



Weekly Epidemiological Bulletin

Disease early warning system and response in Pakistan

Volume 5, Issue 43, Wednesday 29 October 2014

Highlights

Epidemiological week no. 43
(19 - 25 October 2014)

- In this week, 4 suspected CCHF cases were reported. 3 cases were from Khyber Pakhtunkhwa province, while 1 case reported from Balochistan province.
- In this week, **83** out of 87 districts and 2,747 out of 3,590 health facilities have reported to Disease Early Warning System (DEWS), compared to 81 districts with 2,750 health facilities shared weekly data in week 42, 2014.
- A total of **1,107,894** patients consultations reported in this week 43, 2014.
- In this week, a total of 48 alerts generated and timely responded. Altogether 15 alerts were for Measles; 8 for NNT; 7 for CCHF; 6 for Diphtheria; 5 for Dengue fever; 2 each for Acute diarrhoea and Leishmaniasis; while 1 each for AWD, Typhoid and Scabies.
- 1 outbreak was also identified and timely responded.

Figure-1: 83 out of 87 districts reported to DEWS in week 43, 2014



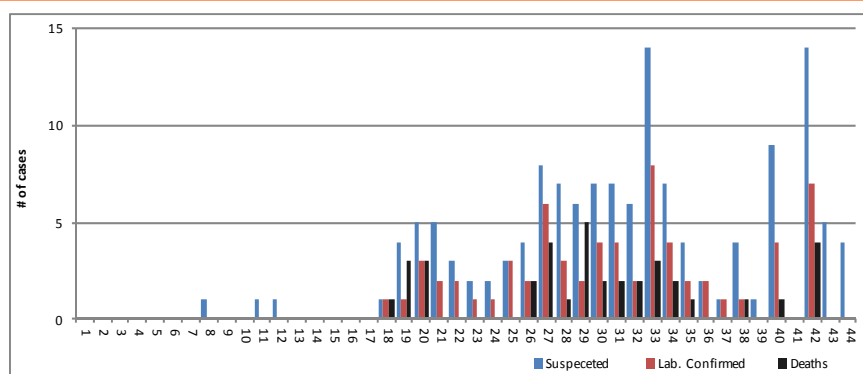
Priority diseases under surveillance in DEWS

- 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 43, 2014 (29 Dec 2013 to 25 October 2014)

Disease	# of Cases	Percentage
ARI	8,073,168	18.48%
Bloody diarrhoea	44,597	<1.00%
Acute diarrhoea	2,509,740	5.74%
S. Malaria	1,104,589	2.53%
Skin Diseases	1,384,425	3.17%
Unexplained fever	1,114,918	2.55%
All other consultations	29,459,547	67.43%
Total (All consultations)	43,690,984	100%

Figure-2: Weekly number of CCHF cases and deaths in Pakistan, week 1 to 43 2014



Major health events reported during the Epi-week - 43 (19 - 25 October 2014)

Disease	# of Cases	Percentage
ARI	246,691	22.27%
Bloody diarrhoea	1,633	<1.00%
Acute diarrhoea	52,333	4.72%
S. Malaria	26,642	2.40%
Skin Diseases	31,515	2.84%
Unexplained fever	26,907	2.43%
All other consultations	722,173	65.18%
Total (All consultations)	1,107,894	100%

Crimean Congo Haemorrhagic Fever (CCHF) cases are reported continuously from epidemiological week 8, 2014. So far total 138 suspected cases (66 laboratory confirmed) and 37 deaths (of these 20 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-43/2014):

Date	Disease	Province	District	Area	<5M	>5M	<5F	>5F	Action Taken
21-Oct	CCHF	Balochistan	Quetta	Killi Haji Habibi Alizai, Tehsil Chaman, District Killa Abdullah	0	1	0	0	Alert for 1 CCHF case was reported. Case is a shepherd by occupation. Patient having high grade fever, headache and body ache along with epistaxis. Case was referred to CCHF isolation ward. One blood sample was collected and sent to NIH which was found positive for CCHF. Awareness session was taken with the family regarding CCHF disease. Information was shared with the relevant Health authorities.
19-Oct	Leishmaniasis	Balochistan	Quetta	MSF (Marriabad)	0	0	0	0	An alert for 12 suspected cases of Leishmaniasis were reported through MSF. All the cases were treated in Leishmaniasis treatment centre established by MSF. All the cases were advised and sensitized about Leishmaniasis. Health and hygiene sessions were conducted in the community regarding procedures of Vector control and Prevention. Information was shared with concerned quarters.
25-Oct	Leishmaniasis	Khyber Pakhtunkhwa	Mardan	Village Haji Abad, Muslim Abad, UC Mian Essa, Tehsil Takht Bhai, Mardan	0	1	0	1	Two clinical cases of C - Leishmaniasis were reported from BHU MianEssa. WHO supplied required doses of Inj-Glucantime to KPH Mardan for all registered cases. RBM, KPH were requested for vector control interventions in the area and surrounding. On job training of health staff was conducted for Intralesional administration of Inj-Glucantime. RBM focal person and EDO Health was informed and requested for vector control measures in the areas.
21-Oct	Dengue Fever	Punjab	Lahore	UC 126 Gulberg Town	0	7	0	1	7 suspected and 1 confirmed Dengue fever cases reported from Jinnah Hospital, Lahore. The cases were investigated and one blood sample was taken and sent laboratory confirmation and result for Dengue fever was found positive. The confirmed case was admitted and kept in isolation ward (HDU) in 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. Community - based environmental management and health education campaign for improved water storage practices to remove mosquito breeding sites. The area would be visited again for follow up. AD(VBD) was informed along with EDO Health Lahore.

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

Disease	2013		Current week 42, 2014		2014	
	A	O	A	O	A	O
Acute watery diarrhoea	142	40	0	0	61	15
Acute jaundice syndrome	49	6	0	0	15	3
Bloody diarrhoea	45	3	0	0	27	0
CCHF	90	47	9	1	109	51
Dengue fever	300	66	6	1	51	12
Diphtheria	84	19	5	1	57	5
Measles	3357	281	13	0	1050	32
Pertussis	46	10	0	0	27	2
NNT + tetanus	349	0	3	0	229	0
Malaria	25	6	0	0	0	0
Cutaneous Leishmaniasis	621	51	7	0	354	19
Others	520	5	0	0	273	6
Total	5628	534	43	3	2253	145

Figure-3: Number of alerts received and responded, week 40 to 43 2014

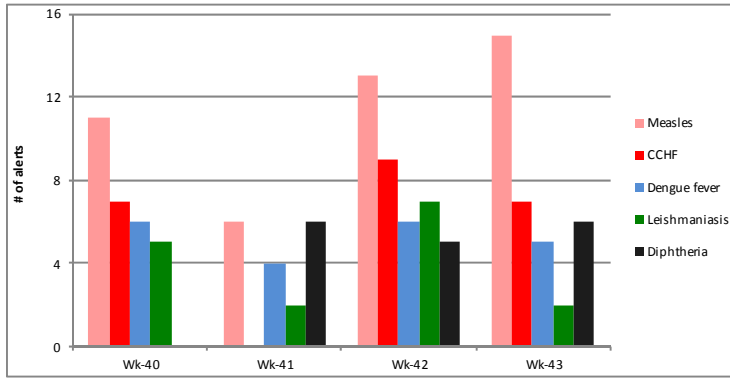
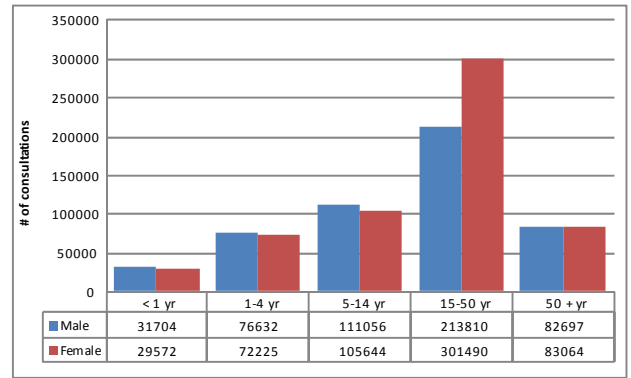
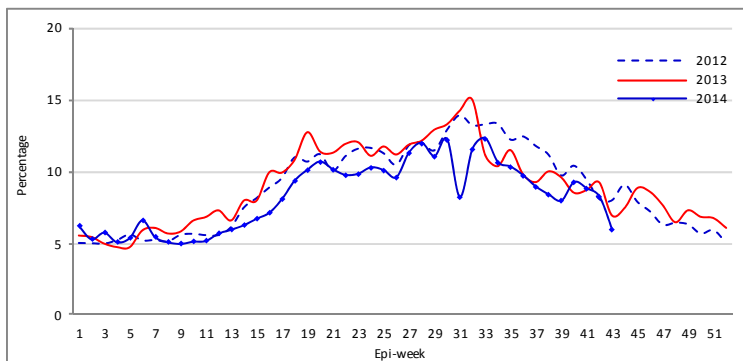


Figure-4: Number of consultations by age and gender, week 43, 2014



Province Khyber Pakhtunkhwa:

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



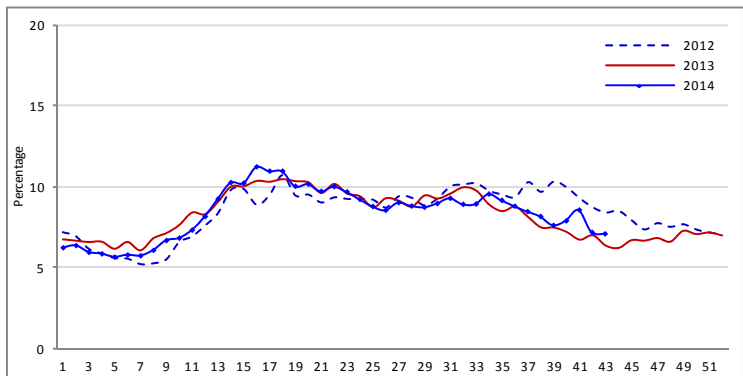
89 health facilities from 7 districts of Khyber Pakhtunkhwa sent reports to DEWS with a total of 27,591 patients consultations reported in week 43, 2014.

A total of 22 alerts were received and appropriate measures were taken during this week. Altogether 11 alerts were for Measles; 4 each for CCHF and Diphtheria; while 1 each for AWD, Dengue fever, and Leishmaniasis.

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

Province Sindh:

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



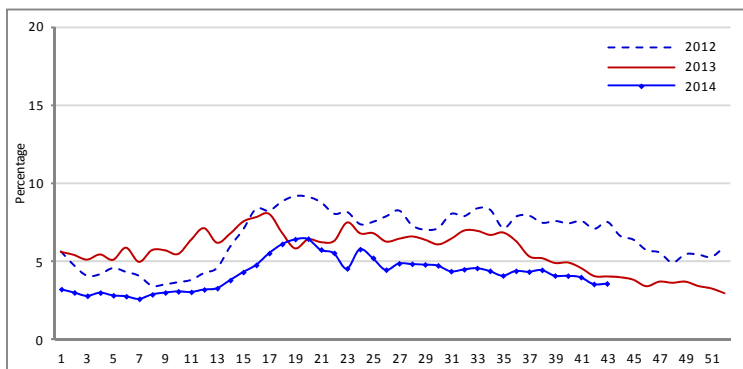
765 health facilities from 23 districts in Sindh province reported to DEWS with a total of 279,961 patient consultations in week 43, 2014.

A total of 6 alerts were received and appropriate measures were taken. Altogether 4 alerts were for NNT; while 2 for Measles.

The proportion of AD for the province is showing decrease as compared with last weeks 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



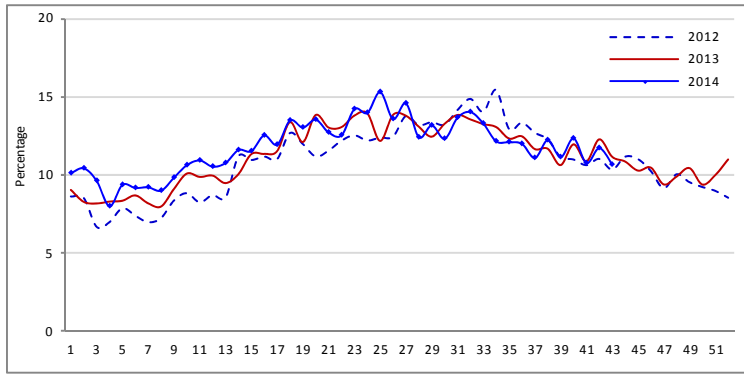
1,633 health facilities from 35 districts in Punjab province reported to DEWS with a total of 759,620 patients consultations in week 43, 2014.

Total 14 alerts were received and appropriate measures were taken. Altogether 4 alerts each were for Dengue fever and NNT; 2 each for 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 increase as compared with last week but low as compared with same time period last year.

Province Balochistan:

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



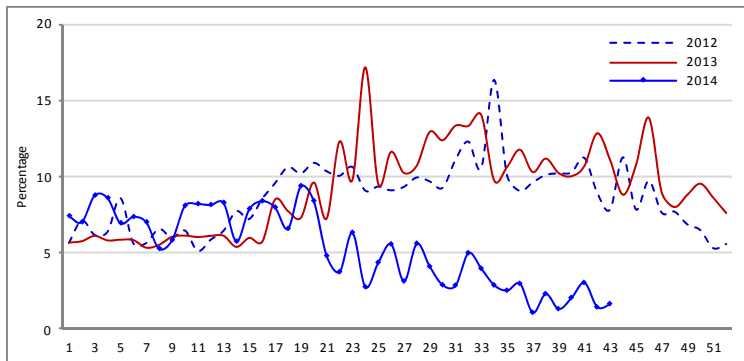
196 health facilities from 8 districts in Balochistan province reported to DEWS with a total of 31,086 patients consultations in week 43, 2014.

A total of 7 alerts were reported and appropriate measures were taken. Altogether 3 alerts each were for CCHF and Measles; 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.

FATA:

Figure-9: Weekly trend of Acute diarrhoea, FATA



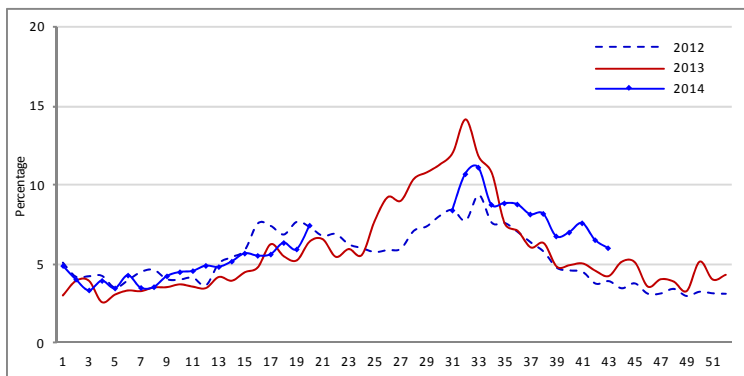
1 health facilities from 1 agency in FATA reported to DEWS with a total of 719 patients consultations in week 43, 2014.

No alert for any disease was received from any area in FATA in week 43 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



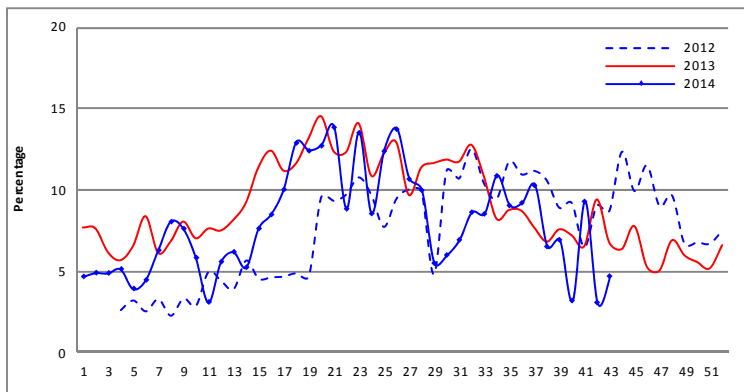
62 health facilities from 8 districts in AJK reported to DEWS with a total of 8,661 patients consultations in week 43, 2013.

No alerts for any disease were received this week.

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



1 health facility reported to DEWS on time with a total of 256 patients consultations in week 43, 2014.

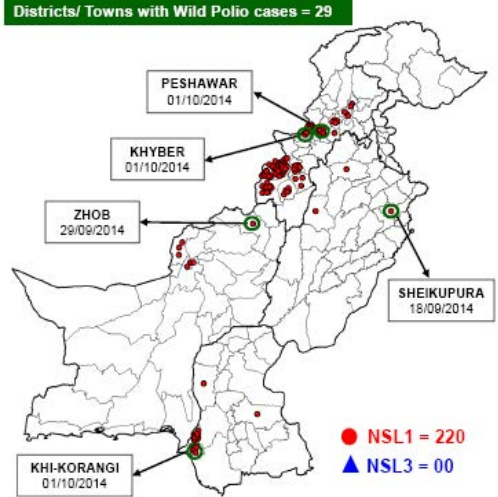
No alert for any disease was reported in week 43 from Islamabad in this week.

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 43 (19 - 25 Oct 2014) ten new wild polio virus (WPV) cases were reported, four from Federally Administered Tribal Areas (*two from Khyber, one each from North Waziristan and FR Bannu*), one from Khyber Pakhtunkhwa (*Peshawar district*), four from Sindh (*two from Korangi town, one each from Gadap town and Dadu district*) and one from Balochistan (*Zhob district*). This brings the total number of polio cases in 2014 to 220 (compared to 64 in 2013 till this time) from 29 districts/towns/tribal agencies/FR areas (compared to 19 in 2013 till this time).

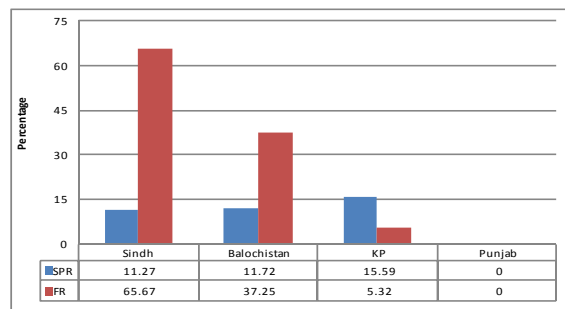
Province	Year 2013			Year 2014 (till 18 Oct)		
	P1	P3	P1+P3	P1	P3	P1+P3
FATA	65	-	-	143	-	-
Khyber Pakhtunkhwa	11	-	-	44	-	-
Sindh	10	-	-	23	-	-
Balochistan	-	-	-	7	-	-
Punjab	7	-	-	3	-	-
Gilgit-Baltistan	-	-	-	-	-	-
AJ&K	-	-	-	-	-	-
Islamabad	-	-	-	-	-	-
Total	93	-	-	220	-	-



Malaria:

The Table and chart given below shows the Malaria Slide Positivity and Falciparum Ratio in week 43, 2014. Total number of Malaria cases tested in this week is 4,570 out of which 547 were found positive; 288 for P. Vivax; 84 for P. Falciparum; while 175 for Mixed (SPR = 11.97%; F.R = 47.35%).

Malaria tests \ Province	Sindh	Balochistan	Khyber Pakhtunkhwa	Punjab
P. Vivax	103	96	89	0
P. Falciparum	27	52	5	0
Mixed	170	5	0	0
# tested	2662	1305	603	0
SPR	11.27	11.72	15.59	0
FR	65.67	37.25	5.32	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.

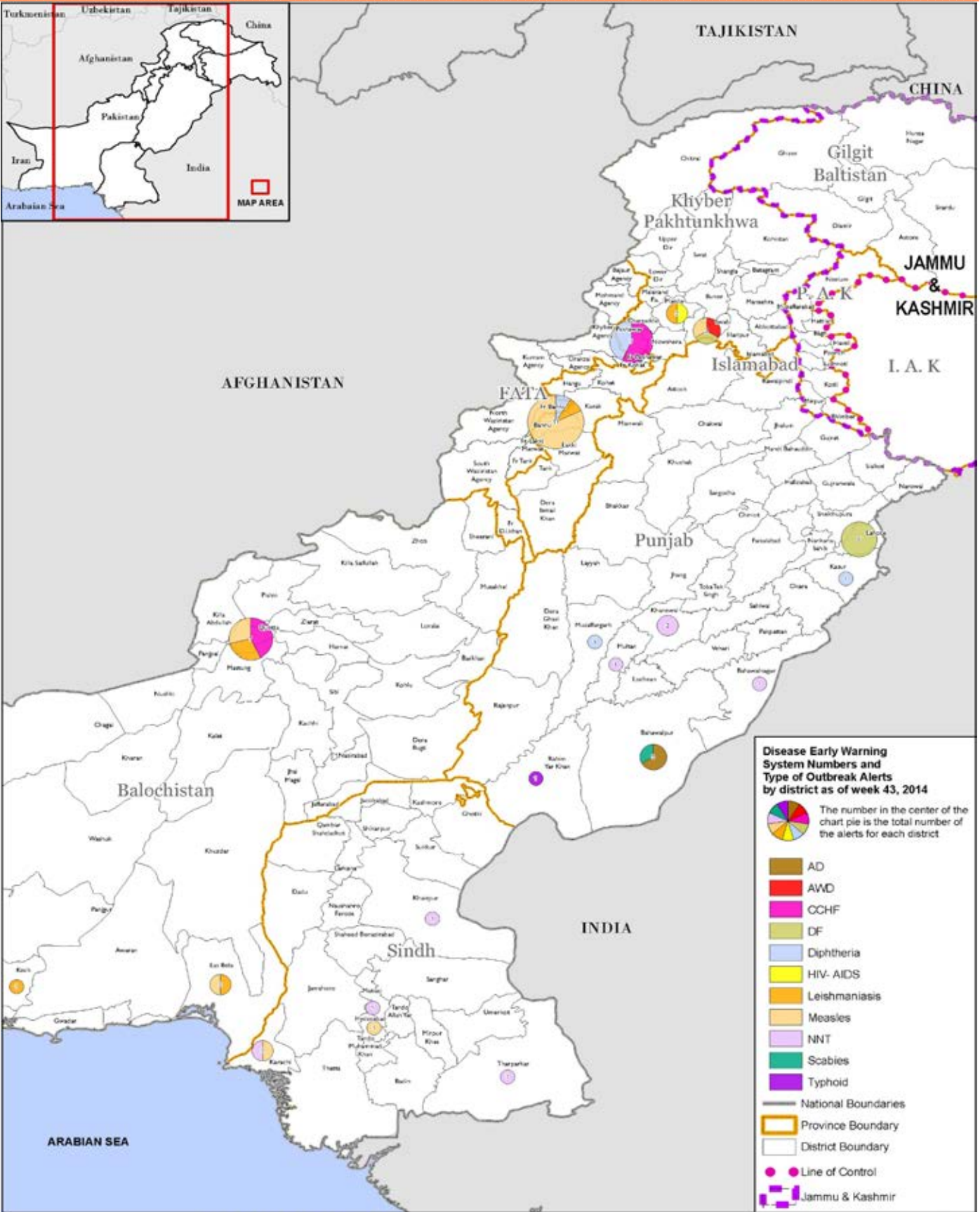
Crimean Congo Haemorrhagic Fever (CCHF) cases are reported continuously from epidemiological week 8, 2014. So far 138 suspected cases (66 laboratory confirmed) and 37 deaths (of these 20 laboratory confirmed) have been reported. Most of the cases are reported from Balochistan province, total 71 suspected cases of CCHF and 16 deaths have been reported; 31 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 3 Nov).

Province	2013			2014		
	Suspected	Lab confirmed	Deaths	Suspected	Lab confirmed	Deaths
AJ&K	1	1	0	1	0	0
Balochistan	66	39	9	71	31	16
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	2	2	1
Total	100	64	20	138	66	37

Alerts and outbreaks week 43 2014



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

Website: www.emro.who.int/countries/pak
 0 65 130 260 Km

The boundaries and names shown and the designations used on this map do not imply the expression of any opinion whatsoever on the part of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted lines on maps represent approximate border lines for which there may not yet be full agreement.

Slide number: _____
 WHO Map form: WHO-PAK-1622
 Date created: October 31, 2014

