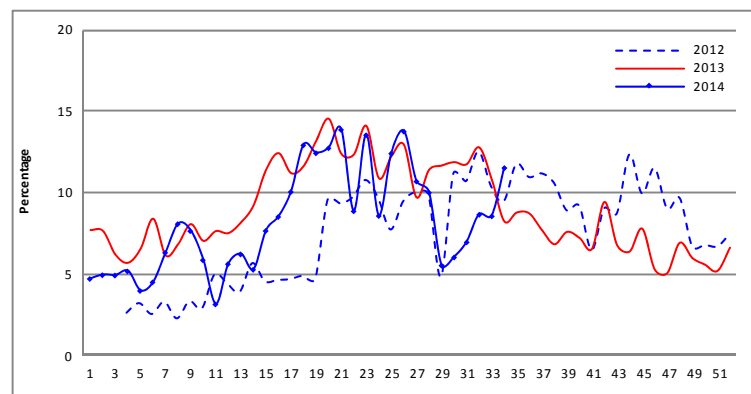
64 health facilities from 8 districts in AJ&K reported to DEWS with a total of 13,691 patients consultations in week 34, 2013.

No alert for any disease was reported from any area in AJ&K.

Weekly trend of AD showing decrease as compared with last week but 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 261 patients consultations in week 34, 2014.

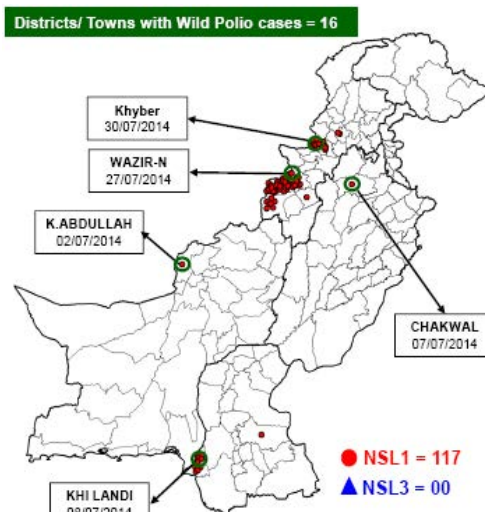
One alert for CCHF was reported in week 34 from Islamabad in this week and appropriate measures were taken.

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 34 (17 to 23 August 2014), two new type-1 wild polio virus (WPV) cases were reported, one each from Federally Administered Tribal Areas (Khyber Agency) and Sindh (Gadap Town Karachi). This brings the total number of polio cases in 2014 to 117 (compared to 28 in 2013 till this time) from 17 districts/towns/tribal agencies/FR areas (compared to 13 in 2013 till this time).

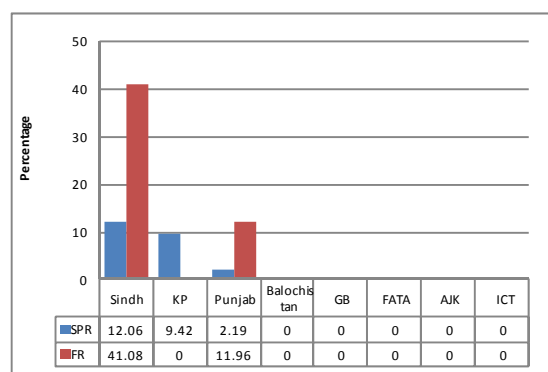
Province	2013			2014		
	P1	P3	P1+P3	P1	P3	P1+P3
Punjab	7	-	-	1	-	-
Sindh	10	-	-	11	-	-
Khyber Pakhtunkhwa	11	-	-	19	-	-
FATA	65	-	-	85	-	-
Balochistan	-	-	-	1	-	-
AJ&K	-	-	-	-	-	-
Gilgit-Baltistan	-	-	-	-	-	-
Islamabad	-	-	-	-	-	-
Total	93	-	-	117	-	-



Malaria:

The Table and chart given below shows the Malaria Slide Positivity and Falciparum Ratio in week 34, 2014. Total number of Malaria cases tested in this week is 8,500 out of which 587 were found positive; 408 for P. Vivax; 41 for P. Falciparum; while 138 for Mixed (SPR = 6.91%; F.R = 30.49%).

Malaria tests \ Province	Sindh	Khyber Pakhtunkhwa	Punjab	Balochistan	GB	FATA	AJK	ICT
P. Vivax	241	86	81	0	0	0	0	0
P. Falciparum	39	0	2	0	0	0	0	0
Mixed	129	0	9	0	0	0	0	0
# tested	3392	913	4195	0	0	0	0	0
SPR	12.06	9.42	2.19	0	0	0	0	0
FR	41.08	0	11.96	0	0	0	0	0



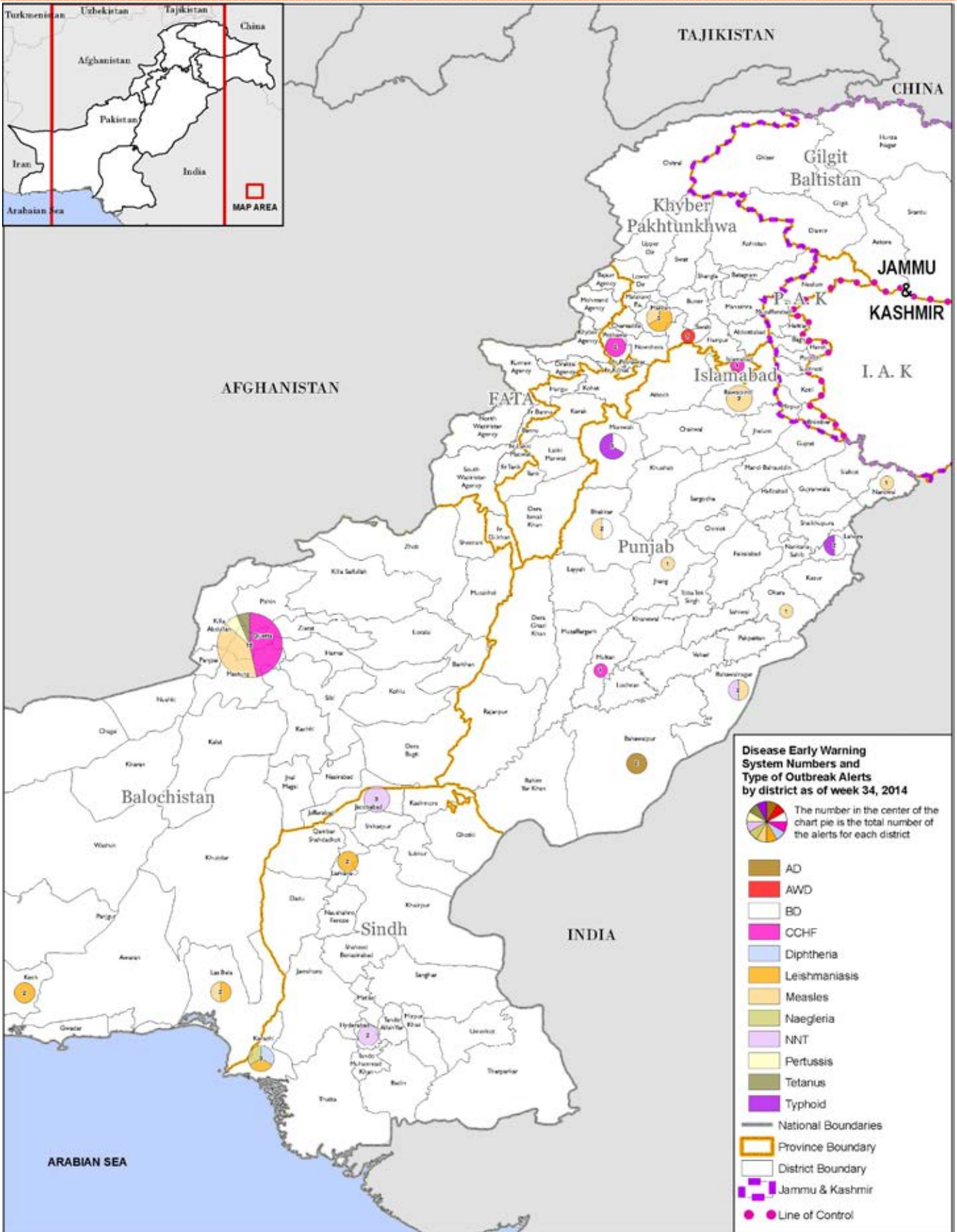
Follow up on: CCHF

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.

Alerts and outbreaks week 34 2014



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