



Weekly Epidemiological Bulletin

Disease early warning system and response in Pakistan

Volume 5, Issue 45, Wednesday 12 November 2014

Highlights

Figure-1: 78 out of 87 districts reported to DEWS in week 45, 2014

Epidemiological week no. 45
(2 - 8 Nov 2014)

- 8 suspected CCHF cases including 1 death were reported from Balochistan province.
- In this week, **78** out of 87 districts and 2,679 out of 3,590 health facilities have reported to Disease Early Warning System (DEWS), compared to 83 districts with 2,525 health facilities shared weekly data in week 44, 2014.
- A total of **788,892** patients consultations reported in this week 45, 2014.
- In this week, a total of 42 alerts generated and timely responded. Altogether 14 alerts were for Leishmaniasis; 9 for Diphtheria; 7 for Dengue fever; 3 each for CCHF, Acute diarrhoea and Measles; 2 for NNT; while 1 for Scabies.
- 1 outbreak was also identified and timely responded.



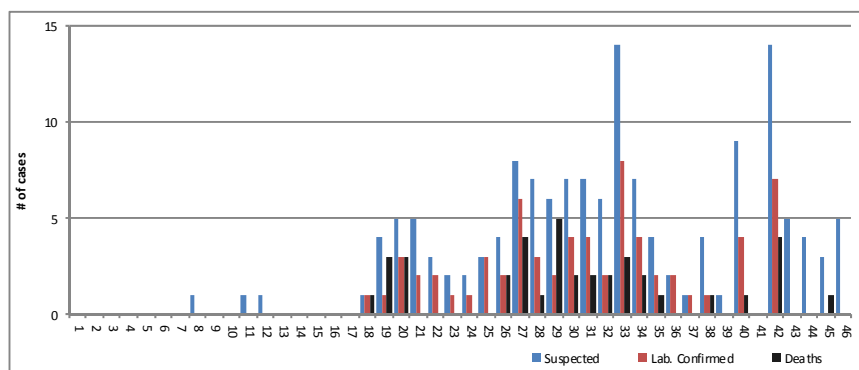
Priority diseases under surveillance in DEWS

- 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 45, 2014 (29 Dec 2013 to 8 November 2014)

Disease	# of Cases	Percentage
ARI	8,484,803	18.60%
Bloody diarrhoea	46,974	<1.00%
Acute diarrhoea	2,602,197	5.70%
S. Malaria	1,148,146	2.52%
Skin Diseases	1,438,891	3.15%
Unexplained fever	1,167,372	2.56%
All other consultations	30,740,917	67.37%
Total (All consultations)	45,629,300	100%

Figure-2: Weekly number of CCHF cases and deaths in Pakistan, week 1 to 46 2014



Major health events reported during the Epi-week - 45 (2 - 8 Nov 2014)

Disease	# of Cases	Percentage
ARI	167,766	21.27%
Bloody diarrhoea	814	<1.00%
Acute diarrhoea	40,654	5.15%
S. Malaria	17,977	2.28%
Skin Diseases	21,402	2.71%
Unexplained fever	21,624	2.74%
All other consultations	518,655	65.74%
Total (All consultations)	788,892	100%

Crimean Congo Haemorrhagic Fever (CCHF) cases are reported continuously from epidemiological week 8, 2014. So far total 146 suspected cases (66 laboratory confirmed) and 39 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-45/2014):

Date	Disease	Province	District	Area	<5M	>5M	<5F	>5F	Action Taken
7-Nov	CCHF	Balochistan	Quetta	1. Jandial Mohallah, Fateh Jhang, District Attock, P2 - 26 FD, ARTY - District Loralai	0	2	0	0	2 suspected CCHF cases were reported from CMH hospital-Quetta. Patient was suffering with headache, body ache, and fever. Case had travelling history to province KP (2 week ago). 2 Blood samples were collected and sent to NIH for further laboratory confirmation. The first case could not survive and died on 4th Nov-2014. While 2nd patient admitted at CMH and under treatment is a close contact of first patient. The family members were educated on CCHF and protective measures. Information shared with DoH.
6-Nov	Acute diarrhoea	Punjab	Bahawalpur	Haider Pur, Ahmad Pur East	13	19	10	16	55 cases of Acute diarrhoea reported from BHU. The cluster of cases reported from different locations. During investigation and active surveillance 3 more suspected Acute diarrhoea cases were identified and referred to THQ. 2 Health education sessions were conducted in the community. Aqua tabs, Jerry cans and water filters were distributed in community. 6 LHWs were trained and mobilized to conduct house to house Health education session on hygiene, prevention from water borne diseases and food safety. Information shared with DoH.
8-Nov	CCHF	Punjab	Khanewal	Jinnah Hospital Lahore	0	1	0	0	One suspected case, 17 years old male patient admitted in medical isolation ward at Jinnah hospital, Lahore, having fever, bleeding from gums, and get treatment from a GP. Patient has no history of animal contacts. One blood sample was taken and sent to NIH for confirmation. CCHF National Guidelines were shared with Consultant Medical ward in Jinnah hospital. Information shared with EDO(H) Lahore and Director CDC.
3-6-Nov	Dengue fever	Punjab	Lahore	UC 36; 37; 106; 7; 116 and Ward1, Lahore	0	17	0	17	Alert for 24 suspected and 10 confirmed Dengue fever cases were reported from different hospitals in Lahore. A total of 9 blood samples were taken and sent to laboratory confirmation, and found positive for CCHF. All the confirmed Dengue fever cases admitted and kept in isolation wards in hospitals. Health education sessions were conducted in the community on proper solid waste disposal, protective clothing and repellents, Community-based environmental management and health education for improved water storage practices. Information shared with AD(VBD) and EDO Health.
5-Nov	CCHF	Sindh	Karachi	UC 7, Malir city, Muslimabad, Malir Town, Karachi	0	1	0	0	A death due to CCHF was reported from LNH, Karachi. The Patient was a butcher by profession and was in the usual state of health when he developed fever, receiving treatment from a local GP in the area. On 22nd October the patient admitted at LNH, but his condition did not stabilize and he passed away on 23rd October. His blood sample was sent to AKUH and found positive for CCHF. Health education given to the family members, and requested to note down body temperature twice daily for at least one week. Information shared with DoH and follow up planned.

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

Disease	2013		Current week 45, 2014		2014	
	A	O	A	O	A	O
Acute watery diarrhoea	142	40	0	0	62	15
Acute jaundice syndrome	49	6	0	0	15	3
Bloody diarrhoea	45	3	0	0	27	0
CCHF	90	47	3	1	126	59
Dengue fever	300	66	7	0	69	12
Diphtheria	84	19	9	0	75	5
Measles	3357	281	3	0	1097	32
Pertussis	46	10	0	0	27	2
NNT + tetanus	349	0	2	0	242	0
Malaria	25	6	0	0	0	0
Cutaneous Leishmaniasis	621	51	14	0	376	20
Others	520	5	4	0	289	6
Total	5628	534	42	1	2405	154

Figure-3: Number of alerts received and responded, week 42 to 45 2014

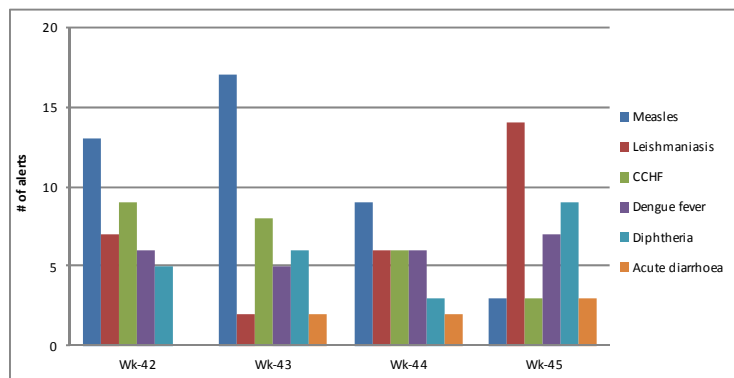
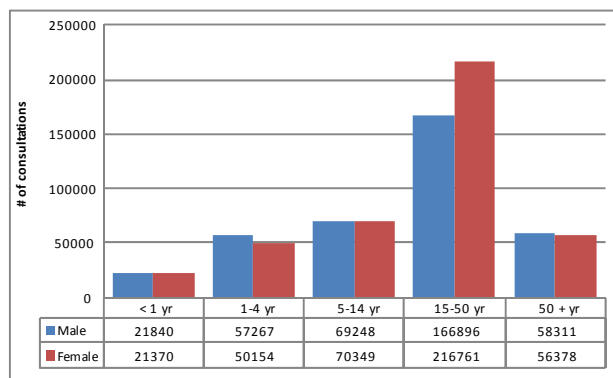
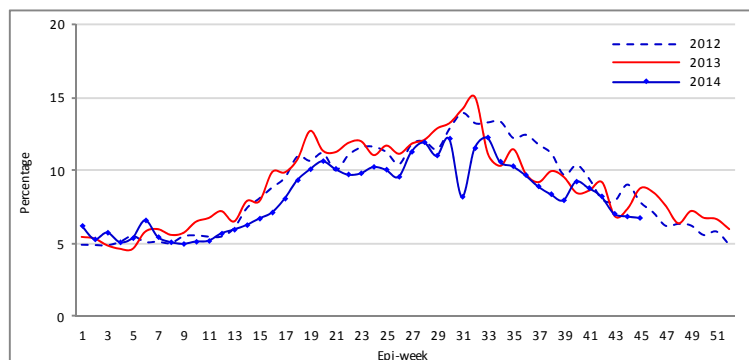


Figure-4: Number of consultations by age and gender, week 45, 2014



Province Khyber Pakhtunkhwa:

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



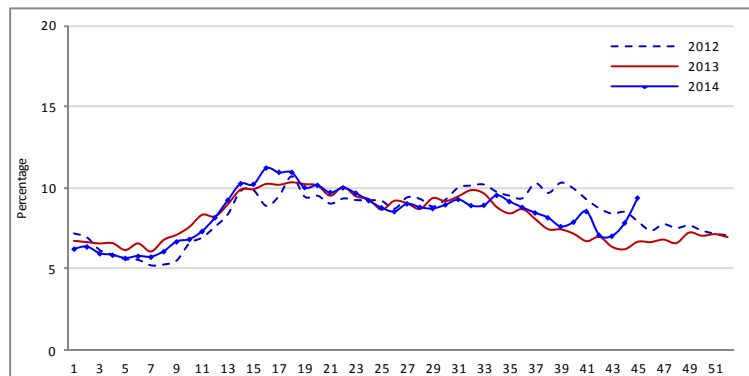
137 health facilities from 11 districts of Khyber Pakhtunkhwa sent reports to DEWS with a total of 34,552 patients consultations reported in week 45, 2014.

A total of 13 alerts for Leishmaniasis were received and appropriate measures were taken during this week. Altogether 8 alerts were for Diphtheria; 3 for Leishmaniasis; while 2 for Measles.

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



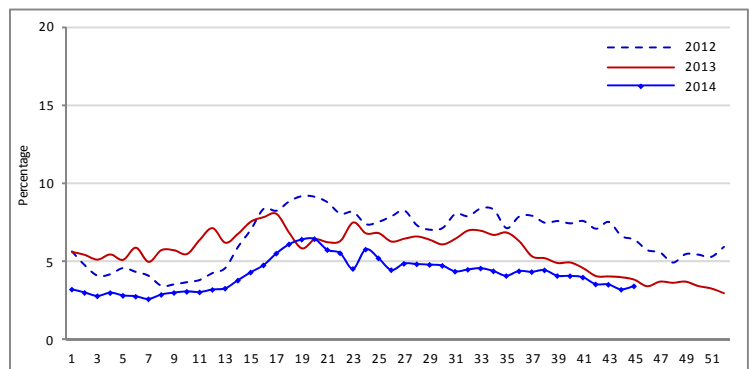
741 health facilities from 23 districts in Sindh province reported to DEWS with a total of 172,970 patient consultations in week 45, 2014.

A total of 11 alerts were received and appropriate measures were taken. Altogether 8 alerts were for Leishmaniasis; while 1 each for CCHF, Diphtheria 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



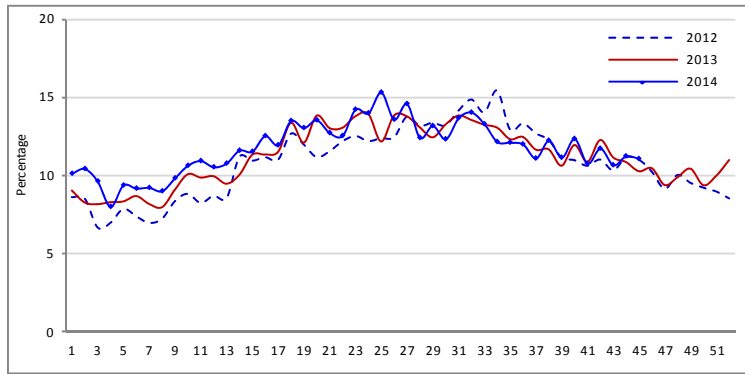
1,594 health facilities from 34 districts in Punjab province reported to DEWS with a total of 551,271 patients consultations in week 45, 2014.

Total 13 alerts were received and appropriate measures were taken. Altogether 7 alerts were for Dengue fever; 3 for Acute diarrhoea; while 1 each for CCHF, NNT 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



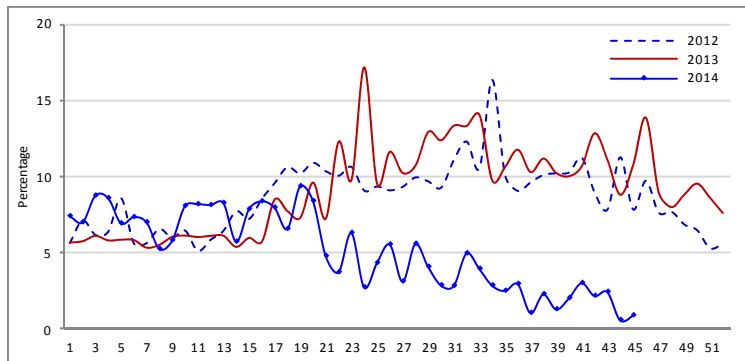
204 health facilities from 8 districts in Balochistan province reported to DEWS with a total of 29,488 patients consultations in week 45, 2014.

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

In this week the weekly proportion of AD showing minor decrease as compared with last week but 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



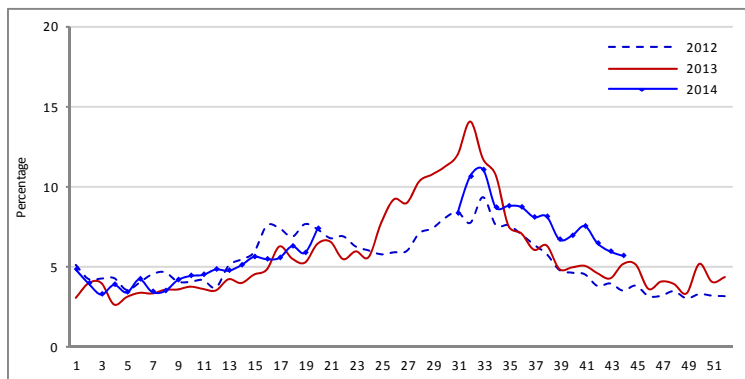
1 health facilities from 1 agency in FATA reported to DEWS with a total of 318 patients consultations in week 45, 2014.

No alert for any disease was received from any area in FATA in week 45 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



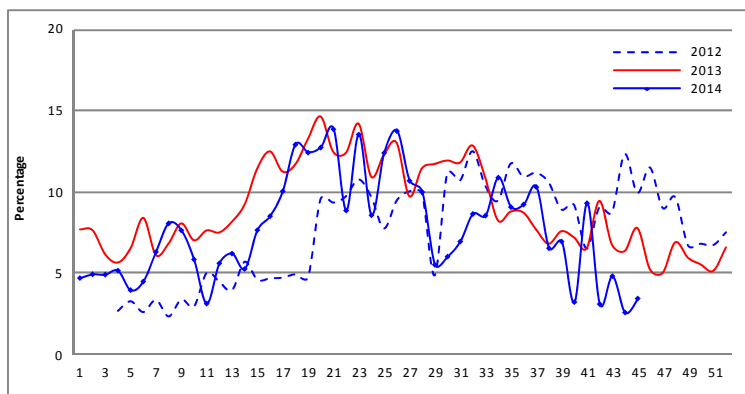
65 health facilities from 8 districts in AJK reported to DEWS with a total of 9,679 patients consultations in week 44, 2013.

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 293 patients consultations in week 45, 2014.

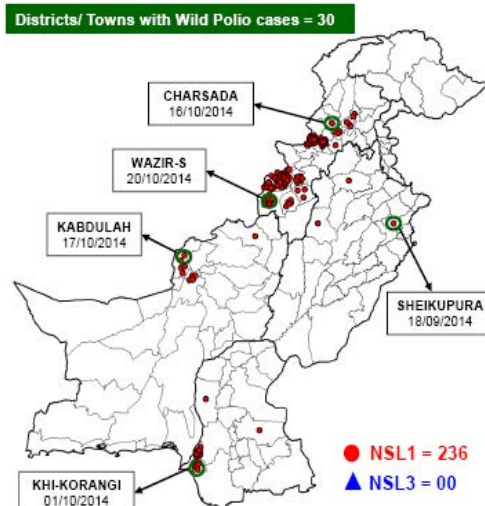
No alert for any disease was reported in week 45 from Islamabad in this week.

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 45 (2 - 8 Nov 2014) one new wild polio virus (WPV) case was reported from Federally Administered Tribal Areas (*Khyber agency*). This brings the total number of polio cases in 2014 to 236 (compared to 69 in 2013 till this time) from 30 districts/towns/tribal agencies/FR areas (compared to 19 in 2013 till this time). Results are available for 282 environmental samples collected this year so far, 92 (32%) of which were positive for WPV-1.

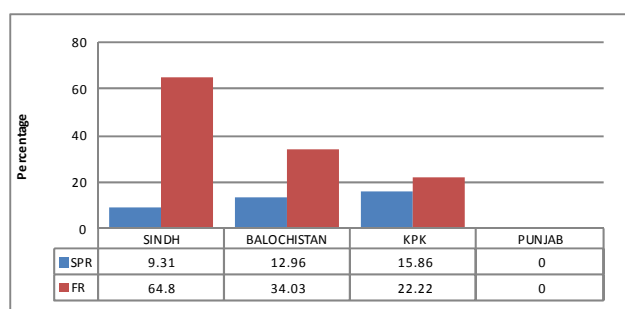
Province	Year 2013			Year 2014 (till 8 Nov)		
	P1	P3	P1+P3	P1	P3	P1+P3
FATA	65	-	-	152	-	-
Khyber Pakhtunkhwa	11	-	-	48	-	-
Sindh	10	-	-	23	-	-
Balochistan	-	-	-	10	-	-
Punjab	7	-	-	3	-	-
Gilgit-Baltistan	-	-	-	-	-	-
AJ&K	-	-	-	-	-	-
Islamabad	-	-	-	-	-	-
Total	93	-	-	236	-	-



Malaria:

The Table and chart given below shows the Malaria Slide Positivity and Falciparum Ratio in week 45, 2014. Total number of Malaria cases tested in this week is 3,444 out of which 376 were found positive; 192 for P. Vivax; 75 for P. Falciparum; while 109 for Mixed (SPR = 10.92%; F.R = 48.94%).

Malaria tests \ Province	Sindh	Balochistan	Khyber Pakhtunkhwa	Punjab
P. Vivax	69	95	28	0
P. Falciparum	31	40	4	0
Mixed	96	9	4	0
# tested	2106	1111	227	0
SPR	9.31	12.96	15.86	0
FR	64.8	34.03	22.22	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 146 suspected cases (66 laboratory confirmed) and 38 deaths (of these 20 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 17 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	3	3	2
Total	100	64	20	146	66	39

