



Weekly Epidemiological Bulletin

Disease early warning system and response in Pakistan

Volume 5, Issue 47, Wednesday 26 November 2014

Highlights

Epidemiological week no. 47
(16 - 22 Nov 2014)

- 2 Laboratory confirmed CCHF cases including 1 death were reported this week from Sindh province.
- In this week, 77 out of 87 districts and 2,646 out of 3,590 health facilities have reported to Disease Early Warning System (DEWS), compared to 75 districts with 2,685 health facilities shared weekly data in week 46, 2014.
- A total of 1,045,875 patients consultations reported in this week 47, 2014.
- In this week, a total of 34 alerts generated and timely responded. Altogether 12 alerts were for Leishmaniasis; 8 for Measles; 4 for Diphtheria; 3 for CCHF; 2 each for Dengue fever and Acute diarrhoea; while 1 each for Typhoid fever, NNT and Scabies.
- 4 outbreaks were also identified and timely responded.

Figure-1: 77 out of 87 districts reported to DEWS in week 47, 2014



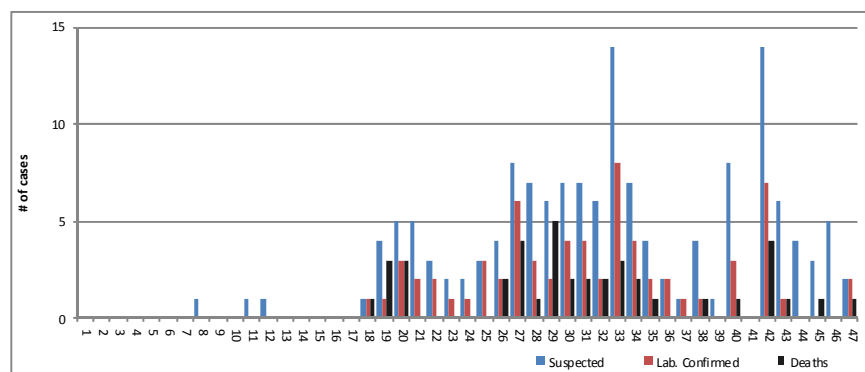
Priority diseases under surveillance in DEWS

Acute Respiratory Infection
Pneumonia
Acute Watery Diarrhoea
Bloody diarrhoea
Acute Diarrhoea
Suspected Enteric/Typhoid Fever
Suspected Malaria
Suspected Meningitis
Suspected Dengue fever
Suspected Viral Haemorrhagic 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 47, 2014 (29 Dec 2013 to 22 November 2014)

Disease	# of Cases	Percentage
ARI	8,972,713	18.78%
Bloody diarrhoea	48,786	<1.00%
Acute diarrhoea	2,705,263	5.66%
S. Malaria	1,195,251	2.50%
Skin Diseases	1,496,503	3.13%
Unexplained fever	1,220,870	2.56%
All other consultations	32,129,709	67.26%
Total (All consultations)	47,769,095	100%

Figure-2: Weekly number of CCHF cases and deaths in Pakistan, week 1 to 47 2014



Major health events reported during the Epi-week - 47 (16 - 22 Nov 2014)

Disease	# of Cases	Percentage
ARI	235,665	22.53%
Bloody diarrhoea	958	<1.00%
Acute diarrhoea	51,159	4.89%
S. Malaria	23,474	2.24%
Skin Diseases	27,695	2.65%
Unexplained fever	25,487	2.44%
All other consultations	681,437	65.15%
Total (All consultations)	1,045,875	100%

Crimean Congo Haemorrhagic Fever (CCHF) cases are reported continuously from epidemiological week 8, 2014. So far total 148 suspected cases (68 laboratory confirmed) and 40 deaths (of these 21 laboratory confirmed) have been reported. Out of total CCHF cases reported in Pakistan, 41 cases (15 laboratory confirmed) and 8 deaths belong to Afghanistan.

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-47/2014):

Date	Disease	Province	District	Area	<5M	>5M	<5F	>5F	Action Taken
18-Nov	Measles	Balochistan	Lasbela	Rat Goth, UC Uthal, Tehsil Uthal	1	0	3	2	An alert of 6 suspected Measles cases were reported from Goth Rath, Tehsil Uthal. During active surveillance no more suspected Measles cases were found in the area. Vitamin-A supplementation was done and people in the community briefed about the importance of vaccination for the children. DoH informed about the cases and requested to carry out the mop up in the area. Follow up planned.
19-Nov	Measles	Balochistan	Lasbela	Umar Khaskhaili, Goth kangar, Tehsil Uthal	1	0	5	2	An alert for 8 suspected Measles cases were reported from Goth Kangar, Tehsil Uthal. All the suspected Measles cases were provided symptomatic treatment along with Vit-A. Vaccination status of children was found nil. During active surveillance no more suspected Measles cases were found in the area. Vaccination session started by outreach team. All information shared with DHO and requested to carry out the mop up in the area. Follow up planned.
20-Nov	Measles	Balochistan	Quetta	U/C Mahmood Gohram, Tehsil Mangoture, District Kalat	0	0	0	0	An alert for high number of suspected Measles cases were reported from UC Mahmood Gohram, District Kalat. During house to house surveillance in the area, a total of 45 suspected Measles cases were found. Symptomatic treatment were given to all the suspected Measles cases, while some cases were referred to DHQ-Hospital Kalat. Vit-A dose given to all the suspected Measles cases. Health education session was conducted in the community regarding the importance of routine immunization. During the response a total of 160 children were immunized against Measles.
21-Nov	CCHF	Sindh	Karachi	Village Khiyaro habib, Chachro, Tharparkar	0	1	0	0	A case of CCHF admitted at AKUH. Patient was a 55 years old male resident of Tharparkar and cattle farmer by profession. The patient admitted at AKUH but his condition did not improve and expired on 21st November. The family members were educated on CCHF and protective measures. Health department through local Live stock department requested to take action regarding Tick survey and measures for its control and prevention at village Khiyaro, Tharparkar.

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

Disease	2013		Current week 47, 2014		2014 (Up till 22 Nov)	
	A	O	A	O	A	O
Acute watery diarrhoea	142	40	0	0	63	16
Acute jaundice syndrome	49	6	0	0	15	3
Bloody diarrhoea	45	3	0	0	27	0
CCHF	90	47	3	1	134	61
Dengue fever	300	66	2	0	77	12
Diphtheria	84	19	4	0	84	6
Measles	3357	281	8	3	1112	35
Pertussis	46	10	0	0	27	2
NNT + tetanus	349	0	1	0	237	0
Malaria	25	6	0	0	0	0
Cutaneous Leishmaniasis	621	51	12	0	392	21
Others	520	5	4	0	304	6
Total	5628	534	34	4	2472	162

Figure-3: Number of alerts received and responded, week 44 to 47 2014

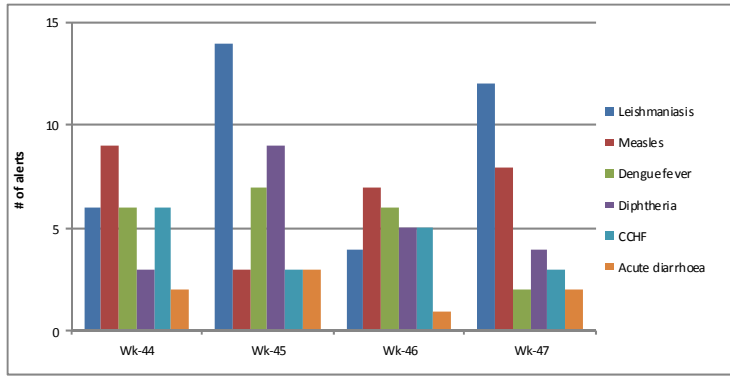
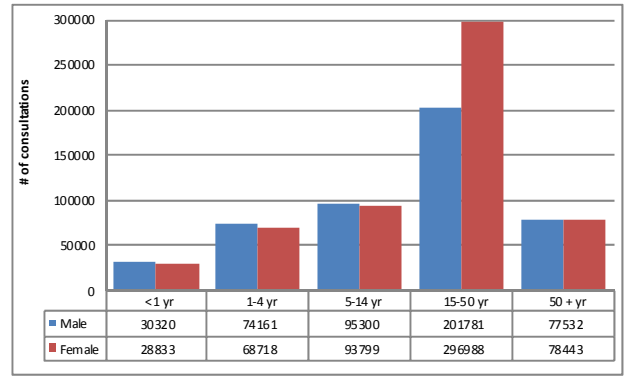
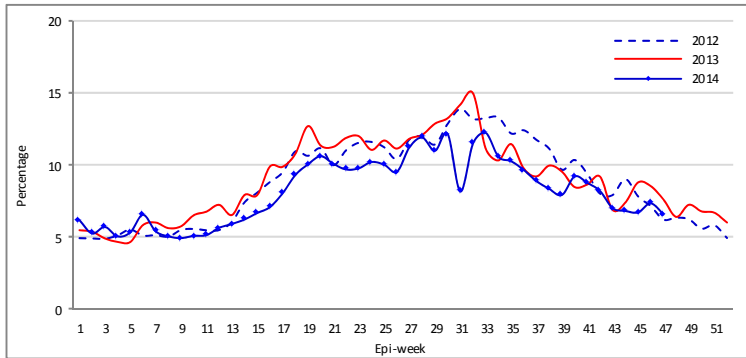


Figure-4: Number of consultations by age and gender, week 47, 2014



Province Khyber Pakhtunkhwa:

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



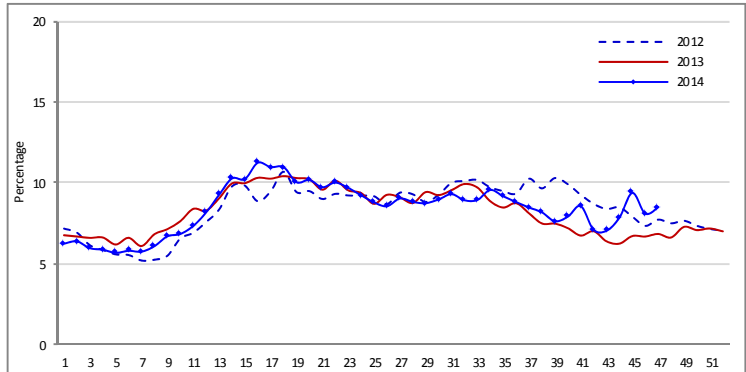
130 health facilities from 10 districts of Khyber Pakhtunkhwa sent reports to DEWS with a total of 41,456 patients consultations reported in week 47, 2014.

A total of 5 alerts were received and appropriate measures were taken during this week. Altogether 2 alerts were for Diphtheria; while 1 each for CCHF, Measles and Leishmaniasis.

Figure-5 shows the weekly trend of Acute diarrhoea showing decrease as compared with last week but vigilant monitoring of the situation is required.

Province Sindh:

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



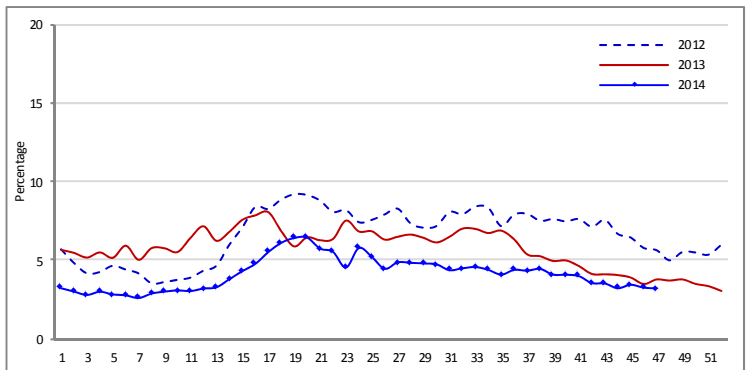
737 health facilities from 23 districts in Sindh province reported to DEWS with a total of 265,661 patient consultations in week 47, 2014.

A total of 9 alerts were received and appropriate measures were taken. Altogether 7 alerts were for Leishmaniasis; while 1 each for CCHF and NNT.

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 high in the province as compared with same time period last year.

Province Punjab:

Figure-7: Trend of Acute diarrhoea, province Punjab



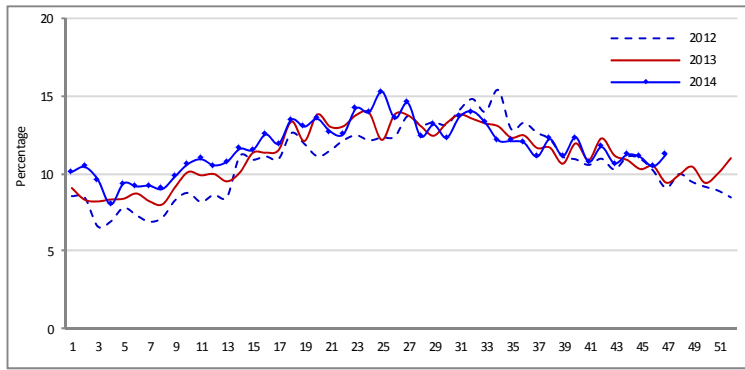
1,585 health facilities from 34 districts in Punjab province reported to DEWS with a total of 708,601 patients consultations in week 47, 2014.

Total 8 alerts were received and appropriate measures were taken. Altogether 2 alerts each were for Dengue fever, Acute diarrhoea and Diphtheria; while 1 each for 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 but vigilant monitoring of the situation is required.

Province Balochistan:

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

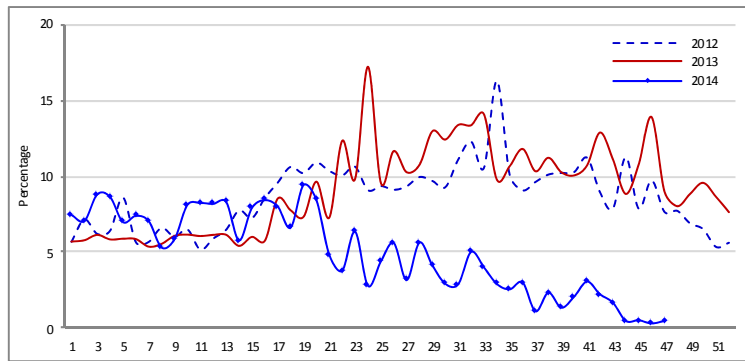


191 health facilities from 8 districts in Balochistan province reported to DEWS with a total of 29,089 patients consultations in week 47, 2014.

A total of 12 alerts were reported and appropriate measures were taken. Altogether 7 alerts were for Measles; 4 for Leishmaniasis; while 1 for CCHF. In this week the weekly proportion of AD showing increase as compared with last week and vigilant monitoring of the situation is required, as the proportion of AD is high as compared with same time period last year.

FATA:

Figure-9: Weekly trend of Acute diarrhoea, FATA



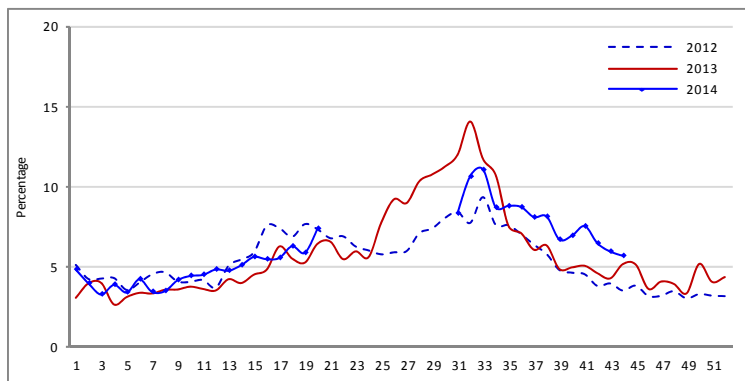
1 health facilities from 1 agency in FATA reported to DEWS with a total of 635 patients consultations in week 47, 2014.

No alert for any disease was received from any area in FATA in week 47 2014.

The proportion of AD showing 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



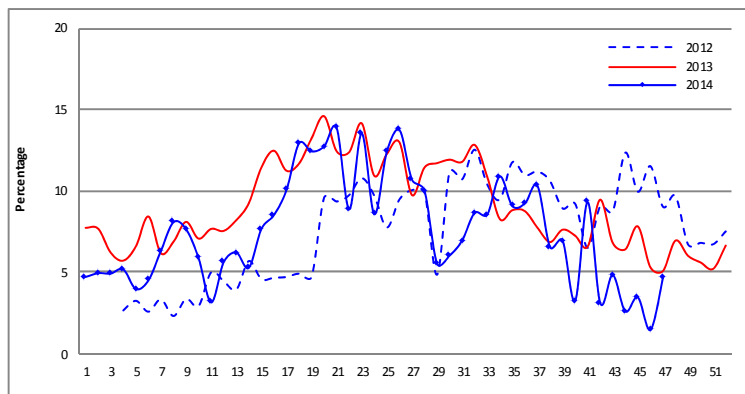
65 health facilities from 8 districts in AJK reported to DEWS with a total of 9,679 patients consultations in week 44, 2013.

A total of 4 alerts were reported and appropriate measures were taken. Altogether 3 alerts each were for Measles; while 1 for Leishmaniasis.

Weekly trend of AD showing decrease this week 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



2 health facilities reported to DEWS on time with a total of 433 patients consultations in week 47, 2014.

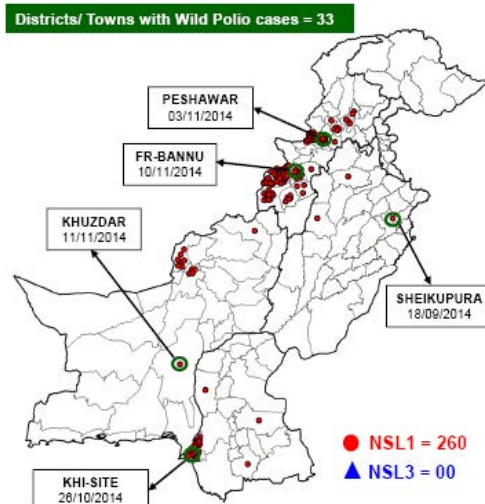
No alert for any disease was reported in week 46 from Islamabad in this week.

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 47 (16 - 22 Nov 2014), fourteen new wild polio virus (WPV) cases were reported, five from Khyber Pakhtunkhwa (four from Peshawar and one from Karak districts), five from Federally Administered Tribal Areas (two each from Khyber and South Waziristan Agencies, one from FR Bannu), three from Balochistan (one each from Kila Abdullah, Khuzdar and Quetta districts) and one from Sindh (SITE Town Karachi). This brings the total number of polio cases in 2014 to 260 (compared to 74 in 2013 till this time) from 33 districts/towns/tribal agencies/FR areas (compared to 20 in 2013 till this time).

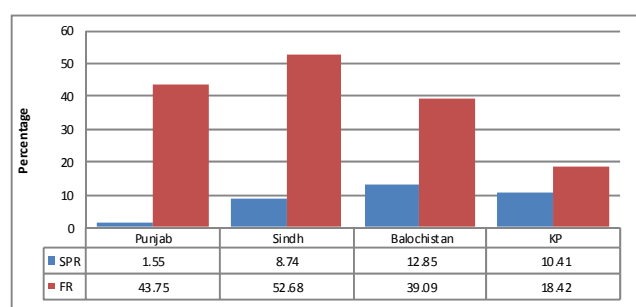
Province	Year 2013			Year 2014 (till 15 Nov)		
	P1	P3	P1+P3	P1	P3	P1+P3
FATA	65	-	-	163	-	-
Khyber Pakhtunkhwa	11	-	-	54	-	-
Sindh	10	-	-	26	-	-
Balochistan	-	-	-	14	-	-
Punjab	7	-	-	3	-	-
Gilgit-Baltistan	-	-	-	-	-	-
AJ&K	-	-	-	-	-	-
Islamabad	-	-	-	-	-	-
Total	93	-	-	260	-	-



Malaria:

The Table and chart given below shows the Malaria Slide Positivity and Falciparum Ratio in week 47, 2014. Total number of Malaria cases tested in this week is 6,873 out of which 420 were found positive; 231 for P. Vivax; 91 for P. Falciparum; while 98 for Mixed (SPR = 6.11%; F.R = 45.00%).

Malaria tests \ Province	Punjab	Sindh	Balochistan	Khyber Pakhtunkhwa
P. Vivax	27	106	67	31
P. Falciparum	15	32	39	5
Mixed	6	86	4	2
# tested	3089	2563	856	365
SPR	1.55	8.74	12.85	10.41
FR	43.75	52.68	39.09	18.42



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.

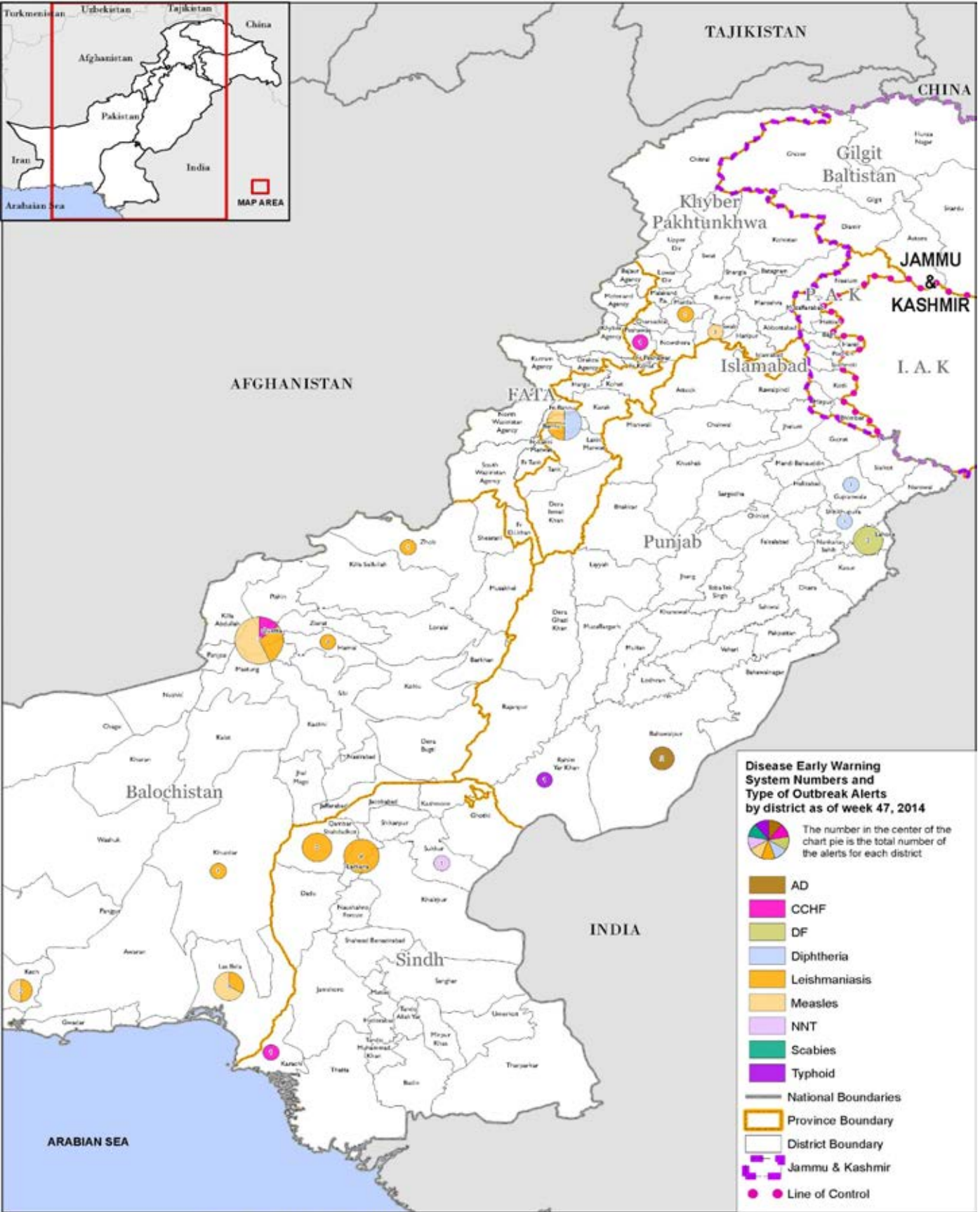
Crime Congo Haemorrhagic Fever (CCHF) cases are reported continuously from epidemiological week 8, 2014. So far 148 suspected cases (68 laboratory confirmed) and 40 deaths (of these 21 laboratory confirmed) have been reported. Most of the cases are reported from Balochistan province, total 78 suspected cases of CCHF and 17 deaths have been reported; 30 of the cases were laboratory confirmed, out of these 16 cases (8 confirmed) cases and 2 deaths belong to Afghanistan. From Khyber Pakhtunkhwa province total of 43 cases and 12 deaths have been reported; 21 laboratory confirmed cases, out of these 23 cases (6 confirmed) cases and 2 deaths belong to Afghanistan.

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.

Number of CCHF cases and deaths reported in year 2013 and 2014 (up till 28 Nov).

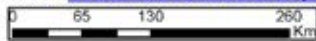
Province	2013			2014		
	Suspected	Lab confirmed	Deaths	Suspected	Lab confirmed	Deaths
AJ&K	1	1	0	1	0	0
Balochistan	66	39	9	78	30	17
ICT	4	4	1	4	3	2
KPK	9	9	4	43	21	12
Punjab	18	9	5	17	9	6
Sindh	2	2	1	5	5	3
Total	100	64	20	148	68	40

Alerts and outbreaks week 47 2014



Produced by:
Health Information Management Unit,
WHO - Pakistan
Projection: WGS84
Data source: WHO (DEWS)

Website: www.emro.who.int/countries/pak



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GLIDE Number: _____
WHO Map No: WHO-PAK-1042
Data created: December 01, 2014

